Devick, Dale A.
Page 3 of 3

Best regards,

Dale A. Devick
P O Box 4254,
Tubac, AZ 85646

For the next few weeks I can be contacted via e-mail or at:

915 Morningstar Ct.
Sartell, MN 56377
320-251-4023

Dewenter, David
Page 1 of 1

P.O. Box 90413
Henderson, NV 89009

RE:Tuscon Electric Power Sahuarita-Nogles Transmission line D.E.I.S.

Sue Kozacek
Forest Supervisor
Coronado National Forest
300W. Congress
Tuscon, Az 85701
October 13, 2003

Dear Sue Kozacek,

1 I am writing to urge you to deny the special use permits for the Western and Crossover Routes because these plans are not compatible with the current use of the area.

2 TEP's proposed Western Route and alternative Crossover Route would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush.

3 I have enjoyed many trips into the Sky Island area of Arizona to view and hike the natural wonders of this area. The above routes would negatively affect this. The Tucson Electric Power plan in the preferred route would build over 20 miles of new road. Not only would this increase the road density over that stated in the current Forest Plan, but would decrease the wildlife habitat in the area. A Jaguar was seen in this location a few years back. Just maybe on one of my hikes I might see one, if the area remains wild.

2 cont.

Sincerely yours,

David Dewenter

Comment No. 1

Sections 3.1 and 4.1 present a description of the existing land use and analyze the potential land use impacts from the proposed project.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to hiking in the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System .

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

The Western Corridor would require construction of approximately 20 mi (32 km) of temporary new roads for construction on the Coronado National Forest, and the Central and Crossover Corridors would require fewer roads, and unnecessary project roads would be closed following construction (see Section 4.12, Transportation). The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. TEP would close 1.0 mi (1.6 km) of existing road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project, such that road density on the Coronado National Forest would not be affected.

Dewenter, David
Page 1 of 1

P.O. Box 90413
Henderson, Nevada 89009

October 13, 2003

RE:Tuscon Electric Power Sahuarita-Nogles Transmission line D.E.I.S.

Dr. Jerry Pell
Department of Energy
Office of Fossil Energy
Washington, D.C. 20585

Dear Dr. Pell,

1 I do not support the proposed routes because they do not serve Santa Cruz County's interests as intended under ACC order 62011 and am writing to urge you to withdraw the current draft Environmental Impact Statement (E.I.S.) for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake,

3 elegant trogon and the Gentry indigo bush. A smaller , less obtrusive 115 kV line was not considered for any route. Why not ? A 115kV line would be cheaper and could be run along existing corridors.

The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and controversial powerline designed to export power to Mexico.

4

The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills. Again please withdraw the E.I.S. and issue a new assesment that includes a smaller powerline along current utility corridors.

Sincerely yours,

David Dewenter

Comment No. 1

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project has a dual purpose to benefit both southern Arizona and Mexico.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis). The commentor's suggestion of building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5 of the Draft EIS).

Comment No. 4

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review.

Dewire, Mary
Page 1 of 1

From: Mary [SMTP:marydon@msinternet.net]
To: Pell, Jerry
Cc:

Subject: The beauty to be lost with TEP Sahuarita-Nogales Transmission Lines

Sent: 10/13/2003 7:53 PM
Importance: Normal

Dear Dr. Pell,

Please do not allow the Western or Crossover Route to go forward. I'm sure you've heard all the arguments. I'm not sure you understand the beauty at stake.

Please go to www.arivaca.net .

1

There, you can read about the wonderful hikes and flora and fauna in the area to be impacted.

This area is unique and irreplaceable. Are we going to trash it for an unneeded overdone power project?

Mary Dewire

Comment No. 1

Each of the resource areas cited by the commentor are addressed in the EIS. See Sections 3.1.2 and 4.1.2 for recreational resources, Sections 3.2 and 4.2 for visual resources, and Sections 3.3 and 4.3 for biological resources.

Diehn, Sonya A.
Page 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/09/2003 06:51 PM -----
sdiehn@biologicaldiversity.org
10/09/2003 05:00 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. This area is also a vital wildlife corridor with Mexico -- a jaguar was sighted in here only two years ago.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Diehn, Sonya A.
Page 2 of 2

3 The goal of providing reliable electrical service to the city of Nogales and Santa Cruz County may be achieved through building a small transmission line. However, TEP has proposed a massive, environmentally destructive and extremely controversial powerline designed to export power to Mexico. Creating "NAFTA for electricity" is a bad idea!

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not private corporate profits. I urge DOE to issue a new draft EIS which fully and rigorously explores available options -- including a local power plant and smaller power lines which would not serve Mexico -- to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Sonya A. Diehn
PO Box 508
Tucson, Arizona 85702

Comment No. 3 *(continued)*

The passage of NAFTA in fact established the benefits of strengthening and enhancing the electricity trade with Canada and Mexico.

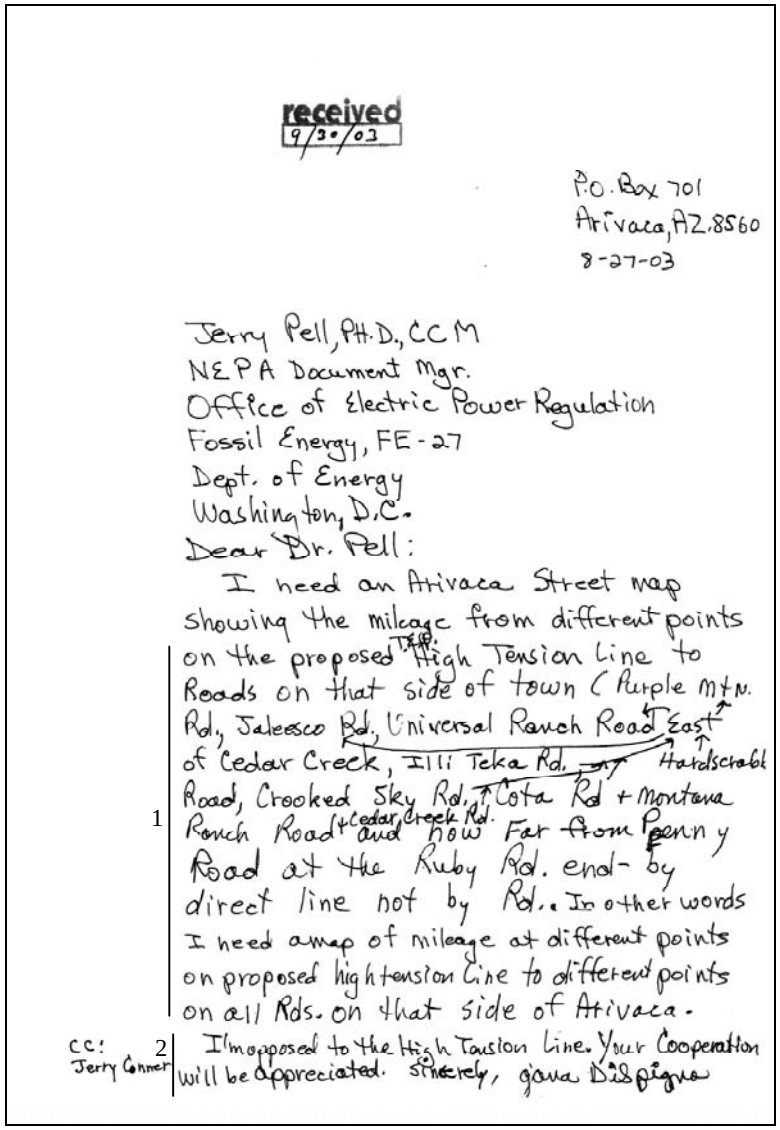
Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

DiSpigno, Gona
Page 1 of 1



received
9/30/03

P.O. Box 701
Arivaca, AZ. 8560
8-27-03

Jerry Pell, PH.D., CCM
NEPA Document Mgr.
Office of Electric Power Regulation
Fossil Energy, FE-27
Dept. of Energy
Washington, D.C.
Dear Dr. Pell:

I need an Arivaca Street map showing the mileage from different points on the proposed TEP High Tension Line to Roads on that side of town (Purple Mtn. Rd., Jaleesco Rd., Universal Ranch Road East of Cedar Creek, Illi Teka Rd. ~~or~~ Hardscrabble Road, Crooked Sky Rd., Cota Rd + Montana Ranch Road + Cedar Creek Rd. and how Far from Pennzy Road at the Ruby Rd. end- by direct line not by Rd.. In other words I need a map of mileage at different points on proposed high tension line to different points on all Rds. on that side of Arivaca. 1

I'm opposed to the High Tension Line. Your Cooperation will be appreciated. Sincerely, Gona DiSpigno 2

cc: Jerry Conner

Comment No. 1

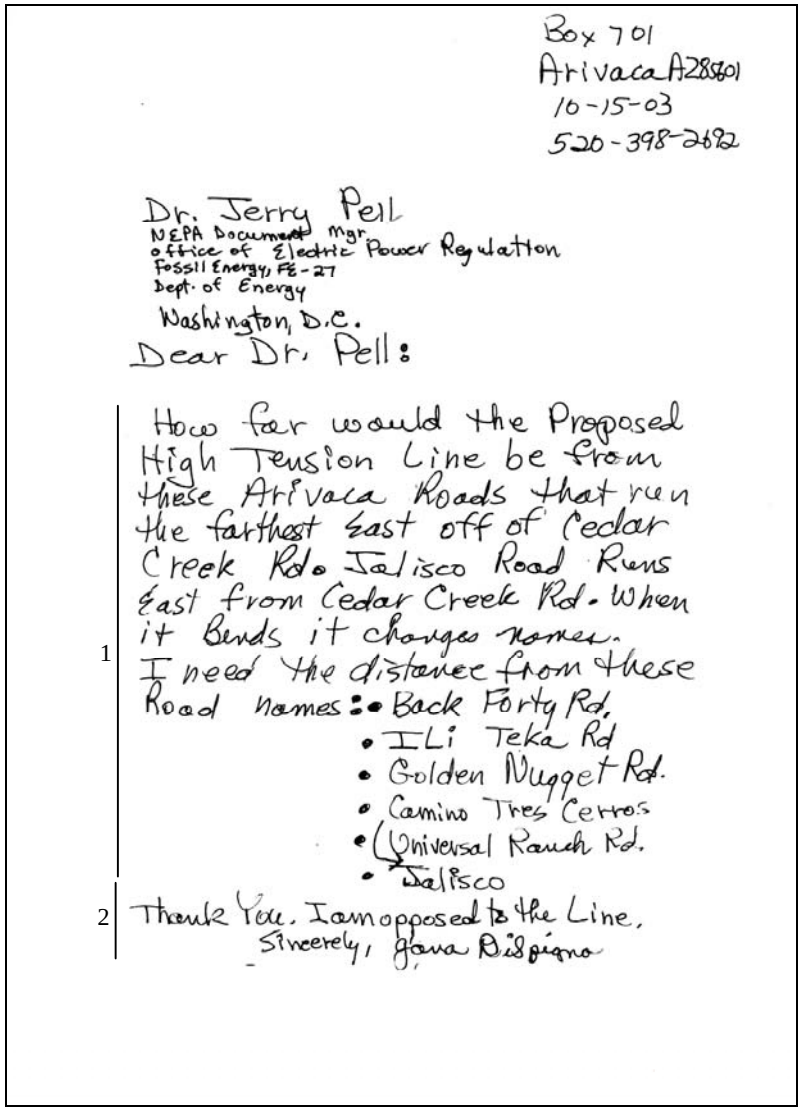
The town of Arivaca is located on Arivaca Road, an estimated 10 mi (16 km) west of the Western Corridor as it runs west of the Tumacacori Mountains, and is beyond the limits of the maps in the EIS.

TEP has not finalized the placement of the 125-ft (38-m) ROW within the 0.25-mi (0.40-km)-wide study corridors. If an action alternative is selected for implementation by each of the Federal agencies through the issuance of a ROD, then precise siting of the ROW and the support structures within the ROW would involve input from cultural, biological, and visual specialists, to identify and minimize impacts to each area of land to be disturbed. For this reason, the Final EIS cannot include maps showing a precise location for the ROW or the individual support structures.

Comment No. 2

The Federal agencies note the commentor's opposition to the proposed project.

DiSpigno, Gona
Page 1 of 1



Box 701
Arivaca AZ 85601
10-15-03
520-398-2682

Dr. Jerry Pell
NEPA Document Mgr.
Office of Electric Power Regulation
Fossil Energy, FE-27
Dept. of Energy
Washington, D.C.

Dear Dr. Pell:

1 How far would the Proposed High Tension Line be from these Arivaca Roads that run the farthest East off of Cedar Creek Rd. Jalisco Road Runs East from Cedar Creek Rd. When it Bends it changes names. I need the distance from these Road names:
- Back Forty Rd.
- ILi Teka Rd
- Golden Nugget Rd.
- Camino Tres Cerros
- Universal Ranch Rd.
- Jalisco

2 Thank You. I am opposed to the Line.

Sincerely, Gona DiSpigno

Comment No. 1

Refer to the response to Comment 1 in the previous submittal from Gona DiSpigno.

Comment No. 2

The Federal agencies note the commentor's opposition to the proposed project.

Drees, Kevin
Pages 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/09/2003 06:51 PM -----
kpd@email.arizona.edu
10/09/2003 06:27 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 Please forbid TEP's proposed 345 kV power line to Mexico. The proposed line will cut through a beautiful and sensitive wilderness, and does not address the mandate to provide more reliable power to Santa Cruz county and Nogales. Instead,

2 TEP is using this need as an excuse to blast power down to Santa Ana, Mexico. Wouldn't a local power plant be more efficient and less destructive?

***

3 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

4 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's

Comment No. 1

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Comment No. 2

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 4

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Drees, Kevin
Pages 2 of 2

4 cont. proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

5 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

6 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

7 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Kevin Drees
2727 E Lee St
Tucson, Arizona 85716

Comment No. 5

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 6

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 7

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's

Comment No. 7 *(continued)*

proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Eames, Cliff
Page 1 of 2

Forwarded by Susan K Kozacek/R3/USDAFS on
10/16/2003 05:22 PM -----
cliff@akcenter.org
10/10/2003 02:47 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's
proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I have backpacked in Arizona a number of times. Its wild areas are worthy of the utmost protection, especially at a time when the federal administration is assaulting the environment on innumerable fronts.

2 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

3 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser

Comment No. 1

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Comment No. 2

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 3

Sections 3.2 and 4.2 describe existing visual resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Eames, Cliff
Page 2 of 2

3 cont. known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

4 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

5 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

6 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Cliff Eames
807 G St., #100
Anchorage, Alaska 99517

Comment No. 4

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 5

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 6

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Egan, Veronica
Page 1 of 2

Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 05:34 PM -----
veroegan@cs.com
10/12/2003 06:20 AM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's
proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing on behalf of the 2000+ members of the Great Old Broads for Wilderness to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.Many of our members enjoy the wild places of Southeastern Arizsona for hiking. birding and solitude.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 1

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities, including hiking and birding, and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Egan, Veronica
Page 2 of 2

The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small
3 transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which
4 would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a
5 new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Veronica Egan
850 1/2 Main St.
Durango, Colorado 81302

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Elton, Wallace
Page 1 of 2

Comments on the DEIS for TEP's proposed 345 kv powerline

From: eb@vermontel.net [SMTP:eb@vermontel.net]
To: Pell, Jerry
Cc:

Subject: Comments on the DEIS for TEP's proposed 345 kv powerline
Sent: 10/14/2003 9:35 PM
Importance: Normal

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

1 Because I have relatives who live in Arizona, I have been fortunate over a period of many years to travel throughout the state. As a result, I know the beauty of many remaining wildlands in the state, including those within the Coronado National Forest.

For this reason, I am writing to ask that you withdraw the current draft EIS for Tucson Electric Power's proposed 345 kilovolt powerline.

2 Both the proposed "Western Route" and the alternative "Crossover Route" would cut through some of the most remote and wild areas in southeastern Arizona, the Tumacacori Highlands. Encompassing several roadless areas (including an area many would like to see designated as Wilderness), this area provides habitat for black bears, lesser-

Comment No. 1

Sections 3.2 and 4.2 present a description of the existing visual resources, including those within the Coronado National Forest, and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Elton, Wallace
Page 2 of 2

2 cont. long nosed bats, Mexican spotted owls, and peregrine falcons, among other species.

3 I support providing reliable electrical service to Nogales and Santa Cruz County. This goal can be achieved without scarring these wildlands, however, by building a much smaller transmission line than proposed by TEP. Unfortunately, the draft EIS does not present and assess suitable alternatives that would be less environmentally destructive and less expensive. Because of that omission, the draft EIS is seriously biased and clearly inadequate. Therefore, I urge you to withdraw it and prepare a new one that considers all available options, including smaller transmission lines that will meet the goal of providing reliable energy service to Santa Cruz County without sacrificing a unique public resource.

Thank you for considering my comments.

Sincerely,

Wallace Elton
69 Elm Hill Street
Springfield, Vermont 05156

Comment No. 3

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review.

Evans, Dave
Page 1 of 2

Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 05:22 PM -----
snerdley@theriver.com
10/10/2003 11:04 AM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's
proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…"

When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Evans, Dave
Page 2 of 2

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

6 Greed is a very powerful force in the destruction of the landscape and biodiversity of our country. It must be completely stifled in its goals.

Sincerely,

Dave Evans
2662 W 21st Ln
Yuma, Arizona 85364

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Comment No. 6

Sections 3.1 and 4.1 discuss the existing land use and analyze the potential impacts to these resources from the proposed project.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to biodiversity.

Falco, Emilio
Page 1 of 6

DOE-EIScomments

From: Emilio Falco [SMTP:falco@starband.net]
To: Pell, Jerry
Cc: RTBNMBAZ@aol.com; LMagruder@aol.com; 'B & E Soporibell'

Subject: DOE-EIScomments
Sent: 10/13/2003 9:22 PM
Importance: Normal
Please find attached comments on DOE/EIS-0336, TEP Sahuarita-Nogales Transmission Line DEIS

PO Box 3371
Tubac, AZ 85646

13 October 2003

Dr. Jerry Pell
Office of Electric Power Regulation
Fossil Energy, FE-27
US Department of Energy
Washington, DC 20585

Dear Dr. Pell,

It is a pleasure to send you the comments that follow.

1 There are many overwhelming arguments for the "no action" decision regarding the 345kV powerline that TEP proposes to build between Sahuarita and Nogales, AZ. The current Draft EIS (DEIS) is deficient, and demonstrates that the TEP project as proposed poses unwarranted risks to the environment and the human landscape. It should be rejected. The following paragraphs provide some of the arguments.

Comment No. 1

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review.

Comment No. 2

The Federal agencies concur with the commentor's statement that ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico. A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

The potential implications of the proposed project on Federal, state, or local energy policies (e.g., regarding renewable energy or distributed and local generation) are outside the scope of the EIS. The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Falco, Emilio
Page 2 of 6

1) Arizona Corporation Commission order No. 62011 is irrelevant to the project that TEP wants:

It is a misrepresentation that Citizens (now UniSource) was ordered by the Arizona Corporation Commission (ACC) to build a 345kV power line, as TEP (UniSource as well) wants. They were simply ordered to improve reliability of power in Santa Cruz County (SCC), by adding a second powerline to 2 complement the existing 115kV line from Sahuarita to Nogales. The electrical power consumption in SCC has approached at its peaks 60MW.

Unisource has equivalent, emergency backup generation in Nogales. Because the extant 115kV powerline carries a load of 100MW, a second 115kV power line would obviously suffice to serve the power needs of SCC for decades to come.

3 Monumental decisions on power infrastructure should not become monuments to ineptitude that will hinder an inevitable shift to renewable energy as well as distributed and local generation.

2 cont. Given that the main reason adduced by TEP is a misrepresentation of ACC order 62011, their current plan should be rejected out of hand. A no-action decision is the only logical outcome for DOE.

2) TEP's 345kV powerline would not improve reliability significantly:

4

At present, it is clearly false that an additional line, whatever its capacity, will improve reliability of power delivery in SCC. Statistics of

Comment No. 4

Refer to the response to Comment 3 above regarding the authority of the ACC to decide how it believes energy should be furnished within Arizona's borders.

Comment No. 5

Energy conservation does not meet TEP's proposal and thus is not evaluated as an alternative in this EIS (refer to the response to ACC Comment 3).

Comment No. 6

The maximum level at which the proposed 345-kV transmission line would be operated is 500 MW (refer to the response to Border Power Plant Working Group, Comment 2). If TEP wanted to operate the proposed 345-kV transmission line above 500 MW, TEP would have to apply to DOE for an amendment to their Presidential Permit, and DOE would have to perform additional analysis required by NEPA.

Section 1.1.2 of the Final EIS has been revised to provide additional background on TEP's business plan and the proceedings of the ACC. Section 1.5 of the Final EIS describes TEP's proposed project capacity and usage, including capacity that would be available for transfer of energy between the United States and Mexico. Any additional information beyond this background information and project description is not related to environmental impacts and is beyond the scope of the EIS.

Falco, Emilio
Page 3 of 6

4 cont. power outages clearly show that the overwhelming majority are in the local distribution of power, not in the 115kV line. In fact, Citizens did improve those statistics considerably over the past few years, thanks to a concerted effort on infrastructure improvements. It is true that considering a 10-year horizon, more power could be needed in SCC. But a 115kV powerline would suffice amply to cover the needs of SCC for several decades. That will remain unchanged for this time span, given the growth rates in SCC. It would be foolish to attempt to plan beyond that.

5 TEP has not proposed to encourage conservation in SCC, especially in regard to outdoor lighting for businesses. That should be a pivotal part of the DEIS. It is not there.

4 cont. TEP has not provided specific plans for the DEIS, showing exactly how their proposed powerline would improve reliability in the delivery of electricity in SCC. That should be an absolute requirement, given that TEP makes a claim of improved reliability for their proposed powerline.

Therefore, another major argument of TEP, the need for the proposed powerline for improved reliability, is invalid. Again, a no-action decision is the only logical outcome.

6 3) TEP has not provided any detailed business plan for exploitation of their proposed powerline:

The DEIS provides only the vaguest descriptions of how TEP plans to deal with Mexico and its state-owned electricity provider. How much power will the powerline carry over time, over the next decades, how do they plan to derive profit, why do they expect to make any profit; what are their financial projections. That should be part of the DEIS and its successor EIS, as 80% of the initial power load carried by these lines would not end up in SCC but elsewhere.

Comment No. 7

Section 3.10, Human Health and Environment, of the EIS acknowledges the present uncertainty regarding EMF health effects, and contains a summary (with backup material in Appendix B) of the existing credible scientific evidence relevant to evaluating the potential impacts of EMF, as required by NEPA-implementing regulations (40 CFR 1502.22).

The Federal agencies concur that EMF levels would vary depending on the distance from the transmission line, and have thus included Table 4.10-2 in the Draft and Final EISs presenting the EMF strengths that would be present at different distances from the centerline of the proposed transmission line. The Federal agencies also concur that EMF levels directly underneath the transmission line may be potentially 100 times larger than EMF levels at locations farther removed from the transmission line. Appendix B of the EIS presents studies on human health effects from transmission lines and states that uncertainty exists on whether long-term, lower exposures (typically associated with transmission lines) and short-term, higher exposures (typically associated with appliances) are comparable in their potential effects on human health.

Comment No. 8

Chapter 3 presents a description of the affected environment and Chapter 4 analyzes the potential impacts to these existing resources from the proposed project, including potential impacts from the proposed Central Corridor.

Falco, Emilio
Page 4 of 6

6 cont. Given that the total capacity of the powerline could eventually be increased to 2000MW, that percentage would shrink to 5%, making the case against TEP's proposed powerline that much stronger.

TEP has likely not provided the required details in their business plan because they cannot. That again should lead to a no-action decision.

7 4) The DEIS is deficient in its treatment of the effect of EMFs on human health:

High-voltage powerlines such as TEP wants produce magnetic fields of about 1mG at a distance of about 100m to each side of the line. The DEIS neglects to discuss the fact that directly underneath the powerline, the field can be about 100 times larger (see, for example, http://www.emfs.info/Source_transmission.asp). If the proposed powerline were built in the central corridor, a significant number of residents would be forced to drive underneath the wiring, possibly several times a day, which could result in periodic exposure to fields 100 times larger than shown in the DEIS, i.e., 100mG, for a few seconds each time. The concern would be the much higher fields that these residents would experience periodically and over the long term.

Residents who would be living near the ROW for the powerline would be exposed continuously to lower-level fields, about 0.01 mG or less at 1000m. It is disingenuous to offer appliances as a comparison, because these are on episodically, for a few minutes each time, and the user would not be in their close proximity for the most part. All of these facts imply that the risks to residents could be significantly greater than suggested in the DEIS.

Comment No. 9

The photograph of the EPNG pipeline ROW in Figure 3.2-6 was taken looking directly down the pipeline ROW to accurately capture the ROW and surrounding area.

Section 3.3.2, Wildlife, has been revised in the Final EIS to discuss wildlife surveys that were conducted in the corridors. Wildlife surveys were conducted in the corridors for special status species such as the Pima pineapple cactus and the cactus ferruginous pygmy owl as part of preparation of the Biological Assessments in support of the proposed project. In addition, ongoing wildlife surveys conducted by USFS and Arizona Game and Fish Department were relied upon as part of the analysis of the affected environment and potential environmental impacts. Any additional project-specific wildlife surveys are generally not required for a NEPA evaluation.

In Figure 4.2-3, the map of the Western Corridor is shaded to indicate visibility from travelways. The EIS states that as the Western Corridor crosses I-19 and continues southwest, residents, travelers, and recreationalists would have intermittent views of the proposed project in the foreground and middleground, with views from many areas in lower terrain obscured by the hills and main tailings piles in the area (see Section 4.2.2).

Comment No. 10

The Federal agencies note the commentor's preference for the No Action Alternative.

Falco, Emilio
Page 5 of 6

The DEIS effectively ignored, by relegating the information to the end of Appendix B, a very significant study that was completed in June 2002 in California (see http://www.dhs.cahwnet.gov/ehib/emf/RiskEvaluation/riskeval.html.)

7 cont. The executive summary of this study makes it clear: prolonged exposure to powerline EMFs is likely to increase the incidence of certain forms of cancer, especially among children, and such risks should be a significant factor in powerline siting. The DEIS concentrated instead on an older study by NIHES that was published in 1999. The goal was clear: concentrate on a study that would shine a more favorable light on the effects of EMFs.

8 It is impossible for TEP to effectively minimize the risks of their proposed powerline in the central corridor. The central corridor is not worth potentially sacrificing human health for TEP's (and nobody else's) gain. A higher standard than used in the DEIS is required. It would be interesting to find out how close to their powerline TEP employees would be willing to allow their families to live. The rational alternative from the point of view of the central corridor is the no-action decision.

5) The DEIS needs significant revision to pass muster as an official document:

9 The DEIS is faulty in its form: the editing was poor, with countless typos; it displays ignorant spelling such as Chilitepene for Chiltepin, Luback Creek for Tubac Creek; there were incorrect figure references and claims that vegetation was cleared in a wide swath around the EPNG gas pipeline (by showing a misleadingly angled photograph, Figure 3.2-6), whereas the reality is that only narrow ROW clearing is in place. The list is endless and will not be included here!

Falco, Emilio
Page 6 of 6

9 cont. The DEIS is faulty in its substance. Only a few examples will be given, but many more can easily be found. The DEIS makes the incredible statement that "no wildlife surveys were conducted in the corridors" (section 3.3.2, before 3.3.2.1). In other words, a high school student with internet access could have produced the ineffable Harris results included in the DEIS. The DEIS states that landforms and vegetation would hide the powerline, and that travelers along I-19 would not see the powerline. That may be true at times (depending on the angle of the Sun), except of course for those most directly affected, the residents near the Central Corridor.

Their views should enter the DEIS in exponential form. Hikers would also see the powerline on the W side of the Tumacacoris every single time they hiked in the area. These are cumulative impacts, not temporary as one might experience while driving along I-19.

10 The poor quality of the DEIS in many respects should be a warning that the underlying project is not worthy of consideration. The no-action alternative should be the final outcome of the EIS process.

Emilio E. Falco, Ph.D.
PO Box 3371
Tubac, AZ 85646

Ferris, Jeanne
Page 1 of 2

From:	Jeanne Ferris [SMTP:j ferris@hotmail.com]
To:	Pell, Jerry
Cc:	
Subject:	TEP's EIS
Sent:	10/14/2003 1:37 a.m Importance: Normal

Dear Dr. Pell and DOE Members,

1 This is a response to the EIS concerning the TEP Sahuarita-Nogales Transmission line. Let me begin by urging you to refuse to issue a permit for this line. I realize that you, the DOE, are under the directives of this current administration in their effort to use the public lands to the fullest possible commercial extent. Yet I prevail upon you to use your best judgment in not allowing this issue to continue unopposed. I am not in favor of this whole project. I believe there are very

2 legitimate alternatives to erecting this massive power line to Nogales to supply them with more power. I truly believe the purpose of this project is to transmit power from Mexico into this country. This is happening in California and the resulting pollution from this is deplorable. I live here in Arivaca to

3 avoid polluted air and water and have no wish to be exposed to it for the benefit of power companies. TEP may not have any plans to build power plants in Mexico, but I'll wager that someone does and TEP will make money from transmitting that power north. I cannot believe that this type of plan is in

Comment No. 1

The Federal agencies note the commentor's preference for the No Action Alternative.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS.

Ferris, Jeanne
Page 2 of 2

3 cont. the interest of the people of the USA. It is in the interest of the multinational corporations that profit from transferring power thru the "Grid". (Think Enron) If you should go ahead and issue this permit, I urge you to reconsider your preferred route thru the Atascosa Highlands. I have studied the EIS and nowhere in it does it make a case to ruin the beautiful, pristine land that the western route encompasses. There is NO advantage to this route and quite a few disadvantages. Since the Arizona Corporation Commission picked this route one of its members has been

4 removed for shady practices and is still being investigated. I was there when the line siteing committee drove out the Ruby Rd. to look over the various routes. It was just a shame. They never bothered to step out of their air-conditioned van and really look at the land that they chose to destroy. I felt that they had already made up their minds and this was just a sham. If you haven't read the latest issue the Sky Island Alliance I urge you to go to their site and take a look at what they said. They are at www.skyislandalliance.org I have yet to speak with anyone who thinks this is the best route or solution for Nogales' energy needs.

Thank you for your time and I pray you make the right decision.

Sincerely,
Jeanne Ferris, j_ferris@hotmail.com
PO Box 94
Arivaca AZ 85601

Comment No. 3 *(continued)*

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the united States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

Potential economic benefit to TEP from the proposed project is outside the scope of the EIS.

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Ferris, Jeanne
Page 1 of 1

From: j_ferris@hotmail.com
Sent: Tuesday, October 14, 2003 2:17 AM
To: Pell, Jerry
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

Re: Tucson Electric Power Sahuarita-Nogales Transmission line.

1 I know that you are new to this position but I am sure that you know the particulars on this project. I am totally appalled that the Arizona Corporation Commission chose the western route as the only possible route for this unnecessary, HUGE power line.

2 I am opposed to this line completely but adamantly opposed to running it through the beautiful, remote, pristine Coronado National Forest. I have lived here for 33 years and have marveled at how undeveloped and remote that area is. It would be more than a shame to ruin it. It would be criminal. There is no reason on earth to grant the power companies the right to rip up and degrade this area. This project would forever ruin it out there and it would never recover. I hope that you make the

1 cont. correct choice here and deny any special use permit for the Western and Crossover Routes.

Sincerely,
Jeanne Ferris
PO Box 94
Arivaca, Arizona 85601

Comment No. 1

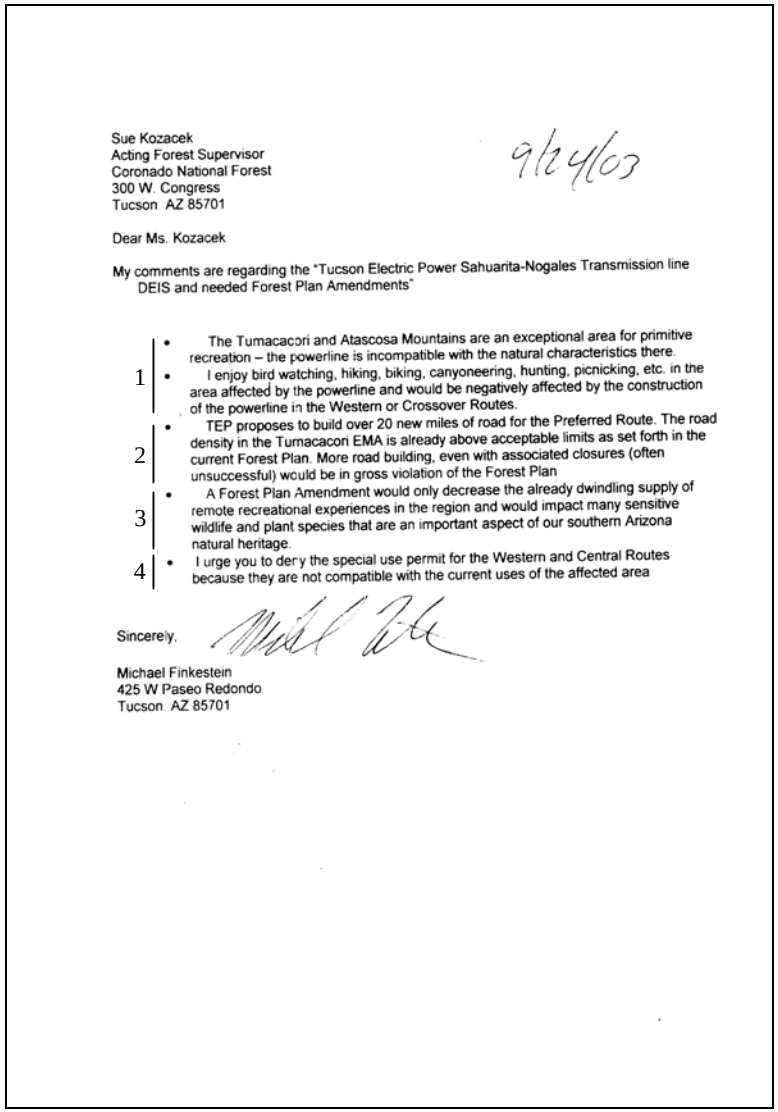
The ACC's selection of the Western Corridor does not limit the choices that each Federal agency can make in their ROD regarding the proposed project (see Section 1.5, NEPA Process, regarding the implications of selection of conflicting alternatives by the ACC and Federal agencies).

Comment No. 2

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Sections 3.1.2 and 4.1.2 discuss existing recreational settings and activities, and analyze potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest. Analysis of the proposed Forest Plan amendments is contained in Appendix H**.**

Finkestein, Michael
Page 1 of 1



Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson AZ 85701

9/24/03

Dear Ms. Kozacek

My comments are regarding the "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendments"

1 • The Tumacacori and Atascosa Mountains are an exceptional area for primitive recreation – the powerline is incompatible with the natural characteristics there.
• I enjoy bird watching, hiking, biking, canyoneering, hunting, picnicking, etc. in the area affected by the powerline and would be negatively affected by the construction of the powerline in the Western or Crossover Routes.

2 • TEP proposes to build over 20 new miles of road for the Preferred Route. The road density in the Tumacacori EMA is already above acceptable limits as set forth in the current Forest Plan. More road building, even with associated closures (often unsuccessful) would be in gross violation of the Forest Plan

3 • A Forest Plan Amendment would only decrease the already dwindling supply of remote recreational experiences in the region and would impact many sensitive wildlife and plant species that are an important aspect of our southern Arizona natural heritage.

4 • I urge you to deny the special use permit for the Western and Central Routes because they are not compatible with the current uses of the affected area

Sincerely,

Michael Finkestein
425 W Paseo Redondo
Tucson AZ 85701

Comment No. 1

Sections 3.1.2 and 4.1.2 discuss existing recreational settings and activities, and analyze potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest. Analysis of the proposed Forest Plan amendments is contained in Appendix H**.**

Commentor No. 2

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Forest as a whole, not for individual land units or EMAs within the Coronado National Forest.

Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Based on these terms and conditions for ensuring the effectiveness of road closures, the proposed project is consistent with Forest Plan standards and guidelines for road density.

Comment No. 3

Refer to the response to Comment 1 above regarding the impacts of a Forest Plan amendment.

Sections 3.3 and 4.3 discuss existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to endangered, threatened and special status species.

Comment No. 4

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources.

Finn, Tom
Page 1 of 1

Mr. Pell,

1 Based on my review of the Transmission Line Project from Tucson to Nogales, nearly 4000 people in the current (and planned) Rancho Sahuarita neighborhoods will be directly affected by the planned construction of additional 350 KV power line structures starting at the Tucson substation, running along the East boundary of Rancho Sahuarita, down to Nogales. The power lines will have a drastic negative effect on property values, a proposed golf course in the area, and will cause a great deal of concern to citizens relating to electromagnetic poisoning. Indeed, many exercise regularly on walking trails almost directly under the current transmission lines where the proposed lines will go.

2 THE PUBLIC INTEREST IS NOT SERVED BY THIS PROJECT. Very few in Rancho Sahuarita currently know about this project and TEP has done a great job keeping this away from the public. If residents in our community were informed about this project, there is no question you'd have hundreds, if not thousands, opposing this at the upcoming public hearings.

1 cont. Once you provide me with the draft EIS, I will take the time to fully read the impact studies. Clearly, placing two 350 Kv lines within a quarter mile of 4000 densely populated residents and right on top of a walking trail used by hundreds of residents is not a good thing for the public, especially when there are better alternatives. Please add me to the agenda for the Thursday 9/25/03 public hearing in Green Valley and provide me a copy of the EIS via email prior to this hearing.

Regards,
Tom Finn
15229 S. Ave. Rancho Sereno
Sahuarita, Arizona 520*207-1615

Comment No. 1

While the Federal agencies recognize that a given property owner's value could be affected (positively or negatively) by the proposed project, the Federal agencies have not attempted to quantify theoretical public perceptions of property values should the proposed project be built.

The available data have not revealed any conclusive evidence that EMF exposure from power lines poses a hazard to animal or human health (see Sections 3.10 and 4.10, Health and Human Environment).

Comment No. 2

Section 1.6 of the Final EIS has been revised to explain the process conducted by the Federal agencies to invite public participation in the NEPA process, per CEQ requirements.

Fleshman, J. Kenneth
Page 1 of 1

960 Placita de la Cotonia
Green Valley, AZ 85614
September 14, 2003

Mr. John M. McGee, Forest Supervisor
U.S. Forest Service
300 West congress, Tucson AZ 85701

Re: Proposed TEP Sahuarita-Nogales Transmission Line

Dear Sir,

When I moved to Arizona 19 years ago I chose to live in Green Valley, rather than Tucson, because of the many nearby mountain ranges, the so-called "Sky Islands". I am out in these mountains hiking 2 times a week. I know the Tumacacori and Atascosa mountains well. This area has been proposed for Wilderness status, which it deserves.

1 The current powerline proposal calls for 191 power poles of 140 feet height and 14 lines to pass through these two mountain ranges. This would be a major intrusion into this rugged, beautiful and nearly roadless and undisturbed area. It is unthinkable to consider the placement of these structures along Ruby Road at the base of Atascosa Peak and the officially designated historic fire lookout.

2 A case has been made for the need of a back up line for Nogales and Santa Cruz County. Only 20% of this line's capacity (100 Megawatts out of 500) is for Nogales. The remainder is for proposed export and sale to Mexico. This does not justify this destructive intrusion into the Coronado National Forest and I respectfully request that the United States Forest Service deny a permit for the passage of this transmission line.

J. Kenneth Fleshman

Comment No. 1

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project. The Atascosa Lookout is listed on the National Register of Historic Places for its architectural quality and its association with historical events that have made a significant contribution to the broad patterns of our history, including wildfire control efforts, Civilian Conservation Corps work, and the conservation movement. Assessments of the visual impact of the Western, Crossover and Central corridors all demonstrate that although the proposed transmission line would be visible from the lookout, the original fire detection function of the lookout house would not be compromised by the presence of the transmission line. The proposed project corridors would compromise neither the architecture, nor the historical associations of the lookout. None of the proposed corridors significantly impact the historical integrity of Atascosa Lookout.

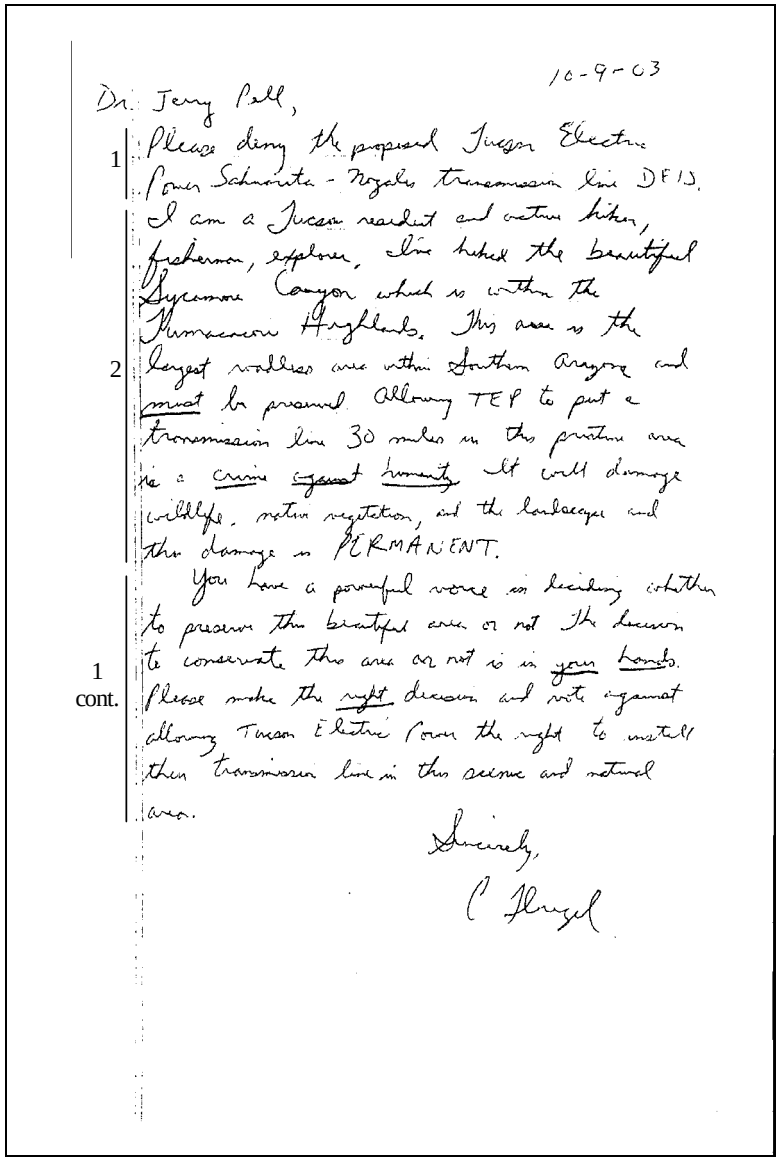
.

Comment No. 2

TEP reached agreement with Citizens to provide up to 100 MW of transmission capacity from Tucson to Nogales, Arizona, and TEP anticipates using the remaining 400 MW of capability for transport of energy between the United States and Mexico (see Section 1.5, TEP's Proposed Project Capacity and Usage, of the Final EIS).

Chapter 3 describes the affected environment of the area and Chapter 4 evaluates the potential impacts of the proposed project, including potential impacts on the Tumacacori EMA of the Coronado National Forest.

F (Illegible), C.
Page 1 of 1



10-9-03

Dr. Jerry Pell,

1 Please deny the proposed Tucson Electric Power Sahuarita - Nogales transmission line DEIS. I am a Tucson resident and active hiker, fisherman, explorer. I've hiked the beautiful Sycamore Canyon which is within the Tumacacori Highlands. This area is the

2 largest roadless area within Southern Arizona and must be preserved. Allowing TEP to put a transmission line 30 miles in this pristine area is a crime against humanity. It will damage wildlife, native vegetation, and the landscape and the damage is PERMANENT.

You have a powerful voice in deciding whether to preserve this beautiful area or not. The decision to conserve this area or not is in your hands.

1 cont. Please make the right decision and vote against allowing Tucson Electric Power the right to install their transmission line in this scenic and natural area.

Sincerely,

C Flugel

Comment No. 1

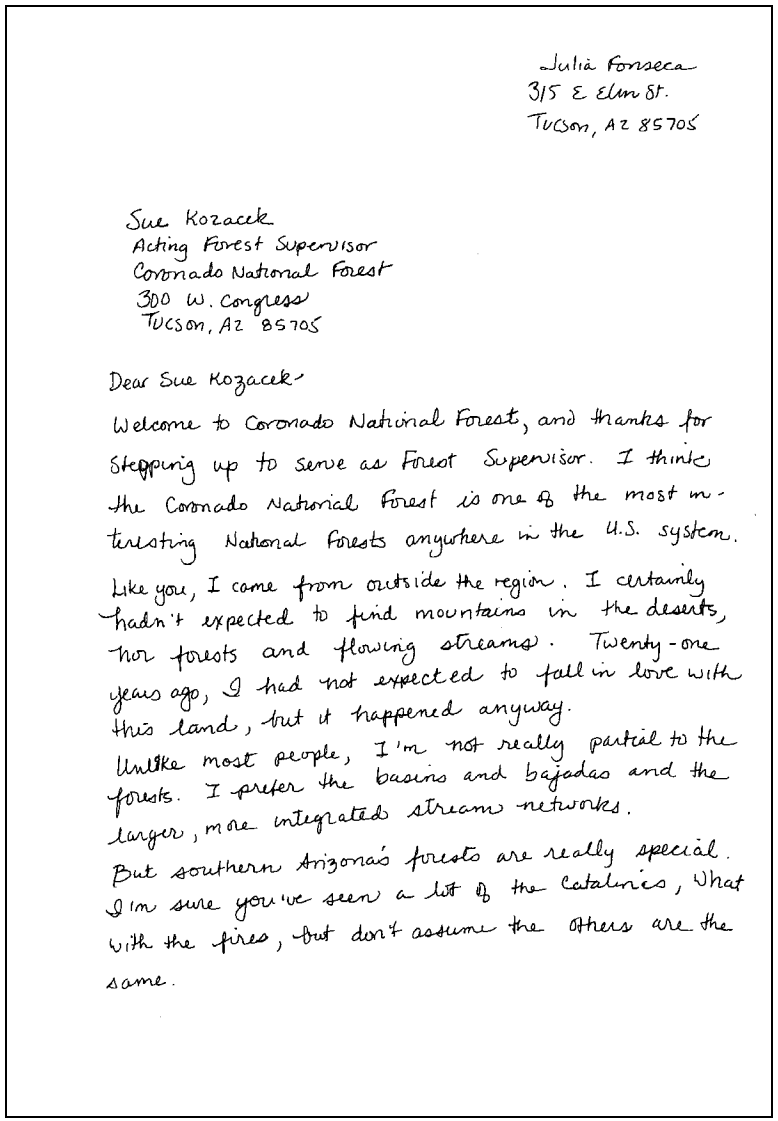
The Federal agencies note the commentor's opposition to the proposed project.

Comment No. 2

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Sections 3.3 and 4.3 discuss the existing biological resources, including the area of the Tumacacori Mountains and Sycamore Canyon, and analyze the potential impacts to these resources from the proposed project. Likewise, Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Fonseca, Julia
Page 1 of 2



Julia Fonseca
315 E Elm St.
Tucson, AZ 85705

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85705

Dear Sue Kozacek-

Welcome to Coronado National Forest, and thanks for stepping up to serve as Forest Supervisor. I think the Coronado National Forest is one of the most interesting National Forests anywhere in the U.S. system.

Like you, I came from outside the region. I certainly hadn't expected to find mountains in the deserts, nor forests and flowing streams. Twenty-one years ago, I had not expected to fall in love with this land, but it happened anyway.

Unlike most people, I'm not really partial to the forests. I prefer the basins and bajadas and the larger, more integrated stream networks.

But southern Arizona's forests are really special. I'm sure you've seen a lot of the Catalinas, what with the fires, but don't assume the others are the same.

Comment No. 1

TEP would close 1.0 mi (1.6 km) of existing road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project on the Coronado National Forest, such that road density on the Coronado National Forest would not be affected.

Analysis of the proposed Forest Plan amendments is contained in Appendix H.

Fonseca, Julia
Page 2 of 2

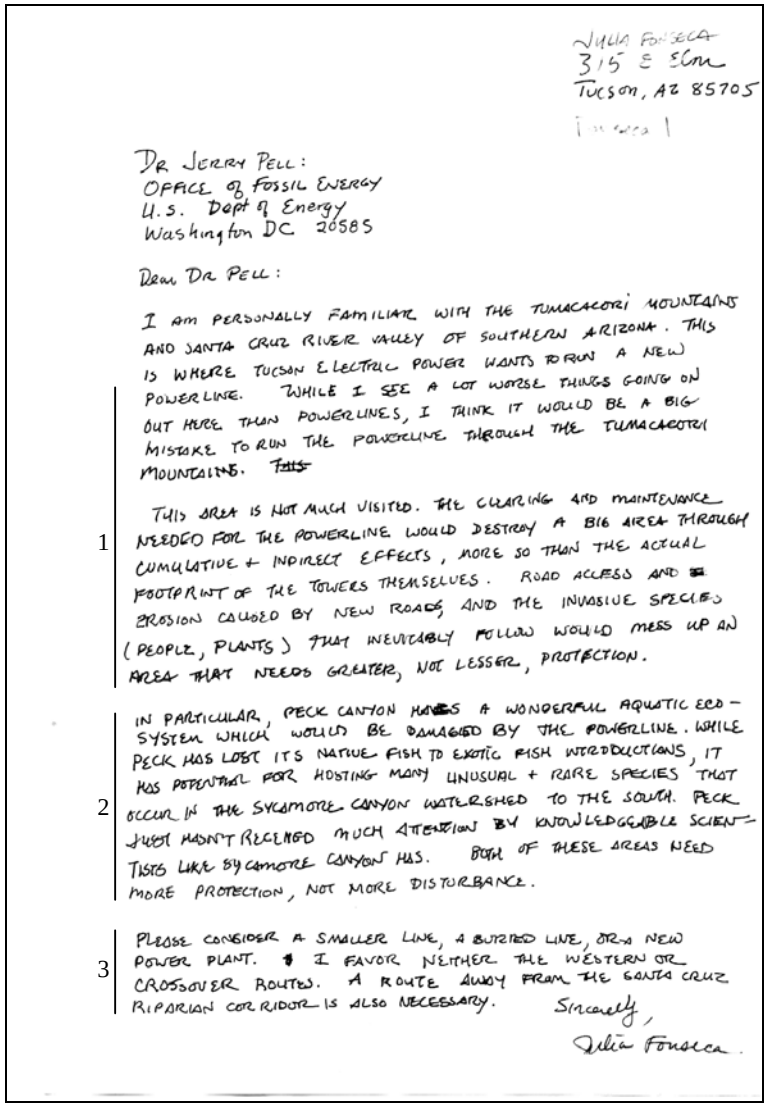
I especially would like to draw your attention to the Pajarita - Atascosa - Tumacácori area to the south. This area is dominated by volcanics, and biologically it has many, many different plant species which bespeak closer ties to the Mexican tropical legacy.

Some of this area is blessedly free of roads. Last year my husband + I made several trips to Peck Canyon. Though close to I-19, the part in National Forest is quite beautiful and wild. Nature has reclaimed portions of the road which passed through the canyon, and many unusual plants grow there, including a number of rare aquatic plants.

1 I think it would be a terrible mistake to put a powerline through any of the Tumacácori Ecosystem Management Area, or add to the burden of roads which already exist. I would hope that you would oppose amending the Forest Plan to allow the powerline.

Long-Term, I think you will see that we need more of what forests can provide -- clear water, spiritual renewal, acquaintance with our fellow travelers on earth -- and less of what cities must provide (roads, electricity), in the forests. Let the countries thrash out the issue outside the forest; let the affected communities come to terms with the solution. Please don't "solve" the real problem by providing an expedient but ultimately incredibly damaging solution by offering up this national treasure. Thanks! Julia

Fonseca, Julia
Page 1 of 1



Julia Fonseca
315 E 5th
Tucson, AZ 85705

Dr Jerry Pell:
Office of Fossil Energy
U.S. Dept of Energy
Washington DC 20585

Dear Dr Pell:

I am personally familiar with the Tumacacori Mountains and Santa Cruz River valley of southern Arizona. This is where Tucson Electric Power wants to run a new powerline. While I see a lot worse things going on out here than powerlines, I think it would be a big mistake to run the powerline through the Tumacacori Mountains. ~~This~~

1 This area is not much visited. The clearing and maintenance needed for the powerline would destroy a big area through cumulative + indirect effects, more so than the actual footprint of the towers themselves. Road access and erosion caused by new roads, and the invasive species (people, plants) that inevitably follow would mess up an area that needs greater, not lesser, protection.

2 In particular, Peck Canyon has a wonderful aquatic eco-system which would be damaged by the powerline. While Peck has lost its native fish to exotic fish introductions, it has potential for hosting many unusual + rare species that occur in the Sycamore Canyon watershed to the south. Peck just hasn't received much attention by knowledgeable scientists like Sycamore Canyon has. Both of these areas need more protection, not more disturbance.

3 Please consider a smaller line, a buried line, or a new power plant. I favor neither the Western or Crossover Routes. A route away from the Santa Cruz Riparian corridor is also necessary.

Sincerely,
Julia Fonseca

Comment No. 1

Section 4.1.1, Land Use, of the Final EIS has been revised to clarify that although the Federal agencies use the term "footprint" to describe the area beneath each tower, there would be additional temporary and permanent land disturbance associated with the proposed project. Section 4.1.1 states that the area to be disturbed by access roads (both temporary roads for construction, and permanent roads for maintenance), transmission line tensioning and pulling sites, fiber-optic splicing sites, and laydown yards is addressed in Section 4.12, Transportation, and is not reflected in the structure site disturbance estimates in Table 4.1-1.

Direct and indirect effects of the proposed action, including the required road access, are evaluated in Chapter 4, Environmental Effects, for each resource area. Cumulative effects, such as road access from the proposed project in combination with road access from U.S. Border Patrol operations, are evaluated in Chapter 5.

Sections 3.6.2 and 4.6.2 present a description of the existing soils and analysis of the potential impacts to soils, including erosion impacts.

Sections 3.3 and 4.3 present a description of the existing biological resources and evaluation of potential impacts to biological resources, including invasive species impacts (Section 4.3.6) that could result from the proposed project.

Comment No. 2

Sections 3.3 and 4.3 present a description of the existing biological resources (including USFS Classified Riparian Areas in the Peck Canyon portion of the Crossover Corridor) and potential impacts to those biological resources from the proposed project.

Comment No. 3

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their

Comment No. 3 *(continued)*

review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Because of the disadvantages and cost differential associated with burying transmission lines, this alternative is not evaluated in detail in the EIS. Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis, has been revised to indicate that the option of burying transmission lines was considered but eliminated from further analysis in the EIS.

Regarding the "Santa Cruz riparian corridor" cited by the commentor, the nearest corridor to the Santa Cruz River is the Central Corridor, which is approximately 0.5 mi (0.8 km) from the Santa Cruz River. The Santa Cruz River would not be crossed by any of the three proposed corridors, and none of the corridors are in the immediate vicinity of the Santa Cruz River.

Garty, Amanda
Page 1 of 1

Opinion of the Tucson-Electric Power Sahuarita-Nogales Transmission line

From: Amanda Garty [SMTP:amandagarty@yahoo.com]
To: Pell, Jerry
Cc:

Subject: Opinion of the Tucson-Electric Power Sahuarita-Nogales Transmission line
Sent: 10/14/2003 7:05 PM
Importance: Normal
Dear Dr. Jerry Pell,

1 I'm writing to you regarding the Tucson-Electric Power Sahuarita-Nogales Transmission line DEIS. I would like to express my concern and opposition to the proposed project. The proposed 345 kV line would slice through some of the most wild and ecologically sensitive areas in southern Arizona without there being a clear "need" for the project in Santa Cruz county.

2 In addition, the Crossover and Western routes, and the 345 kV lines are the most expensive options.

3 Please consider alternatives, such as using a less expensive 115 kV line that can be buried close to community boundaries and outside of extremely fragile ecological areas.

This is a very important issue and I hope the final decision is given serious and fair consideration.

Thank you for taking the time to consider my opinion.

Sincerely,

Amanda Garty
823 W. Birch Ave., Unit B
Flagstaff, AZ 86001

Comment No. 1

Sections 3.3 and 4.3 present a description of the existing biological resources and evaluation of potential impacts to biological resources.

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to ACC, Comment 1, and to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Comment No. 2

The construction costs of each of the three action alternatives (the Western, Central, and Crossover Corridors) would be roughly similar (see Section 4.5.1). Section 4.5 analyzes the potential socioeconomic impacts that could result from the proposed project based on a number of factors including the cost of the proposed project. Any additional analysis of the cost of the proposed project is outside the scope of the EIS.

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. It is not for the agency to run the applicant's business.

Comment No. 3

A smaller transmission line in lieu of the proposed 345-kV line (e.g., 115-kV line) would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Garty, Amanda
Page 1 of 1

Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 06:04 PM

Amanda Garty <amandagarty@yahoo.com>
10/14/2003 04:25 PM

To: skozacek@fs.fed.us
cc:
Subject: Comments on the TEP Sahuarita-Nogales Transmission line

Dear Sue Kozacek,

1 I am writing to you regarding the Tucson-Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendment. I strongly oppose the Preferred Route, specifically the Western and Crossover Routes. Both routes would slice through some of the most ecologically pristine and fragile areas in southern Arizona. I enjoy hiking and camping in the affected area. I would be gravely disappointed if the Forest Service allowed twenty miles of road development, and miles of ecologically disruptive power line development across the Tumacacori and Atascosa Mountains. In

2 addition, the road density in the Tumacacori EMA is already above acceptable limits as stated in the currently enacted Forest Plan.

3 I strongly urge you to deny the special use permit to Tucson Electric Power.

Thank you for taking the time to hear my comments.

Sincerely,

Amanda Garty
823 W. Birch Ave. Unit B
Flagstaff, AZ. 86001
amandagarty@yahoo.com

Comment No. 1

Sections 3.3 and 4.3 present a description of the existing biological resources and evaluation of potential impacts to biological resources, including impacts from roads associated with the proposed project.

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities, including hiking and camping, and analyze the potential impacts to these resources from the proposed project, including impacts from roads associated with the proposed project.

TEP would close 1.0 mi (1.6 km) of existing road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project on the Coronado National Forest, such that road density on the Coronado National Forest would not be affected.

Comment No. 2

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest.

Comment No. 3

The commentor's opinion that the authorization should be denied is noted.

Garvin, Michael J.
Page 1 of 1

DEIS for Tucson Electric Power Powerline Proposal

From: mjgarvin@yahoo.com [SMTP:mjgarvin@yahoo.com]
To: Pell, Jerry
Cc:

Subject: DEIS for Tucson Electric Power Powerline Proposal
Sent: 10/10/2003 1:49 PM
Importance: Normal

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW Washington, DC 20585

Dear Dr. Pell,

1 Because Tucson Electric Power's proposed 345 kilovolt powerline will cut through some of the last remote, wild spots in Southeast Arizona, I ask you to withdraw the project's draft Environmental Impact Statement.

The Tumacacori Highlands, over which the route is proposed, has many roadless areas and abounds with rare wildlife, including the occasional jaguar.

2 While Santa Cruz County needs and deserves reliable electric service, that service can be provided by a much smaller and less obtrusive powerline than that which TEP has proposed. The draft EIS does not address alternatives to the massive proposed powerline, including a local power plant which would nullify the need for the powerlines and may well provide cheaper electricity.

Sincerely,
Michael J. Garvin
1 Spring Hill Cir.
Sausalito, California 94965

Comment No. 1

Sections 3.1.2 and 4.1.2 discuss existing recreational settings and activities, and analyze potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to rare wildlife (see Section 4.3.3, Special Interest Species).

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated

Comment No. 2 ***(continued)***

in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Genser, Richard
Page 1 of 1

"Tucson Electric Power Sahuarita-Nogales Transmission line DEIS"

From: RexGnsr@aol.com [SMTP:RexGnsr@aol.com]
To: Pell, Jerry
Cc:

Subject: "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS"

Sent: 10/13/2003 6:38 PM
Importance: Normal

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585
Jerry.Pell@hq.doe.gov
FAX: 202-318-7761

"Tucson Electric Power Sahuarita-Nogales Transmission line DEIS"

Sir:

1 This project is a waste of money and time.
I suggest NO ACTION

2 I do not support the proposed routes because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. They are an unnecessary economic, environmental, and culture burden on Southern Arizona. Please consider withdrawing the

3 Draft Environmental Impact Statement and issuing an assessment that properly analyzes real solutions to power needs in Santa Cruz County that include a smaller power line and/or locally run power plant.

Respectfully,

Richard Genser
3221 E. Blossom Dancer Lane
Tucson, AZ 85718

Comment No. 1

The Federal agencies note the commentor's preference for the No Action Alternative.

Comment No. 2

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Comment No. 3

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Gerganoff, Doris
Page 1 of 1

From: Doris Gerganoff [deegee5@earthlink.net]
Sent: Wednesday, October 01, 2003 11:30 AM
To: Pell, Jerry
Subject: Power Line Permit

1 Dear Dr. Pell; Please add my name to the list of people opposing the building of a 345,000 volt line, by TEP (UniSource) through some of the most scenic areas of Southern Arizona.

2 This is a bad idea for a number of reasons and no reasons have been presented, other than an economic benefit for TEP (UniSource).

3 I am a hiker and have had the pleasure of hiking in these pristine areas and would love to think that they will be available for my grandchildren to enjoy.

1 cont. I urge the DOE to recommend that a Presidential Permit from the Department of Energy be denied.

Sincerely,

Doris Gerganoff

Comment No. 1

The Federal agencies note the commentor's opinion that the DOE should deny the Presidential Permit for the proposed project.

Comment No. 2

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…."

Comment No. 3

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities, including hiking, and analyze the potential impacts to these resources from the proposed project.

Green, Jonathan
Page 1 of 2

819 N. 10th Ave.
Tucson, AZ 85705
October 14, 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

This letter is in reference to the Tucson Electric Power [TEP] Sahuarita-Nogales Transmission Line DEIS and needed Forest Plan amendments. TEP proposes to erect a 140 ft tall electric transmission line through one of the most remote wildlands of the Coronado National Forest, in the Tumacacori Highlands northwest of Nogales, AZ.

1 The preferred Western route is the longest, most expensive and most environmentally damaging of all alternatives considered. The Crossover route is nearly as terrible. Both

2 slice through the Tumacacori Proposed Wilderness Area. This spectacular area is home to America's last jaguars as well as 9 other Endangered or Threatened species and 74 special status species including Mexican spotted owls, southwestern willow flycatchers, lesser long-nosed bats and Chiricahua leopard

3 frogs. The route comes within ½ mile of the existing Pajarita Wilderness Area and Gooding Research Natural Area, and a stretch of Sycamore Canyon eligible for Wild and Scenic River status.

4 The Tumacacori, Pajarito and Atascosa Mountains are an exceptional area for primitive recreation and wilderness experience. I have enjoyed bird watching, hiking and camping in the area and would be negatively affected by the construction of a power line in the area. It is one of the few places left in the Coronado NF where scenic vistas remain unmarred by human structures on the landscape. The 191

Comment No. 1

The affected environment of the Western and Crossover Corridors is described in Chapter 3, and the potential environmental impacts (including socioeconomics impacts) are fully evaluated in Chapter 4.

Comment No. 2

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to endangered, threatened and special status species.

Comment No. 3

Section 3.1, Land Use, discusses the affected environment of the Pajarita Wilderness, which encompasses the Goodding Research Natural Area and the segment of Sycamore Canyon that is potentially eligible for designation as a Wild and Scenic River. The structure locations, construction areas, and proposed access roads for all three corridors would not enter into the Pajarita Wilderness. Potential impacts to these resources are addressed in the resource sections of Chapter 4, Environmental Effects.

Comment No. 4

Sections 3.1.2 and 4.1.2 present a description of existing recreational settings and activities, and analysis of potential impacts to recreation from the proposed project in the areas cited by the commentor. Section 4.1.2 specifically evaluates impacts to indicators such as remoteness and naturalness, both of which would have changes that are inconsistent with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Sections 3.1.2 and 4.1.2 present a description of existing recreational settings and activities, and analysis of potential impacts to recreation from

Green, Jonathan
Page 2 of 2

4 cont. steel towers would reduce over 18,000 acres of wildlands from a Forest Service scenic rating of 'High or Very High" to "Moderate or Low." A Forest Plan Amendment would only decrease the already dwindling supply of remote recreational experiences in Coronado NF and, for that reason alone, the power line is incompatible with the natural characteristics there.

5 TEP proposes to build over 20 new miles of road for the Preferred Route. Although they plan to close many of them, such closures are often unsuccessful. Even when closed, road scars in these fragile arid areas take generations to recover. Furthermore, power line corridors are notorious for channeling spread of invasive weeds, disrupting wildlife movement, and providing access to illegal off-road drivers and smugglers. Since

6 the road density in the Tumacacori EMA is already above acceptable limits as set forth in the current Forest Plan, more road building, even with associated closures would be in gross violation of the Forest Plan.

7 The Coronado National Forest is under no obligation to grant permission for the power line, which is an inappropriate use of our national forest. A 115 kV line would meet the requirements of both Santa Cruz County and Arizona Corporation Commission order 62011 without a new utility corridor or

8 enormous towers. Furthermore, there is no "need" stated in the DEIS for the 345 kV line by either the applicant (TEP) or agencies. TEP's proposal for this oversized line results from their desire to connect with the Mexican power grid and serves neither the public good, Coronado NF nor the citizens of Santa Cruz County.

7 cont. For these reasons, all Special Use permits and Forest Plan amendments associated with this project must be denied.

Sincerely,
Jonathan Green

Comment No. 4 *(continued)*

the proposed project in the areas cited by the commentor. Section 4.1.2 specifically evaluates impacts to indicators such as remoteness and naturalness, both of which would have changes that are inconsistent with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project, including impacts to Scenic Integrity. Analysis of the proposed Forest Plan amendments is contained in Appendix H.

Comment No. 5

Any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate.

Sections 3.3 and 4.3 present analyses of the affected environment and potential impacts to biological resources, including wildlife and invasive species impacts. Section 4.3.2 states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts related to roads. Section 3.1.2 of the EIS states that there is off-highway vehicle use in the project area, and Section 4.1.2 analyzes the impacts of off-highway vehicle use as one of many recreational uses of the project area, including the Coronado National Forest.

Comment No. 6

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National

Comment No. 6

Forest. TEP would close 1.0 mi (1.6 km) of existing classified road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project, such that road density on the Coronado National Forest would not be affected.

Comment No. 7

As discussed in Section 1.2.2.2 of the Final EIS, the purpose and need for USFS action is to determine whether the proposed project development is appropriate within the Tumacacori EMA within the Coronado National Forest. If the proposed transmission line development is appropriate, USFS would work with TEP to decide the site-specific location for the line and support structures, mitigation measures and BMPs to be implemented to reduce environment effects, permit issuance terms and conditions, and pre- and post- construction reporting and monitoring.

Comment No. 8

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not require a 345-kV transmission line. However, TEP's stated purpose and need for the proposed project has a dual purpose to benefit both southern Arizona and Mexico.

A smaller transmission line in lieu of the proposed 345-kV line (e.g., 115-kV line) would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail (refer to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system located in Sonora, Mexico." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Green, Jonathan
Page 1 of 4

Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS

From: jon green [SMTP:no_scopes@yahoo.com]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS

Sent: 10/15/2003 12:09 AM
Importance: Normal

Dear Dr. Pell,
Comments on the DEIS are included in the body of this email. A duplicate version is attached as MS Word file.
==========

819 N. 10th Ave.
Tucson, AZ 85705
October 14, 2003

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585

Dear Dr. Pell,
I am deeply disappointed by the authors of the "Tucson Electric Power [TEP] Sahuarita-Nogales Transmission Line DEIS". The purpose of this project is ostensibly to comply with the intentions of Arizona Corporation Commission (ACC) order 62011 to ensure a reliable, long-term supply of electricity to Santa Cruz County.
1 By assuming that the construction of a 345kV transmission line from Sahuarita is the only method by which the ACC's requirements can be met, the DEIS only

Comment No. 1

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review..

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Comment Nos. 2, 3, and 4

Refer to the response to Comments 1, 2, and 3, respectively, in the previous submittal from Jonathan Green.

Green, Jonathan
Page 2 of 4

1 cont. addresses issues related to potential locations for that hypothetical line. This constitutes an utter failure by the DEIS, its authors and the government to comply with the intent of the National Environmental Policy Act.

2 The preferred Western route is the longest, most expensive and most environmentally damaging of all alternatives considered. The Crossover route is

3 nearly as terrible. Both slice through the Tumacacori Proposed Wilderness Area. This spectacular area is home to America's last jaguars as well as 9 other Endangered or Threatened species and 74 special status species including Mexican spotted owls, southwestern willow flycatchers, lesser long-nosed bats and Chiricahua leopard frogs. The route comes within ½

4 mile of the existing Pajarita Wilderness Area and Gooding Research Natural Area, and a stretch of Sycamore Canyon eligible for Wild and Scenic River status.

5 The Santa Cruz County Board of Supervisors approved and recommended a 115 kV line. Why should ratepayers pay $85 million for 345 kV, including a 20 percent rate increase in 2003, when they can have a local power station for $50 million or a 115 kV backup for $18-21 million with fewer environmental impacts? The DEIS needs a cost-benefit analysis so that the needs of Santa Cruz County can be addressed in a fiscally responsible and equitable way. Why isn't a smaller, less obtrusive power line considered for any route? It would be cheaper, could more easily be buried in sensitive areas near homes and would serve the long-term needs of Santa Cruz County.

Comment No. 5

Refer to the response to Comment 1 above regarding the alternatives evaluated in the EIS.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS (see the response to the Border Power Plant Working Group, Comment 2).

This EIS evaluates the proposed project's potential environmental impacts, which under CEQ NEPA-implementing regulations encompass the natural and physical environment, as well as the relationship of people with that environment (40 CFR Part 1508.1). NEPA's definition of environmental impacts does not require a cost-benefit analysis, and thus, such analysis for the entire project is outside the scope of the EIS.

Comment No. 6

If TEP's proposed project is approved by each of the Federal agencies, then there would still be a variety of events that could preclude TEP from implementing this project, such as the possibility of failure by TEP to secure a power sales contract with CFE. Issuance of a Presidential Permit by DOE would only indicate that DOE has no objection to the project, but would not mandate that the project be built.

Green, Jonathan
Page 3 of 4

5 cont. There is no "need" stated for the oversized line by either the applicant (TEP) or agencies. TEP's proposal results from their desire to connect with the Mexican power grid and has nothing to do with ACC order 62011. Only a small percentage of the electricity would be used in Santa Cruz County. There are no known customers in Mexico, nor are any likely since the Mexican Constitution prohibits buying power from foreign and private utilities. The probable explanation is that TEP wants to import electricity from future power plants in Mexico, where they can be built and operated more cheaply and with less government oversight than in the US.

6 If the goal of this project is to ensure a long term energy supply for Santa Cruz County, why does the DEIS fail to suggest alternatives such as improving energy efficiency through conservation or increasing local generating capacity (including consideration of solar and wind generation)? Such measures might eliminate the need for any new transmission lines. In fact, Maestros Group has already proposed building a small, gas-fired power plant in Nogales. Even if it is determined that a new transmission line is needed, why

7 weren't existing utility corridors considered? They are already impacted, offer easier access for maintenance and would reduce construction costs.

8 I do not support any of the proposed routes, nor the 345kV transmission line because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. They are an unnecessary economic, environmental, and cultural burden on Southern Arizona. Furthermore, I believe the DEIS is

1 cont. grossly inadequate in its analysis of alternatives to the proposed project.

9

Comment No. 6 *(continued)*

The passage of NAFTA established the benefits of strengthening and enhancing the electricity trade with Canada and Mexico.

The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS.

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the United States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

Comment No. 7

The alternatives suggested by the commentor do not meet TEP's proposal (see response to Comment 1 above). TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…."

Green, Jonathan
Page 4 of 4

Withdraw the Draft Environmental Impact Statement and issue a document that properly analyzes real solutions to power needs in Santa Cruz County, including a smaller power line, increased local generating capacity (including decentralized and non-fossil fueled systems), and energy conservation alternatives! Unless this is done, I will only support the "No Action" alternative. 5 cont. 9 cont.

Sincerely,
Jonathan Green

Comment No. 7 *(continued)*

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 8

A portion of each of the action alternatives follows or crosses an existing natural gas pipeline (see Table 2.3-1, Summary Comparison of Potential Environmental Effects of Alternatives) that is within a utility corridor and has some access roads and other associated ground disturbance. Building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5 of the Final EIS).

Comment No. 9

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Grohman, Randall and Jessica Shinn
Page 1 of 4

Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS

From: Jessie [SMTP:jessieshinn@pop.tcsn.uswest.net]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS
Sent: 10/11/2003 1:12 AM
Importance: Normal
Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS

(Attached is a Word document of the following text)

Dear Dr. Pell:

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345kV powerline.

I have examined the DEIS and would like to make only three points in addition to the many valid arguments against the proposal made by southern Arizona organizations such as the Sky Island Alliance, Friends of Buenos Aires NWR and Tucson Audubon Society, with which I wholeheartedly agree.

2 First, I am appalled by the "Visual Simulation[s]", which I believe give a skewed perspective of the true visual impact of the proposed powerlines.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Section 4.2.1, Visual Resources, has been revised in the Final EIS to clarify that the Western Corridor would be highly visible from higher elevations on trails leading to Castle Rock (in addition to trails leading to Atascosa Lookout, as stated in the Draft EIS). The photo simulations in Section 4.2 are included to portray the range of visual impacts of the proposed project, from wide-open to partially blocked views at a range of distances, covering the most likely viewing areas. The photo simulations are augmented by descriptions of the vegetation and land use; Scenic Integrity values; and maps of visibility and various visual attributes, to support analysis of visual impacts, including impacts on scenic integrity. Mapping of project visibility was performed from major roadways because these areas would have the highest concentration of viewers.

Sections 3.1.2 and 4.1.2 describe existing recreational resources and analyze potential impacts to these resources, such as potential impacts to hiking in the Coronado National Forest.

Comment No. 3

Any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Sections 3.12 and 4.12 describe the existing transportation system in the area, including the prevalence of wildcat roads, and evaluate potential impacts from the proposed project. Section 4.3.2 states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Grohman, Randall and Jessica Shinn
Page 2 of 4

2 cont. The visual impact in the most pristine and lovely areas of the western route are minimized simply by being rendered from such great distances as to make the power poles seem insignificant with respect to the grand proportions of the landscape. However, anyone who has traveled the Ruby Road knows that it travels in very close proximity to Castle Rock, which in the "simulation" is shown only at great distance. To be in the vicinity of this area, or to hike up to this monolith rising from a setting of greenery-softened hills, has an impact that is so visually spectacular as to be headily awesome. I believe that any one of the preferred powerline routes proposed in the DEIS would impose a visual blight on a landscape that is one of the most pristine in southern Arizona and the Southwest US.

Ironically, the simulations that better render the visual impact of the monopoles are done for the routes in that country which is the least spectacular dry, open range with the road and powerline in the near foreground, accentuating the dry and lifeless appearance of the landscape in that area, as if to make it seem that the addition of powerlines hardly matters to visual appeal. Had the same perspective been used for the Castle Rock area, the result would have been to better raise awareness of the true visual impact there and create skepticism in the assessment.

3 Second, while there is an intent to obliterate and revegetate all non-critical access roads created to install the towers and powerlines, authoritative and personal experience tells me that such is a pipe-dream.

In this country, the flow of tens of thousands of illegal immigrants each month has proved unstoppable. The number

Comment No. 3 *(continued)*

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above

Comment No. 4

Sections 3.3 and 3.4 present analyses of affected environment and potential impacts to bird populations in the proposed transmission corridors, including analyses of potential impacts to migratory birds (see Sections 3.3.4 and 4.3.4).

The Federal agencies acknowledge that grassland habitat in southern Arizona is important to species such as Baird's sparrow. Furthermore, the agencies acknowledge that impacts to this habitat type may impact individuals of several grassland species protected under the *Migratory Bird Treaty Act* (MBTA), including Baird's sparrow. Baird's sparrow is not listed under the ESA, as threatened or endangered. A draft preliminary analysis of impacts to birds protected under the MBTA was prepared in support of the Draft EIS. This report was subsequently revised to incorporate comments from USFS made in January 2004 and include more species such as Baird's sparrow. The revised report is summarized in Section 4.3.4, Migratory Birds and Raptors, of the Final EIS and is incorporated by reference. The revised report discusses the impact of bird populations that use migratory flight corridors in the area and resident birds protected under the MBTA. This report also discusses impacts to the major vegetation types, including Semidesert Grassland, as they pertain to species protected under the MBTA.

Grohman, Randall and Jessica Shinn
Page 3 of 4

3 cont. of wildcat roads and trails on public lands is higher than the number of USFS classified roads. Any breach of the landscape is immediately exploited by illegal traffickers as an alternative route for evading law enforcement authorities. Additional spur roads will soon be connected to other existing de-vegetated paths, and attempts to ameliorate the impact of the newly created trails - authorized and resultant unauthorized will require a much larger effort than foreseen by the methods of the EIS. It is my experience, based on my knowledge of the problem at the Buenos Aires National Wildlife Refuge (at the western end of the Ruby Road), that the scars on the land are virtually impossible to erase or even attempt to heal while the illegal immigration problem is unresolved.

4 Third, there is insufficient attention to the impact of the powerlines on the populations of birds, both those that use migratory flight corridors in southern Arizona, and those that reside here seasonally. The importance of the grasslands to limited range species such as Baird's Sparrow is not addressed at all, and would likely find the effects on such species to be adverse.

5 In any case, should the DEIS not be withdrawn, the TEP project in any alternative as proposed is unnecessary, and any incompatibility with recreational attributes or the mission of environmental management should be sufficient cause to take a No Action stance. Any adverse affects to populations of threatened and endangered species provide ample reason to reject a project that is unnecessarily disproportionate to the requirements that initiated it.

Comment No. 4 *(continued)*

The revised analysis of impacts to birds protected under the MBTA will be submitted to the USFWS, which has the primary responsibility for administrating the MBTA and its amendments, and subsequent acts. The USFWS will determine if the conservation measures proposed in the analysis are sufficient to mitigate impacts to birds protected under the MBTA. The USFWS may recommend additional conservation measures if it is determined the impacts would adversely affect populations so that formal listing under the ESA would be required.

Comment No. 5

Section 1.6.6 of the Final EIS states that each Federal agency will make and explain its decision in its respective ROD. Each Federal agency is responding to TEP's proposed project as described in Section 1.2.2, Federal Agencies' Purpose and Need Statements.

Sections 3.1.2 and 4.1.2 discuss existing recreational settings and activities, and analyze potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to indicators such as remoteness and naturalness, both of which would have changes that are not compatible with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest. Section 4.1.2.4 (ROS Impacts Summary for Western, Central, and Crossover Corridors) in the Final EIS includes revised text from USFS, concluding that the proposed transmission line is out of character with recreation settings in the area, but that when considering the overall impact of the proposed transmission line on each area it crosses, it alone would not change ROS settings (that is, the proposed project would not result in the re-classification of areas by USFS in terms of the recreational experience each area provides).

Grohman, Randall and Jessica Shinn
Page 4 of 4

Thank you for your time and consideration.

Sincerely,

Randall Grohman
Vice President, Friends of Buenos Aires National Wildlife Refuge

Jessica Shinn
Assistant to the Director, Tucson Audubon Society
TEP EIS letter 10-2003.doc

Comment No. 5 ***(continued)***

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources, including impacts to threatened and endangered species. The Federal agencies are currently conducting consultation with USFWS under ESA Section 7(a)(2), as described in Section 4.3.3, Special Interest Species. The Federal agencies are not allowed to authorize any actions that would jeopardize the continued existence of any threatened or endangered species listed under the ESA as amended.

Grover, Ravi
Page 1 of 1

From:	desi666@Hindunet.com [SMTP:desi666@Hindunet.com]
To:	Pell, Jerry
Cc:	
Subject:	Tucson Electric Power's proposed 345 kilovolt powerline
Sent:	10/9/2003 11:51 PM **Importance:** Normal

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

Please withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

1 The draft EIS is inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

Sincerely,

Ravi Grover
POB 802103
Chicago, Illinois 60680

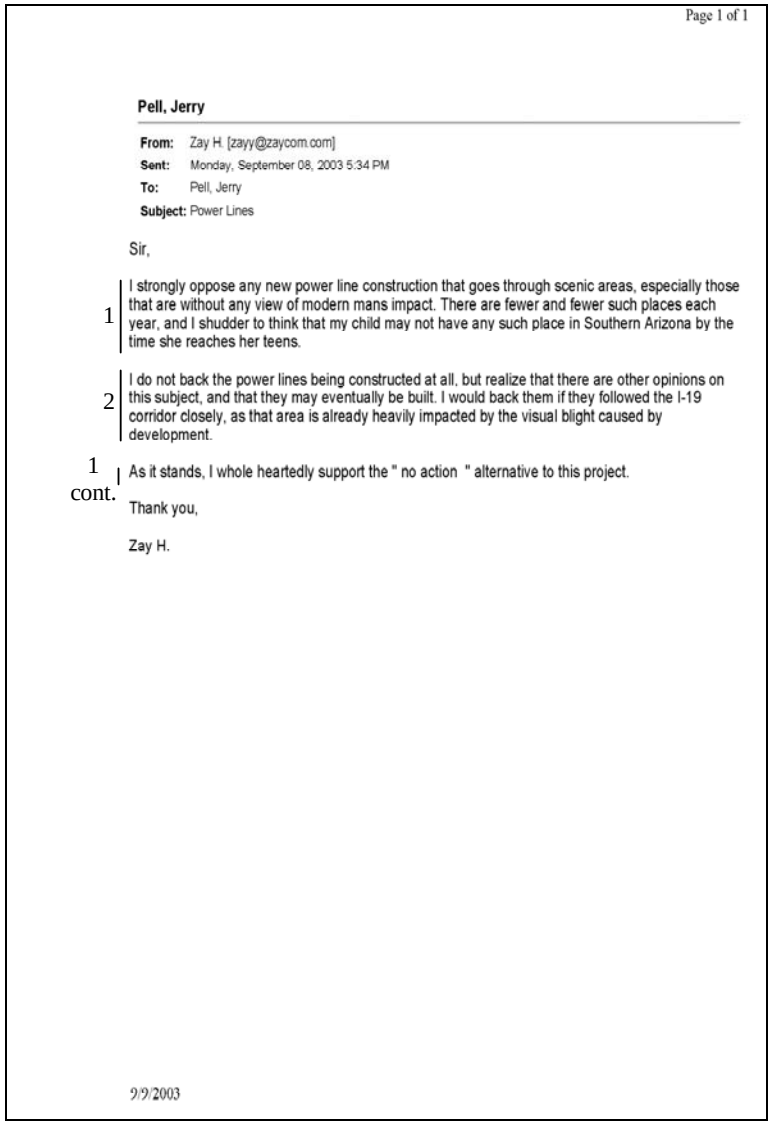
Comment No. 1

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Chapters 3 and 4 discuss the affected environment and analyze the potential environmental impacts from the proposed project, including potential impacts to cultural resources (see Sections 3.4 and 4.4).

Because consumer electricity rates are overseen by the ACC, it would be speculative in nature for DOE or the cooperating agencies to analyze potential impacts to consumers' electricity rates as a result of the proposed project.

H., Zay
Page 1 of 1



Page 1 of 1

Pell, Jerry

From: Zay H. [zayy@zaycom.com]
Sent: Monday, September 08, 2003 5:34 PM
To: Pell, Jerry
Subject: Power Lines

Sir,

1 I strongly oppose any new power line construction that goes through scenic areas, especially those that are without any view of modern mans impact. There are fewer and fewer such places each year, and I shudder to think that my child may not have any such place in Southern Arizona by the time she reaches her teens.

2 I do not back the power lines being constructed at all, but realize that there are other opinions on this subject, and that they may eventually be built. I would back them if they followed the I-19 corridor closely, as that area is already heavily impacted by the visual blight caused by development.

1 cont. As it stands, I whole heartedly support the " no action " alternative to this project.

Thank you,

Zay H.

9/9/2003

Comment No. 1

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

The commentor's suggestion of building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5 of the Final EIS).

Harayda, Ken
Page 1 of 1

---- Forwarded by Susan K Kozacek/R3/USDAFS on 10/15/2003 12:56 PM -----
weharayda@cox.net
10/09/2003 07:24 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to help proceed with the constuction of the badly needed Transmission Line. We are going to need more power sources as more people move to our area. If we, as enviromentalist, would open our minds to progress, and note that company's like TEP are acting responcibly, and reducing the impact to our lands. Again, please take a look at the work that TEP has done, and not go by the words of a few "extreme enviromentalist" Thank you
Ken Harayda

Sincerely,

Ken Harayda
1609 S. Turquise Vista
Tucson, Arizona 85710

Comment No. 1

The Federal agencies note the commentor's support for the proposed project because of increasing power needs as more people move into the area.

Hare, Trevor and Family
Page 1 of 2

10/14/2003 11:27 7917709 SKY_ISLAND_ALLIANCE PAGE 01

Trevor, Janet, Cassidy, and Delaney Hare
2718 E Croyden St
Tucson, Arizona 85716

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585

Dear Dr. Pell,

1 This letter is in regards to the Tucson Electric Power Sahuarita-Nogales Transmission line DEIS and our family's opposition to the proposed powerline through an area we have been visiting, camping and hiking in since the late 1980's.

2 The Tumacacori and Atascosa Mountains are an exceptional area for primitive recreation, we have spent thousands of hours exploring and enjoying the landscape there and the powerline is incompatible with the natural characteristics of the area. The propose powerline would impact

3 many sensitive wildlife and plant species that are an important aspect of our southern Arizona natural heritage and one of the reason we visit the area. The route would cross habitat for 10 federally listed Endangered or Threatened species and 74 special status species including jaguar, Mexican spotted owls, Southwestern willow flycatchers, lesser long-nosed bats, and Chiricahua Leopard frog. The last time we visited in the area we found a brown vine snake! My children were amazed!

4 I urge you to deny the Western and Crossover Routes and choose the no-action alternative because they are not compatible with the current uses of the affected area, they would permanently scar an amazing area, and they would impact the Chiricahua leopard frog which is extremely vulnerable to stress-induced Chytrid fungus infections.

Other points we would like you to consider include:

5 • The preferred Western Route is the longest, most expensive, and most environmentally damaging of all alternatives considered. The Crossover route is equally damaging.

6 • The Western and Crossover routes slice through a citizen's proposed Wilderness Area and would forever scar the outstanding natural characteristics of the area.

7 • TEP proposes to build over 20 new miles of road for the Preferred Route. The road density in the Tumacacori EMA is already above acceptable limits as set forth in the current Forest Plan. More road building, even with associated closures (often unsuccessful) would be in gross violation of the Forest Plan

8 • 200 acres on the Coronado National Forest would be disturbed permanently or temporarily.

9 • The route comes within ½ mile of the existing Pajarita Wilderness Area and Gooding Research Natural Area, and a stretch of Sycamore Canyon eligible for Wild and Scenic River

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed project.

Comment No. 2

Sections 3.1.2 and 4.1.2 discuss existing recreational settings and activities, and analyze potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to indicators such as remoteness and naturalness, both of which would have changes that are inconsistent with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Comment No. 3

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources, including potential impacts to endangered, threatened and special status species.

Comment No. 4

Sections 3.1 and 4.1 present a description of the existing land use and analyze the potential impacts to land use from the proposed project.

The potential impacts to Chiricahua leopard frog are addressed in Section 4.3.3, Special Interest Species. Section 4.3.2 states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Hare, Trevor and Family
Page 2 of 2

9 cont! status. Powerline corridors are notorious for channeling spread of invasive weeds, disrupting wildlife movement, and providing access to illegal off-road drivers and smugglers.

- There is no "Need" stated for a 345 kV line by either the applicant (TEP) or agencies -- because most of the energy transmitted on the line would not benefit Santa Cruz County, why is the 345 kV, and not a smaller line, needed?

10 • A smaller, less obtrusive powerline, such as a 115 kV line was not considered for any route. Why not? A 115 kV line is cheaper, can more easily be buried in sensitive areas near homes, and would serve the long-term needs of Santa Cruz County.

11 • I do not support the proposed routes because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. They are an unnecessary economic, environmental, and culture burden on Southern Arizona. Please consider withdrawing the Draft Environmental Impact Statement and issuing an assessment that properly analyzes real solutions to power needs in Santa Cruz County that include a smaller powerline and/or locally run power plant.

Thank you for your consideration,

Trevor Hare
Conservation Biologist

Janet Hare
Director of Sales and Marketing

Cassidy Hare
15 year old student

Delaney Hare
11 year old student

Comment No. 5

The affected environment of the Western and Crossover Corridors is described in Chapter 3, and the potential environmental impacts (including socioeconomic impacts) from these alternatives are fully evaluated in Chapter 4.

Comment No. 6

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Refer to the response to Comment 4 above regarding scarring of the area.

Comment No. 7

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. TEP would close 1.0 mi (1.6 km) of existing road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project, such that road density on the Coronado National Forest would not be affected. Any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Based on these terms and conditions, the proposed project would not violate the Forest Plan.

Comment No. 8

The area of disturbance on the Coronado National Forest varies for each corridor (see Table 4.12-1, Temporary and Permanent Area Disturbed on the Coronado National Forest by the Proposed Project).

Comment No. 9

Section 3.1, Land Use, discusses the affected environment of the Pajarita Wilderness, which encompasses the Goodding Research Natural Area and the segment of Sycamore Canyon that is potentially eligible for designation as a Wild and Scenic River. The structure locations, construction areas, and proposed access roads for all three corridors would not enter into the Pajarita Wilderness. Potential impacts to these resources are addressed in the resource sections of Chapter 4, Environmental Effects.

Sections 3.3 and 4.3 present a description of the existing biological resources and evaluation of potential impacts to biological resources, including invasive species impacts (Section 4.3.6) and impacts to wildlife (Section 4.3.2).

Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts related to roads. Section 3.1.2 of the EIS states that there is off-highway vehicle use in the project area, and Section 4.1.2 analyzes the impacts of off-highway vehicle use as one of many recreational uses of the project area, including the Coronado National Forest.

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above.

Comment No. 10

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 11

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable

Comment No. 11 *(continued)*

range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Hare, Trevor and Family
Page 1 of 2

---- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 06:04 PM -----
"Trevor Hare" <trevor@skyislandalliance.org>
10/14/2003 11:30 AM
Please respond to trevor

To: <skozacek@fs.fed.us>
cc:
Subject: TEP DEIS and needed Forest Plan Amendments

Trevor, Janet, Cassidy, and Delaney Hare
2718 E Croyden St
Tucson, Arizona 85716

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Dear Ms. Kozacek

1 This letter is in regards to the Tucson Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendments and our family's opposition to the proposed powerline through an area we have been visiting, camping, and hiking in since the early 1980's.

2 I don't think I have to tell you, but the Tumacacori and Atascosa Mountains are an exceptional area for primitive recreation, we have spent thousands of hours exploring and enjoying the landscape there and the powerline is incompatible with the natural

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed project.

Comment Nos. 2, 3, and 4

Refer to the response to Comments. 2, 3, and 4, respectively, in the previous submittal from Trevor Hare and Family.

Hare, Trevor and Family
Page 2 of 2

2 cont. characteristics of the area. The propose powerline would impact many sensitive wildlife and plant species that are an important aspect of our southern Arizona natural heritage and one of the reason we visit the area. The route would cross habitat for 10 federally listed Endangered or

3 Threatened species and 74 special status species including jaguar, Mexican spotted owls, Southwestern willow flycatchers, lesser long-nosed bats, and Chiricahua Leopard frog. The last time we visited in the area we found a brown vine snake! My children were amazed!

4 I urge you to deny the special use permit for the Western and Crossover Routes because they are not compatible with the current uses of the affected area, they would permanently scar an amazing area, and they would impact the Chiricahua leopard frog which is extremely vulnerable to stress-induced Chytrid fungus infections.

Thank you for your consideration,

Trevor Hare
Conservation Biologist

Janet Hare
Director of Sales and Marketing

Cassidy Hare
15 year old student

Delaney Hare
11 year old student

Hausam, Tom
Page 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/15/2003 02:14 PM -----
thaus01@aol.com
10/09/2003 06:47 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area ntains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

PLEASE SAVE THIS ENVIRONMENT SO THAT OUR CHILDREN MAY EXPERIENCE ITS DIVERSITY.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to biodiversity and wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Hausam, Tom
Page 2 of 2

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Tom Hausam
215 Grape St
Denver, Colorado 80220

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Hebeisen, Brian
Page 1 of 1

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 05:22 PM -----
peru_boy@hotmail.com
10/10/2003 04:53 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement on Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 The draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline is highly inappropriate. Please resubmit with major changes. This plan as currently written is massively oversized and would destroy large natural areas and harm many endangered species that already have too little protection. Please stand up for the environment and not for the big business interests that are destroying it.

Sincerely,

Brian Hebeisen
170 Worcester St.
Watertown, Massachusetts 02472

Comment No. 1

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to undisturbed natural areas.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources, including potential impacts to threatened and other special status species.

Heisey, Adriel
Page 1 of 1

---- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 06:04 PM -----
adrielh@earthlink.net 10/15/2003 12:07 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

As a resident of Pima County, I am writing to express my opposition to the proposed power line to Nogales.
1 I believe that this is an unnecessary defacement of an important historic corridor. The scenic, cultural, and economic values of leaving this landscape intact far outweigh any benefits of the power line. The time for these
2 landscape-scarring projects is past. We must find other ways to meet the needs the power line is intended to fulfill.

Thank you for your consideration of my perspective on this important issue.

Sincerely,

Adriel Heisey
1720 W. Placita Salton
Tucson, Arizona 85737

Comment No. 1

Sections 3.4 and 4.4 describe existing cultural resources and analyze potential impacts to these resources from the proposed project. Likewise, Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources.

Sections 3.5 and 4.5 discuss the existing socioeconomic resources and address potential socioeconomic impacts as a result of the proposed project. Section 3.5 has been revised in the Final EIS to describe existing socioeconomic aspects of tourism in the project area, and Section 4.5 has been revised to discuss potential impacts to socioeconomic aspects of tourism. Section 4.5 includes a discussion of the reasons that potential impacts to property values as a result of the proposed project are speculative and beyond the scope of the EIS. A cost-bnefit analysis is beyond the scope of the EIS.

Comment No. 2

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Herbert, Floyd
Page 1 of 1

proposed Sahuarita-to-Nogales power line

From: Maggie Gilman [SMTP:maggieg@dakotacom.net]
To: Pell, Jerry
Cc: herbert@vega.lpl.arizona.edu

Subject: proposed Sahuarita-to-Nogales power line
Sent: 10/11/2003 12:02 PM
Importance: Normal

Dear sirs:

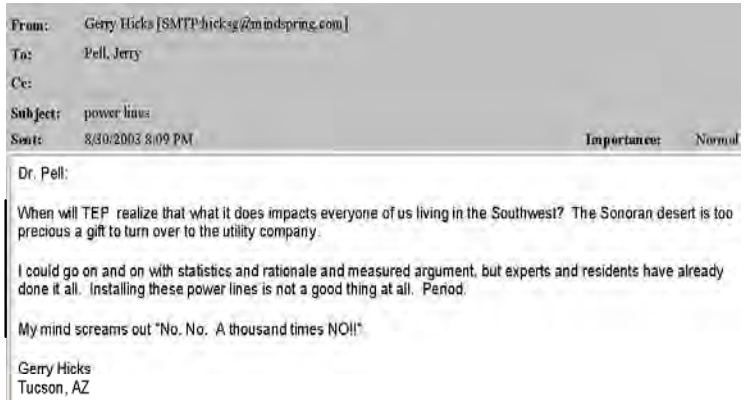
1 I am writing concerning the proposed TEP power line between Sahuarita and Nogales. Generally the power grid lacks redundancy, leading to an increasing frequency of blackouts (which have already begun to happen in Nogales, at the terminus of the present lines), and the solution to this problem is to add transmission capacity. Generally, I believe that National Forest land is the ideal location for power lines because that minimizes social and individual impacts, and thus benefits the most people. The few who oppose this option mostly cite frivolous personal ideological reasons, and should not be allowed to prevail. Indeed, this ideology of opposition to all improvements of the nation's energy infrastructure is functionally analogous to an auto-immune disease, where the body's immune system mistakenly attempts to destroy its own body. These folks are trying, whether they realize it or not, to make life tough for all of us. In summary, I respectfully request that the DOE take responsibility for necessary infrastructure upgrades and approve the proposed power line.

Sincerely,
Floyd Herbert
email: herbert@vega.LPL.arizona.edu

Comment No. 1

The Federal agencies note the commentor's support for the proposed project, stating that additional transmission capacity is needed and that National Forest land is the ideal location for transmission lines.

Hicks, Gerry
Page 1 of 1



From: Gerry Hicks [SMTP:hicksg@mindspring.com]
To: Pell, Jerry
Cc:
Subject: power lines
Sent: 8/30/2003 8:09 PM Importance: Normal

Dr. Pell:

When will TEP realize that what it does impacts everyone of us living in the Southwest? The Sonoran desert is too precious a gift to turn over to the utility company.

1

I could go on and on with statistics and rationale and measured argument, but experts and residents have already done it all. Installing these power lines is not a good thing at all. Period.

My mind screams out "No. No. A thousand times NO!!"

Gerry Hicks
Tucson, AZ

Comment No. 1

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project.

Hinman, Gary
Page 1 of 1

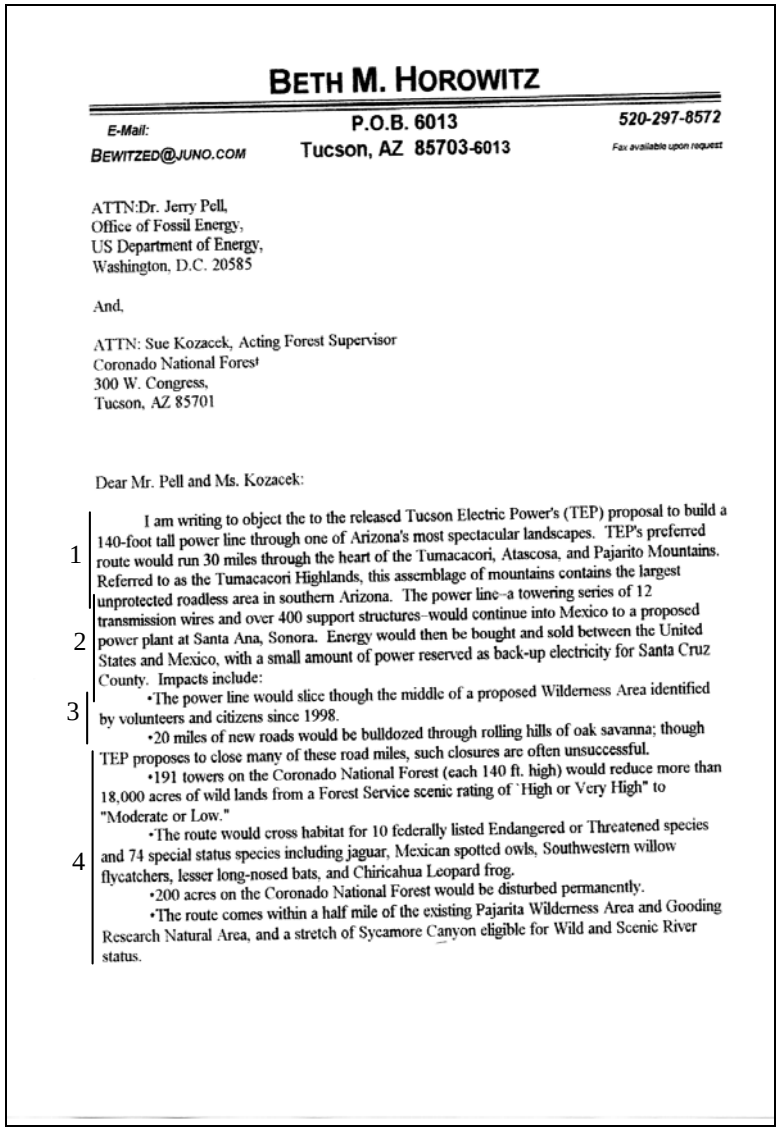
From: GARY HINMAN [ghman51@msn.com]
Sent: Tuesday, September 23, 2003 2:03 PM
To: Pell, Jerry
Subject: proposed power lines

1 I do not support them.
Gary Hinman

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed project.

Horowitz, Beth
Page 1 of 2



BETH M. HOROWITZ

E-Mail: BEWITZED@JUNO.COM
P.O.B. 6013 Tucson, AZ 85703-6013
520-297-8572 Fax available upon request

ATTN:Dr. Jerry Pell,
Office of Fossil Energy,
US Department of Energy,
Washington, D.C. 20585

And,

ATTN: Sue Kozacek, Acting Forest Supervisor
Coronado National Forest
300 W. Congress,
Tucson, AZ 85701

Dear Mr. Pell and Ms. Kozacek:

1 I am writing to object the to the released Tucson Electric Power's (TEP) proposal to build a 140-foot tall power line through one of Arizona's most spectacular landscapes. TEP's preferred route would run 30 miles through the heart of the Tumacacori, Atascosa, and Pajarito Mountains. Referred to as the Tumacacori Highlands, this assemblage of mountains contains the largest unprotected roadless area in southern Arizona. The power line–a towering series of 12 transmission wires and over 400 support structures–would continue into Mexico to a proposed 2 power plant at Santa Ana, Sonora. Energy would then be bought and sold between the United States and Mexico, with a small amount of power reserved as back-up electricity for Santa Cruz County. Impacts include:

3 •The power line would slice though the middle of a proposed Wilderness Area identified by volunteers and citizens since 1998.

•20 miles of new roads would be bulldozed through rolling hills of oak savanna; though TEP proposes to close many of these road miles, such closures are often unsuccessful.

•191 towers on the Coronado National Forest (each 140 ft. high) would reduce more than 18,000 acres of wild lands from a Forest Service scenic rating of "High or Very High" to "Moderate or Low."

4 •The route would cross habitat for 10 federally listed Endangered or Threatened species and 74 special status species including jaguar, Mexican spotted owls, Southwestern willow flycatchers, lesser long-nosed bats, and Chiricahua Leopard frog.

•200 acres on the Coronado National Forest would be disturbed permanently.

•The route comes within a half mile of the existing Pajarita Wilderness Area and Gooding Research Natural Area, and a stretch of Sycamore Canyon eligible for Wild and Scenic River status.

Comment No. 1

Chapter 3 describes the potentially affected environment (including the Western Corridor in the areas cited by the commentor) and Chapter 4 analyzes potential impacts to these areas.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Comment No. 2

Section 1.1.1, The Proposed Action, has been revised in the Final EIS to clarify that the 345-kV transmission line that TEP proposes to construct would go just across the U.S.-Mexico border, where it would likely connect to another transmission line. Section 5.2.4, Power Plants in Mexico, in the Cumulative Impacts analysis of the Final EIS has been revised to indicate that the nearest known location to the U.S.-Mexico border crossing that is planned for power plant construction is in Naco, Sonora, approximately 75 mi (121 km) east of Nogales. The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project.

If TEP's proposed project is approved by each of the Federal agencies, then there would still be a variety of events that could preclude TEP from implementing this project, such as the possibility of failure by TEP to secure a power sales contract with CFE. Issuance of a Presidential Permit by DOE would only indicate that DOE has no objection to the project, but would not mandate that the project be built.

Comment No. 3

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Horowitz, Beth
Page 2 of 2

BETH M. HOROWITZ

E-Mail:
BEWITZED@JUNO.COM

P.O.B. 6013
Tucson, AZ 85703-6013

520-297-8572
Fax available upon request

5 This project destroys valuable wilderness without even benefiting residents of Arizona. Please do not approve this route. If TEP must build it's lines, it should be required to do so along already existing roads thereby illiminating the need for destruction of the last few remaining vestiges of wilderness in this southwest.

Sincerely

Beth M. Horowitz

Comment No. 4

Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate.

Comment No. 5

The commentor states that the proposed project would destroy valuable wilderness without benefiting the residents of Arizona and urges that the Western Corridor not be approved. The commentor states that if the proposed project were to be built, it should be sited along existing roads.

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Section 4.12, Transportation, states that access to the proposed project would be on existing utility maintenance roads, ranch access roads and trails, where feasible, and that new access would be constructed where no access currently exists. TEP would close 1.0 mi (1.6 km) of existing road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project on the Coronado National Forest, such that road density on the Coronado National Forest would not be affected.

Huebbe I, William and William Huebbe II
Page 1 of 1

power line

From: Billy Huebbe [SMTP:billy@osekmedia.com]
To: Pell, Jerry
Cc:

Subject: power line
Sent: 10/8/2003 11:08 PM
Importance: Normal

1 I am opposed to the western route for the proposed power line because of the great, irreverable damage to the wilderness. Sycamore Creek is home to unique animal and plant species. The scenic value of this spectacular area will be seriously degraded. There are existing power lines running up the Santa Cruz Valley. I would rather see the power lines concentrated up this corrider. It seems that it would be more efficient and less expensive to build along already developed corridors than to bulldoze undeveloped, pristine wilderness.

William Huebbe II
William Huebbe I
Arivaca, AZ

Comment No. 1

Sections 3.1 and 4.1 describe the affected environment and analyze potential impacts to visual resources from the proposed project, respectively. Sections 3.3 and 4.3 describe the affected environment and analyze the potential impacts to biological resources.

Due to visual impacts through densely populated areas, and the potential impacts to cultural resources, the I-19 corridor was eliminated from further analysis as viable action alternative (see Section 2.1.5 of the Final EIS).

Husband, Susan
Page 1 of 2

October 10, 2003

Susan Husband
2618 E. Malvern St.
Tucson, AZ 85716

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington, D.C. 20585

Dear Dr. Pell:

1 I am writing regarding the Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS. Tucson Electric Power (TEP) wants to construct a huge electrical transmission line across a remote, beautiful and unique section of Southern Arizona to sell electricity to another country.

The Arizona Corporation Commission has ordered TEP to improve electrical service to Santa Cruz County, yet in a recent interview on Arizona Illustrated, (KUAT Public Television) a TEP spokesman said the reason for the power line was two fold: to protect Tucson from power outages by making us less dependent on the national power grid and to sell power to Mexico.

2 What about Santa Cruz County? A line of 1/3 the voltage they are proposing could provide Santa Cruz County with ample electricity. Existing poles and towers could be used and the smaller line could be buried in populated areas. In addition there is a grassroots group in Mexico, Groupo Maestros, that wants to build an electrical generating facility in Nogales, Sonora, Mexico and provide electricity to Santa Cruz County. This seems to me like a step in the right direction. Not only would the need to transmit electricity from Tucson be eliminated, but this would provide infrastructure and jobs to Mexico, strengthening their economy, which is one of the long term solutions to our current border problems.

3 The TEP representative also stressed the minimal footprint of the transmission towers. When we are looking at 400 towers that rise 140 feet into the air, their "footprint" is not the issue. In addition, these footprints will be linked by an access road, giving access to smugglers and off road drivers.

4 The Sky Island Alliance has been preparing a proposal that would create the Tucmacacori Highland Wilderness, which would be adjacent to the Pajarita Wilderness area. Enlarging this protected area would add over 8,000 acres of habitat protection for 10 species that are threatened or endangered, and more than 70 species with special status, including jaguars. The proposed line travels right through this area, in addition to

Comment No. 1

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…."

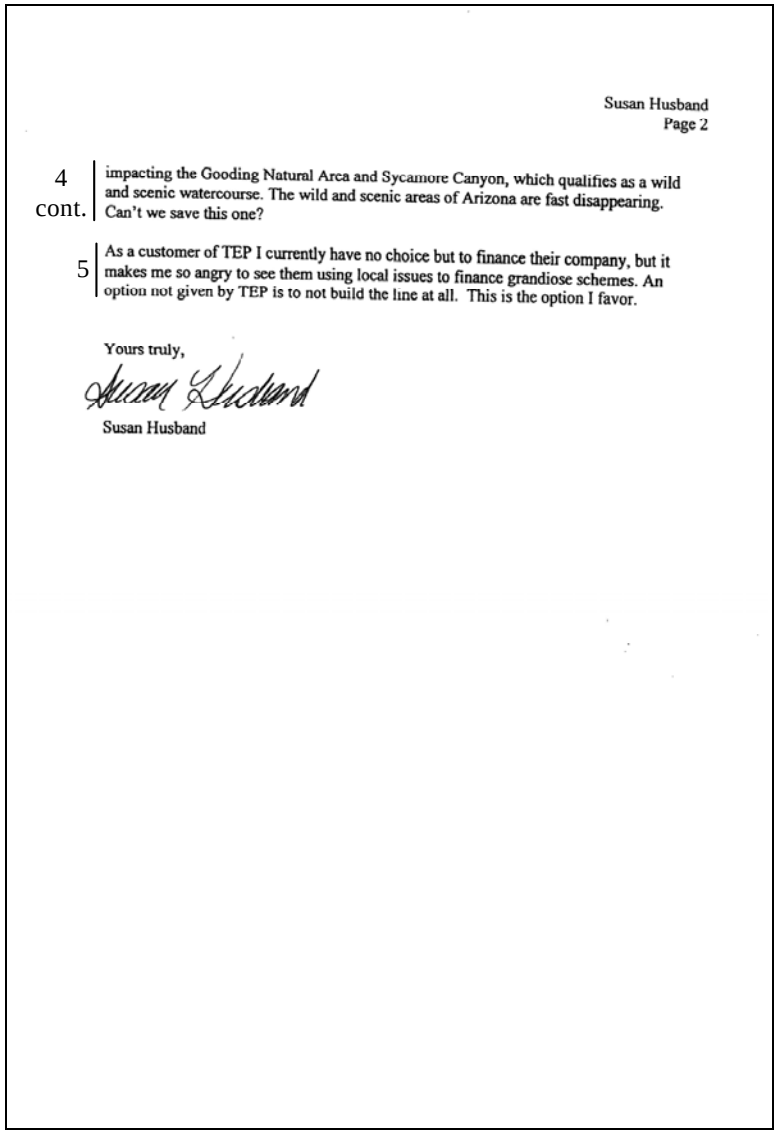
Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Sections 3.1.2 and 4.1.2 present analyses of existing recreational settings and activities, and potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Husband, Susan
Page 2 of 2



Susan Husband
Page 2

4 cont. impacting the Gooding Natural Area and Sycamore Canyon, which qualifies as a wild and scenic watercourse. The wild and scenic areas of Arizona are fast disappearing. Can't we save this one?

5 As a customer of TEP I currently have no choice but to finance their company, but it makes me so angry to see them using local issues to finance grandiose schemes. An option not given by TEP is to not build the line at all. This is the option I favor.

Yours truly,

Susan Husband

Comment No. 2 *(continued)*

On May 10, 2001, DOE received an application for a Presidential Permit from the Maestros Group to construct a transmission line across the U.S.-Mexico border from a proposed power plant to be built in the Nogales, Arizona area. To date, Maestros Group has provided no additional information for DOE to continue processing their Presidential Permit application. However, as more fully discussed in Section 2.1.5, a new power plant in the Nogales area does not obviate TEP's purpose and need for this project, and therefore, is not a viable alternative.

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

Refer to the response to Comment 1 above regarding visual impacts.

Section 4.1.1, Land Use, of the Final EIS has been revised to clarify that although the Federal agencies use the term "footprint" to describe the area beneath each tower, there would be additional temporary and permanent land disturbance associated with the proposed project, including both temporary roads for construction and permanent roads for maintenance.

Section 3.1.2 of the EIS states that there is off-highway vehicle use in the project area, and Section 4.1.2 analyzes the impacts of off-highway vehicle use as one of many recreational uses of the project area, including the Coronado National Forest.

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS

Comment No. 3 *(continued)*

was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above.

Comment No. 4

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Section 3.1, Land Use, discusses the affected environment of the Pajarita Wilderness, which encompasses the Goodding Research Natural Area and the segment of Sycamore Canyon that is potentially eligible for designation as a Wild and Scenic River. The structure locations, construction areas, and proposed access roads for all three corridors would not enter into the Pajarita Wilderness. Potential impacts to these resources are addressed in the resource sections of Chapter 4, Environmental Effects.

Comment No. 5

After a regulated utility such as TEP constructs a project in Arizona, the ACC determines whether, or to what degree, an investment by a utility is recoverable through consumer electricity rates. Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS (see the response to the Border Power Plant Working Group, Comment 2).

The EIS comprehensively reviews a No Action Alternative, that is, one that assumes that the lines are not built at all (see Section 2.1.4).

Husband, Susan
Page 1 of 2

October 10, 2003

Susan Husband
2618 E. Malvern St.
Tucson, AZ 85716

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Dear Ms. Kozacek:

1 I am writing regarding the Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS. Tucson Electric Power (TEP) wants to construct a huge electrical transmission line across a remote, beautiful and unique section of Southern Arizona to sell electricity to another country.

The Arizona Corporation Commission has ordered TEP to improve electrical service to Santa Cruz County, yet in a recent interview on Arizona Illustrated, (KUAT Public Television) a TEP spokesman said the reason for the power line was two fold: to protect Tucson from power outages by making us less dependent on the national power grid and to sell power to Mexico.

2 What about Santa Cruz County? A line of 1/3 the voltage they are proposing could provide Santa Cruz County with ample electricity. Existing poles and towers could be used and the smaller line could be buried in populated areas. In addition there is a grassroots group in Mexico, Groupo Maestros, that wants to build an electrical generating facility in Nogales, Sonora, Mexico and provide electricity to Santa Cruz County. This seems to me like a step in the right direction. Not only would the need to transmit electricity from Tucson be eliminated, but this would provide infrastructure and jobs to Mexico, strengthening their economy, which is one of the long term solutions to our current border problems.

3 The TEP representative also stressed the minimal footprint of the transmission towers. When we are looking at 400 towers that rise 140 feet into the air, their "footprint" is not the issue. In addition, these footprints will be linked by an access road, giving access to smugglers and off road drivers. In fact TEP proposes to build over 20 miles of new roads along this route.

4 Unfortunately, by proposing multiple routes, TEP has already effectively pursued a divide and conquer strategy, which has pitted the homeowners and citizens of Green Valley against those concerned for Arizona's open spaces, ecology and outdoor recreation.

Comment Nos. 1, 2, and 3

Refer to the response to Comments 1, 2, and 3, respectively, in the previous submittal from Susan Husband.

Comment No. 4

NEPA regulations require that Federal agencies rigorously explore and objectively evaluate all reasonable alternatives (40 CFR 1502.12[a]). As explained in Section 1.2 TEP conducted a corridor identification process prior to the NEPA process, and the Crossover Corridor was added for analysis in the EIS based on public and tribal input received during the public scoping period and tribal consultations (see Section 1.6.1, Public Scoping).

Comment No. 5

Refer to the response to Comment No. 4 in the previous submittal from Susan Husband.

Comment No. 6

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project. Any future special use, such as those mentioned by commentor (pipelines, roads, microwave towers, cell phone towers, etc.) would need to go through a permit application process, review by the Forest Service, and environmental assessment. Each proposal is evaluated individually, and it is not possible to predict if any future proposals would be approved. The development of this powerline would not preclude Congressional wilderness designation for areas of the forest.

Comment No. 7

Refer to the response to Comment 5 in the previous submittal from Susan Husband.

Husband, Susan
Page 2 of 2

5 The Sky Island Alliance has been preparing a proposal that would create the Tucmacacori Highland Wilderness, which would be adjacent to the Pajarita Wilderness area. Enlarging this protected area would add over 8,000 acres of habitat protection for 10 species that are threatened or endangered, and more than 70 species with special status, including jaguars. The proposed line travels right through this area, in addition to impacting the Gooding Natural Area and Sycamore Canyon, which qualifies as a wild and scenic watercourse.

6 The forest service has established a scenic rating system. When the towers are erected on forest service land the scenic rating of this area will fall from "high or very high" to "moderate or low". Once this pristine area is compromised it will be easier to further degrade the area with pipelines, roads, microwave towers, cell phone towers, etc. The wild and scenic areas of Arizona are fast disappearing. Can't we save this one?

7 As a customer of TEP I currently have no choice but to finance their company, but it makes me so angry to see them using local issues to finance grandiose schemes. An option not given by TEP is to not build the line at all. This is the option I favor.

Yours truly,

Susan Husband

Susan Husband

Jewett, Robert and Deana
Page 1 of 3

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 05:14 PM -----
abblou@earthlink.net
10/10/2003 12:33 AM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Jewett, Robert and Deana
Page 2 of 3

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must beachieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

6 Also please support renewable energy resources such as wind power. Jimmy Carter, one of our more intelligent presidents, had some good ideas on this. Those supporting a more commercially based value system over people's interests and practicality made sure these ideas were not implemented.

7 The government is subsidizing and forming partnerships with industries that are destroying, not maintaining and

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Jewett, Robert and Deana
Page 3 of 3

protecting people's interests. There are other choices, but those industries that also support political campaigns would loose control, market share and power. (7 cont.)

As voters, we haven't been asked. We are excluded, it is done behind closed doors in secrecy.

Please withdraw this Impact Statement. (1 cont.)

Sincerely,

Robert and Deana Jewett
12832 Iona Rd
Ft Myers, Florida 33908

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

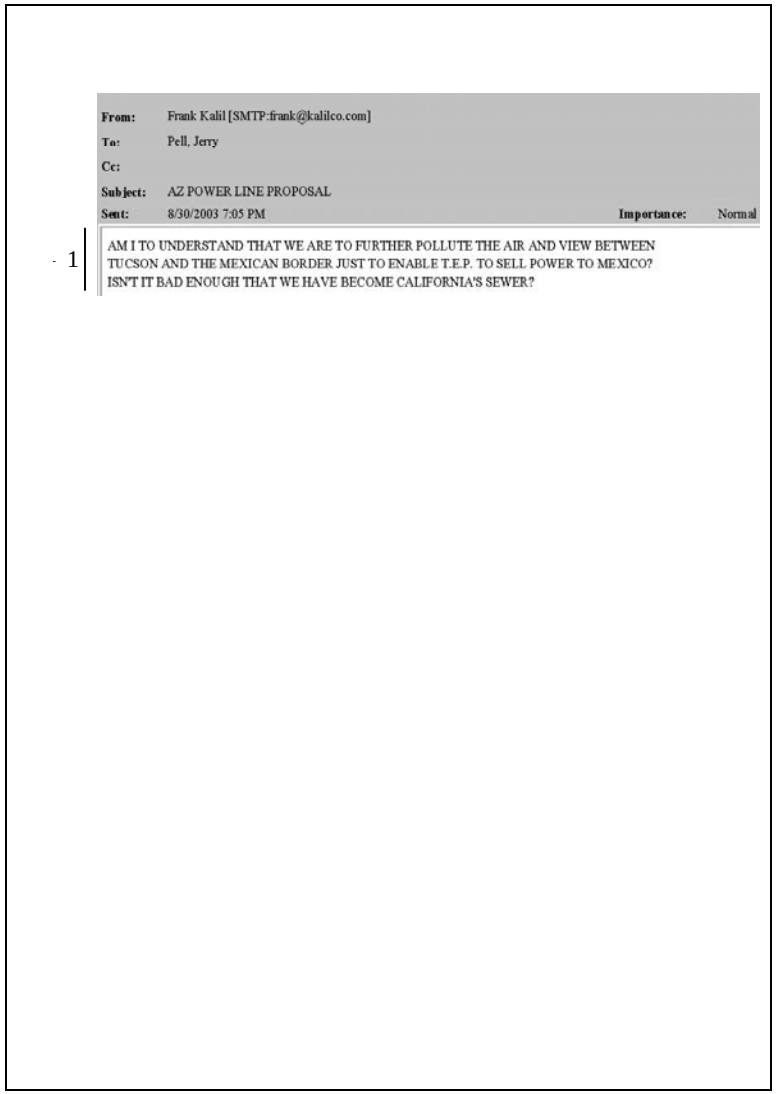
Comment No. 6

Alternative or renewable power supply methods do not meet TEP's proposal and are thus not evaluated in this EIS (see Section 2.1.5).

Comment No. 7

Section 1.2.2 of the Final EIS provides discussion of the Federal agencies' purpose and need for action. Section 1.6 of the Final EIS presents a discussion on the public participation process for the proposed project.

Kalil, Frank
Page 1 of 1



From: Frank Kalil [SMTP:frank@kalilco.com]
To: Pell, Jerry
Cc:
Subject: AZ POWER LINE PROPOSAL
Sent: 8/30/2003 7:05 PM **Importance:** Normal

1 AM I TO UNDERSTAND THAT WE ARE TO FURTHER POLLUTE THE AIR AND VIEW BETWEEN TUCSON AND THE MEXICAN BORDER JUST TO ENABLE T.E.P. TO SELL POWER TO MEXICO? ISN'T IT BAD ENOUGH THAT WE HAVE BECOME CALIFORNIA'S SEWER?

Comment No. 1

Sections 3.8 and 4.8 discuss the existing air resources and analyze the potential impacts to these resources from the proposed project. Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Kalil, Frank
Page 1 of 1

From: Frank Kalil [frank@kalilco.com]
Sent: Friday, September 26, 2003 1:57 PM
To: Pell, Jerry
Subject: MEXICAN POWER LINE

1 I'M CONCERNED THAT TUCSON ELECTRIC POWER WANTS TO FURTHER POLLUTE THE TUCSON AIR
2 JUST TO SELL POWER TO MEXICO. LET MEXICO PRODUCE THEIR OWN POWER. OVERHEAD LINES
1 cont. WILL ADD EVEN MORE OF THEIR VISUAL POLLUTION. THEY HAVE ALREADY DECIMATED PRISTINE AREAS JUST FOR PERSONAL PROFIT. YOU SHOULD SEE WHAT THEY DID TO THE RILLITO RIVER. I'M SURE THEY COULDN'T GET AWAY WITH THAT TODAY. ASSETS WHICH
3 BELONG TO ALL OF US SHOULD NOT BE USED FOR THEIR PERSONAL GAIN. THANK YOU.

Comment No. 1

Sections 3.8 and 4.8 present a description of the existing air resources and analyze the potential impacts to these resources from the proposed project. Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

This EIS addresses the environmental impacts that would accrue if a transmission line were constructed within one of the three corridors identified. There are a variety of events that could preclude TEP from implementing this project, such as the possibility of failure by TEP to secure a power sales contract with CFE, the national electric utility of Mexico.

Comment No. 3

Potential economic benefit to TEP from the proposed project is outside the scope of the EIS.

Kasulaitis, Mary
Page 1 of 20

October 14, 2003

Dr. Jerry Pell
Office Of Fossil Energy
U.S. Dept. Of energy
1000 Independence Ave., S.W.
Washington, DC 20585

RE: Tucson Electric Power Company (TEP) Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement (DOE/EIS-0336)

Dear Dr. Pell:

I am providing public comment as property owner and resident of the Arivaca area, near the Western Corridor of the power line. My family has lived in this area since 1879. All comment I made in the previous period still stands. Below are my comments regarding this Draft EIS:

1 I favor a No Action Alternative. If a power line must be constructed, I favor the Central Corridor. I am absolutely opposed to the Western or Crossover Corridors. There are absolutely no justifiable reasons for the Western Corridor choice. The Western Corridor is the least defensible route environmentally. I will provide additional comments to support this opinion below, referencing the Draft EIS:

2 Page 1-6: Preferred Alternative Corridor: If the only corridor that will be ultimately considered is the Western Corridor, because the Arizona Corporation Commission (ACC) has chosen it as their Preferred Corridor, why is the Crossover Corridor now being added? It was not considered by the ACC. In addition, most of the material in this Draft EIS was not available to the ACC, thus their opinion was based on incomplete information.

Comment No. 1

Chapter 3 presents a description of the affected environment, and Chapter 4 analyzes the potential impacts to the environment from the three proposed corridors.

Comment No. 2

All three corridors that are evaluated in detail in the EIS (the Western, Central, and Crossover Corridors) and the No Action Alternative are under consideration by each of the Federal agencies. Each Federal agency has designated their preferred alternative(s) in Section 1.4 of the Final EIS, as required by NEPA (40 CFR Part 1502.14[e]). Each agency is authorized to select its own preferred alternative, regardless of the actions of other agencies or the ACC. The Final EIS, including public input received during public scoping and review of the Draft EIS, will be used by each agency to make informed decisions in their respective RODs. For further explanation of the decision framework, refer to Section 1.6.6.

Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Commission, of the Final EIS includes an explanation of the relevant ACC decisions and the relation to TEP's proposed project, including the fact that ACC Decision No. 64356 (ACC 2002) approved only TEP's proposed Western Route. The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders).

However, while the Central Corridor remains a viable alternative for selection by the Federal decisionmakers in their respective RODs, implementation of the proposed project in the Central Corridor could not occur until TEP meets all regulatory requirements, including obtaining the necessary approval from the ACC.

Kasulaitis, Mary
Page 2 of 20

2 cont. Despite the preference of the ACC for the Western Route, the Central Route is the most logical route because it would be the easiest route for construction, cost the least, and would do the least damage to the environment. The Western Corridor is the least defensible route for the purposes of this EIS. For this reason I will call for this Draft EIS to be returned to the ACC for reconsideration before a final decision is made by the DOE.

3 Page 1-7: TEP initially proposed this project to "assist Citizens Utility," and the connection with Mexico was not emphasized in the initial hearings in front of the ACC. Now it is apparent that a Mexico connection was the main purpose for TEP's actions. This Draft EIS does not cover all the issues that will be encountered when power lines are extended into Mexico. In the "Issues Out of Scope of the EIS" listed on page 1-12, the concerns regarding Mexico and the reliability and security concerns involved with any connection that travels into Mexico are considered "out of scope." It does not behoove the DOE to ignore security and reliability issues when issuing a Presidential Permit to allow power lines into Mexico, a country that has never had and does not now have the best interests of the United States at heart. There is a great amount of precedent for these concerns. The DOE is the agency responsible for the safety of the American people where these power lines are concerned. Thus this Draft EIS is incomplete if these concerns are not addressed.

2 cont. Page 1-9: The USFS should be able to determine where the site-specific location for the power line would go and not need to follow the ACC's determination of the use of the Western Corridor, if that would do the most ecological damage. The USFS has the responsibility of protecting its lands, which it has done since 1906 in this area. Protective measures have increased over the years. The DOE must not allow a power

Comment No. 3

As discussed in Section 1.6.2, Issues Out of Scope, while examining reliability of the U.S. electricity grid is part of DOE's Presidential application review process, such an examination does not involve the study of environmental impacts and does not require assessment in the EIS. DOE will not "ignore" reliability issues, as suggested by the commentor. Security issues within the United States are addressed in Section 4.11, Infrastructure, and security issues in Mexico are outside the scope of the EIS.

Comment No. 4

Sections 3.7 and 4.7 present a description of the existing water resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 5

Hard copies of the appendices were available upon request to the DOE contact in the cover letter of the Draft EIS.

Comment No. 6

The commentor expresses concern about the ecological integrity and sensitive nature of the Western Corridor, and states that site-specific information was provided to DOE and the ACC.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project.

Sections 3.1 and 4.1 present a description of the existing land use, and analyze the potential impacts to these resources from the proposed project.

All information received from the public was reviewed and considered in preparation of the EIS to the extent that it was relevant to environmental analysis of the proposed project at the level of detail that is appropriate for an EIS.

Kasulaitis, Mary
Page 3 of 20

4 line into an extremely sensitive ecological watershed (the Western Corridor and the Crossover Corridor), particularly when there are no justifiable reasons for it.

5 Page 1-10: Public participation. As I indicated in my email to Dr. Pell dated 10/8/03 in my capacity as Librarian of the Arivaca Library, public notice was incomplete in Arivaca. The appendices D, E and F were only available on CD, which could not be read on the public computers of the Arivaca Library. As of this writing, copies are still not available.

6 Page 1-11: Please note that 111 commentators raised issues regarding the ecological integrity and sensitive nature of the Western Corridor (and Crossover Corridor). I intend to emphasize this same concern in my comments below, because site-specific information is not provided in this Draft EIS. I provided it in my comments in 2001 both to the DOE and the ACC and thus it was available to TEP and their contractors.

7 Page 2-1: TEP Corridor Identification Process: If TEP was to actually follow the principles given in this section, the Western Corridor would be eliminated. It does not have an existing utility corridor, it does not have existing infrastructure to follow along most of its route, it contains the most sensitive and regulated habitat for threatened or endangered species, including the Pajarita Wilderness, the Goodding Research Natural Area, USFS roadless areas, and a AAA-designated scenic road-- the Ruby Road.

8 The cost of construction of a line on the Western Corridor would be higher because it is longer, 65.7 miles versus 57.1 for the Central Route, would have more environmental impacts thus more mitigation costs, and is technically a more difficult terrain to traverse than the Central Corridor.

Comment No. 7

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 8

The construction costs of each of the three action alternatives (the Western, Central, and Crossover Corridors) would be roughly similar (see Section 4.5.1). Section 4.5 analyzes the potential socioeconomic impacts that could result from the proposed project based on a number of factors including the cost of the proposed project. Any additional analysis of the cost of the proposed project is outside the scope of the EIS.

Kasulaitis, Mary
Page 4 of 20

The number of poles and towers will total 429 on the Western Corridor, 431 on the Crossover, but 373 on the Central Corridor, or 56 fewer poles than the remote routes.

8 cont. The Western Corridor would disturb permanently 29 acres and the Crossover Corridor 36 acres, while the Central only 23. Temporary disturbance would impact 197 acres on the Western, 238 on the Crossover, and only 105 on the Central. Fewer new access roads would be needed on the Central Corridor.

2 cont. The Central Corridor is the most logical route because it would be the easiest route for construction and would do the least damage to the environment. The Western Corridor is the least defensible choice for a route for the purposes of this EIS.

9 Page 2-2 and 2-12: TEP would close 1 mile of existing road for every 1 mile of road they need for project maintenance. This is one of the beauties of this area: THERE ARE VERY FEW EXISTING ROADS. The roads that do exist now on the west side of the Tumacacoris and Atascosas are necessary for the USFS and the ranchers who have these grazing allotments. TEP cannot close these necessary roads in order to mitigate the construction it plans.

Road construction by TEP will open up an area that is currently not open to the public because roads are too difficult to build in this terrain, topography and type of soil. The west side of the Tumacacoris, Apache Pass, Peck Canyon, and Bear Valley will be ruined by these roads. During construction, TEP's roads will irreparably damage the watershed of Sycamore Canyon, and no mitigation will be successful. If it

Comment No. 9

Section 4.12.1, Transportation, has been revised to clarify that roads to be closed on the Coronado National Forest to maintain the existing road density and would be identified through the authorization process. TEP has already had preliminary consultations with USFS regarding the closure of roads. This process would include USFS personnel who would coordinate the road closures with other multiple uses, such as grazing permits, on the Coronado National Forest.

As discussed in Sections 4.1.2, Recreation, and 4.12, Transportation, there would be two classifications of roads: temporary roads that are required only for construction of the project, and roads that are required for ongoing maintenance of the project. Roads that are required for ongoing maintenance by TEP would be administratively closed. Road closures would limit vehicular traffic to occasional access by TEP, mitigating against other potential impacts to the area. The impacts of roads associated with the proposed project are evaluated in Chapter 4, Environmental Effects, in each respective resource area (e.g., visual impacts are evaluated in Section 4.2, and watershed impacts are evaluated in Section 4.7, Water Resources).

Any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate.

Kasulaitis, Mary
Page 5 of 20

9 cont. were possible to make roads in this area, there would already be roads, but there are not. Hunters, treasure hunters, pot hunters, off-road vehicle aficionados and illegal migrants will be the winners. There are no gates, posts or berms that will keep people off the power line roads once they are constructed. Thus this proposed mitigation cannot and will not happen on the Western Corridor despite the claims of this Draft EIS on pages 2-12 to 2-22. Irreparable damage will occur.

Specific Comments on Proposed Action and Alternatives

Pages 2-23 – 2-41 offer comparison between the three corridors. Using the own words of the Draft EIS to support my contention that the Western Corridor is the least desirable, I quote from this Draft EIS (my comments are in italics):

2 cont. **Land Use:** "The Central Corridor is shorter than the Western and Crossover Corridors"[by 14 miles.]
"The Western and Crossover Corridors pass primarily through undeveloped land with few residences, five houses approximately 1,000 ft from the centerline west of Sahuarita."

"In addition to the residences near the Western Corridor, the Central Corridor centerline passes approximately 1,000 feet from eight residences in the vicinity of Tubac." *That is, ONLY EIGHT HOUSES MORE in the Central than the more remote routes. These eight homeowners must be very powerful people.*

10 Page 3.2: A National Forest Plan would have to be amended because 27.5 miles of power line would be in the Coronado National Forest. *If the current plan is the highest and best usage of the land in the CNF, why should they be*

Comment No. 10

As explained in Section 3.1, Land Use, each of the three study corridors cross a portion of the Coronado National Forest, and each would require a Forest Plan amendment. As discussed in Section 1.2.2 of the EIS, the purpose and need for USFS action is to determine whether the proposed project development is appropriate within the Tumacacori EMA within the Coronado National Forest. If the proposed transmission line development is appropriate, USFS would work with TEP to decide the site-specific location for the line and support structures, mitigation measures and best management practices to be implemented to reduce environment effects, permit issuance terms and conditions, and pre- and post- construction reporting and monitoring. Analysis of the proposed Forest Plan Amendment is contained in Appendix H.

Comment No. 11

Sections 3.1.2 and 4.1.2 present a description of the existing ROS settings, and analyze the potential impacts to these ROS settings from the proposed project. Figure 3.12-1, Roads Within the Tumacacori EMA, shows the existing roads in the vicinity of the Western Corridor on the west side of the Tumacacori Mountains.

Kasulaitis, Mary
Page 6 of 20

10 cont. *expected to negate it in favor of commercial interests that have nothing to do with the goals and objectives of the USFS, i.e. not agricultural.*

Recreation: "A Forest Plan amendment would be required to implement any of the three proposed corridors on national forest land. Because the Central Corridor has the longest segment that follows or crosses an existing pipeline ROW, fewer new access roads would be required [for the Central Corridor] than for the other alternatives..."

"The Western and Crossover Corridors would have greater overall impacts than the Central Corridor to ROS settings on the Coronado National Forest."

"The Western Corridor would have an unacceptable impact on Naturalness where it runs adjacent to Ruby Road for approximately 4 mi southwest of the Atascosa Mountains.

11 Most of the Western Corridor would be inconsistent with Remoteness. The length of the Western Corridor on the CNF affects the extent of potential recreation impacts on the CNF." *(at this point on the Ruby Road, speed limit is approximately 15 miles an hour. Four miles=1 hour driving time with the power line next to the road in the viewshed.)*

Page 3-11: "Upon turning north from Ruby Road, the Western Corridor runs west of the Atascosas…Access to this area is limited to roads assigned for use by high-clearance vechicles, on which traffic is normally minor…this area is more remote than along Ruby Road, as the only evidence of human activity are dirt roads and occasional foot trails…The naturalness is very high…" *Naturalness is what makes this area valuable. There are so few natural and also beautiful areas left in the United States. The Draft EIS neglects to mention that north of Corral Nuevo to the Arivaca Road there are virtually no roads, especially none paralleling the*

Comment No. 12

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above.

Comment No. 13

The statement that the area of land that would have reduced Scenic Integrity as a result of the Western or Crossover Corridors is approximately double the area of reduced Scenic Integrity from the Central Corridor is correct (see listing of areas under Visual Resources in Table 2.3-1).

Section 4.2.1 states that the proposed transmission line in the Western Corridor would be highly visible in the immediate foreground in the segment where the two overlap. However, as further described in this section, the proposed transmission line in the Western Corridor would be sited immediately adjacent to Ruby Road in this segment such that the viewshed looking to the south (standing on Ruby Road, almost directly underneath the transmission line) would be protected.

Kasulaitis, Mary
Page 7 of 20

11 cont. *mountains, near the proposed Western Corridor. The Central Corridor is similar. Peck Canyon is also beautiful and natural.*

Page 4-9: [On Western Corridor] "Permanent access roads would be closed to public access; nonetheless, some increase in foot and all-terrain vehicle traffic may occur. Remoteness would be decreased. Naturalness would decrease from very high to moderate and low with minimum access roads, or to moderate, low and very low with full access roads. These changes are not compatible with ROS class." [underlining mine]

Page 4-15: "...the Western and Crossover Corridors would have greater overall impacts to ROS settings on the Coronado National Forest than the Central Corridor."

12 *A Power line on either the Western and Crossover corridors would provide a ready, well-marked passageway north for undocumented immigrants and an increase in Border Patrol use.*

13 **Visual:** "The area of land that would have reduced Scenic Integrity as a result of construction and operation of the Western or Crossover Corridors is approximately double (*Actually, four times*) the area of reduced Scenic Integrity for the Central Corridor...While siting the Western Corridor transmission line immediately adjacent to portions of Ruby Road would have a maximum visual impact along Ruby Road, it would protect the viewshed to the south (towards the Pajarita Wilderness) for the public (including photographers)..." *This is wrong: the power line will be on the south side of Ruby Road (see map on page3-17) thus the viewshed to the south for several miles along the Ruby Road*

Comment No. 14

Section 3.5 has been revised in the Final EIS to describe existing socioeconomic aspects of tourism in the project area, and Section 4.5 has been revised to discuss potential impacts to socioeconomic aspects of tourism.

The Federal agencies agree that Visual Simulation 3 is not an actual photograph, but the simulation is included in the Final EIS because it shows the location of the proposed transmission line in relation to Ruby Road. Other visual simulations in the Final EIS that use actual photographs accurately represent the visual qualities of the project area.

Comment No. 15

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to special status species.

As discussed in Section 4.6.1.1, there is a potential for ground failure where the Western Corridor crosses steep mountain ridges. Relatively intact bedrock, which is not subject to ground failure, is near to or exposed to the ground surface along the majority of the Western Corridor on the west side of the Tumacacori Mountains. These conditions should be suitable for supporting poles on a rock bolted base. To ensure structure stability, TEP would conduct detailed geotechnical studies at the potential locations for tower structures to determine the suitability of specific areas, once a corridor has been selected.

Comment No. 16

Biologist that prepared the BAs used general and site-specific sources as cited in the BAs that were adequate to evaluate the potential biological impacts from the proposed project.

Section 3.3.3 and 4.3.3, Specials Status Species, of the Final EIS have been revised to address the species cited by the commentor.

Kasulaitis, Mary
Page 8 of 20

13 cont. *will be maximally impacted instead of protected.)* Also see page 3-16: there are 21.2 miles of Distinctive Scenic Attractiveness on the Western Corridor, versus 5.4 on the Central.

14 Page 4-22: Predicted scenic integrity if project is constructed in the Western Corridor would go from Very High and High to Very Low along the Ruby Road. *This will impact tourism in this area, including the destinations of Arivaca and the Buenos Aires Refuge. There is no photo of the Ruby Road with the power line running along it. Visual Simulation 3 bears no resemblance to the real view.*

Page 3-18: "The human alterations to the natural landscape are minimal along the Western Corridor within the Coronado National Forest…Especially to the south and west of the Tumacacori and Atascosa Mountains, the landscape is pristine as far as the eye can see, resulting in very high Scenic Integrity (the landscape is intact.) Map on page 3-20 shows High Public Value for the entire Western Corridor within the National Forest.

Biological Resources.

15 According to the Environmental Assessment of the Santa Cruz Study Area (1995) made for TEP by Harris Environmental Group, she recommended against the use of what would come to be known as the Western Corridor. *I quote*: " Semidesert grassland should be the preferred area to place the transmission line for the following reasons: relatively few numbers of special status species, proximity to Interstate 19 corridor, and small acreage of federal land holdings." *(Central Corridor)* She recommended against the Atascosa Mountains because of: "high number of special status species, most of the habitat is owned and

Comment No. 17

As discussed in Section 4.3.1, biodiversity in the area results from the convergence of the climatic zones, topographic relief, variable geology, and precipitation patterns. The proposed project would not alter these factors on a scale that would cause a regional decline in biodiversity.

Comment No. 18

Application of BMPs for road and tower construction, revegetation for roads not needed for ongoing maintenance, and spot repairs of existing roads would mitigate the potential for impacting USFS water resource parameters on the Coronado National Forest, including the Sycamore Canyon watershed.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including impacts from roads associated with the proposed project.

Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate

Kasulaitis, Mary
Page 9 of 20

15 cont. administered and engineering problems associated with steep canyons and slopes." (p. 5-6)

RE: Appendix D (Harris Environmental group's Draft Biological Assessment) of Draft EIS:
This document is incomplete and inadequate. It is general and not sufficiently site specific to the Western Corridor. I contend that the entire Draft EIS is incomplete and inadequate if the most site-specific information is omitted.
Appendix D does not contain references to the specific scientific journal articles that pertain to studies done in Sycamore Canyon, Pena Blanca Canyon and/or their watersheds. I include a bibliography of those articles at the end of this letter.

16 *I contend that an adequate biological assessment was not done of this sensitive and special area. Harris used lists obtained from Arizona Game and Fish Dept to determine the special species at risk, however, the following special status species listed by AGFD, Heritage Data Management System, obtained by the author on 7/26/01 for the area of the Western Corridor, are not mentioned in this Draft EIS:*
Great Plains Narrowmouth Toad (Gastrophryne olivacea)
Yellow-nosed cotton rat (Sigmodon ochrognathus)
Pima Indian Mallow (Abutilon parishii)
Supurb beardtongue (Penstemon supurbus)
Mexican lobelia (Lobelia laxiflora)
Whisk Fern (Psilotum nudum)
Lemmon Cloak Fern (Notholaena lemmonii)

Draft EIS, comparison of special status species by corridor, page 2-35: There is habitat on the Western Corridor for 10 federally listed species, v. 7 on the Central. There are 74 special status species on the Western Corridor, v. 62 on the Central.

Comment No. 19

This concern is stated in Sections 3.4 and 4.4 of the EIS, which acknowledges that only a small percentage of each corridor has been surveyed for cultural resources, and that unrecorded sites are expected in all of the corridors. If an action alternative is selected, the Federal agencies will follow a Programmatic Agreement with the Arizona State Historic Preservation Office (SHPO), interested tribes, and TEP guiding the treatment of cultural resources. Prior to ground-disturbing activities in any approved corridor, a complete on-the-ground inventory would be conducted by professional archaeologists in accordance with provisions of Section 106 of the National Historic Preservation Act (NHPA). Efforts to identify cultural resources would also include historical document research and continued consultation with Native American tribes regarding potential traditional cultural properties and sacred sites. Identified cultural resources would be evaluated in terms of National Register eligibility criteria and potential project effects in consultation with all parties who are participants in the Programmatic Agreement.

Wherever possible, power poles, access roads, and any other ground-disturbing activities would be placed to avoid direct impacts to cultural resources. A professional archaeologist would assist the pole-siting crew in avoiding impacts to cultural resource sites. In cases where avoidance of sites is not feasible, a site-specific Treatment Plan and Data Recovery Plan would be developed in consultation with tribes, the, appropriate land-managing agencies, and the Arizona SHPO. These plans will include an appropriate Plan of Action to implement the Native American Graves Protection and Repatriation Act. A Discovery Plan would be developed to establish procedures to be followed in the event of discovery of unanticipated cultural resources, and a Monitoring Plan would address issues of site protection and avoidance.

Comment No. 20

while the Federal agencies recognize that a given property owner's value could be affected (positively or negatively) by the project, the Federal agencies have not attempted to quantify theoretical public perceptions of property values should the proposed project be built.

Comment No. 21

To ensure structure stability, TEP would conduct detailed geotechnical studies at the potential locations for tower structures to determine the suitability of specific areas, once a corridor has been selected.

Kasulaitis, Mary
Page 10 of 20

Impact of construction on Biological Resources:

17 Page 4-52: "Individual plant and animal species whose occurrences are considered rare in the proposed corridors may be directly or indirectly impacted through the construction, maintenance and/or operation of the proposed powerline. No decline in the biodiversity of the region is anticipated as a result of the three proposed corridors." *How is it possible that TEP can make such a blanket statement in light of the information provided in this Draft EIS to the contrary?*

Page 2-34: "Because the proposed project would be in an arid area, where vegetation recovers very slowly, disturbances due to construction could have long-term impacts. The Western Corridor has the highest potential for adverse effects to special status species."

Page 3-93 "Because most wildcat roads...may not meet technical or environmental protection standards, they may post a threat to both the environment (for example, increased sedimentation in riparian corridors) and to user safety."

18 *I agree and contend that damage to the Sycamore Canyon watershed by roads used to access the transmission line either during construction or afterwards will directly affect the Canyon itself and its unique ecology, due to the constricted nature of the canyon and the effects of future flooding with additional sedimentation. Unique flora and fauna that inhabit the canyon bottom will be adversely affected by the effects of erosion caused by road construction and subsequent usage. This effect has not been sufficiently taken into consideration by this Draft EIS.*
I contend that road rehabilitation cannot be done as confidently stated in this Draft EIS because of the nature of

Comment No. 22

As discussed in Section 4.6.2, Soils, information regarding site-specific conditions where individual roads are planned would be used during design and construction of the new roads to calculate and minimize erosion. TEP is in consultation with USFS regarding development of BMPs for minimizing impacts on geologic, soil, and water resources from the proposed project, in accordance with the USFS "Soil and Water Conservation Practices Handbook."

Comment No. 23

Sections 3.6 and 4.6 present a description of the existing geologic and soil resources and analyze the potential impacts to these resources from the proposed project, including potential impact from geologic hazards to the proposed project.

Comment No. 24

The portion of Sycamore Creek that is preliminarily eligible for designation as a Wild and Scenic River (the segment of Sycamore Canyon from south of Ruby Road to the U.S.-Mexico border) is not within the Western Corridor or any of the proposed corridors. Figure 3.1-1, Specially Designated Areas on the Coronado National Forest, has been revised in the Final EIS to show the portion of Sycamore Creek that is preliminarily eligible for designation as a Wild and Scenic River.

The value cited in Table 2.3-1 of the Draft EIS under Water Resources for the Western Corridor of 1.97 acres of 100-year floodplain is correct, although this number has been revised in the Final EIS based on the 500-year floodplain analysis that the Federal agencies conducted.

Kasulaitis, Mary
Page 11 of 20

the geology of the area and the nature of the future road users who are waiting in line to get into this area with their ATVs.

18 cont. *Figure 3.12-1: map showing roads and areas that will need prescriptive maintenance for the construction vehicles: compare the Western Corridor with at least 120 sites that will need road work, v. 24 for the Central Corridor. You cannot separate road building impacts from biological impacts.*

Cultural Resources. "Although there may be a greater number of cultural resource sites in the Central Corridor, the majority of these have already been disturbed by construction of the existing EPNG pipeline... "Representatives of several tribes have stated that they are opposed to the project, but they would prefer that the project be constructed along the Central Corridor, if it is to be built at all."

19 *Note: The Western Corridor has never been surveyed for archaeological sites, as there has been no need in the past. Because of little human impact, the Western Corridor has the most potential for damage to sites known by local residents to exist. There are known Native American trails, both prehistoric and historic, that use the Western Route from Sycamore Canyon north to the Sopori Wash. There are known habitation sites for prehistoric peoples along all washes and their tributaries. I have seen sites at Bear Grass Tank and know of sites at Indian Hills Tank and Apache Pass, and there are petroglyphs on the walls of Peck Canyon. One should assume there are many more.*

20 **Socioeconomics.** "...Any connection between public perception of a risk to property values and future behavior would be uncertain or speculative at best, and therefore would not inform decision making." *Property values are*

Comment No. 25

Sections 3.9 and 4.9 present a description of the existing noise and analyze the potential impacts to these resources from the proposed project, including potential impacts from corona effect. Sound level measurements taken during fair weather at existing TEP 345-kV transmission lines indicate only a 2 to 3 dB difference between background noise levels and levels beneath the transmission line. Changes in sound level of +/-5 dBA over a long period of time (such as the relatively constant noise from the corona effect) would generally be perceived as "barely perceptible." Therefore, noise from the corona effect would have little or no impact on noise levels along the Western Corridor.

Comment No. 26

Section 3.10, Human Health and Environment, acknowledges the present uncertainty regarding EMF health effects, and contains a summary (with back-up material in Appendix B) of the existing credible scientific evidence relevant to evaluating the potential impacts of EMF, as required by NEPA-implementing regulations (40 CFR 1502.22). The available data have not revealed any conclusive evidence that EMF exposure from power lines poses a hazard to animal or human health (see Sections 3.10 and 4.10, Health and Human Environment). Where transmission lines are located in close proximity to each other, EMF levels can increase or decrease depending on the layout of the transmission lines and ROWs.

Kasulaitis, Mary
Page 12 of 20

20 cont. *most important to those living near the south part of the Central Corridor, since there are more people living there than on the other corridors, so if their opinions are <u>not</u> to be taken into consideration, then the Central Corridor is the most logical one to follow.*

21 **Geology and Soils:** "Potential for ground failure exists in mountainous areas…steep terrain in the southern portion of the [Western] corridor increases potential for ground failure" *Along the Western Corridor the slopes are commonly 30 to 50 degrees through the Atascosas, along the Ruby Road, thus the Western Corridor has the greatest potential for ground failure, as does the Crossover Corridor through Peck Canyon.*

"Road construction on unconsolidated alluvium could cause soil erosion and compaction*."*

18 cont. Page 3-70: The proposed project (Western Corridor) crosses the Sycamore Canyon watershed, but is north of the nominated section..."*It is immediately upstream of this section. Any alluvium immediately upstream of Sycamore Canyon will be affected by road building and erosion will negatively impact the fragile ecosystem in the canyon bottom. Flooding is common in this area and the Forest Service has spent years increasing the protection of this ecosystem, by removing cattle and roads. Now that it is relatively protected, will you now undo everything the USFS has done for the last 30 years?*

22 Page 3-63: "Relatively intact bedrock is near to or exposed at the ground surface along the majority of the Western Corridor on the Western side of the Tumacacori Mountains." *On the Western and Crossover Corridors there are soils unsuited for roads, thus no roads have been built in the past. These include the Tertiary volcanic rocks shown in Figure 3.6-1*

Comment No. 27

The commentor's suggestion of building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5, Alternatives Considered But Eliminated from Further Analysis, of the Draft EIS).

Comment No. 28

As discussed in Section 4.12, Transportation, short-term traffic delays may be encountered during construction when the proposed transmission line crosses major roads. Traffic mitigations, such as the use of flagmen, would be employed to mitigate traffic delays on these roads.

Comment No. 29

Refer to the response to Comment 25 above regarding potential noise impacts from the corona effect.

Comment No. 30

Section 3.5 has been revised in the Final EIS to describe existing socioeconomic aspects of tourism in the project area, and Section 4.5 has been revised to discuss potential impacts to socioeconomic aspects of tourism.

Section 3.13 discusses minority and low-income populations in the vicinity of the proposed project, including Arivaca, and Section 4.13 concludes that there would be no disproportionately high and adverse impact to the minority or low-income populations.

Comment No. 31

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS

Kasulaitis, Mary
Page 13 of 20

along the western side of the Atascosa Mountains. Lampshire-Chiricahua-Graham soils are very cobbly loose soils, which do not lend well to road building. "Erosion hazard is high on steep slopes in the Atascosa and Tumacacori Mountains". *(page 3-68) The Ruby road, along which the power line will follow, is on a steep slope of the Atascosas.*

22 cont.

Page 3-65: "A majority of the Central Corridor near and on the Tumacacori EMA has exposed soil at the surface rather than bedrock..." *Road building for construction purposes would be easier on the Central Corridor than on the Western or Crossover.*

23 Page 32-61: Seismic hazards. *The author's grandfather, Arthur Noon, a rancher and miner, noted numerous rockfalls in the area of Montana Peak and Atascosa Peak during the 1887 earthquake, which he witnessed. Rockfalls of the type he described would damage the power poles. No such similar hazard exists on the Central Corridor.*

Water Resources: "The Western and Crossover Corridors would have the greatest potential to impact floodplains in the project area."

24 "None of the corridors cross any eligible or designated Wild and Scenic Rivers." *This is incorrect: Sycamore Canyon is an eligible Wild and Scenic River and the Western Corridor power line would follow its upper watershed from Apache Pass south to where the Canyon narrows at Hank and Yank Spring. On the chart on page 2-37 the figure of 1.97 acres for the Western Corridor obviously does not include the newly constructed roads in the entire watershed from Arivaca Road south to Ruby Road. Since there are virtually no roads in the area there will need to be more than 20 miles of construction.*

Comment No. 31 ***(continued)***

was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above. Refer also to the response to Sky Island Alliance, Comment 14.

Section 3.13 discusses minority and low-income populations in the vicinity of the proposed project, including Arivaca, and Section 4.13 concludes that there would be no disproportionately high and adverse impact to the minority or low-income populations.

Comment No. 32

The Federal agencies note the commentor's requests that DOE only issue a Presidential Permit if the Western or Crossover Corridors are not the final choice for the proposed project.

Kasulaitis, Mary
Page 14 of 20

Noise: "Long-term noise from the corona effect on transmission lines would generally be lost in background noise." *This is only applicable on the Central Corridor: there* 25 *is virtually no human noise "background noise" on the entire expanse of the Western corridor south of the Arivaca Road except for occasional cars on Ruby Road.*

Human Health and Environment: "There would be no [human] health effects from this exposure." *This is certainly a* 26 *debatable issue, which I personally am not prepared to discuss.*

27 **Infrastructure.** *The power line should follow existing right of ways in the Santa Cruz Valley and not add new ones.*

Transportation. "Because the Central Corridor has the longest segment following the EPNG pipeline RPW, fewer temporary new access roads would be required than for the 28 other alternatives...Short-term traffic disruptions on major roads such as I-19 or Ruby Road could occur during construction." *Ruby Road will be inaccessible during construction as it is only barely wide enough for two cars—passing large construction vehicles will not be possible.*

Floodplains and wetlands. The Western Corridor will cross numerous drainages upstream of Sycamore Canyon Creek and within 2 mi. of a total of 10 mapped springs. 29 *These springs are used by the fauna of the area, which may be affected by power line noise and potential users of the roads that will be constructed on and to the ROW. The Central Corridor will not come near any mapped springs.*

Kasulaitis, Mary
Page 15 of 20

Minority and low-income populations

The town of Arivaca is a low income area (see 2000 Census, detail available at the Arivaca Library) and dependent on ecotourism (birding) for much of its income, especially for the stores, restaurants, artists' cooperative, and hotel facilities (B&Bs). This power line along the Western Corridor will permanently destroy the beautiful birding route from Nogales to Arivaca, from the birding areas of Patagonia to the birding areas on the Buenos Aires 30 *National Wildlife Refuge. What tourist will want to go on the Ruby Road with the powerline along the roadside for miles? The correlation between visual damage and ecotourism is not covered in the Draft EIS. I enclose a bibliography of sources that illustrate the impact of ecotourism on the Arivaca area, and the value of the Ruby Road birding/butterfly route.*

TEP will contribute to environmental justice by providing illegal immigrants from Mexico a well-marked road north to 31 *their jobs in the United States, no matter which corridor is chosen. For an example of this, see the power line ROW in the Altar Valley from Sasabe to Three Points.*

Conclusions

In summary, I believe that the Draft EIS itself is the best defense against the choice of the Western and Crossover 32 Corridors in the siting of the power line. The Central Corridor would be shorter, less expensive for construction purposes and will do less damage to significant environmental sites. In no place is the Central Corridor

Kasulaitis, Mary
Page 16 of 20

32 cont. shown by this Draft EIS to have greater environmental value than the two more western corridors. I ask that the DOE issue a Presidential Permit only if the Western or Crossover Corridors are not the final choice for a power line.

Respectfully,

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Kasulaitis, Mary
Page 17 of 20

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SANTA CRUZ COUNTY, ARIZONA
(Websites are as of 10-14-03)

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Provides site description, special interest plants

Kasulaitis, Mary
Page 18 of 20

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Kasulaitis, Mary
Page 19 of 20

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Kasulaitis, Mary
Page 20 of 20

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Kesich, John
Page 1 of 2

EIS for Tucson Electric Power's proposed 345 kilovolt powerline

Forwarded by Susan Kozacek/R3/USDAFS
on 10/16/2003 05:34 PM
Kesich@npacc.net
10/11/2003 08:30 AM
To: skozacek @fs.fed.us
Cc:

Subject: EIS for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 west Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 Please withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 KV powerline. This draft EIS is flawed. It assumes that the new powerline should be used to export power to Mexico rather than presenting alternatives which restrict use to providing power to Santa Cruz County - this may be good for the company's bottom line but I do not see that it serves the public interest.

2 I would also like to see alternatives which rely on distributed power generation - solar, wind, cogeneration - rather than simply stretching more wires across our landscape.

3 One alternative I would favor is scaling back the project to the backup line which ACC originally ordered built and running that through the existing existing powerline corridors along I-19. This makes much more sense to me than marring the Coronado National Forest so that TEP can export power to Mexico.

Comment No. 1

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 2

Alternative or renewable power supply methods do not meet TEP's proposal and are thus not evaluated in this EIS (see Section 2.1.5).

Comment No. 3

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

The commentor's suggestion of building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5).

Kesich, John
Page 2 of 2

4 --- TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

5 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

6 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

7 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,
John Kesich
RR 2 Box 168a
Millerton, Pennsylvania 16936

Comment No. 4

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 5

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

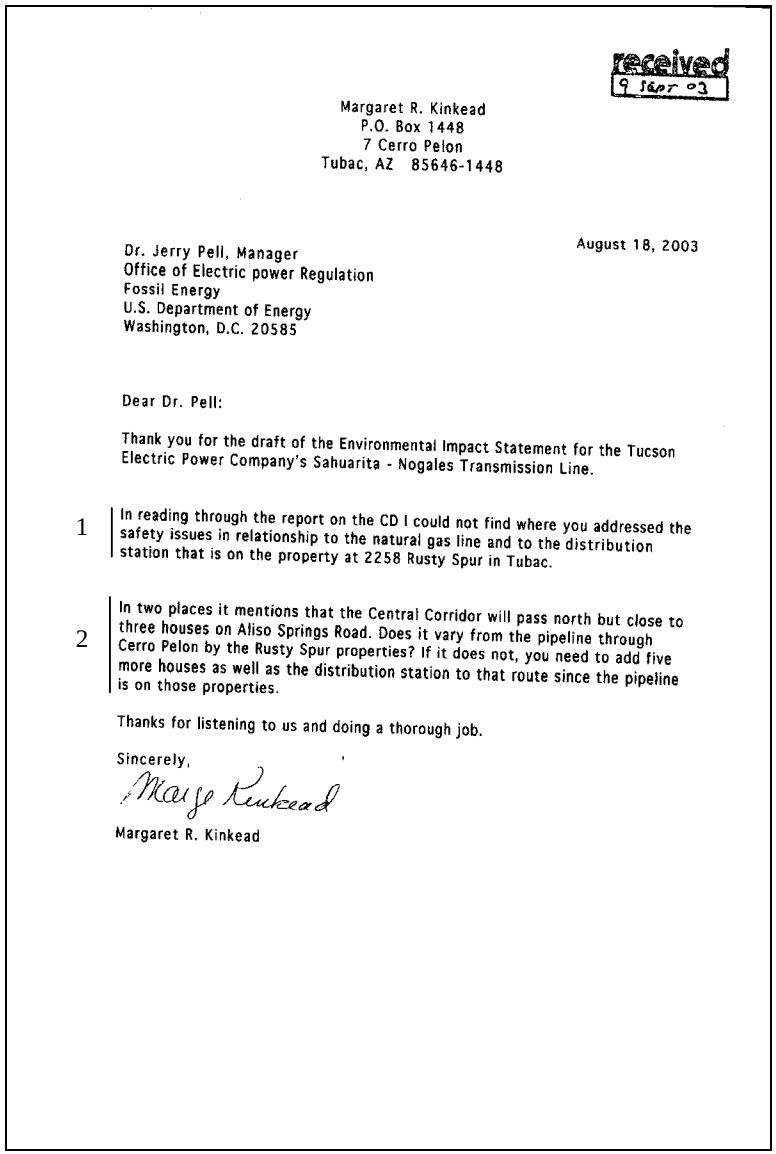
Comment No. 6

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 7

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Kinkead, Margaret
Page 1 of 1



received
9 Sept 03

Margaret R. Kinkead
P.O. Box 1448
7 Cerro Pelon
Tubac, AZ 85646-1448

August 18, 2003

Dr. Jerry Pell, Manager
Office of Electric power Regulation
Fossil Energy
U.S. Department of Energy
Washington, D.C. 20585

Dear Dr. Pell:

Thank you for the draft of the Environmental Impact Statement for the Tucson Electric Power Company's Sahuarita - Nogales Transmission Line.

1 In reading through the report on the CD I could not find where you addressed the safety issues in relationship to the natural gas line and to the distribution station that is on the property at 2258 Rusty Spur in Tubac.

2 In two places it mentions that the Central Corridor will pass north but close to three houses on Aliso Springs Road. Does it vary from the pipeline through Cerro Pelon by the Rusty Spur properties? If it does not, you need to add five more houses as well as the distribution station to that route since the pipeline is on those properties.

Thanks for listening to us and doing a thorough job.

Sincerely,

Marge Kinkead

Margaret R. Kinkead

Comment No. 1

Section 4.10 of the Final EIS has been revised to include discussion on safety considerations for collocating natural gas pipelines and transmission lines. TEP has consulted with EPNG about the proposed project, and TEP would have detailed discussions with EPNG regarding safety issues of siting the proposed transmission line near the distribution station once an exact location for the structures is determined.

A minimum distance of 100 ft (30 m) would be maintained between any of the proposed transmission line structures and the edge of the existing EPNG pipeline ROW, in compliance with the Amended Certificate of Environmental Compatibility issued to TEP on October 29, 2001, by ACC (see Section 4.10 of the EIS). As shown in Table 10-2 of the Final EIS, the Federal agencies consulted with EPNG regarding safety requirements, and EPNG concurred that the ACC's requirement is adequate.

Comment No. 2

The study corridor for the Central Corridor would stay along the pipeline ROW in the area cited by the commentor. Section 3.1, Land Use, of the Final EIS has been modified to include the five additional houses and the distribution station along the Central Corridor.

Kinkead, Marge
Page 1 of 1

From: Marge Kinkead [wmkinkead@earthlink.net]
Sent: Tuesday, September 30, 2003 7:28 PM
To: Pell, Jerry
Subject: power lines

Dr. Pell:

I missed the meeting in Nogales because I did not hear about it until after I had other plans.

1 I wanted to address my continuing concerns about the safety of putting the pipeline along the gas line near the distribution station on Ed and Linda Wood's property at 2258 Rusty Spur in Tubac. Since these hearings have been going on the uncontrolled venting of the gas line has ceased. But El Paso Gas has told us that it is necessary to vent and test the distribution point and the line itself on a regular basis. It is this venting near 45 K power lines that seems to me to be unsafe.

If I had been able to come to the meeting, I would have voiced these concerns at the meeting. This safety issue was not addressed in the Draft of the Environmental Impact Statement. I hope that it will be addressed in the final report.

Marge Kinkead
P.O. Box 1448
7 Cerro Pelon
Tubac, AZ
520 398 2364

Comment No. 1

Refer to the response to Comment No. 1 in the previous submittal from Margaret Kinkead.

Kinkead, Marge
Page 1 of 1

Environmental Impact Statement for the proposed Tucson Electric Power lines into Mexico

From: Marge Kinkead [SMTP:wmkinkead@earthlink.net]
To: Pell, Jerry
Cc: marshall@magruder.org

Subject: Environmental Impact Statement for the proposed Tucson Electric Power lines into Mexico
Sent: 10/13/2003 7:06 PM
Importance: Normal

Margaret R. Kinkead
P.O. Box 1448
7 Cerro Pelon
Tubac, AZ 85646-1448
520 398 2364

Re: Environmental Impact Statement for the proposed Tucson Electric Power lines into Mexico

Dear Dr. Pell:

Marshall Magruder suggested that I rephrase my recent letter to you so that it was in a question form. Where in the draft of the Environmental Impact Statement were the safety issue addressed?

1

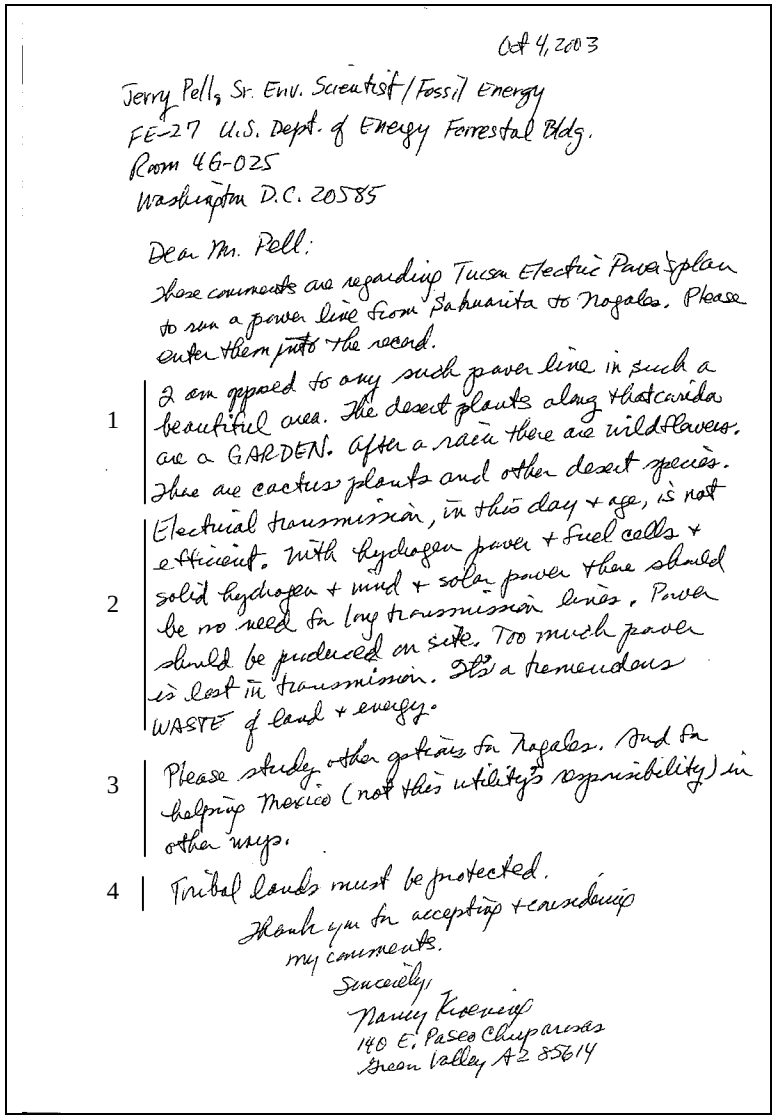
How close can the 345 K power lines safely come to the distribution station on the property at 2258 Rusty Spur, Tubac, AZ which is vented for testing on a regular basis? I am anxious to receive your answer.

Marge Kinkead

Comment No. 1

Refer to the response to Comment No. 1 in the first submittal from Margaret Kinkead.

Kroening, Nancy
Page 1 of 1



Oct 4, 2003

Jerry Pell, Sr. Env. Scientist/Fossil Energy
FE-27 U.S. Dept. of Energy Forrestal Bldg.
Room 4G-025
Washington D.C. 20585

Dear Mr. Pell:
Those comments are regarding Tucson Electric Power's plan to run a power line from Sahuarita to Nogales. Please enter them into the record.

1 I am opposed to any such power line in such a beautiful area. The desert plants along that corridor are a GARDEN. After a rain there are wildflowers. There are cactus, plants and other desert species.

2 Electrical transmission, in this day + age, is not efficient. With hydrogen power + fuel cells + solid hydrogen + wind + solar power there should be no need for long transmission lines. Power should be produced on site. Too much power is lost in transmission. It's a tremendous WASTE of land + energy.

3 Please study other options for Nogales. And for helping Mexico (not this utility's responsibility) in other ways.

4 Tribal lands must be protected.

Thank you for accepting + considering my comments.

Sincerely,
Nancy Kroening
140 E. Paseo Chiparosas
Green Valley AZ 85614

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed transmission line because of the potential impact on the vegetation in the area.

Comment No. 2

Alternative or renewable power supply methods do not meet TEP's proposal and are thus not evaluated in this EIS (refer to section 2.1.5).

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

Section 1.2 explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Any study of alternatives for "helping Mexico" would be outside the scope of the EIS.

Comment No. 4

Sections 3.4 and 4.4 discuss the existing cultural resources and analyze the potential impacts to these resources from the proposed project, including Native American Concerns. There are no reserved tribal lands in the proposed project; however, several tribes have traditional connections to the proposed project areas. Tribal concerns about the impacts of the transmission line on traditional use lands have been considered through consultation.

Kurtz, William
Page 1 of 1

DOE-EIScommentsDOE/EIS-0336,TEP Sahuarite-Nogales Transmission Line DEIS

From: B & E Soporibell [SMTP:soporibell@msn.com]
To: Pell, Jerry
Cc:

Subject: DOE-EIScommentsDOE/EIS-0336,TEP Sahuarite-Nogales Transmission Line DEIS
Sent: 10/14/2003 4:52 PM

Importance: Normal

Couple items not included in my verbal presentation:

1 The ACC order contains a condition that TEP use non-reflective, colorized monopoles. The DEIS only mentions self-weathering monopoles. Should the line be built TEP should be required to use the non-reflective, colorized monopoles as they would be less intrusive visually.

2 In additions to my verbal presentation on "roads" please note the concern of invasive species taking advantage of the cleared path--they are extremely difficult to control and we certainly do not need them in the roadless-wilderness area.

William Kurtz,
65 Box 7990,
Amado AZ 85645.

Comment No. 1

ACC Decision No. 64356 (ACC 2002) uses the terms “non-reflective,” “self-weathering,” and “color suitable to the terrain and vegetation” to describe the structures that TEP should use. The self-weathering monopoles described in the EIS are intended to comply with these requirements of the ACC regarding structure finish.

Comment No. 2

Section 4.3.2, Biological Resources, states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances. Sections 3.3.3 and 4.3.3 presents analyses of the existing special interest species, and potential impacts to these species as a result of the proposed project. Section 3.3.2 discusses the existing vegetation and wildlife in the proposed project area, and Section 4.3 analyzes habitat fragmentation impacts.

Sections 3.3.6 and 4.3.6 discuss the existing invasive species (nonnative plants) in the project area, and potential invasive species impacts that could result from the proposed project.

Kurtz, William
Page 1 of 2

Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 06:04 PM -----
"B & E Soporibell" <soporibell@msn.com>
10/14/2003 01:13 PM

To: <skozacek@fs.fed.us>
cc:
Subject: DEIS, TEP Sahuarita-Nogales Transmission Line

<?xml:namespace prefix="v" /><?xml:namespace prefix="o" />
Attached is the statement I made to DOE at the hearing in Nogales. Some of those statements are pertinent to the Coronado National Forest. Please also consider the following additional comments:

1 | 1. TEP is required by the ACC to use non-reflective colorized monopoles and NOT the self-weathering type described in the DEIS. Should the line be built in the National Forest non-reflective colorized monopoles should be required.

2 | 2. Regardless of how many visual simulations are made the fact remains that the line will be a great visual intrusion on the Forest and certainly one that we do not need be it the western, cross-over or central route.

3 | 3. The line is truly incompatible with the roadless,wilderness character of the Forest. These areas are disappearing and we should not mar this one with transmission lines.

4 | 4. The attachment discusses roads but fails to mention that any new roads are prime places for invasive species to become established.

Comment No. 1

Refer to the response to Comment No. 1 in the previous submittal from William Kurtz.

Comment No. 2

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Comment No. 3

Sections 3.1 and 4.1 discuss the existing land use, including Wilderness Areas and roadless designations, and analyze the potential impacts to these resources from the proposed project. Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts related to roads. Also, refer to the response to Center for Biological Diversity, Comment 9, regarding roadless area designations.

Comment No. 4

Section 4.3.2, Biological Resources, states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances. Section 3.3.2 discusses the existing vegetation and wildlife in the proposed project area. Sections 3.3.6 and 4.3.6 discuss the existing invasive species (nonnative plants) in the project area, and potential invasive species impacts that could result from the proposed project.

Kurtz, William
Page 2 of 2

5 Because the ACC order for a second line to serve Nogales only needs to be a 115kv line and can be provided outside the Forest no compelling reasons exist to construct a 345kv line through the Forest. Of the four alternatives in the DEIS the NO ACTION alternative should be selected.

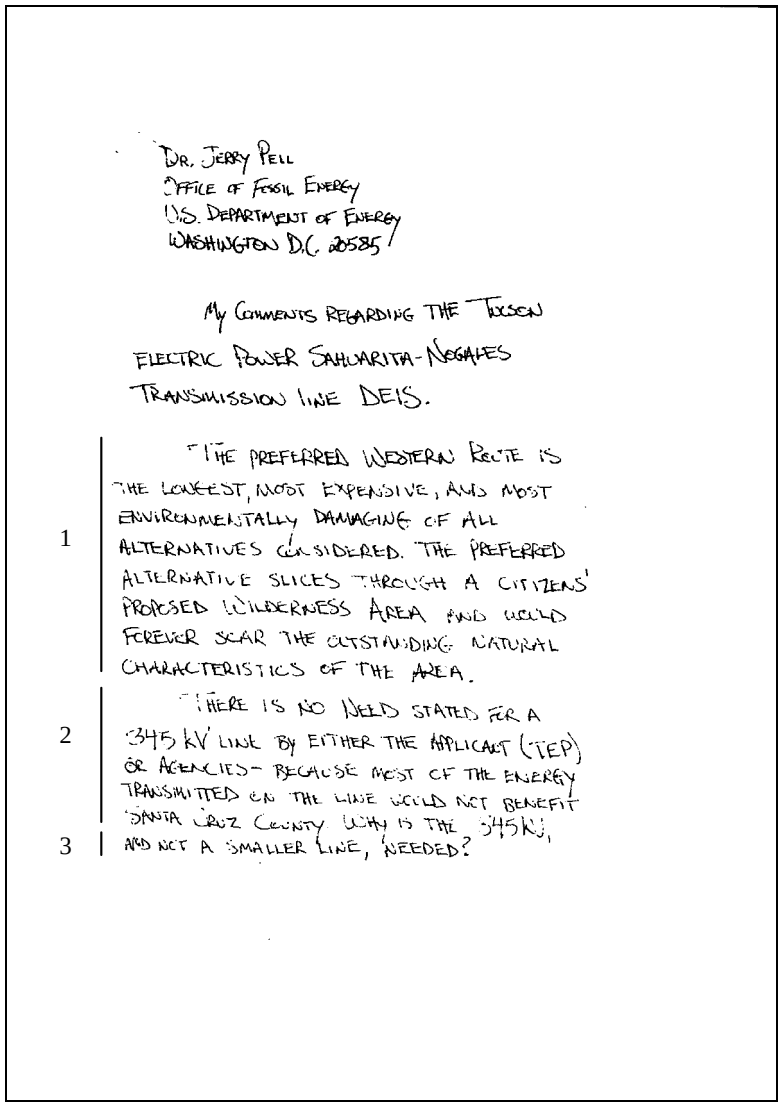
William Kurtz, HC
65 Box 7990,
Amado AZ 85645.

Comment No. 5

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

A smaller transmission line in lieu of the proposed 345-kV line (e.g., a 115-kV line) would not meet the international interconnection aspect of TEP's proposal. Therefore, this alternative is not evaluated in detail in this EIS (see Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Lancaster, Rodd
Page 1 of 2



DR. JERRY PELL
OFFICE OF FOSSIL ENERGY
U.S. DEPARTMENT OF ENERGY
WASHINGTON D.C. 20585

MY COMMENTS REGARDING THE TUCSON ELECTRIC POWER SAHUARITA-NOGALES TRANSMISSION LINE DEIS.

1 "THE PREFERRED WESTERN ROUTE IS THE LONGEST, MOST EXPENSIVE, AND MOST ENVIRONMENTALLY DAMAGING OF ALL ALTERNATIVES CONSIDERED. THE PREFERRED ALTERNATIVE SLICES THROUGH A CITIZENS' PROPOSED WILDERNESS AREA AND WOULD FOREVER SCAR THE OUTSTANDING NATURAL CHARACTERISTICS OF THE AREA.

2 "THERE IS NO NEED STATED FOR A 345 kV LINE BY EITHER THE APPLICANT (TEP) OR AGENCIES - BECAUSE MOST OF THE ENERGY TRANSMITTED ON THE LINE WOULD NOT BENEFIT SANTA CRUZ COUNTY WHY IS THE 345 kV,

3 AND NOT A SMALLER LINE, NEEDED?

Comment No. 1

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.1 and 4.1 present a description of the existing land use, and analyze potential impacts to these resources from the proposed project.

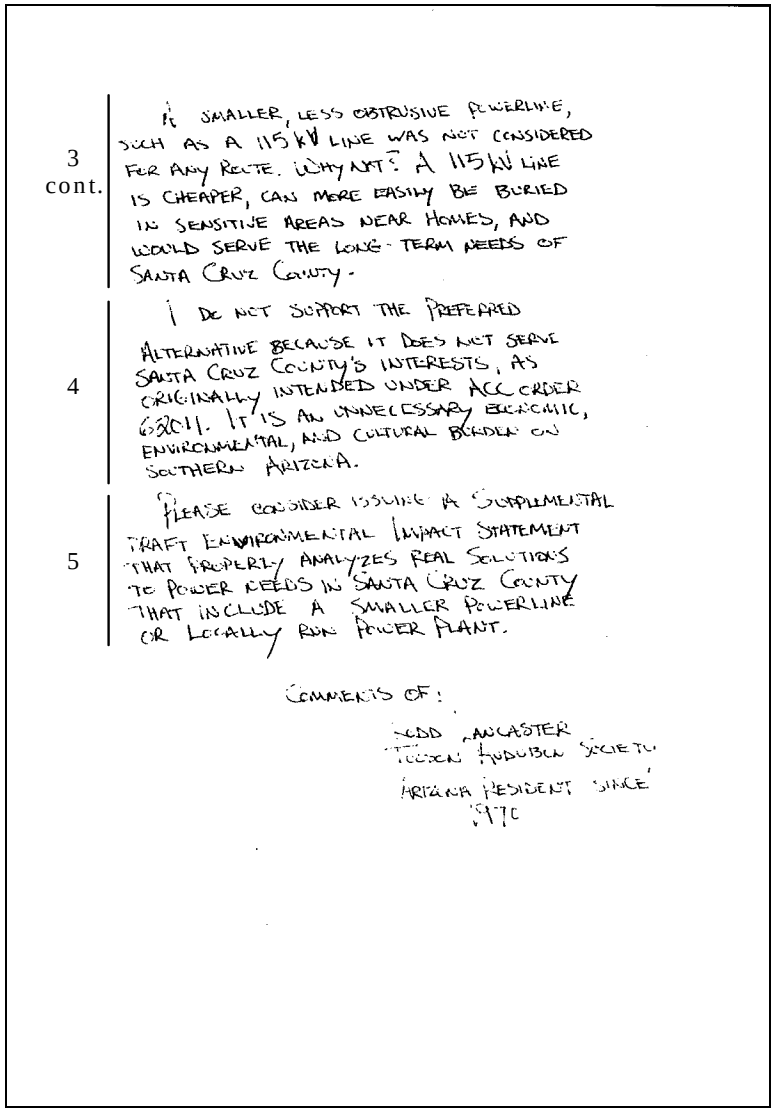
Comment No. 2

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Comment No. 3

A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Lancaster, Rodd
Page 2 of 2



3 cont. A SMALLER, LESS OBTRUSIVE POWERLINE, SUCH AS A 115 kV LINE WAS NOT CONSIDERED FOR ANY ROUTE. WHY NOT? A 115 kV LINE IS CHEAPER, CAN MORE EASILY BE BURIED IN SENSITIVE AREAS NEAR HOMES, AND WOULD SERVE THE LONG-TERM NEEDS OF SANTA CRUZ COUNTY.

4 I DO NOT SUPPORT THE PREFERRED ALTERNATIVE BECAUSE IT DOES NOT SERVE SANTA CRUZ COUNTY'S INTERESTS, AS ORIGINALLY INTENDED UNDER ACC ORDER 62011. IT IS AN UNNECESSARY ECONOMIC, ENVIRONMENTAL, AND CULTURAL BURDEN ON SOUTHERN ARIZONA.

5 PLEASE CONSIDER ISSUING A SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT THAT PROPERLY ANALYZES REAL SOLUTIONS TO POWER NEEDS IN SANTA CRUZ COUNTY THAT INCLUDE A SMALLER POWERLINE OR LOCALLY RUN POWER PLANT.

COMMENTS OF:

RODD LANCASTER
TUCSON AUDUBON SOCIETY
ARIZONA RESIDENT SINCE 1970

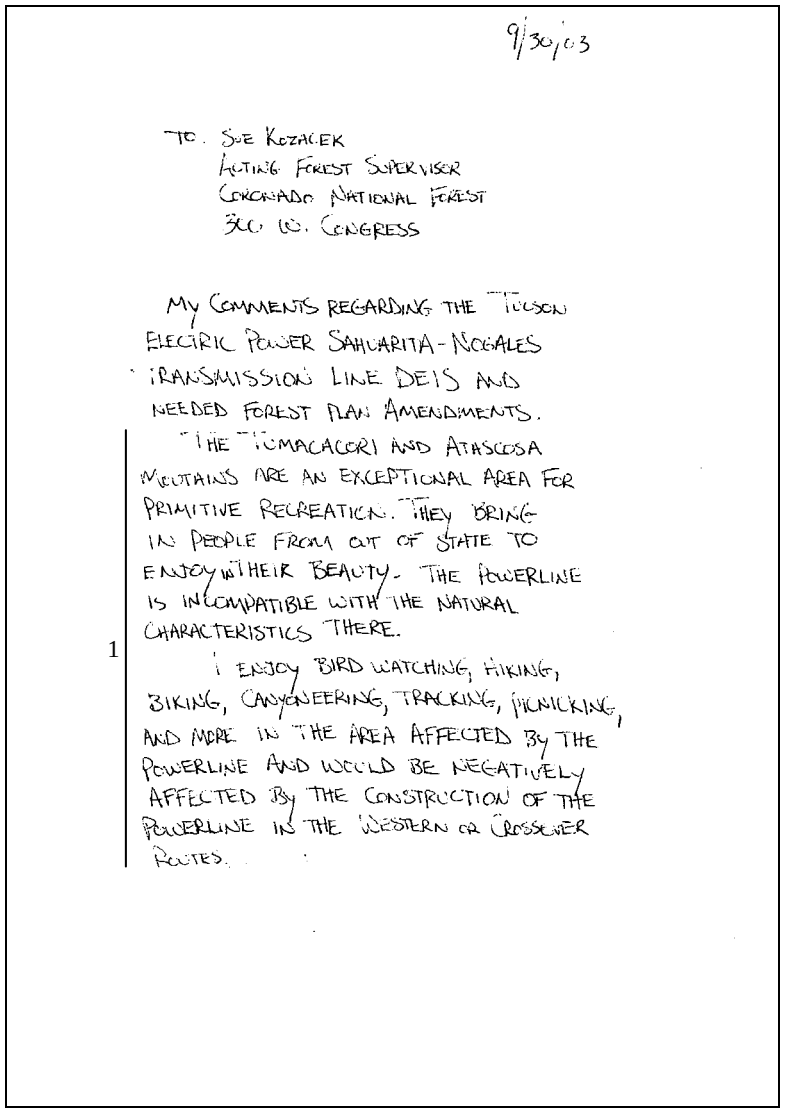
Comment No. 4

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Lancaster, Rodd
Page 1 of 2



9/30/03

TO: SUE KOZACEK
ACTING FOREST SUPERVISOR
CORONADO NATIONAL FOREST
300 W. CONGRESS

MY COMMENTS REGARDING THE TUCSON ELECTRIC POWER SAHUARITA-NOGALES TRANSMISSION LINE DEIS AND NEEDED FOREST PLAN AMENDMENTS.

THE TUMACACORI AND ATASCOSA MOUTAINS ARE AN EXCEPTIONAL AREA FOR PRIMITIVE RECREATION. THEY BRING IN PEOPLE FROM OUT OF STATE TO ENJOY THEIR BEAUTY. THE POWERLINE IS INCOMPATIBLE WITH THE NATURAL CHARACTERISTICS THERE.

1 I ENJOY BIRD WATCHING, HIKING, BIKING, CANYONEERING, TRACKING, PICNICKING, AND MORE IN THE AREA AFFECTED BY THE POWERLINE AND WOULD BE NEGATIVELY AFFECTED BY THE CONSTRUCTION OF THE POWERLINE IN THE WESTERN OR CROSSOVER ROUTES.

Comment No. 1

Sections 3.1.2 and 41.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Sections 3.1.2 and 4.1.2 present analyses of existing recreational settings and activities, and potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

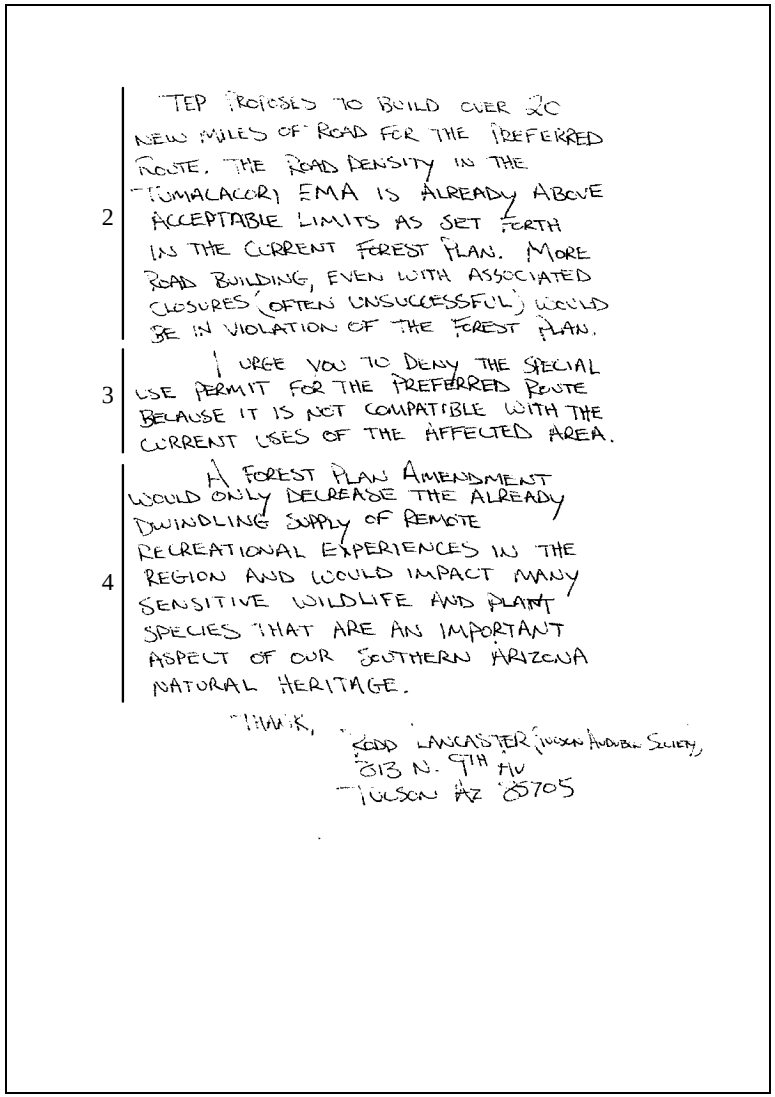
Comment No. 2

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. Any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Based on these terms and conditions for ensuring the effectiveness of road closures, the proposed project is consistent with Forest Plan standards and guidelines for road density.

Comment No. 3

Sections 3.1 and 4.1 present a description of the existing land use, and analyze the potential impacts to these resources from the proposed project.

Lancaster, Rodd
Page 2 of 2



TEP PROPOSES TO BUILD OVER 20 NEW MILES OF ROAD FOR THE PREFERRED ROUTE. THE ROAD DENSITY IN THE TUMACACORI EMA IS ALREADY ABOVE ACCEPTABLE LIMITS AS SET FORTH IN THE CURRENT FOREST PLAN. MORE ROAD BUILDING, EVEN WITH ASSOCIATED CLOSURES (OFTEN UNSUCCESSFUL) WOULD BE IN VIOLATION OF THE FOREST PLAN. 2

I URGE YOU TO DENY THE SPECIAL USE PERMIT FOR THE PREFERRED ROUTE BECAUSE IT IS NOT COMPATIBLE WITH THE CURRENT USES OF THE AFFECTED AREA. 3

A FOREST PLAN AMENDMENT WOULD ONLY DECREASE THE ALREADY DWINDLING SUPPLY OF REMOTE RECREATIONAL EXPERIENCES IN THE REGION AND WOULD IMPACT MANY SENSITIVE WILDLIFE AND PLANT SPECIES THAT ARE AN IMPORTANT ASPECT OF OUR SOUTHERN ARIZONA NATURAL HERITAGE. 4

THANK,

RODD LANCASTER (TUCSON AUDUBON SOCIETY)
3313 N. 5TH AV
TUCSON AZ 85705

Comment No. 4

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project.

Landa, Hazel
Page 1 of 2

From: dryland2@aol.com
Sent: Thursday, October 09, 2003 9:02 PM
To: Pell, Jerry
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline. It sounds to me that Tucson

2 Electric Power is taking advantage of the agreement between the Arizona Corporations Commission and the Citizens Communication Company to make a lot of extra profit by creating a more massive line than necessary so that it can export electricity to Mexico.

In this rush to make profits as opposed to providing a needed backup for Nogales and Santa Cruz County, they are sacrificing the environment, a treasure for the rest of us and the wildlife within it.

3 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican

Comment No. 1

The Federal agencies note the commentor's suggestion that DOE withdraw the current Draft EIS.

Comment No. 2

Potential economic benefit to TEP from the proposed project is outside the scope of the EIS. (See response to the Border Power Plant Working Group, Comment 2.)

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Comment No. 3

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Landa, Hazel
Page 2 of 2

3 cont. spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

4 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

HAZEL LANDA
3837 NY 2
CROPSEYVILLE, New York 12052

Comment No. 4

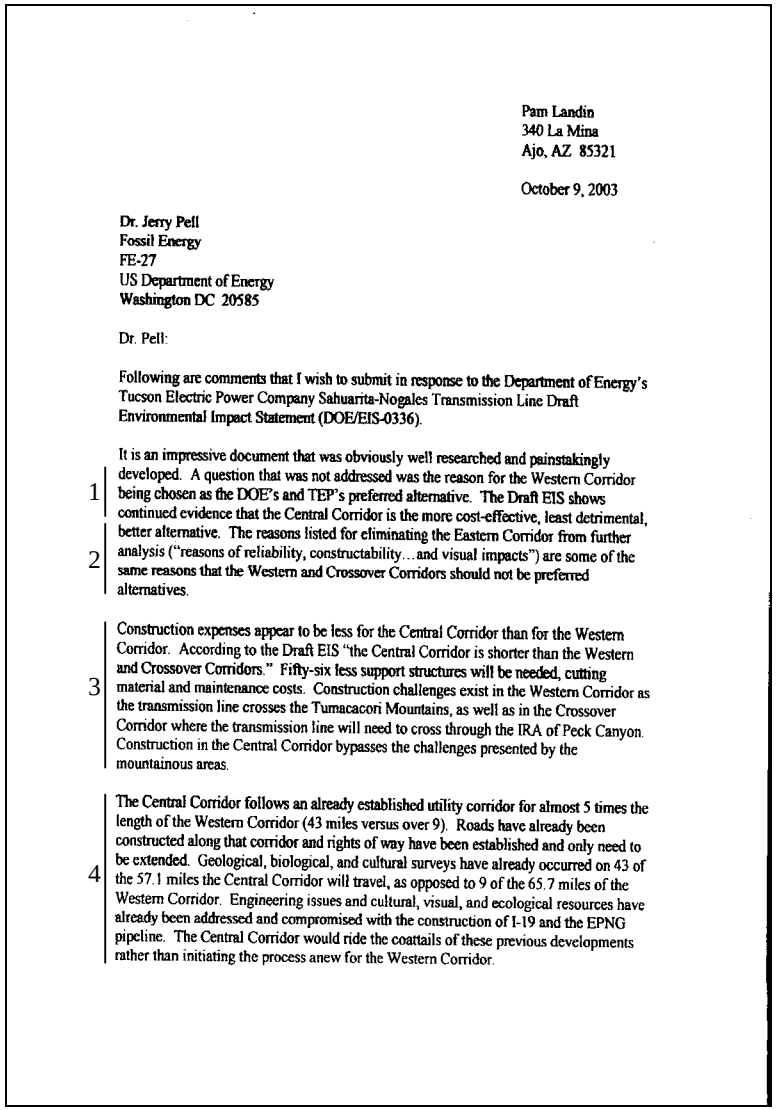
When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 5

Potential economic benefit to TEP from the proposed project is outside the scope of the EIS.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Landin, Pam
Page 1 of 4



Pam Landin
340 La Mina
Ajo, AZ 85321

October 9, 2003

Dr. Jerry Pell
Fossil Energy
FE-27
US Department of Energy
Washington DC 20585

Dr. Pell:

Following are comments that I wish to submit in response to the Department of Energy's Tucson Electric Power Company Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement (DOE/EIS-0336).

1 It is an impressive document that was obviously well researched and painstakingly developed. A question that was not addressed was the reason for the Western Corridor being chosen as the DOE's and TEP's preferred alternative. The Draft EIS shows continued evidence that the Central Corridor is the more cost-effective, least detrimental, better alternative. The reasons listed for eliminating the Eastern Corridor from further

2 analysis ("reasons of reliability, constructability…and visual impacts") are some of the same reasons that the Western and Crossover Corridors should not be preferred alternatives.

3 Construction expenses appear to be less for the Central Corridor than for the Western Corridor. According to the Draft EIS "the Central Corridor is shorter than the Western and Crossover Corridors." Fifty-six less support structures will be needed, cutting material and maintenance costs. Construction challenges exist in the Western Corridor as the transmission line crosses the Tumacacori Mountains, as well as in the Crossover Corridor where the transmission line will need to cross through the IRA of Peck Canyon. Construction in the Central Corridor bypasses the challenges presented by the mountainous areas.

4 The Central Corridor follows an already established utility corridor for almost 5 times the length of the Western Corridor (43 miles versus over 9). Roads have already been constructed along that corridor and rights of way have been established and only need to be extended. Geological, biological, and cultural surveys have already occurred on 43 of the 57.1 miles the Central Corridor will travel, as opposed to 9 of the 65.7 miles of the Western Corridor. Engineering issues and cultural, visual, and ecological resources have already been addressed and compromised with the construction of I-19 and the EPNG pipeline. The Central Corridor would ride the coattails of these previous developments rather than initiating the process anew for the Western Corridor.

Comment No. 1

While DOE identified the Western Corridor as its preferred alternative in Section 1.1 of the Draft EIS for the reasons cited, DOE accepted public comments on this designation and has taken these comments into account in the Final EIS. The Federal agencies made changes in the Final EIS where appropriate to include additional clarifications and analyses suggested by commentors on the Draft EIS. As stated in Section 1.4.1, in light of the Arizona Corporation Commission's (ACC) decision to site TEP's proposed line along the Western Corridor, DOE continues to identify the Western Corridor as DOE's preferred alternative. Refer to Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, of the Final EIS that provides background on TEP's selection of the Western Corridor as its preferred alternative.

Comment No. 2

The Eastern Corridor was eliminated from further consideration in this EIS because of TEP's conclusion that the Eastern Corridor is technically infeasible (see Section 2.1.5 for further discussion of elimination of the Eastern Corridor). The Western and Crossover Corridors remains a viable alternative for selection by the Federal decisionmakers. However, implementation of the proposed project in the Western or Crossover Corridors could not occur until TEP meets all regulatory requirements, including obtaining the necessary approval from the ACC.

Comment No. 3

The construction costs of each of the three action alternatives (the Western, Central, and Crossover Corridors) would be roughly similar (see Section 4.5.1). Section 4.5 analyzes the potential socioeconomic impacts that could result from the proposed project based on a number of factors including the cost of the proposed project. Any additional analysis of the cost of the proposed project is outside the scope of the EIS.

Landin, Pam
Page 2 of 4

5 The Draft EIS mentions that helicopters will be used to string conductors in all corridors. Helicopter use will be more of an issue in the Western and Crossover Corridors where it could adversely affect sensitive species or species of concern. Helicopter use will not be as much of an issue along the Central Corridor where there is already disturbance from existing development. The Draft EIS also mentions that explosives blasting may be used depending on geologic conditions. Again, this will be more of an issue along the

6 Western and Crossover Corridors where there is more mountainous terrain and a potentially greater negative impact on wildlife due to the lesser amount of human disturbance that currently exists in the area.

7 The Western Corridor will affect a much longer area (almost 30 miles versus 15 miles) of pristine landscape than the Central Corridor. The Draft EIS even states that "the area of land that would have reduced Scenic Integrity as a result of construction and operation of the Western or Crossover Corridors in approximately double the area of reduced Scenic Integrity for the Central Corridor." The Western Corridor jeopardizes existing High Scenic Integrity of the area. The Central Corridor also impacts the HSI of the area, however HSI has already been degraded along much of the corridor by existing human development. The Western Corridor also passes through "distinctive landscape" for 4 times the length of the Central Corridor (21.2 miles versus 5.4 miles, respectively) and more than 9 times the length of USFS Scenic Class 1 landscape (10.5 miles versus 1.8 miles, respectively). The Central Corridor was quoted as being "intermittently visible" to the area residents and thus will not be a contiguous presence to the affected communities.

8 The acreage of vegetation communities impacted for each of the Management Indicator Species is greater for each vegetation community in the Western and Crossover Corridors than in the Central Corridor. Less wildlife will be displaced by disturbance or alterations along the Central Corridor. "The Western Corridor has the highest potential for adverse effects to special status species." Ten species listed under the ESA could potentially be affected by the construction and maintenance of the Western Corridor versus 7 listed species in the Central Corridor. When given a choice, impacting the lesser number of listed species is the more practical alternative. "The Western Corridor crosses a portion of the Sycamore Canyon watershed upstream of Critical Habitat for Sonora chub." Even though groundwater pollution and soil erosion are expected to be minimal and temporary, there is a possibility of serious, long-term damage that could affect the critical habitat of the Sonora chub. That is not a risk worth taking and could have legal consequences.

9 The potential for a higher density of cultural resource sites along the Central Corridor has been addressed by the construction of the EPNG pipeline. Surveys have not yet been conducted in detail along the Western and Crossover Corridors, however 3 to 4 times more previously identified archaeological and historical sites have been documented in the Western and Central Corridors (22 and 27, respectively) than in the Central Corridor (6). Native American communities/tribes/nations have already stated a preference for the Central Corridor listing lack of surveys along the Western and Crossover Corridors, presence of culturally significant plants and animals, and the current status of the area as "one of the few areas still existing in southern Arizona where the pre-European contact landscape can be encountered" as reasons for their preference.

Comment No. 4

As discussed in Section 4.12.2, access to the Central Corridor would be on existing utility maintenance roads which would require extensive upgrades, ranch access roads and trails, and new access ways where no access currently exists.

This EIS relies on pre-existing information and surveys to the extent practicable, and newly obtained information where necessary, to evaluate the environmental impacts of each of the proposed project alternatives.

Comment No. 5

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze potential impacts to these resources from the proposed project, including potential impacts from the use of helicopters along the three proposed alternative corridors.

Comment No. 6

Sections 4.3.2, Vegetation and Wildlife, and 4.3.4, Migratory Birds and Raptors, of the Final EIS have been revised to include analyses of the potential effects of explosives blasting. In addition, a mitigation measure has been added to the EIS (see Section 2.2) stating that no blasting would occur during peak breeding times for migratory birds (April through August) to minimize the impacts to migratory birds. The effects of blasting are unlikely to lead to a downward population trend or loss of population viability for any wildlife or migratory bird populations occurring in the project area.

Specific information on where explosives blasting would be required is pending final siting of the transmission line, which would occur only after issuance of a ROD by each Federal agency (if an action alternative is selected for implementation).

Landin, Pam
Page 3 of 4

10 The Draft EIS has addressed and excused as negligible property-owners' concerns about the potential decline of property values if the Central Corridor is established. Effects of long term EMF exposure along the Central Corridor was also excused as negligible and the corridor will be positioned at a safe distance from the EPNG pipeline.

11 Temporary construction noise along the corridor is just that, temporary. That will go away. Temporary construction noise and the presence of humans and machines will have a greater impact on wildlife along the Western and Crossover Corridors than along the Central Corridor. The statement "long term noise from the corona effect on transmission lines would generally be lost in background noise" from the Draft EIS addresses noise affecting the human population, but long term noise from the corona effect will add to "background noise" (is there any now?) of the Western and Crossover Corridors rather than being "lost" in it as it would along the Central Corridor. If there is currently no background noise in the Coronado National Forest, then the noise from the transmission lines along the Western and Crossover Corridors will become a new source of background noise. Operational noise after construction is completed (corona and maintenance, specifically) has greater negative impact in a pristine area unaccustomed to human produced noise.

12 According to an e-mail included in the EIS from Maj. David Von Brock, the Western Corridor poses potential impacts on military airspace and missions that the Central Corridor would not.

13 The issue of drug trafficking and illegal aliens should also be considered when making the final corridor decision. Tom Raffanello of the DEA responded to the issue in his correspondence by saying that the removal of plants and construction of the ROW "would be a concern of the DEA, in that it would help facilitate border crossings by drug traffickers and illegal immigrants." Would illegal alien traffic be more likely to follow a power line that at its closest is 5 miles west of an interstate highway? The Western Corridor, going through the remote areas of the Coronado National Forest and state lands, has the potential to draw more illegal alien traffic to the area than the Central Corridor which would be located in relatively flat, developed areas. An increase in illegal alien traffic along an established Western Corridor would not only create additional environmental and recreational impacts from trash, pedestrians, and vehicles, but also from response of law enforcement agencies including the US Border Patrol, Customs and DEA personnel.

14 Another issue that was not addressed was the potential fire risk in each of the corridors with and without the transmission lines, and the additional disturbance associated with fire fighting activities in response to perceived fire risks. Would the potential for fire increase with the addition of the power lines, thus increasing disturbance by fighting fires that were started by conditions brought about by the transmission lines? The EIS did mention that "smoke is a conductor of electrical current" and that "firefighters would monitor smoke near the transmission line for possible fire starts outside fire perimeter" so smoke near the transmission lines is a potential second source of ignition. What are the

Comment No. 7

Sections 3.1 and 4.1 present a description of the existing land use and analyze the potential impacts to these resources from the proposed project.

Comment No. 8

Sections 3.3.5 and 4.3.5 present a description of the existing MIS and analyze the potential impacts to these species from the proposed project. The proposed project is not expected to result in any downward population trends for MIS in any of the alternative corridors.

Landin, Pam
Page 4 of 4

14 cont. chances that a fire could be ignited by the energy dispersal associated with electrical currents traveling the transmission line?

15 What happens if the other agencies involved in the planning process select a different preferred alternative to the one the DOE and TEP selected?

16 In conclusion, recognizing that TEP is obligated to go ahead with this project, I highly recommend and strongly urge TEP to erect the transmission line along the proposed Central Corridor. The Draft EIS itself outlines the reasons why the Central Corridor should be the preferred alternative. Any use of the Western Corridor, even for the Crossover alternative, would result in construction challenges including increased material costs and survey (geological, biological, and cultural) expenses; higher maintenance costs; greater detrimental impacts to geological, biological and cultural resources; greater interference with special interest groups (e.g. recreationists, military activities), and the potential for an increase in additional disturbance due to illegal alien activity and potential fire risks. The Crossover Corridor should not be considered a viable alternative at all. It runs the longest route through pristine areas and has added costs and detrimental biological and cultural impacts. The Central Corridor will require fewer materials, will be easier and cheaper to construct and maintain, and will be located in an area that is already developed.

17 Prevention measures to avoid soil erosion, including use of vegetation and substrates for soil stabilization, should be exercised during construction in any corridor that is chosen.

Thank you for the opportunity to comment and provide input.

Comment No. 9

Although the EPNG pipeline may have damaged the archaeological sites through which it was constructed, the proposed TEP transmission line in the central corridor would not be located directly on the EPNG pipeline for safety reasons. The central corridor right-of-way is ¼ mile wide, and the transmission line could impact potentially previously undisturbed areas. To deal with this issue, Federal agencies are preparing a Programmatic Agreement with the Arizona State Historic Preservation Office (SHPO), interested tribes, and TEP guiding the treatment of cultural resources if any of the action alternatives is selected.

Comment No. 10

The Federal agencies have not attempted to assess potential impacts to property values from the proposed project because it would be speculative.

Sections 3.10 and 4.10 present analyses of the potential human health impacts of EMF exposure. Appendix B presents a study conducted by the NIEHS to determine if exposure to EMF may cause or promote adverse health effects. The available data have not revealed any conclusive evidence that EMF exposure from power lines poses a hazard to animal or human health (see Sections 3.10 and 4.10, Health and Human Environment).

Comment No. 11

Sections 3.9 and 4.9 discuss the existing noise and analyze the potential impacts from noise resulting from the proposed project, including potential noise impacts to wildlife.

Comment No. 12

As discussed in Chapter 10 and Appendix A of the Final EIS, consultation with the Air Space Manager of the Davis Monthan Air Force Base has been initiated. Information on the proposed project has been forwarded to the 162nd FG Airspace Manager for their review on how it may impact their military flight operation. The 162nd FG Airspace Manager was added to the

Comment No. 12 *(continued)*

Draft EIS distribution mailing list and a copy of the Draft EIS has been sent for their review and comment, but no comment was provided on the proposed project.

Comment No. 13

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above.

Comment No. 14

The following discussion on the potential for fire within the Coronado National Forest has been added to Section 4.1.1 of the Final EIS:

The lands traversed by the proposed power line are typified by low fire occurrence from natural ignition sources. Human caused fires occur at a more frequent rate in the area immediately west of Nogales, Arizona, and south of the Ruby Road (State Highway 289).

Impacts to the power line from natural fires are expected to be minimal. This assessment is based on several factors. The first issue of consideration is the low frequency of natural ignitions. The second factor is that the primary carrier fuel is grass which would result in low to moderate flame heights. A rapid dispersal of smoke could also be expected since there would be minimal smoldering of material after the passage of the fire front. Natural ignitions (lightning) are also frequently associated with light to moderate rainfall which would also temper the impacts from this source.

Comment No. 14 (continued)

Human caused fires in the Nogales area, and other areas of public travel are of somewhat greater concern because of the increased number of starts and the fact that these ignitions occur without the benefit of rainfall. Again, due to grass being the primary carrier fuel, significant impacts are not expected to the proposal.

Although heat from natural and man caused fires is not anticipated to be an impact to the power line corridor, smoke from a fire as small as several acres could generate enough concern to cause arcing problems. Smoke from wildfires is known to cause arcing if it becomes dense enough. This creates a significant hazard to firefighters attempting to suppress the fire. There is also a potential risk to the power line itself and adjacent structures. During the summer of 2004, power lines of a similar nature to the proposal were shut down while crews conducted burnout operations on the Willow Fire north of Phoenix, Arizona. During the same time period, a power line crossing the Coconino National Forest was also shut down for a brief period while crews completed burnout operations along the power line right-of-way. Similar shutdowns could be expected for power lines associated with the TEP Proposal.

At the present time, the majority of the power line proposal lies in areas where we are not likely to conduct prescribed burning. The Forest has not identified the area associated with the power line as needing immediate fuels treatment. One exception would be the area associated with Potrero Canyon in the vicinity of the Gateway Substation. This area is currently being treated as a Wildland Urban Interface area with values at risk relating to the adjacent private land subdivisions. The initial fuels reduction treatment in this area is scheduled for completion in 2005. Future treatment options will be necessary to further reduce the risk to private land development and the planned power line and substation.

Comment No. 15

As discussed in Section 1.6.6, if there is a lack of agreement on the decision among the Federal agencies involved in the process, i.e., if TEP ultimately does not receive the unanimous consent all Federal agencies and the State of Arizona to build along the same corridor, this proposed project will have been rendered infeasible and could not proceed as described in the EIS.

Comment No. 16

While the Central Corridor remains a viable alternative for selection by the Federal decisionmakers in their respective RODs (see Section 1.6.6), implementation of the proposed project in the Central Corridor could not occur until TEP meets all regulatory requirements, including obtaining the necessary approval from the ACC.

Comment No. 17

Refer to Sections 3.6 and 4.6, Geology and Soil Resources, for a discussion of erosion and sedimentation.

Lane, Dianne
Page 1 of 1

SEP-17-2003 16:30 P.01

To: Dr. Jerry Pell, Office of Fossil Energy
From: Dianne Lane
6420 Berwickshire Way
San Jose, CA 95120
408-268-7906
Date: September 16, 2003
Subject: Proposed Tucson Electric Power Company

Although I received the CD with the entire Draft EIS, for some reason I am only able to pull up the summary on my computer. Therefore I have no specific information on the environmental impact of the proposed plant and lines on the air, wildlife, agriculture or residents.

1 My question, however, is why any new power plant proposed in 2003 would be built using 19th century technology. Corporations profiting in the past from fossil fuels should be looking to the future with renewable energy source (wind and sun found in abundance in southern Arizona). In the long run this would be cheaper, more profitable and have less impact on the environment.

TOTAL P.0

Comment No. 1

The alternative or renewable power supply methods cited by the commentor do not meet the purpose and need of the proposed project (see Section 2.1.5).

Lazar, Brenda
Page 1 of 1

Brenda Lazar
7077 Mission Hill Lane
Tucson, Az. 85718

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, Az 85701

Dear Ms. Kozacek,

1 I am writing to urge you to deny the special use permit for the Preferred Route for the Tucson Electric Power Sahaurita-Nogales Transmission line DEIS . I live in the area and my family and I enjoy the
2 outdoors on a daily basis. We live here for the beautiful environment. The proposed powerline would totally disrupt the Tumacacori and Atascosa Mountain area's beautiful views, let alone the wildlife that would be disturbed by the road building proposed, This power line is unneeded and its only reason would
3 be for the power company to make profits by selling power to Mexico. For this, we should not destroy our most precious asset, our natural beauty and landscapes.

Thank you for your consideration.

Sincerely,
Brenda Lazar
Brenda Lazar

Comment No. 1

Sections 3.1 and 4.1 present a description of the existing land use, and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Sections 3.2 and 4.2 present a description of the existing visual resources, and analyze the potential impacts to these resources from the proposed project, including potential impacts to Tumacacori and Atascosa Mountains.

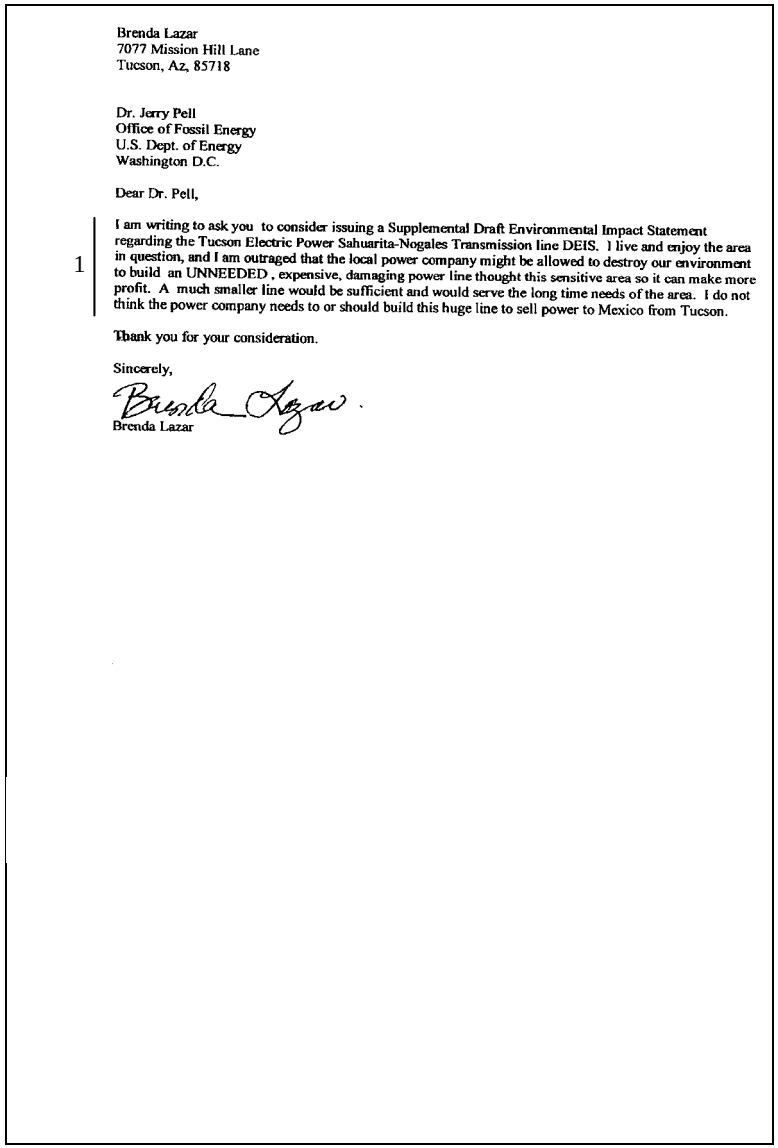
Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources. Sections 3.3.1 and 4.3.1 of the Final EIS have been revised to include the additional information regarding habitat fragmentation, specifically with respect to roads and linear corridors such as those associated with the proposed project.

Comment No. 3

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to ACC, Comment 1, and to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Potential economic benefit to TEP from the proposed project is outside the scope of the EIS.

Lazar, Brenda
Page 1 of 1



Brenda Lazar
7077 Mission Hill Lane
Tucson, Az, 85718

Dr. Jerry Pell
Office of Fossil Energy
U.S. Dept. of Energy
Washington D.C.

Dear Dr. Pell,

1 I am writing to ask you to consider issuing a Supplemental Draft Environmental Impact Statement regarding the Tucson Electric Power Sahuarita-Nogales Transmission line DEIS. I live and enjoy the area in question, and I am outraged that the local power company might be allowed to destroy our environment to build an UNNEEDED , expensive, damaging power line thought this sensitive area so it can make more profit. A much smaller line would be sufficient and would serve the long time needs of the area. I do not think the power company needs to or should build this huge line to sell power to Mexico from Tucson.

Thank you for your consideration.

Sincerely,

Brenda Lazar

Comment No. 1

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Potential economic benefit to TEP from the proposed project is outside the scope of the EIS.

Levick, Lainie
Page 1 of 2

TEP Sahuarita-Nogales Transmission line DEIS
From: lrl6454 [SMTP:lrl6454@comcast.net]
To: Pell, Jerry
Cc:
Subject: TEP Sahuarita-Nogales Transmission line DEIS
Sent: 10/13/2003 10:47 PM
Importance: Normal

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585

Dear Dr. Pell,
Please accept the following as my comments on the Draft EIS for the Tucson

Electric Power Sahuarita-Nogales Transmission Line.
I am strongly opposed to any alternative that would build this unnecessary power line. I support the No Action Alternative for these reasons:

-This power line is not needed, and would not benefit Santa Cruz County.
1 - Both the Western and Crossover Routes would severely impact the wilderness proposal for the Tumacacori Highlands. This proposal was being developed long before this power line proposal was presented, and would protect one of the largest remaining roadless areas in the Southwest. Numerous threatened, endangered, and special status species depend on these lands. A power line with its associated roads would fragment and degrade the habitat.

Comment No. 1

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to ACC, Comment 1, and to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to the resources, including threatened, endangered and special status species.

Comment No. 2

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Levick, Lainie
Page 2 of 2

1 cont. - This transmission line does not serve the real needs of the citizens of the region. I urge you to withdraw this DEIS and re-issue a new one that addresses the real power needs of Santa Cruz County with a small, locally run power plant, or a smaller power line that uses existing power line routes and infrastruction.

2

Thank you for the opportunity to provide these comments for your consideration.

Sincerely,
Lainie Levick
12120 E. Snyder Road
Tucson, AZ 85749

Liston, Kamie
Page 1 of 2

Forwarded by Susan K Kozacek/R3/USDAFS on 10/09/2003 06:51 PM -----
kliston@oceana.org
10/09/2003 04:38 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system….." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Liston, Kamie
Page 2 of 2

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

6 We must take the opportunity to protect what we can not change back. Please do not mar this landscape with power lines, while trying to meet energy needs.

Sincerely,

Kamie Liston
PO BOX 20252
Juneau, Alaska 99802

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 6

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Sections 3.1 and 4.1 discuss of the existing land use and analyze the potential impacts to these resources from the proposed project. Section 4.3.2 states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Loe, Steve
Page 1 of 2

From: stevealoe@msn.com
Sent: Friday, October 17, 2003 10:36 PM
To: Pell, Jerry
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

I am a former Forest Biologist of the Coronado National Forest. I served on the Forest from 1978-1980. During this time, I had the pleasure of working in this biologically rich area.

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Loe, Steve
Page 2 of 2

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

6 I urge you to make sure the alternatives of placing this development in existing disturbed corridors are fully explored and do not risk creating intrusion into roadless, pristine areas.

Sincerely,

Steve Loe
12569 FIFTH ST.
Yucaipa, California 92399

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 6

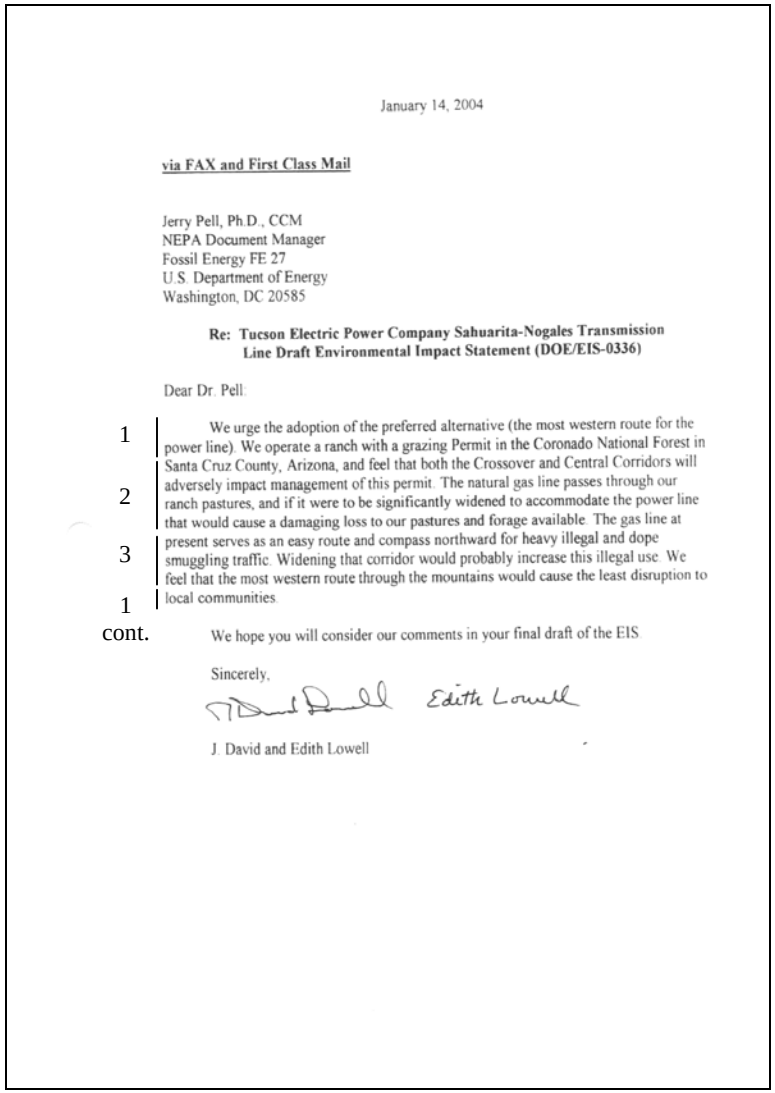
Section 1.2 explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review

Comment No. 6 ***(continued)***

alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the existing roads and IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts related to roads.

Lowell, J. David and Edith
Page 1 of 1



January 14, 2004

via FAX and First Class Mail

Jerry Pell, Ph.D., CCM
NEPA Document Manager
Fossil Energy FE 27
U.S. Department of Energy
Washington, DC 20585

Re: Tucson Electric Power Company Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement (DOE/EIS-0336)

Dear Dr. Pell:

1 We urge the adoption of the preferred alternative (the most western route for the power line). We operate a ranch with a grazing Permit in the Coronado National Forest in Santa Cruz County, Arizona, and feel that both the Crossover and Central Corridors will
2 adversely impact management of this permit. The natural gas line passes through our ranch pastures, and if it were to be significantly widened to accommodate the power line that would cause a damaging loss to our pastures and forage available. The gas line at
3 present serves as an easy route and compass northward for heavy illegal and dope smuggling traffic. Widening that corridor would probably increase this illegal use. We feel that the most western route through the mountains would cause the least disruption to
1 local communities.
cont.

We hope you will consider our comments in your final draft of the EIS.

Sincerely,

J. David and Edith Lowell

Comment No. 1

The Federal agencies note the commentor's preference for the Western Corridor because it would cause the least disruption to the local communities.

Comment No. 2

The issuance of authorization by USFS would be coordinated with other special use permits on the Coronado National Forest.

Relative to land use, the purpose of an EIS is not to determine the compatibility of the proposed project with specific adjacent land uses, but to disclose the potential impacts to land use that would result from the proposed project and determine the overall compatibility with land use plans. The Final EIS has been corrected to clarify that the EIS focuses on the potential impacts to land use that would result from the proposed project and determine the overall compatibility with land use plans. In addition, Section 4.1, Land Use, of the Final EIS has been revised to clarify potential impacts on commercial, residential, and other land uses in the project area.

TEP has not finalized the placement of the 125-ft (38-m) ROW within the 0.25 mi (0.40 km)-wide study corridors. If an action alternative is selected for implementation by each of the Federal agencies through the issuance of a ROD, then precise siting of the ROW and the support structures within the ROW would involve input from cultural, biological, and visual specialists, to identify and minimize impacts to each area of land to be disturbed.

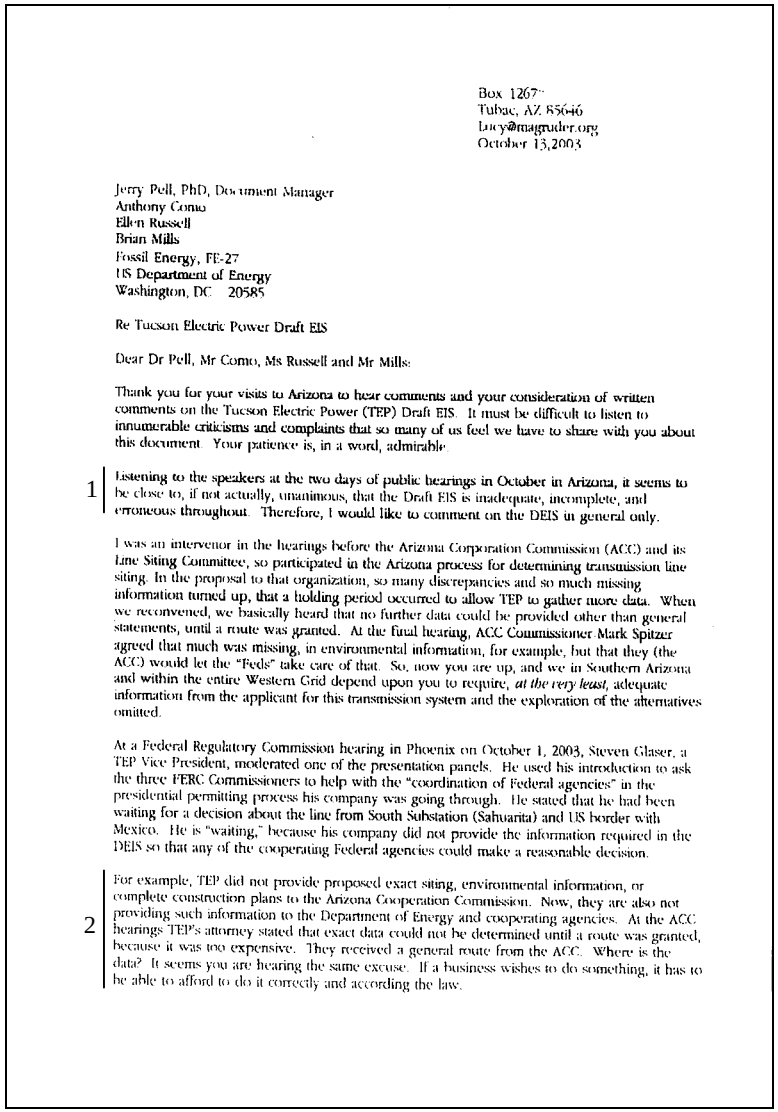
Comment No. 3

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and

Comment No. 3 ***(continued)***

narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above.

Magruder, Lucy
Page 1 of 2



Box 1267
Tubac, AZ 85646
lucy@magruder.org
October 13,2003

Jerry Pell, PhD, Document Manager
Anthony Como
Ellen Russell
Brian Mills
Fossil Energy, FE-27
US Department of Energy
Washington, DC 20585

Re Tucson Electric Power Draft EIS

Dear Dr Pell, Mr Como, Ms Russell and Mr Mills:

Thank you for your visits to Arizona to hear comments and your consideration of written comments on the Tucson Electric Power (TEP) Draft EIS. It must be difficult to listen to innumerable criticisms and complaints that so many of us feel we have to share with you about this document. Your patience is, in a word, admirable.

1 Listening to the speakers at the two days of public hearings in October in Arizona, it seems to be close to, if not actually, unanimous, that the Draft EIS is inadequate, incomplete, and erroneous throughout. Therefore, I would like to comment on the DEIS in general only.

I was an intervenor in the hearings before the Arizona Corporation Commission (ACC) and its Line Siting Committee, so participated in the Arizona process for determining transmission line siting. In the proposal to that organization, so many discrepancies and so much missing information turned up, that a holding period occurred to allow TEP to gather more data. When we reconvened, we basically heard that no further data could be provided other than general statements, until a route was granted. At the final hearing, ACC Commissioner Mark Spitzer agreed that much was missing, in environmental information, for example, but that they (the ACC) would let the "Feds" take care of that. So, now you are up, and we in Southern Arizona and within the entire Western Grid depend upon you to require, *at the very least*, adequate information from the applicant for this transmission system and the exploration of the alternatives omitted.

At a Federal Regulatory Commission hearing in Phoenix on October 1, 2003, Steven Glaser, a TEP Vice President, moderated one of the presentation panels. He used his introduction to ask the three FERC Commissioners to help with the "coordination of Federal agencies" in the presidential permitting process his company was going through. He stated that he had been waiting for a decision about the line from South Substation (Sahuarita) and US border with Mexico. He is "waiting," because his company did not provide the information required in the DEIS so that any of the cooperating Federal agencies could make a reasonable decision.

2 For example, TEP did not provide proposed exact siting, environmental information, or complete construction plans to the Arizona Cooperation Commission. Now, they are also not providing such information to the Department of Energy and cooperating agencies. At the ACC hearings TEP's attorney stated that exact data could not be determined until a route was granted, because it was too expensive. They received a general route from the ACC. Where is the data? It seems you are hearing the same excuse. If a business wishes to do something, it has to be able to afford to do it correctly and according the law.

Comment No. 1

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all other applicable laws and regulations. The Federal agencies have determined that the Draft EIS does not need to be recirculated for additional review.

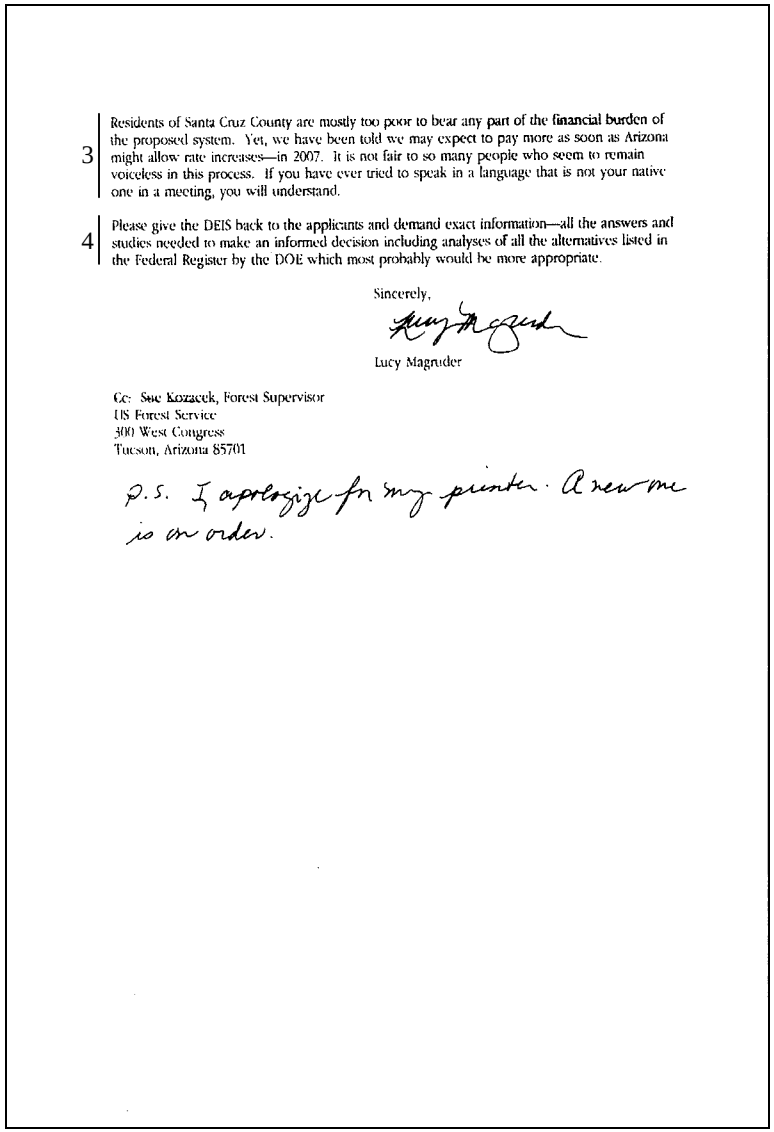
Comment No. 2

The level of detail provided by TEP on the proposed project is adequate for the Federal agencies to conduct an environmental analysis of the proposed project per NEPA requirements. TEP has not finalized the placement of the 125-ft (38-m) ROW within the 0.25 mi (0.40 km)-wide study corridors. If an action alternative is selected for implementation by each of the Federal agencies through the issuance of a ROD, then precise siting of the ROW and the support structures within the ROW would involve input from cultural, biological, and visual specialists, to identify and minimize impacts to each area of land to be disturbed. The detailed engineering and design of the proposed project would be completed after the final siting of the corridor. For this reason, the Final EIS cannot include maps showing a precise location for the ROW or the individual support structures.

Comment No. 3

Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS.

Magruder, Lucy
Page 2 of 2



3 Residents of Santa Cruz County are mostly too poor to bear any part of the financial burden of the proposed system. Yet, we have been told we may expect to pay more as soon as Arizona might allow rate increases—in 2007. It is not fair to so many people who seem to remain voiceless in this process. If you have ever tried to speak in a language that is not your native one in a meeting, you will understand.

4 Please give the DEIS back to the applicants and demand exact information—all the answers and studies needed to make an informed decision including analyses of all the alternatives listed in the Federal Register by the DOE which most probably would be more appropriate.

Sincerely,

Lucy Magruder

Cc: Sue Kozacek, Forest Supervisor
US Forest Service
300 West Congress
Tucson, Arizona 85701

P.S. I apologize for my printer. A new one is on order.

Comment No. 3 ***(continued)***

In order to include public participation from the Hispanic population that may be impacted from the proposed project, factsheets and public meeting announcements were provided in Spanish.

Comment No. 4

The alternative of constructing a new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Magruder, Marshall
Page 1 of 3

Comments at Green Valley by
Marshall Magruder
PO Box 1267, Tubac AZ, 85646, 520-398-8587

Thursday 3-5 PM, 25 September 2003

Good Afternoon, Mr. Como, Dr. Pell.

As you are probably aware, I will have many comments on the version of the DOE's Draft EIS. I would like to discuss one primary Issue during this session, during the five-minutes allowed, and some related issues, that is, TEP's South Substation, the northern terminal for this proposed project.

Your Federal Register Notice of 10 July 2001, provided the DOE's EIS requirements and started this process. It specifically required that a "floodplain analysis" be provided in the draft EIS. Appendix C contains this response, along with the other required analysis, for wetlands.

First, on page C-10 and during ACC Siting Committee testimony, TEP freely acknowledges that this facility is within the 100-year floodplain. It further gives some requirements that have to be met for a
1 100-year floodplain.

The proposed TEP project has a capacity for 1,000 MW per circuit for a total capacity of 2,000 MW even through the initial operational limits will be 500 MW. This is a 2,000 MW system and can carry 2,000 MW. On August 12, 2003, TEP experienced a new record peak demand day at 2060 MW. Thus, this facility will have the capability to meet all of Tucson's load demands. Under any and all floodplain definitions, TEP's South Substation exceeds the minimum requirements to be designated as a Critical Facility.

Floodplain analysis for Critical Facilities require review at the 500-year levels, not the 100-year levels used in this Appendix. Thus, **this analysis is thus erroneous and fails a fundamental test. On this one issue alone, it must be resubmitted for review.**

Now for some additional failures in Appendix C:

1. Page C-1, "**because the final siting and engineering of the transmission line has not been completed, alternatives** that specifically address **floodplain/wetland impacts have not been developed**. Therefore, measures to avoid or minimize wetland impacts can only be
2 discussed in **general terms**."
   - Comparison of Alternatives is required for a floodplain and wetland analyses?
   - Again, **this analysis is incomplete**.
   - As TEP is aware, on 5 August 2003, they filed with the Arizona Corporation Commission a
3 document which discussed this project and stated "that some agencies involved in the EIS process have said that they will not comment on specifics of the Project until they are

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project, 25 September 2003, Green Valley, 3-5 PM page 1 of 4

Comment No. 1

The Federal agencies concur that the proposed project should be treated as a critical facility, and have revised the Floodplain/Wetlands Assessment in Appendix C to identify and evaluate impacts to the 500-year floodplain. The Floodplain/Wetlands Assessment includes evaluation of the same alternatives evaluated in detail in the EIS (Western, Central, and Crossover Corridors, and the No Action Alternative). Specific alternatives (i.e., mitigation measures) for addressing floodplain/wetland impacts would be developed upon final siting and engineering of the transmission line.

Comment No. 2

Refer to the response to Comment 1 above regarding the alternatives evaluated and the development of mitigation measures. The final siting and engineering of the transmission line has not yet been completed and alternatives that specifically address floodplain/wetland impacts have not yet been developed. A final Floodplain/Wetlands Assessment would be conducted once the final siting of the transmission line has been determined, and if the Federal agencies determine that there is no alternative to implementing the proposed project in a floodplain then a brief statement of finding would be prepared (see Appendix C of the Final EIS). The potential floodplain impacts in Mexico are not presented in the EIS because the EIS only analyzes potential environmental impacts in the United States.

Comment No. 3

The commentor is correct that some agencies, such as USACE and USFWS, will not take further action on this project until a corridor and/or precise alignment is selected for implementation. However, DOE and the cooperating agencies preparing this EIS will select from among the alternatives evaluated in the EIS in their ROD.

TEP has not finalized the placement of the 125-ft (38-m) ROW within the 0.25 mi (0.40 km)-wide study corridors. If an action alternative is selected for implementation by each of the Federal agencies through the issuance of a ROD, then precise siting of the ROW and the support structures within the ROW would involve input from cultural, biological, and visual specialists, to identify and minimize impacts to each area of land to be disturbed.

Magruder, Marshall
Page 2 of 3

provided with a final location by either the DOE or the U.S. Forest Service."[1] Thus, **without final siting and engineering**, this EIS will never be approved. TEP testified this would take 3 months during the ACC Line Siting Committee hearings. Further, the case, cited below, was in response to a Settlement Agreement that required Citizens (now UniSource Energy Services) to follow a Plan of Action which called for completing the EIS prior to obtaining their ACC CEC permit. TEP did not follow that agreement.

3 cont.
- When is TEP going to determine where each pole, each tower, each fiber-optic splicing station, each lay-down yard, and so forth, going to be LOCATED. They have had over 3 years for a 3-month effort. With "final" siting, then just a few things might have to be moved, slightly, but its' their continual failure to do professional work that has been a significant concern for all parties.
- **Why should ANY federal, state, tribe, county, city, town or other agency approve or agree to facilities which have yet to be SITED?**
- **Without a siting, these analyses are, at best, useless.**
- **Let me show you an example of an EIS which "sites" facilities**. This just one of four books in the EIS for a wastewater treatment plant for Ambos Nogales, both sides of the border, like this TEP project entails.
- **Note that each manhole cover is located, in US and MEXICO, in these sheets.**

2 cont.
- **Where are the floodplain impacts in Mexico?**

2. A bit lower on page C-1, it states "**IF DOE determines that there is no Alternative** to implementing a proposed project in a floodplain, a **brief statement must be prepared**."

4
- It's not too hard to find Alternatives: (1) a New Substation. or (2) TEP's Cypress Sierrita SUBSTATION, which these transmission lines bypass, to the west of the Green Valley mines. Obviously out of the floodplain, and for reasons below, better for the Town of Sahuarita and Green Valley.
- Why is this statement not included in the EIS (no final locations)?
  - **Where are these Alternatives?**

3. A FLOODPLAINS ASSESSMENT requires Public Notices so governmental agencies and parties can participate.

5
- When with this be issued?
- When will these public hearings be held? Suggestion, please complete this process prior to resubmitting another draft EIS.

[1] See ACC Docket No. E-1032A-00-0401, "Joint Application for delay of the in-service deadline or, in the alternative, waiver of penalties and for other appropriate relief" at 8, lines 5 to 7.

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project, 25 September 2003, Green Valley, 3-5 PM page 2 of 4

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered.

The alternatives suggested by the commentor do not meet TEP's purpose and need, part of which is to connect to the existing electrical grid at the South Substation. TEP's Cyprus-Sierrita Substation cited by the commentor is on a lower voltage system and would not support the proposed transmission line.

Comment No. 5

The "Notice of Intent to Prepare an Environmental Impact Statement (EIS) and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement" for the proposed project was published in the *Federal Register* (66 FR 35950) on July 10, 2001. By including the Floodplain and Wetlands Involvement in this Notice of Intent, and taking public comments on the entire Draft EIS (including the Floodplain/Wetlands Assessment in Appendix C), the Federal agencies fulfilled the requirements of DOE's regulations for "Compliance with Floodplain/Wetlands Environmental Review Requirements" (10 CFR Part 1022).

Magruder, Marshall
Page 3 of 3

- What's that status on Clean Water Act, Section 401 and 404 reports? Why aren't they available in this draft EIS for agency and public review? Suggestion, complete the design, do the analysis, then include results in the EIS, 6

4. On page C-2, an additional 100 feet to the Southeast, equating to 58.600 square feet (100x586) could be added to South Substation **about 70 feet closer to the Santa Cruz River**. This is for a 500 MW bay. In addition, there is another 500 MW bay (future) shown in the Figures from the ACC Application, Exhibit G-1.1.
   - **Where will the additional 1,000 MW bays be located and associated 1,000 MW or more of transmission lines to use the 2,000 MW of power?** 7
   - Why are there no such diagrams for South, Gateway and Valencia Substations in this proposed draft EIS?
   - NO TECHNICAL figures are in this appendix, none have been reviewed by a **Registered Professional Civil Engineer**, as no "approved" stamps are shown. Please ensure all such figures have reviewed by a competent engineer.

5. On pages C4 to C-7, are Figures 2 to 5. These are the 100-year floodplain maps. In this format, they are unacceptable. They are cartoons, not useful for any analysis.
   - **Where are the "contours" like the map I provided DOE on this subject during the Scoping Meetings over 2 years ago?** That's what's necessary. 8
   - **Topographic maps are what are missing throughout this report.**

6. On page C-4, Figure 2 – this shows the "approximate boundary" of South Substation.
   - Show the real boundary of this present facility.
   - Why are there no photographs showing the pre- and post-construction impacts at South Substation? 9
   - Related, why are there no photographs of Sahuarita, for example, a photograph from the I-19 bridge at Pima Mine Road would show what the residents of Sahuarita will see everything they come home and all gamblers at the new Tohono O'odham Casino.

7. On page C-6, Central Corridor.
   - This fails to show the correct Central Corridor Segment 9, in the vicinity of Tubac, where the Eastern Segment 10 continued along the natural gasline. Segment 9 is described in the Federal Register as Central Route. See DOE maps and Exhibits from TEP's ACC application for maps for correct Central alignment. 10

8. On page C-7, Gateway Substation.
   - This shows an outline of Gateway Substation, suggest using updated Exhibits G-1.2 and G-1.3 from TEP's ACC Application, which show substation landscape and revegetation plan. 11
   - Where is the revegetation plan for South Station and along the routes in the Town of Sahuarita?

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project,
25 September 2003, Green Valley, 3-5 PM page 3 of 4

Comment No. 6

Permits or review requirements under Sections 401 and 404 of the *Clean Water Act* (requirements for discharge of dredge or fill material and wetland permit review) are identified in Chapter 10 as potentially applicable to the proposed project. TEP is currently in consultation with USACE on these requirements, and would complete the required studies and obtain the required permits upon final selection of an alternative.

Comment No. 7

The South Substation would be expanded from a "three-breaker ring bus" to a "four-breaker ring bus" (an arrangement of circuit breakers in a substation), with an 100-ft (30-m) expansion to the existing fenceline (see Section 2.2.1, Substation Upgrades and Additions and Fiber-Optic Regeneration Sites). This EIS addresses the development of the proposed project for operation at the 500 MW level, including the required substation additions and modifications. If TEP wanted to operate the proposed 345-kV transmission line above 500 MW, TEP would have to apply to DOE for an amendment to their Presidential Permit, and DOE would have to perform additional analysis required by NEPA.

An EIS is not a detailed engineering design document meant to certify the merits of a project's design, but rather a document that identifies and discloses potential environmental impacts. The level of project design detail required for assessment of potential environmental impacts in an EIS depends upon the degree to which project design details could affect environmental impacts.

Comment No. 8

Due to the scale and the level of detail shown in the figures in Appendix C, topographical lines (lines showing elevation contours of the land) are not included in order to present simplified, user-friendly maps.

Comment No. 9

The Final EIS has been modified to illustrate the South Substation boundary in Appendix C, Figure 2.

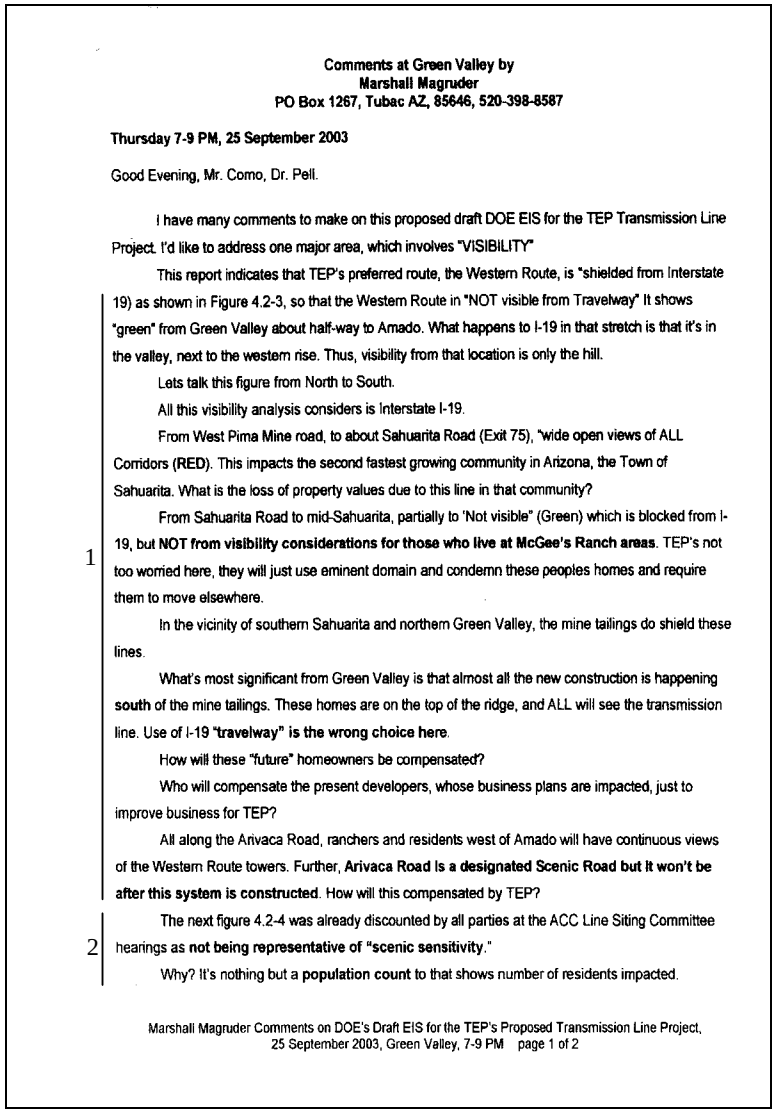
Comment No. 10

The information on routes presented during the scoping process is intended to be preliminary in nature and is not intended to be a final determination of routing or topics that ultimately are to be analyzed in the Draft EIS. In fact, one of the stated purposes of scoping is to refine alternatives and issues to be addressed. The analysis that occurred between scoping and publication of the Draft EIS refined the actual Central Corridor to be considered for environmental effects. The Central Corridor is correctly shown in the Draft EIS.

Comment No. 11

Exhibits G-1.2 and G-1.3 from TEP's ACC Application were not added to Figure 5 of Appendix C because Figure 5 depicts the 100-year floodplain relative to the corridor alternative, and revegetation plan for the South Substation would not contribute useful information to the figure. As stated in Section 2.2.1 of the EIS, the South Substation would be revegetated with native plants, leaving a 10-ft (3-m) clear zone around the outside perimeter of the fence for safety and security personnel.

Magruder, Marshall
Page 1 of 2



Comments at Green Valley by
Marshall Magruder
PO Box 1267, Tubac AZ, 85646, 520-398-8587

Thursday 7-9 PM, 25 September 2003

Good Evening, Mr. Como, Dr. Pell.

I have many comments to make on this proposed draft DOE EIS for the TEP Transmission Line Project. I'd like to address one major area, which involves "VISIBILITY"

This report indicates that TEP's preferred route, the Western Route, is "shielded from Interstate 19) as shown in Figure 4.2-3, so that the Western Route in "NOT visible from Travelway" It shows "green" from Green Valley about half-way to Amado. What happens to I-19 in that stretch is that it's in the valley, next to the western rise. Thus, visibility from that location is only the hill.

Lets talk this figure from North to South.

All this visibility analysis considers is Interstate I-19.

From West Pima Mine road, to about Sahuarita Road (Exit 75), "wide open views of ALL Corridors (RED). This impacts the second fastest growing community in Arizona, the Town of Sahuarita. What is the loss of property values due to this line in that community?

From Sahuarita Road to mid-Sahuarita, partially to 'Not visible" (Green) which is blocked from I-19, but **NOT from visibility considerations for those who live at McGee's Ranch areas**. TEP's not too worried here, they will just use eminent domain and condemn these peoples homes and require them to move elsewhere. 1

In the vicinity of southern Sahuarita and northern Green Valley, the mine tailings do shield these lines.

What's most significant from Green Valley is that almost all the new construction is happening **south** of the mine tailings. These homes are on the top of the ridge, and ALL will see the transmission line. Use of I-19 **"travelway" is the wrong choice here**.

How will these "future" homeowners be compensated?

Who will compensate the present developers, whose business plans are impacted, just to improve business for TEP?

All along the Arivaca Road, ranchers and residents west of Amado will have continuous views of the Western Route towers. Further, **Arivaca Road is a designated Scenic Road but it won't be after this system is constructed**. How will this compensated by TEP?

The next figure 4.2-4 was already discounted by all parties at the ACC Line Siting Committee hearings as **not being representative of "scenic sensitivity**." 2

Why? It's nothing but a **population count** to that shows number of residents impacted.

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project,
25 September 2003, Green Valley, 7-9 PM page 1 of 2

Comment No.1

In Figure 4.2-3, the map of the Western Corridor is shaded to indicate visibility from travelway. As the Western Corridor crosses I-19 and continues southwest, residents, travelers, and recreationalists would have views of the proposed project in the foreground and middleground, with views from many areas in lower terrain obscured by the hills and main tailings piles in the area (see Section 4.2.2).

The Federal agencies have not attempted to assess potential impacts to property values from the proposed project because it would be speculative.

If implementation of the proposed project requires condemnation of private lands (in the case that an easement agreement cannot be reached with the land owner or manager), such condemnation would be subject to separate legal proceedings which provide due process for those affected.

While there is a potential for construction of new houses on the hills to the west of I-19 and almost anywhere in the project area, until plans are presented, new housing construction is speculative. If such housing construction were to occur, the transmission line may be visible from potential residences on the hills to the west of the interstate, depending on the terrain setting of each individual house.

Comment No. 2

Figure 4.2-4 is based on residential density and topography and depicts one measure of visual assessment. Section 4.2 also presents other figures and visual assessments showing the potential impacts from the proposed project.

Magruder, Marshall
Page 2 of 2

2 cont. For example, the **Central Corridor is LEAST SENSITIVE, with LOWEST IMPACT** from just south of Arivaca Road to Rio Rico. To anyone, the CENTRAL Corridor is most visually sensitive in that area. As TEP testified, oh, you don't have as many people living there, so it's not important to this analysis. **Baloney**.

3 Now, lets look at the poles, the 140 foot tall monopoles in Figure 1.1-1 and the erector set lattice towers in Figure 1.1-2. Why are they so tall? Because they carry 12 conductors, wires for two circuits, two independent circuits. One could have flow going north, another south. Why two? We only need one circuit in Nogales. TEP has NEVER justified any rationale for two circuits for this system. One circuit would reduce structure heights by at least 20 to 30 feet.

4 Color. The "self-weathering" RUST is designed to "look like wood telephone poles" as the color of the monopoles. That works fine in the East or in tall pine forest, maybe redwoods would be even better. As the environmental analysis indicates, this system will not go through those kinds of areas, but where mesquite are 20 or so feet tall, at the highest.

The RUST color has high contrast with blue sky and clouds, which is the background for most viewers of this system. The industry standard is "DULLED, GALVINIZED STEEL". That's what is used as the finish for the lattice towers.

In order, as I've tried throughout this whole process, we should have low-contrasting poles. There is no cost difference, they don't rust from the inside fasters (as recently claimed by TEP in a line siting hearing), and they will reduce the visual impact from about 6 miles to a few miles less.

If there is no justification for a second circuit, then **compact**, smaller DULLED, GALVINIZED STEEL poles are highly recommended, with significantly less visual impact.

I'm sure this would not be considered a significant change by the ACC, so approval should not be difficult.

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project,
25 September 2003, Green Valley, 7-9 PM page 2 of 2

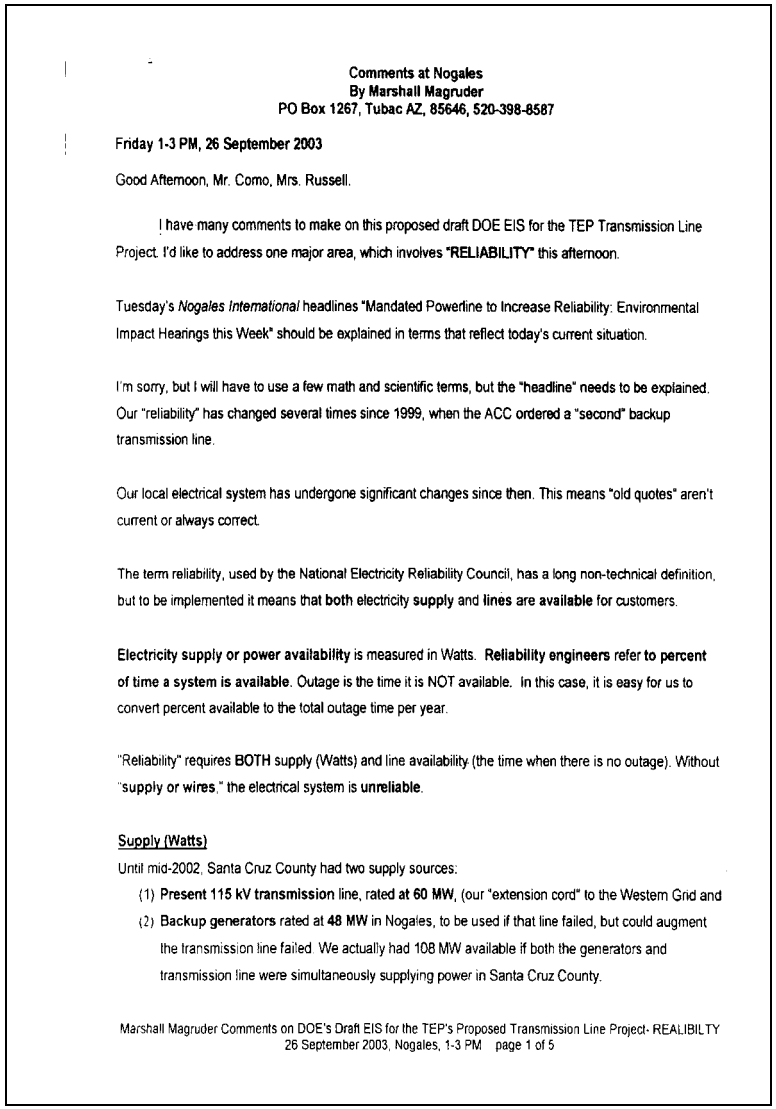
Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Comment No. 4

TEP, together with visual, cultural, and biological specialists, would site structures on the landscape so that viewers would see land or vegetation (such as a mountain) behind the structure rather than sky, where feasible (that is, so the structures are not skylined). Thus, the self-weathering monopoles were selected because they would blend better with the background of land or vegetation than gray or silver dulled galvanized steel would.

Magruder, Marshall
Page 1 of 5



Comments at Nogales
By Marshall Magruder
PO Box 1267, Tubac AZ, 85646, 520-398-8587

Friday 1-3 PM, 26 September 2003

Good Afternoon, Mr. Como, Mrs. Russell.

I have many comments to make on this proposed draft DOE EIS for the TEP Transmission Line Project. I'd like to address one major area, which involves **"RELIABILITY"** this afternoon.

Tuesday's *Nogales International* headlines "Mandated Powerline to Increase Reliability: Environmental Impact Hearings this Week" should be explained in terms that reflect today's current situation.

I'm sorry, but I will have to use a few math and scientific terms, but the "headline" needs to be explained. Our "reliability" has changed several times since 1999, when the ACC ordered a "second" backup transmission line.

Our local electrical system has undergone significant changes since then. This means "old quotes" aren't current or always correct.

The term reliability, used by the National Electricity Reliability Council, has a long non-technical definition, but to be implemented it means that **both** electricity **supply** and **lines** are **available** for customers.

Electricity supply or power availability is measured in Watts. **Reliability engineers** refer **to percent of time a system is available**. Outage is the time it is NOT available. In this case, it is easy for us to convert percent available to the total outage time per year.

"Reliability" requires **BOTH** supply (Watts) and line availability (the time when there is no outage). Without "**supply or wires**," the electrical system is **unreliable**.

Supply (Watts)

Until mid-2002, Santa Cruz County had two supply sources:

(1) **Present 115 kV transmission** line, rated **at 60 MW**, (our "extension cord" to the Western Grid and
(2) **Backup generators** rated at **48 MW** in Nogales, to be used if that line failed, but could augment the transmission line failed. We actually had 108 MW available if both the generators and transmission line were simultaneously supplying power in Santa Cruz County.

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project- REALIBILTY
26 September 2003, Nogales, 1-3 PM page 1 of 5

Comment No. 1

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

As discussed in section 2.1.5, improvements to the local distribution system (formerly Citizens) do not obviate the need for the proposed second transmission line. The Federal agencies agree that it is the purview of the state to determine the need for and effectiveness of transmission lines within its boundaries.

Comment No. 2

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS.

Magruder, Marshall
Page 2 of 5

On June 4, 2002, the **maximum peak** electric load here reached **58.7 MW**, for only the **sixth time we'd exceeded a 50 MW demand**. I do not know if we've exceed that value since.

The **local generators** in Nogales meet our **backup** supply capabilities **over 99.6% of the time**.

Outage (outage is the amount of time per year that one does not received electricity)

We had **17-transmission outages** (in five years) on the **present 115 kV line**, with just over 10 **total hours of outage, or 2.05 hours per year**. The most significant was over **seven** hours when the batteries were dead for the electric starter motor, thus the generators could not be started (now corrected). **More than 8 of these 17 outages were human or procedural errors, not transmission line failures**.

A new transmission line will NOT resolve any of the 2,304 outages between the transmission line substations and customers in the same timeframe. This is very important, because customers DO NOT know how or why they lose electricity. Thus, 99.27% (= 2304/2321) of the "outages" were NOT caused by transmission line failure, but by distribution system failures.

These 2321 outages were significant. Citizens lost a $5.5 million dollar class action suit for having low reliability. The City of Nogales filed a formal complaint to the ACC based on the outages during 1998 and 1999. We were a "basket case." **We had both high distribution and transmission reliability problem**. This environment led to Citizens developing a detailed Plan of Action and a Settlement Agreement with the ACC Staff. We had a reliability problem then caused by poor "wires." Citizens spent millions correcting this by installing over 1,000 new telephone poles, replacing over 60,000 feet of unreliable underground cables, added new substations along the present 115 kV transmission line, installed a modem control system with fiber optics communications and computer display in Nogales so they could monitor the generations supply coming into Santa Cruz County, and other technical improvements. Citizens started "spinning reserve" on its generators when electrical storms were predicted so they could rapidly switch from the transmission line to a local generation source, and even instituted a meaningful training program. **This has resulted in a much-improved system since 1999**.

1

Back on our subject of **"transmission" reliability**, we now have **four substations**. This means the 115 kV line could be proving power in Rio Rico, while the Generators provide power in Nogales. The ability to remotely and automatically "split" the system gives us two sources, **some** degree of **redundancy**, the key to improving reliability.

Citizens in it's Plan of Action, called for a "second" 115 kV transmission line between Tucson and Nogales. The detailed schedule showed **after** all "environmental impacts" would be resolved, including an EIS if necessary, Citizens would **then** file with the ACC for its Certificate of Environmental Compatibility,

Comment No. 3

A smaller transmission line (e.g., 100 MW capacity) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 4

The alternative of a new power plant in Nogales, Arizona, is evaluated briefly in the EIS (refer to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis). CEQ regulations (1502.14[a]) only require a brief discussion of the reasons for which alternative were eliminated from detailed analysis, rather than an in-depth analysis (including a cumulative effects analysis). Therefore, the alternative of a local power plant is not included in Chapter 5, Cumulative Impacts. Additionally, Section 5.2.1 of the Final EIS explains that there are no reasonably foreseeable power plant construction or expansion projects in Pima or Santa Cruz Counties to be included in the cumulative impacts analysis.

Chapter 5 of the EIS presents an analysis of cumulative impacts that could occur as a result of the potential impacts of TEP's proposed project when added to impacts from other past, present, and reasonably foreseeable future actions. Where specific information was available on past, present, and reasonably foreseeable future actions, it was included in the EIS; relevant information received from the public during the Draft EIS public comment period was also added to the Final EIS (e.g., information on planned residential developments was added to Section 5.2.4). The Cumulative Impacts Methodology section in the Final EIS has been revised to clarify that the analysis identifies where cumulative impacts may differ among alternatives, and Section 5.3, Cumulative Impact Analysis, has been revised in the Final EIS to more completely assess cumulative impacts.

Magruder, Marshall
Page 3 of 5

its permit to construct a **"backup"** transmission line. That concept is what the ACC thought they were approving when they mandated Citizens to "provide a second transmission line" in November 1999.

Then the "line wars to Mexico" stated.

In December 1998, Public Service Company of New Mexico submitted to DOE a Presidential permit application. This highlighted "transmission lines" to Mexico. **TEP has a negative corporate attitude towards PNM** "moving into its territory." These companies have public disputes, which appear in the news. **TEP did not want PNM in its "own backyard."**

In June of 2000, TEP approached Citizens and opened discussions concerning TEP's participation with Citizens to provide the "backup" line that also would continue to Mexico.

The situation changed significantly on August 17, 2000, with an Application by TEP for a Presidential Permit followed by its Joint Application to the ACC on March 1, 2001.

During the ACC Line Siting Hearings, the 115 kV transmission line was rated at 60 MW. This was of concern and obviously near the peak demand limit for our county.

At that time, we had a **reliability** problem then **due to supply shortages**. The significant outages of 1998 and 1999 had decreased significantly by then. Citizens' system improvements were obvious to customers and they told that to the ACC Siting Committee.

A few months after those hearings, Citizens completed its update on the last 3 miles on the 115 kV line, **now rated at 100 MW. We now have adequate supply capacity and reserve on that line**.

Everyone, including myself, **agrees a "second" line is required**.

The ACC "mandated" a "second line" in 1999:

- not voltage,
- not 12 lines to Mexico,
- not lines through National Forest primitive wilderness,
- not lines that will cost each ratepayer $30 per month for backup power,
- not 140 foot tall towers, when 60 foot tall towers (115 kV) satisfy all requirements.

2

The proposed TEP project could provide up to **100 MW backup power** to Nogales, **no more**, on a **separate 115 kV line. The 345 kV line is ONLY continues through Nogales to Mexico**.

The 345 kV line could be capable of providing the **remaining 1,900+ MW, presently un-Constitutional in Mexico**, for some kind of Mexican electricity trade "in the future" that will **bypass Nogales at the speed of light.**

3

Redundancy improves line reliability, not voltage, height of tower or "company."

1 cont.

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project- REALIBILTY
26 September 2003, Nogales, 1-3 PM page 3 of 5

Comment No. 4 *(continued)*

Also, Table 5.4-1 has been added to the Final EIS to provide a summary comparison of the cumulative impacts by resource area and identify any differences in cumulative impacts for the Western, Central, and Crossover Corridors.

As discussed in Section 5.2, the Applicant for the proposed PNM transmission line project recently indicated that he would be withdrawing his Application for a Presidential Permit. As such, the cumulative impact assessment no longer includes that project.

Comment No. 5

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review. It is noted that the Final EIS contains revisions based on public comments and internal reviews.

Comment No. 6

Outside of the EIS, DOE will assess the impact of TEP's proposed project on the reliability of the U.S. electric power supply system as part of its decisionmaking process (see Section 1.2.2.1, DOE Purpose and Need).

Magruder, Marshall
Page 4 of 5

The present transmission line outage was 2.05 hours (5-year average) per year, reliable 99.977% of the time.

1 cont. For two lines, based on that reliability, transmission failures are 1.72 seconds/year, reliable 99.999945%.

For three lines (ACC requires that power plants have a minimum of two to meet its N-1 rule), transmission outages are 0.000404 seconds/year, reliability 99.9999999997%.

The "ACC mandated" backup line does not have to come from Tucson.

A "local powerplant near Nogales to serve the target area" was mandated as an Alternative by the Department of Energy to be analyzed in the Environmental Impact Statement (EIS).

TEP failed to include the Powerplant Alternative. It did not conform "to their plan."

4 Without another DOE requirement for the EIS, the required "cumulative effects analysis (CEA)" of ALL Alternatives, including both a local Power Plant and PNM Alternatives, for past, present and future impacts, this proposed draft EIS is deficient.

This draft EIS must be re-written with all the required analyses necessary for decision makers. Without this information, how can they make decisions that last generations.

5 I recommend DOE take the NO ACTION Alternative on this project unless major changes are made.

I've included a copy of the computations using standard reliability engineering practice for verification.

TEP has never provided ANY reliability analyses or NUMBERS other than their new towers

6 are "more robust" which missed the critical point, it's redundancy that improves Relability.

Thank you.

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project- REALIBILTY
26 September 2003, Nogales, 1-3 PM page 4 of 5

Magruder, Marshall
Page 5 of 5

Math Showing Reliability Calculations

The basic equation for combining independent probabilities is to take the sum of the individual probabilities and subtract the product of the probabilities. Two examples are shown, before two and three transmission line computations.

Example 1: Two coin tosses, probably of heads (which is 50% reliable)

P1 = normally success = 50% of the time
P2 = a second line or toss is added, having same 50% reliability
P1 = P2 = 0.5 (or 50% of the time it works)
Adding for a second line P1 + P2 – (P1xP2)
0.5 + 0.5 – (0.25) = 1.0 – 0.25 = 0.75 or 75% of the time it works or you get a head

---

Example 2: If, P1 = P2 = 0.9 (ten sided coin, which is 90% reliable)
Adding for a second toss P1 + P2 – (P1xP2)
0.9 + 0.9 – (0.81) = 1.8 – 0.81 = 99.0 % reliable or failure is 1% of the time.

For Santa Cruz County, using Transmission Outage date, where there was an average of 2.049 hours of outage per year (from a five year set of data that includes all the "bad" years with high outage rates)

1 year = 365.25 x 24 = 8766 hours in a year (includes every fourth leap year)

Outage = 2.049 hours / year, therefore 8766 – 2.049 = 8763.951 hours/year without outage

Percent of time without outage or Probability of not having an outage = 8763.951 / 8766 = **99.9766255989 %** without outage, or the reliability of the transmission line.

Note: 1.0 – 0.999766255989 = probability of having an outage = 0.000233744 or 0.0233744 %

With a second transmission line, with same outage rate (could be a bit higher but it's redundancy that's the critical factor, not the reliability of another line)

Adding for a second line P1 + P1 – (P1xP1) = P2 (reliability probability for two lines)

P1 + P1 = 1.999532511978097
P1 x P1 = 0.99953256661

P2 = P1 + P1 – (P1xP1) = 1.99953251197- 0. 99953256661 = 0.99999994536= **99.999994536%** reliable

Outage = 1 – probability of being unreliable = (1.0 - 0. 9999999453) = 00.00000546 % unreliable

(0. 99999994536) x 8766 hr/year x 60 min/hr x 60 sec/min = **1.724 seconds/year** outage for a second redundant transmission line.

for a third line, where P1 = 99.97662559**89%** reliable (same as P1), so using two line value P2 above and adding a third redundant line gives

P1 + P2 = 0.9997662559890486 + 0.99999994536 = 1.9997662013490486

P1 x (P2) = 0.9997662559890486 x 0. 0.99999994536 = 0.999766201361820

P3 = P1 + P2 – (P1 x P2) = 1.999766201349- 0.999766201361 = 0.9999999999872286 = 99.999 999 9872% reliable with a third line

(1.0 – 0.9999999999872) x 8766 x 60 x 60 = **0.000404 seconds/year for a third redundant transmission line**

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project- REALIBILTY
26 September 2003, Nogales, 1-3 PM page 5 of 5

Magruder, Marshall
Page 1 of 2

Comments at Nogales
By Marshall Magruder
PO Box 1267, Tubac AZ, 85646, 520-398-8587

Friday 5-7 PM, 26 September 2003

Good Afternoon, Mr. Como, Mrs. Russell.

I have many comments to make on this proposed draft DOE EIS for the TEP Transmission Line Project. I'd like to address one major area, which involves "**Costs**" this afternoon.

We have several ways to look at cost, but in end, all "**prudent costs**" are **reimbursable** and thus **absorbed** by either the **ratepayers** or **shareholders**. **Utilities**, in general, **prefer to recover all costs from ratepayers**, so that they **maximize** their **returns for shareholders**.

DOE rules are clear, any **imprudent cost is not reimbursable**. I'm going to discuss reimbursable costs but many "marketing" and "sales" costs are not reimbursable as they are the cost of doing business.

First, we have **Transmission Line capital costs**, which include the environmental studies and the cost to TEP for this meeting. This is a reimbursable cost. Thus, TEP is not "losing" money because of doing prudent environmental analysis, they will not have to "absorb" this cost, as this becomes a capital cost. "Capital" costs, in this case, is what TEP spends on this transmission line system. In most industries, capital costs are shareholders responsibilities, because the company wants to grow. The utilities industry, however, at rate cases, argues that capital costs should be absorbed by ratepayers, and consumer advocates, such as our Arizona Residential Utilities Consumer Organization (RUCO), usually takes the side for ratepayers. Ultimately, this is decided but really won't be known for Santa Cruz customers until UniSource Energy Services (UES) or its electric subsidiary, UNS Electricity, Inc, our new electricity company files a rate case in August 2007.

Mr. Pignatelli, UniSource Energy/TEP's CEO and President, was very upset with the ACC when he was told he could not file for these costs in 2005. He also testified that he expects Santa Cruz customers to pay $20 million of the Capital Costs of this system, at $2 to $3 million per year. That's between $11.11 and $16.66 per month (for the 15,000 customers here). In addition, reimbursable costs have interest added, thus this will be higher, which I'd estimate to be **about $15.00 per customer per month**. This is just for Capital, or ownership, of the system.

In addition to what's been testified, the Federal Energy Regulatory Commission (FERC), the "crazies" in DC, have authorized transmission line costs to have a minimum return on investment of 12%. This is "profit" incentives added to the total Capital Costs of the system, reimbursed by ratepayers. Initially, in the TEP ACC Application on page 10, the cost were as follows:

Substation Costs for three substations $9,950,000 (all routes)

Magruder, Marshall
Page 2 of 2

state that any agreement that TEP made with me in that answer won't be decided until August 2007, with interest!

The "Wheeling Charge" is VERY important for TEP, because that is the "toll booth" charge it will make for people using its transmission line. For 1,000 MW of continuous usage, TEP will receive $2,330,000 per month in revenues, with 10% of that from UES. Annually, this is $27,960,000 in wheeling or toll charges. This means the $87.5 million capital costs, from TEP's view, is paid off in 3 years 2 months, a short period and more importantly, after that, ALL the Wheeling Charges (minus operations and maintenance costs, which are, in comparison, minimal) are Profit. So, TEP could make $27,960,000 if it sold "space" on this line. TEP testified during the ACC Siting hearings, it really didn't care what direction the electricity goes, TEO will always collect this charge. With Santa Cruz County paying 10% of this, not to our electricity company, UES or UNS Electricity, Inc, but to subsidize TEP's ratepayers in Tucson.

Third, we have the actual **Electricity** cost. Based on statistics during our most unreliable five year period, we could use a maximum of 2.05 hours of backup power on this line. The new TEP agreement with the PWCC's-Arizona Public Service Company, purchases power for $58.79 per MW-hr. For 2.05 hours, say for 50 MW of demand, we would then spend (58.79 x 2.05 x 50) = **$7,348.75 per year or $0.04 per month per customer for electricity we use from the backup transmission line.**

	Summary Costs for Customers:	
	Capital Cost to own part of the transmission line	$15.00 (includes interest)
	Line use (wheeling charges)	$15.33 (without interest)
1	Electricity cost	$ 0.04 (during outages)
	Total Cost	**$30.37 per month per customer**

Isn't this **excessive costs** for **backup** electricity?

Thank you

Marshall Magruder Comments on DOE's Draft EIS for the TEP's Proposed Transmission Line Project- COSTS
26 September 2003, Nogales, 1-3 PM page 3 of 3

Comment No. 1

After a regulated utility such as TEP constructs a project in Arizona, the ACC determines whether, or to what degree, an investment by a utility is recoverable through consumer electricity rates. Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS .

Magruder, Marshall
Page 1 of 84

Marshall Magruder
PO Box 1267
Tubac, Arizona 85646

14 October 2003

Dr. Jerry Pell, Ph.D.
Fossil Energy, FE-27
U.S. Department of Energy
Washington, DC 20585

Subject: First Comments on the Department of Energy's *Tucson Electric Power Company (TEP) Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement* (DOE/EIS-0336 and BLM Reference No. AZA 31746) dated July 2003

References:
(a) Department of Energy letter dated 11 August 2003
(b) *Federal Register*, "Department of Energy Notice of Availability of Draft Environmental Impact Statement and Public Hearings ..." of 27 August 2003. (*FR* 68, 51560)
(c) *Federal Register*, "Department of Energy Notice of Intent to Prepare an Environmental Impact Statement and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands involvement, Tucson Electric Power Company," (*FR* 66, 35950) dated 10 July 2001.
(d) *National Environmental Protection Act* of 1969 (NEPA)
(e) *Joint TEP-Citizens ACC CEC Application* "In the matter of a Joint Application of Tucson Electric Power Company and Citizens ... for a Certificate of Environmental Compatibility for a Proposed 345 kV Transmission Line System from Tucson Electric Power Company's Existing South 345 kV Substation, ... Sahuarita, Arizona, to the proposed Gateway 345/115 kV Substation in ... Nogales Arizona with a 115 kV Interconnection to Citizens ...115 kV Valencia Substation in Nogales, Arizona, with a 345 kV Transmission Line from the Proposed Gateway Substation South to the International Border ." of 1 March 2001.
(f) *ACC Decision No. 64356*, "In the matter of a Joint Application of Tucson Electric Power Company ... to the International Border ..." of 15 January 2002.

These comments are provided in response to your letter, reference (a) of 11 August 2002, the *Federal Register* instructions in reference (b), and the *Federal Register* Environmental Impact Statement (EIS) notice in reference (c). The EIS process must follow reference (d) as proscribed in reference (c). The proposed system is described in reference (e) as modified by reference (f).

The comments are prepared with an Overall Summary, several Parts as follows:

Overall Summary, Conclusions, and Recommendations
Part I – Specific Comments, Questions, and Recommendations on the Draft EIS
Part II – Compliance of Draft EIS with *Federal Register* Notice of Intent to prepare an EIS
Part III – Comparison of Marshall Magruder Scoping Inputs to the Draft EIS

Magruder, Marshall
Page 2 of 84

Overall this draft EIS has erroneous and incomplete information, confusing and contradictory statements, with major requirements of reference (c) missing.

As shown in by the specific key comments in Part I, the failure to comply in Part II, the inadequate response to my Scoping inputs in Part III (to be submitted separately), this document failed to provide adequate, correct and reliable information. This effort has proven to be entirely too time consuming due to such an inadequate draft EIS. Additional inputs will be forthcoming. This input is provided to be postmarked on October 14, 2003.

The public and governmental agencies and decision makers require an updated, resubmitted Draft EIS for another round of review, prior to going to the next phase, required by reference (d), the Final EIS.

Sincerely

Marshall Magruder
marshall@magruder.org
(520) 398-8587

cc: Ms Sue Kozacek, Forest Supervisor
U.S. Forest Service
300 West Congress
Tucson, Arizona 85701

Table of Contents

Letter 1
Table of Contents 2
Overall Summary, Conclusions, and Recommendations 3
Summary of a few Key Comments 3
Conclusions 5
Recommendations 6
Part I – Specific Comments, Questions, and Recommendations on the Draft EIS 7
Part II – Compliance of this Draft EIS with the *Federal Register* Notice of Intent to prepare an EIS 77
Part III – Comparison of Marshall Magruder Scoping Inputs to the Draft EIS (to be submitted later)

Magruder, Marshall
Page 3 of 84

Overall Summary, Conclusions, and Recommendations

This version of the draft EIS, as indicated in Parts I to III that follow, appears to have missed the mark in many key decision making areas for the proposed system.

Summary of a few Key Comments
These are brief statements; however, the details in the following Parts to this letter must require compliance for a adequate draft EIS.

1. Failure by the DOE to **evaluate the local power plant Alternative** specified in the *Federal Register* NOI of July 10, 2001.

2. Failure by the DOE to consider the 345 kV transmission line **system operational capability** (or capacity) of **2,000 MW**, with associated requirements and information necessary to

   A. Determine safe minimum Right Of Way (ROW) and easement requirements,
   B. Determine significant effects of increased EMF levels (four times that assessed),
   C. Re-compute the disturbed areas involved in project due to stepped-up power, and
   D. Account for increased land acquisition costs with resultant higher socio-economic and environmental justice impacts than presented.

3. Failure by the DOE to prove adequate needs for the system, other than TEP's business plan.

4. Errors by the DOE in **Central Route**, Segment Legs 9 and 10, in the vicinity of Cerro Pelon that require extensive maps and land use data to be revised, as **Leg 9 is in the TEP's Central** Route and Leg 10 in the TEP's Eastern Route.

5. Failure by the DOE to determine the **minimum safe distances** between the El Paso Natural Gasline (EPNG) and TEP's transmission line systems with an ample margin of safety. No national standard exists for when these two utilities are in parallel easements. Consequently, the multiple electrical-gas interactions including induced electricity, gas and electric system grounding interaction, extensive natural gas distribution substation back pressure "venting", and EMF impacts on gasline cathodic protection systems require that a **minimum safe distance** to be specified in order to avoid significant liability with 908-psi, nearly 50-year old, pair of natural gas pipelines. The ACC requirement was only "greater than requirement" with safe distance to be determined later. That time is now as the **minimum safe distance** impacts much information in the draft EIS.

6. Failure by the DOE to reduce liability concerns if an incident results in the future between TEP's transmission line system and EPNG including explosions, fire, damage, injury or death, by inclusion of a signed "**Memorandum of Understanding Concerning Liability Responsibilities between TEP and El Paso Natural Gas**" (or similarly titled) corporate agreement between TEP and EPNG, Inc., in the EIS.

7. Failure by the DOE to include **adequate maps**, in particular, topographic maps commonly used in this area.

Magruder, Marshall
Page 4 of 84

8. Failure by the DOE to show **interconnecting** 345 kV transmission capabilities in Sonora, Mexico. There are only 230 kV there and no future plans show 345 kV lines.

9. **Failure by the DOE to consider any Mexican impacts by the proposed system:**

   A. Environmental (cultural, socio-economic, air and water, etc.) impacts, effects, proposed mitigation schemes, system information on Mexican side of the border,
   B. No Mexican Alternatives were considered, assessed, or evaluated.
   C. No Mexican-half system construction, operations or maintenance effects were considered to impact the US side of the border.
   D. US system-half system construction, operations or maintenance effects were not considered to impact the Mexican side of the border.

10. **Failure by the DOE to assess the required 500-year Flood requirement process, including public reviews, for "critical" facilities that require 500-year** flood plain analysis by Army Corps of Engineers, specifically the TEP South Substation, located on the Santa Cruz River and inside the 100-year floodplain. This substation is proposed to expand in the direction of the river. **The resultant floodplain analysis (Appendix C) should be rejected as erroneous, misleading, with hazards to people and property, including potential heavy metal pollution of the Tohono O'odham San Xavier Indian Reservation and into the Tucson aquifer.**

11. Failure by TEP to integrate into their socio-economic analysis that this is a **backup** or secondary line for Nogales. It will be required about 2 hours a year (worst case). It will raise residential rates between $24 and $30 per month per customer. Nogales, Arizona, cannot use more than 5% (<100 MW) of the line 2,000 MW capacities, with 95% (>1,900 MW) of this line capability dedicated to trading Mexican electrical power. The DOE must openly discuss the Mexican "power" issue in the EIS. TEP's purchase of interest in a coalmine and coal-fired power plant in Mexico and other political and economic events occurring in Mexico that could impact this line needs discussion. These long-term plans must be presented. **The "backup" requirement for Nogales, Arizona is inadequate justification for this project.**

12. Failure by DOE to understand the **Nogales "reliability" problem is bogus**. We have 48 MW of backup in Nogales. What is needed is a second, redundant energy source (for backup) about 2 hours per year. Short, local 115 kV lines rated at 100 MW from a small generation plant or distributed generation sites, but not a 345 kV line rated at 2,000 MW.

13. Failure by the DOE to discuss, to consider, to evaluate or to make system recommendations on the system add significant DOE judgments in this draft EIS, which has resulted in many TEP-oriented statements and pronouncements which are not been proven, justified, evaluated, or correlated with prior TEP's testimony, applications or other documentation on this system. For example, the Biological Assessments (BA) in Appendices D, E, and F were submitted to "Tucson Electric Power" and not to DOE, implies a **possible conflict of interest** could exist. If the applicant controls the BA, then the applicant controls the resultant environmental impacts, assessments and mitigation measures being recommended.

14. Failure by the DOE to include a **reliable interconnection design near the border. TEP's proposal is unsatisfactory, unreliable, unstable, and hazards millions of Americans**.

Magruder, Marshall
Page 5 of 84

15. Failure by the DOE to prove electrical reliability will be stable on both side of the Mexican/U.S. border. TEP's proposal is to remove Sinaloa and Sonora states from the Mexican Grid and encapsulate them into the US Western Grid. This will include all the Mexican power plants and transmission lines from C.F.E.'s NW Region, Sinaloa and Sonora states, some exceeding 650 miles south of Nogales. Without an AC-DC-AC converter or other physical means to separate these two, asynchronous grids, **high probability for cascading electrical failures in western U.S. and Canada exists**. This is a major concern to the public. This reliability analysis, commonly not included in DOE EISs must be included the **next draft EIS due to its critical nature for southern Arizona and the nation**.

16. Failure by TEP to obtain **airspace authorization** and permits in FUZZY ONE Military Operational Airspace to use helicopters for construction or for tower construction and power operations in military airspace (flight hazard).

Conclusions

A. Acceptable responses to the above Key Comments clearly conclude that the **deficiencies** in this draft plan **are significant**, and that another round of review, for a minimally acceptable Draft EIS is essential.

B. Without a compliant **Cumulative Effects Analysis** (CEA) that meets the Notice of Intent and the Council on Environmental Quality standards, the **DOE should consider the draft EIS non-compliant.**

C. Adequate responses to Parts I to III will result in such a changed document, that all prior **conclusions would require reconsideration**, including those by the Arizona Corporation Commission. A different decision or No Action would most likely result.

D. In general, this document appears to be more of a TEP document than a document produced by the DOE. A philosophical or conceptual review is necessary, because the "third-party" and associated EIS contractors are required to respond to DOE direction and control, and not that observed of the Applicant (TEP)-oriented views in this version of the draft EIS. There is enough of the TEP "point of view" throughout the document to cause rejection of this draft version as non-compliant with NEPA. For example, Appendices C, D, and E were submitted to TEP, not DOE, and it appears material therein was not under DOE direction, but was directed by the Applicant.

E. Without TEP providing the preliminary design details, such as specific "siting" [defined as location, position] and not vague conceptual "areas." NO locations can be verified as environmentally compliant or can be validated to cause significant environmental impact. Siting requires significant negotiation with many parties including landowners. The DOE Public Hearings indicated this has NOT been accomplished. This must be completed so an adequate description is available, then environmentally important issues and details can be reviewed, options evaluated, preliminary to final changes accomplished, and re-viewed, until concurrence results in a system that meets the minimum requirements under NEPA. Thus, there is **no basis for approval** of an incomplete document that **fails to locate the position of anything in their proposal.**

Magruder, Marshall
Page 6 of 84

F. **TEP proposes a "system" but only has the half available for review. Without the entire system being reviewed, including the details of the Mexican environmental impacts, designed as mentioned in the prior conclusion, this process should not move to the Final EIS phase.**

Recommendations

I recommend that:

(1) The **DOE re-submit a revised and complete version of a Draft EIS** including the conclusions and recommendations herein, for public reviews, with local public review sessions, and consider further comments on the re-submitted version. The Final EIS process must be delayed until after this review. Without this re-submission, decision makers have inadequate, incomplete, and erroneous information.

(2) **If (1) is not accomplished, then issuing a Record of Decision for the NO ACTION ALTERNATIVE is the only appropriate option left to the Department of Energy and the Cooperating Agencies.**

Magruder, Marshall
Page 7 of 84

Part I - Specific Comments, Questions, and Recommendations on the Draft EIS (July 2003 version)

These comments are provided in tabular form so that each can be assessed individually by the DOE and Cooperating Agencies.

These comments are sorted as one reads the document. The Summary version was not specifically reviewed. It will require a complete revision to be acceptable and include the changes in the EIS.

Organization of these Review Comments.

In the left "paragraph" column, each entry is described, such as Figure or Table and number. The first entry for each is identified by its title or subtitle, when appropriate.

The second column is the page number.

The third column gives the paragraph number, starting at the first written lines at the top of a page, then a slash, followed by the line numbers involved in that paragraph. There may be instances with one may have to search a bit on the page for the location due to "bulleted" subparagraphs or other formatting variations. When a Figure has more than one drawing, an indication such as "left figure" is to aid the reviewer. If there is just one figure, the location of the comment in the figure may read something like "center" to aid the reviewer.

The Fourth column, usually contains at least two entries, a "Comment" and a "Recommendation" with "questions asked for clarification, usually information necessary for the next version of the draft EIS. Each Comment, Question and Recommendation is sequentially numbered to assist in the reviewer. Simple comments and recommendations are made without long explanations. In many instances, changes are recommended, with recommended text provided. Some long changes are also included, along with recommended additional Tables to be included in the next EIS version.

Additional reference(s) to a Paragraph or Figure, page, text paragraph/line number, are located in the table beside a "comment" or "recommendation" to aid the reviewer to the appropriate reference.

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
Cover Letter 11 Aug. 2003	1	1/5	1. **Comment**. The date published in the *Federal Register* was August 27, 2003. 2. **Recommendation**. Change "22" to read "27" before "August".
Cover Sheet	None	Contacts	3. **Comment**. Suggest including the "toll free" phone number. 4. **Recommendation**: after "Telephone: (202) 586-3362" add new line to read: "Toll-Free Telephone (recording): (800) 430-4046"
Cover Sheet	None	Abstract 1/1	5. **Comment**. The term "construct" is not clear. 6. **Recommendation**. Change "construct" to read: "commence construction of".
Cover Sheet	None	Abstract 1/6	7. **Comment**. The term "redundant" is not used in the Arizona Corporation Commission Order 62011 which required "a second transmission line" with no other specification. It could be from a local power plant, if not from near Tucson. Further, the TEP transmission line, based on testimony at least a dozen times during the ACC Transmission Line Siting hearings, will only be

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 7 of 84

Comment No. 1-2

The Final EIS has been modified to reflect the correct date of *Federal Register* publication as August 27, 2003.

Comment No. 3-4

The toll-free number was established to facilitate public involvement during the scoping and public comment period. Therefore, the toll-free number is not available after the publication of the Draft EIS.

Comment No. 5-8

The text is correct as written.

Magruder, Marshall
Page 8 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			used for "backup" purposes since the local utility owns the present 115 kV line, that has been upgraded to 100 MW. Has TEP or Citizens changed their joint testimony that the TEP line would never be the primary line? 8. **Recommendation**: Change "redundant" to read "backup second transmission line" to closer reflect the mandate for this line.
Cover Sheet	None	Abstract 1/7 and 1/9	9. **Comment**. Citizens Communications has been purchased by UniSource Energy, Inc. (UNS), the holding company for TEP. UNS has created UniSource Energy Services, Inc. (UES) as a holding company for the natural gas and electricity companies purchased from Citizens Communications. The new electrical utility, in both Santa Cruz and Mohave Counties, is UNS Electricity, Inc. Based on these changes in ownership, wherever appearing in this document; Citizens Communications should now read UNS Electricity, Inc. There should be no changes to TEP based on this purchase agreement. 10. **Recommendations**: (1) Change "Citizens Communications" to read "UNS Electricity, Inc." (2) Change "Citizen's" to "UNS Electricity's"
Cover Sheet	None	Abstract 1/7 to 10	11. **Comment**. During the ACC Transmission Line Siting hearings and subsequent information, the maximum peak load for UNS Electricity, Inc., customers in Santa Cruz County was 58.7 MW on June 4, 2002. There is no wholesale or retail customer for the difference between a firm commitment made by Citizens (and assumed by UNS Electric) for the 100 MW in the Joint TEP-Citizens Project Development Agreement (PDA) located in TEP's ACC Application. During another ACC case (the combined Citizens PPFAC, Citizens Gas, UniSource Purchase cases), UniSource stated in response to a Data Request, that this firm transmission commitment could be reduced to 60 MW, since there are no possible buyers in Nogales for the excess 40 MW. This is for **backup** electricity in case of failure of both (1) the present UNS Electric's 115 kV (100 MW) transmission line, and (2) the backup 48 MW generation capacities in Nogales. It should be noted that only 500 MW are now planned for this transmission system; however**, the system is designed to operate to its thermal limit of 1,000 MW per circuit (for example, see 1.2.1, page 1-7), for a total of 2,000 MW.** This means **Santa Cruz County will use from about 2% to 5% of the capacity of the TEP 345 kV (2,000 MW) transmission line capabilities**. 12. **Question**. (1) Why would TEP demand that a utility (now UNS Electricity) purchase 40% more electricity than it could use on its peak day? (2) How and when will the other 1,500 or 1950 MW of capacity be allocated? (3) What are the electrical supply resources and demand sinks involved with this system? 13. **Recommendation**: Change the last two sentences to read: "UNS Electricity, Inc., the local Nogales utility, was committed by a prior TEP-Citizens Project Development Agreement to purchase 100 MW of firm transmission capacity from TEP. UniSource Energy (UNS), during another ACC case, reduced this to meet the current Santa Cruz County load of approximately 60 MW. TEP anticipates using the remaining 440 MW of the requested operational capacity for transport of energy between the United States and Mexico."
Chapter 1 Introduction	1-1	2/5	14. **Comment**. The DOE NEPA representative, Mrs. Ellen Russell, appeared before the Arizona Corporation Commission's (ACC) Power Plant and Transmission Line Siting Committee on two occasions and requested that the ACC and other State of Arizona agencies involved with this project join with the federal NEPA process as cooperating agencies. 15. **Questions**. (1) Why did the state of Arizona not "cooperate" with the federal government when developing an EIS?

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 8 of 84

Comment No. 9-10

The discussion regarding the purchase of the Citizens Communications by UniSource Energy, Inc. (UNS) has been expanded in Section 1.1.2 of the Final EIS.

Comment No. 11-13

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis. Analysis of commitments made by utilities is outside the scope of the EIS.

UNS has committed to the purchase of 100 MW of transmission capacity from TEP to allow for future growth above Citizen's current Santa Cruz County load of approximately 65 MW. TEP anticipates using the other 400 MW of capability for transport of energy between the U.S. and Mexico. If DOE issues a Presidential Permit, it would contain limits on the amount of power that could be placed on the transmission line. These limits are based on reliability studies done in support of the application and also on the design limiting the transmission line to operate at 500 MW. If TEP wanted to operate the transmission line above 500 MW, TEP would have to apply to DOE for an amendment to their Presidential Permit, and DOE would have to perform additional analysis required by NEPA.

Comment No. 14-16

As the lead agency, DOE may invite Federal and state agencies to join in the NEPA process by becoming a cooperating agency. It is within an agency's discretion to accept or reject the invitation to become a cooperating agency. While any of the alternatives would be viable for selection by the Federal decisionmakers in their respective RODs (see Section 1.6.6), implementation of the proposed project could not occur until TEP meets all regulatory requirements, including obtaining the necessary approval from the ACC and other state agencies.

Magruder, Marshall
Page 9 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			(2) Since there are many open issues at the State of Arizona level, how will these be resolved? 16. **Recommendation**: Add new sentence after "cooperating agencies." to read: "The DOE NEPA representative appeared before the Arizona Corporation Commission's (ACC) Power Plant and Transmission Line Siting Committee on two occasions and requested that various Arizona agencies join with the federal NEPA process as cooperating agencies. DOE received no response to both this oral and the written request. The State of Arizona did not cooperate in the development of this EIS." [emphasis recommended]
1.1 Background	1-1	1/2	17. **Comment**: The term "proposes" should be in the past tense as the proposal in question was submitted on August 17, 2000. This is to clarify that information in this paragraph is related to material that could, in all likelihood, change. 18. **Recommendation**: change "proposes" to "proposed"
1.1	1-1	2/5	19. **Comment**: The TEP South Substation is inside the city limits of the Town of Sahuarita and across West Pima Mine Road from the Tohono O'odham San Xavier Mission Reservation. [stated as such many times in the draft EIS] 20. **Recommendation**: change "vicinity of" to read "Town of Sahuarita and in the vicinity of the Tohono O'odham San Xavier Mission Reservation" [and all other instances]
1.1	1-1	2/6 to 7	21. **Comment**: The proposed TEP transmission line will have two circuits from South Substation to Gateway Substation to Santa Ana Substation, Sonora, Mexico with a 115 kV spur from Gateway to the Valencia Substation in Nogales. One circuit will be transformed to a single circuit, at 115 kV, rated at 100 MW to interconnect with UNS Electricity, Inc., the local electrical utility in Nogales. This interconnection will be from the Gateway Substation to the Valencia Substation, on Grand Avenue, Nogales, Arizona. The ACC Certificate of Environmental Compatibility (CEC), Condition 19 which states "commons structures shall not be used to double circuit the new 115 kV transmission line..." 22. **Recommendation**: change the beginning of the fourth sentence to read: "TEP has proposed to connect two 345 kV circuits (1,000 MW each) to the Gateway Substation and to Santa Ana Substation, Sonora, Mexico, with one 115 kV (100 MW) circuit from Gateway to interconnect with ..."
1.1	1-1	2/7 to 8	23. **Comment**: UniSource Energy, Inc. (UNS) has purchased the resources and personnel of Citizens Communications Company. It is now operated and maintained by a subsidiary of UniSource Energy Services, Inc. (UES), as UNS Electricity, Inc. The organization changes from the Joint Citizens-TEP Application needs to be presented. Why isn't an organization chart included to show these relationships, which changed again on August 11, 2003? 24. **Recommendation**: change "Citizens Communications Company (Citizens) (formerly know as Citizens Utilities)" to read "UNS Electricity, Inc. a subsidiary of UniSource Energy Services, Inc. (UES), which is a subsidiary of UniSource Energy, Inc. a holding company that also includes TEP. UniSource, on 11 August 2003, purchased Citizens Communications Arizona Electricity Division, formerly known as Citizens Utilities."
1.1	1-1	2/10 to 12	25. **Comment**: The proposed TEP transmission line is planned to be a twin-circuit, 345 kV transmission systems that will continue "across the U.S.-Mexico border." There are no 345 kV transmission lines installed in the Mexican State of Sonora. There are no 345 kV capabilities at the Santa Ana Substation. 26. **Questions**: (1)What organization is responsible for interconnection standards at the U.S.-Mexican border? (2)How are such standards determined?

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 9 of 84

Comment No. 17-18

Although TEP submitted its application for the proposed project on August 17, 2000, TEP has not withdrawn its application for the proposed project and the application process is ongoing.

Comment No. 19-20

The maps in the Final EIS have been modified to incorporate the correct boundary of the Town of Sahuarita.

Comment No. 21-22

The text is correct as written.

Comment No. 23-24

See response to Comments 9-10 above.

Comment No. 25-27

Section 1.1.1, The Proposed Action, has been revised in the Final EIS to clarify that the 345-kV transmission line that TEP proposes to construct would go just across the U.S.-Mexico border, where it would likely connect to another transmission line. The specific routing of the connecting transmission line between the U.S.-Mexico border and a new substation in the area of Nogales, Sonora, and the location of the substation have not yet been determined.

Magruder, Marshall
Page 10 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			(3)What organization enforces compliance? (4)What organization inspects, certifies and approves interconnection at the U.S.- Mexican border? (5)What are the penalties for non-compliance after initial certification? 27. **Recommendation**: add a new sentence at the end of this paragraph to read: "There are no 345 kV circuits in Sonora for the proposed TEP transmission line to interconnect with. Such an interconnection will have to be designed, constructed, maintained, and certified to meet the Western Area Coordination Council (WACC) reliability standards prior to any interconnection with the TEP transmission system."
1.1 Figure 5	1-1 C-5	2/10 to 12 Center	28. **Comment**. A copy of the letter approving and certifying the joint US-Mexican approved border crossing must be in the Final EIS so there is no later disagreement as to the exact location of this border crossing, which is fairly congested in this area. There is also an El Paso Natural Gas pipeline that crosses the border along with other utilities. 29. **Recommendations**: (1) Include a copy of the approval and certification by both countries of the exact border crossing point in the Final EIS. (2) Show on maps, such as Figure 5, page C-5, the natural gasline and any other utility easements in the vicinity of the transmission line crossing.
Figure 1.1-1 2.2.2 2.2.2	1-2 2-14 2-14	Left drawing	30. **Comment**. This drawing now show the depth required underground for the structure or the height above ground for the lowest conductor. 31. **Recommendation**: Add the underground structure and height above ground for the lowest conductor and place these dimensions in the left drawing. Also, show the fiber-optic splicing box locations (see section 2.2.2, page 2-14).
Figure 1.1-1 2.2.2 2.2.2	1-2 2-13 2-13	All	32. **Comment**. In section 2.2.2 (page 2-13), there are three different variations in the monopole (tangent structure, turning structure, and deadend structure). 33. **Recommendation**. Please show each type with dimensions indicated for each that are discussed in section 2.2.2.
Figure 1.1-2 2.2.2 2.2.2	1-3 2-14 2-14	All	34. **Comment**. In paragraph 2.2.2 (page 2-14), there are three different variations in the lattice structure (tangent structure, turning structure, and deadend structure). 35. **Recommendation**. Please show each type with dimensions indicated for each that are discussed in section 2.2.2.
Figure 1.1-2 2.2.2	1-3 2-14	Left drawing	36. **Comment**. This drawing does now show the depth required underground for this structure, the height above ground for the lowest conductor, or the width of the Right of Way (ROW). 37. **Recommendation**: Add the underground structure and height above ground for the lowest conductor show and label the width of the ROW and place these dimensions in the left drawing. Also, show the fiber-optic splicing box locations (see section 2.2.2, page 2-14).
Figure 1.1-3	1-4	Main drawing, lower half	38. **Comment**. This drawings fail to show the transmission line between the US-Mexican border and to Santa Ana, Sonora, Mexico. There will have to be an approved route in Mexico, and a US-Mexican "agreed" interconnection point on the Border, before this EIS can be completed. 39. **Recommendation**: **Show the approved 345 kV transmission line route from the TEP transmission line crossing the border to the Santa Ana Substation** and include the location of the approved border crossing. If several Alternatives are under consideration, they should also be shown.
Figure 1-1-3 Figure 1.1-4 Figure 2.1-2 Figure 2.1-4 Figure 3.1-1	1-4 1-5 2-4 2-9 3-3	Both figures Both figures Left figure Left figure The figure	40. **Comment**. These drawings show the Central Route as following the El Paso Natural Gas (EPNG) line in the vicinity of Tubac, Arizona. The Central Route proposed by TEP to the ACC Line Siting Committee did not follow the EPNG line in Tubac. From TEP's ACC Certification of Environmental Compatibility Application, of March 1, 2001, in Exhibit A-4b (sheet 3 of 3)

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 10 of 84

Comment No. 28-29

The proposed corridors would meet the U.S.-Mexico border approximately 3,300 ft (1,005 m) west of Arizona State Highway 189 in Nogales, Arizona (see Chapter 2). USIBWC would review plans for construction of the proposed project where it would cross the border between the United States and Mexico and assess whether the effects of the proposed project would be consistent with existing bilateral arrangement between the two countries or would obscure or otherwise impact the international border.

Comment No. 30-31

The figure correctly shows what the structure would look like to viewers.

Comment No. 32-33

The three slightly different monopoles that would be used along the corridor based on the turning angle of the transmission line and the elevation change between towers would be visually very similar to the monopole shown in the Chapter 1 of the Final EIS. The environmental impacts of the different variation of the monopoles would be very similar if not identical to the impacts that are cited in the Final EIS, and therefore, only one figure of the typical monopole that would be used is shown in the EIS.

Comment No. 34-35

The three slightly different lattice towers that would be used along the corridor would be visually very similar to the monopole shown in the Chapter 1 of the Final EIS. The environmental impacts of the different variation of the lattice towers would be very similar if not identical to the impacts that are cited in the Final EIS, and therefore, only one figure of typical lattice tower that would be used is shown in the EIS.

Comment No. 36-37

The figure correctly shows what the structure would look like to viewers.

Comment No. 38-39

See response to Comments 25-27 above.

Magruder, Marshall
Page 11 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
Figure 3.1-2	3-9	The figure	which shows the "preferred alternative" or Central Route Segment Leg 9, to
Figure 3.2-2	3-17	The figure	the west of Cerro Pelon, in Tubac. Segment Leg 10, an Alternative Route,
Figure 3.2-3	3-19	The figure	continues in this area along the EPNG line. Where appearing in this version
Figure 3.2-4	3-20	The figure	of the EIS, comments will be included in page sequence, when the
Figure 3.3-1	3-28	Both figures	differences in Segment Leg 9 and Segment Leg 10 require correction to
Figure 3.6-2	3-64	The figure	conform to TEP's Application. Further, the Leg 9 separation from the EPNG
Figure 3.6-5	3-67	The figure	line was included in the DOE's *Federal Register* "Notice of Intent" of 10 July
Figure 3.7-1	3-71	Both figures	2001.
Figure 3.7-2	3-72	The figure	41. **Recommendation**. **Correct this Figure to agree with the ACC CEC**
Figure 3.7-3	3-74	Both figures	**Application and the *Federal Register*.**
Figure 3.8-2	3-81	Both figures	
Figure 3.11-1	3-91	The figure	
Figure 3.13-1	3-98	Both figures	
Figure 3.13-2	3-99	Both figures	
Figure 4.2-1	4-20	The figure	
Figure 4.2-3	4-24	The figure	
Figure 4.2-4	4-26	The figure	
Figure 4.2-5	4-27	The figure	
Figure 4.2-7	4-30	The figure	
Figure 4.2-8	4-32	The figure	
None	4-35	Right figure	
None	4-36	Right figure	
None	4-37	Right figure	
None	4-38	Right figure	
None	4-39	Right figure	
None	4-40	Right figure	
None	4-41	Right figure	
None	4-43	Right figure	
None	4-44	Right figure	
None	4-45	Lower figure	
None	4-46	Lower figure	
None	4-47	Right figure	
None	4-48	Right figure	
None	4-49	Right figure	
None	4-50	Top figure	
none	4-51	Right figure	
Figure 1.1-4	1-5	various	42. **Comments**. There are three comments: (1) In the white center area of the map, the Sonoita State Conservation Area (5000 acres), the new Sonoita State Park, Robert Damon Rio Rico State Park, Tubac Presidio State Historic Park, and San Rafael Valley State Park should be shown in light blue as "State of Arizona" land. (2) The Tumacacori Mission N.H. P. should be indicated as Department of Interior, National Park Service. (3) Patagonia is an incorporated town and should be indicated like Nogales. 43. **Recommendation**: Show the state lands in blue to represent the Sonoita Conservation Area; Rio Rico, Sonoita and San Rafael State Parks, Tubac Presidio S.H.P; Tumacacori Mission N.H.P. and the incorporated area of the Town of Patagonia.
1.1	1-6	1 (all)	44. **Comment**. No data presented to the ACC Line Siting Committee hearing during 2001 confirmed the reliability of the proposed synchronization solution. TEP said it did not have a solution but one would be required. TEP did testify that the TEP transmission line system would interconnect with all the CFE generation stations in Sonora and Sinaloa. TEP stated no qualification or testing programs had been discussed or approved to ensure reliability between the Mexican and US systems. There is strong evidence that the synchronous current connection will fail or at best will be very fragile. TEP consideration of a Direct Current (DC) interconnection was

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 11 of 84

Comment No. 40-41

The Central Corridor is correct as shown in all figures in the EIS (see for example, Figure 1.1-4), and is correctly described in the reference text. In the *Notice of Intent* for the proposed project, the Central Corridor was shown as diverging to the west of the EPNG pipeline for a short distance near Tubac, while the Eastern Corridor followed the EPNG pipeline more closely. However, upon elimination of the Eastern Corridor from further analysis (prior to the Draft EIS), TEP opted to retain the corridor alignment following the EPNG pipeline near Tubac (formerly the Eastern Corridor) as the Central Corridor for the Draft and Final EIS.

Comment No. 42-43

Due to the scale and the level of detail shown in Figure 1.1-4, the suggested locations are not shown or shaded in order to present a simplified, user-friendly map. The historic parks in Tumacacori and Tubac are outside of the three 0.25-mi (0.40-km) wide study corridors. Therefore, the impact on these historic parks from the Central Corridor (the closest of the corridors to these parks) would be limited to visual impacts. Since publication of the Draft EIS, a field review of these sites was conducted and a report, the "Proposed TEP Powerline—Visibility from Tumacacori and Tubac Historic Sites", was added to Appendix I. Based on that field review and associated report, Section 4.4.1.2 has been revised with the following language: "Impacts to views from the historic parks in Tumacacori and Tubac would be minimal."

Magruder, Marshall
Page 12 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			discarded due to cost. DC interconnections have been proved to be reliable and effective at boundaries between two asynchronous systems, the US Western and Mexican Grids. With about 25% of all electricity generated in Mexico illegally tapped from the distribution system (data shown at ACC hearings), local shorts, outages, and failures have a much higher frequency than in the United States. A major outage of both Sonora and Sinaloa States (up to 1,000 miles south of Nogales, Arizona) occurred on 17 April 2001, where many locations were without electricity 24-hours after the initial cascading failure caused a synchronization problem at a Hermocillo generation plant, hundreds of miles from Nogales, Sonora, which lost electricity for a minimum of six-hours. These local failures can, when not property handled by personnel, can result in major outages, such as what happened in the Mid-West U.S. this summer, or trees on lines as in the Oregon cascading failure in 1996 that impacted Tucson. This paragraph fails to demonstrate any confidence in TEP's interconnection analysis, design, operability, reliability, or proof that cascading failures will be inhibited at the US-Mexican border. **Without such confidence, the NO ACTION Alternative is the only logical conclusion for this application.**
			45. **Recommendation**. Due to prior news articles concerning the high probability of failure and cascading Mexican blackouts, this section requires facts, figures and trade-study information necessary to prove that such failures will not result from the system. TEP failed before the ACC; however, they assumed the "feds" would resolve this significant issue. **This has to be fully explained, with numbers to indicate outages, probability of cascading outages, qualifications to US standards for Mexican generation and transmission line systems and operators, and other data to prove the proposed interconnection and system to Santa Ana and that specific interconnection will NOT fail.** For example, how will the SCADA information from all 50 Mexican generation plants be made available at TEP's Control Center in Tucson?
1.1	1-6	1/7	46. **Comment**. First paragraph, line 7, "Noreste" 47. **Recommendation**: should read "Northwest"
1.1	1-6	3/2 and 3	48. **Comment**. The phrase "run immediately adjacent to the pipeline ROW" is not permitted by the ACC Certificate of Environmental Compatibility (CEC) Condition 18, which states "All transmission structures shall be place a minimum of 100 feet from the edge of the gas pipeline right of way." This is due to the impact of electric fields on the gas line and to reduce possible explosive situations. The impacts include increase gasline corrosion, induced currents, and negative impacts with gasline catholic protection systems. The results of EMF on gasline safety are poorly understood; however, a preliminary model from the Gas Institute of Canada Report 105 was discussed during the ACC Line Siting Hearings with the 100-foot separation being considered as a minimum. I pointed out to the ACC that the formula applied was calculated improperly and the minimum distance, for a 500 MW systems, should be 138 feet for one of the two EPNG lines at their normal operating pressure of 508 pounds per square inch. A higher 2,000 MW system requires a much greater separations, on the order of 500 feet, between the gas and electric ROWs to meet minimum gas explosive safety requirements which are just to prevent damaging the transmission lines from flames of a gas fire. Induced current impacts have not been accounted for, which extends beyond the EPNG line, but involves any ferromagnetic structures/pipes these transmission lines will cross. Additional study and analysis, which accounts for and uses soil resistively measurements, updated EPNG line physical measurements with "pigs" to determine the current corrosive states of these two 50-year old gas lines is necessary. Several EPNG substations and distribution stations exist along these routes with several "blow" values that release overpressures,

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 12 of 84

Comment No. 44-45

As part of DOE's decisionmaking process on whether to grant a Presidential Permit for the proposed project, DOE will determine whether the proposed project will adversely impact the reliability of the U.S. electric system. Also, before authorizing exports to Mexico over the proposed 345-kV facilities, DOE must ensure that the export will not impair sufficiency of supply within the United States and will not impede, or tend to impede, the coordinated use of the regional transmission system. Section 1.5 discussed synchronization of the U.S. and Mexican systems.

Comment No. 46-47

The text is correct as written as it is in Spanish.

Comment No. 48-49

Section 4.10 of the Final EIS has been revised to include discussion on safety considerations for collocating natural gas pipelines and transmission lines. TEP has consulted with EPNG about the proposed project, and TEP would have detailed discussions with EPNG regarding safety issues of siting the proposed transmission line near the distribution station once an exact location for the structures is determined.

Magruder, Marshall
Page 13 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			sometimes for over 36-hours at a time. NG can be smelt hundreds of feet away from these substations. The explosive mixture of NG-air is about 5 to 15%, not very high concentrations. Meteorological micro-climate conditions can create local thermal inversions to "trap" NG is local canyons to achieve explosive concentrations. In addition, grounding of the electrical structures in the vicinity of NG lines needs a minimum separation. Santa Cruz County has more lightning strikes per square mile than any other county in Arizona. 49. **Recommendations**. That an analysis be conducted and data included in the draft EIS which assesses the impacts between the electric and electromagnetic fields from the transmission lines and the two EPNG lines which are intended to be considered for crossing, or running adjacent to. The following resulting minimum safe separation between the gas and electric lines needs to consider, as a minimum, gas line corrosion, induced currents, and catholic system degradation based on actual corrosive measurements for these two EPNG lines, the soil conditions along the EPNG route, and grounding impacts, including lightning arrestment, with respect to various air-natural gas mixtures. The results from this study are necessary to determine the "**minimum safe distance**" between the NG and electricity ROWs. A **concern public, especially, those whose property is adjacent to the EPNG line, must be presented this analysis in order to complete this EIS review.**
1.1	1-6	3/4 and 5	50. **Comment**. This sentence indicates that many crosses of the EPNG might occur. The results of the prior comment may impact "crosses" and the "follows" thus the additional "offset" distance should be specified in the last sentence of this paragraphs. 51. **Recommendation**. Before the period at the end of this paragraph, add "and accounts for a minimum offset by the transmission line ROW by XXX feet when "follows" and each crossing is required by (TBD – whatever the resultant crossing limitations become from the above analysis)."
1.1	1-6	4 (all)	52. **Comments**. The Federal Register (66 FR 35952) states "The EIS will also consider alternatives to the proposed transmission lines, including, to the extent practicable: (1) **No Action Alternative**... (2) **Construction of a powerplant in the U.S. closer to the U.S.-Mexican border with a shorter transmission line extending to the border, an alternative concept for supplying electric power to the target region.** This Alternative is MISSING from this Draft EIS. It needs to be developed as a fifth alternative, as many in Santa Cruz County favor such an approach. TEP testified during the ACC Line Siting Hearings that it never seriously considered such an approach. This continues. Without this Alternative, this draft EIS fails to conform to the requirements clearly presented in the *Federal Register* Notice of Intent of July 10, 2001. 53. **Recommendation**. Include this Fifth Alternative throughout the EIS. If a second draft EIS is NOT provided to the public, then a Supplemental EIS, containing and completing this analysis, comparison, and evaluations prior to the Final EIS being prepared for the public. If asked, the public would prefer this Alternative to any of the three transmission line alternatives. Only the DOE can make TEP do this, as it is not in TEP's interest to perform such an analysis. Why? The results may or probably will, lead to this Fifth Alternative as the best, most optimal and preferred solution for all Governmental Agencies cooperating in this study. Add a new paragraph between the present third and fourth paragraphs to read: "A fifth Alternative is required by the *Federal Register* (66 FR 35950) for "Construction of a powerplant in the U.S. closer to the U.S.-Mexican border with a shorter transmission line extending to the border, an alternative concept for supplying electric power to the target region." This Alternative shall be added to all parts of this EIS so that it can be

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 13 of 84

Comment No. 50-51

The number of times that the proposed transmission would cross the EPNG pipeline would be determined upon final siting of the transmission corridor, following each Federal agencies' ROD.

Comment No. 52-53

The alternative of a new power plant is evaluated briefly in the EIS (refer to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis). ACC Comment 3 emphasized that a new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal).

Magruder, Marshall
Page 14 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			compared with the three Route Alternatives and the No Action Alternative. This comparison shall be provided to the public for review and comment with these review comments incorporated into the Final EIS. A Supplemental EIS maybe necessary to comply with this requirement."
1.1 1.1 S-2	1-6 1-6 S-2	4/5 and 6 5/1 4/6	54. **Comment**. The fourth sentence states: "DOE has decided to identify the Western Corridor as DOE's preferred alternative at this time." From the comments elsewhere, only TEP's "preferred" route and the ACC's elimination of all other routes are the rationale for this designation. Since this is NOT based on DOE's evaluation, but only one TEP's preference which was barely approved by the ACC Line Siting Committee, after one Committee member changed the outcome from a "hung" I-(non-decisive vote which would meet approval without any limitations on TEP), and then the ACC designate only the Western route as being suitable. Such wording fails to give confidence that the DOE has even made an assessment. Based on this rationale, it appears that use of the designation "TEP Preferred Alternative" reflects the truth in this mater, which applying the DOE adjective makes it appear to be a stronger descriptive phrase than it really is. 55. **Recommendation**. Where appearing in the EIS, the term **"DOE preferred alternative" should be changed to read "TEP's preferred alternative"** to reflect the source of this designation.
1.1.	1-6	6/2to 5	56. **Comment**. The part of the Central Route near Tubac, where the Central Route departs from the EPNG line in Segment Leg 9. As presently worded, the Central Route "follows or crosses the EPNG pipeline ROW. Leg 9 is slightly longer than Leg 10 that needs to be reflected in this description. 57. **Recommendation**. In this first sentence, line two starting at "parallel" change to read: "parallel and offset from the EPNG pipeline ROW" and in the second and third sentences, the lengths might need to be increased slightly to account for Leg 9. In the second sentence, line 4, before the "period" add, "except in the Tubac area where Segment Leg 9 leaves the EPNG pipeline, going to the west of Cerro Pelon, and then rejoining and offset from the EPNG ROW."
1.1	1-7	Before second paragraph	58. **Comment**. The required "Power Plant" alternative needs to be discussed, and logically, this would be before the "No Action Alternative." The analysis necessary to include the "power plant alternative". From the Federal Register (66 FR 35952), this power plant is "an alternate concept for supplying power to the target region." It appears that there are two "target regions" with one target area being Santa Cruz County with power necessary for backup, as mandated by the ACC, and the second being the Santa Ana substation, Sonora, Mexico. Santa Cruz County has never exceeded 60 MW of demand. Based on the Joint City of Nogales/Santa Cruz County Energy Commission results in June of 2001 indicating that long-term demands would be 100 MW or lower, then consideration for that demand of a power plant with a capability of at least 70 MW and less than 100 MW would serve that demand. The second target area, Sonora Mexico, demand would be that indicated by C.F.E. of 457 MW considered for purchase from the Nogales-Naco area of Mexico in 2006 to 2008. Thus a power plant of 450 to 500 MW would meet that demand. The below is a recommended wording of a new paragraph. 59. **Recommendation**: Add the following. **Power Plant Alternative.** The Federal Register (66 FR 35952) requires that a power plant, constructed in the U.S. closer to the U.S.-Mexico border with a shorter transmission line extending to the border, as an Alternative concept for supplying electric power to the target area. There are two target areas. One target area, the City of Nogales and Santa Cruz County, target area would need a power plant of generating between 70 to 100 MW. The second target area, originating at the Santa Ana substation, in

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 14 of 84

Comment No. 54-55

The text is correct as written.

Comment No. 56-57

See response to Comments 40-41 above.

Comment No. 58-59

See response to Comments 52-53 above.

Magruder, Marshall
Page 15 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			Sonora, Mexico, would need a power plant generating between 450 and 500 MW. For this concept, this power plant would be co-located at the Gateway Substation. The estimated length of a high voltage (rated at 500 MW) transmission line would be about 3.0 miles to the border and 2.6 to 3.0 miles of 115 kV (100 MW) transmission line to the Valencia Substation. These transmission lines would have the same characteristics as those proposed by TEP. This power plant would use natural gas from the present EPNG pipeline (with natural gas concentrated in Tucson) to meet the Nogales requirements and a new pipeline needed for the Mexican target area."
Figure 1.1-4 Figure 2.1-3 Figure 2.1-4 Figure 3.1-1 Figure 3.2-1 Figure 3.2-2 Figure 3.2-3 Figure 3.2-4 Figure 3.3-1 Figure 3.6-2 Figure 3.6-5 Figure 3.7-1 Figure 3.7-2 Figure 3.7-3 Figure 3.8-2 Figure 4.2-1 Figure 4.2-4 Figure 4.2-5 Figure 4.2-8 Figure 5.2-1 Figure 1 Figure 5	1-5 2-5 2-9 3-3 3-9 3-17 3-19 3-20 3-28 3-64 3-67 3-71 3-72 3-74 3-81 4-20 4-26 4-27 4-32 5-3 C-3 C-5	Lower Lower Lower Right Right Right Right Right Left figure Lower Lower Lower Right Lower Lower Lower Lower Lower Lower Lower Lower Right	57. **Comment**. This figure does not show the 115 kV transmission lines (Preferred Alternative and the Alternative) from the Gateway Substation to the Valencia Substation. 58. **Recommendation**. Add the Preferred and Alternative 115 kV transmission lines between the Gateway and Valencia Substations. If too small, then show just the Preferred 115 KV transmission line and the Valencia Substation.
1.2.1 Applicant's Purpose and Need	1-7 to 1-8	Entire	60. **Comment**. This entire paragraph appears supplied by the Applicant. No analyses have been provided by the Applicant to confirm or deny, validate or invalidate, show understanding the issues, assess requirements, or verify that such the stated "need" exists. 61. **Recommendation**: That the Applicant must update and remove all the obsolete material in this paragraph. The Applicant needs to clearly discuss and separate "purpose" from the "need" as these are separate concepts. The "purpose" will describe the objectives, goals and end results for the system. The "need" should describe the circumstances, deficiencies, and requirements, which resulted in establishing specifications for the system. **The Applicant must "prove" that a validated need exists for each requirement necessary to develop the proposed transmission system.**
1.2.1	1-7 to 1-8	2/all	62. **Comment**. Imprecise worded phrases need clarification, definition, and rationale for their use, such as • "potential to benefit" (requires a cost-benefit analysis, as a minimum, for both target areas), • "availability of electric power" (requires a supply and demand analysis, as a minimum, for both target areas)", • "need to improve transmission" (requires a transmission load and stability analysis, as a minimum, for both target areas)", • "assist… in meeting an ACC mandate" (as a minimum, requires a discussion on how such "assistance" will be provided to achieve the precise requirements, that need to be presented, of this mandate), • "second transmission line" (as a minimum, the three options for 345 kV,

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 15 of 84

Comment No. 57-58 *(misnumbered comment)*

The 115-kV transmission line from Gateway Substation to the Valencia Substation has been added, as appropriate, to the applicable figures in the Final EIS.

Comment No. 60-78

TEP's purpose and need has been revised in the Final EIS (see Section 1.2.1).

Magruder, Marshall
Page 16 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			115 kV and 115-345 kV options need to be presented, each analyzed, and trade studies performed and presented in this EIS so that cost/benefits of the options for one 115 kV (100 MW) transmission line to achieve the ACC mandate, an intermediate 115-345 kV, or the twin-circuit 345 kV (2000 MW) lines as now proposed – without such a trade off study showing impacts of these options and how they were evaluated to determine the "TEP preferred" alternative.), • "serve .. customers in Santa Cruz County by December 31, 2003" (as • a minimum, meeting schedules requires a plan with key events, accomplishment tasks and durations, with milestone dates as used in project management expected for this system) 63. **Recommendation**. This section be re-written as indicated above, and include: • Cost-benefit analyses, • Supply and demand analyses for past, present and future needs, • Transmission load and stability analysis (summary format but reference to a detailed technical report(s) listed in Chapter 11, References), • All options in the TEP-Citizens Project Development Agreement (for "planned project scope" or the 345 kV configuration, the "interim project scope" for
1.2.1	1-7 1-7 1-8	2/4 4/3, 4 and 7 1/1, 2, 3, and 5	59. **Comment**. Citizens Communications (Citizens) has been purchased by UniSource Energy, Inc. (UNS), a holding company, which oversees UniSource Energy Services, Inc., (UES), which oversees UNS Electricity, Inc., the one-for-one replacement for Citizens. 60. **Recommendation**: Change "Citizens", "Citizens Communications", or Citizens (Communication Company)" to read: "UNS Electricity, Inc." where appearing.
1.2.1	1-7	3/1	61. **Comment**. The first sentence in this paragraph appears misleading and fails to express the details in this agreement. 62. **Recommendation**. Change this sentence to read as "TEP and Citizens Communications Company (now UNS Electric, Inc., a subsidiary of UniSource Energy Services, Inc.) signed a Project Development Agreement (PDA) which gave TEP responsibilities to design, construct, and test a transmission line system to meet the second transmission line requirements implemented by ACC Order No. 62011."
1.2.1	1-7	3/5	63. **Comment**. The end of the second sentence is not clear. 64. Recommendation. Replace "accordance…" to the period, with "in accordance with the ACC Decision No. 64356 (ACC 2002) and its 30 Conditions. These Conditions are in Table 1.2.1-1 below: ***Table 1.2.1-1 ACC Decision No. 64356 Conditions*** **Condition Number** / **Definition of the Condition** 1 – Applicants shall obtain all required approvals and permits necessary to construct the Project. 2 – Applicants shall comply with all existing applicable laws, environmental control standards and regulations, ordinances, master plans and regulations of the United States, the State of Arizona, Pima and Santa Cruz Counties, the City of Nogales, the Town of Sahuarita, the Tohono O'odham Nation, and any other governmental entities having jurisdiction. 3 – As to the Preferred Route. Applicants shall construct the Project transmission lines only within the corridor more fully described in Exhibit I, attached hereto (the Route "Corridor"). 4 – Applicants shall met and confer with landowners who are within or adjacent to the Route Corridor and other interested parties in order to develop a plan for specific pole locations that will mitigate the environmental and visual impact of the Project transmission lines within the Route Corridor.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 16 of 84

Comment No. 60-78 ***(continued)***

TEP's purpose and need has been revised in the Final EIS (see Section 1.2.1).

Magruder, Marshall
Page 17 of 84

Paragraph	Page	Para/ Line Nos.		Comments, Questions (if necessary), and Recommendation
			5	Applicants shall, prior to construction of the Project transmission lines, conduct the studies recommended in the Report of The Harris Environmental Group, Inc. attached to the Joint Application as Exhibit C ("Harris Report") and attached hereto as Exhibit 2.
			6	Applicants shall implement the mitigation measures and impact avoidance recommendations set forth in the Harris Report and those recommended in the additional Harris Report studies. Applicants shall also continue to completion those studies that are ongoing as identified in the Harris Report.
			7	Applicants shall file with the ACC, in this docket, the findings of the additional Harris Report studies.
			8	Applicants shall retain an archaeologist satisfactory to the State Historical Preservation Office (SHPO). The archaeologist is to be on site during construction activities to advise applicant in connection with any additional archaeological and related studies that may be required and to manage cultural and historical preservation efforts for archaeological sites that may be affected by the construction of the Project transmission lines. The archaeologist shall meet and confer with representatives of local Native American Nations and local historical societies to determine any sensitive areas and determine if and how they can be avoided or mitigated.
			9	Applicants shall retain a biologist satisfactory to the Arizona Game and Fish Department. The biologist is to be on-site during construction activities in connection with any additional biological and related studies that may be required and to advise Applicants in connection with mitigation efforts for any endangered, threatened and sensitive species that may be affected by the construction of the Project transmission line.
			10	Applicants shall consult with the State Historical Preservation Office to advise them in connection with any mitigation efforts for any historical sites affected by the construction of the Project transmission lines and any historical identified and made known to them (any information on historical sites in the record of Case No. 111 is deemed known to the applicant.
			11	In the final design and construction of the transmission line, Applicants shall: (a) Use structures of a non-reflective nature that are to the greatest extent possible consistent with the terrain and vegetation through which they are installed. (b) Use non-specular conductors and dulled structures of a self-weathering material and color suitable to the terrain and vegetation. (c) Use monopoles except in locations where use of lattice towers would minimize detrimental impacts upon the total environment. (d) When making specific easement routing decisions as to the ultimate pathway to be followed for the construction of the transmission line, the applicant shall make the minimization of any detrimental impact upon the total environment the deciding factor as between different pathways within the corridor approved by this decision.
			12	Before construction on this project may commence, the Applicant must file a **construction mitigation and restoration plan** with ACC Docket Control. Applicants shall, within one year of completion of the Project, rehabilitate to its original state any area disturbed by construction of the Project, except for any road that may be necessary to access the transmission lines for maintenance and repair. The goals of the Plan will be to: • Avoid impacts where practical; • Where impacts are unavoidable, minimize impacts; and • Focus on site preparation to facilitate natural processes of revegetation. Other key elements of the Plan are to: • Emphasize final site preparation to encourage natural

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 17 of 84

Comment No. 60-78 ***(continued)***

TEP's purpose and need has been revised in the Final EIS (see Section 1.2.1).

Magruder, Marshall
Page 18 of 84

Paragraph	Page	Para/ Line Nos.		Comments, Questions (if necessary), and Recommendation
				revegetation; • Avoid (*i.e.*, reserve), where practical, mature native trees; • Stipulate a maximum construction corridor width; • Preserve topsoil and plant material from the right-of-way before grading, and respread over the right-of-way after construction is complete; • Imprint the restored right-of-way to prevent indentations to catch seed and water; • Implement best management practices to protect the soil; • Apply restoration methods that have been shown to work in the desert environment; • Prevent the spread of noxious weeds or other undesirable species; and • Apply methods to discourage unauthorized off-highway-vehicle (OHV) use of right-of-way.
			13	In connection with the Western Systems Coordinating Council review process, TEP shall provide to the ACC Utilities Division requested technical information regarding any interconnection plans between TEP and CFE.
			14	TEP shall notify the ACC Utilities Division, within thirty (30) days of execution, of the existence of any agreement between TEP and CFE and shall provide any technical studies performed to investigate the interconnection between TEP and CFE.
			15	Applicants shall file with the ACC, in Docket n. L-00000C-01-0111, and L-00000F-01-0111, a copy of the federal Environment Impact Statement ("EIS") and associated Records of Decision, when completed, for the Project.
			16	Applicants shall comply with the recommendations, mitigation measures, and actions to reduce or prevent environmental impact included in the EIS.
			17	The authorization to construct the Project will expire three years from the date the Certificate of Environmental Compatibility is approved by the ACC. Applicants shall have the right to apply to the ACC for an extension of this time limitation.
			18	All transmission structures shall be placed a minimum of 100 feet from the edge of existing gas pipeline right-of-way.
			19	Common structures shall not be used to double circuit the new 115 kV transmission line approved herein with Citizens' existing 115 kV transmission line.
			20	Distribution substation feeder lines shall not be attached to structures supporting the 115 kV lines approved herein. Applicants or their assigns may apply to the ACC for a waiver of this condition in the event of future system expansion.
			21	Citizens shall make necessary systems improvements to ensure continuity of service in the event of an outage on the new 115 kV transmission line approved herein and shall submit system improvement plans to the ACC Utilities Division six months from the date this Certificate of Environmental Compatibility is approved by the ACC.
			22	Applicants shall participate as a consulting party with the lead federal agency, the State Historical Preservation Office ("SHPO"), and the state and federal land managing agencies in the federal compliance process (*i.e.*, 36 C.F.R. 800) to reach a finding of the effect and to resolve adverse effects, if any.
			23	Should federal involvement in any part or all of this project be removed or not occur, the Applicants shall continue to consult with SHPO in the state compliance process to reach a determination of impact and resolve impacts, if any.
			24	The Applicants shall ensure consultation with Indian tribes regarding the potential impacts to historical properties, particularly traditional cultural places, that may be present within, or adjacent to, the proposed corridor, and resolve adverse effects, if any. Such

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 18 of 84

Magruder, Marshall
Page 19 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			consultations shall be done in a sensitive manner respectful of tribal sovereignty and concerns regarding confidentiality.
			25 The Applicants shall include the geographic area effected by the project (*i.e.*, area of potential effect), the final right-of-way and buffer zone, new and existing access roads, material source pits (if any), and equipment staging areas.
			26 The Applicants shall sponsor the necessary studies to complete the historical site identification effort as part of the federal or state compliance process. This may include a cultural resources survey, archaeological testing, or ethnographic study performed under the direction of professionals that meet the Secretary of the Interior's qualification standards and permitting requirements of the appropriate land-management agency.
			27 If historic property cannot be avoided, Applicants shall sponsor the necessary studies or take the appropriate actions to lessen or mitigate the impacts as part of the federal or state compliance process. The may include archaeological data recovery(*i.e.*, excavations), archival research and structure documentation.
			28 After construction, Applicants, in conjunction with the land-managing agency, if any, shall allow Arizona State Stewards, volunteer-staffed SHPO program, to periodically inspect the sites present within the corridor for vandalism or damage.
			29 The Applicants, their successor(s) or assignee(s) shall submit a self-certification letter annually, identifying which conditions contained in the CEC as amended, have been met. Each letter shall be submitted to the Utilities Division Director on August 1, beginning with 2002, describing conditions which have been met as of June 30. Attached to each certification letter shall be documentation explaining, in detail, how compliance with each condition was achieved. Copies of each letter, along with the corresponding documentation, shall also be submitted to the Arizona Attorney General and the Directors of the Arizona Department of Environmental Quality, Department of Water Resources, and Department of Commerce Energy Office.
			30 The authority to construct facilities granted by this Commission Decision **shall be revoked** and the associated CEC **rendered null and void in its entirety if** (a) the Applicants, their successor(s) or assignee(s) legally challenge any condition herein, or **(b) fail to comply with any condition herein as determined by the Commission.** [emphasis added by Magruder to show the significance of these 30 conditions.]
1.2.1	1-7	3/5 to 9	65. **Comment**. There are two sentences that discuss extensions in the operational date for this project. ACC Order No. 64356 (ACC 2002) does not discuss the operational date for the proposed transmission system. In order to clarify and include correct references, new sentences are included. 66. **Recommendation**. Reword these two sentences to read: "The ACC Order No. 62011, dated November 2, 1999, the ACC issued Decision 62011, "In the matter of service quality issues, analysis of transmission alternatives, and proposed plan of action in the Santa Cruz Electric Division of Citizens Utilities Company". On October 27, the City of Nogales filed a Complaint against Citizens concerning electrical outages in Nogales, Arizona. After several ACC Orders, procedural orders, and on August 9, 1999, the ACC Staff "Settlement Agreement Between Commission Staff and Citizens Utilities Company" committed Citizens to a plan of action "to build a second transmission line to serve its customers in Santa Cruz County by December 31, 2003." The Settlement Agreement said, "Citizens will owe a penalty of $30,000 per month for each full month delay after December 31, 2002" which represents liquidation damages for Citizens' failure to fulfil [sic] its obligations under this Agreement and for the benefit of Citizens' Arizona electric customers." The ACC Order No. 62011of November

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 19 of 84

Comment No. 60-78 ***(continued)***

TEP's purpose and need has been revised in the Final EIS (see Section 1.2.1).

Magruder, Marshall
Page 20 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			2, 1999 implemented this Settlement Agreement. The TEP-Citizens Project Development Agreement and testimony at the ACC Power Plant and Transmission Line Siting Committee hearings indicate that TEP has assumed the penalty obligation, formerly assigned to Citizens. The Settlement Agreement permits "circumstances beyond its reasonable control" to be used to file for a waiver of the penalty. It should be noted, that only a 115 kV transmission line between Nogales and Tucson was proposed in Citizens plan of action, with no indications that a transmission line with Mexican interconnection or traversing the National Forest were considerations, which have delayed, but were avoidable by Citizens-TEP having chosen other alternatives that the system contained in this EIS."
1.2.1	1-7	4/1 to 3	67. **Comment**. The terms "thermally capable of transmitting 1,000 MW, as expanded in 2.2.2, means that the conductors and the system is designed to transmit 1,000 MW on each circuit, or 2,000 MW total. The present request is for a 500 MW system, primarily since that is more than is available at TEP's South Substation. The system is designed for 2,000 MW, then all environmental factors need to account for that load, and not 500 MW or TEP would have to return to the DOE and request a change to the Presidential Permit, update the Final EIS which would have to be provided to the pubic for review as a new Draft EIS, followed by Public Comments, then a Final EIS developed and routed to the appropriate agencies for Records of Decision. By considering this system, as it really is, a 2,000 MW system, then the above steps would not be required. 68. **Recommendation**. Replace the first sentence with: "Each circuit is capable of transmitting 1,000 MW based on the thermal rating of the conductors. **The overall total system, for the double-circuit system is capable of transmitting 2,000 MW, thus this EIS will be assessed for the design load of 2,000 MW for this system**. The initial load design and operational conditions will be limited to 500 MW total, for operational and reliability considerations. "
1.2.1	1-7	4/4	69. **Comment**. The JDA required Citizens to purchase firm delivery of 100 MW. This exceeds the highest local demand by over 40% and is between 40% to 75% too high for normal daily demand peaks. This electric power can not be used by any other entity in Nogales Arizona. During a recent purchase power case, during discovery, UniSource indicated that it might consider 60 MW instead of 100 MW. This is reflected below. 70. **Recommendation**: Add new sentence, after second sentence, "UNS Electricity, Inc. for Santa Cruz County will initially purchase firm delivery for a maximum of 60 MW TEP during summer months and for a maximum of 45 MW during winter months. A monthly and diurnal demand curves will be included in the interconnection agreement required by the Joint [UES and TEP] Development Agreement."
1.2.1	1-7	4/4 to 8	71. **Comment**. The sentence, "This would allow Citizens to improve reliability of electric service to its customers in Santa Cruz County." Should be deleted, as the next sentence, which discusses "redundant path" is the key to transmission line reliability. 72. **Recommendation**. Replace these two sentences with "The proposed TEP transmission line could provides redundant path, the key to improving transmission line reliability, between an independent power source and substations in Santa Cruz County. Transmission line reliability is primarily a function of line length, not voltage. Human factors considerations require functional teams with key personnel trained and ready for operations during any weather condition augmented by automated performance sensing and monitoring equipment, diagnostics and evaluation, implementation and feedback recording capabilities necessary to automate system responses and react to ensure system safety and optimize performance under all

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 20 of 84

Comment No. 60-78 ***(continued)***

TEP's purpose and need has been revised in the Final EIS (see Section 1.2.1).

Magruder, Marshall
Page 21 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			natural and human caused environmental factors. Resultant transmission reliability must ensure both."
1.2.1	1-8	1/1 to 2	73. **Comment**. This sentence indicated, "Citizens committed to purchase to 100 MW of transmission capacity". This sentence then states the "current Santa Cruz County load of approximately 65 MW." The maximum peak load as 58.7 MW in June 2002. This exceeds the maximum peak load of MW by at least 70%, which would still exceed the County's highest demand, at 3% annual growth, for more than 20 years in the future. Since 48 MW of backup generation exists in Santa Cruz County, at present only 10.7 MW of backup power is necessary on the highest demand days. Based on statistical results, backup power, without any additional measures, including load reduction or efficiency measures, adequate power is available about 99% of the time. This deficiency can be overcome also by additional distributed energy sources in the county or local generation sources. However, under no circumstances should the local utility, now UNS Electricity, be obligated to purchase unnecessary electricity. Based on this, from 11 MW to 50 MW, could possibly be needed from the TEP Transmission line in the next 15 to 20 years, not 100 MW. Purchasing 100 MW electricity, based on the present TEP FERC-approved wheeling rate of $2.33/kW/month, is (2.33x1000x100x12) $2,796,000 per year. For 15,000 customers is (2796000/15000) $186.40 per year for backup electricity. Primary power will never be purchased on the TEP transmission line, due to lower wheeling charges and cost on the present 115 kV transmission line. 74. **Recommendations**. (1) Change this sentence to read: "Citizens has over committed to purchase 100 MW of firm transmission capacity. Only 11 to 50 MW capacity will initially be necessary for backup purposes in Santa Cruz County." (2) And insert footnote to read: "Citizens originally committed to purchase to 100 MW of transmission capacity. The current Santa Cruz County maximum peak load was 58.7 MW in June 2002. A 100 MW exceeds the maximum peak load of MW by at least 70%, which would still exceed the County's highest demand, at 3% annual growth, for more than 20 years in the future. Since 48 MW of backup generation exists in Santa Cruz County, at present only 10.7 MW of backup power is necessary on the highest demand days. From 11 MW to 50 MW, could possibly be used from the TEP Transmission line during the next 15 to 20 years, not 100 MW. Purchasing 100 MW electricity, based on the present TEP FERC-approved wheeling rate of $2.33/kW/month, are (2.33 x 1000 x 100 x 12) $2,796,000 per year. For 15,000 customers is (2796000 / 15000) or $186.40 per year per customer for backup electricity, thus it is recommended that the "Citizens" requirement be changed from 100 MW to be a maximum of 50 MW or lower."
1.2.1	1-8	1/3 to 5	75. **Comment**. The present 115 kV line has been upgraded from having a thermal capacity of 60 MW to 100 MW, thus being off-line for that purpose has been overtaken by events. There still could be maintenance purposes to use the TEP Transmission line. 76. **Recommendation**: Change this sentence to read: "The TEP 345 kV transmission line could be used when maintenance is necessary on the existing 115 kV line."
1.2.1	1-8	3 (all)	77. **Comment**. This sentence implies that more than "initial" capabilities will be requested for this fiber optic cable. The ACC CEC Application indicated it would be used for commercial communications, and such was testified during the ACC Line Siting hearings that this was one of the significant benefits of the 345 kV transmission system. 78. **Recommendation**. Add new sentence at end of paragraph. "The fiber optic cable will be used in future commercial communication applications."

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 21 of 84

Comment No. 60-78 ***(continued)***

TEP's purpose and need has been revised in the Final EIS (see Section 1.2.1).

Magruder, Marshall
Page 22 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
1.2.2 Federal Agencies' Purpose and Need and Authorizing Actions	1-8	DOE. 1/7	79. **Comment**. The DOE, as lead Federal agency, issued the Notice of Intent to Prepare an Environmental Impact Statement and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement; Tucson Electric Power Company" on July 10, 2001. 80. **Recommendation**: Delete period and add "as indicated in the "Notice of to Intent to Prepare an Environmental Impact Statement and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement; Tucson Electric Power Company" in the *Federal Register* on July 10, 2001 (66 FR 35950 to 35952)."
1.2.2	1-8	DOE. 2 (general)	81. **Comments**. There are activities in the Department of Transportation that is appears coordination will be necessary before completion of the permit process for this system. 1. The **Federal Aviation Agency (FAA)** manages U.S. airspace, in particular, the FAA has designated Military Operation Area (MOA) named "Ruby One" under the operational responsibility of the Air National Guard managed by the 162nd Fighter Wing, Tucson, Arizona. This is 100 feet above ground, which means transmission lines will penetrate in this airspace, which has unique low level training capabilities. 2. **Office of Pipeline Safety** needs to determine the EMF, electrical field, and induced impacts of 2,000 MW capability in these lines, at 32 feet above ground, on both of the 908 pounds/square inch El Paso Natural Gasline (ELPG) line including its substations. The **minimum safe separation distance**, calculated by the ACC, was based on a 500 MW loading with a 45-foot height above ground. The Department of Homeland Security's US Border Patrol has concerns about the use of maintenance roads and visual markets to navigate which will increase human, pack-animal, and motorized traffic by illegal immigration into the US by terrorist, undocumented aliens (UDAs) and drug runners. **Recommendation**: Add coordination with the Department of Transportation including the Federal Aviation Agency (FAA) and the 162nd Fighter Wing, US Border Patrol and the Office of Pipeline Safety.,
1.2.2	1-9	USFS. 2/6 and 7.	82. **Comment**. There appear to be two types of use permits required by the USFS, similar to BLM. 83. **Recommendation**. To clarify, (1) in line 6, before "application" add "transmission line ROW land-use" and (2) in line 7, before "use" add "fiber optic communications ROW land-".
1.3.1 Issues Within Scope of the EIS	1-11	4/3 and 4	84. **Comment**. The correct name is the "Juan Bautista de Anza National Historic Trail." 85. **Recommendation**: add "National Historic" in line 4 after "Anza"
1.3.1	1-11	5/3 and 4	86. **Comment**. Other significant sites were not listed. 87. **Recommendation**. Before "and" add "Tumacacori National Historic Park,"
1.3.2 Issues Out of Scope of the EIS	1-12	2 (all)	88. **Comment**. This paragraph implies that because the Maestros Group proposal for a power plant in Nogales in Santa Cruz County, did not have air permit requests to the Arizona Department of Environmental Quality (ADEQ) or Pima County Department of Environmental Quality, that proposal could not be evaluated or assessed when comparing cumulative impacts of Alternatives. There is enough information in Maestros Group's Presidential Permit application to make basic assumptions about that system to be used in this analysis. The Mexican electricity company intends to procure 456 MW of energy by 2008 in the vicinity of Naco or Nogales with a request for proposal in 2004. 89. **Recommendations**. That the Maestros Group's Presidential Permit application for proposed combined cycle, natural gas turbine power plant, in or near the present Gateway Substation, with 100 MW for Nogales, Arizona, and 500 MW for Nogales, Senora be used in this analysis.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 22 of 84

Comment No. 79-80

The text is correct as written.

Comment No. 81

As discussed in Chapter 10 and Appendix A of the Draft EIS, consultations were conducted with the recommended agencies and organizations where appropriate.

Comment No. 82-83

The text is correct as written.

Comment No. 84-85

Section 1.7.1 of the Final EIS has been modified to include the full name of the Juan Bautista de Anza National Historic Trail.

Comment No. 86-87

The text is correct as written.

Comment No. 88-89

On May 10, 2001, DOE received an application for a Presidential Permit from the Maestros Group to construct a transmission line across the U.S.-Mexico border from a proposed power plant to be built in the Nogales, Arizona area. To date, Maestros Group has provided no additional information for DOE to continue processing their Presidential Permit application; as such, it is not considered a reasonably foreseeable action.

Magruder, Marshall
Page 23 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
1.3.1	1-12	2 (all)	(1) Delete this paragraph, 1.3.2 para 2.
1.3.2	1-12	4 (new)	(2) Insert a new paragraph at top of the page, in paragraph 1.3.2, to read "Five comments stated that the cumulative effects analysis (CEA) of the proposed project needed to consider a power plant in the vicinity of Nogales, Arizona. The Maestros Group Presidential permit application contains a description of a power plant in the Nogales area to serve the Nogales target areas, as required by 66 FR 35952, to contain a description of the second required Alternative necessary for this EIS."
1.3.2	1-12	5 (new)	(3) Add new fifth paragraph in paragraph 1.3.2 to read: **"A Cumulative Effects Analysis (CEA) will be completed as a part of this EIS. Each of the three Alternative routes proposed by TEP will be compared to the (1) Power Plant Alternative, and (2) No Action Alternative, as required by the Executive Office of the President Council on Environmental Quality (CEQ) *Considering Cumulative Effects Under the National Environmental Policy Act.* (CEQ 1997b)."**
1.3.2	1-12	2/3	90. **Comment**. Reference CEQ 1997 should be 1997b. 91. **Recommendation**. Change "1997" to read "1997b"
1.3.2	1-12	2/8	92. **Comment**. Reference PDEQ 2003 is given to a verbal with a Pima County Department of Environmental Quality. The requirement for the power plant is in Santa Cruz County.
Chapter 11	11-6	PDEQ 2003	93. **Recommendation**. Delete reference to PDEQ 2003 and Reference PDEQ 2003 in Chapter 11.
1.3.2	1-12	3/all	94. **Comment**. TEP testified during the ACC Power Plant and Transmission Line Siting Committee hearings, on several occasions, testified that 30 percent of the electricity on this transmission system would be from Mexico to the United States and that 70% would be from the US to Mexico. Further, after the major blackout on April 17, 2001, in both Sonora and Sinaloa, the Mexican C.F.E. manager was quoted in the newspapers saying that Sonora had several thousand megawatts of excess electricity, which as not a factor in this blackout caused by synchronization problems originating in Hermosillo, Sonora. 95. **Recommendation**: change third sentence of this paragraph to read "Thus, DOE considers the assertion by TEP that importing 30% of the electricity flow in these transmission lines, as claimed by TEP, to be speculative."
1.3.2	1-12	5 (all)	96. **Comment**. This paragraph seems to discount any alternative that does not "fulfill TEP's purpose and need." The purpose of an EIS is to weight the impacts of a project and various alternatives against the significant environmental impacts that such the target project. Obviously, the transmission lines are just one option to deliver electricity to customers. The requirement in the *Federal Register* "Notice of Intent" (66 FR 35952) dated July 10, 2001, to compare the "project" against two alternatives: (1) No Action Alternative, and " (2) Construction of a power plant in the U.S. closer to the U.S.- Mexico border with a shorter transmission line extending to the border, an alternative concept for supplying electric power to the target area." Thus, construction of a power plant in Nogales should be considered an Alternative and including in paragraph 1.3.1 and such comments deleted from paragraph 1.3.2. 97. **Recommendations** Change this paragraph to read: "Thirty-one commentators (or a smaller number, depending on how many comments reflected the local power plant Alternative, now in 1.3.1) suggested additional alternatives be considered in lieu of TEP's proposed project, a Local Power Plant Alternative and No Action Alternative. These alternatives included TEP exploring alternative sources of energy and promoting energy conservation. These suggested alternatives are not explicit enough to be considered as alternatives used in the comparisons in this EIS; however, both alternative sources of energy and promoting

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 23 of 84

Comment No. 90-91

Based on the rewrite of Chapter 1, the CEQ 1997 reference that was in Section 1.3.2 of the Draft EIS has been deleted.

Comment No. 92-93

The Pima County Department of Environmental Quality (PDEQ) controls the air quality in Pima County. Information obtained from PDEQ was used in the analysis and as such, reference PDEQ 2003 is used to cite the information.

Comment No. 94-95

The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS. Refer to the response to Sky Island Alliance, Comment 14, for further discussion of power plant construction in Mexico.

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the United States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

Comment No. 96-97

A new power plant in Nogales is not a viable alternative to a new, second transmission line. Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Magruder, Marshall
Page 24 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			energy conservation are discussed, in general terms, in Chapter 2." (2) See 2.3.1 and 2.3.2, which will be discussion oriented paragraphs. See below.
1.3.2	1-12	6/all	98. **Comment**. This paragraph discussion concerns a much different form of "reliability" than that involving local electrical service in Nogales. These "reliability" discussions concern national grid reliability when the US Western and Mexican Grids are interconnected as proposed by TEP. TEP has proposed to interconnect the US and Mexican Grids with this single transmission system and to remove about 50 Mexican generation plants from the Mexican C.F.E. Northwestern Region, which includes all of the Sonora and Sinaloa States, to over 650 miles south of the US-Mexican Border. TEP has not proposed any synchronization conversion equipment in its proposed plan to link the US/Mexican Grids. Only by physical separation, by an actual disconnection of the C.F.E. Northwestern Region from Mexican Grid, can this be accomplished. TEP testified during the ACC Line Siting Hearings that they hoped the Mexican generation plants and transmission system will be compatible and operate with the US Western Grid. None of the C.F.E. power plants or transmission equipment has been certified to meet any US Standard or approved processes. Without an AC-DC-AC converter, then large transients can freely cross between these two systems. The AC-DC-AC converter proposed by Public Service Company of New Mexico (PNM) required 25 to 40 acres and cost about $160,000,000, (about twice this entire transmission system), present significant EMF, and natural environmental impact. In addition, on April 17, 2001, both Sonora and Sinaloa States had cascading electrical failures, as was presented during the ACC Line Siting Hearings, including translations of Mexican newspapers. The ACC electrical engineer indicated this was a federal government responsibility as his concerns were the local reliability in Nogales. 99. **Recommendation**. **This "reliability" issue has never been satisfactorily addressed by TEP. The public, including industrial organizations, is concerned based on several newspaper articles that discussed the three different "grid" interconnection options, with that proposed by TEP, having unacceptable reliability. Strongly recommend the rational and interconnection solution be presented in the Final EIS.**
1.3.2	1-12	7 (all)	100. **Comment**. This paragraph implies that "stage of decision making" impacts environment impacts. This is an erroneous assumption since the Public Service of New Mexico (PNM) Presidential Permit Application to the DOE provides the design characteristics, economic impacts, various criteria which use some of the same Right-Of-Way (ROW) at proposed by TEP. A comparison is necessary to determine the differences between these two proposals, to determine if none (No Action), one or two transmission systems are needed, and these Alternatives compared to the "Local Power Plant Alternative" required by the DOE. There are many features of the PNM transmission line system that are technically superior, such as inclusion of an AC-CD-AC converter station to keep the present Mexican electrical grid separate and independent of the US Western Grid. In addition, the capacity of the PMN system is for only 1,000 MW at 230 kV (found in Sonora Mexico), while the TEP system is for 2,000 MW at 345 kV (not existing in Sonora) transmission systems. The economic analysis from PNM shows significant increases in property tax revenue in Santa Crux County when compared to estimates for TEP's system (even though TEP has no estimates of property tax revenue changes in this Draft EIS).. 101. **Recommendations**. (1) Delete this 7th paragraph. (2) Add comparisons with the PNM transmission system that crosses both Pima and Santa Cruz Counties in the next update to this EIS. Without

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 24 of 84

Comment No. 98-99

As part of DOE's decisionmaking process on whether to grant a Presidential Permit for the proposed project, DOE will determine whether the proposed project would adversely impact the reliability of the U.S. electric system. Also, before authorizing exports to Mexico over the proposed 345-kV facilities, DOE must ensure that the export would not impair sufficiency of supply within the United States and would not impede, or tend to impede, the coordinated use of the regional transmission system.

Comment No. 100-101

The consideration of impacts from the PNM proposal has been eliminated as described in Section 5.2 of the Final EIS.

Magruder, Marshall
Page 25 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			this information, the cumulative environmental impacts of two transmission line systems cannot be compared by the DOE, USFS, BLM or the Arizona Corporation Commission decision makers. Nor can these decision makers make the required NEPA comparison with the Local Power Plant Alternative.
1.3.1	1-11	After 6th paragraph, New	(3) Add a new paragraph within section 1.3.1 (p. 1-11) to read: "Two commentators suggested coordinating routes and review processes with the Public Service of New Mexico's (PNM's) proposed transmission line project in Pima County, Santa Cruz County, and Sonora Mexico. The comparisons in Table 2.3-1 includes the impact of this Alternative. For the PNM information, their "pipeline" route and substation in Nogales were used in this comparison."
Table 2.3-1	2-30 to 2-41	New Column before No Action	(4) In Table 2.3-1, add a new column titled "PNM Pipeline Alternative" and the appropriate comparison information. (5) Add in the next version of this EIS, a comparison of the property tax changes for both Pima and Santa Cruz County, with breakouts by all impacted School and Fire Districts.
Chapter 2 Proposed Action and Alternatives	2-1	1/3	102. **Comment**. As worded, this action only indicates that a transmission line with be evaluated "to the U.S.-Mexican border." This line continues 60 miles south to Santa Ana, Sonora, Mexico. Impacts and decisions on the Mexican portion of this transmission system are critical and necessary to be designed, concurrently and coordinated with, the U.S. portion of the system. In additional, the significant environmental impacts in Mexico may have impacts, in particular, cumulative impacts on the U.S. side. Thus, the entire system, including Mexican Alternatives, needs to be included in this Chapter. If these Mexican routes have been designed and environmental impacts developed, to the same standards as required by NEPA, then inclusion of that study needs to be an appendix to this EIS. For example, there is not 345 kV transmission lines in the target area of Mexico. How will be work, additional substations necessary for converters, and interconnection with other power sources in Mexico, substations, and transmission line impacts must be included so decision makers can evaluate impacts of Mexican options on the U.S. and so that Mexican decision makers can evaluate U.S. options on their alternatives, with the final system representing the optimal of the two. 103. **Recommendation**. Before the period of the first sentence, add "and continuing to the designated substation in Santa Ana, Sonora, Mexico."
Chapter 2	2-1	2/3 and 4	104. **Comment**. The proposed project also includes a 115 kV transmission line to the Valencia Substation in Nogales, Arizona. 105. **Recommendation**. after "(Gateway Substation)" add "and a 115 kV single circuit line to the Valencia Substation"
2.1 Alternatives	2-1	1/7 to 9	106. **Comment**. There are four Alternatives to be addressed in the EIS, in addition to the No Action Alternative. 107. **Recommendation**. Change this sentence to read: "There are five Alternatives addressed in this EIS. These are TEP's preferred alternative, TEP's Western Corridor Alternative, TEP's Central Corridor Alternative, and a new TEP's Crossover Corridor Alternative; and the Local Power Plant Alternative; and the No Action Alternative."
2.1	2-1	1 (at end)	108. **Comment**. During the ACC Transmission Line Siting Committee hearings and in the Joint TEP-Citizens CEC Application, two Alternatives were provided for the 115 kV portion of the proposed system. These need to be included in this EIS, and a table, similar to Table 2.3-1 be included. 109. **Recommendation**. See comments below for new Table 2.3-2.
2.1	2-1	2 (all)	110. **Comment**. This draft EIS implies in this paragraph that "the 125-foot (38 meter) transmission line right-of-way (ROW)" will be or could be adequate for the 345 kV portions of the project. The 125-foot width for the ROW is based on two factors (1) the effects from a 500 MW electrical and

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 25 of 84

Comment No. 102-103

See response to Comments 25-27 above.

As part of the analysis of potential impacts in the United States, DOE made the conservative assumption that there would be simultaneous construction in Mexico of a transmission line connecting to TEP's proposed project in the United States that could have air quality impacts in the United States. These potential air quality impacts are evaluated in Section 4.8.3. DOE is not aware of any other past, present, or reasonably foreseeable future actions in Mexico that could result in cumulative impacts in the United States. Likewise, DOE is not aware of any design or impact evaluation documents for the connecting Mexican portion of the transmission line that could be included as an appendix to this EIS.

Comment No. 104-105

The Final EIS have been revised to evaluate the proposed 115-kV transmission line between the Gateway and Valencia Substations in Nogales, Arizona as part of the proposed project.

Comment No. 106-107

See response to Comments 52-53 above.

Comment No. 108-109

The Final EIS has been revised to evaluate the proposed 115-kV transmission line route between the Gateway and Valencia Substations in Nogales, Arizona as part of the proposed project. TEP is not pursuing the alternate 115-kV transmission line and it is not evaluated in the EIS.

Comment No. 110-111

The ROW width of 125 ft (38.1 m) was established by TEP as part of their project design, which includes operating the transmission line at 500 MW total, the maximum level at which the proposed 345-kV transmission line would be operated (refer to the response to Border Power Plant Working Group, Comment 2).

Magruder, Marshall
Page 26 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			electromagnetic frequency (EMF) effects and (2) offset requirements between the transmission line ROW from the EPNG pipeline ROW.sff Due to capability of transmission of 2,000 MW (1,000 per circuit) on this system, the design must account for that level of power being transferred, even though a request to operate the system is initially planned at 500 MW. All values computed at 500 MW need to be revised to reflect 2,000 MW of peak long-term power being transferred through this system. The calculations in the ACC Line Siting Committee used NGI-103 were for 500 MW and 42 feet above ground, for only one of the two national gas pipelines in the easement, and need to be redone and agreed between TEP and the El Paso Natural Gas Company, the Arizona and Federal Office of Pipeline Safety, **prior to approval** in the Final EIS. 111. **Recommendations**: (1) Determine the appropriate "stand off" distance or minimum separation between the transmission and natural gasline ROW and this impacts all final siting decisions. (2) Change all references to the correct ROW.
2.1	2-1	4 and all 5 bullets under this paragraph	112. **Comments.** The set of "corridor identification" principals used by TEP were not followed in the selection of the TEP preferred alternative. In particular all of these principles were violated by the Western and Crossover Alternatives • First bullet – Stay within existing utility corridors was ignored from TEP Cypress Sierrita Substation to south of Ruby Road when it joins the EPNG gasline in the USNF designated utility corridor. From Pima County until last three miles to Nogales, and from Gateway to Santa Ana, Sonora is NOT within an existing corridor. • Second bullet – Be parallel to existing infrastructures was not followed in the path discussed under the first bullet. • Third bullet – Following existing legal or jurisdictional boundaries, was not done. • Fourth bullet – Avoid sensitive areas of biological or historic wealth was not followed as the National Forest region has the highest number of protected species of any of the routes, and • Fifth bullet – Avoid the viewshed of the most concentrated residential areas, may have been accomplished for the southern area, but the new growth in Sahuarita and southern Green Valley will be within the viewshed of these transmission lines. Since maybe just one of these five principles were followed when establishing the TEP preferred alternative, and only route approved by the ACC, then deletion of this paragraph is highly recommended. **There is no reason to list five design principles that were NOT followed.** 113. **Recommendation**: Delete Second paragraph, starting with "Commencing in 1995... " to the end of the page, after the fifth bullet.
2.1	2-2	1 and all 3 bullets under this paragraph	114. **Comments.** TEP evaluation of potential alignments considered three factors. • First bullet – Feasibility of construction and cost was not considered for the TEP preferred alternative as it is the most expensive and difficult to construct. • Second bullet – ability to acquire all regulatory permits – there are at least ten additional permits required for the TEP preferred alternative, several that have the highest probably if not being granted. • Third bullet – ability to meet TEP's purposes including providing sufficient power reliability in Nogales, Arizona is met by any second redundant route, as it is redundancy reliability as long as 100 MW, the maximum necessary load for Nogales, Arizona, for at least the next two decades. Since none of these considerations were more favorable for the TEP

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 26 of 84

Comment No. 110-111 *(continued)*

Refer also to the response to MM-4 in the public hearing transcript for Nogales, AZ September 26, 2003, 5 p.m. to 7 p.m. transcript.

Comment No. 112-113

The description of TEP's corridor and substation location identification process was provided by TEP, and was included in this EIS to provide background information on how TEP identified potential transmission line corridors. The merits of TEP's corridor identification process are beyond the scope of this EIS; the Federal agencies conducted an independent review of the transmission line corridors proposed by TEP, adding the Crossover Corridor as a result of public scoping and tribal input. The description of the corridor and substation location identification process remains in the EIS as relevant background information.

Comment No. 114-115

Refer to the response to Magruder Comment No. 112-113. The description of the factors used by TEP to evaluate potential transmission line alignments was provided by TEP, and remains in the EIS in Chapter 2 as relevant background information.

Magruder, Marshall
Page 27 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			preferred route, inclusion in the EIS is not recommended. 115. **Recommendation**: Delete this paragraph, starting with "TEP evaluated... " To the end of the paragraph, after the third bullet.
2.1	2-2	2 (all)	116. **Comment**. **There is no requirement to start at the South Substation**, since both the Bucknell and Cypress Serrita Substations could have provided a node for this network, at lower voltage 115 kV or 138 kV, while providing a 100 MW load, the maximum necessary for Nogales, Arizona. 117. **Recommendation**. Delete the second sentence. It is obviously not a requirement for meeting the system's needs.
2.1	2-2	4/1	118. **Comment**. **The principles above were deleted, since they were not met by TEP's proposed alternative.** 119. **Recommendation**. Delete "Using these principles,".
2.1.1 Western Corridor	2-2	1/1	120. **Comment**. The Western Route is the "default" DOE's preferred alternative which might change in the Final EIS. Thus, making this a declarative statement in the draft EIS maybe OK; however, until the DOE's Record of Decision (ROD) has been issued, no such statement is official. It was believed that the ACC's decision that only the Western Route was at all appropriate was intended. 121. **Recommendation**: Change "DOE's" to read "the Arizona Corporation Commission's (ACC) only approved route"
2.1.1	2-2 2-6	1/last line 1/first line	122. **Comment**. Reference is made to "Figure 3.1-1 (Existing Utility Infrastructure)."This should be Figure 3.11-1 123. **Recommendation**. Change "3.1-1" to read "3.11-1"
Figure 2.1-1 Close-up of Alternative Study Corridors near Sahuarita and Green Valley	2-3	Left side	124. **Comment**. The El Paso Natural Gasline is shown as a dashed line. In the "All Corridors" North-South segment, from Camino del Toro to the split into the Central and Western/Crossover Corridors, the route appears to be a straight line, which is not associated with the EPNG pipeline. In addition, the Caterpillar Test and Training facility needs to be shown. 125. **Recommendations**. (1) If the intended "All Corridors" segment, in this area, is separated and straight, then no change is necessary. If the two ROW are parallel, then the straight "All Corridors" segment should be redrawn to clearly show parallelism with the EPNG pipeline ROW. (2) Show the **Caterpillar Test and Training facility boundaries**.
Figure 2.1-1 Figure 2.1-4 Figure 3.7-1 Figure 3.7-3 Figure 3.11-1 Figure 4.2-3 Figure 4.2-7 Figure 1 Figure 2	2.3 2-9 3-71 3-74 3-91 4-24 4-30 C-3 C-4	Center 2-9 3-71 3-74 3-91 4-24 4-30 C-3 C-4	126. **Comment**. The incorporated area of the Town of Sahuarita has been greatly expanded. 127. **Recommendation**. Show the current limits the Town of Sahuarita.
Figure 2.1-2	2-4	Lower	128. **Comment**. The Tubac Fire Department station, Tubac Presidio State Historic Park and Tumacacori National Historic Parks are not shown. 129. **Recommendation**. Show the Tubac Fire Department station, Tubac Presidio State Historic Park and Tumacacori National Historic Parks locations.
Figure 2.1-3	2-5	Lower	130. **Comment**. The Rio Rico and Nogales Fire Department stations, nor is the Coronado National Forest Nogales Ranger Station are not shown. 131. **Recommendation**. Show the Rio Rico and Nogales Fire Department stations and the Coronado National Forest Nogales Ranger Station locations.
Figure 2.1-3 Figure 3.7-1 Figure 3.7-3	2-5 3-71 3-74	Lower Lower Lower	132. **Comment**. The "in-holdings" within the National Forest are not shown. 133. **Recommendation**. Show all "in-holdings" within the National Forest as white.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 27 of 84

Comment No. 116-117

Refer to the response to MM-8 in the public hearing transcript for Green Valley, AZ September 25, 2003, 3 p.m. to 5 p.m.

Comment No. 118-119

Refer to the response to Magruder Comment No. 112-115. The principles used by TEP remain in the EIS.

Comment No. 120-121

DOE correctly identified the Western Corridor as DOE's preferred alternative in the Draft EIS for the reasons stated (in light of TEP's preference and the ACC's decision to site TEP's proposed line along the Western Corridor). DOE accepted public comments on this designation through the Draft EIS public comment period, and has taken these comments into account in the Final EIS. DOE and each of the cooperating agencies are authorized to select their own alternative(s) for approval or denial in the ROD, regardless of the actions of other agencies or the designation of preferred alternatives in the Draft or Final EIS.

Comment No. 122-123

The reference to Figure 3.1-1 has been corrected to Figure 3.11-1 in the Final EIS.

Comment No. 124-125

The All Corridors segment is correct as shown. The Caterpillar Test and Training facility was added to Figure 2.1-1.

Comment No. 126-127

The limits of the incorporated area of the Town of Sahuarita have been expanded on figures throughout the EIS.

Magruder, Marshall
Page 28 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
Figure 1	C-3	C-3	
2.1.1	2-6	1/ (all)	134. **Comment**. This paragraph indicates that "transmission line tensioning and pulling and fiber-optic splicing sites… averaging 0.5 to 1.5 acres in size…estimated 12 sites outside the national forest…14 sites on the Coronado National Forest" These are not shown in a Figure or map. There is no table that shows the size of each and the totals for inside and outside the National Forest. 135. **Recommendations**. (1) Please provide the locations of the fiber-optic splicing sites on a map and a table that tabulates the appropriate data about each of the 26-transmission line tensioning and pulling and fiber-optic splicing sites. (2) Add the following new sentence at the end of this paragraph. "See the map in Figure 2.1.1-X and the summary in Table 2.1.1-Y of tensioning and pulling sites and fiber-optic splicing sites along the Western Corridor."
2.1.1	2-6	1/1 to 2	136. **Comment**. There is a reference to fiber-optic splicing sites in section 2.2.3. A review of 2.2.3 fails to find reference to fiber-optic slicing sites and how such activities would temporarily disturb land. 137. **Recommendations**. (1) Either in 2.1.1 or in 2.2.3 please add a discussion as the impact and disturbance of land that the fiber-optic sites would have. (2) Further, please provide the locations of the fiber-optic splicing sites on a map.
2.1.1	2-6	3/7	138. Comment. The last part of this sentence indicates that the TEP 345 kV **transmission** line passes "just east of the existing TEP Cyprus Sierrita Substation." Thus, there are questions concerning interconnection with that 138 kV substation. From an overall reliability viewpoint, a 345/138 kV transformer would provide another option for TEP to route power, establish backup routes between sites, and to make a more robust network. The latest TEP "Ten Year Transmission Plan" provided to the ACC does not contain any reference for such an interconnection in the next decade. 139. **Recommendation**. That TEP consider such an interface to make the proposed TEP transmission line system more reliable.
2.1.1	2-6	5/6	140. **Comment**. The 115 kV transmission line from the Gateway Substation to the Valencia Substation was omitted in the discussion. 141. **Recommendation**. Before the last sentence in this paragraph, add a new sentence to read: "A single-circuit, 115 kV transmission line will continue east from the Gateway Substation to the Valencia Substation in Nogales on Grand Avenue."
2.1.2 Central Corridor	2-6	1/2	142. **Comment**. This implies that the Central Route continues along the EPNG pipeline for 43.2 continuous miles. The TEP ACC CEC Application had a dog-leg in the vicinity of Tubac for the Central Route with the Eastern Route going along the EPNG pipeline. As shown in TEP 2001 (ACC CEC Application) Exhibit A-4b, Segment 9 leaves the El Paso Gas pipeline going SSW, from a point just south of the Agua Linda I-19 exit, then going south, from a point about west of the Chavez Siding I-19 exit, to the west of Cerro Pelon, a small, "butte-like" hill, continuing south to Aliso Spring Road, then southeast to rejoin the EPNG pipeline to the west of the Tumacacori I-19 exit. Segment 10, labeled Eastern Route, continues along the EPNG pipeline route. 143. **Recommendation**. At the end of this sentence, before the period add "except for Segment 9 (TEP 2001, Exhibit A-4b) which separates to west from the EPNG pipeline, to pass west of Cerro Pelon, in the vicinity of Tubac, and rejoins EPNG pipeline, west of the Tumacacori I-19 exit."
2.1.2	2-7	1/12	144. **Comment**. This paragraph indicates that "transmission line tensioning and pulling and fiber-optic splicing sites… averaging 0.5 to 1.5 acres in size…estimated 12 sites outside the national forest…17 sites on the Coronado National Forest" These are not shown in a Figure or map. There

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 28 of 84

Comment No. 128-129

The Tubac Presidio State Historic Park and Tumacacori National Historic Parks have been added to Figure 2.1-2. Fire stations are not typically environmental or cultural resources or locations of special interest and are not included on the maps.

Comment No. 130-131

Fire stations and ranger stations are not typically environmental or cultural resources or locations of special interest and are not included on the maps.

Comment No. 132-133

The in-holdings of private land on the Coronado National Forest are shown in Figure 1.1-4. Other maps in the EIS that include the Coronado National Forest Tumacacori EMA do not show in-holdings for purposes of presenting simplified, user-friendly maps.

Comment No. 134-135

The exact locations of the tensioning and pulling sites and fiber-optic splicing sites would depend on the final precise siting of the ROW and support structures, which would occur after each agency has issued a ROD, as stated in Section 3.1.1 of the Final EIS. This would allow for mitigation of potential environmental impacts by resource specialists. Section 2.2.4 (Shield Wire and Conductor Stringing) states that stringing and tensioning sites and fiber-optic splicing sites would be selected to avoid environmentally sensitive resources, in coordination with land owners and managers. The description of the number, size, and general selection of tensioning and pulling sites presented in the Final EIS is adequate for evaluating potential environmental impacts.

Comment No. 136-137

Fiber-optic splicing sites are discussed under Shield Wire and Conductor Stringing in Section 2.2.4. Refer to the response to Magruder Comment No. 134-135 regarding the exact siting of the fiber-optic splicing sites.

Magruder, Marshall
Page 29 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			is no table, which shows the size of each and the totals for inside and outside the National Forest. 145. **Recommendations**. (1) Provide the locations of the fiber-optic splicing sites on a map and a table that tabulates the appropriate data about each of the 21-transmission line tensioning and pulling and fiber-optic splicing sites. (2) Add the following new sentence at the end of this paragraph. "See the map in Figure 2.1.2-X and the summary in Table 2.1.2-Y of tensioning and pulling sites and fiber-optic splicing sites along the Central Corridor."
2.1.3	2-8	1/6	146. **Comment**. This paragraph indicates that "transmission line tensioning and pulling and fiber-optic splicing sites… averaging 0.5 to 1.5 acres in size…estimated 12 sites outside the national forest…12 sites on the Coronado National Forest" These are not shown in a Figure or map. There is no table, which shows the size of each and the totals for inside and outside the National Forest. 147. **Recommendations**. (1) Provide the locations of the fiber-optic splicing sites on a map and a table that tabulates the appropriate data about each of the 24-transmission line tensioning and pulling and fiber-optic splicing sites. (2) Add the following new sentence at the end of this paragraph. "See the map in Figure 2.1.3-X and the summary in Table 2.1.3-Y of tensioning and pulling sites and fiber-optic splicing sites along the Crossover Corridor."
2.1.4 Alternatives Considered but Eliminated from Further Analysis	2-8	1/1	148. **Comment**. The expression "alternative identification process" was discussed in section 2.1, third paragraph. Based on discussion above, this process was not followed, thus deleted. 149. **Recommendation**. Delete ""alternative identification process," as this process was not followed for TEP's preferred alternative corridor.
Figure 2.1-4	2-9	Lower center	150. **Comment**. The Tubac Presidio State Historical Park (S.H.P.); Robert Damon Rio Rico, Sonoita Creek and San Rafael Valley State Parks (S.P.), and Sonoita State Conservation Area (S.C.A.) are not shown. The Tumacacori N.H.P. should be correctly titled as the "Tumacacori N.H.P. 151. **Recommendation**: Show the Tubac Presidio S.H.P., Sonoita Creek S.P. and San Rafael Valley S.P. similar to how the Tumacacori N.H.P is indicated in this figure
2.1.4

Magruder, Marshall
Page 30 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
2.1.4	2-10	2/No. 1/fourth line	155. **Comment**. This first reason indicates "a single event such as a wildfire could cause the loss of both transmission lines, completely cutting off electricity transmission to Nogales, Arizona." This fails to account for the present local generation capabilities of 48 MW, which is sufficient for over 99% of the time as backup generation. Thus, loss of all "transmission" does not lose electricity to Nogales. 156. **Recommendations**.
2.1.4	2-10	No. 1/4	(1) In line four, delete the following: ", completely cutting off electricity transmission to Nogales, Arizona"
2.1.4	2-10	No 1/4	(2) Adding in place, "which would make parts of Santa Cruz County and Nogales, Arizona dependent upon its backup 48 MW of local generation during such a transmission line outage."
2.1.4	2-10	2/No. 3/(all)	157. **Comments**. This third reason indicates that lengthy outages of the existing Citizens [now UNS Electricity] transmission line, given its proximity, thereby cutting off transmission to Nogales during construction." Most transmission line companies repair and replace "hot" conductors, to 500 kV, using various equipment to hold the "hot" line while stringing the replacement. This is a routine practice. 158. **Questions**. (1) Does TEP have the capability repair and replace "hot" transmission lines? (2) If not, could TEP consider hiring a company that can do this, as this is a common world-wide industry practice? (3) Since such outages would be planned, why would the local generation not be able to hold the load, with its substations forming a temporary island?
2.1.4	2-10	No. 3 (all)	159. **Recommendation**. This reason is invalid. Delete this third "reason."
2.1.4	2-10	5 (all)	160. **Comment**. This sentence contains two concepts and omits another factor in this decision as discussed in the recommendation. 161. **Recommendation**: Replace paragraph number 4, with new paragraphs 4 and 5 to read as follows: "4. This route is more visually obtrusive than the Western or Crossover Corridors as expressed by residents of Santa Cruz Valley during DOE Scoping Meetings. "5. The Eastern route was declared infeasible by TEP prior to commencing the ACC Transmission Line Siting Committee hearings and was never considered viable."
2.14 Construction of a Power Generating Station Near Nogales	2-11	4 (all)	162. **Comment**. This paragraph discusses construction of a power plant alternative near Nogales which TEP rejects for including in this version of the draft EIS. The *Federal Register*, 66 FR 35952, states that "**The EIS will also consider alternatives** to the proposed [TEP] transmission lines, including, to the extent possible: (1) No Action Alternative…(see presently numbered section 2.1.5) (2) **Construction of a powerplant** in the U.S. closer to the U.S.-Mexico border with a shorter transmission line extending to the border, an alternative concept for supplying electric power to the target region." **Such an Alternative may not rejected by TEP "because it would not fulfill TEP's purpose." This EIS is being developed under the management of the Department of Energy.** This Alternative is required by the DOE Notice to Prepare an Environmental Impact Statement…" in the *Federal Register*. In fact, **this "fifth" Alternative must be in all tables, all assessments, and all analysis in this EIS**. Anything less, such as described on page 2-10 (5th paragraph). "Because TEP has asserted that it does not want to pursue a given alternative route and DOE will not decide otherwise, it would be a waste of time and resources to evaluate an alternative that eh applicant rejects…The Applicant bears the risk that if it changes its mind in the future… additional environmental review would be required." Supporting the viability of a local power plan, during the ACC TEP Line

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 30 of 84

Comment No. 150-151

The suggested features have not been added to the map for purposes of presenting simplified, user-friendly maps. The Tumacacori National Historic Park has been removed from this map for consistency purposes.

Comment No. 152-154

TEP's application to DOE on August 17, 2000 for a Presidential Permit included three proposed corridors the Western, Central, and Eastern. DOE began the NEPA process based on this application. During the preparation of the EIS, TEP determined the Eastern Corridor to be unsuitable, and subsequently requested that DOE remove the Eastern Corridor from the EIS as a viable alternative. TEP's analysis and consultation with DOE and the cooperating agencies on the Eastern Corridor took approximately 2 years, concluding with TEP's July 3, 2002, letter. The reasons cited by TEP in its letter requesting removal of the Eastern Corridor from further analysis are correctly summarized.

Comment No. 155-161

The reasons cited by TEP in its letter requesting removal of the Eastern Corridor from further analysis are correctly summarized. The Eastern Corridor was eliminated from further consideration in this EIS because of the reasons given by TEP in a letter to DOE (TEP 2002a) that rendered it infeasible (see Section 2.1.5 for further discussion of elimination of the Eastern Corridor).

Comment No. 162-165

Section 1.2 explains the roles of TEP and the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit

Magruder, Marshall
Page 31 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			Siting Hearings, testimony by the ACC's Mr. Jerry Smith, stated **such a power plant**, if it had connections to two substations, and thus met the N-1 "best practices rule" it **would be adequate to meet the "second transmission line" requirements of ACC Order 62011**. In fact, such a power station would give Nogales triple redundancy, with a predicted transmission line outage rate of 0.0004 second per year. Thus, a local power plant has superior reliability, when compared to the predicted 1.74 seconds of transmission outage per year for a second redundant transmission line, which is NOT a function of voltage, but redundancy. These predicted figures use the worst-case analysis, based on the actual 115 kV line's 17 outages during the period of highly unreliable service in Nogales, when over 10 hours of outage resulted from transmission line failures during a five-year period. It should also be noted, that many of these outages were human caused and independent of the actual transmission line. During the same five years, there were 2,304 distribution outages that were the primary cause of low reliability in Santa Cruz County. The proposed line is the most expensive solution as it provides over 35 times more power than could be used in Santa Cruz County (Nogales), only 2% to 5% of its capacity will ever be used at one time, and it will raise rates by $30 per month per resident for 2 hours of "backup" usage per year. Further, during these hearings, it was repeatedly pointed out to TEP that there was absolutely NO way it's proposal would meet the December 31, 2003 deadline since it took nearly 9 months just to get started in this EIS.
21.4	2-11	4(all)	163. **Recommendations**: (1) Delete the paragraph, "Construction of a Power Generation Station Near Nogales" since this Alternative is required by the DOE and is a logical competition for a transmission line, either generate or transport electricity to users. (2) Add new paragraph 2.1.5 be added (see next comment below), (3) Renumber present paragraph 2.1.5 to 2.1.6.
2.1.5 (new) Local Power Plant Alternative	2-12	New (all)	164. **Comment**. Since the Local Power Plant Alternative is required, based on the requirements of the Federal Register, and such an alternative is essential to conduct analysis, evaluation and make decisions on the merits of generation versus transmission environmental impacts. 165. **Recommendation**. Add new section 2.1.5 to read as follows: **"2.1.5 Local Power Plant Alternative** As required by the Notice of Intention to prepare this Environmental Impact Statement (66 FR 35950-35952), an alternative shall be included for construction of a power plant in the U.S. closer to the U.S. Mexico border with a shorter transmission line extending to the border, an alternative concept for supplying electric power to the target region. Since this alternative was not proposed by TEP, then a set of assumptions are necessary for this power plant. First, there are two target areas, Nogales, Arizona and the same Santa Ana Substation, Sonora, Mexico. The Nogales power plant generation capability will be to have up to 100 MW. The Santa Ana portion of the power plant generation will be 456 MW, to be requested by C.F.E. in a request for proposals to be issued in 2004 for delivery starting April 2007 for a 25-year contract. Second, the TEP's locations will be used by the Power Plant Alternative, with the Gateway substation for this natural gas combined cycle, air cooled, turbine, using standard turbines, such as General Electric LM-2500 series, that meets or exceeds all US environmental requirements. Third, the power plant will have two 115 kV transmission lines, one to the Valencia Substation, using the same ACC authorized corridor and the second to the Southern Rio Rico Substation, about 8 miles to the north. The

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 31 of 84

Comment No. 162-165 *(continued)*

is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line. Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Magruder, Marshall
Page 32 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			115 kV line will use the same EPNG corridor as used by TEP, for most of the distance, until about parallel with the South Rio Rico substation, then east to interconnect, after passing over Interstate 19."
2.1.5 (old) changed to 2.1.6	2-12	All	166. **Comment**. The No Action Alternative section, should be last. 167. **Recommendation**. Renumber section 2.1.5 to "2.1.6".
2.1.5 (old) changed to 2.1.6	2-12	1/8 to 11	168. **Comment**. The last sentence appears to confuse a transmission line to Mexico, requiring a Presidential Permit, with the ACC required "second transmission line" to Nogales, required by ACC Order 62011. 169. **Recommendations**. To clarify, make the following changes: (1) in line 9, before "transmission line" add "345 kV" (2) in line 10, before "'transmission line" add "115 kV" (3) in line 11, before the period add "; however, TEP would have to have to appear before the ACC Power Plant and Transmission Line Siting Committee with a new application for any transmission line rated at 115 kV or higher."
2.2.1 Substation Upgrades and Additions and Fiber-Optic Regeneration Site	2-12	1/5	170. **Comment**. The South Substation is adjacent to the Tohono O'odham San Xavier Indian Reservation. The Tohono O'odham Nation has expressed concerns about changing transmission lines within five miles of their reservation. 171. **Question**. Where have the complaints of this Indian Nation been addressed, in particular, their concern about transmission line within 5 miles of their reservation, in the EIS? 172. **Recommendation**. Add new sentence at end of paragraph to read: "The South Substation is south of West Pima Mine Road. To the north is the Tohono O'odham San Xavier Indian Reservation."
2.2.1	2-12	1 (all)	173. **Comment**. The South Station meets the requirements to be classified as a "critical facility" since it will initially have operational capabilities that will include over 40% of the peak electricity power requirements for City of Tucson and Pima County. When, the proposed TEP transmission line and its interconnections, at full operational capability to the South Substation it is required to consider the final configuration of South Substation and it's impact on the Santa Cruz River. As discussed, a 100-foot expansion to the southeast is required for 500 MW, or will this also be adequate for 2,000 MW? 174. **Questions**. (1) If additional an additional expansion for 1,500 MW is required, where will this be located? Has the expansion of the South Substation been approved by the US Corps of Engineers, under Sections 401 and/or 404? (2) Has Pima County Flood Control and Town of Sahuarita reviewed and approved the plans for expansion of South Substation? 175. **Recommendations**. (1) Provide details as to expansion of the South Substation in the vicinity of the Santa Cruz River. (2) Show the 100-year and 500-year flood plains on map showing the 500 MW and 2,000 MW configurations for the TEP Transmission line interconnection. (3) Provide a copy of the response in an Appendix, from the US Corps of Engineers, under Sections 401 and/or 404, concerning the South Substation expansions, including an initial 500 MW operational and the total 2,000 MW capabilities. (4) Provide the responses in an Appendix, from Pima County Flood Control and the Town of Sahuarita, concerning South Substation expansions, including an initial 500 MW operational and the total 2,000 MW capabilities.
2.2.1	2-12	1/5	176. **Comment**. The South Substation is adjacent to the Santa Cruz River, thus flooding is always a concern.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 32 of 84

Comment No. 166-167

Section 2.1.4, Alternatives Considered but Eliminated from Further Analysis, in the Draft EIS has been renumbered to Section 2.1.5 in the Final EIS for logical flow of the alternatives.

Comment No. 168-169

The text is correct as written.

Comment No. 170-172

Sections 3.4.2 and 4.4.2 address Native American concerns. The San Xavier District of the Tohono O'odham Reservation is shown on Figure 2.1-1.

Comment No. 173-175

The proposed project would be operated at 500 MW (refer to the response to Border Power Plant Working Group, Comment 1). The RODs to be issued by each agency would require compliance with all applicable regulations, including any requirements of the Town of Sahuarita or Pima County Flood Control.

Comment No. 176-177

Environmental effects of the proposed project are described in Chapter 4, not Chapter 2 (see Section 4.7 for Water Resources).

Magruder, Marshall
Page 33 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			177. **Recommendation**. Add new sentence at end of paragraph to read: "See Appendix C for the Floodplain Assessment information concerning the South Substation."
2.2.1	2-13	3/6 to 9	178. **Comment**. The last sentence discusses "light spilling offsite." This needs to conform to all Arizona, Pima County and Town of Sahuarita Lightning Statues and Ordinances. 179. **Recommendation**. "All outdoor lighting at the South Substation will conform with all current all lighting statutes, ordinances and regulations, in particular, the types of lights, shielding requirements, intensity and other requirements."
2.2.1	2-13	4/1	180. **Comment**. The designs with respect to the floodplain will need to be submitted to the US Army Corps of Engineers as a part of their Section 401 and 404 reviews. 181. **Recommendation**. Please provide a copy of these designs in an Appendix for public review, in particular, by the Town of Sahuarita, the Tohono O'odham Nation, Pima County, and US Army Corps of Engineers and subsequent comments and/or approvals in an Appendix for public review.
2.2.1	2-13	4/3 and 4	182. **Comment**. There are various hazardous peteroleum products, including oil-filled equipment, installed at the South Substation. 183. **Questions** (1) What are these fluids, the quantities for each, their purpose and safeguards used? (2) Where will these be located with respect to the Santa Cruz River, including distance? (3) How containment will be determined for each product? (4) Will any of these fluids be able to reach the Santa Cruz River? 184. **Recommendations**. Please provide a table listing this data, buy fluid type.
2.2.1	2-13	4/4 to 7	185. **Comment**. An alarm system will be installed; however, it is not described. 186. **Questions** (1) Which of these fluids will be in alarmed systems? (2) What will these alarms monitor? (3) Where is the "operations center" how far is it from South Substation? (4) What is the response time for a qualified person to reach the Substation from the operations center and time required to contain the "worst case" leak? (5) Are any of these fluids carcinogens, such as PCBs? (6) What will be the impact on this "alarm system" from a 100-year and 500 year flood? (7) What is the amount of liability insurance that TEP carries that covers the liabilities from dangerous spills? 187. **Recommendations**. Please include the answers to the above questions prior to the final EIS to local "first responders" in the Town of Sahuarita, Pima County and the City of Tucson.
2.2.1	2-13	4/8	188. **Comment**. TEP indicates that the Oil Spill Contingency and Spill Prevention Countermeasure and Control plans will be updated to include specific procedures for both the South and Gateway Substations. 189. **Questions** (1)How will personnel be trained to carry out these new procedures? (2) How will personnel qualifications be determined and tracked to ensure adequate response capabilities are available 24/7/365? (3) Where will the cleanup equipment be stowed and maintained? (4) What "first responders" are included in your plans? (5) Have these "first responders" been informed as to the hazardous materials at the South Station?

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 33 of 84

Comment No. 178-179

The RODs to be issued by each agency would require compliance with all applicable regulations.

Comment No. 180-181

As discussed in the EIS, TEP would acquire all necessary permits and approvals for construction in a floodplain. It is premature to attempt to provide the level of detail requested by the commentor.

Comment No. 182-184

Refer to Sections 3.11.2 and 4.11.2 regarding waste management impacts. TEP's Spill Prevention Control and Countermeasures Plan would prevent, control, and minimize impacts from a spill.

Comment No. 185-193

The level of detail of information provided in the EIS is adequate to assess environmental impacts.

Magruder, Marshall
Page 34 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			(6) What notifications of these materials, plans, processes and cleanup techniques will be provided to the "down stream" Tohono O'odham Nation? 190. **Recommendation**. Please provide a copy of these updated plans that specify the specific mitigation procedures for these substations in an Appendix.
2.2.1	2-13	5/1	191. **Comment**. This sentence water flow runoff will be directed by grading. 192. **Questions**. (1) Where will this runoff be directed? (2) What percent will end up in the Santa Cruz River during 10, 100, and 500-year storms? 193. **Recommendation**. Please show how water flow runoff will be directed?
2.2.1	2-13	5/3 and 4	194. **Comment**. Since there is very little room for berms and barriers that don't cause changes in the Santa Cruz River, when it overflows its banks. 195. **Question**. How will these berms and barriers not increase flooding at the Molybdenum processing plant, just across the Santa Cruz River from South Substation? 196. **Recommendation**. Please show how these berms and barriers will cause river flow changes that will not negatively impact close structures, such as the Molybdenum processing plant, across the Santa Cruz River.
2.2.1	2-13	5/4 to 6	197. **Comment**. This last sentence discusses "storm water mitigation measures" and suggests that retention ponds be considered to contain runoff. 198. **Questions**. (1) Where would storm water retention ponds be installed? (2) What amount of rainfall will these retention ponds be designed to contained? (3) Does this cover the 500-year requirements? 199. **Recommendation**. Please answer these questions with engineering diagrams or changes to the text. Include any justification for use of retention ponds.
2.2.1	2-13	6 (all)	200. **Comment**. The fiber-optic system appears not designed but such information is required before the US Forest Service and Bureau of Land Management can issue their Records of Decision. 201. **Questions**. (1) What is the purpose of the fiber-optic system? (2) Where will its components be installed? (3) Where will information flow into and out of the fiber-optic system? (4) Will the fiber-optic system be used for SCADA? If so, what information is exchanged, what are the nodes, update rates (complete), and operational concept for the SCADA system including which stations will be manned or automated? (5) Will the Valencia Substation be a node on the SCADA system? (6) What is the backup for a fiber-optic SCADA system? (7) Will the fiber-optic system be used for commercial communications, if so, what are the nodes, update rates, and operational concept for the commercial system? (8) If there is a commercial communications goal, what additional permits required (and list in Section 9)? (9) Who will be the owner, operator, and maintenance companies involved with a commercial system? (10) What is the purpose of the "regeneration" site? (11) How often will personnel be required to visit or work at the regeneration site? 202. **Recommendations**. Please explain the purpose of this system, how it will work, and provide a diagram showing its components, locations, and its interconnections with the transmission system and other, external locations, such as TEP's operations station. Please include a block diagram with

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 34 of 84

Comment No. 194-196

The proposed expansion of the South Substation would not be expected to: (1) raise the flood elevation in the surrounding area; (2) change flow patterns of the Santa Cruz River; nor (3) introduce significantly new hazardous material. TEP has completed a study to determine engineering measures that could be implemented to provide flood protection to the South Substation. (TEP 2002c) The results of that study indicate a variety of protective measures (ranging from reducing erosion with soil cement to building a structural concrete retaining wall) that can be implemented to better protect the South Substation from flooding. TEP would take appropriate measures to maintain the reliability of the electric transmission system.

Comment No. 197-199

The level of detail of information provided in the EIS is adequate to assess environmental impacts.

Comment No. 200-202

The level of detail of information provided in the EIS is adequate to assess environmental impacts. The purpose of the fiber optic system is described in Chapter 1, and a description of the facility is provided in Section 2.2.1. Maintenance requirements are described in Section 2.2.5.

Magruder, Marshall
Page 35 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			function flows shown and labeled. Please show these locations on a map.
2.2.2 Transmission Line Structures and Wires	2-13	entire	203. **Comment**. There appears to be only two types of structures: monopoles and lattice structures. Many other types exist and these options need to be considered. For example, **XXXX get transmission line article!!** 204. **Recommendation**. Please delete the word "self-weathering" in line 1, "Dulled, galvanized" in line 2 and capitalize "Steel" in line 2.
2.2.2	2-13	1/1 and 2	205. **Comment**. The terms "self-weathering" and "Dulled, galvanized" are defined on the next page (with suggested changes) as the color for each of these structures. 206. **Recommendation**. Please delete the word "self-weathering" in line 1, "Dulled, galvanized" in line 2 and capitalize "Steel" in line 2.
2.2.2	2-13	1/5	207. **Comment**. Acreage is an inappropriate word to describe 25 square feet. 208. **Recommendation**. Change "acreage" to read "footprint"
2.2.2	2-13	1/11	209. **Comment**. Three variations of monopoles are indicated but their characteristics are not shown or provided. In addition, such information is also required for the 115 kV transmission line monopoles to be installed in Nogales, Arizona. 210. **Recommendation**. Please provide a table which shows following, as a minimum, for each type of monopole: ***Table 2.2.2-1 Lattice Tower Characteristics*** Monopole Characteristic / Tangent Structure / Turning Structure / Deadend Structure Height (above ground) / 140 ft (43.0 m) / XXX ft (XX.X m) / XXX ft (XX.X m) Depth (below ground) / XXX ft (XX.X m) / XXX ft (XX.X m) / XXX ft (XX.X m) Length of Arms - Neutral Ground wires - Conductors / - XX ft (X.X m) - 28 ft (8.5 m) / - XX ft (X.X m) - XX ft (X.X m) / - XX ft (X.X m) - 28 ft (X.X m) Distance between Arms (top to bottom) / 10 ft, 28 ft, 28 ft (Xm, Ym, Z m) / X ft, Y ft, Z ft (Xm, Ym, Z m) / X ft, Y ft, Z ft (Xm, Ym, Z m) Number of Conductors / 6 ft (X.X m) / X ft (X.X m) / X ft (X.X m) Minimum height of Conductor above ground / 32 ft (X.X m) / 32 ft (X.X m) / 32 ft (X.X m) Length of Insulators / 11.6 ft (X.X m) / X ft (X.X m) / X ft (X.X m) Diameter (top/bottom) / X ft/ y ft (Xm/Ym / X ft/ y ft (Xm/Ym / X ft/ y ft (Xm/Ym Size of Footprint / 25 sq. ft (XX sq m) / X ft/ y ft (Xm/Ym / X ft/ y ft (Xm/Ym Total weight (lbs) / XXXX lbs (XXX kg) / XXXX lbs (XXX kg) / XXXX lbs (XXX kg)
2.2.2	2-14	1/1 and 2	211. **Comment**. Three variations of lattice towers are indicated but their characteristics are not shown or provided. 212. **Recommendation**. Please provide a table which shows following, as a minimum, for each type of lattice tower: ***Table 2.2.2-2 Lattice Tower Characteristics*** Lattice Tower / Tangent Structure / Turning Structure / Deadend Structure Height (above / 140 ft (XX.X m) / XXX ft (XX.X m) / XXX ft (XX.X m) Depth (below ground) / XXX ft (XX.X m) / XXX ft (XX.X m) / XXX ft (XX.X m) Length of Arms / XXX ft (XX.X m) / XXX ft (XX.X m) / XXX ft (XX.X m) Distance between / 10 ft, 10 ft, 24 ft, 24 ft / W ft, X ft, Y ft, Z ft / W ft, X ft, Y ft, Z ft Number of / 6 ft (X.X m) / X ft (X.X m) / X ft (X.X m) Minimum height of / 32 ft (X.X m) / 32 ft (X.X m) / 32 ft (X.X m) Length of Insulators / 11.6 ? ft (X.X m) / X ft (X.X m) / X ft (X.X m) Diameter (top/bottom) / 30 ft/ y ft (Xm/Ym / X ft/ y ft (Xm/Ym / X ft/ y ft (Xm/Ym

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 35 of 84

Comment No. 203-208

The types of towers described are those that are included in TEP's proposal. The suggested text changes are not appropriate.

Comment No. 209-212

A description and drawing of the proposed 115-kV structures have been added to the Final EIS. The Draft EIS (Section 2.2.3) indicates that the variations of the structure types are visually very similar, and thus the additional information requested is not necessary.

Magruder, Marshall
Page 36 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			Diameter (top/bottom) | 30 ft/ y ft (Xm/Ym | X ft/ y ft (Xm/Ym | X ft/ y ft (Xm/Ym Size of Footprint | 3,600 sq. ft (XX sq m) | X ft/ y ft (Xm/Ym | X ft/ y ft (Xm/Ym Total weight (lbs) | XXXX lbs (XXX kg) | XXXX lbs (XXX kg) | XXXX lbs (XXX kg)
2.2.2	2-14	2/(all)	213. **Comments**. These first two sentences discuss "self-weathering" color for monopoles to make them look like wooden utility poles. In view of the lack of trees or other cover material along most routes, use of a "dulled, galvanized" color on the surface would make these structures less visible when the sky is the background. 214. **Questions**. (1) Why hasn't each monopole site been examined to determine if "self-weathering" or "dulled, galvanized" color would be preferred? (2) What other colors can be used to reduce visibility of monopoles? (3) Can monopoles have a lower section that is self-weathering and its upper section dull, galvanized? 215. **Recommendation**. Revise the visual simulations in Section 4.2 needs to compare "dulled, galvanized" versus "self-weathering" color options and provide in the maps, which color style has less visual impact. Delete all but the last sentence in this paragraph that should be reworded to read: "Refer to Section 4.2 for a complete discussion of visual impacts, structure colors, and pole treatments."
2.2.2	2-14	4/3 to 5	216. **Comment**. This sentence indicates that each circuit has a 1,000 MW capability. The total capability of the entire system is 2,000 MW. 217. **Questions**. (1) Doesn't' the thermal capability control the maximum capability for the 345 kV elements of this system? (2) Will 500 MW be the initial operational capability for the whole 345 kV system? (3) Is each of the 345 kV circuits are capable of transmitting 1,000 MW? If so, then isn't the total 345 kV system maximum capability 2,000 MW but will initially be operated at 500 MW? (4) What other factors in this EIS are related to the capabilities of the system? (5) Is there any reason why all design and environmental factors don't reflect the maximum capability of 2,000 MW for the 345 kV system? If not, then will TEP complete another EIS to reflect these maximum capabilities? 218. **Recommendation**. Change this sentence to read: "Each circuit has a thermal capability of supplying 1,000 megawatts (MW), but the double circuit would be initially operated to transmit a total of 500 MW for operations and reliability purposes. The system maximum capability of 2,000 MW is reflected in this document."
2.2.2	2-14	4/3	219. **Comment**. The reference WECC 2003 in Chapter 11, includes a URL to a web site. Unfortunately, to access this document, one needs a password and ID, which is not available. 220. **Recommendation**. Place the appropriate part of the reference in an Appendix so that reviewers can access the document or provide the ID and password here or in Chapter 11, References.
2.2.2	2-14	5/2 and 5	221. **Comment**. The two neutral ground wires are installed between each monopole and lattice tower. Arizona is very dry and special grounding methods are required in desert environments. Santa Cruz County has the highest number of lightning strikes in Arizona. 222. **Questions**. (1) What is the "grounding subsystem" for the transmission system, in terms of grounding locations and how the "ground wire" go to ground? (2) Will the grounding system require both preventative and corrective maintenance, such as after a lighting strike? (3) What ways will TEP used to minimize grounding system maintenance while retaining highly reliable ground system?

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 36 of 84

Comment No. 213-215

Refer to the response to MM-2 in the Green Valley, AZ September 25, 2003, 7 p.m. to 9 p.m. public hearing transcript.

Comment No. 216-218

The maximum level at which the proposed 345-kV transmission line would be operated is 500 MW (refer to the response to Border Power Plant Working Group, Comment 2).

Comment No. 219-220

The referenced portion of the WECC website has been printed and placed in the administrative record for the proposed project.

Comment No. 221-223

The level of detail of information provided in the EIS is adequate to assess environmental impacts.

Magruder, Marshall
Page 37 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			(4) What special measures are required to meet the lightning strike requirements for Santa Cruz County? (5) Which are the grounding differences required along each route as a function of soil resistively, frequency of lightning, etc.? (6) How will underground cables, pipes and other structures be protected from inducted voltage, system grounds and lightning strikes? 223. **Recommendation**. Please describe the grounding subsystem, its capability to ground "shorts in the system" and the lightning protection system for the entire system, including each structure.
2.2.2	2-14	5/7	224. **Comment**. The locations of fiber-optic splicing sites are unknown. 225. **Question**. How many and where will these sites be located? 226. **Recommendation**. Please show the fiber-optic splicing sites on a map.
2.2.2	2-14	5/8	227. **Comment**. The locations and characteristics of fiber-optic splicing boxes on the monopoles and lattice towers are unknown. 228. **Questions**. (1) How many and where will these splicing boxes be located on monopoles and lattice towers? (2) How big are these boxes? (3) How often will maintenance personnel be required to service the fiber-optic boxes? (4) Are any of the monopoles or lattice structures to be used for "cell" or other wireless communications means? If so, how will these be maintained? (5) What will be the process used by TEP to request permits for any additional appendages? 229. **Recommendation**. Please show the fiber-optic splicing boxes on a picture of each type of structure, monopole and lattice.
2.2.3 Transmission line construction	2-14	Prior to first paragraph	230. **Comment**. The ACC requires that a **Construction Mitigation and Restoration Plan** be filed with the ACC Docket Control **before any construction on this project may commence.** See prior Comments above under section 1.2.1, page 1-7, and third paragraph, for the exact wording of ACC Order No. 64356, Condition 12. From the Siting Hearings, this plan is to be distributed so that it can be reviewed and integrated into all aspects of this project. Thus, submission within the next version of the draft EIS will permit this review. If submitted independently of this process, such coordination, synergy, and integration will be lost, as conflicts will result. Thus, such a plan needs to be included in this EIS, preferably as a stand-alone appendix, and the vague, non-specific, and very general statements in section 2.2.3 will be replaced by a work plan, detailed and specific with respect to actual road construction plans, and the same plan that will be used for the construction phase. Since this is a "construction plan" it will need, as a minimum, a Schedule, Tasks to be Accomplished, Required Resources (personnel and equipment), Start and Stop Dates, etc. Any other approach will not achieve the goals. In particular, the proposed TEP's "**Mitigation**" parts of this plan are **critical** for the federal government to consider PRIOR to drafting their Records of Decision (RODs) and the granting of many of the other permits and approvals indicated in Chapter 9 of the EIS. 231. **Recommendations**.
New	New	New Appendix "X"	(1) The ACC-required Construction Mitigation and Restoration Plan must agree with this section of the EIS, and since it is required **before** construction, it should be included in the next draft version of this EIS because this is of vital interest to the federal decision makers, local government permit agencies.
2.2.3	2-14	New Paragraph before present first	(2) Add a new paragraph, prior to the first paragraph of 2.2.3 to read as follows: "See Appendix X for the details of the required "Construction Mitigation and Restoration Plan" used for construction planning, transmission line

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 37 of 84

Comment No. 224-226

The precise locations of the splicing sites have not yet been determined, but they would be selected to avoid environmentally sensitive resources.

Comment No. 227-229

The level of detail of information provided in the EIS is adequate to assess environmental impacts.

Comment No. 230-231

Each agency will state any required mitigation measures in their respective RODs, based on the mitigation measures presented in Section 2.2.6 of the EIS, and any additional mitigation measures that the agency deems necessary.

Magruder, Marshall
Page 38 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
		paragraph	construction, and restoration. This plan is required by Condition 12 of the ACC Certificate of Environmental Compatibility (CEC), ACC Order No. 64356and will also satisfy parts of other CEC Conditions (see Table 1.2.1-1) to • Mitigate specific environmental and pole impacts (Condition 4), • Consolidate the implementation details of the mitigation measures included in various required reports of the Harris Group (Conditions 5 and 6) and additional recommendations (Condition 7), • Define the on-site roles and authority of the approved archaeologist required to manage cultural and historical preservation actions, • Define the on-site roles and authority of the approved biologist (Condition 8) required to mitigate efforts for any endangered, threatened or sensitive species impacted by the project (Condition 9), • Ensure consultations with the Arizona State Historical Preservation Office (SHPO) to advise mitigation efforts for historical sites (Condition 10), • Specific locations of each monopole and lattice structure (Condition 11), satisfy all the goals of Condition 12, • Incorporate and manage any impacts of possible technical changes that will impact planning, construction and restoration activities (Conditions 13 and 14), • Consolidate the filing of the Final EIS (Condition 15) by including this Plan in the Final EIS, • Show how TEP will measure and ensure compliance with this plan to reduce or prevent environmental impacts (Condition 16), • Show the schedule to meet the three-year expiration date of the CEC (Condition 17), • Confirm that safety liability issues have been resolved by consultations with the El Paso Natural Gas company to prevent accidental explosions or fires caused by electricity and electromagnetic radiation, induced currents and preservation of the corrosion prevention measures that will ensure gasline and natural gas substation safety including meeting the minimum 100 foot separation of all transmission line structures including conductors, from the edge of the gasline ROW (Conditon 18), • Address TEP's participation as a consulting party with DOE, SHPO, state and federal land managing agencies to ensure compliance with 36 C.F.R. 800 to reach a finding of the effect and to resolve adverse effects (Condition 22), • Confirm how consultations and the conflict resolution process concerning potential impacts to historical properties, particularly traditional cultural places present or adjacent to the proposed corridor, with Native American Tribes (Condition 24), • Show the geographic area effected by the project, final ROW and buffer zone, new and existing access roads, material source pits (if any) and equipment staging areas (Condition 25), • Sponsor the necessary studies to complete the historical site identification effort as part of the federal or state compliance process. This may include a cultural resources survey, archaeological testing, or ethnographic study performed under the direction of professionals that meet the Secretary of Interior's qualification standards and permitting requirements of the appropriate land-management agencies (Condition 26), • Sponsor, if a historic property cannot be avoided, the necessary studies or take the appropriate actions to lessen or mitigate the impacts as part of the federal or state compliance process. The may include archaeological data recovery(*i.e.,* excavations), archival research and structure documentation (Condition 27), • Allow Arizona State Stewards, volunteer-staffed SHPO program, to

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 38 of 84

Magruder, Marshall
Page 39 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			periodically inspect the sites present within the corridor for vandalism or damage after construction and in conjunction with the land-managing agency, if any (Condition 28), • Submit a letter annually, identifying which conditions in the CEC have been met, to the ACC, (Condition 29), and • Show Compliance with the ACC CEC Conditions since "The authority to construct facilities granted by this Commission Decision shall be revoked and the associated CEC rendered null and void in its entirety if (a) the Applicants, their successor(s) or assignee(s) legally challenge any condition herein, or (b) fail to comply with any condition herein as determined by the Commission. (Condition 30)."
2.2.3	2-14	All	232. **Comment**. An important element in constructing such projects requires the expertise of the actual construction contractor who brings his professional knowledge and skills to facilitate meeting both system and environmental requirements. The major activities in the first paragraph do not agree with the activites in Table 2.2-1 nor in the subparagraphs in this paragraph. 233. **Questions**. (1) What are the qualifications required by TEP for its transmission line construction contractor? (2) Has TEP selected its transmission line construction contractor? TEP testified during the ACC Line Siting Hearings that it would hire an outside contractor for this role. (3) Was this transmission line construction contractor selected as a result of a competition (RFP, proposal) process? (4) Has the selected transmission line construction contractor participated in the drafting and planning in section 2.2.3? (5) When will the construction contractor actively participate with TEP to write a coherent proposal on transmission line construction? (6) When will the major activities in the first paragraph be rewritten to agree with the activites in Table 2.2-1 and in the subparagraphs in this paragraph? 234. **Recommendation**. TEP **should actively involve its transmission line construction contractor in this EIS review process**. Such comments must be solved now as the design is being completed, in order to make following the resultant EIS more viable, easier to follow, to reflect the contractor's best business practices, and produce a meaningful EIS.
2.2.2 Figure 2.1-1 Figure 2.1-2 Figure 2.1-3	2-14 2-3 2-4 2-5	5/7 to 9 Left map Left map Left map	235. **Comments**. Slicing sites are not found on maps. 236. **Recommendation**. Show and annotate each spicing site on the maps.
2.2.3 2.2.3	2-14 2-15	1/(all) 1/(all)	237. **Comments**. These two paragraphs fail to provide, at best, "rough" schedule of key activities. It is very incomplete, not planned month by month, and fails to show project planning has commenced. The statement "**the project would be completed approximately 12 to 18 months after construction begins**" clearly indicates that this project has NOT been planned, resources allocated, actions planned to the ability to predict completion within a 50% (6 months period). This is **unsatisfactory** is TEP has been working on this project since 1995 and is not ready to begin. There is no agreement with the first two paragraphs and the remaining parts of this section or with Table 2.2-1. Resources, including manpower, vehicles, and helicopters, and supply deliveries have to be planned, scheduled, and coordinated. That has NOT been done. 238. **Questions**. (1) How many months are required from approval of the last ROD to Operational Date and to final cleanup date? (2) How many months will each phase take?

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 39 of 84

Comment No. 232-242

The information provided in the sections of the EIS cited by the commentor is consistent. The level of detail of information provided in the EIS is adequate to assess environmental impacts.

Magruder, Marshall
Page 40 of 84

<table>
<tr><th>Paragraph</th><th>Page</th><th>Para/ Line Nos.</th><th>Comments, Questions (if necessary), and Recommendation</th></tr>
<tr><td></td><td></td><td></td><td>(3) When are the design, test, and operational reviews scheduled?
(4) What is the manpower loading per month by skill?
(5) When will project planning finally begin (it hasn't in this EIS, it should be completed before submitted the initial application and at the very latest prior to the draft EIS)?
(6) Will this project accomplish all the steps, phases and activities in the ACC Citizens Project Plan? If not, why not?
(7) When will helicopters be used to insert personnel and material?
239. <u>Recommendation</u>. Please show at least 100 events with key milestones or so on a Gantt or Network chart for this project that answers the above basic planning steps for a project of this magnitude. The Citizens Plan of Action has a basic list of activities that are missing in this section. Resources, including vehicles and helicopters need to be planned to the same degree as personnel.</td></tr>
<tr><td>Table 2.2-1 Typical Personnel and Equipment for Transmission Line Construction

Table 4.9-1 Peak Attenuated Noise Levels (dBA) Expected from Construction Equipment</td><td>2-15

4-96</td><td>All

All</td><td>240. <u>Comments.</u> This is a "typical" list of equipment and personnel used in constructing a transmission line system. This table FAILS to give any confidence that TEP is ready to commence construction. The equipment in this table does not agree with those in Figure 2.1-1 and Table4.9-1, for example:
<table>
<tr><th>Table 2-2-1</th><th>Figure 2.2-1</th><th>Table 4.9-1</th></tr>
<tr><td>Flatbed truck</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Crawler bulldozer</td><td>Wheeled bulldozer</td><td>Bulldozer</td></tr>
<tr><td>Jeep with auger</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Backhoe</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Side boom crane</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Equipment trailer</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Water spray truck</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Digger truck</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Loader</td><td>Loader</td><td>Loader</td></tr>
<tr><td>Track air drill</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Tractor trailer</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Rough terrain crane</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Cement truck</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>All terrain crane</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Boom truck</td><td>Not shown (maybe</td><td>Not included</td></tr>
<tr><td>Concrete ready-mix truck</td><td>Not shown</td><td>Concrete Mixer</td></tr>
<tr><td>Crew cab truck</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Line truck (bin body)</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Lace boom crane</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Crew cab flatbed</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Wire puller (truck mounted)</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Crawler dozer</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Splicing buggy</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Wire tensioner (truck</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Tractor and tandem axle</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Pilot wire stringing truck</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Tractor trailer</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Aerial lift</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Farm tractor with disc</td><td>Not shown</td><td>Not included</td></tr>
<tr><td>Not included</td><td>Water truck</td><td>Not included</td></tr>
<tr><td>Not included</td><td>Back hoe loader</td><td>Not included</td></tr>
<tr><td>Not included</td><td>Wheel Tractor Scraper</td><td>Scraper</td></tr>
<tr><td>Not included</td><td>Dump Truck</td><td>Dump Truck</td></tr>
<tr><td>Not included</td><td>Excavator</td><td>Not included</td></tr>
<tr><td>Not included</td><td>Crane (what type?)</td><td>Crane</td></tr>
<tr><td>Not included</td><td>Not shown</td><td>Heavy trucks</td></tr>
<tr><td>Not included</td><td>Not shown</td><td>Jackhammer</td></tr>
<tr><td>Not included</td><td>Not shown</td><td>Generator</td></tr>
<tr><td>Not included</td><td>Not shown</td><td>Grader</td></tr>
<tr><td>Not included</td><td>Not shown</td><td>Pile Driver</td></tr>
<tr><td>Not included</td><td>Not shown</td><td>Fork Lift</td></tr>
</table></td></tr>
</table>

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 40 of 84

Magruder, Marshall
Page 41 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			Not included | Not shown | Fork Lift From the above, it appears that these equipment lists were not coordinated. 241. **Questions**. (1) Why don't the Activities in this table agree with the activities in the prior paragraph and with the subtitles in 2.2.3? (2) Why is there no consistency between these three equipment lists? (3) Why is a "typical" list of personnel and equipment used the best available at this stage? If not available, determine which equipment and personnel are to be used prior and complete prior to the Final EIS. (4) Where are each of these vehicles discussed in this paragraph, as most are only mentioned in this table? (5) Why don't the vehicles in Figures 2.2-1 agree with those in Table 2.2-1? (6) Why is different equipment, such a pile drivers, generators, included in Table 4.9-1 that is not found in the Figure/Tables 2.2-1? (7) Where are the persons and activites associated with the fiber-optic subsystem? (8) Are these same vehicles to be used in the Mexican part of this system? If not, please provide the data on the Mexican vehicles. (9) What are the specific dust control measures TEP will employ in Mexican construction activities? 242. **Recommendations**. (1) Rewrite the Table 2.2-1, in a more standard "project management" format, such as a resource table from MS Project, to schedule both resources and people for the entire system, including the Mexican half-system. (2) Show major Events and all project Milestones. (3) Show a manpower-loading chart, with monthly loading, by different types of construction and management workers. (4) Show the Network Chart, with start/stop dates (or months after commencement, MAC), resources, and which Events precede others. (5) Show with the Network Chart, the matching Gantt planning chart for the project as a whole, including Events necessary for completion in Mexico. (6) For each vehicle, include a table to indicate weight, when used, required at each site, and air transportability capabilities (to avoid one-use road construction). (7) Include the fiber-optic subsystem construction activites. (8) Include in the schedule that shows the activities of the biologist, archaeologist, and other uniquely required personnel that are involved with inspections of activites, at each phase of construction. (9) The "noisy" equipment in Table 4.9-1 needs to match the corrected Table/Figure 2.2-1s.
Table 2.2-1	2-15	All	243. **Comment**. There is no indication in this table activites necessary for the fiber-optic subsystem. 244. **Recommendation**. Include the fiber-optic subsystem activites.
2.2.3 ROW Access	2-15	(all)	245. **Comment**. During the ACC Line Siting Hearings, there was an objection filed by Caterpillar Company. The TEP Common Routes in Pima County cross the Caterpillar Test Facility. That company has not granted permission for the TEP ROW to cross this parcel of property. The Caterpillar Test facility needs to be shown on maps. 246. **Questions**. (1) Has Caterpillar provided access to cross the Caterpillar Test facility in a part of the designated ACC-approved corridor or with it has to leave that corridor? (2) If the TEP route avoids the Caterpillar Test range, which requires it to leave the ACC-approved corridor, what actions will TEP do, since it cannot leave the Corridor? (3) Will TEP request the ACC to modify the Corridor? 247. **Recommendations**.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 41 of 84

Comment No. 243-244

Fiber-optic construction would be a minor part of construction and would be accomplished as part of the overall project construction.

Comment No. 245-247

See response to Comments 124-125 above.

Magruder, Marshall
Page 42 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
Figure 1.1-4 Figure 2.1-1 Figure 4.2-3	1-5 2-3 4-24	Left map Left map Whole figure	(1) Provide answers to the above three questions. (2) Show the Caterpillar Test facility boundary on the maps (Figures 1.1-4, 2.1-1, and 4.2-3) indicated, as a minimum.
2.2.3 ROW Access	2-15	1/7 to 11	248. **Comment**. In addition to those listed, road access may require permission of the State Land Trust for access to state lands, Pima or Santa Cruz County for access to use heavy equipment on county roads, and the City of Nogales and Town of Sahuarita. Further, the El Paso Natural Gas Company has an easement for their natural gasline that all routes will need access. 249. **Recommendation**. In line after "property owners," add "State Land Trust Department, Pima County, Santa Cruz County, City of Nogales, Town of Sahuarita, El Paso Natural Gas Company,"
2.2.3 ROW and Structure Site Clearing and Grading	2-18	1/5	250. **Comment**. The term "proposed access way" is used. There are several other terms that define easements, right-of-way, gasline safety distances, etc. that are best illustrated in a diagram. Further, this is necessary for both the 345 kV (2,000 MW maximum capacity load) and the 115 kV (100 MW) transmission lines between Gateway and Valencia Substation. 251. **Question**. What is a "proposed access way? 252. **Recommendations**: (1) Please define this term, both here and in Chapter 12. If it is related to "right-of-way" (ROW) or "easement", then please show these on an excerpt of a chart so that the "width" of each is clear. (2) Since there also is a relationship between the transmission line ROW and the El Paso Natural Gas (EPNG) ROW, please also show how they are related and the total width of all of these, including EPNG ROW, TEP ROW, safety area in between, (3) When necessary, show the total ROW or easement differences for lattice towers and monopoles. (4) In addition, show a cross-section of the lattice tower and monopole, lowest conductor, at its maximum sag, or distance above ground to the outer edge of TEP's ROW.
2.2.3 ROW and Structure Site Clearing and Grading	2-18	1/7	253. **Comment**. This sentence indicates that the Right of Way (ROW) would be "bladed as necessary to ensure safe working conditions." The ROW should not be indiscriminately bladed, only the area in the vicinity of the foundation. Blading roads shall be accomplished in the required "Construction Mitigation and Restoration Plan" required to be submitted to the ACC Condition 12 of the ACC Certificate of Environmental Compatibility. [see Recommendations under 1.2.1 above for page 1-7, paragraph 3] 254. **Recommendations**: Prior to the final EIS, TEP shall provide a copy of this required Construction Mitigation and Restoration Plan that will show the details of all areas to be "bladed" including all roads as an appendix to the EIS, preferably in the next submission of the draft for review prior to final reviews by decision makers.
2.2.3 Construction Yard and Material Handling sites	2-18	1/7	255. **Comment**. The last sentence indicates that a different construction area is required for monopoles. 256. **Questions**. (1) What are the construction area requirements for a monopole? (2) Are construction areas different when sky crane helicopters are used for monopoles? (3) Are construction areas different when sky crane helicopters are used for lattice towers? (4) Are there other factors which impact construction areas, other than local or remote "construction" of the tower or pole? If so, please explain and discuss the benefits of smaller construction areas. 257. **Recommendation**. Please provide the construction area requirements for a monopole and describe the differences in construction area

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 42 of 84

Comment No. 248-249

"Land managers" has been added after "property owners" to clarify that lands may be managed by various entities.

Comment No. 250-252

Proposed access way is a road to access the proposed project. The level of detail of information provided in the EIS is adequate to assess environmental impacts.

Comment No. 253-254

Refer to the response to Comment 230-231 above.

Comment No. 255-257

The area required both for construction of a monopole and lattice tower are given in the sentence cited by the commentor. These estimates of maximum disturbance apply for all methods of construction.

Magruder, Marshall
Page 43 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			requirements for sky crane provided towers and poles.
2.2.3 Construction Yard and Material Handling sites	2-18	2/(all)	258. **Comment**. This sentence states that three temporary construction sites of 3 acres or less and that a temporary construction lay down yard of 80 acres will be required. They are not shown on maps. 259. **Questions**: (1) When will each of these construction sites and the lay down yard be used? (2) What is the rehabilitation Mediation Measures and schedule for each of these sites? (3) Will the sky cranes be operated with all three of these temporary construction sites? 260. **Recommendation**. (1) Show the locations of the three temporary construction sites and the lay down yard on maps. (2) Show the dates for each construction site use and rehabilitation schedules in the "Construction Mitigation and Restoration Plan appendix.
Figure 2.1-1 Figure 2.1-2 Figure 2.1-3 New	2-3 2-4 2-5 New	Left map Left map Left map Appendix X	
2.2.3	2-18	2/4 and 5	261. **Comment**. This sentence implies that an 80 acre laydown yard would be near the Arivaca Road and I-19 Interchange in Amado. This area is the "visual gateway" to Santa Cruz County and Pima Counties, an area where commercial activities depend on tourism and transients at three major restaurants. Such a site, if visible from I-19 or Arivaca Road would significantly degrade this economic activity. 262. **Questions**: (1) Will sky crane helicopters ever use this laydown yard to move towers or monopoles? (2) Will sky crane helicopters operate from this yard to move people and/or equipment? 263. **Recommendations**. (1) Change this sentence to read: "A temporary construction laydown area of approximately 80 acres (32-ha) will be neatly laid out, about two miles east of Amado, at least one mile from Arivaca, and not visible from either I-19 or Arivaca Road. Upon completion of construction activity, the site will be completely returned to its natural environmental state, including re-planting with the native seeds, for all vegetation types damaged during construction. The landowner and the appropriate County (Pima or Santa Cruz, depending on the location) zoning inspector will have to approve the revegetation plan before construction begins. No utility equipment or material, including petroleum products, will be permitted to remain." (2) Discuss how, when, why and how often sky crane helicopters will frequent this laydown yard.
2.2.3	2-18	2/4 and 5	
2.2.3 Foundation Evacuation and Installation	2-18	1 (all)	264. **Comments**. Several kinds of foundations are discussed in this paragraph; however, which structure sites and foundation types are not provided. This EIS should have all the geological information necessary to decide foundation evacuation details, if not, then provide that information in the geological and soils section. 265. **Questions**. (1) What are the types of foundations that will be used at each pole/tower site? (2) What are the characteristics, in tabular form, for each foundation type and equipment necessary for each foundation type? (3) Which foundation type is least to most disruptive to the environment in terms of volume of material evacuated, moved, stored, kept from washing away, returned, and compacted? (4) Where will the excessive dirt or rock evacuated be place or will it be removed to another site? (5) Does this EIS have the geological and soil information necessary to

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 43 of 84

Comment No. 258-260

The temporary construction sites and construction laydown area are not shown on any of the project maps. However, the EIS does specify the approximate location of the temporary laydown area and construction sites. These sites would be used prior to and during construction for storing of construction materials and equipment.

The start of construction is dependent on several factors, including approval by Federal and state agencies, and therefore is not known at this time.

A detailed list of standard mitigation practices to be employed by TEP is shown in Table 2.2-2. TEP would implement standard mitigation practices in areas cleared or disturbed during construction. The temporary construction sites and the laydown area would be allowed to revert back to its original state or reseeded/revegetated to prevent the introduction or spread of invasive species. Erosion control measures would be implemented in accordance with TEP's Erosion and Sediment Control Plan.

Comment No. 261-263

The temporary construction laydown yard would be sited on previously disturbed land and would be used to store construction equipment and materials including transmission line towers. The EIS points out that helicopters would be used when large cranes could not access tower locations by road. For the Western and Central Corridors, existing, improved, and new access roads would be used to bring poles to structure sites. TEP intends to use helicopters only for stringing conductors on the Western and Central Corridors. However, for the Crossover Corridor Alternative, helicopters would be used to transport 20 to 25 structures to the Peck Canyon portion of the Crossover Corridor due to the terrain in this area of the site.

Magruder, Marshall
Page 44 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			decide on foundation type? 266. **Recommendations**. (1) Provide answers to the above in the next EIS. (2) Provide rationale for selection of foundation type by soil and geological characteristics at each tower/pole site. (3) Provide additional geological and/or soil information, if necessary, to this EIS so that it can be reviewed when assessing foundations and excavation process.
2.2.3 Foundation Evacuation and Installation	2-18	2/7	267. **Comment**. The final sentence indicated, continued "until the desired depth is attained." 268. **Question**. What is the "desired depth?" 269. **Recommendation**. Include the "desired depth" information so that decision makers and understand what geological conditions determine the depth requirements for each structure.
2.2.3 Structure Assembly/ Erection	2-19	1/1	270. **Question**. Are "large cranes" required on-site if sky cranes are used? 271. **Recommendation**. If so, please discuss how the "large crane" will be transported to the site.
2.2.3 Structure Assembly/ Erection	2-19	1/ 5 and 6	272. **Comment**. This states that "angle" and "dead-end" monopoles can not be transported by helicopter. 273. **Question**. Where are all the "angle" and "dead end" monopoles located, at which sites? 274. **Recommendation**. Please discuss how each of the angle and dead end monopoles will be assembled and erected.
2.2.3 Structure Assembly/ Erection	2-19 2-19	2/1 2/1	275. **Comment**. The ACC Order does not "require" but it permits the use of lattice towers. 276. **Recommendation**. Change the word "require" to "permits" to clarify. See actual ACC Order quote in next comment.
2.2.3 Structure Assembly/ Erection	2-19	2/2 to end of paragraph	277. **Comment**. T he ACC Order No. 64356 states in Condition 11 "Applicants [TEP] shall: ....(c) use monopoles except in locations where use of lattice towers would minimize detrimental impacts upon the total environment." . The "primary criteria" used by TEP used to identify locations for lattice towers depends upon road accessibility. That criteria may fail to "minimize overall environmental impacts" such as historic ruins, environmentally sensitive species, etc. thus this singular criteria fails to meet the ACC Order. This might be convenient for TEP, but this criterion fails to minimize the total environmental impacts. Further, the last sentence in this paragraph contradicts the repeated testimony by TEP that helicopters would be used for all monopoles and lattice towers in the National Forest.
Figure 1.1-1 Figure 1.1-2	1-2 1-3	dimensions dimensions	278. **Questions**: Since lattice towers and monopole are the same height (Figures 1.1-1 and 1.1-2), and the monopole has its lowest conductors higher (140 ft – 56 ft) than the lattice tower (140 ft – 68 ft), use of "lattice towers at locations such as road crossings" is misleading. [insulator length not included since figure 1.1-2 fails to show this, suggest revise Fig 1.1-2].
2.2.3 2.2.3	2-19 2-19	2/2 2/2 to end of paragraph	279. **Recommendations**. (1) Place a period after "impacts" and (2) Replace "the primary criteria that TEP would use to identify locations for lattice towers would be whether the location is readily accessible by road..." to the end of this paragraph with "The Construction Mitigation and Rehabilitation Plan, in Appendix [TBD], contains the specific environmental rationale for selection of each lattice tower. Conveniences for TEP or costs are unacceptable rationale for siting lattice towers as neither considers environmental impacts. This plan will show the actual siting locations for each monopole and lattice tower. Helicopters will be use to transport structures to minimize environmental impacts, especially, when road access is not acceptable. Helicopters will transport all structures, when new road construction will cause detrimental impacts to the environment. In

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 44 of 84

Comment No. 264-266

Since a preferred alternative has not been agreed upon, the discussion on foundation types is general because a geotechnical investigation for the preferred alternative has not been conducted. The scope of the geology and soils section of the EIS is limited to general information about the geology, soils, and geological features in the project area and vicinity. To determine the depth to bedrock and the soil types at each proposed pole location, site-specific geotechnical investigations must be conducted at each proposed pole location. These investigations will be conducted once the Presidential Permit is approved and a preferred alternative is agreed upon.

Comment No. 267-269

The depth would depend on local geologic conditions.

Comment No. 270-271

Several cranes would be used at the site during construction. These cranes include the side boom crane, the all terrain crane, rough crane, rough terrain crane, and the truck mounted crane. Cranes would be transported to the site on large flat-bed trucks.

Comment No. 272-274

Details on monopole types to be used and pole locations are not provided in the EIS. If an action alternative is selected for implementation, these decisions would be made after the RODs from each Federal agency, during the design phase of the project.

Comment No. 275-276

The text is correct as written.

Comment No. 277-279

As stated in the discussion of Structure Assembly/Erection in Section 2.2.4, lattice towers would be used in locations such as road crossing because their use would allow for a greater distance between tower locations. TEP's

Magruder, Marshall
Page 45 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			general, lattice towers will not be used if they have higher maintenance requirements."
2.2.3	2-19	New After revised 2nd ¶	(3) Provide a summary table of the number of lattice towers and monopoles for each corridor in this part of the draft EIS.
2.2.3	2-19	Same as above	(4) Provide a map that shows the actual locations for lattice and monopoles for each corridor, with symbols, structure type (including tangential, angle, deadend), structure number or ID designation, and transportation mode (truck or helicopter or mixed helicopter/truck) for each tower or pole between the four substations (South, Gateway, Valencia, Santa Ana Sonora). (5) Indicate the total number of expected helicopter and total vehicle transportation trips required per structure.
2.2.3 Structure Assembly/ Erection	2-19	3(all)	280. **Comment**. As indicated above, a detailed plan, table and maps will provide this information. It is expected that helicopters will be used for **all** routes, thus the last part of this sentence is in direct variance with TEP's testimony during the ACC Siting Committee hearings and the mitigation measures found in the ACC Order No. 64356 Exhibit 2. Further, **TEP is not authorized to change the ACC Order**, thus the reference (TEP 2003) also is incorrect. This paragraph is not required.
2.2.3	2-19	4(all)	281. **Recommendation**. Delete this entire paragraph.
2.2.3 Shield Wire and Conductor Stringing	2-19	1/2	282. **Comment**. These wire-handling sites have not been shown in any maps. Since helicopters will be using these sites, please show where each associated helicopter landing area will be located. 283. **Question**. (1) Where are these wire-handling sites located along each ROW. (2) Where is the road connection for each site? 284. **Recommendation**. Show wire-handling sites and road access on the appropriate maps.
2.2.3 Shield Wire and Conductor Stringing	2-19	2/(all)	285. **Comment**. The Western Corridor, south of Arivaca Road to about a point north of Castle Rock, is all in the FAA designated, Military Operational Airspace (MOA) designated as FUZZY. Flights are not normally permitted in side this area due to high-speed, low level military combat aircraft flying low level routes. The USAF owns the airspace down to 100 feet above ground. 286. **Question**. (1) Have the helicopter landing sites been approved by the FAA and USAF? (2) Has TEP obtained a Memorandum of Understanding (MOU) or a Memorandum of Agreement that contains the concurrence of the USAF, FAA and TEP's helicopter transportation plans in the FUZZY One MOA? 287. **Recommendations**. The helicopter plans in this EIS may not be possible without such permission of these two US Government agencies. A copy of an agreement between TEP, FAA and USAF be included in the next version of this draft EIS.
2.2.3 Shield Wire and Conductor Stringing	2-20	1/(all)	288. **Comment**. This paragraph does not provide any confidence that arrangements have been made to cross the border with the transmission lines. The second to fourth sentences are extremely vague and without any meaning. Obviously, the FAA will be involved with the helicopter. Mexican organization are not named, locations not specified or shown on maps, continuation into Mexico is missing, etc. The "hills" mentioned in the last sentence confirm that this part of the draft EIS is insufficient for decision makers. 289. **Question**. (1) Who is the Mexican "proponent" of this project? (2) What are all the US and Mexican authorities that will be involved in stringing cable across the border? (3) Why isn't the FAA involved? (4) Has TEP obtained a Memorandum of Understanding (MOU) or a Memorandum of Agreement that contains the concurrence of the USAF,

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 45 of 84

Comment No. 277-279 *(continued)*

rationale for using lattice towers is to reduce the impact to the environment by not constructing new access roads and by increasing the distance between towers.

Comment No. 280-281

See the response to Comment 272-274 above. The citation TEP 2003 references documents used in EIS preparation and not ACC Decision No. 64356. ACC Decision No. 64356 has been referenced as ACC 2002 in Chapter 2 and in Chapter 11, References. That Decision is also now in Appendix J.

Comment No. 282-284

Details on wire-handling sites are not provided in the EIS. Once a preferred alternative is agreed upon, the location of these sites would be designated in the design phase of the project.

Comment No. 285-290

As presented in Chapter 10 and Appendix A of the Final EIS, the Federal agencies and TEP had initiated consultation with Davis Monthan Air Force Base regarding potential impacts of the proposed transmission line on military flight operation. In response to the consultation, the Davis Monthan Air Force Base stated no relevant issues with any of the proposed corridors. The proposed Western Corridor could impact the FUZZY Military Operating Area, controlled by the 162nd FG Airspace in Tucson. Subsequently, information regarding the proposed project has been forwarded to the 162nd FG Airspace Manager and a copy of the Draft EIS has been sent for review and comment. No comment has been received.

DOE and TEP has initiated consultation with FAA regarding potential impacts of the proposed transmission line on flight operations. FAA has indicated that the proposed project would not affect air traffic due to location and height of the transmission line structures (see letter in Appendix A).

Magruder, Marshall
Page 46 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			FAA and TEP's helicopter transportation plans in the FUZZY One MOA? 290. **Recommendations**. (1) The helicopter plans in this EIS may not be possible without such permission of these two US Government agencies. A copy of an agreement between TEP, FAA and USAF be included in the next version of this draft EIS. (2) Due to the high interest in the actual border crossing, a map showing the "hills" and each tower would greatly facilitate decision making concerning stringing conductors between two countries.
2.2.3 Cleanup and Restoration	2-20	1/7	291. **Comment**. The Pima County Sahuarita Landfill site is becoming full with closure to waste from contractor building asupplies being prohibited from using that facility.
2.2.3	2-20	1/7	292. **Recommendation**. Change comma to period and delete "such as the Pima County Sahuarita Landfill."
2.2.3 Cleanup and Restoration	2-20	1/8	293. **Comment**. This sentence indicates that "state-certified native seed mix" will be used. Both Pima County and Santa Cruz County have ordinances that list approved native species that can and others species that are prohibited to be planted.
2.2.3	2-20	1/8	294. **Recommendation**. After "state-certified" add "and meeting the requirements of native plant ordinances in Santa Cruz and Pima Counties."
2.2.3 Safety Program	2-21	All	295. **Comments**. This paragraph indicates that "all applicable" federal, state and local safety standards would be used. Many times conflicts exist between such standards. The legal liabilities to personnel, equipment, and land need to be resolved prior to starting construction that will cover both construction and continuing operations and maintenance. 296. **Question**. (1) Who will be responsible to resolve conflicts between various safety standards? (2) Is TEP or the "contractor" legally liable if private or public property is damaged or an employee is injured on either kind of property? (3) How will liabilities be determined for accidents that damage public or private lands? (4) Will there be a project Safety Plan? (5) Who will conduct the hazardous analyses assessments for a Safety Program? (6) Will TEP require any other personnel, other than the unknown "transmission line contractor" to have a Safety Program? (7) Will there be a Safety Program required after construction has been completed? (8) Why wasn't electrical safety or the National Electric Code and National Fire Prevention Administration standards not included as minimum safety requirements? (9) Who is responsible for any damage to the El Paso Natural Gasline and its substations caused by construction and/or operations and maintenance actions? (10) Who is responsible for any damage to the TEP transmission line and its substations caused by the El Paso Natural Gasline and its substations? (11) What are the "appropriate" actions that TEP will take if the contactor fails to comply with the approved safety program? (12) Does the Transmission Line Contractor contract indicate it can be terminated for failure to comply with the Safety Program? 297. **Recommendations**. Provide answers to these potentially expensive liabilities and safety concerns prior to releasing the final EIS.
2.2.4 Operations and Maintenance	2-20	1/1 to 2	298. **Comments**. This first sentence implies that landowners may occupy land inside the ROW for extended periods of time, possibly to live or work within the ROW. Since the boundary of the ROW is determined by EMF magnetic field requirements, any prolonged stay could exceed the safe

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 46 of 84

Comment No. 291-292

Reference to the Pima County Sahuarita Landfill in Section 2.2.4, ROW Cleanup and Restoration, was stated as an example.

Comment No. 293-294

The commentor's recommendation, "meeting the requirements of native plant ordinances in Santa Cruz and Pima Counties," has been be added to the ROW Cleanup and Restoration section in Section 2.2.4 of the Final EIS.

Comment No. 295-299

In cases where there is a conflict between various safety standards, the strictest/most conservative safety standard would be adhered to. Evaluation of legal liability is outside the scope of the EIS.

Magruder, Marshall
Page 47 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			standards for these individuals. The boundary of the ROW needs to be marked with safety Warning signs. The rest of this paragraph does not relate to this first sentence.
2.2.4	2-20	1/2	299. **Recommendations**. (1) That landowners not be permitted to work, have extended stays, or any structures, including non-metallic buildings, such a barns, inside the ROW. (2) Thus, add a new sentence between the first and second sentence of this paragraph to read: "Landowners and other people should stay for extended times or perform long-term work within the ROW boundaries, since its width is determined by exposure limits considered safe for short durations inside the ROW. The boundary of the ROW will be marked by small, standard 'WARNING' signs with an appropriate inscription of the effects of prolonged stays inside the ROW."
2.2.4	2-20	1/2, new ¶	(3) Start a new paragraph with the present second sentence.
2.2.4	2-20	1/2 to 6	300. Comments. This sentence indicates that the Tucson TEP operations center would control the system. The operational connectivity, communications interfaces and training between the US and Mexican systems is not discussed. This is a potential area for causing system failure. The Tucson operations center is not included in this EIS, it's interfaces not described, nor are its capabilities to manage a bi-national system. 301. Questions. (1) Will the Tucson operations control center control the Mexican portion of the system? (2) Who will be authorized close Mexican circuit breakers? (3) Who will be authorized to open American circuit breakers? (4) What means of communications will exist between the 50 or so Mexican power plants, transmission line operators and various control centers in Sonora and Sinaloa? (5) Will the Tucson control center be able to "control" all of the Mexican power plants and transmission lines? (6) Who is has responsibility and authority to prevent "cascading" power failures from crossing the International border? (7) Are there any agreements between TEP and Mexican authorities that will provide for internationalization of this part of the Western Grid? (8) Has the WECC and WestConnect RTO approved the addition of Sonora and Sinaloa into the Western Grid? (9) When will cross-border system operators training start? (10)]Are there any differences in the personnel qualification and technical standards used in Mexico when compared to same US personnel qualification and technical standards? 302. **Recommendations**. As a minimum, these questions have to be answered so that decision makers will have confidence that the proposed system can operate in a safe, reliable, and consistent manner. Such answers needs to be included in the next version of this draft EIS.
2.2.4	2-20	2/1 to 5	303. **Comment**. This first sentence discusses two plans without providing what each plan shall contain. 304. **Recommendation**. Adding a small table that will give the outline of each plan. The same format maybe applicable for providing the same plan to both the USFS and BLM.
2.2.4	2-20	2/8	305. **Comment**. The transmission line damages listed include "flood" damage. This EIS requires that a floodplain analysis be completed. If done correctly, all of the system will be designed for a minimum of a 100-year flood and the South Substation, as a minimum, for a 500-year flood. If flood damage could occur to the proposed system, then it needs to be "designed out" with at least less than 1% occurrence, on a annual basis.
2.2.4	2-20	2/8	306. **Recommendation**. Delete the word "flood" in this sentence.
2.2.4	2-20	2/8 to 10	307. **Comments**. This sentence indicates that repair crews have to get to

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 47 of 84

Comment No. 300-302

The level of detail requested by the commentor is not appropriate in an EIS. Chapter 1 provides a discussion of TEP's efforts to link the Mexican and U.S. electric systems.

Comment No. 303-304

The level of detail requested by the commentor is generally not provided in an EIS.

Comment No. 305-306

In Section 2.2.5, a general statement is made about the potential sources that sometimes damage transmission lines. As written, the statement does not imply that transmission lines associated with this project will be damaged by floods, rather, there is the potential for damage. A floodplain analysis is provided in Appendix C.

Comment No. 307-309

The information requested by the commentor is not appropriate for this EIS.

Magruder, Marshall
Page 48 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			damaged parts of the transmission line rapidly. From the first paragraph in this section, such repair crews will be dispatched from Tucson. 308. **Questions**. (1) Has TEP conducted a travel time analysis to determine how long it would take a crew, in monsoon rainstorm to get from Tucson to points on the Western Route? (2) What was the travel time required to reach a point half-way between Arivaca Road and Ruby Road? (3) Does TEP have access to properly equipped helicopters to reduce travel time? (4) What is the difference between travel by helicopter or by vehicle to the hardest part to reach on the Western, Central, and Crossover Routes? 309. **Recommendation**. Provide the results of this analysis and compare such results for the Power Plant Alternative, PNM's Routes, and NO Action (meaning travel time for the present 115 kV line). Such a comparison is important for decision makers to evaluate the "repair time" challenges facing transmission lines versus local generation.
2.2.5 Standard Mitigation	2-21	1/1 to 2	310. **Comment**. TEP testified during the ACC Line Siting Hearings that TEP would NOT construct this system, but an outside contractor would be hired. The TEP "Standard Mitigation Practices" portion of TEP's Environmental Protection Provisions needs to be included in this section (or another) so that all mitigation practices are included in **one place** in the EIS. The word "mitigation is used throughout this draft EIS but it's nearly impossible to determine what Mitigation Measure applies where, when, etc. **The compilation of Mitigation Measures, as recommended below, is critical for decision makers (who will consider changes or adding new Mitigation Measure requirements for TEP). This has to be completed so the EIS can be reviewed.** This needs to be accomplished in the next draft EIS version. 311. **Questions**: (1) Do any other lists of mitigation measures, practices and process that will be implemented on this project exist including those in Appendices D, E, and F? (2) Will all the mitigation measures, practices and processes in the ACC Order implementing the Certification of Environmental Compatibility be included in this section? (3) Will all the mitigation measures, practices and processes in the "Harris Reports" be included in this section? (4) What mitigation counter-measures (proactive actions) that will be performed to avoid having to perform a prescribed Mitigation Measure? (5) How will TEP ensure its "contractor" will follow all the Mitigation Measures? 312. **Recommendations**. (1) **All mitigation practices and procedures need to be consolidated into one location in the EIS so that they are available and understood by decision makers**. (2) Provide **ALL** specific mitigation details in related groups. One arrangement could be by project management phases. (3) Please describe the mitigation measure management process that TEP will used with its contractor and various subcontractors. (4) Each **Mitigation Measure** needs to include answers to the following: (a) Why is the Mitigation Measure necessary? (b) Who will perform the Mitigation? (c) Where and when is the specific Mitigation Measure applicable? (d) When will it be performed, such as before/after another event? (e) What are the specific actions required by the Mitigation Measure? (f) When will the Mitigation be considered complete,

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 48 of 84

Comment No. 310-312

Condition Number 16 in ACC Decision No. 64356 requires TEP comply with "recommendations, mitigation measures, and actions to reduce or prevent environmental impact included in the EIS." TEP management will be responsible for providing oversight of contractors and ensuring that mitigation measures are implemented and adhered to. Section 2.2.6 provides a list of other sources (e.g., agreements, permits) that may include mitigation measures.

Magruder, Marshall
Page 49 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			(g) Who on the TEP Project Team (organization not in this version of the draft EIS) will manage Mitigation Measures and be the point of contact for both public and governmental officials concerning mitigation? (h) Who will verify that the Mitigation process was completed in a satisfactory manner and until no additional follow-up is required? And (i) How will Mitigation Measures be managed, tracked, opened and closed? (j) Who is ultimately responsible if the Mitigation Measure fails? (5) Redo Table 2.2-2 and section 2.2.5 to incorporate the above.
Table 2.2-2 TEP Mitigation Practices Included in the Proposed Action	2-21 to 2-23	Entire table	313. **Comment**. Table 2.2-2 is too general and fails to adequately describe mitigation in terms used by project management and decision makers. More specific and mandatory Mitigation Measures are necessary, as there is no assurance that voluntary measures will be followed. 314. **Recommendations**. (1) Rewrite this table to include, as a minimum, the information requested above under section 2.2.5. (2) Each Mitigation Measure **shall include the verb "shall" to make compliance a mandatory requirement.** (3) **Change the word "would" to read "shall" throughout this Table.**
Table 2.2-2	2-21	3./1 to 4	315. **Comments**. The first sentence of this mitigation measure implies that pole construction areas, staging areas, lay down area, and access" are shown in this version of the draft EIS. None of these have been placed on maps. 316. **Questions**. (1) Where is each of these areas? (2) Where are the wildlife zones, archaeological sites, or ROW boundaries? (3) Why isn't there a reference to the best maps provided to show these important parts of this proposed work plan? (4) How will the land managers know the definition the "colored flags" and "survey markers" 317. **Recommendation**. Include the reference to the maps in the EIS to show each of these areas. These visual presentations are important for decision makers.
Table 2.2-2 Table 2.2-2	2-21 2-21	6.(all) 6./1	318. **Comments**. The term "range improvements" needs clarification. 319. **Question**. Do range improvements include fences and gates? 320. **Recommendation**. After "water facilities" add ", fences, gates,"
Table 2.2-2	2-21	7.(all)	321. **Comment**. During the ACC Siting Committee hearings, TEP indicated that NO highly visible devices would be used on any of these towers. The consultations need to be completed and Memoranda of Understanding included in the EIS from the Federal Aviation Administration and the US Air Force giving permission for this system to be constructed. **This has to be accomplished prior to release of the Final EIS so decision makers can consider this in determining each Record of Decision (ROD).** 322. **Questions**: (1) Have the visibility requirements for Ruby Field (McGee's Siting) been met? (2) What are the requirements for "highly visible devices" (HVDs) including colored balls or lights? (3) How will these lights be powered? (4) What are the maintenance requirements for these devices? (5) Have these HVDs been considered in the visibility studies. If not, then the visibility studies in this EIS need to be redone, taking the HVDs into account? 323. **Recommendations**. Clarify that NO "Highly Visible Devices" are required for any parts of this system. If so, then all visibility analyses will have be redone. This has to be provided in "draft" form for comments and review, prior to starting the Final EIS.
Table 2.2-2	2-23	16/1	324. **Comment**. This mitigation measure is dependent upon a future action

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 49 of 84

Comment No. 313-314

The mitigation measures in Table 2.2-2 are proposed measures under the Proposed Action. The Federal agencies will describe specific mitigation commitments in their RODs. The RODs will explain how mitigation measures will be planned and implemented, will be as complete as possible based on available information, and will be subject to revision as more specific and detailed information becomes available. The RODs will be available for public review and copies will be available upon request.

Comment No. 315-317

Due to changes likely to be made during the NEPA process, final designation for the pole construction, staging, laydown and access areas will occur during the design phase of the project. These areas are described in Section 2.2.4.

Comment No. 318-320

Repairs would depend on agreements with the parties involved.

Comment No. 321-323

CEQ and DOE NEPA-implementing regulations require compliance with all applicable regulations.

Comment No. 324-326

Refer to Section 4.3 regarding consultation with USFWS.

Magruder, Marshall
Page 50 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			by the USFWS, "consultation under Section 7 of the *Endangered Species Act*.." 325. **Question**. Why aren't the Section 7 ESA consultations with USFWS been completed? 326. **Recommendations**. (1) Complete consultations under Section 7 prior to resubmitting this EIS. (2) Delete, "If required," and capitalize "Mitigation...
Table 2.2-2	2-23	21.	327. **Comment** This "mitigation" measure is really a safety issue. The safety issue then should lead to a way to improve safety. 328. **Recommendation**. That ALL safety issues be in one section with safety steps grouped together.
Table 2.2-2 Table 2.2-2	2-23 2-23	22.(all) 22. (all)	329. **Comment**. Due to the unique construction equipment that will come from other parts of the country for this project, there is a reasonable probability they could have seeds of noxious, non-native, varieties embedded. The only way to ensure such material is not brought into the area is steam cleaning, using the same standards as required by the U.S. Department of Agriculture (which recently was transferred to the Department of Homeland Security) when importing vehicles into the United States. Thus, similar procedures should be followed for all vehicles coming into the construction zone. 330. **Recommendations**. (1) That all work vehicles, such as listed in Table 2.2-1 (page 2-15) and those discussed in section 2.2.1 use the approved-USDA "steam cleaning" standards PRIOR to entering into any part of the construction zone. Such cleaning would not have to be repeated when vehicles moved from one part to another part of the construction zone. Each "clean" vehicle will have a tag giving particulars so that the professional biologist can certify compliance. (2) Change this measure to read as "22. All construction equipment shall be steam cleaned prior to entering the construction zone using the USDA-approved process. All work vehicles shall be tagged and certified as clean and the on-site biologist will track compliance who can have unclean vehicles removed from the project. Clean vehicles will be able to shift work locations without having to be re-cleaned."
2.3 Comparison of Alternatives	2-23	2/bullets	331. **Comment**. The ***Federal Register* Notice of Intention.., provided eight specific areas to be assessed. None of these were followed as mandated**. For example, "biological resources" description, as amplified on page 2-25, only discussed plants, not wildlife, fails to indicate that consultations have even started. 332. **Question**. Why were these not assessed as indicated in the NOI? 333. **Recommendations**. To agree with these requirements, then (1) Third bullet, change to read "visual impacts" (2) Fourth bullet, change to read "Impacts on protected, threatened, endangered, or sensitive species of animals or plants, or their critical habitats." (3) Fifth bullet, change "cultural resources" to read "Impacts on cultural and historic resources." (4) Sixth bullet, change to read "Socioeconomic impacts of development of the land tracts and their subsequent uses." (5) Eight bullet, just after "water resources" add "Impacts on floodplains and wetlands" (6) Fourteenth bullet, change to read "Disproportionately high and adverse impacts on minority and low income populations"
2.3.1	2-29	NEW	334. **Comment** Renewable energy sources will increasingly produce electricity and energy during the life cycle of the proposed TEP system. A new paragraph needs to be included to discuss the effects that renewable energy sources will have in the target areas, between Sahuarita and Santa

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 50 of 84

Comment No. 327-328

In Table 2.2-2, mitigation measure 21 does address fire safety as stated by the commentor. Table 2.2-2 provides a list of all proposed mitigation measures that are likely to be implemented under the Proposed Action. A more detailed discussion on fire safety and mitigation can be found in Section 4.10, Human Health and Environment. Firefighters and TEP personnel would comply with the mitigation and safety measures in Forest Service Fireline Handbook (NWCG Handbook 3, PMS 410-1, NFES 0065) and the Forest Service Health and Safety Code Handbook (FSH 6709.1).

Comment No. 329-330

Sections 3.3.6 and 4.3.6 discuss the existing invasive species (non-native plants) in the project area, and potential invasive species impacts that could result from the proposed project, and Table 2.2-2 describes the mitigation measures to be employed in accordance with applicable requirements.

Comment No. 331-333

The Identification of Environmental Issues section of the *Notice of Intent To Prepare an Environmental Impact Statement and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Improvement; Tucson Electric Power Company* provided a preliminary list of issues that would be analyzed in the Draft EIS. Section 2.3 presents a list of the resource areas evaluated. The issues identified in the NOI are discussed in the appropriate resource area.

Comment No. 334-335

Alternative power supply means does not meet TEP's proposal and are thus not evaluated in this EIS (refer to Section 2.1.5 of the EIS).

Magruder, Marshall
Page 51 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			Ana, Sonora. 335. **Recommendation**. New paragraph 2.3.1. "Impact of Alternative Sources of Energy on the Five Alternatives." Suggest comparing and contrasting the impacts of 1.1%, 2.5%, 5%, and 10% use of local generation, through renewable energy resources, due to more realistic changes to the present 1.1% renewable energy source requirements imposed in Arizona.
2.3.2	2-29	NEW	336. **Comments**. Energy efficiency and conservation programs have proved to reduce significant energy loads. Such programs are slowly being introduced in Arizona and acceleration is expected as the price of electricity continues to increase. Such programs, conservatively, can save 30% or more energy demand. They will impact the future requirements for this system, in the target area, between the Town of Sahuarita and Santa Ana, Sonora. 337. **Recommendation**. New paragraph 2.3.2. "Impact of Promoting Energy Conservation and Efficiency on the Five Alternatives" Suggest make 10%, 20% and 30% reductions in Energy due to both conservation and efficiencies means being implemented in Santa Cruz County, which recently adopted the International Building Code, including the Energy Code sections. Santa Cruz County is preparing a "green" or high efficiency building ordinance, using the U.S. Green Building Council recommendations, requiring Energy Star rated appliances, and National Association of Home Builders (NAHB) recommendations, which, conservatively, can reduce future energy demands for structures by 30%.
Table 2.3-1	2-30 to 2-41	New Column	338. **Comment** Since the Local Power Plant Alternative is required to be assessed and compared in this EIS. 339. **Recommendation**. That a new Column is needed to be added, with data, between the "Crossover Corridor" and "No Action Alternative" labeled "**Local Power Plant Alternative**" and that all the relevant information be included in this table for that alternative.
Table 2.3-2	2-41	New	340. **Comment** Since there are two alternatives for the 115 kV line that will interconnect with the TEP 345 kV transmission line, the summary of this analysis needs to be included in this EIS. 341. **Recommendation**. Add new Table 2.3-2, titled "Summary Comparison of Potential Environmental Effects of Alternatives for the 115 kV transmission line in Nogales, Arizona.
3.1.1	3-1	3(all)	342. **Comment** The sentence states that TEP has not finalized the placement of the 125-ft" right-of-way (ROW). The second sentence states that "precise siting of the ROW would involve input form cultural, biological, and visual specialists." That process is what the EIS is all about. Obtaining such consultations, such inputs, negotiations, compromises of ALL of these factors so that all parties are comfortable and in agreement with the precise nature of the final design. Obviously, **TEP has failed to accomplish this task so far in the EIS process.** Without such agreements and "statements" in this report, the work is incomplete. The next statement confirms that all parties will never agree "after each agency has issues a Record of Decision (ROD), to identify and minimize impacts of each area of land to be disturbed" continues to show that TEP fails to understand this process. By "waiting" for individual agencies to respond prevents an integrated solution to the complex, interrelated issues throughout this EIS. **Without the precise locations of ROWs, poles/towers, and all other facilities, this draft EIS is NOT ready for presentation to ANY agency for decision making. The time is now, in this DRAFT EIS to present all of those factors, and it's more than 'area of disturbed land" that is involved with this decision. TEP MUST provide, discuss, compromise, modify, and reach agreement with all government agencies, landowners, customers, residents, and all others impacted by this project with the DRAFT EIS**

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 51 of 84

Comment No. 336-337

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to ACC, Comment 1, and to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Comment No 338-339

ACC Comment 3 emphasized that a new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 340-341

One of the alternatives route for the proposed 115-kV transmission line was eliminated from further analysis due to land use of the area. Discussion on the 115-kV line has been added to Chapter 2 of the Final EIS.

Comment No. 342-344

The NEPA process does not end with the preparation of the Draft EIS. Rather, it is an ongoing process with formal and informal consultations until the project is completed. Presentation of tower, ROWs, and facility locations in the Draft EIS are preliminary and subject to change with the findings of the biological and cultural investigations. If an action alternative is selected, the Federal agencies will follow a Programmatic Agreement with the Arizona State Historic Preservation Office (SHPO), interested tribes, and TEP guiding the treatment of cultural resources. Prior to ground-disturbing activities in any approved corridor, a complete on-the-ground inventory would be conducted by professional archaeologists in accordance with provisions of Section 106 of the National Historic Preservation Act (NHPA). Efforts to identify cultural resources would also

Comment No. 342-344 (continued)

include historical document research and continued consultation with Native American tribes regarding potential traditional cultural properties and sacred sites. Identified cultural resources would be evaluated in terms of National Register eligibility criteria and potential project effects in consultation with all parties who are participants in the Programmatic Agreement.

Wherever possible, power poles, access roads, and any other ground-disturbing activities would be placed to avoid direct impacts to cultural resources. A professional archaeologist would assist the pole-siting crew in avoiding impacts to cultural resource sites. In cases where avoidance of sites is not feasible, a site-specific Treatment Plan and Data Recovery Plan would be developed in consultation with tribes, the, appropriate land-managing agencies, and the Arizona SHPO. These plans will include an appropriate Plan of Action to implement the Native American Graves Protection and Repatriation Act. A Discovery Plan would be developed to establish procedures to be followed in the event of discovery of unanticipated cultural resources, and a Monitoring Plan would address issues of site protection and avoidance.

Magruder, Marshall
Page 52 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			showing those results. Anything less than that requires REJECTION. 343. **Question**. Why hasn't TEP presented the precise location of each ROW and structure in the Draft EIS, even after governmental approval agencies have specifically requested this information be provided? 344. **Recommendation**. Resubmit this EIS after all of the precise locations have been determine and preliminary agreements achieved among all parties to this project, including those in Mexico.
3.10 Human and Health Environment	3-86	3/1 to 5	345. **Comment**. This paragraph indicates "deleterious" heath conditions are the concerns of the public from EMF. The conclusions are wrong, there is a connection stated below, that EMF is a "possible" human carcinogen. 346. **Recommendation**. (1) Change the first three sentences to read: The long-term exposure to EMF exposure, in particular magnetic fields, has increased awareness by the public due to several studies that indicate a possible impact on the heath of such individuals. As the population increases, high voltage creates a stable electric field while the alternating components create the magnetic fields from transmission lines. Both electric fields (measured in kilo Volts per meter) and magnetic fields (measured in micro Tesla (μT) or milli Gauss (mG)) are of concern. As part of the EMF-RAPID Program's assessment of EMF-related health effects, an international panel of 30 scientists met in June 1998 to review and evaluate the weight of the ELF-EMF scientific evidence. Using criteria developed by the International Agency for Research on Cancer, none of the Working Group considered the evidence strong enough to label EMF exposure as a "known human carcinogen" or "probable human carcinogen." However, a majority of the members of this Working Group (19/28 voting members) concluded that exposure to power-line frequency EMF is a "possible" human carcinogen. This decision was based largely on "limited evidence of an increased risk for childhood leukemias with residential exposure and an increased occurrence of CLL (chronic lymphocytic leukemia) associated with occupational exposure." For other cancers and for non-cancer health endpoints, the Working Group categorized the experimental data as providing much weaker evidence or no support for effects from exposure to EMF. (NIEHS 1999) The NIEHS agrees that the associations reported for childhood leukemia and adult chronic lymphocytic leukemia cannot be dismissed easily as random or negative findings. The lack of positive findings in animals or in mechanistic studies weakens the belief that this association is actually due to EMF, but cannot completely discount the finding. The NIEHS also agrees with the conclusion that no other cancers or non-cancer health outcomes provide sufficient evidence of a risk to warrant concern. (2) In the third sentence, delete all before "Appendix B..."
3.10	3-86	4/1 to 2	347. **Comment**. This first two sentences of the paragraph are not related. 348. **Recommendation**. (1) Spilt this into two paragraphs, between the first and second sentence. (2) Suggest moving the first sentence to be a new fifth paragraph.
3.10.1 Electric and Magnetic Fields	3-86	1/5	349. **Comment**. Frequency is measures in cycles per unit time. 350. **Recommendation**. Change from "frequency" to read "of alternating current (AC) of 60 Hz, or 60 cycles per second."
3.10.1	3-86 to 3-87	2 (all 1 (all)	351. **Comments**. These two paragraphs are a mixture of unrelated information, much in error. The first two sentences in the last paragraph on 3-86 do NOT show that "common household appliances" are **not** the "primary EMF levels" in the project vicinity. The appliance data are for a three-foot distance while transmission line EMF levels are measured at the edge of the Right-of-Way, from the structures and conductors.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 52 of 84

Comment No. 345-346

As stated in the Draft EIS "the possibility of deleterious health effects…has increased public concern." The suggestion made by the commentor is similar to and conveys the same idea as presented in the Draft EIS.

Comment No. 347-348

Section 3.10, Human Health and Environment, includes a discussion on electric and magnetic fields. While corona effects mainly cause interference, audible noise, and produce visible light, because these effects are due to the electric field effects, they are discussed in Section 3.10.

Comment No. 349-350

The text is correct as written.

Comment No. 351-352

Section 3.10.1 of the EIS mentioned by the commentor provides a comparison of the EMF level of some common household appliances at 3 ft and EMF level from existing transmission lines at the edge of the ROW. The EMF from the common household appliances and the existing transmission lines were modeled at a reasonable distance that the public would be exposed to the EMF.

Magruder, Marshall
Page 53 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			352. **Recommendations**. The NIEHS 1999 report, pages 31 to 34, provide a better and more complete discussion of the effected "magnetic" environment, thus recommend using the following (modified and tailored for this system): **EMF Envionment.** An evaluation of the importance of any environmental agent requires knowledge of both the potential health impacts associated with exposure and the exposure levels encountered by the population. For any environmental exposure, a clear estimate of risk is made more difficult by the lack of a well-defined measure of dose. For EMF, it is unknown whether time-averaged fields, time above a threshold, the electric current induced by the field, the magnetic field itself, or specific temporal characteristics of the field (e.g. frequency, waveform, or intermittency) are relevant to human health. **Magnetic Field Environment.** Recognizing this uncertainty and faced with practical limitations, investigators have employed several different methods to estimate human exposure to EMF. Most of these approaches provide an estimate of the 24-hour time-average of the 60 Hz magnetic field. The first EMF epidemiological study, as well as several subsequent studies, estimated exposure by developing a code to describe power-line wiring near homes. More recent studies performed actual measurements of magnetic fields using either survey instruments in homes or miniature monitors worn by an individual for periods of up to 24 hours or more (personal exposure measurements). Another approach was to calculate time-average magnetic field exposures based on electric current in nearby power lines and distance of homes to the lines. This report focuses entirely on recent studies that measured magnetic fields, and highlights single spot measurements and 24-hour, time-weighted averages. Several studies measured magnetic fields in either homes or personal exposure. These studies and others compared different types of measurements in an attempt to relate the results across various epidemiological studies. Two of the studies attempted to evaluate nationwide exposures in the U.S. population. One study measured magnetic fields in various locations within homes using fixed meters. This survey, although not designed to describe individual exposures, provides a snapshot of residential fields, and the results are probably reasonably representative of residential conditions. An extensive measurement protocol was used including spot measurements inside rooms, field recordings in the home, measurements of field profiles from wiring outside the home, measurements of household appliances and measurement of fields from currents in the electrical grounding system. The other study relied entirely upon personal monitors mailed to participants along with a questionnaire that addressed characteristics of the individual wearing the monitor. These two studies form the basis for most of the discussion that follows. Measured magnetic field exposures to individuals and measurements in homes tend to have an asymmetric distribution with the bulk of their values in the low range with fewer values in the range of higher exposures. Therefore, the central tendency of the values is better represented as a geometric mean (log-weighted average) and the variation around that mean given as a geometric standard deviation. Another measure commonly used is the median, which denotes the estimate of exposure for which 50% of the population have smaller exposures and 50% have larger

Magruder, Marshall
Page 54 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			exposures. In addition, estimates are also presented for the portion of the population in the upper range of exposure. This report presents averages as geometric means with geometric standard deviations given in parenthesis beside the average estimate. Average 24-hour personal magnetic field exposure for individuals in the U.S. population is about 0.09 micro Tesla (μT) (0.9 milligauss or mG). (geometric standard deviation of approximately 2.2). The median measured fields using monitors located for 24 hours in several places in the homes shown in Table 3.10-1. The main difference between the home and personal exposure measurements pertains to exposures incurred outside of the home and the movement of individuals within the home near EMF sources. **Table 3.10-1.** ***Average Magnetic Field Measured in Homes.*** Measurement | In Micor Tesla | In Milli Gauss | Geometric Std Dev. Average 24-hr personnel magnetic field exposure in U.S. | 0.09 μT | 0.9 mG | 2.2 About 44% have 24-hr exposure | > 0.1 μT | > 1.0 mG | NA About 14 % have 24-hr exposure | > 0.2 μT | > 2.0 mG | NA About 0.5 % have 24-hr exposure | > 0.75 μT | > 7.5 mG | NA Mean measured fields using monitors located for 24-hrs in several places in the home | 0.06 μT | 0.6 mG | NA About 28% of homes exceeded | > 0.1 μT | > 1.0 mG | NA About 11% of homes exceeded | > 0.2 μT | > 2.0 mG | NA About 2% of homes exceeded | > 0.5 μT | > 5.0 mG | NA Personal exposures measured within the home averaged 0.08 μT (0.8 mG) (geometric mean standard deviation of about 2.5) for time not in bed and 0.05 μT (0.5 mG) (3 geometric SD about 5.2) for time spent in bed. In comparison, personal exposures at work, exposure at school and exposure during travel measured are in Table 3.10-2 below. It is clear from these numbers that personal exposures tend to be somewhat larger than those observed by fixed measurement of fields in homes. **Table 3.10-2.** ***Personnel Exposures to Magnetic Fields at Home, School and Work Environments.*** Measurement | In Micor Tesla | In Milli Gauss | Geometric Std Dev. Average personal exposures at work | 0.1 μT | 1.0 mG | 2.57 Average exposure at school | 0.06 μT | 0.6 mG | 2.1 Average exposure druring travel | 0.1 μT | 1.0 mG | 2.0 About 38% of personnel at home and not in bed or 30% of personnel in bed | > 0.1 μT | > 1.0 mG | NA About 14 % of personnel at home and not in bed or in bed | > 0.2 μT | > 2.0 mG | NA About 3.5 % of personnel at home and not in bed or 4.0% of personnel in bed | > 0.5 μT | > 5.0 mG | NA Average within home not in bed | 0.08 μT | 0.8 mG | 2.5 Average within home in bed | 0.05 μT | 0.5 mG | 2.5 Personal exposures do not appear to differ by gender, but do differ by age as shown in Table 3.10-3. There are some regional differences in exposure across the United States, but these are differences that are likely to change based upon

Magruder, Marshall
Page 55 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation

the seasons and are not likely to have a major impact upon exposure considerations. Residents of apartments and duplexes seem to have higher average exposures compared to residents of other dwelling types.

Table 3.10-3. ***Personnel Exposures by Age to Magnetic Fields.***

Measurement	In Micor Tesla	In Milli Gauss	Geometric Std Dev.
Young childres less than 5 years of age	0.08 µT	0.8 mG	2.1
School-aged children, five to 17 years of age	0.08 µT	0.8 mG	2.2
Working-aged adults, 18 to 64 years of age	0.1 µT	1.0 mG	2.2
Average exposures for Residents of apartments and duplexes	0.1 µT	1.0 mG	NA
Average exposures for Residents of other dwelling tupes	0.05 µT to 0.07 µT	0.5 to 0.7 mG	NA

The presence of overhead power lines near homes contributes to both personal exposures and fixed home measurements. In a large study using fixed monitors in homes, estimates of fields due to power-line fields were determined independent of exposures measured in the homes. Both the power-line and grounding system fields were combined and compared to the short-term field levels measured in the centers of rooms. Combined, the two sources add up to much of the spot residential fields in homes having higher than usual magnetic field levels.

A comparison shown in Table 3.10-4, was made between different types of power lines to determine which ones produced the greatest fields. Transmission lines and certain types of distribution lines produced the greatest fields, although the number of residences exposed to these fields was small), and several types of primary distribution lines produced the lowest median fields. The majority of homes were associated with underground distribution lines that still generated fields with 5% exceeding roughly 75% of the median for all homes).

Table 3.10-4. ***Personnel Magnetic Field Exposures by Type of Power Line***

Measurement	In Micor Tesla	In Milli Gauss
Homes associated with Transmission Lines and certain types of distribution lines	0.09 µT to 0.38 µT	0.9 mG to 3.8 mG
Homes associated with severl types of pirmary distribution lines	0.01 µT to 0.02 µT	0.1 mG to 0.2 mG
Average home associated with underground distribution lines	0.03 µT	0.3 mG
About 5 % of homes associated with underground distribution lines exceeded (about 75% of the median for all homes)	> 0.13 µT	> 1.3 mG

The effect of power lines on personal exposures was also assessed, but in contrast to the previous discussion, self-reporting was used to classify the types of power lines. Persons reporting three-phase primary distribution lines (average exposure at home), multiple three-phase primary distribution lines and transmission lines had the highest average exposures, while those reporting single phase and two-phase primary distribution lines had the lowest exposure as shown in Table 3.10-5. For all types of lines, some of the population had higher exposures. At distances of greater than 50 feet, the type of power lines appeared to have little impact on the average exposure and only a minor impact on the number of individuals with the highest exposures.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 55 of 84

Magruder, Marshall
Page 56 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation

Table 3.10-5. ***Effect of Power Lines on Average Magnetic Field Exposures at Home***

Measurement	In Micor	In Milli
Three-phase primary distribution lines	0.083 µT	0.83 mG
Multiple three-phase primary distribution lines	0.1 µT	1.0 mG
Transmission line	0.1 µT	1.0 mG
Single-phase distribution line	0.07 µT	0.7 mG
Two-phase primary distribution line	0.05 µT	0.5 mG
For all types of lines, 25% of the population had	> 0.1 µT	>1.0 to 2.0
For all types of lines, 5% of the population had	> 0.3 µT	>3.0 to 5.0

Several other factors contributed to increased personal exposure and/or increased residential exposure. These included type of home (single family homes had smaller average exposures than multi-family homes), size of the home (smaller homes had higher fields), age of the home (older homes had higher fields), water-line type inside the home (homes with metal pipes tended to have higher fields) and location of the home (urban and suburban homes had higher fields than rural homes).

Magnetic fields generated by appliances were also studied. Exposures tend to vary greatly by distance to the appliance and type of appliance. In general, microwave ovens, toaster ovens, ceiling heat and refrigerators generated the highest fields. However, the contributions of these fields to personal exposure will depend upon placement of the appliance, distance from the appliance, frequency of use, manufacturer, etc. Any observations on exposures from appliances are not easily generalized.

Occupational exposures have been evaluated in a large number of studies. The list of occupations with EMF exposure is quite large. In general, electrical workers, persons working near machines with electric motors and welders tend to have the highest exposures with time-weighted average magnetic field exposure levels in the range of 0.1 to 4.0 µT (1 to 4 mG).

Electrical Field Enviroment. The electric-field profile, see Table 4.10-1, Table 4.10-2, and Figure 4.10.1, is measured from the centerline of the structure. The figures clearly illustrate the electric , the location of the maximum, and the Right-of-Way (ROW) considerations. Effects on humans due to spark discharges from objects insullated from ground may cause injury. A male can perceive a spark discharge in approxitely a 0.12 magaJoule (mJ), while a 2 mJ spark is annoying. It takes a 25 mJ spark to injury, which is a value beyond that expected on objects beneath a transmission line. Using worst case analysis, with a combination of no leakage path to ground exists, the object has steady motion and it is oriented parallel to the transmission line, Table 3.10-6 shows the kV/m.

Table 3.10-6. ***Effect of Electric Fields from a Transmission Lines that will induce current on various vehicles. (in kV/m)***

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 56 of 84

Magruder, Marshall
Page 57 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation

	25 J	259.00	159.00	106.50
Annoyance	2 mA	8.92	4.35	2.50
	2 mJ	2.37	1.21	0.95
Perception	1.1 mA	4.91	2.39	1.39
	0.12 jJ	0.58	0.35	0.23

Actual Magnetic and Electric Enviroments for a Segement this Project. Tucson Electric Power Company (TEP) has developed model data of existing levels of EMF levels on the Bureau of Land Management (BLM) part of the Common Corridor, shown in Figure 1.1-4. At present, two existing transmission lines are in the same corridor, to the north of the proposed project. Table 3.10-7 shows both the Magnetic and Electric Field data a distances of 285 feet (85 m) and 340 feet (104 m) from the closest existing transmission line. This coincides with the right-of-way (ROW) of the proposed transmission system. These magnetic and electric fields will be additive to that in the proposed transmission line system.

Table 3.10-7. *Effect of Magnetic and Electric Fields from Existing Power Lines that will be added to the Proposed Transmission System*

Distance from Existing Transmission Lines to Proposed System	Magnetic Field	Electric Field
At 280 feet (85 meters)	0.11 µT (1.1 mG)	0.01 kV/m
At 340 feet (104 meters)	0.076 µT (0.76 mG)	0.006 kV/m

Table 3.10.1 EMF Field Level of Some Common House Hold Appliances	3-87	Table (entire)	353. **Comment**. The reference for this table leads to its reference that is a report dated September 1985. There have been many improvements in internal grounding, RF shielding and understanding radiations from such appliances in the past 18 or so years. Recommend using the following Table from a study. The reworded paragraph above discussed home appliances and their variability. The connection with home appliances and transmission lines is very misleading, not true, nor expected to be used as an argument since appliances are temporal, not 24/7, and are improving with respect to EMF. 354. **Question**. Does DOE have better data if it' is essential to discuss EMF from modern appliances2 355. **Recommendations** This table is very misleading. Delete
3.10.1	3-87	2	356. **Comment**. This paragraph suggests that no standards are used for EMF. There is the National Electric Code which recommended the limit for the electric field under a transmission line no to exceed 5 milli-amps (rms). Further, Appendix B, page B-1, fifth paragraph, uses the value of 3 mG (0.3 micro Teslas) as when magnetic fields appear to be associated with childhood leukemia. The use of 3 mG is commonly used to define the boundary of the required ROW. These appear to be reasonable electric and magnetic field values to use for this project. Further the discussion with respect to other state laws is very incomplete. 357. **Recommendations**. (1) Insert a new Table 3.10.1- 8 to read as follows: **Table 3.10-8 *State Transmission Line EMF Standards and Guidelines.*** **Electric Field** / **Magnetic Field** **State** / **On R.O.W** / **Edge of R.O.W** / **Edge of R.O.W** Florida: 8 kV/m (1) 10 kV/m / 2 kV/m / 15.0 µT (150 mG) – Maximum Load (1) 20.0 µT (200 mG) – Maximum Load (2) 25.0 µT (250 mG) – Maximum Load (3) Minnesota: 8 kV/m / --- / --- Montana: 7 kV/m (4) / 1 kV/m / ---

Comment No. 353-355

The reference for the data for Table 3.10-1, EMF Level of Some Common Household Appliances, in the EIS was from a study done in 2003, and not September 1985 as stated by the commentor.

The comparison with the household appliance EMF was used for exposure to EMF from the transmission line because exposure to EMF from the transmission line would not be continuous, as there are no houses located in the vicinity of the proposed corridors that would be exposed to continuous EMF from the transmission line. Therefore, like exposures the household appliance EMF, exposure to EMF from the transmission line would be short-term.

Comment No. 356-362

The referenced paragraph states that no Federal regulations have been established specifying environmental limits on the strengths of fields from powerlines. The level of detail of information currently provided in the EIS is adequate to assess environmental impacts.

Magruder, Marshall
Page 58 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation

New York	11.8 kV/m 11 kV/m (5) 7 kV/m (6)	1.6 kV/m	20.0 µT (200 mG) – Maximum Load
Oregon	9 kV/m	---	---

Notes R.O.W. = right-of-way
(1) For lines 69 to 230 kV
(2) For 500 kV lines.
(3) For 500 kV lines on certain existing R.O.W.
(4) Maximum for highway crossing
(5) Maximum for private road crossings.

(2) Insert a new Table 3.10-9 to read as follows:

Table 3.10-9 *International Commission on Non-Ionizing Radiation Protection (IRPA/INIRC) Guidelines.*

	Electric Field	Magnetic Field
Occupational:		
Whole Working day	10 kV/m	500 µT (5 G)
Short term (1)	30 kV/m	5000 µT (50 G)
For limbs		25,000 µT (250 G)
General Public:		
Up to 24 hours per day	5 kV/m	100 µT (1 G)
Few hours per day	10 kV/m	1,000 µT (10 G)

Notes
For electric fields of 10-30 kV/m, field strength (kV/m) x hours of exposure should not exceed 80 for the whoe working day. Whole-body exposure to magnetic fields up to 2 hours per day should not exceed 5000 µT (50 G).
Source: IPRA/INIRC, 1990

(3) Insert a new Table 3.10-10 to read as follows:

Table 3.10-10 *ACGIH Occupational Threshold Limit Values for 60-Hz EMF.*

	Electric Field	Magnetic Field
Occupational Exposures should NOT exceed:	25 kV/m	1,000 µT (10 G)
	Prudence dictates the use of protective devices (e.g., suits, gloves, insulation) in fields above 15 kV/m	For workders with cardiac pacemakter the magnetic field shoud not exceed: 10 µT (1 G)
	For workers with cardiac pacemakers maintain exposure at or below 1 kV/m	

Source: American Conference of Governmental Industrial Hygienists (ACGIH), 1994.

(4) Change the words in the paragraph to read as follows:

'In the United States, there are no federal health standards specifically for 60-Hz EMFs.

At least six states have set standards for transmission line electric fields and two of those states have standards for magnetic fields, as shown in Table 3.10-8. The two state magnetic field standards (NY, NJ) are basically the maximum fields that existing lines in those states produce under maximum load-carrying conditions. In other words, their purpose is to ensure that future power lines do not exceed current EMF levels.

Two organizations have developed guidelines for 60-Hz EMP exposure, as shown in the Tables 3.10-9 and 3.10-10. Note that both these sets of guidelines are based on established effects of EMFs, such as nerve stimulation, and are much higher than EMF levels found typically in

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 58 of 84

Magruder, Marshall
Page 59 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			occupational and residential environments. Tables 3.10-9 and 3.10-10 are not meant to correspond t the low-level field strengths associated with elevated cancer incident reported in recent epidemiological studies and should not be interpreted as distinguishing "safe" from "unsafe" EMF levels. The National Institute of Environmental Health Services and Department of Energy (NIEHS/DOE) do not know at this point whether EMF exposure from power frequency sources constitutes a health hazard. Therefore the NIEHA/DOE cannot determine levels of exposure which are "safe" and "unsafe." (NIEHS/DOE 1995)
3.10.1 Safety	3-87	2/4	358. **Comment**. There are no quantitative values that represent the impact of the four types of shock or currents. 359. **Recommendations**.
	3-87	2/4	(1) Insert a new sentence, in the second paragraph to read. "See Table 3.10-11 below.
	3-88	after 3rd bulleted paragraph	(2) Insert new paragraph and Table 3.10-11 on page 3-88, after last bulleted paragraph as follows: The effects of EMF on humas is generally due to discharges from objects insulated from the ground, such a vehicles, building, and rancher cattle fences which become electrically charged by induction for the transmission line. Table 3.10-11 summarizes the electrical effects on humans, ranging from no perception through severe shock and possible entricular fibrillation.

Table 3.10-11 *Threshold Levels for 60 Hz Contact Current.*

Perception	
0.09	Touch perception for 1% of women
0.13	Touch perception for 1% of men
0.24	Touch perception for 50% of women
0.33	Grip perception for 1% of women
0.36	Touch perception for 50% of men
0.49	Grip perception for 1% of men
0.73	Grip perception for 50% of women
1.10	Grip perception for 50% of men
Startle	
2.2	Estimated borderline hazardous reaction, 50% of women (arm contact)
3.2	Estimated borderline hazardous reaction, 50%of men (pinched contacts)
Let Go	
4.5	Estimated Let-go for 0.5% of women
6.0	Let-go for 0.5% of women
9.0	Let go for 0.5% of men
10.5	Let-go for 50% of women
16.0	Let-go for 50%of men
Respiratory Tentanus	
15	Breathing difficult for 50% of women
23	Breathing difficult for 50% of men
Fibrillation	
35	Estimated 3-s fibrillating current for 0.5 % of 20 kg (44-lb) children
100	Estimated 3-s fibrillating current for 0.5 % of 70 kg (150-lb) adults
Established Standards	
0.50	ANSI standard for maximum leakage, portable equipment
0.75	ANSI standard for maximum leakage, installed appliance
5.0	NESC recommended limit for induced current under transmission line

3.10.2 Corona Effects	3-89	3 (all) Radio and Television Interference	360. **Comments**. This interference from both the 345 kV (2000 MW) and 115 kV (100 MW) transmission lines needs to be quantified. 361. **Questions**. (1) What are the distances from each will various levels of RF and TV interference be noted, in terms of decibels over background noise. (2) In the "common corridor" northern parts of the 345 kV line, what are the

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 59 of 84

Comment No. 356-362 *(continued)*

The referenced paragraph states that no Federal regulations have been established specifying environmental limits on the strengths of fields from power lines. The level of detail of information currently provided in the EIS is adequate to assess environmental impacts.

Magruder, Marshall
Page 60 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			combined impacts of this line and the other three transmission lines in the same utility easement? 362. **Recommendations**: (1) Show the curve, which reflects RF/TV interference, levels versus distance from the 115 kV and 345 kV, at full operational loads, for wet and dry climates. (2) Show where the RF/TV noise level exceeds background noise, in 10 dB increments. (3) Include the impacts of all four utility lines, and any planned future utility lines. (4) Discuss the impacts of age of insulator and conductors on RF/TV interference.
3.13 Environmental Justice	3-96 to 3-102	All	363. **Comment**. The Environmental Protection Agency (EAP) has established the Environmental Justice Geographic Assessment Tool replaces the *EnviroJustice Mapper* with new features and new technology. It is the result of an Agency-wide work group and provides information relevant to any area in the Continental U.S. Factors relevant to environmental justice assessments generally fall into four sets of indicators, i.e., **environmental**, **health**, **social**, and **economic**. The conditions these indicators seek to illuminate include, but are not limited to: adverse health or environmental impacts, aggregate or cumulative impacts, unique exposure pathways, vulnerable or susceptible populations, or lack of capacity to participate in decision-making process. These data are incorporated into the Environmental Justice Geographic Assessment Tool, to provide the information necessary to conduct a comprehensive preliminary analysis of any area of concern. Use of buffers is incorporated into the Environmental Justice Geographic Assessment Tool; population estimation is accomplished through the area-weighted methodology. Only race and income were considered in the DEIS analysis. The assessment in the DEIS failed to assess health or environmental impacts, aggregate or cumulative impacts, unique-exposure pathways, vulnerable or susceptible populations, or lack of capacity to participate in the decision making process. No social, economic, or health impacts were assessed. This section only provides location information for minorities and low-income populations, but **fails to provide any assessment of the four EJ indicators listed above.** 364. **Questions**: (1) Was the current EPA tool, described above, used for this analysis? (2) What are aggregate or cumulative health impact results of the proposed system on minority and low-income groups for each of the four EJ indicators: environmental, health, social and economic? 365. **Recommendations**: The "Durango" example fails to adequately assess environmental justice indicators and, due to its date, used older analysis techniques. **The section requires to be redone using the proper tool and derive the minimum results necessary to assess impacts on the four EJ indicators for these two counties**.
Figure 3-13-3 Detail of Block Group Boundaries for Populated Areas	3-100	Both maps	366. **Comment**. Neither map shows the transmission line corridors. Further, these maps are not color-coded, like Figures 3.13-1 and 3.13-2 367. **Recommendation**. Add the transmission line corridors on each of these maps. In addition, these maps need to be color-coded, similar to Figures 3.13-1 and 3.13-2.
Table 3.13-1 Pima County Census Block Groups on or Near	3-101	See comments	368. **Comment**. Block Group ID 9409901 (San Xavier District of the Tohono O'odham Reservation) is "across the street" of the South Substation, which is obviously close to the project that environmental justice (EJ), such that it should be included with checks in the 13th to 15th columns. 369. **Recommendation**. Include checks in the Western, Crossover, and

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 60 of 84

Comment No. 363-365

Section 3.13 describes the affected environment as it pertains to environmental justice issues. The information and data presented in this section provide a baseline description of environmental justice issues against which the various alternatives could be evaluated to determine potential negative or positive effect on minority populations and low-income populations on or near the proposed transmission line corridors. The impacts associated with the proposed project are discussed in Chapter 4.

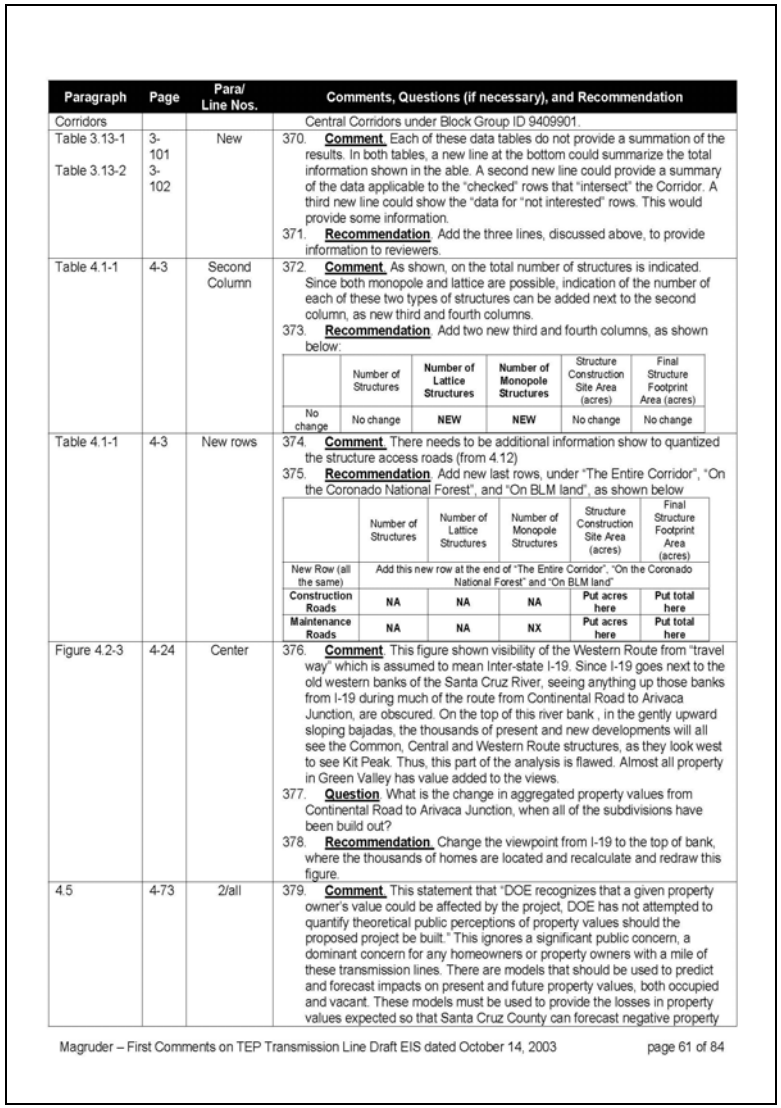
Comment No. 366-367

The purpose of Figure 3-13.3 is to show the unlabeled block groups in Figures 3.13-1 and 3.13-2.

Comment No. 368-369

Figures 3.13-1 and 3.13-2 shows the minority and low-income census block groups on near the three proposed corridor alternatives. Table 3.13-1 presents numerical information by race and poverty level for the census blocks on or near the corridors and indicates whether each block is intersected by any of the proposed corridors. While the substation abuts the far southeastern edge of census block group 9409901 (San Xavier District [Tohono O'odham Reservation]), the corridors do not intersect this census block.

Magruder, Marshall
Page 61 of 84



Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
Corridors			Central Corridors under Block Group ID 9409901.
Table 3.13-1 Table 3.13-2	3-101 3-102	New	370. **Comment**. Each of these data tables do not provide a summation of the results. In both tables, a new line at the bottom could summarize the total information shown in the able. A second new line could provide a summary of the data applicable to the "checked" rows that "intersect" the Corridor. A third new line could show the "data for "not interested" rows. This would provide some information. 371. **Recommendation**. Add the three lines, discussed above, to provide information to reviewers.
Table 4.1-1	4-3	Second Column	372. **Comment**. As shown, on the total number of structures is indicated. Since both monopole and lattice are possible, indication of the number of each of these two types of structures can be added next to the second column, as new third and fourth columns. 373. **Recommendation**. Add two new third and fourth columns, as shown below:
Table 4.1-1	4-3	New rows	374. **Comment**. There needs to be additional information show to quantized the structure access roads (from 4.12) 375. **Recommendation**. Add new last rows, under "The Entire Corridor", "On the Coronado National Forest", and "On BLM land", as shown below
Figure 4.2-3	4-24	Center	376. **Comment**. This figure shown visibility of the Western Route from "travel way" which is assumed to mean Inter-state I-19. Since I-19 goes next to the old western banks of the Santa Cruz River, seeing anything up those banks from I-19 during much of the route from Continental Road to Arivaca Junction, are obscured. On the top of this river bank , in the gently upward sloping bajadas, the thousands of present and new developments will all see the Common, Central and Western Route structures, as they look west to see Kit Peak. Thus, this part of the analysis is flawed. Almost all property in Green Valley has value added to the views. 377. **Question**. What is the change in aggregated property values from Continental Road to Arivaca Junction, when all of the subdivisions have been build out? 378. **Recommendation**. Change the viewpoint from I-19 to the top of bank, where the thousands of homes are located and recalculate and redraw this figure.
4.5	4-73	2/all	379. **Comment**. This statement that "DOE recognizes that a given property owner's value could be affected by the project, DOE has not attempted to quantify theoretical public perceptions of property values should the proposed project be built." This ignores a significant public concern, a dominant concern for any homeowners or property owners with a mile of these transmission lines. There are models that should be used to predict and forecast impacts on present and future property values, both occupied and vacant. These models must be used to provide the losses in property values expected so that Santa Cruz County can forecast negative property

	Number of Structures	Number of Lattice Structures	Number of Monopole Structures	Structure Construction Site Area (acres)	Final Structure Footprint Area (acres)
No change	No change	**NEW**	**NEW**	No change	No change

	Number of Structures	Number of Lattice Structures	Number of Monopole Structures	Structure Construction Site Area (acres)	Final Structure Footprint Area (acres)
New Row (all the same)	Add this new row at the end of "The Entire Corridor", "On the Coronado National Forest" and "On BLM land".				
Construction Roads	**NA**	**NA**	**NA**	**Put acres here**	**Put total here**
Maintenance Roads	**NA**	**NA**	**NX**	**Put acres here**	**Put total here**

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 61 of 84

Comment No. 370-371

The summation totals requested by the commentor are already provided in the table by Block Group ID. For example, Block Group ID 9960001 has a total population of 858, of which 748 are non-Hispanic and 110 are Hispanic. There are 42 (5 percent) persons living below the poverty level and 13 percent of the population is Hispanic in that Block Group ID.

Comment No. 372-373

If an action alternative is selected for implementation by each of the Federal agencies through the issuance of a ROD, then precise siting of the ROW and the support structures within the ROW would involve input from cultural, biological, and visual specialists, to identify and minimize impacts to each area of land to be disturbed. The detailed engineering and design of the proposed project would be completed after the final siting of the corridor. For this reason, the Final EIS cannot speculate on the numbers of each type of structure.

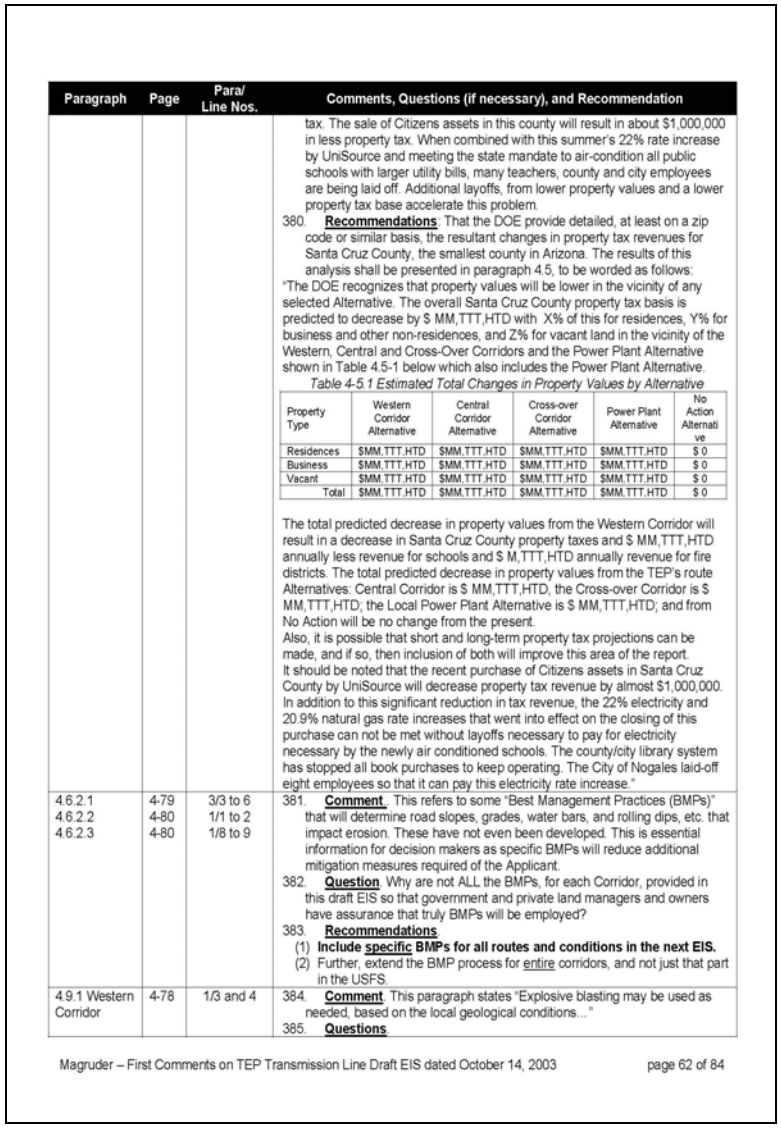
Comment No. 374-375

Table 4.1-1 shows the amount of acreage that would be disturbed from the installation of the transmission line structure (i.e., lattice towers and monopoles). Table 4.12-1 shows the amount of currently undisturbed acreage that would be disturbed with the construction of access roads, use of construction laydown areas, and the installation of transmission line structures by corridor alternatives.

Comment No. 376-378

In Figure 4.2-3 of the EIS, the map of the Western Corridor is shaded to indicate visibility from travelway. As the Western Corridor crosses I-19 and continues southwest, residents, travelers, and recreationalists would have views of the proposed project in the foreground and middleground, with views from many areas in lower terrain obscured by the hills and main tailings piles in the area.

Magruder, Marshall
Page 62 of 84



Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			tax. The sale of Citizens assets in this county will result in about $1,000,000 in less property tax. When combined with this summer's 22% rate increase by UniSource and meeting the state mandate to air-condition all public schools with larger utility bills, many teachers, county and city employees are being laid off. Additional layoffs, from lower property values and a lower property tax base accelerate this problem. 380. **Recommendations**: That the DOE provide detailed, at least on a zip code or similar basis, the resultant changes in property tax revenues for Santa Cruz County, the smallest county in Arizona. The results of this analysis shall be presented in paragraph 4.5, to be worded as follows: "The DOE recognizes that property values will be lower in the vicinity of any selected Alternative. The overall Santa Cruz County property tax basis is predicted to decrease by $ MM,TTT,HTD with X% of this for residences, Y% for business and other non-residences, and Z% for vacant land in the vicinity of the Western, Central and Cross-Over Corridors and the Power Plant Alternative shown in Table 4.5-1 below which also includes the Power Plant Alternative. *Table 4-5.1 Estimated Total Changes in Property Values by Alternative* Property Type / Western Corridor Alternative / Central Corridor Alternative / Cross-over Corridor Alternative / Power Plant Alternative / No Action Alternative Residences / $MM,TTT,HTD / $MM,TTT,HTD / $MM,TTT,HTD / $MM,TTT,HTD / $ 0 Business / $MM,TTT,HTD / $MM,TTT,HTD / $MM,TTT,HTD / $MM,TTT,HTD / $ 0 Vacant / $MM,TTT,HTD / $MM,TTT,HTD / $MM,TTT,HTD / $MM,TTT,HTD / $ 0 Total / $MM,TTT,HTD / $MM,TTT,HTD / $MM,TTT,HTD / $MM,TTT,HTD / $ 0 The total predicted decrease in property values from the Western Corridor will result in a decrease in Santa Cruz County property taxes and $ MM,TTT,HTD annually less revenue for schools and $ M,TTT,HTD annually revenue for fire districts. The total predicted decrease in property values from the TEP's route Alternatives: Central Corridor is $ MM,TTT,HTD, the Cross-over Corridor is $ MM,TTT,HTD; the Local Power Plant Alternative is $ MM,TTT,HTD; and from No Action will be no change from the present. Also, it is possible that short and long-term property tax projections can be made, and if so, then inclusion of both will improve this area of the report. It should be noted that the recent purchase of Citizens assets in Santa Cruz County by UniSource will decrease property tax revenue by almost $1,000,000. In addition to this significant reduction in tax revenue, the 22% electricity and 20.9% natural gas rate increases that went into effect on the closing of this purchase can not be met without layoffs necessary to pay for electricity necessary by the newly air conditioned schools. The county/city library system has stopped all book purchases to keep operating. The City of Nogales laid-off eight employees so that it can pay this electricity rate increase."
4.6.2.1 4.6.2.2 4.6.2.3	4-79 4-80 4-80	3/3 to 6 1/1 to 2 1/8 to 9	381. **Comment**. This refers to some "Best Management Practices (BMPs)" that will determine road slopes, grades, water bars, and rolling dips, etc. that impact erosion. These have not even been developed. This is essential information for decision makers as specific BMPs will reduce additional mitigation measures required of the Applicant. 382. **Question**. Why are not ALL the BMPs, for each Corridor, provided in this draft EIS so that government and private land managers and owners have assurance that truly BMPs will be employed? 383. **Recommendations**. (1) **Include specific BMPs for all routes and conditions in the next EIS.** (2) Further, extend the BMP process for entire corridors, and not just that part in the USFS.
4.9.1 Western Corridor	4-78	1/3 and 4	384. **Comment**. This paragraph states "Explosive blasting may be used as needed, based on the local geological conditions…" 385. **Questions**.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 62 of 84

Comment No. 376-378 *(continued)*

While there is a potential for construction of new houses on the hills to the west of I-19 and almost anywhere in the project area, until plans are presented, new housing construction is speculative. If such housing construction were to occur, the transmission line may be visible from potential residences on the hills to the west of the interstate, depending on the terrain setting of each individual house.

Comment No. 379-380

Any decrease in property values from the proposed transmission lines would be perception-based impact. Any connection between public perception of a risk to property values and future behavior would be uncertain or speculative at best, and therefore would not inform decisionmaking. Section 4.5 references a discussion of past studies of the impact of transmission lines and property values in other geographic areas. The studies conclude that other factors, such as general location, size of property, and supply and demand factors, are far more important criteria than the proximity of a transmission line in determining the value of residential real estate. Accordingly, while the Federal agencies recognize that a given property owner's value could be affected (positively or negatively) by the project, the Federal agencies have not attempted to quantify theoretical public perceptions of property values should the proposed project be built.

Comment No. 381-383

As indicated in the EIS, Section 4.6.2, specific BMPs would be defined once coordination between TEP, USFS, and ADEQ has been completed, prior to implementation of the proposed project.

Comment No. 384-385

Explosive blasting sites were not provided in the EIS because the areas requiring blasting along the corridor would not be known until the preferred alternative is selected and a detailed geotechnical investigation is conducted.

Magruder, Marshall
Page 63 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			(1) Which sites will require explosive blasting? (2) Which sites have the "local geological conditions" that require explosive blasting? (3) How much explosives will be required at each site? (4) Will any sites require explosives that are within a mile of homes or residences? (5) Will some sites require multiple explosives? (6) Do any roads require explosives, if so, where? (7) How will explosives be handled, after each workday (stored or removed, where does it go, what is the security, fire sprinklers, etc.)? 386. **Recommendation**. The analysis cannot continue until the above questions are answered. (1) Please provide a listing of which sites and showing on a map where explosives will be required (and locations of residences). (2) Discuss how much "explosives" will be needed at each site. (3) Explosives handling, storage, and security needs to be included.
4.9.1	4-97	1 (all)	387. **Comment**. This paragraph states "for tower sites where workers or equipment are inserted by helicopter or sky crane…" 388. **Questions**. (1) Which sites are "tower" sites? (2) Which sites are where workers will be inserted by helicopter? (3) Which sites are where equipment will be inserted by helicopter or sky crane? (4) How many helicopter flights will be necessary at each site? 389. **Recommendation**. The analysis cannot continue until the above questions are answered. Without the answers, the rest of this section is meaningless, because no one can evaluate which sites will have noise from helicopters or from work equipment.
4.9.1 4.9.2 Central Corridor 4.9.3 Crossover Corridor	4-97 4-98 4-99	4 (all) and 5 (all) NEW NEW	390. **Comment**. The fourth paragraph only discusses jaguars. In the area of the Western Corridor wildlife populations include deer, bear, javalina, mountain lions, and bobcats. Further, different hunting seasons (including fowl) bring dozens of hunting parties into the area around the Western and Central Corridors. Due to their large number, residents have learned never to hike or go into these areas during hunting seasons (which varies by animal). Explosives will significantly impact wildlife movements, thus several days prior to each of the hunting seasons; explosive operations should cease, so that wildlife can return to their normal patterns. 391. **Questions**. (1) Will construction be occurring during any of the hunting seasons? (2) Will explosives be used during any of the hunting seasons? (3) How will TEP ensure that it's personnel are safe during the hunting seasons? 392. **Recommendations**. (1) Construction and explosive operations not be performed during any of the hunting seasons. (2) That all construction operations cease two days prior to each hunting season and that explosive operations cease at least five days prior to each hunting season.
4.9.1	4-97	6 and 7	393. **Comment**. The noise levels indicated exceed the thresholds of comfort in Table 3.9-1. These two paragraphs discuss noise levels averaged over a 24-hour period. 394. **Question** (1) Why can't all work, which has noise levels that exceed 70 dBA be performed on alternative days? (2) Why can't residents be compensated for high noise days so they can "go away" on those days? 395. **Recommendations**.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 63 of 84

Comment No. 387-389

Details on tower locations where workers or equipment will be inserted by helicopter or sky crane are not provided in the EIS because these decisions will be made during the design phase of the project, if TEP receives the Presidential Permit from DOE, and other required approvals from Federal, state, and local authorities.

Comment No. 390-392

Each agency will state any required mitigation measures in their respective RODs, based on the mitigation measures presented in Section 2.2.6 of the EIS, and any additional mitigation measures that the agency deems necessary.

Comment No. 393-395

The noise levels reported for Temporary Threshold Shift and Noise-Induced Permanent Threshold shift are examples taken from Canter 1977.

Each agency will state any required mitigation measures in their respective RODs, based on the mitigation measures presented in Section 2.2.6 of the EIS, and any additional mitigation measures that the agency deems necessary.

Magruder, Marshall
Page 64 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			(1) That all sites where noise exceeds 70 dBA only have work performed on alternative days. This would give both wildlife and humans a chance for their hearing to return to normal levels, between a noisy day. (2) Further, on days that the noise exceeds 77 dBA, as shown in Table 4.9-2, each homeowner will be compensated $250 for each workday. This is so the family can adjust its plans and not be home when noisy work is being performed. (3) Further, residents within 1000 feet need to be issued "hearing protectors" that are optimized for the expected types of noise being planned.
4.10.1.1	4-107	5	370 **Question**. Is the ICNIRP 2003 reference the proper one?
4.10.1.1	4-107	6	371 **Comment**. October 29, 2001 should read January 15, 2002.
4.10.2.1 Western Route	4-109	Visual Light 1/3 to 5	372 **Comment**. The reference "(Chriswell 2002) refers to a gamma ray telescope which does not operate in the visual spectrum, thus this reference appears not valid as support for this sentence "There would be no effects on the operation of observatories in the project vicinity (Fred Lawrence Whipple and Kit Peak Observatories) from the proposed project." The gamma ray telescope project is now being developed for Kit Peak. 373 **Question**. What is the spectrum of the visual light and intensity generated by Corona effects? 374 **Recommendation**: (1) Based on the answer, there could be visual interferences. (2) Delete the above reference and sentence, unless supporting data are provided.
4.12.1 Western Corridor	4-114	1/4 to 5	375 **Comment**. It is expected that helicopters will be used for the Western Corridor. This sentence is in direct variance with TEP's testimony during the ACC Siting Committee hearings and the mitigation measures found in the ACC Order No. 64356 Exhibit 2. Further, **TEP is not authorized to change the ACC Order**, thus the reference (TEP 2003) also is incorrect. This sentence should be deleted.
4.12.1	4-114	1/4 to 5	376 **Recommendation**. Delete the entire third sentence in this paragraph.
4.12.2 Central Corridor	4-116	3/4 to 5	377 **Comment**. It is expected that helicopters will be used for the Western Corridor. This sentence is in direct variance with TEP's testimony during the ACC Siting Committee hearings and the mitigation measures found in the ACC Order No. 64356 Exhibit 2. Further, **TEP is not authorized to change the ACC Order**, thus the reference (TEP 2003) also is incorrect. This sentence should be deleted.
4.12.2	4-116	3/4 to 5	378 **Recommendation**. Delete the entire third sentence in this paragraph.
5.3 Cumulative Impacts Analysis	5-9	2/6 to 8	379 **Comment**. There is reference to VERITAS, a gamma ray telescope that was proposed for the Coronado National Forest. This project has been cancelled, thus this comment is not accurate.
	5-9	2/6 to 8	380 **Recommendation**. Deleted this sentence, which begins with "For example..." and end with "... lands."
4.13 Environmental Justice			381 **Comment**. This analysis is very weak with respect to the four Environmental Justice indicators: environment, health, social, and economic on minorities and low-income populations. For example, from Figures 3-13-1 and 3-13.3, the preferred corridor goes through 11 Census Groups, of which 8 have greater minority populations and 3 have low-income populations. Obviously, minority populations are paying more than their share for this project. Please review the EPA definitions and requirements for assessing EJ indicator effects. **This section is not acceptable without considering the four EJ indicators: environment, social, economic, and health. Health problems are significant issues in Santa Cruz County, especially in Nogales.** 382 **Questions**:

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 64 of 84

Comment No. 396 *(Note that the following comments were not numbered consecutively by the commentor, and the number that the commentor assigned to each comment is provided in parentheses, which, in this case, is 370)*

In Section 4.10.1, subsection *Field Perception and Neurobehavioral Responses*, ICNIRP 2003 should reference the following sentence, "The International Commission on Non-Ionizing Radiation Protection Guidelines recommend that short-term exposures be limited to 4.2 kV/m for the general public."

Comment No. 397 *(371 in document)*

The date specified in *Field Perception and Neurological Response* in Section 4.10.1 for the issuance of the Amended Certificate of Environmental Compatibility will be changed from October 29, 2001 to January 15, 2002.

Comment No. 398-400 *(372-374 in document)*

The text is correct as written.

Comment No. 401-404 *(375-378 in document)*

The ACC Order 64356 does not specify that helicopters should be used. Condition 11 (d) requires TEP to use the minimization of detrimental impact on the environment as the deciding factor when making specific easement routing decisions for construction of the transmission lines. TEP fully intends to abide by the conditions set forth in the ACC order and as such would use helicopters and lattice towers whenever necessary to minimize impact on the environment. The reference TEP 2003 in Section 4.12.1 refers to data provided by TEP regarding the use of helicopters on the Western Corridor.

Comment No. 405-406 *(379-380 in document)*

The VERITAS project has been remanded, but has not been cancelled.

Magruder, Marshall
Page 65 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			(1) Where are the analyses for each of the four EJ indicators? (2) What are the EJ impacts on minority and low-income populations? (3) What models were used to predict these results? 383 **Recommendations**. **The section requires to be redone using the proper tool and derive the minimum results necessary to assess impacts on the four EJ indicators for these two counties**.
Chapter 6 Unavoidable Adverse Environmental Impacts	6-1 6-1	Erosion 2/1 Erosion 2/1	384 **Comment**. There is a reference to "Best Management Practices (BMP)" which is not specific. In order to determine what practices, processes, techniques and procedures that will be used to solve this issue, a specific reference is necessary. 385 **Recommendation**. Replace "Best Management Practices (BMP" with the specific practice to be implemented.
Chapter 8 Short-Term Use and Long-Term Productivity	8-1	4/new	386 **Comment**. In section 4.5, the "DOE recognizes that a given property owner's value could be affected by the project, DOE has not attempted to quantify theoretical public perceptions of property values should the proposed project be built." This ignores a significant public concern, a dominant concern for any homeowners or property owners with a mile of these transmission lines. There are models that should be used to predict and forecast impacts on present and future property values, both occupied and vacant. These models must be used to provide the losses in property values expected so that Santa Cruz County can forecast negative property tax. The sale of Citizens assets in this county will result in about $1,000,000 in less property tax revenue. When combined with this summer's 22% rate increase by UniSource and meeting the state mandate to air-condition all public schools with larger utility bills, many teachers, county and city employees are being laid off. Additional layoffs, from lower property values and a lower property tax base accelerate this problem. 387 **Recommendations**: That the DOE provide detailed, at least on a zip code or similar basis, the resultant changes in property tax revenues for Santa Cruz County, the smallest county in Arizona. The results of this analysis shall be presented in the paragraph, to be worded as follows: "The DOE recognizes that property values will be lower in the vicinity of any selected Alternative. The overall Santa Cruz County property tax basis is predicted to decrease by $ MM,TTT,HTD with X% of this for residences, Y% for business and other non-residences, and Z% for vacant land in the vicinity of the Western, Central and Cross-Over Routes. This total will
Chapter 9 Applicable Environmental Laws, Regulations, Permits and DOE Orders	9-1	Table 9-1	388 **Comment**. The penetration of the 345 kV transmission lines into Military Operational Airspace (MOA) Fuzzy and Ruby in the ESA. The USAF owns and controls the airspace to 100 feet above ground in the Fuzzy MOA. TEP will be required to obtain USAF, Air National Guard (ANG), and FAA Approval. In addition, TEP plans to use helicopters to string cable across the International border that will, at a minimum, require FAA approval. 390 **Recommendations**: Add following to this table: **Agency** — **Permit/Approval** FAA — Temporary Airspace Authorization Permit (construction helicopter flights in Fuzzy One) FAA — International Airspace Authorization to string cables (for helicopters that will string cables across the US-Mexican border) FAA — Permanent Airspace Authorization Permit (towers penetrations into Fuzzy One Airspace, map changes, NOTAMs) US Air Force — Temporary Fuzzy One Airspace Authorization permit (construction helicopter flights in Fuzzy One) US Air Force — Permanent Fuzzy One Airspace Authorization permit (tower penetrations into of Fuzzy One Airspace, maps changes, etc.) Air National Guard — Temporary Authorization to use Fuzzy One Airspace (construction helicopter flights in Fuzzy One) Air National Guard — Permanent Authorization to use Fuzzy One Airspace (tower penetrations into Fuzzy One airspace, briefing material changes,

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 65 of 84

Comment No. 407-409 *(381-383 in document)*

Impacts to minority health, environment, social, and economic are the same as the impacts discussed in Chapter 4 for the general population. Neither DOE nor its cooperating agencies are aware of any special circumstance (e.g., unique exposure pathways, food gathering practices, etc.) that would result in disproportionate impacts to minority populations or low-income populations as a result of the proposed project.

Comment No. 410-411 *(384-385 in document)*

Best Management Practices to address erosion control would vary depending on site-specific conditions. As indicated in the EIS, Section 4.6.2, specific BMP would be defined once coordination has been completed, prior to implementation of the proposed project.

Comment No. 413-414 *(386-387 in document)*

Refer to the response to the DeConcini McDonald Yetwin & Lacy, P.C., Comment 7 on why the Federal agencies have not attempted to assess potential impacts to property values from the proposed project.

Comment No. 415-416 *(388-390 in document)*

Table 9-1 is not intended to be an exhaustive list of every approval that TEP may or may not need, but is intended to cover the primary potential approvals and permits. In addition, it is not clear that TEP would require helicopter flights in the Fuzzy MOA. Should helicopters be required, TEP would obtain all necessary permits and approvals.

Magruder, Marshall
Page 66 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			training instructions changed, etc.)
Table 9-2	9-2	EO 11988 Flood plain Management	391 **Comments**. This states, "no practical alternative in floodplains and wetlands Federal agencies are required to prepare a floodplains and wetlands assessment, design mitigation measures, and provide public review. This public review must be held prior to the Final EIS, or this whole project may have to be redefined. 392 **Questions** (1) Where is this statement? (2) Why isn't this statement included in this section of the EIS? (3) Has DOE agreed to write such a statement? (4) What floodplain "alternatives" were considered? (5) Where is the analysis of these alternatives? (6) What was the result of that analysis? (7) Was the TEP Cyprus Sierrita Substation considered as an alternative, since this transmission line goes next to it? (8) Why isn't that analysis provided in the Draft EIS so that decision makers could review that assessment? (9) When will this assessment be accomplished, hopefully, after the "final design" has been completed? (10) If the "final design" has a conflict, has TEP agreed to make any and all DOE recommendations? (11)When will the PUBLIC REVIEW be held, before or after the Final EIS? (12) Will this Public Review include representatives of the San Xavier Indian Reservation, which is across West Pima Mine Road, and downstream of the South Substation? 393 **Recommendations**. (1) Determine the answers to these questions, then either relocate away from the floodplain, or obtain the DOE statement and place it within the EIS. (2) Coordinate all of the floodplain activity, as a minimum, with the Tohono O'odham Nation. (3) Hold and complete public review in Southern Arizona, using the EIS address list for notifications.
Table 9-2	9-2	New	394 **Comment**. The penetration of the 345 kV transmission lines into Military Operational Airspace (MOA) Fuzzy and Ruby in the ESA. The USAF owns and controls the airspace to 100 feet above ground in the Fuzzy MOA. TEP will be required to obtain both USAF, Air National Guard, and FAA Approval. In addition, compliance with the appropriate *Federal Aviation Regulations (FAR)* and Air Force Instruction AFI 11-206, *General Flight Rules*, and AFI 13-201, *U.S. Air Force Airspace Management* is required. In general, this will require making changes to all airspace maps, documents, in-flight handbooks, and other FAA and USAF documentation, prior to becoming a change in airspace can be effective.
Table 9-2	9-2	New	395 **Recommendations**. Add new Entries in Table 9-2, five columns to reflect airspace permits. Additional information will be necessary as the details of these procedures are not readily available.

Resource Category	Statute/ Regulation/ Order	Citation	Administrating Agency	Permits, Approvals, Consolations, and Notifications
Air Space	Federal Aviation Regulations (FAR)	FAR 91.15, EO 10854	Federal Aviation Agency (FAA)	Airspace Authorization Permit
	US Air Force AFI 11-206	32 CFR Part 898	Department of the United States Air Force (USAF)	Fuzzy One Airspace Authorization Permit
	US Air Force AFI 32-7061	40 CFR 1500-1508	Air National Guard Readiness Center, ANG	Regulations for Implementing the Procedural Provisions of the National

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 66 of 84

Comment No. 417-418 *(391-393 in document)*

A Floodplains and Wetlands Assessment, per Title 10, *Code of Federal Regulations, Part 1022, Compliance with Floodplain/Wetlands Environmental Review Requirements* has been conducted for the proposed project and is included in Appendix C of the EIS.

Comment No. 419-420 *(394-395 in document)*

Prior to any construction of the proposed project, TEP would acquire all necessary permits from USAF.

Magruder, Marshall
Page 67 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			Environmental Planning Center, Herndon VA — Environmental Policy Act as implemented by the Air National Guard (ANG)
			US Air Force AFI 11-206, AFI 13-201 — Derived — Air National Guard (ANG), 162nd Air Wing, Tucson, AZ — Authorization to use Fuzzy One Airspace and coordination with Air Traffic Control Assigned Air Space (ATCAA) and Military Training Routes (MTRs)
Table 9-2 Other (continued)	9-6	Obstruction Marking and Lighting	396 **Comment**. This entry, in column five, states that this standard is "**potentially applicable**." During the ACC Line Siting Committee hearings, it was clearly stated that NO navigation markers (such a Orange Balls) or lighting objects (such as strobe lights, white or red blinking/steady lights, etc.) would be required for any of the TEP transmission line structures. 397 **Recommendations**. This is a very important issue and resolution is critical. Due to the several airports in the vicinity of the transmission line, the "dark sky" lighting state, Pima County and Santa Cruz County ordinances, and such lights having a potential for being installed in the US National Forest, resolution must be made prior to any final decision on this project. IF such lighting is required, then this fact must be brought to the public before any permits to construct this system be approved.
Chapter 10	10-3	EPNG	398 **Comment**. A telephone conservation is referenced for concurrence in "the 100 foot requirement of "at least 100 ft between the edge of the pipeline ROW and support structures in adequate (EPNG 2002)." In view of the complex relationships between the change from 500 to 2,000 MW, and the limited impacts considered by the ACC when determining the 100 feet (which should have been at least 138 feet), the omission of the second gasline in the ROW, no considerations for natural gas substations which "bleed" natural gas for up to 36-hours, considerations of meteorological conditions soil resistively, that permit explosive natural gas concentrations, grounding considerations, lightning suppression, omission of any impacts due to induced currents, corrosive and erosion status of these 45-year old gas pipelines, lack of measurement data, and other interactive factors, lead the ACC to state a "minimum" so that the correct, safe offset could be calculated based on field data. The was agreement that pre-determination of the liabilities between EPNG and TEP have to be resolved PRIOR to final design so that an agreement can be made between these two companies. Resolution of liability after a major explosive incident with loss of human life, based on know conditions that need to be designed into the system, is irresponsible. A telephone conservation reference is inadequate due to the potential safety impacts between these two systems. 399 **Recommendation**. That an Agreement be made between El Paso Natural Gas Company and TEP that assigned legal liabilities base on know conditions along the route, an agreed minimum safe separation distances, that will, with extremely high confidence, prevent explosive conditions from natural gas leakage from the pipeline and EPNG substations, based on corrosion measurements, impacts on the installed cathothic protection system due to 2,000 MW of electric voltage and electromagnetic field EMF), since each system can damage the others due to fire, explosion, or corrosion. As a minimum the FINAL EIS should include a signed copy by corporate officers of this liability agreement (or Memorandum of Understanding as to Liabilities between EPNG and TEP to the Electrical and Natural gas systems), as a FEIS attachment.
Chapter 11 References	11 (all)	all	400 **Comment**. This list of reference is not complete. Each legal citation, Federal Act, and all other documents referenced within this EIS, including appendixes, needs to be included in this Chapter.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 67 of 84

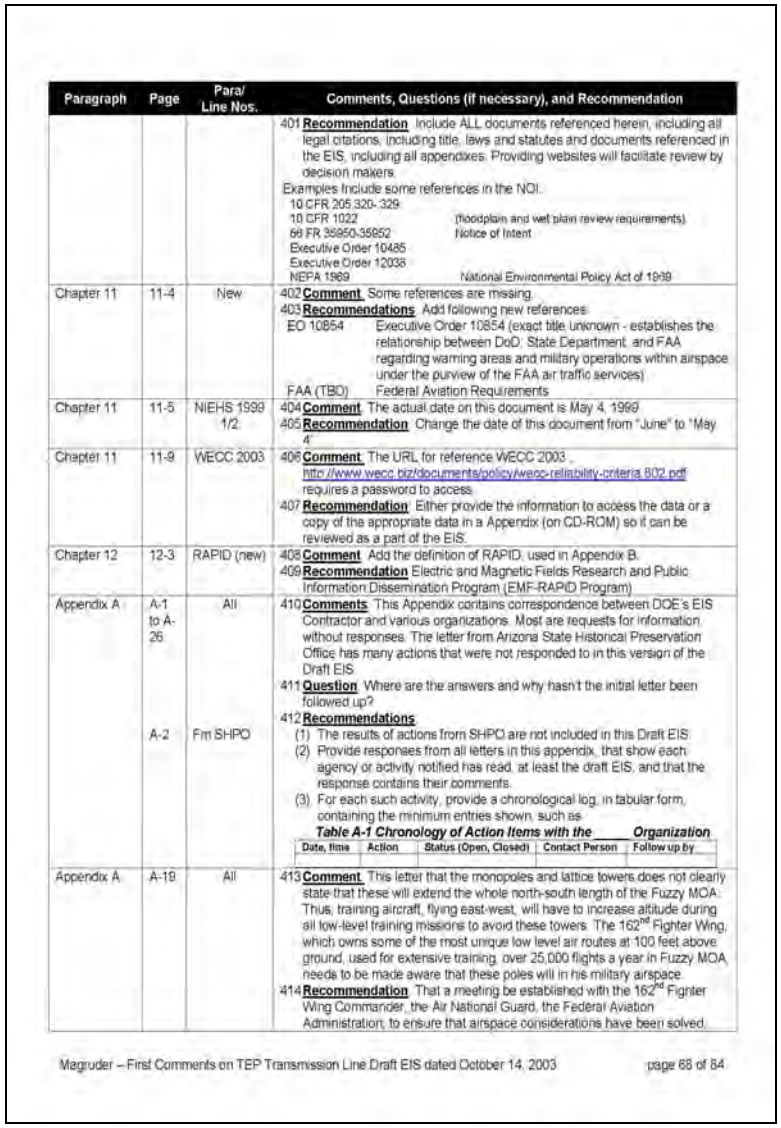
Comment No. 421-422 *(396-397 in document)*

As stated in Table 2.2-2, TEP Mitigation Practices Included in the Proposed Action, towers and/or ground wire would be marked with highly visible devices, such as colored balls or lights, if required by governmental agencies. It is currently anticipated that no visual markers such as colored balls or lights would be required for the proposed project. Consultations with the agencies regarding required visual markers for each corridor are ongoing.

Comment No. 423-424 *(398-399 in document)*

See the response to Comment 48-49 above.

Magruder, Marshall
Page 68 of 84



Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			401 **Recommendation** Include ALL documents referenced herein, including all legal citations, including title, laws and statutes and documents referenced in the EIS, including all appendixes. Providing websites will facilitate review by decision makers. Examples include some references in the NOI. 10 CFR 205.320-.329 10 CFR 1022 (floodplain and wet plain review requirements) 68 FR 35950-35952 Notice of Intent Executive Order 10485 Executive Order 12038 NEPA 1969 National Environmental Policy Act of 1969
Chapter 11	11-4	New	402 **Comment** Some references are missing. 403 **Recommendations** Add following new references: EO 10854 Executive Order 10854 (exact title unknown - establishes the relationship between DoD, State Department, and FAA regarding warning areas and military operations within airspace under the purview of the FAA air traffic services) FAA (TBD) Federal Aviation Requirements
Chapter 11	11-5	NIEHS 1999 1/2	404 **Comment** The actual date on this document is May 4, 1999. 405 **Recommendation** Change the date of this document from "June" to "May 4"
Chapter 11	11-9	WECC 2003	406 **Comment** The URL for reference WECC 2003 , http://www.wecc.biz/documents/policy/wecc-reliability-criteria 802.pdf requires a password to access. 407 **Recommendation** Either provide the information to access the data or a copy of the appropriate data in a Appendix (on CD-ROM) so it can be reviewed as a part of the EIS.
Chapter 12	12-3	RAPID (new)	408 **Comment** Add the definition of RAPID, used in Appendix B. 409 **Recommendation** Electric and Magnetic Fields Research and Public Information Dissemination Program (EMF-RAPID Program)
Appendix A	A-1 to A-26	All	410 **Comments** This Appendix contains correspondence between DOE's EIS Contractor and various organizations. Most are requests for information without responses. The letter from Arizona State Historical Preservation Office has many actions that were not responded to in this version of the Draft EIS. 411 **Question** Where are the answers and why hasn't the initial letter been followed up?
	A-2	Frm SHPO	412 **Recommendations** (1) The results of actions from SHPO are not included in this Draft EIS. (2) Provide responses from all letters in this appendix, that show each agency or activity notified has read, at least the draft EIS, and that the response contains their comments. (3) For each such activity, provide a chronological log, in tabular form, containing the minimum entries shown, such as: ***Table A-1 Chronology of Action Items with the _____ Organization*** Date, time | Action | Status (Open, Closed) | Contact Person | Follow up by
Appendix A	A-19	All	413 **Comment** This letter that the monopoles and lattice towers does not clearly state that these will extend the whole north-south length of the Fuzzy MOA. Thus, training aircraft, flying east-west, will have to increase altitude during all low-level training missions to avoid these towers. The 162nd Fighter Wing, which owns some of the most unique low level air routes at 100 feet above ground, used for extensive training, over 25,000 flights a year in Fuzzy MOA needs to be made aware that these poles will in his military airspace. 414 **Recommendation** That a meeting be established with the 162nd Fighter Wing Commander, the Air National Guard, the Federal Aviation Administration, to ensure that airspace considerations have been solved.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 68 of 84

Comment No. 425-426 *(400-401 in document)*

All Federal regulations cited in the TEP EIS are publicly available at http//www.gpoaccess.gov/cfr/index.html and are not listed in Chapter 11, References, of the EIS.

Comment No. 427-428 *(402-403 in document)*

The Executive Order 10854 mentioned by the commentor was not added to Chapter 11, References because it was not used in the EIS.

Comment No. 429-430 *(404-405 in document)*

The date for reference NIEHS 1999 will be changed from June 1999 to May 1999.

Comment 431-432 *(406-407 in document)*

A hardcopy of the document referenced WECC 2003 in Chapter 11 has been made available in the administrative record.

Comment No. 433-434 *(408-409 in document)*

A reference to the acronym RAPID (Research and Public Information Dissemination Program) could not be found in Appendix B. It will not be added to the acronym list.

Comment No. 435-437 *(410-412 in document)*

See Table 10-2, Summary of Consultations.

Comment No. 438-439 *(413-414 in document)*

The letter is correct as written, and the response is indicated in Table 10-2.

Magruder, Marshall
Page 69 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			and that a **Memorandum of Understanding** (or equivalent) has been signed by all of these commands and agencies, prior to release of the Final EIS.
Appendix B Electric and Magnetic Fields Background Information	B-1	2 (all)	415 **Comments**. This paragraph only selects and choose selective quotes from the NIEHS Executive Summary. 416 **Questions**. Why is the NIEHS "conclusion" no included in its entirety? 417 **Recommendation**. Change this paragraph to read: From the NIEHS Executive Summary, the conclusions state: "The scientific evidence suggesting that ELF-EMF exposures pose any health risk is weak. The strongest evidence for health effects comes from associations observed in human populations with two forms of cancer: childhood leukemia and chronic lymphocytic leukemia in occupationally exposed adults. While the support from individual studies is weak, the epidemiological studies demonstrate, for some methods of measuring exposure, a fairly consistent pattern of a small, increased risk with increasing exposure that is somewhat weaker for chronic lymphocytic leukemia than for childhood leukemia. In contrast, the mechanistic studies and the animal toxicology literature fail to demonstrate any consistent pattern across studies although sporadic findings of biological effects (including increased cancers in animals) have been reported. No indication of increased leukemias in experimental animals has been observed. The lack of connection between the human data and the experimental data (animal and mechanistic) severely complicates the interpretation of these results. The human data are in the "right" species, are tied to "real-life" exposures and show some consistency that is difficult to ignore. This assessment is tempered by the observation that given the weak magnitude of these increased risks, some other actor or common source of error could explain these findings. However, no consistent explanation other than exposure to ELF-EMF has been identified. Epidemiological studies have serious limitations in their ability to demonstrate a cause and effect relationship whereas laboratory studies, by design, can clearly show that cause and effect are possible. Virtually all of the laboratory evidence in animals and humans and most of the mechanistic work done in cells fail to support a causal relationship between exposure to ELF-EMF at environmental levels and changes in biological function or disease status. The lack of consistent, positive findings in animal or mechanistic studies weakens the belief that this association is actually due to ELF-EMF, but it cannot completely discount the epidemiological findings. The NIEHS concludes that ELF-EMF exposure cannot be recognized as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard. In our opinion, this finding is insufficient to warrant aggressive regulatory concern. However, because virtually everyone in the United States uses electricity and therefore is routinely exposed to ELF-EMF, passive regulatory action is warranted such as a continued emphasis on educating both the public and the regulated community on means aimed at reducing exposures. The NIEHS does not believe that other cancers or non-cancer health outcomes provide sufficient evidence of a risk to currently warrant concern. The interaction of humans with ELF-EMF is complicated and will undoubtedly continue to be an area of public concern. The EMF-RAPID Program successfully contributed to the scientific knowledge on ELF-EMF through its support of high quality, hypothesis-based research. While some questions were answered, others remain. Building upon the knowledge base developed under the EMF-RAPID Program, meritorious research on ELF-EMF through

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 69 of 84

Comment No. 440-442 *(415-417 in document)*

The NIEHS conclusion presented in the Draft EIS is consistent with the other independent studies presented in Appendix B. The NIEHS study mentioned in Appendix B of the Final EIS has not been added because the applicable portion is publicly available as part of the administrative record of the EIS.

Magruder, Marshall
Page 70 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			carefully designed, hypothesis-driven studies should continue for areas warranting fundamental study including leukemia. Recent research in two areas, neurodegenerative diseases and cardiac diseases associated with heart rate variability, have identified some interesting and novel findings for which further study is ongoing.
Appendix C Floodplains/ Wetlands Assessment	C-1	Introduction 1/8 to 11	418 **Comment**. In this sentence, it states the "because the **final siting and engineering** of the transmission line **has not been completed**, alternatives that specifically address **floodplain/wetland impacts have not been developed**. Therefore, measures to avoid and minimize wetland impacts can only be discussed in **general terms**." [emphasis added] House plans require much more information than provided for South Substation. TEP has filed with the Arizona Corporation Commission on August 5, 2003, before this draft EIS was released, "that some of the agencies involved in the EIS process have said that they will not comment on specifics of the Project until they are provided with a final location by either DOE or the U.S. Forest Service." [ACC Docket No. E-01032A-99-0401, "Joint Application for delay of the in-service deadline or, in the alternative, waiver of penalties and for other appropriate relief" at 8 lines 5 to 7.] Thus, without completing the final design, estimated to take 3 months in the Line Siting Hearings, TEP has placed itself in a stalemate. The *Federal Register* NOI required a Floodplain Analysis and Wetland Assessment. These are separate requirements for each of these activities. 419 **Questions**. (1) Why has the draft EIS been submitted with "final siting" determined and analyzed? Without "final siting" this plan fails to provide information necessary for decision makers, in particular, regarding flood plain impacts on the South Substation, the northern terminal of the proposed project. (2) **When will final siting be completed**, because without such decisions by TEP, there is not way any agency can approve this permit? (3) How can any "general" flood avoidance mitigation measures be proposed for review when none are proposed? (4) Why should any federal, state, tribal, or local agency approve a general floodplain/wetlands analysis which has "not been developed"? (5) Where is a "compliance matrix" which shows the requirements for these two activites, that confirm either compliance, non-compliance, or rationale for a different approach, methodology, or process used by TEP? 420 **Recommendations**. (1) Without these two analysis being complete, this draft EIS should be rejected as being non-compliant with the DOE's *Federal Register* announcements for this project. (2) As a minimum, this Appendix has to be resubmitted, to comply with the requirements for each of these analyses.
C.1 Introduction and Methods	C-1	3/(all)	421 **Comments**. This states that "IF DOE determines that there is no alternative to implementing a proposed project in a floodplain, a brief statement of finding must be prepared." 422 **Questions** (1) Why isn't this statement included in this section of the EIS? (2) Has DOE and all other government agencies agreed with such a statement? (3) What floodplain "alternatives" were considered? (4) Where is the analysis of these alternatives? (5) When will completion of this analysis be announced, including Public Notice, so that those in southern Arizona can make comments and attend the required hearings. (6) Since the *Federal Register* NOI announcement indicates the EIS will contain an Floodplains Assessment, is what is presently in the draft just a summary, a preliminary, or an independent assessment of the required

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 70 of 84

Comment No. 443-445 *(418-420 in document)*

The "Notice of Intent to Prepare an Environmental Impact Statement (EIS) and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement" for the proposed project was published in the *Federal Register* (66 FR 35950) on July 10, 2001. By including the Floodplain and Wetlands Involvement in this Notice of Intent, and taking public comments on the entire Draft EIS (including the Floodplain/Wetlands Assessment included in Appendix C), DOE fulfilled the requirements of its regulations for "Compliance with Floodplain/Wetlands Environmental Review Requirements" (10 CFR Part 1022).

As discussed in Section 1.6.6, an EIS does not contain the final decisions by the agencies. An EIS is not meant to be the document in which an agency presents its final decision. Rather, it is intended to be a tool that informs Federal decision makers of the environmental consequences of choosing among the alternatives available to them. However, in the Final EIS, the agencies' preferred alternative is presented. Each agency's final decision is set forth in a separate ROD, or a letter of concurrence in the case of USIBWC.

If an action alternative is selected and final siting of the proposed project has been determined, a Final Floodplain/Wetlands Assessment would be conducted. General impact avoidance on the floodplain and wetlands is discussed in Appendix C.3 of the Final EIS.

Comment No. 446-448 *(421-423 in document)*

The final siting and engineering of the transmission line has not yet been completed and alternatives that specifically address floodplain/wetland impacts have not yet been developed. A Final Floodplain/Wetlands Assessment would be conducted once the final siting of the transmission line has been determined and if the Federal agencies determine that there is no alternative to implementing the proposed project in a floodplain, a brief statement of finding would be prepared (see Appendix C of the Final EIS).

Magruder, Marshall
Page 71 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			section 401 and 404 reports? (7) Have the section 401 and 404 reports been completed, and if so, what is their availability? (8) What was the resultant decisions, mitigation measures, and actions necessary for TEP to comply of that analysis? (9) Was the TEP Cyprus Sierrita Substation considered as an alternative, since this transmission line goes next to it? (10) Why isn't that analysis provided in the Draft EIS so that decision makers could review that assessment? (11) When will this assessment be accomplished, hopefully, after the "final design" has been completed? (12) If the "final design" has a conflict, has TEP agreed to make any and all DOE recommendations? 423 **Recommendations**. Determine the answers to these questions, then either relocate away from the floodplain, or obtain the DOE statement and place it within the EIS.
C.1

Magruder, Marshall
Page 72 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			direction of the Santa Cruz River. This expansion needs to be shown on Figure 2. These figures are more like cartoons than engineering drawings.
			430 **Questions**. (1) Where are photographs of this area found in this version of the draft EIS? (2) Will photographs be provided in the next version of the South Station expansion requirements?
			431 **Recommendations**. (1) Add Exhibit G-1.1 from the ACC CEC Application for South Substation to Appendix C. (2) The land contours, flood plain details, railroad and automobile bridges need to be shown, as prior storms have overflowed them with all maps in this Appendix signed by a Registered Professional Civil Engineer. (3) Additional facilities, within at least 1,000 feet of the South Substation need to be shown, along with land contours.
Appendix C Figure 4	C-6	Central Corridor	432 **Comments**. This figure does not show the correct Central Corridor alignment for Segment Leg 9, as specified in the *Federal Register* and TEP's ACC Application, Exhibit A-4b. Leg 10, which is shown, was with the former Eastern Corridor.
			433 **Recommendation**. Correct the Central Corridor to reflect the requested corridor..
Appendix C, Figure 5	C-7	All	434 **Comment**. This figure shows the outline of the Gateway Substation. From TEP 2001 (ACC CEC Application), Exhibit G-1.2, Proposed Gateway Substation Landscape and Revegetation Plan, the equipment layout is shown. The Valencia changes were omitted.
			435 **Recommendation**. (1) As a minimum add Exhibit G-1.2 (or equivalent) from the ACC CEC Application for Gateway Substation to Appendix C. (2) Show the transmission line towers that go to the Valencia Substation. (3) Add a new figure, such as G-1.2 (Gateway landscaping and revegetation plan) and G-1.3 (New Valencia Switchyard). (4) Ensure all of these have been approved by a Professional Engineer.
Appendix C, Figure 6 (NEW)	C-7a	All	436 **Comment**. There is no figure shows floodplains with respect to the Valencia Substation or basic equipment at this substation. From TEP 2001 (ACC CEC Application), Exhibit G-1.3, New Valencia Switchyard, the equipment layout is shown.
			437 **Recommendation**. (1) Include the flood plain analysis for the Valencia Substation, and (2) Add Exhibit G-1.3(or equivalent) from the ACC CEC Application for Valencia Substation to Appendix C.
C.1.2.2 Wetlands	C-8	3/2 to 4	438 **Comments**. This sentence, "Wetland functions and values include water quality preservation, flood protection, erosion control, biological productivity, fish and wildlife habitat, cultural values, aesthetic values, economic values and scientific values." Each of the watersheds flood protection in the vicinities of these corridors has these values. The EPA provides a classification scheme and data that allows cumulative effects of this project to be assessed. The USACE jurisdictional responsibilities are not relevant to the preservation of the most important qualities of life in Arizona. The Federal Register required that a "cumulative effects analysis" be included in the EIS. None is present that analyzes the above for watersheds.
			439 **Questions**. (1) **Where are watershed maps that each corridor crosses**? (2) Where are the EPA Watershed data located in this proposed draft EIS? a. Assessments for each watershed along these routes that assesses water quality preservation for present and the future? b. Assessments for each watershed along these routes that assesses flood protection for present and the future? c. Assessments for each watershed along these routes that assesses

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 72 of 84

Comment No. 457-458 *(432-433 in document)*

Refer to Comment 40-41 above for discussion on Leg 9 of the Central Corridor.

Comment No. 459-460 *(434-435 in document)*

The 115-kV transmission line from Gateway Substation to the Valencia Substation has been added to figures throughout the Final EIS. Due to security issues, equipment layout is not shown in the Final EIS.

Comment No. 461-462 *(436-437 in document)*

A floodplain analysis for the existing Valencia Substation is beyond the scope of the Federal actions.

Comment No. 463-465 *(438-440 in document)*

The level and methods of analysis conducted are appropriate.

Magruder, Marshall
Page 73 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			erosion control for present and the future? d. Assessments for each watershed along these routes that assesses biological productivity for present and the future? e. Assessments for each watershed along these routes that assesses fish and wildlife habitats for present and the future? f. Assessments for each watershed along these routes that assesses Native American, Spanish colonial, Mexican, early Western and present American cultural values for present and the future? g. Assessments for each watershed along these routes that assesses aesthetic values for present and the future? h. Assessments for each watershed along these routes that assesses economic values for present and the future? i. Assessments for each watershed along these routes that assesses scientific values, especially with respect to biological reserves along proposed several routes for present and the future? 440 **Recommendations**. Complete these all of these assessments as required cumulative effects assessments.
C2	C-9	1/ 1 to 4	441 **Comments**. These two sentences indicate that the 58.500 square foot addition to the South Substation would "increase" flood elevation and "increase in downstream flood losses and long-term negative impacts on life an property." Directly to the east of the South Substation is the large Molybdenum Processing plant, which processes heavy metals for the local mining industry. **Reducing the width of the river's floodplain on the western side of the Santa Cruz River at the South Substation will increase the flooding potential at this plant with hazardous material polluting the Santa Cruz River, flowing through the San Xavier Reservation and into downtown Tucson. This** has not been assessed at all in this draft version of the EIS. **This is a critical deficiency**. 4.4.2. **Questions**. Has this conclusion been discussed with the Tohono O'odham Nation, which is immediately downstream of the South Substation? (1) What are the precise flood control measures proposed for the South Substation by TEP? (2) Do all the Pima County, City of Tucson and Town of Sahuarita flood control officers agree with any of the flood control measures proposed by TEP? (3) Has TEP considered closing or stop expansion at the South Substation due to these reasons? (4) Has TEP submitted any of the flood permit requests for this facility, as a minimum, for a draft or conceptual review? 442 **Recommendations**. (1) That all parties involved with flood control and floodplain analysis review these proposals, prior to the next version of the draft EIS being released. (2) That TEP start all the flood related permit process, because changes to meet those requirements may have significant impacts on this project.
C.3 Impact Avoidance	C-10	1/2 to 8	442 **Comments**. This final conclusion, not mentioned earlier, states "Impacts to the floodplains resulting from the South Substation expansion would be unavoidable, however, **because the South Substation was originally constructed in the 100-year floodplain, and the proposed project is designed to connect to the existing grid at this location." This is the most arrogant, amongst others, lamebrain excise in this document.** Obviously, two wrongs don't make it right. 443 **Questions**. (1) Who is liable for flooding downstream or across the stream when TEP builds up a berm to protect the expanded South Substation? (2) Will TEP post a $1 billion dollar bond to cover property and human life losses to the next-door industry, to the Tohono O'odham Nation, to the

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 73 of 84

Comment No. 466-467 *(441-442 in document)*

Regarding impacts to the local Molybdenum Processing Plant from potential South Substation flooding, refer to Green Valley Public Comment (September 25, 2003, 3-5 p.m.) Comment 64.

Comment No. 468-469 *(442 [second]-444 in document)*

Regarding liability from flooding at the South Substation, refer to Green Valley Public Comment (September 25, 2003, 3-5 p.m.) Comment 60.

Magruder, Marshall
Page 74 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
			City of Tucson, Tucson's aquifer, and to the Town of Sahuarita prior to construction? 444 **Recommendations**. (1) **That NO expansion of the South Station be authorized or permitted.** (2) **That TEP find another northern terminal, outside the 500-year floodplain, if it wants to have a transmission line with Mexico.**
C.3	C-11	1/7 to 10	445 **Comments**. The "if necessary" implies that TEP does not understand if this project is required for Section 401 and 404 permit. 446 **Question**. Why "if necessary" at this stage of the project.? 447 **Recommendation**. Do what it takes to understand and become knowledgeable about this issue and it's permit requirements for this project. Thus, delete "if necessary" and find out before resubmitted another draft version of the EIS.
Appendix D Appendix E Appendix F	D.0 E.0 F.0	Lower left Lower left Lower left	448 **Comment**. Each of these three Appendices is a Biological Assessment for different Corridors. All were "Prepared for Tucson Electric Power" by "Harris Environmental Group." There are no indications that DOE required these three Appendices, established oversight or even participated in development of the Biological Assessments. The ACC Decision No. 64356, Condition 5, required that such studies be completed. The "independent" third-party relationship appears not to have been present in these reports. As direct payment by TEP for such reports would conflict the DOE requirements for independence in important areas, such as would be included in a Biological Assessment. Appendix G provides NEPA Disclosure Statements.
Appendix G	G-1 to G-3	form	449 **Questions**. (1) Has the Harris Environmental Group been determined by the DOE to be a **qualified organization** to perform independent analyses, such as these reports? (2) Has the DOE used Harris Environmental Group for any prior NEPA studies? (3) Was this determination made prior to TEP's application for a Presidential Permit? (4) Were these three Appendices awarded based on a competitive solicitation? (5) When was the Harris Environmental Group placed under contract to accomplish these studies? **(6) Did DOE have any involvement in the requirements for this Biological Assessment; include level of detail, quality reviews, and/or direct participation between DOE and Harris Group?** 450 **Recommendations**. (1) Change "Prepared for Tucson Electric Power" to read "Prepared for Department of Energy." (2) Depending on the answers to the above questions, either provide an Appendix G Disclosure Statement for the Harris Environmental Group, Option (a) or indicate what additional TEP contracts that the Harris Group has that "conflict" with the draft EIS, Option (b). Please indicate all such contracts within the past five years, start and completion dates, value, and key TEP oversight technical manager.
Appendix D Appendix E Appendix F Executive Summary	D-4 E-3 F-4	4/7 4/7 4/7	451 **Comment**. This line indicates that the FWS will issue a Biological Opinion (BO) based in the Biological Assessment (BA) contained in these Appendices. 452 **Question**. (1) When is it expected that a BO will be issued? (2) Who will receive this BO? TetraTech, DOE, TEP, Harris Group (3) What is the role of the DOE in Section 7 consultations? (4) What is the role of TEP in Section 7 consultations?
	D-5 E-4	1/2 and 10 1/2 and 10	(5) Do the Arizona State Land Department (ASLD) and Arizona Game and Fish Department receive a copy of the BO?

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 74 of 84

Comment No. 470-472 *(445-447 in document)*

Regarding permits or review requirements under Sections 401 and 404 of the *Clean Water Act*, refer to Green Valley Public Comment (September 25, 2003, 3-5 p.m.) Comment 59.

Comment No. 473-475 *(448-450 in document)*

The BAs were prepared by a professional biologist, under contract with TEP, and the Federal agencies always review and evaluate the merits of the information before relying upon it in an environmental analysis.

Comment No. 476-478 *(451-453 in document)*

Refer to Section 4.3 regarding consultation with USFWS and preparation of the BO.

Magruder, Marshall
Page 75 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
	F-5	1/2 and 10	453 **Recommendation** (1) Include the results of the BO in the Appendices before the Final EIS.
Appendix D 1.2 1.4	D-11 D-15	1/5 6. Road ../1	454 **Comment**. The term "obliterated" is not appropriated. 455 **Recommendation** Change "obliterated" to "returned to natural vegetation, including planting, watering, and native plants from that area"
Appendix B 1.4	D-15	1. Environmental Training.	456 **Comment**. This implies that "all construction supervisors" will receive this training. During the ACC Line Siting Hearings, TEP testified that ALL construction workers would receive such training. Further, TEP indicated that all workers would be trained prior to working on-site. 457 **Recommendations**. (1) Change "supervisors" to "workers" in line 1 (2) After "training," add "before performing any on-site work."
Appendix B 1.4	D-15	2. Erosion Control Measures	458 **Comment**. The second sentence discussed "Best Management Practices" but indicates that "Specific BMPs will be identified after coordination with Arizona Department of Environmental Quality (ADEQ) and before implementation of the project, for the entire length of the selected corridor." 459 **Question**. (1) Why haven't these BMPs been determined for each Corridor? (2) When will DOE review and approve the "specific" BMPs (as written, this option may not exist)? 460 **Recommendation**. Include the Western Corridor Best Management Practices in the EIS, so that decision makers can consider these when determining the Mitigation measures in various Records of Decisions (RODs).
Appendix D 1.4	D-15	3. Fire Prevention Plan	461 **Comment** This plan needs to be reviewed by decision makers prior to issuing a ROD. 462 **Question**: (1) Who will approve this Fire Prevention Plan? (2) Will the USFS and BLM have approval authority? (3) Which local fire districts have been included in coordination necessary for the development of this Fire Prevention Plan? 463 **Recommendations**. Change "under development" to read "is found in Appendix X"
Appendix D 1.4	D-15	4. Hazardous Material Spill Response Plan	464 **Comment** This plan needs to be reviewed by decision makers prior to issuing a ROD. 465 **Question**: (1) Who will approve this Plan? (2) Will the USFS and BLM have approval authority? (3) Which local fire districts and county emergency response centers have been included in coordination necessary for the development of this Plan? 466 **Recommendations**. Change "under development" to read "is found in Appendix Y"
Appendix D 1.4	D-15	5. Invasive Species Control	467 **Comment** This plan needs to be reviewed by decision makers prior to issuing a ROD. 468 **Question**: (1) Who will approve this Invasive Species Management Plan? (2) Will the USFS, ASLD, and BLM have approval authority? (3) Will the on-site "staff biologist" be involved in the development, implementation or management of measures to control invasive species? (4) Where are the roles and responsibilities of the Staff Biologist described in this EIS? 469 **Recommendations**. Change "under development" to read "is found in Appendix X"
Appendix D 1.4	D-15	6. Road Closure/ Obliteration	470 **Comment**. The Road Analysis (RA) discussed in the second paragraph appears to contain valuable information necessary for decision makers to understand the EIS. 471 **Question**:

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 75 of 84

Comment No. 479-494 *(454-469 in document)*

The text and level of detail provided is appropriate as written.

Comment No. 495-497 *(470-472 in document)*

The Roads Analysis is available as a reference as part of the administrative record.

Magruder, Marshall
Page 76 of 84

Paragraph	Page	Para/ Line Nos.	Comments, Questions (if necessary), and Recommendation
		2/3	(1) Should the RA be included as an Appendix? 472 **Recommendations**. Include the RA as an Appendix (only on CD-ROM versions).
Appendix D 1.4 1.4 1,4 1.4 1.4	 D-16 D-16 D-17 D-16 D-17	 7. Additional Mitigation 2. MSO 1. CFPO 2. MSO 1. CFPO	473 **Comment**. The second mitigation measure for the Mexican Spotted Owl required that "protocol surveys will be conducted in the year immediately before construction." The CFPO requires the survey two years before construction. The construction project is expected to be between 12 and 18 months. 474 **Recommendation**. (1) Recommend commencing this protocol for MSO as soon as the Final EIS is issued. (2) Recommend conduct the CFPO survey ASAP.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 76 of 84

Comment No. 498-499 *(473-474 in document)*

Protocol surveys would be conducted as appropriate following the Record of Decision.

Magruder, Marshall
Page 77 of 84

Part II – Compliance with
***Federal Register* "Notice of Intent to prepare an EIS"**

The Table below provides a comparison of verbatim requirements in the DOE-issued "Notice of Intent" to the response in the draft EIS in the third column. An "assessment" of recommended actions that could resolve open or incomplete issues in the present version of the draft EIS are included in the fourth column.

	Location in NOI	Requirement	Draft EIS Response	Assessment
500	**Action**	Notice of intent to prepare an environmental impact statement (EIS).	This Notice started this process, which is ongoing	The process is in the draft EIS phase.
501	**Summary**	Tucson Electric Power Company (TEP) has applied to DOE for a Presidential permit to construct a double-circuit 345,000-volt (345-kV) transmission line originating at TEP's South Substation in Sahuarita, Arizona, and extending approximately 60 miles alternative routes, where it would cross the United States border with Mexico in the vicinity of Nogales, Arizona.	The requirements for a "double-circuit" is not proven or even discussed in the draft EIS. The operational capability for this eystem is 1,000 MW per circuit or a total of 2,000 MW with only 500 MW initially being planned for implementation due to lack of additional power at TEP's South Station. This capability is almost equal to the maximum peak demand for Tucson on August 12, 2003. At the ACC Transmission Line Siting Hearings, TEP testified the capabilities for the system was only 500 MW as indicated in TEP's ACC CEC Application.	The operational capability of two 1,000 MW circuits is enough for the entire city of Tucson. This is four times the power requirement the applicants requested at the ACC Line Siting Hearings. The ACC needs to review this change, which is not reflected in TEP's Ten Year Transmission Plan or other documents until the draft EIS was released.
502	Summary	South of the border, the line would extend approximately 60 miles into Mexico and terminate at an existing substation located in the City of Santa Ana, in the Mexican State of Sonora. DOE has determined that the issuance of the Presidential permit would constitute a major Federal action that may have a significant impact upon the environment within the meaning of the National Environmental Policy Act of 1969 (NEPA).	No data are provided in the draft EIS concerning the other half of this system, the 60 miles into Mexico. This system will have significant impacts on both sides of the border, and without a total system view, environmental impacts and effects cannot be understood, so decision makers can make sound decisions.	**Without any environmental or technical information, Alternatives, or constraints from the southern half of this system, at this point, the only logical DOE action would be either to recommend NO ACTION or require the draft EIS to be resubmitted.**
503	Summary	For this reason, DOE intends to prepare an EIS to address reasonably foreseeable impacts from the proposed action and alternatives.	Draft EIS failed to consider reasonably foreseeable impacts, including local power generation, distributed generation, Mexican recession impacts in Sonora and Santa Cruz County, electricity supply and demand forecasts	**Failed to use good analysis practices.**
504	Summary	The purpose of this Notice of Intent is to inform the public about the proposed	Public participation was accomplished; however, use of	Complied with public participation;

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 77 of 84

Comment No.500

The Federal agencies note the commentor's statement that the EIS process was initiated by the Notice of Intent to Prepare an Environmental Impact Statement.

Comment No. 501

While each circuit is thermally capable of transmitting 1,000 MW, the double circuit system has been designed and would be operated to transmit 500 MW total, for operational and reliability considerations. It is not anticipated that the double circuit system would be operated above 500 MW and the environmental impacts of operating at 500 MW is analyzed.

Comment No. 502

The impact from the Mexican portion of the proposed transmission line is analyzed to the extent that it is reasonably foreseeable. Air resources have far-reaching effect and impact to United States from emissions that could be generated in Mexico from the construction of Mexico's connection portion of the transmission line is analyzed in Section 4.8.3 of the Final EIS. The potential impact from the proposed project in Mexico is not analyzed in the EIS.

Comment No. 503

A new power plant or local (distributed) generation in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Mexican recession impacts on Sonora and Santa Cruz County are outside the scope of this EIS. The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders.

Magruder, Marshall
Page 78 of 84

	Location in NOI	Requirement	Draft EIS Response	Assessment
504 cont.		action, announce plans for three public scoping meetings in the vicinity of the proposed transmission lines, invite public participation in the scoping process, and solicit public comments for consideration in establishing the scope and content of the EIS.	material from scoping was less than complete	however, less than complete use made of Scoping Comments by DOE.
505	Summary	Because the proposed project may involve an action in a floodplain or wetland, the EIS will include a floodplain and wetlands assessment and floodplain statement of findings in accordance with DOE regulations for compliance with floodplain and wetlands environmental review requirements (10 CFR part 1022).	Floodplain compliance was faulty as this South Substation meets "critical facility" requirements and thus needs to consider 500-year floodplain. Wetland analysis in draft EIS failed to include one proposed Wild and Scenic River.	**Failed to comply, wrong floodplain used** (100-yr versus 500-yr), analysis incomplete, public hearing have not been held to date.
506	**Dates**	DOE invites interested agencies, organizations, and members of the public to submit comments or suggestions to assist in identifying significant environmental issues and in determining the appropriate scope of the EIS.	Public comments were submitted, other non-federal agency participation appears to have been very limited (responses in Appendix A), very little follow up DOE to obtain other agency inputs, such as Border Patrol, USAF, FAA, US Fish and Wildlife Services.	**Partial compliance**, with reasonable public response, low response by other federal, state, county, city, towns and tribes.
507	**Background and Need for Agency Action**	Executive Order 10485, as amended by Executive Order 12038, requires that a Presidential permit be issued by DOE before electric transmission facilities may be constructed, maintained, operated, or connected at the U.S. international border.	Actions are not completed including the DOE "reliability" analysis, which appears to be a significant fault in the proposed project.	**Many actions are still required** to comply with Presidential permit requirements.
508	Background and Need for Agency Action	The Executive Order provides that a Presidential permit may be issued after a finding that the proposed project is consistent with the **public interest.**	There is no justification provided by DOE as to the "public interest" in this project, other than TEP's business plan.	**Failed** to comply to requires that NO ACTION by DOE be the only acceptable Alternative
509	Background and Need for Agency Action	In determining consistency with the **public interest**, DOE considers the impacts of the project on the reliability of the U.S. electric power system and on the environment.	There is **no proof that this system improves the "U.S. electric power system" as contrary information states the U.S. Western Grid's reliability would be significantly reduced by the inclusion of all of the Mexican generation and transmission equipment into the US grid, as proposed by TEP as its interconnect methodology.** The "**Nogales" reliability situation has improved significantly** since the ACC 1999 order, with distribution outages the cause of over 99.9% of customer outages, and the upgrading to 100 MW to meet the supply requirements in Santa Cruz County, estimated until 2030 or later. *Black's Law Dictionary* defines "public interest" as "1. The	**Failure to improve**, actually to **lower, the reliability of the US Western Grid requires that NO ACTION by DOE be the only acceptable Alternative.** Such a negative technical solution fails to meet the definition of "public interest."

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 78 of 84

Comment No. 504

The public comments from scoping meetings are categorized either as issues within the scope of the EIS or issues out of the scope of the EIS (see Section 1.6.2 of the Final EIS) and the scoping meeting issues are also addressed in the EIS.

Comment No. 505

Sections 3.7, 4.7, and Appendix C of the Final EIS has been modified to include analysis of the 500-year floodplain for the South Substation.

Comment No. 506

As discussed in Chapters 9 and 10 of the Final EIS, consultation with those Federal and state agencies that TEP would need to act in issuing permits or approvals for the proposed project have been initiated.

Comment No. 507

As part of DOE's decisionmaking process on whether to grant a Presidential Permit for the proposed project, DOE will determine whether the proposed project will adversely impact the reliability of the U.S. electric system. Also, before authorizing exports to Mexico over the proposed 345-kV facilities, DOE must ensure that the export will not impair sufficiency of supply within the United States and will not impede, or tend to impede, the coordinated use of the regional transmission system.

Comment No. 508

Section 1.2.2, DOE Purpose and Need, of the Final EIS discusses the purpose and need for DOE action. In determining whether a proposed action is in the public interest, DOE considers the impact of the proposed project on the environment and on the reliability of the U.S. electric power supply system.

Magruder, Marshall
Page 79 of 84

	Location in NOI	Requirement	Draft EIS Response	Assessment
509 cont.			general welfare of the public that warrants recognition and protection. 2. Something in which the public as a whole has a stake; esp., an interest that justifies government regulation."	
510	Background and Need for Agency Action	The regulations implementing the Executive Order have been codified at 10 CFR 205.320– 205.329.	Complied	Complied.
511	Background and Need for Agency Action	Issuance of the permit indicates that there is no Federal objection to the project, but does not mandate that the project be completed.	In addition to the Coordinating Agencies with this draft EIS, the Department of Defense (US Air Force Airspace Management, US Army Corps of Engineers), Environmental Protection Agency, Department of Transportation (Federal Aviation Administration), Department of Homeland Security (Border Patrol), Department of Interior (US Fish and Wildlife Service, Bureau of Land Management), Department of Agriculture (US Forest Service), Arizona Game and Fish Department, Arizona Department of Environmental Quality, Arizona Department of Water Resources, Arizona State Historic Preservation Office, Pima County, Santa Cruz County, City of Nogales, Town of Sahuarita, all have additional permitting actions that could impact this system. All of these need to coordinate their actions with this system along with a long list of Mexican counterparts.	**Low compliance**, since required siting information has not been provided by the Applicant. Some major federal agencies impacted by this proposal have not been given enough information to understand this project and thus, cannot provide adequate inputs to the current process. Until those listed have agreed at the pre-draft EIS level, this process should not move foreword.
512	Background and Need for Agency Action	On August 17, 2000, TEP, a regulated public utility, filed an application for a Presidential permit with the Office of Fossil Energy of DOE, and on May 18, 2001, supplemented its application with its March 1, 2001, application to the Arizona Corporation Commission for a Certificate of Environmental Compatibility.	The original Presidential permit application was very shallow in its content, never changed or updated, but supplemented by an Application to the ACC for a CEC. The environmental information in the ACC CEC application was very weak with at least 15 additional studies and analysis required by the ACC prior to permitting construction.	**Failed** to include all the required information in both the Original Application and the ACC Application, corrections never issued.
513	Background and Need for Agency Action	TEP proposes to construct two 345-kV transmission circuits on a single set of support structures. Both circuits would originate at TEP's existing South Substation located approximately 15 miles south of Tucson in the vicinity of Sahuarita, Arizona, and 1.4 miles east of Interstate Highway 19 (I–19), south of Pima Mine Road, in Pima County, Arizona. South of the border, TEP would	The draft EIS only covers the northern half of this system, thus there is no information presented about environmental issues impacting Mexico and Mexican subsystem impacts on Arizona. The South Substation is located on the Santa Cruz River, well inside the 100-year floodplain.	**Low to partial compliance**, as this is a Project Description. However, half is missing, as there is **no description of the Mexican half of this system**.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 79 of 84

Comment No. 509

As part of DOE's decisionmaking process on whether to grant a Presidential Permit for the proposed project, DOE will determine whether the proposed project will adversely impact the reliability of the U.S. electric system. Also, before authorizing exports to Mexico over the proposed 345-kV facilities, DOE must ensure that the export will not impair sufficiency of supply within the United States and will not impede, or tend to impede, the coordinated use of the regional transmission system.

Comment No. 510

The Federal agencies note the commentor's statement that the Draft EIS complied with the 10 CFR 205.320-205.329.

Comment No. 511

Regarding permitting requirements from Federal and state agencies, refer to response to Comment 481 above.

Comment No. 512

The contents of the TEP's Presidential Permit application are not being evaluated in this EIS.

Comment No. 513

Regarding potential impacts to Mexico from the proposed project, refer to the response to Comment 502 above. For discussion on locating South Substation in a 100-year floodplain, refer to response to Magruder, Comment 508 above.

Magruder, Marshall
Page 80 of 84

	Location in NOI	Requirement	Draft EIS Response	Assessment
513 cont.		extend the line approximately 60 miles to the Santa Ana Substation, located in the City of Santa Ana, Sonora, Mexico, and owned by the Comision Federal de Electricidad (CFE), the national electric utility of Mexico.		
514	Background and Need for Agency Action	The TEP application, including associated maps and drawings, can be downloaded in its entirety from the Fossil Energy web site (www.FE.DOE.GOV; choose "Electricity Regulation," then Pending Procedures).	The Applicant has been never defined in the details necessary to understand where facilities are to be located. The maps in the draft EIS are not topographic maps. There are no professional drawings or details signed by a registered Professional Engineer (PE) as being technically correct, Website has never included the ACC CEC application.	Failed to comply, since an adequate project definition, including **locations** of appropriate facilities has never been provided by TEP. **Until received by DOE, then the only acceptable solution is NO ACTION by DOE.**
515	Background and Need for Agency Action	TEP states that there are no firm contracts in place for the sale of power to Mexico using the proposed transmission lines.	This is a "business deal" with only one company. Failure to have a customer should prevent approval.	**Construction of this system should not begin until a long-term contract has been agreed with C.F.E.**
516	Background and Need for Agency Action	Prior to commencing electricity exports to Mexico using the proposed lines, TEP, or any other electricity exporter, must obtain an electricity export authorization from DOE pursuant to section 202(e) of the Federal Power Act.	A future requirement that TEP must comply.	Compliance **not necessary now,** but will be required at a later date.
517	Background and Need for Agency Action	TEP proposes three alternative corridors, each beginning at its South Substation. About one-half of each alternative corridor would be on privately-owned land, with the other half on Federally-owned land. The study corridors are about two miles wide, but, when constructed, the transmission line would actually use a right-of-way about 125 to 250 feet wide.	TEP still has not located sites, and even the width of the transmission line right-of-way was unknown. Additional natural gas "minimum safe distance" requirements will increase the ROW width, but is still to be determined. A Memorandum of Understanding Liability Responsibilities between the gasline company and TEP needs to be accepted by both companies and regulatory agencies before ROWs can be finalized.	**Low compliance** since ROW width has not been determined, **especially with respect to avoidance of safety incidents with the natural gasline. No liability agreements are in the draft EIS.**
518	Background and Need for Agency Action	One alternative corridor, the "Westerly Route" identified by TEP as its preferred route, would extend about 62 miles within the U.S. to the U.S.-Mexico border, primarily on the west side of I– 19. The proposed route would exit the South Substation to the west, intersect the existing natural gas pipeline corridor owned by El Paso Natural Gas Company and located approximately six miles west of I–19, turn south, and parallel the natural gas pipeline for about seven miles. Southwest of Green Valley, the Westerly Route would turn southwest for	This route, where it is in common with the Central route, goes through an industrial area that has not agreed to yielding to TEP. Compliance with the ACC's routes is mandatory; however, this route may not comply. TEP did not have to propose to enter the National Forest on non-utility corridor. This was TEP's decision, not DOE's. In addition, even the current Forest Service designated utility corridor will require special processing by the USFS.	**TEP failed to comply and use the USFS designated utility corridor.**

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 80 of 84

Comment No. 514

The exact locations of the facilities associated with the proposed transmission line would depend on the final precise siting of the ROW and support structures, which would occur after each agency has issued a ROD. This would allow for mitigation of potential environmental impacts by resource specialists.

Comment No. 515-516

If TEP's proposed project is approved by each of the Federal agencies, then there would still be a variety of events that could preclude TEP from implementing this project, such as the possibility of failure by TEP to secure a power sales contract with CFE. Issuance of a Presidential Permit by DOE would only indicate that DOE has no objection to the project, but would not mandate that the project be built. If TEP's proposed project is approved by each of the Federal agencies, then there would still be a variety of events that could preclude TEP from implementing this project, such as the possibility of failure by TEP to secure a power sales contract with CFE. Issuance of a Presidential Permit by DOE would only indicate that DOE has no objection to the project, but would not mandate that the project be built (refer also to the response the Center for Biological Diversity, Comment 2).

Comment No. 517

As discussed in Section 2.1 of the Final EIS, TEP defined a 0.25-mi (0.4-km) wide study corridor for each alternative, within which the 125-ft (38-m) transmission line ROW would be sited. The precise siting of the transmission line ROW within the selected corridor would be based on further engineering evaluation and mitigation of potential impacts, following the issuance of ROD by the lead and cooperating agencies.

A minimum distance of 100 ft (30 m) would be maintained between any of the proposed transmission line structures and the edge of the existing EPNG pipeline ROW, in compliance with the Amended Certificate of Environmental Compatibility issued to TEP on October 29, 2001, ACC (see Section 4.10 of the Final EIS). As shown in Table 10-2 of the Final EIS, the Federal agencies consulted with EPNG regarding safety requirements, and EPNG concurred that the ACC's requirement is adequate.

Magruder, Marshall
Page 81 of 84

	Location in NOI	Requirement	Draft EIS Response	Assessment
518 cont.		three miles, and then continue south across private lands before crossing the Coronado National Forest on land not currently a Forest Service-designated utility corridor.		
519	Background and Need for Agency Action	The second alternative corridor, the "Central Route" (identified by TEP as its preferred route if the Westerly Route could not be constructed), would extend about 56 miles within the U.S. to the U.S.-Mexico border. The Central Route would also be located primarily on the west side of I–19. The proposed Central Route would begin in the same way as the Westerly Route, but southwest of Green Valley it would continue parallel to the existing natural gas pipeline to a point in the vicinity of Tubac, where it would make a slight southwest turn. Then, for about three miles, this proposed route would be one mile west of the natural gas pipeline. The route then would turn southeast, rejoin the natural gas pipeline corridor and parallel it through the Coronado National Forest in a Forest Service designated utility corridor that currently contains only the natural gas pipeline.	The draft EIS has a Central route that fails to include the "to a point in the vicinity of Tubac, where it would make a slight southwest turn ... rejoin the natural gasline corridor. The draft EIS uses leg 10 (of the Eastern route) instead of leg 9 (Central route). This would avoid going through a housing area, with multi-million dollar houses requiring condemnation. The ACC specifically rejected the Central route.	**TEP failed to comply** and use the correct Central Route in the draft EIS.
520	Background and Need for Agency Action	The third alternative corridor, identified by TEP as the "Easterly Route," would extend about 60 miles within the U.S. to the U.S.-Mexico border, and for about half this distance would run parallel to the existing 115- kV transmission line owned by Citizens Communications Company, located east of I–19. In the vicinity of Amado, the Easterly Route would cross to the west side of I–19, intersect the existing natural gas pipeline corridor south of Amado on private land, turn south paralleling the natural gas pipeline, and continue, paralleling the natural gas pipeline through the Coronado National Forest in the Forest Service-designated utility corridor.	TEP deleted this route before the May 2001 ACC Line Siting Committee hearings as not viable. TEP did not delete this route from consideration before DOE for over a year afterwards. The ACC rejected this route in January 2002. TEP's rationale for rejection of the Eastern route could also be used to reject the Central and Western Routes.	**Failed to include this route.**
521	Background and Need for Agency Action	Each of the three proposed alternative study corridors would cross 100-year floodplains and may cross wetlands.	None of the routes are outside the 100-year flood plain, and the Northern terminal is required to comply with a 500-year floodplain. The DEIS failed to indicate wetlands were along any route.	**Failed to comply with 500-year floodplain for a critical facility (south substation)**
522	Background and Need for Agency Action	The Westerly Route would cross approximately 1,500 feet of 100-year floodplain; the Central Route, 2,100 feet; the Easterly Route, 6,600 feet.	None of the routes are outside the 100-year flood plain, and the Northern terminal is required to comply with a 500-year floodplain.	All routes are inside 100-year floodplain.
523	Background and Need for Agency Action	Project activities would include clearing rights-of- way and access roads, digging tower footings, setting transmission	Compliance with these actions is why the EIS is required. The inaccurate, incomplete, and in	Understanding the impacts of these actions is why the

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 81 of 84

Comment No. 518

Section 1.2 explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 519

Refer to Magruder Comments 40-41 above, concerning discussion on Leg 9 of the Central Corridor.

Comment No. 520

On July 3, 2002, TEP wrote a letter to DOE requesting that the Eastern Corridor alternative be removed from further analysis in the EIS for reasons stated in Section 2.1.4 of the Final EIS. TEP's decision not to pursue the Eastern Corridor renders it infeasible, and DOE, in consultation with the cooperating agencies, has removed this alternative from further consideration in the EIS. Where a proposed project is advanced by a non-Federal applicant, such as TEP, seeking a permit for a project, an agency ordinarily need not redefine the applicant's proposal or select alternatives that change the applicant's goals. Because TEP has asserted that it does not want to pursue a given alterative route, the Federal agencies will not decide

Magruder, Marshall
Page 82 of 84

	Location in NOI	Requirement	Draft EIS Response	Assessment
523 cont.		towers, hanging transmission wires, constructing a new substation on the west side of Nogales, Arizona, near Mariposa Road, and modifying TEP's existing South Substation.	error information in the DEIS will not provide correct decision making information.	EIS is required; however, the **DEIS will not provide decision makers with acceptable information.**
524	Background and Need for Agency Action	In a separate but related proceeding, Public Service Company of New Mexico (PNM) has also applied for a Presidential permit to construct an electric transmission line across the U.S. border in the vicinity of Nogales, Arizona. A separate EIS is being prepared in that proceeding. The study corridor identified by TEP as the Central Route is very similar to the study corridor identified by PNM as its "Pipeline Corridor." TEP's Easterly Route and PNM's "East Valley Corridor" study corridors are similar in that a segment of each parallels the Citizens Communications Company's existing 115-kV transmission line.	The **cumulative effects analysis (CEA) needs to consider this Alternative. The Draft EIS failed to accomplish the minimal requirements for a CEA and failed to assess and evaluate the PNM Alternative.**	**Failed to comply**
525	Background and Need for Agency Action	To assist the reader, maps available from the DOE web site (referenced above) reflect the applicants proposal and also the proposed corridors of the other applicant.	The cumulative effects analysis (CEA) **must consider this Alternative**. The Draft EIS failed to assess and evaluate the PNM Alternative.	**Failed to comply.**
526	Background and Need for Agency Action	Each of the EISs being prepared will **consider the potential impacts** of the other company's proposed transmission line as part of its cumulative impacts analysis.	The cumulative effects analysis (CEA) **must consider this Alternative**. The Draft EIS **failed** to accomplish the minimal requirements for a CEA and failed to assess and evaluate the PNM Alternative.	**Failed to comply as PNM's potential impacts were ignored.**
527	**Identification of Environmental Issues**	A purpose of this notice is to solicit comments and suggestions for consideration in the preparation of the EIS.	Not all comments and suggestions from the Scoping process appear to have been considered.	**Limited compliance**, mostly superficial.
528	Identification of Environmental Issues	As background for public comment, this notice contains a list of potential environmental issues that DOE has tentatively identified for analysis. This list is not intended to be all-inclusive or to imply any predetermination of impacts.	Very limited compliance, with **no emphasis on Mexican issues, valid Alternatives, or cumulative impacts, most details necessary** for compliance are missing.	**Limited compliance** in a few areas
529	Identification of Environmental Issues	Following is a preliminary list of issues that may be analyzed in the EIS:	Very **limited compliance**, with no emphasis on Mexican issues, valid Alternatives, or cumulative impacts	**Limited compliance in a few areas**
530	Identification of Environmental Issues	(1) Socioeconomic impacts of development of the land tracts and their subsequent uses;	**Not followed**, see page 2-26 and 2-27	**Failed to comply**
531	Identification of Environmental Issues	(2) Impacts on protected, threatened, endangered, or sensitive species of animals or plants, or their critical habitats;	**Not followed**, see page 2-25, which indicates that Sec. 7 ESA consultations have not yet started	**Failed to comply**
532	Identification of Environmental Issues	(3) Impacts on floodplains and wetlands;	**Not followed**, wrong floodplain assessed, omitted the designation of Sycamore Creek into the Wild	**Failed to comply**

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 82 of 84

Comment No. 520 *(continued)*

otherwise, and it would be a waste of time and resources to evaluate an alternative that the applicant reject.

Comment No. 521-522

Sections 3.7, 4.7, and Appendix C of the Final EIS has been modified to include a 500-year floodplain analysis of the South Substation.

Comment No. 523

The Federal agencies note the commentor's concern about inaccuracies, incompleteness and errors in the Draft EIS.

Comment No. 524-526

The proposed PNM transmission line project is no longer reasonably foreseeable, as explained in Chapter 5 of the Final EIS.

Comment No. 527

For discussion on issues raised during the public scoping meeting, refer to the response to Comment 479.

Comment No. 528

See Section 1.1.1, The Proposed Action, on a connecting transmission line in Mexico.

Section 1.2 explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the

Comment No. 528 ***(continued)***

applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Chapter 5 of the EIS presents an analysis of cumulative impacts, as required under NEPA, that could occur as a result of the potential impacts of TEP's proposed project when added to impacts from other past, present, and reasonably foreseeable future actions. Where specific information was available on past, present, and reasonably foreseeable future actions, it was included in the EIS; relevant information received from the public during the Draft EIS public comment period was also added to the Final EIS (e.g., information on planned residential developments was added to Section 5.2.4). Section 5.3, Cumulative Impact Analysis, has been revised in the Final EIS to more completely assess cumulative impacts. Also, Table 5.4-1 has been added to the Final EIS to provide a summary comparison of the cumulative impacts by resource area and identify any differences in cumulative impacts for the Western, Central, and Crossover Corridors.

Comment No. 529-530

Socioeconomic impacts from the constructing the proposed project are analyzed in Section 4.5.1 of the EIS, including discussions on landowners affected by TEP acquiring easements for the transmission line ROW and access roads; negative visual impacts on private property; compensation to landowners for acquiring easement on existing access road. The ROW easement developed with proposed project would have limited land use.

Comment No. 531

The Federal agencies have initiated formal consultation under Section 7 (a)(2) of the ESA with the USFWS (see Section 4.3).

Magruder, Marshall
Page 83 of 84

	Location in NOI	Requirement	Draft EIS Response	Assessment
			and Scenic River category, p. 2-27	
533	Identification of Environmental Issues	(4) Impacts on cultural or historic resources;	**Partially followed**, **failed** to meet ACC requirements to consult with local historical societies, some with extensive, unique information.	**Failed to comply**
534	Identification of Environmental Issues	(5) Impacts on human health and safety;	**Failed to determine the "minimum safe distance"** between the natural gasline and electric conductors.	**Failed to comply**
535	Identification of Environmental Issues	(6) Impacts on air, soil, and water;	**Very limited compliance**, with no emphasis on Mexican issues, valid Alternatives, or cumulative impacts	**Limited compliance** in very few areas
536	Identification of Environmental Issues	(7)Visual impacts; and	Very limited compliance, with **errors in some analyses** and emphasis in wrong factors	**Limited compliance** in very few areas
537	Identification of Environmental Issues	(8) Disproportionately high and adverse impacts on minority and low income populations.	**Failed to understand** that 70% of census areas are environmental justice area with occupational and children health issues, especially, when including Mexico and Nogales.	**Failed to comply**
538	Identification of Environmental Issues	The EIS will also consider alternatives to the proposed transmission lines, including, to the extent practicable:	**Very limited analysis of alternatives with inadequate rational for rejection of many options.**	**Failed to comply**
539	Identification of Environmental Issues	(1) No Action Alternative: The EIS will analyze the impacts associated with "no action." Since the proposed action is the issuance of a Presidential permit for the construction of the proposed transmission lines, "no action" means that the permit would not be issued. However, not issuing the permit would not necessarily imply maintenance of the status quo. It is possible that the applicant and/or the Mexican government may take other actions if the proposed transmission lines are not built. The No Action Alternative will address the environmental impacts that are reasonably foreseeable to occur if the Presidential permit is not issued.	**Mexican government actions not assessed or discussed if the line is not build. In addition, all environmental impacts "to" Mexico from the U.S. and those "from" Mexico to the U.S. have not been assessed. The environmental impacts consider the border transparent, Not such treatment was included. There is considerable concern about Mexican power plants causing air pollution in the US, if power is going north on this system.**	**Limited compliance** but failed to include any factors involving Mexico, which is where half of this system will be located.
540	Identification of Environmental Issues	(2) **Construction of a powerplant in the U.S. closer to the U.S.-Mexico border** with a shorter transmission line extending to the border, an alternative concept for supplying electric power to the target region.	**Failed to evaluate and assess this viable alternative.**	**Failed to comply.**
541	**Scoping Process**	Interested parties are invited to participate in the scoping process both to refine the preliminary alternatives and environmental issues to be analyzed in depth, and to eliminate from detailed study those alternatives and environmental issues that are not feasible or pertinent.	Failed to analyze issues into depth, for example, the **minimum safe distance between the natural gasline and the electrical system** which was erroneously calculated by the ACC during the Line Siting Hearings. Most of criteria used to reject some Alternatives would also apply to the three Alternatives	**Failed to follow through in the Draft EIS.** Criteria for Alternative rejection was subjective and not property applied, failed to comply with standard analysis

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 83 of 84

Comment No. 532

The "Notice of Intent to Prepare an Environmental Impact Statement (EIS) and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement" for the proposed project was published in the *Federal Register* (66 FR 35950) on July 10, 2001. By including the Floodplain and Wetlands Involvement in this Notice of Intent, and taking public comments on the entire Draft EIS (including the Floodplain/Wetlands Assessment included in Appendix C), DOE fulfilled the requirements of its regulations for "Compliance with Floodplain/Wetlands Environmental Review Requirements" (10 CFR Part 1022).

Sections 3.7, 4.7, and Appendix C of the Final EIS has been modified to include an analysis of the 500-year floodplain for South Substation.

Comment No. 533

This EIS does not assess whether TEP meets the ACC's requirements.

Comment No. 534

A minimum distance of 100 ft (30 m) would be maintained between any of the proposed transmission line structures and the edge of the existing El Paso Natural Gas (EPNG) pipeline ROW, in compliance with the Amended Certificate of Environmental Compatibility issued to TEP on October 29, 2001, by ACC (see Section 4.10). As shown in Table 10-2 of the Final EIS, DOE consulted with EPNG regarding safety requirements, and EPNG concurred that the ACC's requirement is adequate.

Comment No. 535

Chapters 3 and 4 of the EIS analyze the affected environment and potential impacts to air, soil and water resources from the proposed project.

Section 5.2.1, Other Energy and Transmission Line Projects in Southern Arizona, has been revised in the Final EIS to include the available information on a transmission line that would connect to TEP's proposed project at the U.S.-Mexico border. Section 1.1.1, The Proposed Action, of

Magruder, Marshall
Page 84 of 84

	Location in NOI	Requirement	Draft EIS Response	Assessment
			analyzed.	practices.
542	Scoping Process	The scoping process is intended to involve all interested agencies (Federal, state, county, and local), public interest groups, Native American tribes, businesses, and members of the public. Potential Federal cooperating agencies include the U.S. Department of the Interior (including the Bureau of Land Management, Bureau of Indian Affairs, Park Service, and the Fish and Wildlife Service), the U.S. Department of Agriculture's Forest Service, the International Boundary and Water Commission, and the Tohono O'odham Nation.	The State of Arizona, including the ACC, Fish and Game, Air Quality Environment Department (AQED), Arizona Water Resources, etc. did not cooperate with DOE in the NEPA process used to develop this draft EIS. The Arizona **Certificate of Environmental Compliance (CEC) was granted with over 15 environmental studies that had not been started**, as the **ACC felt the federal EIS would identify and remediate environmental issues**.	**Failed to have concurrence between federal and state governments**.
543	**Draft EIS Schedule and Availability**	The Draft EIS is scheduled to be issued in December 2001, at which time its availability will be announced in the **Federal Register** and local media and public comments again will be solicited.	Failed to meet this deadline, as August 22, 2003 is over 20 months late.	**Failed to meet deadline.**
	Draft EIS Schedule and Availability	People who do not wish to submit comments or suggestions at this time but who would like to receive a copy of the Draft EIS for review and comment when it is issued should notify Mrs. Russell at the address above.	Not draft EIS related.	None applicable.
544	Draft EIS Schedule and Availability	The Draft EIS will be made available for public inspection at several public libraries and reading rooms in Arizona.	Complied, however, **only partial documents provided to some libraries.**	**Mostly Complied**
	Draft EIS Schedule and Availability	A notice of these locations will be provided in the **Federal Register** and local media at a later date.	Complied	Complied.

Magruder – First Comments on TEP Transmission Line Draft EIS dated October 14, 2003 page 84 of 84

Comment No. 535 (*continued*)

the Final EIS has been revised to clarify that TEP's proposed project is limited to activities within the United States, and the analysis in this EIS is limited to environmental impacts within the United States.

Impacts to United States from emissions that may be generated in Mexico from the construction of Mexico's connecting portion of the transmission line were analyzed using conservative assumptions due to lack of available information on project design and construction in Mexico.

Comment No. 536

Sections 3.2 and 4.2 of the EIS present analyses of the affected environment and potential impacts to the visual resources from the proposed project.

Comment No. 537

Sections 3.13 and 4.13 of the EIS discuss the affected environment and potential impacts to environmental justice groups. Based on the analyses presented in Section 4.13.1 of the EIS, the Federal agencies conclude that no disproportionately high and adverse impacts would be expected for minority or low-income populations.

Comment No. 538

Section 2.1 Alternatives, explains the roles of TEP and the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable

Comment No. 538 *(continued)*

range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 539

As the EIS analyzes potential environmental impacts to United States from the proposed project, potential impacts to Mexico is outside the scope of the EIS. Impact to United States from emissions that could be generated in Mexico is included as appropriate in Section 4.8.3 of the Final EIS.

The Federal agencies are not aware of any specific information available on power plants that may be built in Mexico, and was not provided any such specific information during the Draft EIS public comment period. Chapter 5 presents the most current information available regarding the construction of power plants in the vicinity of Nogales, Mexico.

Comment No. 540

ACC Comment 3 emphasized that a new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 541

A minimum distance of 100 ft (30 m) would be maintained between any of the proposed transmission line structures and the edge of the existing EPNG pipeline ROW, in compliance with the Amended Certificate of Environmental Compatibility issued to TEP on October 29, 2001, ACC (see Section 4.10 of the Final EIS). As shown in Table 10-2 of the Final EIS, the Federal agencies consulted with EPNG regarding safety requirements, and EPNG concurred that the ACC's requirement is adequate. (Reference to first place the response appears).

Comment No. 542

As part of the NEPA process, the Federal agencies have initiated consultations with those state agencies that would need to act in issuing permits or approvals for the proposed project, including ACC, and ADEQ (see Chapter 9 of the EIS).

Comment No. 543

In order to include all necessary analyses needed for the Draft EIS, the scheduled release date of the Draft EIS stated in the Notice of Intent in the *Federal Register* was not met.

Comment No. 544

Copies of the Draft EIS, the Draft EIS Summary, and the references were placed in the four public libraries and available for public review. The Draft EIS was placed in these public libraries in order to allow the maximum number of people that would be potentially affected by the proposed project along the proposed transmission line corridors.

Mertz, Robert
Page 1 of 3

Environmental Impact Statement for Tucson Electric's proposed powerline

From: ramertz@access.mountain.net
[SMTP:ramertz@access.mountain.net]
To: Pell, Jerry
Cc:

Subject: Environmental Impact Statement for Tucson Electric's proposed powerline
Sent: 10/10/2003 8:07 PM
Importance: Normal

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,
Our two sons are men now. Trevor the older son works at the small town hardware store in our town where he spends much of his time installing large appliances. In his spare time he uses his considerable mechanical skills to keep his 4-wheel drive truck and ATV working. Justin is going to college in a small but prestigious school near New York City. We could never afford to send him there, but he was given a great financial package at the school. He seems to be enjoying college life in a very positive way. Lacrosse, fencing, theater and studying keep him busy and socially involved with his fellow students. They are both over 6 ft 4 inches tall, athletic, and good-looking too.

Comment No. 1

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Mertz, Robert
Page 2 of 3

People say they get their looks and brains from their mother, and their off the wall sense of humor from me. Their peers respect them for their self-confidence and independent nature. They are sons to make any parents proud.
Our sons are the most important and joyful part of my life. Although both my wife and I have spent the greater part of our adult lives interacting with young people as teachers, nothing comes close to the emotional intensity of raising your own children. They are mostly grown and independent of us now, but our commitment to them continues. Today the growth of the human population and the selfish consumerism that is spreading over the Earth is endangering the future of all humans. Will we be able to both save ourselves from self-destruction and maintain our freedom and individuality? I have been teaching students the value of developing a sustainable culture and personal life style for 25 years as a Biology and Environmental Earth Science teacher. I hope that the knowledge I have gained from my masters degree in Biology as well as my extensive reading have been delivered with the passion that I feel for the welfare of our planet. Teaching is a powerful way to have a positive influence on the future, but many issues are too important and too immediate to wait for the future. I am writing today about one of these issues.

1 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 3

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

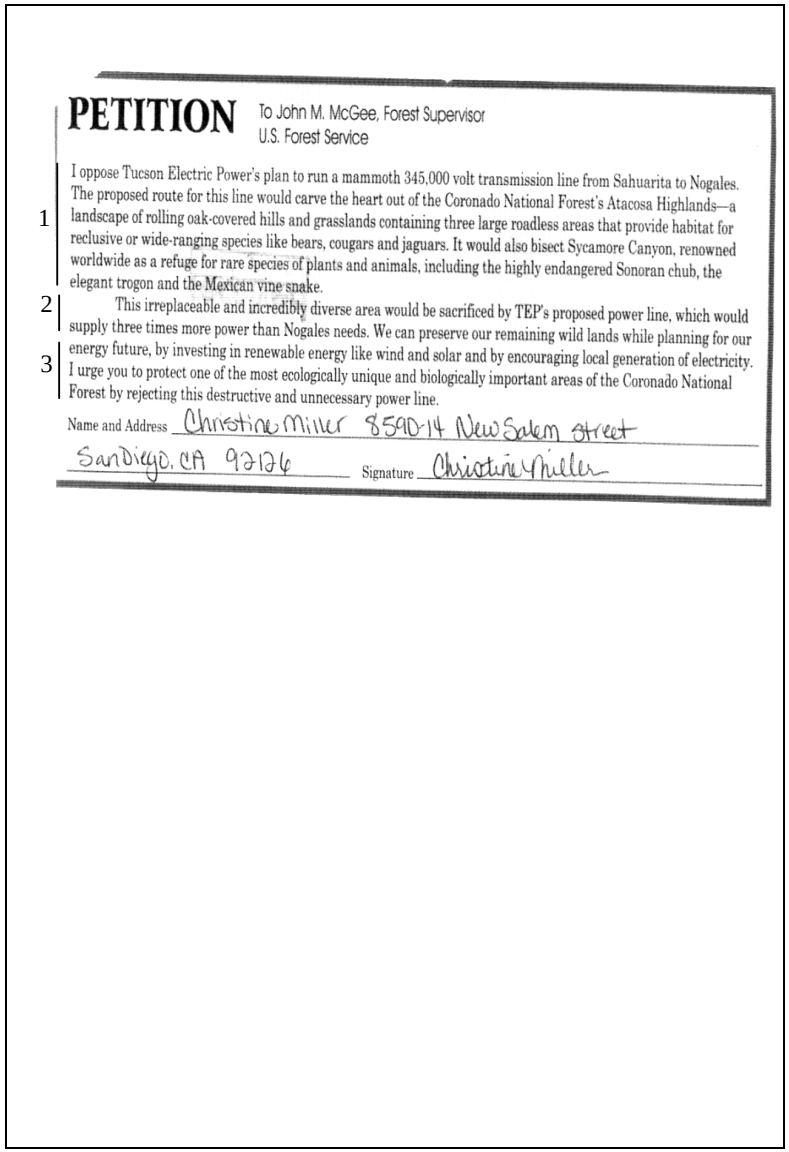
Mertz, Robert
Page 3 of 3

2 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

3 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,
ROBERT A. MERTZ
1205 Mulberry Ridge Road
SPENCER, West Virginia 25276

Miller, Christine
Page 1 of 1



PETITION To John M. McGee, Forest Supervisor
U.S. Forest Service

I oppose Tucson Electric Power's plan to run a mammoth 345,000 volt transmission line from Sahuarita to Nogales. The proposed route for this line would carve the heart out of the Coronado National Forest's Atacosa Highlands—a
1 landscape of rolling oak-covered hills and grasslands containing three large roadless areas that provide habitat for reclusive or wide-ranging species like bears, cougars and jaguars. It would also bisect Sycamore Canyon, renowned worldwide as a refuge for rare species of plants and animals, including the highly endangered Sonoran chub, the elegant trogon and the Mexican vine snake.

2 This irreplaceable and incredibly diverse area would be sacrificed by TEP's proposed power line, which would supply three times more power than Nogales needs. We can preserve our remaining wild lands while planning for our energy future, by investing in renewable energy like wind and solar and by encouraging local generation of electricity.

3 I urge you to protect one of the most ecologically unique and biologically important areas of the Coronado National Forest by rejecting this destructive and unnecessary power line.

Name and Address Christine Miller 8590 14 New Salem Street
San Diego, CA 92126 Signature Christine Miller

Comment No. 1

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to special status species in the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Comment No. 2

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…."

Comment No. 3

Alternative and renewable power supply methods do not meet TEP's proposal and are thus not evaluated in this EIS (refer to Section 2.1.5).

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Millinovitch, Maggie
Page 1 of 2

October 8, 2003

Sue Kozacek, Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, Arizona 85701

Re: Proposed Tucson Electric Power Sahuarita-Nogales transmission line

Dear Ms. Kozack,

In writing to the Department of Energy my opposition to the proposed transmission line it was, "just the measurable facts, mam." I hope you will take a moment to read this short article I published in my monthly newspaper *The Connection*. It isn't just the facts; it's the heart of why I oppose the TEP project. 1

This is the place of my heart where I come to heal, to celebrate, to appreciate. Sycamore Canyon is more than the sum of its rocks, water, wildlife and flora. It fills the empty places in my soul: a by-product of "civilized" living. A day of listening to the cascading call of the Canyon Wren reverberating off the red rock canyon walls, lazing under a willow tree chomping on carrot sticks while considering a delicate wildflower is about all I need to get me back in tune with the rest of the planet, for a while.

I have come to this quiet garden in the desert for the past 30 years. Echoes of past visits and the promise of its enduring beauty greet me as I round each bend in the meandering stream. Reassuringly the canyon never changes yet is never the same. Also, no matter how often I return, I have a different perspective with which to appreciate it and new eyes to see what I missed before.

The lower canyon begins just off the serpentine, dirt, one lane Ruby Road and runs to the international boundary with Mexico. While all around may be dangerous territory, Sycamore is always a safe, protected place. No mule trains with illegal cargos venture this way. The tumble of rocks and water-filled pools carved of solid stone block their way to northern destinations. It is a designated wildlife and plant research area; there are no roads, no hunters, no motor homes, no ATVs, and no ghetto blasters. Alone, I feel safe - at home.

A short hike into the old parking area and I spot the huge oak tree where years ago, when my children were very young, we often pitched our huge old canvas tent. The homestead of Hank and Yank Bartlett sits nearby. With each visit a little less is left of the melting adobe walls from a time when the West was young and Apaches were fierce. The rains that wash the canyon clean also wash out a bit of history.

Today insects rule the canyon. Butterflies in a bright parade wobble on the light breeze. Bright orange dragonflies with transparent wings hover over the water showing their aerodynamic prowess despite being engaged in double-decked co-mingling. I watch for a convention of ladybugs; a few years back I came upon thousands of them meeting on the shady side of a large boulder. I scooped up a handful to join in their party and was welcomed by their using my body as a playground. In my hair, under my shirt and over my face they skittered until they bored of me and flew back to the convention.

Comment No. 1

The Federal agencies note the commentor's preference for the No Action Alternative.

Comment No. 2

Sections 3.1 and 4.1 present a description of the existing land use, and analyze the potential impacts to these resources from the proposed project, including potential impacts to Sycamore and Peck Canyons and the Atascosa Mountains.

Millinovitch, Maggie
Page 2 of 2

Coming to the first nature-provided swimming pool echoes a time when, as the kids grew older, we ventured further into the canyon. The pools are home to tiny fishes that nibbled on our skin if we stood too long in one place. Their hungry probing sent shivering sensations up our spines and we had contests to see who could stand still the longest without giggling.

Many side canyons flow into the main. Some are so narrow, steep and clogged with scrub they defy exploration. Others made of solid rock reward mountain goat climbing skills with waterfalls and clear pools for swimming. The refreshingly cool water can, even in the summer heat, feel chilly in the lower levels of these undisturbed, temperature-stratified pools.

Passing by one of the larger side canyons, I recall a hot summer day with my sons. We had been scrambling over the water-strewn boulders of this side canyon and I let the kids go on ahead. I sat quietly by a small pool in the shade of a twisted, stunted oak tree. In that shade grew velvet textured, bright green moss clinging to stones moistened by the seep water trickling over them. I could still hear the kids, but barely. Relaxing, contemplating nature's application of various shades of green, I caught movement out of the corner of my eye. I froze. A band of coati had come with their young for a sip of water. I must have blended into the surroundings like a homely girl at the prom, because they didn't notice me just a few feet away. I couldn't call to my children to share the experience nor could I reach for my camera; I didn't want to disturb the band. Instead, concentrating all my powers on observation and conservation of movement, I sat and rejoiced in the moment.

This time my visit is with a heavier heart. Sycamore Canyon, a large part of my life and my history, with my hopes for its future untroubled by the advances of "civilization," are now threatened.

2 Tucson Electric Power wants to put a monstrous, power transmitting abomination very close to this canyon. But Sycamore is not the only area in jeopardy. Peck Canyon, the Atascosa Mountains, along with miles and miles of wild areas are being considered for pathways to corporate riches. Please join me in putting a stop to this madness.

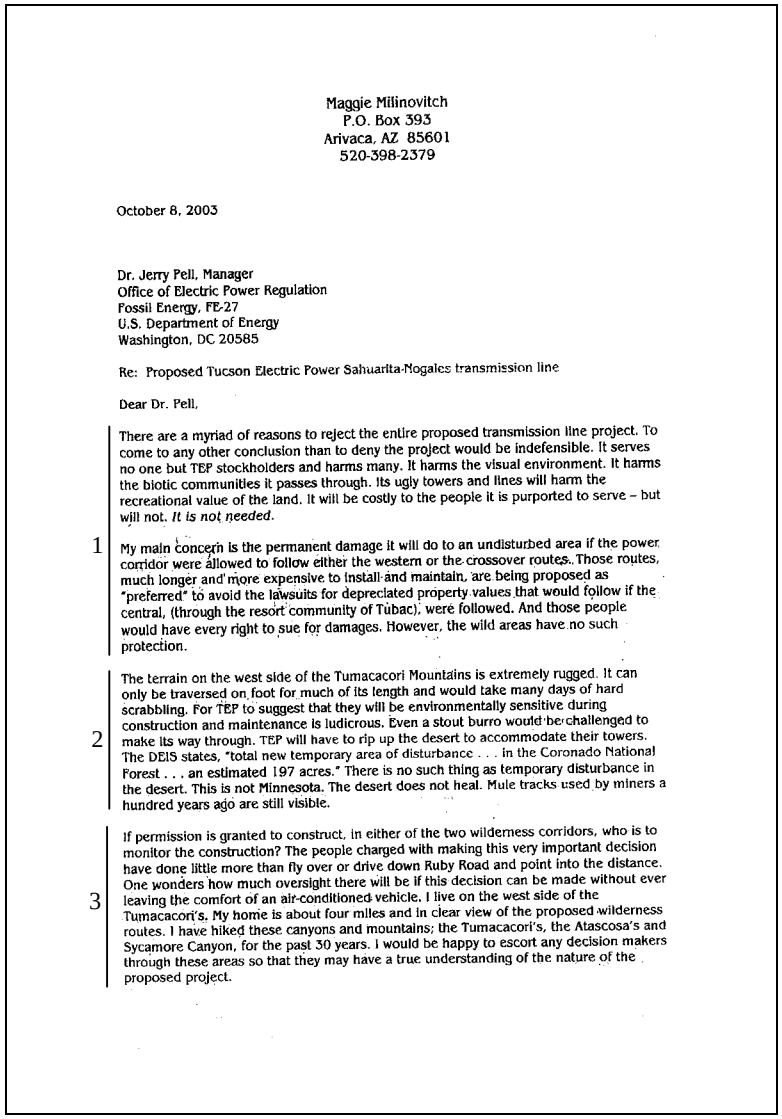
Thank you for your time and please disallow the transmission line on national forest land.

Sincerely,

Maggie Millinovitch

Maggie Milinovitch
P.O. Box 393
Arivaca, AZ 85601
520-398-2379

Millinovitch, Maggie
Page 1 of 2



Maggie Milinovitch
P.O. Box 393
Arivaca, AZ 85601
520-398-2379

October 8, 2003

Dr. Jerry Pell, Manager
Office of Electric Power Regulation
Fossil Energy, FE-27
U.S. Department of Energy
Washington, DC 20585

Re: Proposed Tucson Electric Power Sahuarita-Nogales transmission line

Dear Dr. Pell,

There are a myriad of reasons to reject the entire proposed transmission line project. To come to any other conclusion than to deny the project would be indefensible. It serves no one but TEP stockholders and harms many. It harms the visual environment. It harms the biotic communities it passes through. Its ugly towers and lines will harm the recreational value of the land. It will be costly to the people it is purported to serve – but will not. *It is not needed.*

1 My main concern is the permanent damage it will do to an undisturbed area if the power corridor were allowed to follow either the western or the crossover routes. Those routes, much longer and more expensive to install and maintain, are being proposed as "preferred" to avoid the lawsuits for depreciated property values that would follow if the central, (through the resort community of Tubac), were followed. And those people would have every right to sue for damages. However, the wild areas have no such protection.

2 The terrain on the west side of the Tumacacori Mountains is extremely rugged. It can only be traversed on foot for much of its length and would take many days of hard scrabbling. For TEP to suggest that they will be environmentally sensitive during construction and maintenance is ludicrous. Even a stout burro would be challenged to make its way through. TEP will have to rip up the desert to accommodate their towers. The DEIS states, "total new temporary area of disturbance . . . in the Coronado National Forest . . . an estimated 197 acres." There is no such thing as temporary disturbance in the desert. This is not Minnesota. The desert does not heal. Mule tracks used by miners a hundred years ago are still visible.

3 If permission is granted to construct, in either of the two wilderness corridors, who is to monitor the construction? The people charged with making this very important decision have done little more than fly over or drive down Ruby Road and point into the distance. One wonders how much oversight there will be if this decision can be made without ever leaving the comfort of an air-conditioned vehicle. I live on the west side of the Tumacacori's. My home is about four miles and in clear view of the proposed wilderness routes. I have hiked these canyons and mountains; the Tumacacori's, the Atascosa's and Sycamore Canyon, for the past 30 years. I would be happy to escort any decision makers through these areas so that they may have a true understanding of the nature of the proposed project.

Comment No. 1

Potential economic benefit to TEP from the proposed project is outside the scope of the EIS.

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

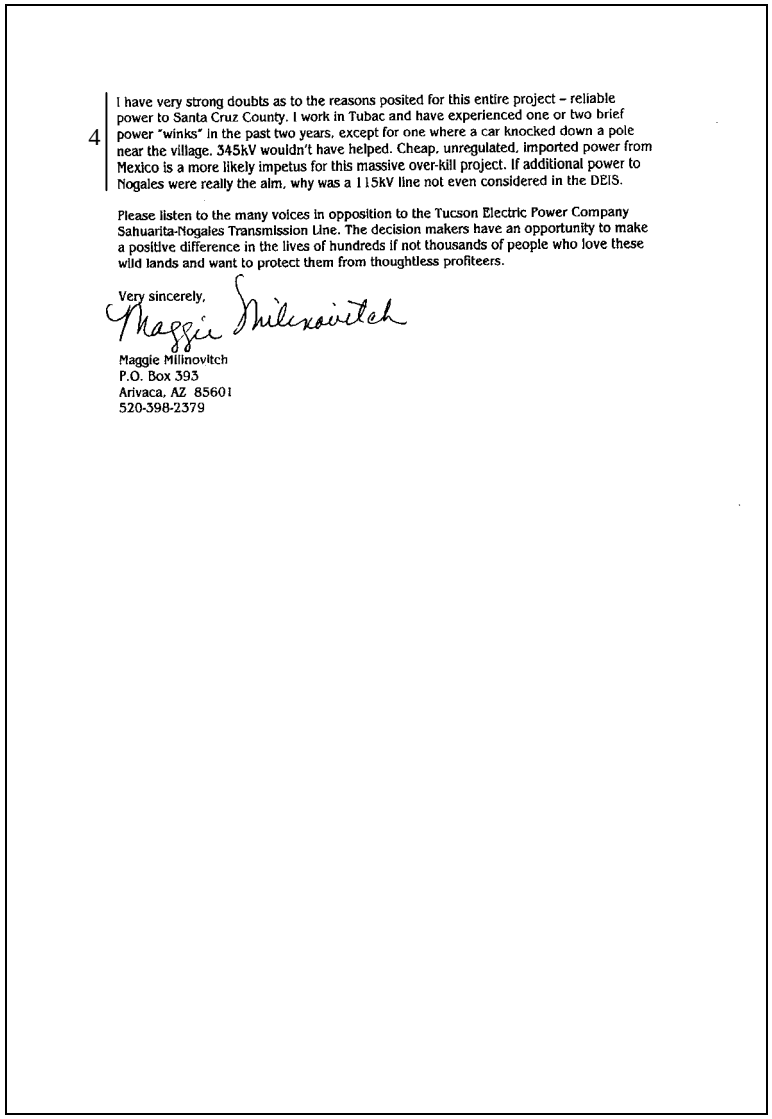
Sections 3.4 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project.

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…."

Comment No. 2

Section 4.3.2 states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Millinovitch, Maggie
Page 2 of 2



4 I have very strong doubts as to the reasons posited for this entire project – reliable power to Santa Cruz County. I work in Tubac and have experienced one or two brief power "winks" in the past two years, except for one where a car knocked down a pole near the village. 345kV wouldn't have helped. Cheap, unregulated, imported power from Mexico is a more likely impetus for this massive over-kill project. If additional power to Nogales were really the aim, why was a 115kV line not even considered in the DEIS.

Please listen to the many voices in opposition to the Tucson Electric Power Company Sahuarita-Nogales Transmission Line. The decision makers have an opportunity to make a positive difference in the lives of hundreds if not thousands of people who love these wild lands and want to protect them from thoughtless profiteers.

Very sincerely,

Maggie Millinovitch

Maggie Millinovitch
P.O. Box 393
Arivaca, AZ 85601
520-398-2379

Comment No. 3

Any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions related to monitoring, as appropriate.

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Montgomery, Dorothy
Page 1 of 2

Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS

From: DOROTHY MONTGOMERY
[SMTP:mont113@mindspring.com]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS
Sent: 10/8/2003 8:22 PM
Importance: Normal

1 I oppose the proposed Western and Crossover alternatives for the Sahuarita-Nogales Transmission Line for a number of reasons, both economic and environmental. The need for a project this size has not been demonstrated. The original reason for this project was to alleviate a demonstrated power reliability problem in Nogales, Arizona (ACC Order 62011). This problem could be solved with a smaller line within existing right-of-way or a small power plant in the vicinity of Nogales. These alternatives were not seriously considered in the DEIS.

2 It appears that Tucson Electric Power has upsized the project in hopes of a future connection with a possible power plant in Santa Ana, Mexico. (I have been told that buying and selling power between the United States and

3 Mexico would require an amendment to the Mexican Constitution.) Important economic changes have occurred which are not considered in the DEIS. Originally Citizens Utility supplied power in Nogales and agreed to buy a certain amount of power from Tucson Electric Power Company.

Comment No. 1

A new power plant in Nogales is not a viable alternative to a new, second transmission line. Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 2

If TEP's proposed project is approved by each of the Federal agencies, then there would still be a variety of events that could preclude TEP from implementing this project, such as the possibility of failure by TEP to secure a power sales contract with CFE. Issuance of a Presidential Permit by DOE would only indicate that DOE has no objection to the project, but would not mandate that the project be built (refer also to the response the Center for Biological Diversity, Comment 2, regarding existing connections between the electric grids of the United States and Mexico).

The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS. Refer to the response to Sky Island Alliance, Comment 14, for further discussion of power plant construction in Mexico.

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the United States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

Montgomery, Dorothy
Page 2 of 2

3 cont. Tucson Electric Power Company has since bought out Citizen Utility's interests around Nogales. The citizens of Nogales are concerned about rate changes Tucson Electric Power has made and the potential for additional charges to pay for the proposed 345 kV line. There is a measure on the ballot on November 4 for the City of Nogales to take over local power service. One of the alternatives they are looking into is building a local power plant.

If that occurs, this will eliminate the need of the line to serve Arizona customers.

4 The DEIS has not thoroughly considered the value of the areas included in the Western and Crossover alternatives. Some of the area included in the Western and Crossover alternatives are currently roadless and have been considered for Wilderness status. Having hiked some of this area with knowledgeable botanists (including the late Jack Kaiser, the acknowledged expert on Santa Cruz County flora), I know this area to be particularly rich. Endangered animals such as the jaguar have been recorded in the area. This is in addition to the special visual qualities of the area.

While I am sure that Tucson Electric Power Company will attempt to close and revegetate the temporary access roads, that process will be particularly difficult, if not impossible, in this particular case. The rocky terrain and unreliable rainfall will work against this process. Keeping pedestrian and motor traffic off these tracks will be difficult because of the location near the Mexican border. They will attract both illegal migrants and drug smugglers and the law enforcement officers trying to catch them.

DOROTHY MONTGOMERY
mont113@mindspring.com
560 E. Monaco Place
Tucson, AZ 85737-7411

Comment No. 3

Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS.

As discussed in section 2.1.5, a new local power plant does not eliminate the need for the proposed second transmission line.

Comment No. 4

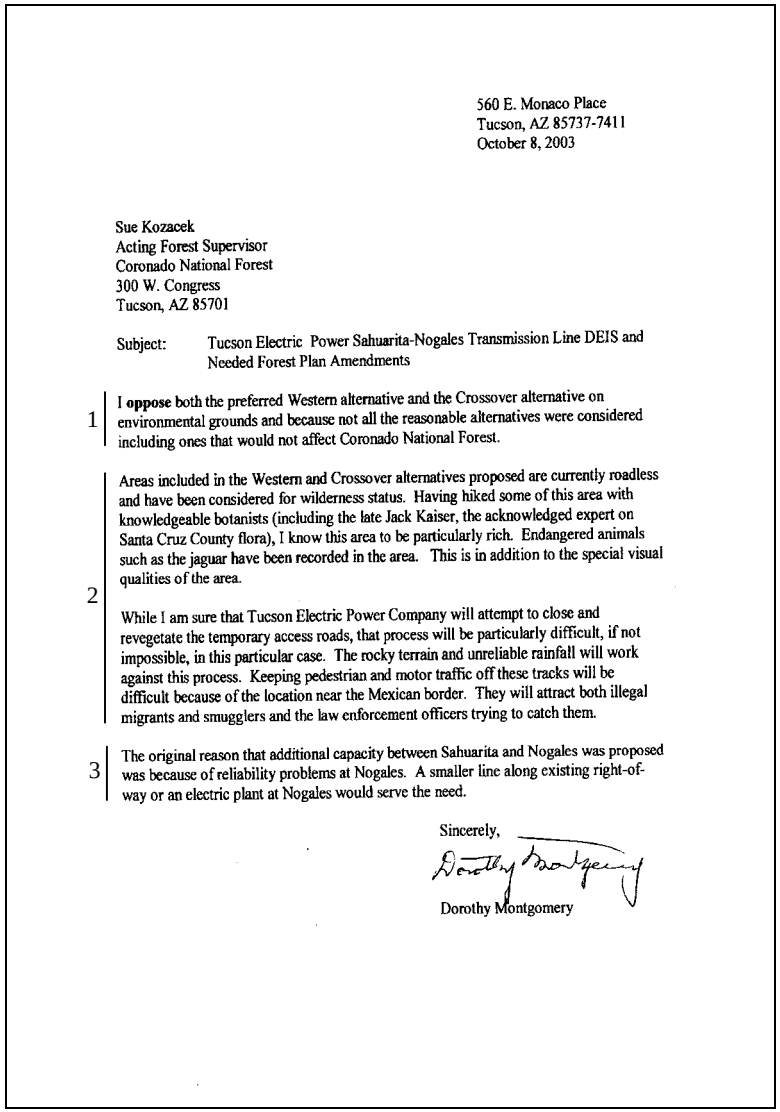
Sections 3.3.3 and 4.3.3 discuss the affected environment and analyze potential impacts to endangered species, including potential impacts to jaguar.

Sections 3.2 and 4.2 of the EIS present analysis of the potential existing environment and potential visual impacts from the proposed project.

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above. Refer also to the response to Sky Island Alliance, Comment 14.

Any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate.

Montgomery, Dorothy
Page 1 of 1



560 E. Monaco Place
Tucson, AZ 85737-7411
October 8, 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Subject: Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS and Needed Forest Plan Amendments

1 I **oppose** both the preferred Western alternative and the Crossover alternative on environmental grounds and because not all the reasonable alternatives were considered including ones that would not affect Coronado National Forest.

2 Areas included in the Western and Crossover alternatives proposed are currently roadless and have been considered for wilderness status. Having hiked some of this area with knowledgeable botanists (including the late Jack Kaiser, the acknowledged expert on Santa Cruz County flora), I know this area to be particularly rich. Endangered animals such as the jaguar have been recorded in the area. This is in addition to the special visual qualities of the area.

While I am sure that Tucson Electric Power Company will attempt to close and revegetate the temporary access roads, that process will be particularly difficult, if not impossible, in this particular case. The rocky terrain and unreliable rainfall will work against this process. Keeping pedestrian and motor traffic off these tracks will be difficult because of the location near the Mexican border. They will attract both illegal migrants and smugglers and the law enforcement officers trying to catch them.

3 The original reason that additional capacity between Sahuarita and Nogales was proposed was because of reliability problems at Nogales. A smaller line along existing right-of-way or an electric plant at Nogales would serve the need.

Sincerely,

Dorothy Montgomery

Comment No. 1

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 2

Refer to the response to Comment 4 in the previous submittal from Dorothy Montgomery.

Comment No. 3

Refer to the response to Comment 1 in the previous submittal from Dorothy Montgomery.

Morello, Phyl
Page 1 of 2

From: fastphyl1@hotmail.com
Sent: Friday, October 10, 2003 7:00 AM
To: Pell, Jerry
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

1 Why is it there is always some one wanting to destroy our American envrionment? Why is it our government actually endorses these big businesses to do damage to our fragile environment?

2 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

3 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 1

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." The Federal agencies have prepared this EIS to evaluate the potential environmental impacts of TEP's proposed project. Each Federal agency's purpose and need for action is explained in Section 1.2.2, Federal Agencies' Purpose and Need Statements.

Comment No. 2

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 3

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Morello, Phyl
Page 2 of 2

4 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

5 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a

6 new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Phyl Morello
HC 2
Albrightsville, Pennsylvania 18210

Comment No. 4

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

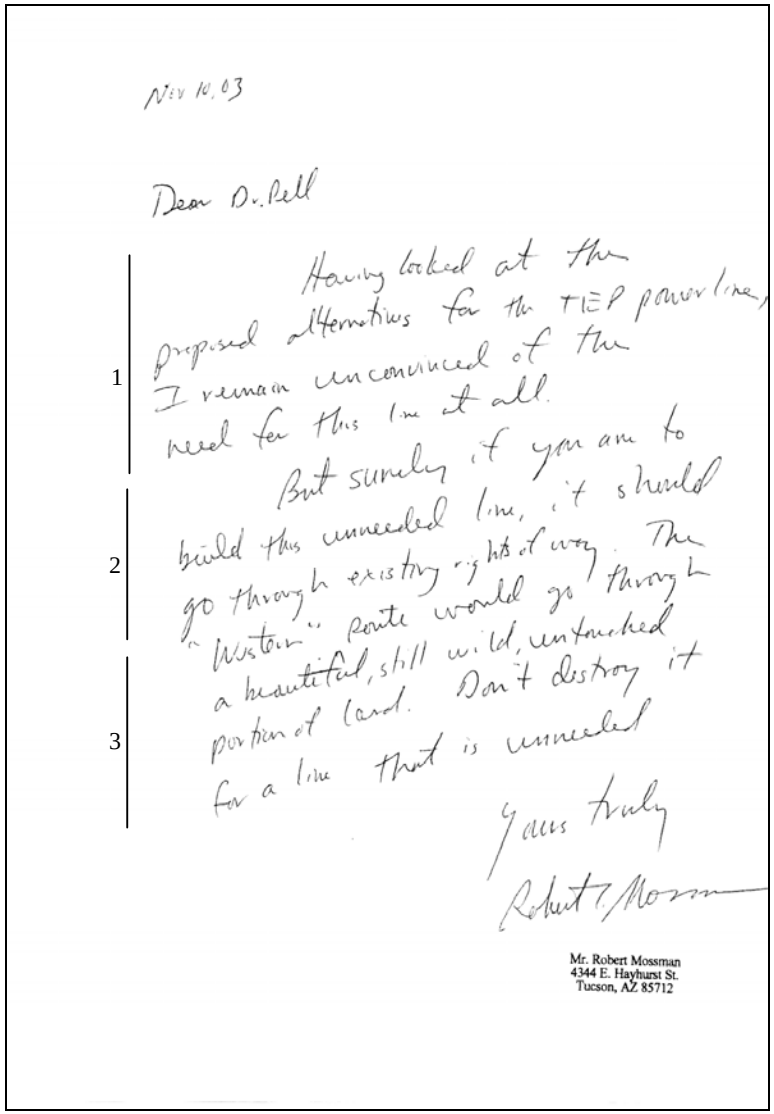
Comment No. 5

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 6

A new power plant in Nogales is not a viable alternative to a new, second transmission line. Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Mossman, Robert
Page 1 of 1



Nov 10, 03

Dear Dr. Bell

1 Having looked at the proposed alternatives for the TEP power line, I remain unconvinced of the need for this line at all.

2 But surely, if you are to build this unneeded line, it should go through existing rights of way. The "Western" route would go through a beautiful, still wild, untouched portion of land. Don't destroy it

3 for a line that is unneeded

Yours truly

Robert T. Mossman

Mr. Robert Mossman
4344 E. Hayhurst St.
Tucson, AZ 85712

Comment No. 1

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to ACC, Comment 1, and to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

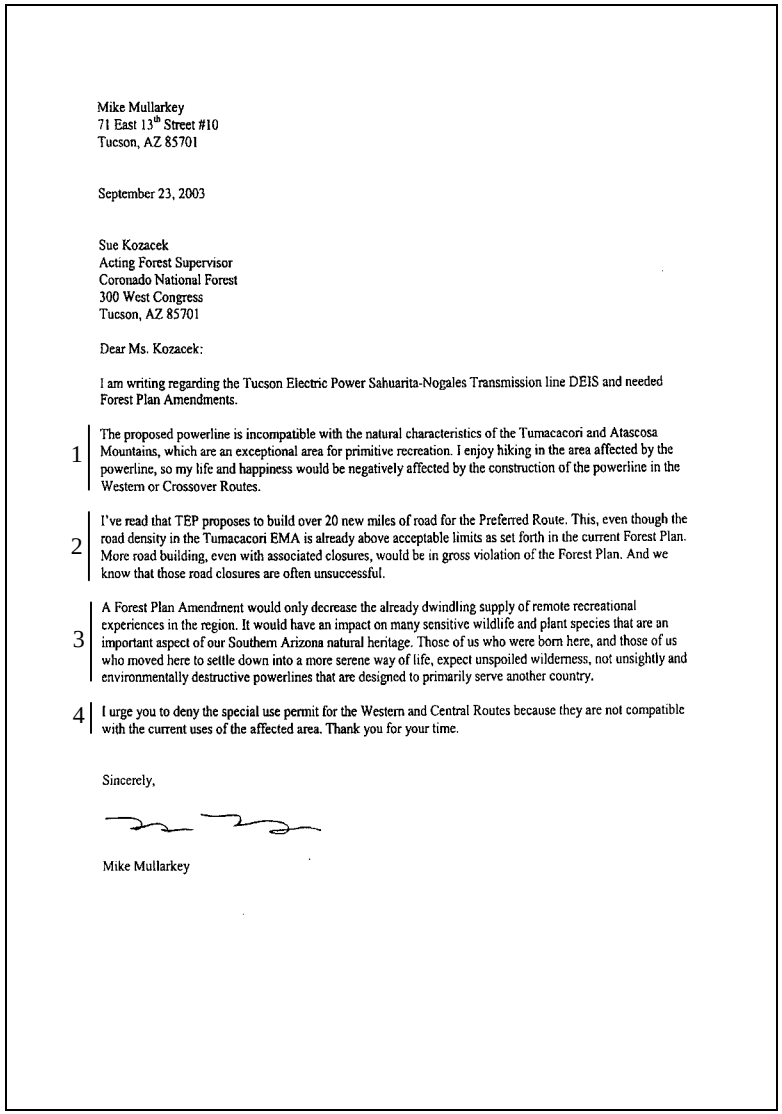
Comment No. 2

A portion of each of the action alternatives follows or crosses an existing natural gas pipeline (see Table 2.3-1, Summary Comparison of Potential Environmental Effects of Alternatives) that is within a utility corridor and has some access roads and other associated ground disturbance. Building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5 of the Final EIS).

Comment No. 3

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife habitat.

Mullarkey, Mike
Page 1 of 1



Mike Mullarkey
71 East 13th Street #10
Tucson, AZ 85701

September 23, 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek:

I am writing regarding the Tucson Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendments.

1 The proposed powerline is incompatible with the natural characteristics of the Tumacacori and Atascosa Mountains, which are an exceptional area for primitive recreation. I enjoy hiking in the area affected by the powerline, so my life and happiness would be negatively affected by the construction of the powerline in the Western or Crossover Routes.

2 I've read that TEP proposes to build over 20 new miles of road for the Preferred Route. This, even though the road density in the Tumacacori EMA is already above acceptable limits as set forth in the current Forest Plan. More road building, even with associated closures, would be in gross violation of the Forest Plan. And we know that those road closures are often unsuccessful.

3 A Forest Plan Amendment would only decrease the already dwindling supply of remote recreational experiences in the region. It would have an impact on many sensitive wildlife and plant species that are an important aspect of our Southern Arizona natural heritage. Those of us who were born here, and those of us who moved here to settle down into a more serene way of life, expect unspoiled wilderness, not unsightly and environmentally destructive powerlines that are designed to primarily serve another country.

4 I urge you to deny the special use permit for the Western and Central Routes because they are not compatible with the current uses of the affected area. Thank you for your time.

Sincerely,

Mike Mullarkey

Comment No. 1

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

The Western Corridor would require construction of approximately 20 mi (32 km) of temporary new roads for construction on the Coronado National Forest, and the Central and Crossover Corridors would require fewer roads, and unnecessary project roads would be closed following construction (see Section 4.12, Transportation). The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. TEP would close 1.0 mi (1.6 km) of existing classified road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project, such that road density on the Coronado National Forest would not be affected.

Comment No. 3

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources

An explanation of Forest Plan Amendments has been added (see Appendix H).

Comment No. 4

Sections 3.1 and 4.1 present a description of the existing land uses and analyze the potential impacts to these resources from the proposed project.

Notestine, Jim
Page 1 of 1

Oct. 14, 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 West Congress
Tucson, AZ 85701

Re: Tumacacori Highlands

Dear Ms. Kozacek:

1 As a twenty-three year resident of Santa Cruz County Arizona, I would like to express how important the Tumacacori Highlands area is to me. The Tumacacori and Atascosa mountains as well as Sycamore Canyon/Pajarita Wilderness area have been a very important area for me to hike, bird and seek solitude in. I addition the area is an important wildlife migration corridor for rare species, both bird and mammal.

2 I urge you to support the Sky Island Alliance and Arizona Wilderness Coalition proposal for Wilderness designations in the Tumacacori Highlands. I also urge you to not support

3 Tucson Electric Power's proposal to route a 345kV power line through the Coronado National Forest. It is unnecessary and the proposed 140 foot tall towers would be a severe impact to the aesthetics and natural resource values of this area.

1 cont. In summary, I urge you to protect the natural values of the Tumacacori Highlands.

Sincerely,

Jim Notestine

POB 461
Sonoita, AZ 85637

irisjim@earthlink.net

Comment No. 1

Sections 3.1.2 and 4.1.2 discusses the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to threatened and endangered species.

Comment No. 2

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Comment No. 3

The Federal agencies note the commentor's preference for the No Action Alternative.

Orlando, Anne
Page 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 05:34 PM -----
eletimbuktu@yahoo.com
10/12/2003 12:39 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

Please withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

1 The proposed "Western" and "Crossover" routes would destroy the scenery and integrity of some of the most beautiful and wild places left in Arizona. The landscapes of the Tumacacori Highlands are a treasure, and undisturbed areas like these are very rare these days. This is one of the few places where a person can enjoy nature unmarred by our onslaught of human development, use, and land conversion. The area is rich in rare watchable wildlife.

2 Excellent electrical service to Nogales and Santa Cruz County can be achieved by building the small transmission line. What the TEP has proposed is a massive, environmentally destructive, and extremely controversial powerline to export power to Mexico.

Comment No. 1

Sections 3.2 and 4.2 present analyses of the existing visual resources, and potential impacts to these visual resources for each alternative, including changes in Scenic Integrity.

Sections 3.1.2 and 4.1.2 present analyses of existing recreational settings and activities, and potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Comment No. 2

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Orlando, Anne
Page 2 of 2

2 cont. This project should not be allowed to mar a gorgeous unmarred land, because few refuges like this still exist.

3 Feasible alternatives exist which cost less money and would notdestroy the integrity of this region, but the draft EIS doesn't adequately address these. The draft EIS should be withdrawn as does not present an honest picture of how needs can be met easily without this destructive project.

I urge DOE to issue a new draft EIS which fully explores all available options including a local power plant and smaller power lines which would not be designed to serve Mexico.

Thank you for reviewing this important issue.

Sincerely,

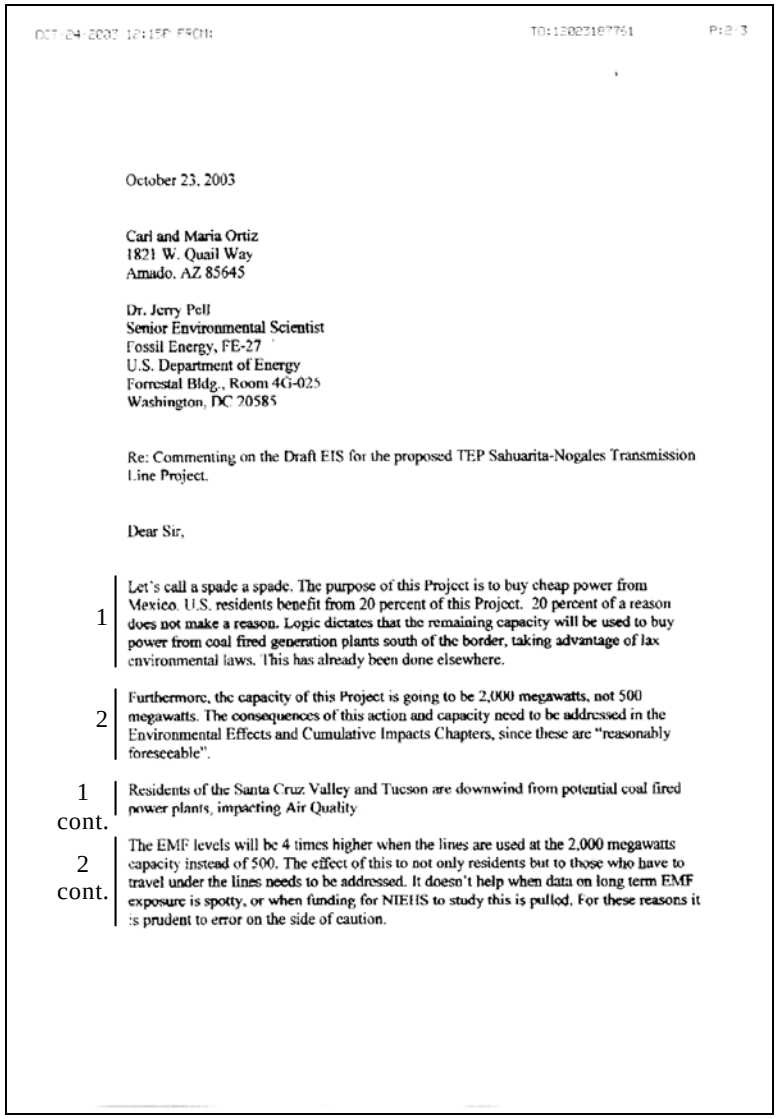
ANNE ORLANDO
2855 BIDWELL PL. #2
DAVIS, California 95616

Comment No. 3

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line. Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Ortiz, Maria and Carl
Page 1 of 2



OCT-24-2003 10:15P FROM: TO:13023187761 P:2/3

October 23, 2003

Carl and Maria Ortiz
1821 W. Quail Way
Amado, AZ 85645

Dr. Jerry Pell
Senior Environmental Scientist
Fossil Energy, FE-27
U.S. Department of Energy
Forrestal Bldg., Room 4G-025
Washington, DC 20585

Re: Commenting on the Draft EIS for the proposed TEP Sahuarita-Nogales Transmission Line Project.

Dear Sir,

1 Let's call a spade a spade. The purpose of this Project is to buy cheap power from Mexico. U.S. residents benefit from 20 percent of this Project. 20 percent of a reason does not make a reason. Logic dictates that the remaining capacity will be used to buy power from coal fired generation plants south of the border, taking advantage of lax environmental laws. This has already been done elsewhere.

2 Furthermore, the capacity of this Project is going to be 2,000 megawatts, not 500 megawatts. The consequences of this action and capacity need to be addressed in the Environmental Effects and Cumulative Impacts Chapters, since these are "reasonably foreseeable".

1 cont. Residents of the Santa Cruz Valley and Tucson are downwind from potential coal fired power plants, impacting Air Quality

2 cont. The EMF levels will be 4 times higher when the lines are used at the 2,000 megawatts capacity instead of 500. The effect of this to not only residents but to those who have to travel under the lines needs to be addressed. It doesn't help when data on long term EMF exposure is spotty, or when funding for NIEHS to study this is pulled. For these reasons it is prudent to error on the side of caution.

Comment No. 1

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…."

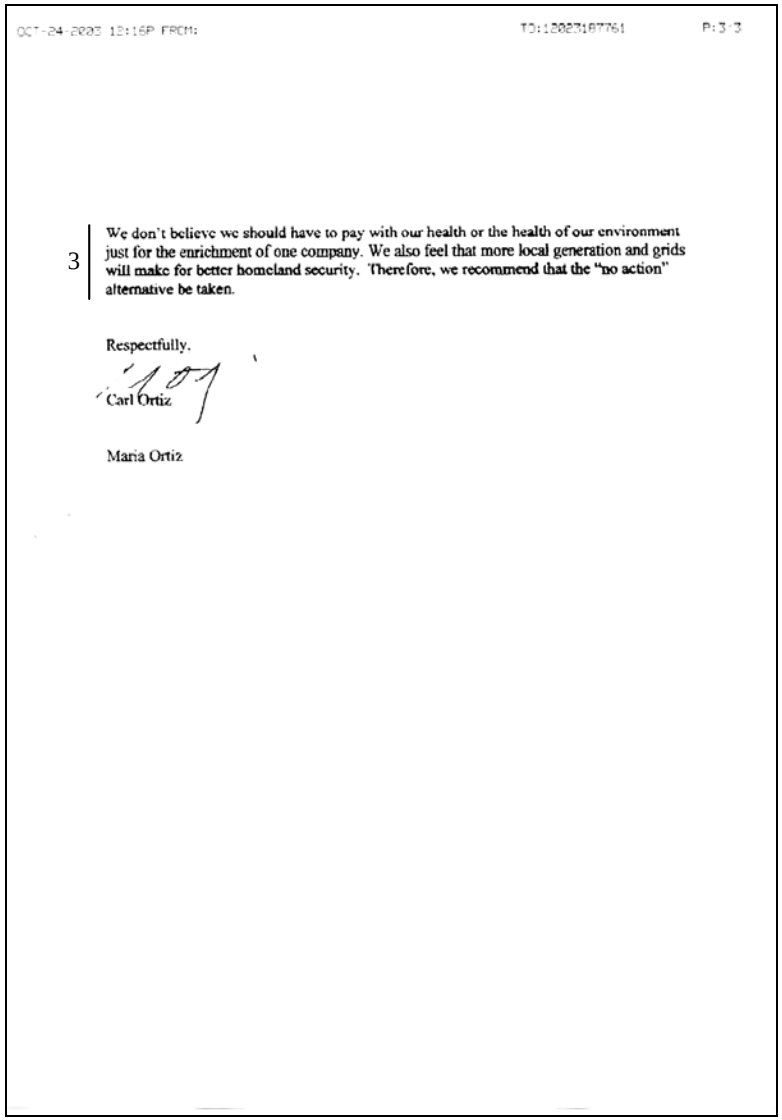
The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS. Refer to the response to Sky Island Alliance, Comment 14, for further discussion of power plant construction in Mexico.

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the United States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

Comment No. 2

The maximum level at which the proposed 345-kV transmission line would be operated is 500 MW (refer to the response to Border Power Plant Working Group, Comment 2). If TEP wanted to operate the proposed 345-kV transmission line above 500 MW, TEP would have to apply to DOE for an amendment to their Presidential Permit, and DOE would have to perform additional analysis required by NEPA. The maximum EMF levels listed in Table 4.10-2 were calculated correctly based on operation of the proposed 345-kV transmission line at the 500-MW level.

Ortiz, Maria and Carl
Page 2 of 2



OCT-24-2003 12:16P FROM: TO:12082187761 P:3/3

3 We don't believe we should have to pay with our health or the health of our environment just for the enrichment of one company. We also feel that more local generation and grids will make for better homeland security. Therefore, we recommend that the "no action" alternative be taken.

Respectfully.

Carl Ortiz

Maria Ortiz

Comment No. 3

As discussed in Section 2.1.5, a new power plant in Nogales is not a viable alternative to a new, second transmission line. Therefore, the alternative of a new power plant is not evaluated in detail in this EIS.

Paige, Richard
Page 1 of 1

1109 W. Placita Refinada
Green Valley, AZ 85614
September 15, 2003

Mr. John M. McGee, Forest Supervisor
U.S. Forest Service
300 West congress, Tucson AZ 85701

Re: Proposed TEP Sahuarita-Nogales Transmission Line

Dear Sir:

I chose to live in Green Valley, because of the many nearby mountain ranges, the so-called "Sky Islands". I am a former Hike Master for the Green Valley Hiking Club and I also lead hikes for Pima Community College, I spend three to four days a week hiking all over Southern Arizona. I know the Tumacacori and Atascosa mountains well. This area has been proposed for Wilderness status, which it deserves.

1 The current powerline proposal calls for 191 power poles of 140 feet height and 14 lines to pass through these two mountain ranges. This would be a major intrusion into this rugged, beautiful and nearly roadless and undisturbed area. It is unthinkable to consider the placement of these structures along Ruby Road, near Sycamore Canyon, and at the base of Atascosa Peak and the officially designated historic fire lookout.

2 A case has been made for the need of a back up line for Nogales and Santa Cruz County. Only 20% of this line's capacity (100 Megawatts out of 500) is for Nogales. The remainder is for proposed export and sale to Mexico. This does not justify this destructive intrusion into the Coronado National Forest and I respectfully request that the United States Forest Service deny a permit for the passage of this transmission line.

Sincerely,

Richard Paige

Richard Paige

Comment No. 1

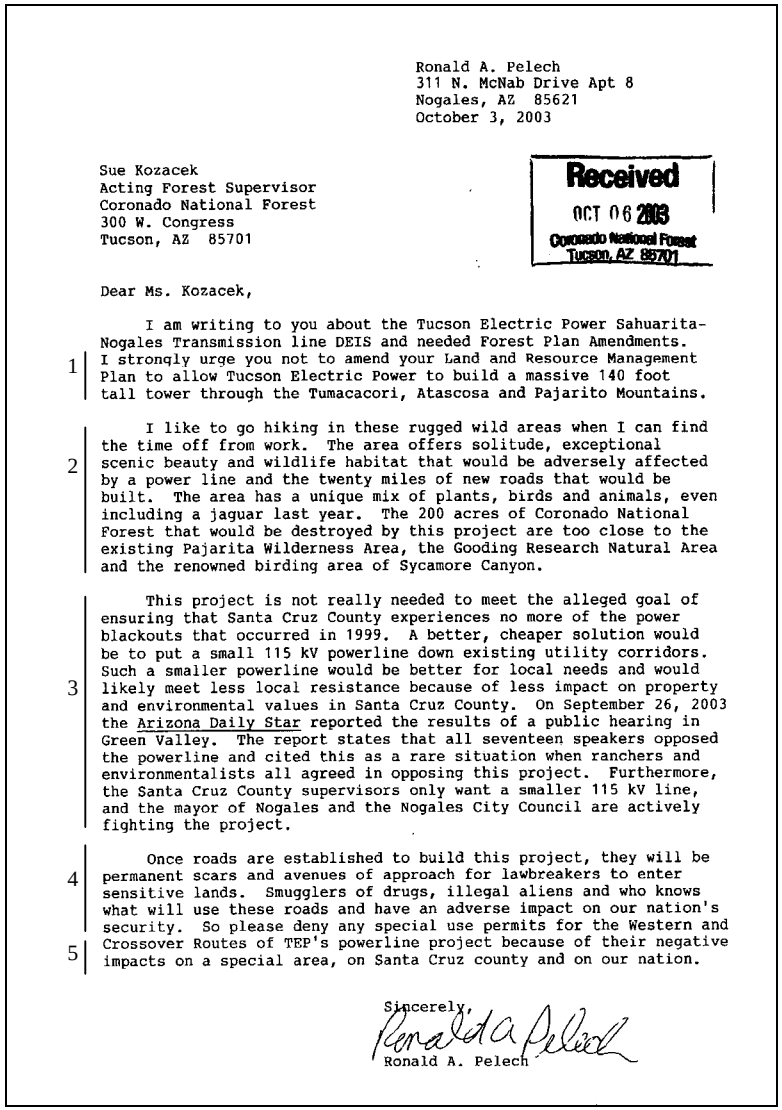
Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project. Section 4.4.1.1 (Archaeological and Historical Sites, Western Corridor) specifically addresses impacts to the Atascosa lookout tower.

Comment No. 2

TEP reached an agreement with Citizens to provide up to 100 MW of transmission capacity from Tucson to Nogales, Arizona, and TEP anticipates using the remaining 400 MW of capability for transport of energy between the United States and Mexico (see Section 1.5, TEP's Proposed Project Capacity and Usage, of the Final EIS).

Chapter 3 describes the affected environment of the area and Chapter 4 evaluates the potential impacts of the proposed project, including potential impacts on the Tumacacori EMA of the Coronado National Forest.

Pelech, Ronald A.
Page 1 of 1



Ronald A. Pelech
311 N. McNab Drive Apt 8
Nogales, AZ 85621
October 3, 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Received
OCT 06 2003
Coronado National Forest
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to you about the Tucson Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendments. I stronqly urge you not to amend your Land and Resource Management Plan to allow Tucson Electric Power to build a massive 140 foot tall tower through the Tumacacori, Atascosa and Pajarito Mountains.

2 I like to go hiking in these rugged wild areas when I can find the time off from work. The area offers solitude, exceptional scenic beauty and wildlife habitat that would be adversely affected by a power line and the twenty miles of new roads that would be built. The area has a unique mix of plants, birds and animals, even including a jaguar last year. The 200 acres of Coronado National Forest that would be destroyed by this project are too close to the existing Pajarita Wilderness Area, the Gooding Research Natural Area and the renowned birding area of Sycamore Canyon.

3 This project is not really needed to meet the alleged goal of ensuring that Santa Cruz County experiences no more of the power blackouts that occurred in 1999. A better, cheaper solution would be to put a small 115 kV powerline down existing utility corridors. Such a smaller powerline would be better for local needs and would likely meet less local resistance because of less impact on property and environmental values in Santa Cruz County. On September 26, 2003 the Arizona Daily Star reported the results of a public hearing in Green Valley. The report states that all seventeen speakers opposed the powerline and cited this as a rare situation when ranchers and environmentalists all agreed in opposing this project. Furthermore, the Santa Cruz County supervisors only want a smaller 115 kV line, and the mayor of Nogales and the Nogales City Council are actively fighting the project.

4 Once roads are established to build this project, they will be permanent scars and avenues of approach for lawbreakers to enter sensitive lands. Smugglers of drugs, illegal aliens and who knows what will use these roads and have an adverse impact on our nation's security. So please deny any special use permits for the Western and
5 Crossover Routes of TEP's powerline project because of their negative impacts on a special area, on Santa Cruz county and on our nation.

Sincerely,
Ronald A. Pelech

Comment No. 1

The Federal agencies note the commentor's opinion that USFS should not to amend their Land and Resource Management Plan to allow the proposed project.

Comment No. 2

The Western Corridor would require construction of approximately 20 mi (32 km) of temporary new roads for construction on the Coronado National Forest, and the Central and Crossover Corridors would require fewer roads. Unnecessary project roads would be closed following construction (see Section 4.12, Transportation). The area of disturbance on the Coronado National Forest would vary for each corridor (see Table 4.12-1, Temporary and Permanent Area Disturbed on the Coronado National Forest by the Proposed Project).

Sections 3.1.2 and 4.1.2 present analyses of existing recreational settings and activities, and potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Sections 3.2 and 4.2 present analyses of the existing visual resources, and potential impacts to these visual resources for each alternative.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including vegetation and wildlife (see Section 4.3.2).

Comment No. 3

A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 4

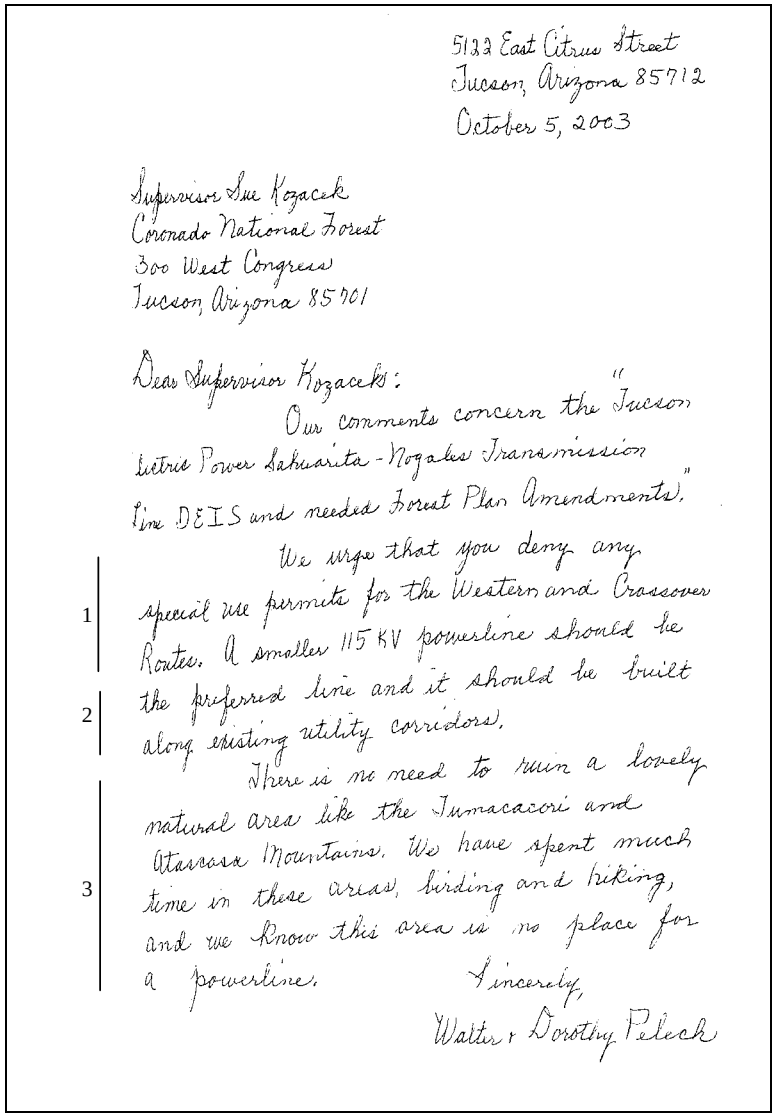
Section 4.3.2 states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above

Comment No. 5

The Federal agencies note the commentor's requests that any special use permits for the Western and Crossover Corridors be denied.

Pelech, Walter and Dorothy
Page 1 of 1



5122 East Citrus Street
Tucson, Arizona 85712
October 5, 2003

Supervisor Sue Kozacek
Coronado National Forest
300 West Congress
Tucson, Arizona 85701

Dear Supervisor Kozacek:

Our comments concern the "Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS and needed Forest Plan Amendments."

1 We urge that you deny any special use permits for the Western and Crossover Routes. A smaller 115 KV powerline should be the preferred line and it should be built
2 along existing utility corridors.

There is no need to ruin a lovely
3 natural area like the Tumacacori and Atascosa Mountains. We have spent much time in these areas, birding and hiking, and we know this area is no place for a powerline.

Sincerely,

Walter & Dorothy Pelech

Comment No. 1

The Federal agencies note the commentor's opposition to the Western and Crossover Corridors.

Comment No. 2

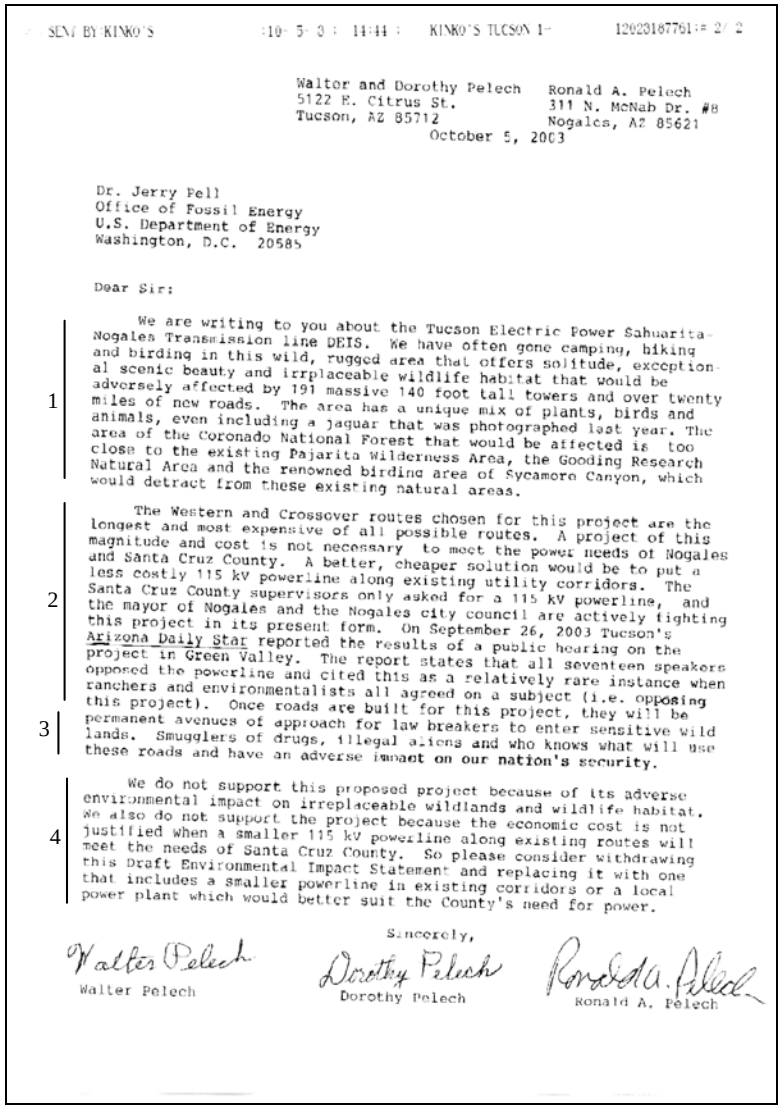
A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities, including hiking and birding, and analyze the potential impacts to these resources from the proposed project.

Sections 3.3 and 4.3 present description of the existing biological resources and analyze the potential impacts to these resources.

Pelech, Walter, Dorothy, and Ronald A.
Page 1 of 1



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Walter and Dorothy Pelech
5122 E. Citrus St.
Tucson, AZ 85712

Ronald A. Pelech
311 N. McNab Dr. #8
Nogales, AZ 85621

October 5, 2003

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington, D.C. 20585

Dear Sir:

1 We are writing to you about the Tucson Electric Power Sahuarita-Nogales Transmission line DEIS. We have often gone camping, hiking and birding in this wild, rugged area that offers solitude, exceptional scenic beauty and irrplaceable wildlife habitat that would be adversely affected by 191 massive 140 foot tall towers and over twenty miles of new roads. The area has a unique mix of plants, birds and animals, even including a jaguar that was photographed last year. The area of the Coronado National Forest that would be affected is too close to the existing Pajarita Wilderness Area, the Gooding Research Natural Area and the renowned birding area of Sycamore Canyon, which would detract from these existing natural areas.

2 The Western and Crossover routes chosen for this project are the longest and most expensive of all possible routes. A project of this magnitude and cost is not necessary to meet the power needs of Nogales and Santa Cruz County. A better, cheaper solution would be to put a less costly 115 kV powerline along existing utility corridors. The Santa Cruz County supervisors only asked for a 115 kV powerline, and the mayor of Nogales and the Nogales city council are actively fighting this project in its present form. On September 26, 2003 Tucson's Arizona Daily Star reported the results of a public hearing on the project in Green Valley. The report states that all seventeen speakers opposed the powerline and cited this as a relatively rare instance when ranchers and environmentalists all agreed on a subject (i.e. opposing this project).

3 Once roads are built for this project, they will be permanent avenues of approach for law breakers to enter sensitive wild lands. Smugglers of drugs, illegal aliens and who knows what will use these roads and have an adverse impact on our nation's security.

4 We do not support this proposed project because of its adverse environmental impact on irreplaceable wildlands and wildlife habitat. We also do not support the project because the economic cost is not justified when a smaller 115 kV powerline along existing routes will meet the needs of Santa Cruz County. So please consider withdrawing this Draft Environmental Impact Statement and replacing it with one that includes a smaller powerline in existing corridors or a local power plant which would better suit the County's need for power.

Sincerely,

Walter Pelech
Walter Pelech

Dorothy Pelech
Dorothy Pelech

Ronald A. Pelech
Ronald A. Pelech

Comment No. 1

Refer to the response to Comment 2 in the previous submittal from Ronald A. Pelech.

Section 3.1, Land Use, discusses the affected environment of the Pajarita Wilderness, which encompasses the Goodding Research Natural Area and part of Sycamore Canyon. The structure locations, construction areas, and proposed access roads for all three corridors would not enter into the Pajarita Wilderness. Potential impacts to these resources are addressed in the resource sections of Chapter 4, Environmental Effects.

Comment No. 2

Refer to the response to Comment 3 in the previous submittal from Ronald A. Pelech.

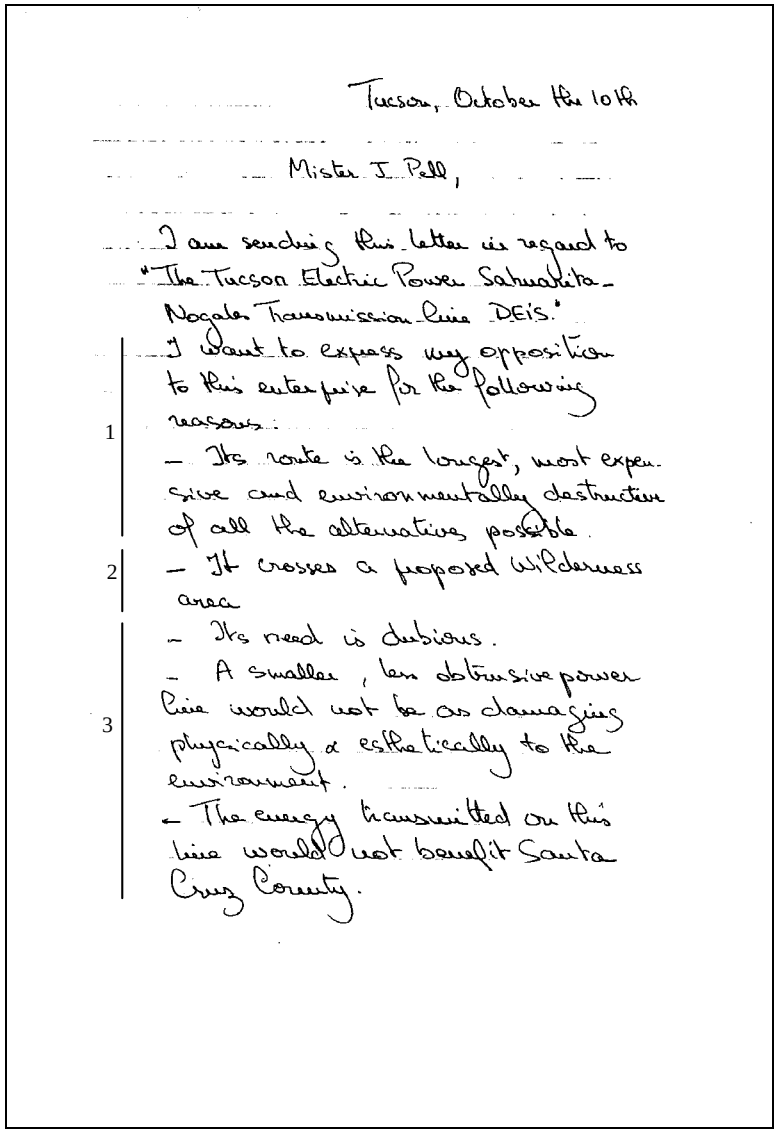
Comment No. 3

Refer to the response to Comment 4 in the previous submittal from Ronald A. Pelech.

Comment No. 4

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Perifou, Marie Clark
Page 1 of 2



Tucson, October the 10th

Mister J. Pell,

I am sending this letter in regard to "The Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS."

I want to express my opposition to this enterprise for the following reasons:

1 – Its route is the longest, most expensive and environmentally destructive of all the alternatives possible.

2 – It crosses a proposed Wilderness area.

– Its need is dubious.

– A smaller, less obtrusive power

3 line would not be as damaging physically & esthetically to the environment.

– The energy transmitted on this line would not benefit Santa Cruz County.

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed project.

Comment No. 2

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

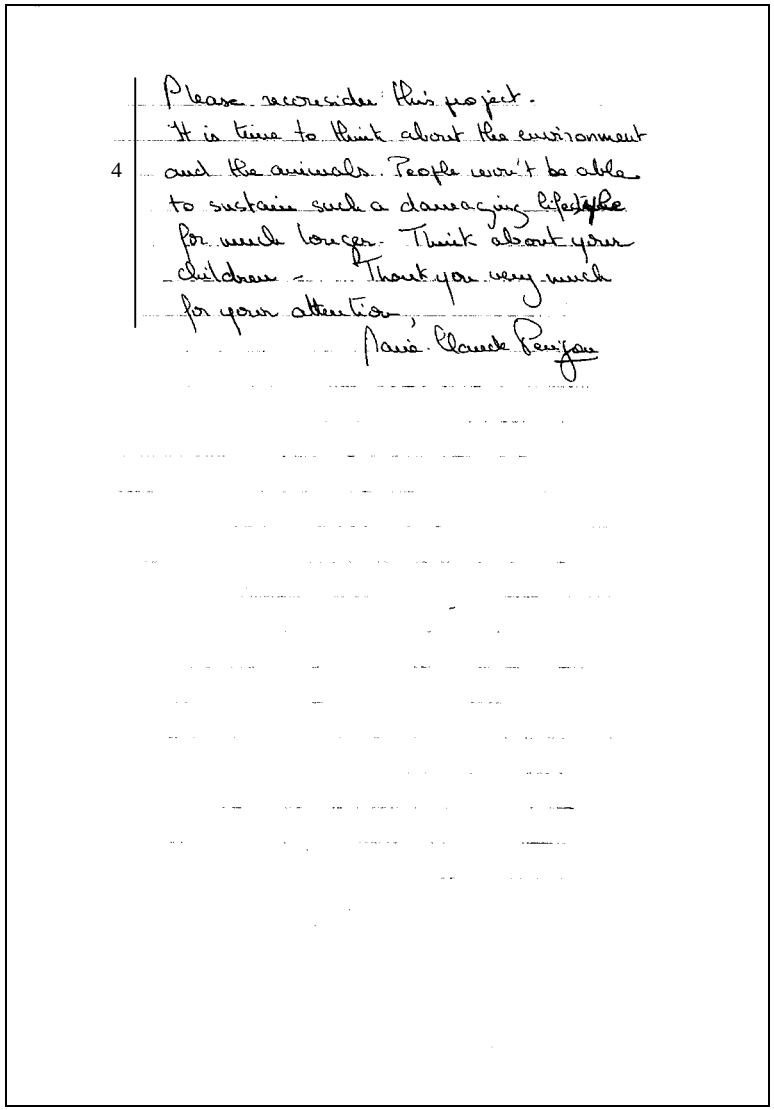
Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

TEP reached agreement with Citizens to provide up to 100 MW of transmission capacity from Tucson to Nogales, Arizona (part of Santa Cruz County), and TEP anticipates using the remaining 400 MW of capability for transport of energy between the United States and Mexico (see Section 1.5, TEP's Proposed Project Capacity and Usage, of the Final EIS).

Perifou, Marie Clark
Page 2 of 2



Please reconsider this project.
It is time to think about the environment
4 and the animals. People won't be able
to sustain such a damaging lifestyle
for much longer. Think about your
children. Thank you very much
for your attention.
Marie Claude Perifou

Comment No. 4

Direct and indirect effects of the proposed project, including impacts to wildlife (see Section 4.3.2), are evaluated in Chapter 4, Environmental Effects, for each resource area. Cumulative effects of the proposed project combined with other reasonably foreseeable past, present, and future actions are evaluated in Chapter 5.

Poppino, Marilyn
Page 1 of 1

211 E. Rudasill Rd.
Tucson, AZ 85704
September 30, 2003

Dr. Jerry Pell, Office of Fossil Energy
US Department of Energy
Washington D.C 20585

Dear Dr. Pell:

1 I am writing on behalf of many Arizona residents who object to the power line applied for by TEP crossing the heart of the Tumacacori Highlands. It's one more road we do not need and will slice through the beautiful highlands. The 140 foot tall powerline is not going to benefit Santa Cruz county and would scar the landscape forever.

2 Why is a 345kV line needed anyhow? A smaller less obtrusive 115kV is cheaper and can more easily be run along existing utility corridors and buried near homes.

This is an unnecessary economic, environmental and cultural burden on southern Arizona. The Draft Environmental Impact Statement needs to be withdrawn and a new assessment put in place that analyzes the solutions to power needs in Santa Cruz County more accurately.

1 cont. The Tucson Electric Power proposal admits it will have an adverse aesthetic impact. The impact of a road and power lines is uncertain at best.

Please consider another alternative.

Sincerely yours:

Marilyn Poppino

DR. MARILYN POPPINO
211 E. RUDASILL RD.
TUCSON, AZ 85704

Comment No. 1

Chapters 3 and 4 provide analyses on the affected environment and potential impacts to the environment from the proposed project and associated roads, including evaluation of visual resources (Sections 3.2 and 4.2) and other resources in the Tumacacori Highlands.

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A smaller transmission line in lieu of the proposed 345-kV line (e.g., 115-kV line) would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Poppino, Marilyn
Page 1 of 1

211 E Rudasill Rd.
Tucson, AZ 85704
September 30, 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Dear Ms. Kozacek

My comments are in reference to the "Tucson Electric Power Sahuarita-Nogles Transmission line DIES and Forest Plan Amendments"

1 | I would like to object to the construction of the powerline in the Western or Crossover Routes. TEP proposes to build over 20 new miles of road for the Preferred Route. Road density in the Tumacacori EMA is already above acceptable limits.

2 | More would violate the Forest Plan.

3 | Many sensitive forest plants and wildlife species would be impacted, and the beauty of this spectacular landscape would be lost forever.

1 cont. | I would urge you to deny and special use permits of the Western and Crossover Routes.

Many thanks:

Marilyn Poppino

DR. MARILYN POPPINO
211 E. RUDASILL RD.
TUCSON, AZ 85704

Comment No. 1

The Federal agencies note the commentor's opposition to the Western and Crossover Corridors and urges the denial of any special use permits for the Western and Crossover Corridors.

Comment No. 2

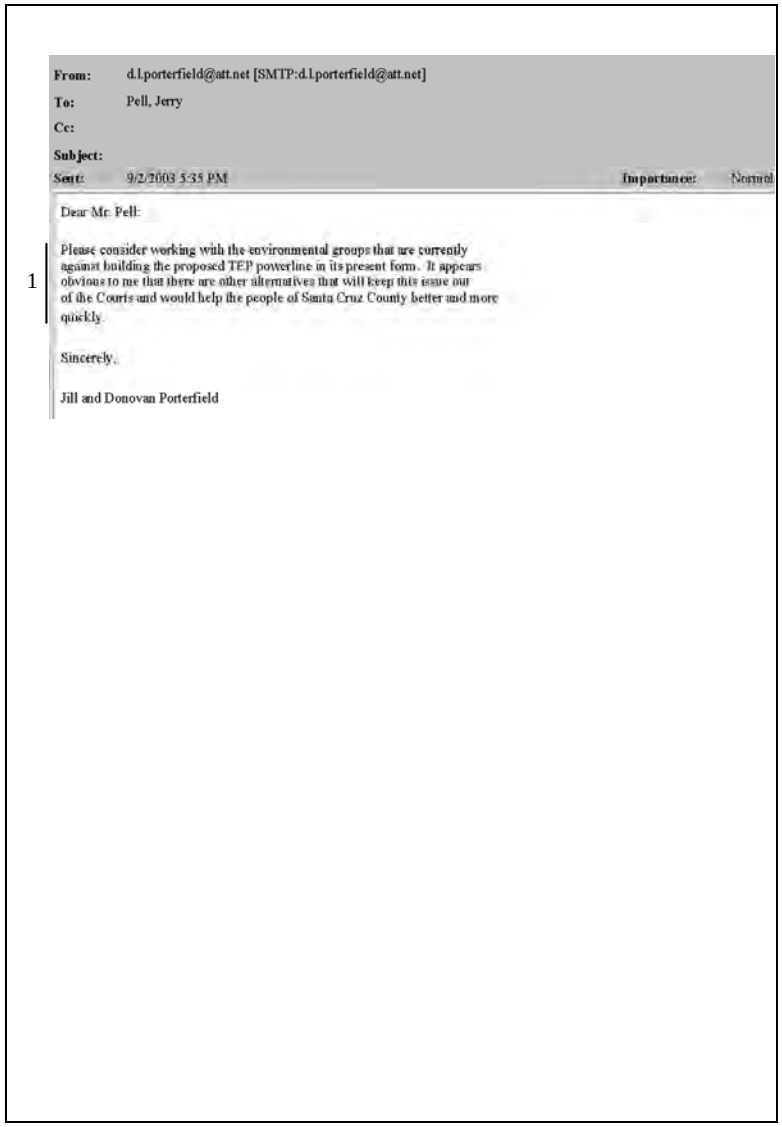
The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. TEP would close 1.0 mi (1.6 km) of existing road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project, such that road density on the Coronado National Forest would not be affected.

Comment No. 3

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project.

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Porterfield, Jill and Donovan
Page 1 of 1



From: d.l.porterfield@att.net [SMTP:d.l.porterfield@att.net]
To: Pell, Jerry
Cc:
Subject:
Sent: 9/2/2003 5:35 PM **Importance:** Normal

Dear Mr. Pell:

1 Please consider working with the environmental groups that are currently against building the proposed TEP powerline in its present form. It appears obvious to me that there are other alternatives that will keep this issue out of the Courts and would help the people of Santa Cruz County better and more quickly.

Sincerely,

Jill and Donovan Porterfield

Comment No. 1

A number of environmental groups have been involved in the NEPA process for the proposed project, through the opportunities for public participation (see Section 1.6). The Federal agencies have considered the information and preferences expressed by all members of the public, including environmental groups, in preparation of this Final EIS.

Purdon, Kathryn
Page 1 of 1

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, Az. 85701

Dear Ms. Kozacek,

1 Please use your influence to STOP the proposed Tucson Electric Power Sahuarita-Nogales Transmission line DEIS. The environmental impact of this mega power system is huge and totally unnecessary. The needs of Santa Cruz County for alternate power source can be solved so much more simply and economically, both financially and environmentally. The only need for huge new power lines is to line the pocket of TEP at
2 the expense of the taxpayers and the environment. Making use of existing right-of-ways or building a power plant in Nogales are much better solutions to this rather minor problem. Please don't allow TEP to destroy our beloved wilderness areas. Thank you.

Yours truly,

Kathryn Purdon

Kathryn Purdon
Green Valley, Arizona
kmpurdon@cox.net

Comment No. 1

The Federal agencies note the commentor's preference for the No Action Alternative.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A portion of each of the action alternatives follows or crosses an existing natural gas pipeline (see Table 2.3-1, Summary Comparison of Potential Environmental Effects of Alternatives) that is within a utility corridor and has some access roads and other associated ground disturbance. Building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5 of the Final EIS).

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Pybus, Brooke
Page 1 of 1

Department of Energy
Dr. Jerry Pell,
Office of Fossil Energy,
U.S. Department of Energy,
Washington, D.C. 20585

Comments opposed to " Tucson Electric Power Sahuarita-Nogales Transmission lines- DIES"

Dear Dr. Pell:

I am an Arizona resident and aware of the great vistas this state has to offer. There are fewer and fewer of these vistas left in the West. This 1 proposal is just another slight against those remaining wild areas. All of us enjoy visiting these areas, but, few of us seem to be able to keep them from being "developed" by people with other intentions. The preferred Western Routes and Crossover routes are the longest, most expensive, and 2 most environmentally damaging,of all the alternatives considered. This route, if approved, would slice through a citizen proposed Wilderness Area and forever scar this still, relatively, untouched wild location.

This proposal for a 345KV line is "above and beyond" the requested need of Santa Cruz County, for power. Further, most of this additional power is targeted for sale in Mexico. Why didn't they offer a smaller power line to fulfill Santa Cruz County's power need ? Long term power needs for 3 Santa Cruz County could easily be met with a smaller, 115KV line, installed along existing utility corridors at a fraction of the cost.

I do not support these proposed routes because it does not serve the interests of Santa Cruz County 's needs as originally intended under ACC order 62011. This proposal is an unneccessary burden both economically and environmentally, to the residents of Arizona. If the increasing challenge of illegal immigrantion and the refuse they leave behind, aren't 4 enough, now the Arizona Sector Utilities want to further degrade the fragile beauty of the Borderland areas.

Please consider withdrawing this Draft Environmental Impact Statement and issuing a new assessment that properly analyzes real solutions to 5 power needs in Santa Cruz County and includes a smaller line using existing easements and / or local power plant.

Respectfully,

Brooke Pybus
8002 N. 14th Ave
Phoenix, AZ 85021

10/6/

Comment No. 1

Direct and indirect effects of the proposed project, including impacts to visual resources (see Section 4.2), are evaluated in Chapter 4, Environmental Effects, for each resource area. Cumulative effects of the proposed project combined with other reasonably foreseeable past, present, and future actions are evaluated in Chapter 5.

Comment No. 2

The affected environment of the Western and Crossover Corridors is described in Chapter 3, and the potential environmental impacts (including socioeconomic impacts) from these alternatives are fully evaluated in Chapter 4.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Comment No. 3

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's

Comment No. 3 ***(continued)***

proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 4

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity.

The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above. Refer also to the response to Sky Island Alliance, Comment 14.

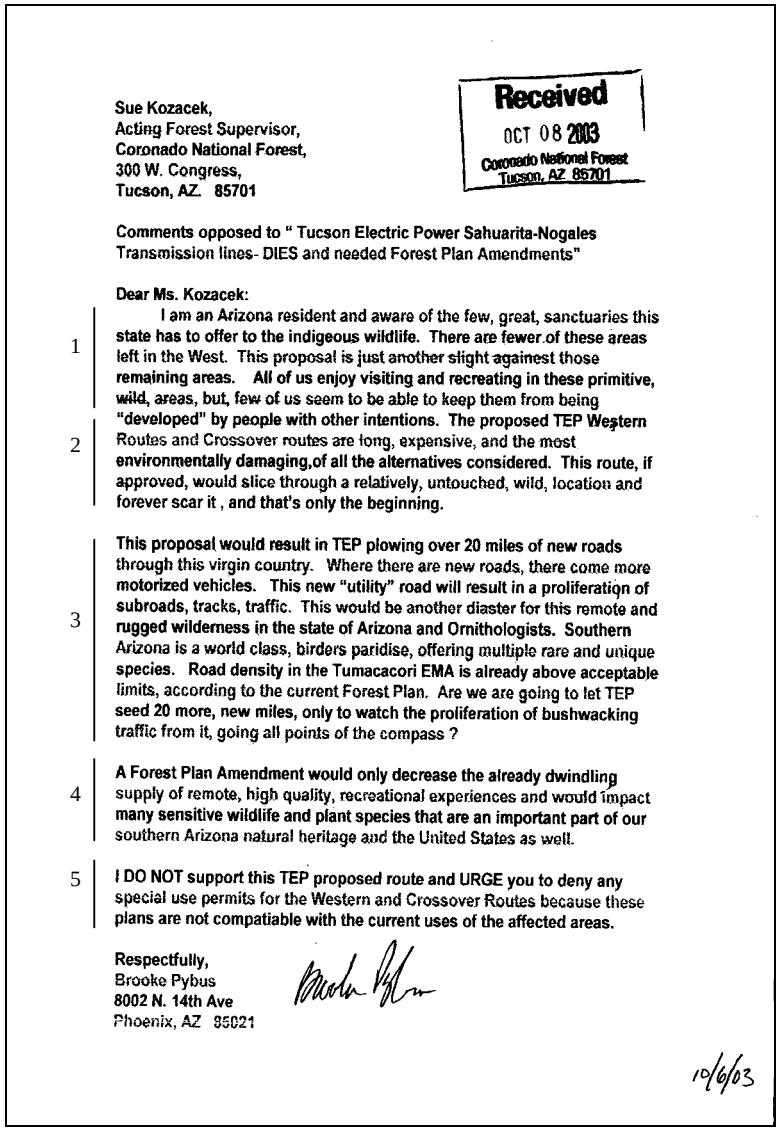
Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the

Comment No. 5 ***(continued)***

proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Pybus, Brooke
Page 1 of 1



Sue Kozacek,
Acting Forest Supervisor,
Coronado National Forest,
300 W. Congress,
Tucson, AZ. 85701

Received
OCT 08 2003
Coronado National Forest
Tucson, AZ 85701

Comments opposed to " Tucson Electric Power Sahuarita-Nogales Transmission lines- DIES and needed Forest Plan Amendments"

Dear Ms. Kozacek:

1 I am an Arizona resident and aware of the few, great, sanctuaries this state has to offer to the indigeous wildlife. There are fewer of these areas left in the West. This proposal is just another slight againest those remaining areas. All of us enjoy visiting and recreating in these primitive, wild, areas, but, few of us seem to be able to keep them from being "developed" by people with other intentions. The proposed TEP Western

2 Routes and Crossover routes are long, expensive, and the most environmentally damaging,of all the alternatives considered. This route, if approved, would slice through a relatively, untouched, wild, location and forever scar it , and that's only the beginning.

3 This proposal would result in TEP plowing over 20 miles of new roads through this virgin country. Where there are new roads, there come more motorized vehicles. This new "utility" road will result in a proliferation of subroads, tracks, traffic. This would be another diaster for this remote and rugged wilderness in the state of Arizona and Ornithologists. Southern Arizona is a world class, birders paridise, offering multiple rare and unique species. Road density in the Tumacacori EMA is already above acceptable limits, according to the current Forest Plan. Are we are going to let TEP seed 20 more, new miles, only to watch the proliferation of bushwacking traffic from it, going all points of the compass ?

4 A Forest Plan Amendment would only decrease the already dwindling supply of remote, high quality, recreational experiences and would impact many sensitive wildlife and plant species that are an important part of our southern Arizona natural heritage and the United States as well.

5 I DO NOT support this TEP proposed route and URGE you to deny any special use permits for the Western and Crossover Routes because these plans are not compatiable with the current uses of the affected areas.

Respectfully,
Brooke Pybus
8002 N. 14th Ave
Phoenix, AZ 85021

10/6/03

Comment No. 1

Refer to the response to Comment 1 in the previous submittal from Brooke Pybus.

Comment No. 2

Refer to the response to Comment 2 in the previous submittal from Brooke Pybus.

Comment No. 3

The Western Corridor would require construction of approximately 20 mi (32 km) of temporary new roads for construction on the Coronado National Forest, and the Central and Crossover Corridors would require fewer roads, and unnecessary project roads would be closed following construction (see Section 4.12, Transportation). The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. TEP would close 1.0 mi (1.6 km) of existing classified road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project, such that road density on the Coronado National Forest would not be affected.

Section 3.1.2 states that there is off-highway vehicle use and recreational birding in the project area, and Section 4.1.2 analyzes the potential impacts to these activities. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Sections 3.3 and 4.3 present a description of the existing biological resources, including birds and other wildlife, and analyze the potential impacts to these resources

Comment No. 4

Refer to the response to Comment 3 above regarding impacts to recreation and biological resources. Analysis of the proposed Forest Plan amendment is contained in Appendix H**.**

Comment No. 5

Sections 3.1 and 4.1 present a description of the existing land use and analyze the potential impacts to these resources from the proposed project.

Quinlan, Michael
Page 1 of 3

Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

From: Quinlan, Michael [SMTP:mquinl@midwestern.edu]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS
Sent: 10/14/2003 1:03 AM
Importance: Normal

Dear Dr. Pell:

1 I recently learned that Tucson Electric Power (TEP) wishes to construct a 345 kV power line to Nogales, AZ, through environmentally-sensitive parts of southern Arizona. Given the enormous environmental and monetary costs associated with the project, I cannot understand how such a project can go forward under the preferred plans (the "Western Route" and "Crossover Route"). I urge you to: 1) withdraw the current draft Environmental Impact Statement for TEP's proposed 345 kV powerline, and 2) reconsider environmentally-sensitive alternatives that are more in keeping with the needs of Nogales and that do not place an undue monetary burden on the citizens of Santa Cruz County.

2 With respect to the environmental costs of the preferred routes, I was appalled to learn that the powerlines would pass through remote and exceptionally scenic areas in southeastern Arizona. Specifically, the "Western Route" would pass through roadless parts of the Tumacacori and

Comment No. 1

Chapter 3 provides a description of the potentially affected environment and Chapter 4 analyzes potential impacts to each resource area.

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 2

Sections 3.1, Land Use, and 3.12, Transportation, discuss the existing roads and IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts related to roads.

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 3

Section 3.3 presents a description of the existing biological resources, and Section 4.3 analyzes potential impacts to these resources, including potential impacts to special status species.

Quinlan, Michael
Page 2 of 3

2 cont. Atascosa mountains, while the "Crossover Route" would additionally pass through Peck Canyon, the largest and most scenic canyon in the area. Powerlines of the sort proposed by TEP (140' towers) would seriously disrupt the scenic characteristics of these areas and could threaten several of

3 the species with special status that occupy the region (e.g., jaguars, Mexican spotted owls, Southwestern willow flycatchers, etc.).

In addition to the environmental issues discussed above, the economics of the proposal are disturbing. My understanding is that the powerline proposal came about because the Arizona Corporation Commission ordered backup power to be made available for Nogales, AZ.

4 However, the proposed 345 kV line would reserve only 20% of its capacity for the needs of Nogales; the remainder would be sold to Mexico. Who will bear the cost of this powerline? Already electrical rates have increased in Santa Cruz County by over 20%, in part to pay for this powerline. Are future increases planned? Is it fair to tax one of the poorest counties in Arizona so that TEP can export power to Mexico? Finally, if Nogales requires

5 additional power, would it not make more sense to construct a new powerplant near Nogales and thereby eliminate the need for powerlines?

6 Finally, I question the wisdom of any project that would link our power grid to the Mexican power distribution system for two reasons. First, I understand that the Constitution of Mexico currently prohibits linkage of Sonora and Sinaloa with the US Western Energy Grid. Why build the powerline if it's currently illegal to connect it to the Mexican grid?

Comment No. 4

After a regulated utility such as TEP constructs a project in Arizona, the ACC determines whether, or to what degree, an investment by a utility is recoverable through consumer electricity rates. Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS.

Low-income populations in the area are identified in Section 3.13, and potential environmental impacts to these populations are analyzed in Section 4.13.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 6

As part of DOE's decisionmaking process on whether to grant a Presidential Permit for the proposed project, DOE will determine whether the proposed project will adversely impact the reliability of the U.S. electric system. Also, before authorizing exports to Mexico over the proposed 345-kV facilities, DOE must ensure that the export will not impair sufficiency of supply within the United States and will not impede, or tend to impede, the coordinated use of the regional transmission system.

It is not illegal in either the United States or Mexico to connect these two countries' electrical grids.

Quinlan, Michael
Page 3 of 3

6 cont. Second, I think it very unwise for us to link our electrical grid with one that is likely to be even less reliable than our own. Will connection with Mexico decrease power reliability in Santa Cruz County?

7 In closing, the draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

Sincerely,

Michael C. Quinlan
323 E. Solana Drive
Tempe, AZ 85281
Email: mquinl@midwestern.edu

Comment No. 7

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review.

Ragan, Peter
Page 1 of 3

TEP Sahuarita-Nogales Transmission Line

From: peter ragan [SMTP:sodwinder@yahoo.com]
To: Pell, Jerry
Cc:

Subject: TEP Sahuarita-Nogales Transmission Line
Sent: 10/14/2003 10:36 PM
Importance: Normal

Dear Mr. Pell,

I am writing concerning the Tucson Electric Power Sahuarita - Nogales Transmission Line EIS. My name is Peter Ragan and I live in Arivaca. I made some comments at a public hearing in Green Valley but would like to add some more.

1 One of the greatest omissions in the EIS is it's failure to consider the impact of the lines on the economies and quality of life of the surrounding communities. Arivaca would be very negatively impacted by this project. Many of the visitors here are coming or going from the Tumacacori EMA. They go there to see the wildlife and the relatively pristine land of the area's interior, just the area crossed by on the line's preferred and crossover routes. Sycamore Canyon is renowned for it's bird watching opportunities and it's diversity of plant and animal life in general. Peck Canyon also has great biodiversity and is a wonderful hike. Arivaca has a bed and breakfast that caters especially to birders and the library here loans binoculars and books for birding and wildlife watching. The construction of these power lines would

Comment No. 1

Section 3.5 has been revised in the Final EIS to describe the socioeconomic aspects of tourism in the project area, and Section 4.5 has been revised to discuss potential impacts to socioeconomic aspects of tourism.

Comment No. 2

Sections 3.1.2 and 4.1.2 discuss existing recreational settings and activities, and analyze potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to indicators such as remoteness and naturalness, both of which would have changes that are inconsistent with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Comment No. 3

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to threatened and endangered species.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the existing roads and IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts related to roads.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Chapter 8 analyzes the proposed project's short-term use of man's environment and the maintenance and enhancement of long-term productivity.

Ragan, Peter
Page 2 of 3

1 cont. greatly diminish the wilderness experience in the heart of this national forest and significantly reduce it's attractiveness to many people who would otherwise pass through Arivaca and patronize it's businesses.

2 The quality of life of the people who live in this area is directly linked to the beauty of the surrounding lands. The people who live in Arivaca inhabit Sycamore Canyon, Peck Canyon, Apache Pass, and the foothills of the Tumacacori and Atascosa Mountains as much as they inhabit their own homes. Even more so, perhaps, as these are the places we, and many others form many other places, escape to. To put an enormous power line through this area will destroy it for many people.

3 The preferred and crossover routes for the proposed power line are the most expensive, most difficult, and most negatively impactful routes possible. They use the most poles and cross the most Endangered and Threatened Species habitat. On both the preferred and crossover routes, the line would cross the largest remaining unprotected roadless area in southern Arizona. Citizens have been working since 1998 to make the place a Wilderness Area. The people who live near this place and those who would come to visit deserve to have it protected. This is in the best short and long term interest of the citizens of this area, this region and this country.

4 TEP has never shown any need in the U.S. or in Mexico for a project of the scale it is proposing. Why do so much damage for no purpose? The needs of Nogales can be more than adequately met with much less costly and impactful alternatives, which, as mentioned in my public comments,

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

The Federal agencies note the commentor's opinion that DOE should deny a Presidential Permit for the proposed project.

Ragan, Peter
Page 3 of 3

4 cont. | were never reasonably considered. I urge the DOE to deny a Presidential Permit on any of the proposed routes and to
5 | help see that the energy needs of the people of this region are met by practical and cost effective means.

Thank you,
Peter Ragan

Ragan, Peter
Page 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 06:04 PM -----
peter ragan <sodwinder@yahoo.com>
10/14/2003 06:25 PM

To: skozacek@fs.fed.us
cc:
Subject: TEP Sahuarita-Nogales Transmission Line

Dear Acting Forest Director,

1 I am writing regarding the Tucson Electric Power Sahurita - Nogales Transmission Line EIS. My name is Peter Ragan and I live in Arivaca. I moved here a few months ago in large part because of the beauty of the very area the proposed power lines would cross on the preferred and crossover routes. I have hiked and backpacked and camped in this area many times with many friends, some of whom are professional botanists and archaeologists, and can attest to it's wonderful recreational qualities. I enjoy birdwatching and studying plants and for these activities, Sycamore Canyon is second to none, not just in the area but in the state and the entire region. Peck canyon is also quite beautiful and a wonderful hike. These places are treasures that need to be saved and protected. The proposed power lines would significantly adversely impact the area, both ecologically and aesthetically.

2 The power line proposes to cut through the habitat of no less than 10 federally listed Endangered or Threatened species and many dozens of other sensitive ones on it's preferred route. None of the routes have been more than partially surveyed for cultural

Comment No. 1

Chapter 3 describes the affected environment of the area and Chapter 4 evaluates the potential impacts of the proposed project, including potential impacts to the resources (Sections 3.1.2 and 4.1.2, Recreation; Sections 3.2 and 4.2, Visual Resources; and Section 3.3 and 4.3, Biological Resources) and areas cited by the commentor.

Comment No. 2

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including impacts to endangered, threatened and special status species, impacts associated with construction noise (e.g., explosives blasting), impacts to birds and wildlife, and invasive species impacts.

Additional field surveys would be conducted by cultural specialists prior to final siting of the ROW and the support structures, in order to minimize impacts to each area of land to be disturbed.

Section 2.2.3, Transmission Line Construction, states that explosives blasting may be used as needed based on local geologic conditions. Explosives blasting can result in the breakup of large rocks. Sections 3.6 and 4.6 present a description of the existing geology and soils and analyze potential impacts to geology and soils as a result of the proposed project.

Ragan, Peter
Page 2 of 2

2 cont. artifacts. Construction of the line, with heavy equipment and possible blasting, especially in low, rocky areas such as upper Sycamore Canyon, would cause significant damage to all existing things, living and not, along the route. The area already has too many

3 roads under the existing Forest Plan and the possibility of creating 20 more miles is apalling.

2 cont. Once up, a power line would kill birds, invite invasive weeds, and disrupt wildlife movement

4 generally. The only movement it wouldn't impair is that of illegal vehicles.

1 cont. Aesthetically, 140 foot tall power poles marching through the most beautiful part of the Tumacacori EMA would be a travesty. It would greatly diminish the experience of wilderness far beyond the footprint of the lines.

5 I ask you to please deny any special use permit for the construction of this project and not to amend, and, if anything, strengthen the existing Forest Plan. Thank you.

Peter Ragan.

Comment No. 3

The Western Corridor would require construction of approximately 20 mi (32 km) of temporary new roads for construction on the Coronado National Forest, and the Central and Crossover Corridors would require fewer roads, and unnecessary project roads would be closed following construction (see Section 4.12, Transportation). The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. TEP would close 1.0 mi (1.6 km) of existing road for every 1.0 mi (1.6 km) of proposed road to be used in the operation or long-term maintenance of the proposed project, such that road density on the Coronado National Forest would not be affected.

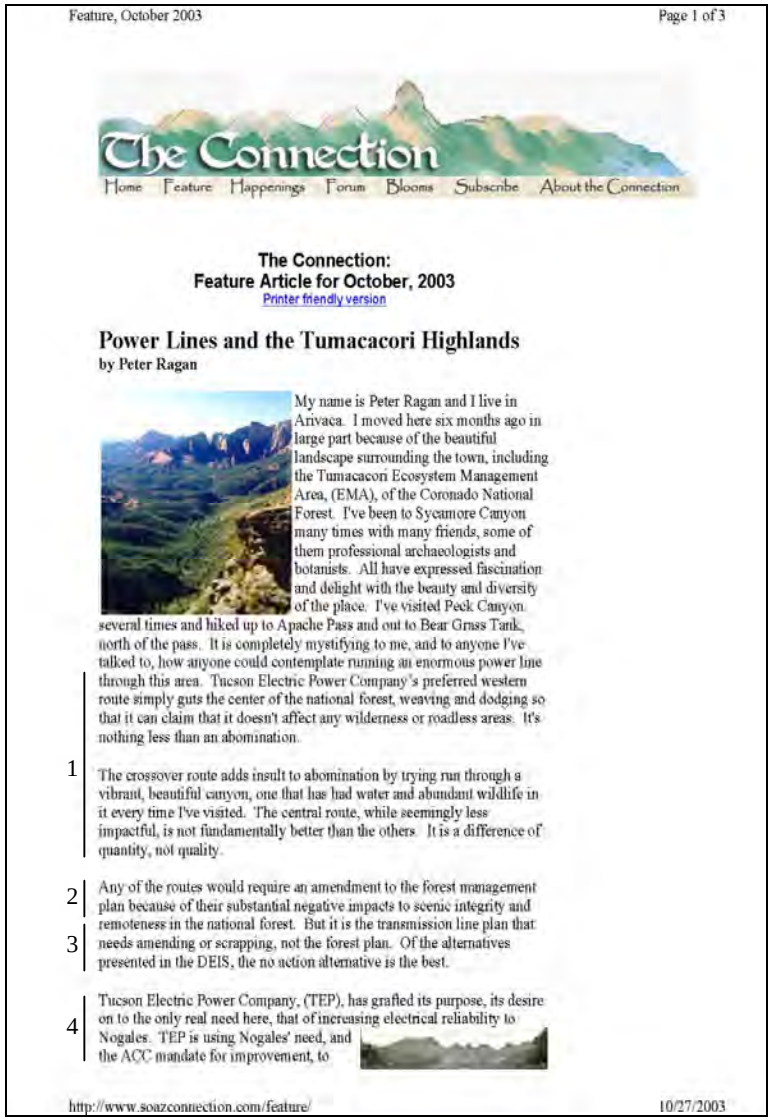
Comment No. 4

Section 3.1.2 of the Draft EIS states that there is off-highway vehicle use in the project area, and Section 4.1.2 analyzes the impacts of off-highway vehicle use as one of many recreational uses of the project area, including the Coronado National Forest.

Comment No. 5

The Federal agencies note the commentor's opinion that USFS should deny any special use permit for the construction of the proposed project and not to amend the Forest Plan.

Ragan, Peter
Page 1 of 3



Feature, October 2003 Page 1 of 3

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Feature Article for October, 2003
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Power Lines and the Tumacacori Highlands

by Peter Ragan

My name is Peter Ragan and I live in Arivaca. I moved here six months ago in large part because of the beautiful landscape surrounding the town, including the Tumacacori Ecosystem Management Area, (EMA), of the Coronado National Forest. I've been to Sycamore Canyon many times with many friends, some of them professional archaeologists and botanists. All have expressed fascination and delight with the beauty and diversity of the place. I've visited Peck Canyon several times and hiked up to Apache Pass and out to Bear Grass Tank, north of the pass. It is completely mystifying to me, and to anyone I've talked to, how anyone could contemplate running an enormous power line through this area. Tucson Electric Power Company's preferred western route simply guts the center of the national forest, weaving and dodging so that it can claim that it doesn't affect any wilderness or roadless areas. It's nothing less than an abomination.

1 The crossover route adds insult to abomination by trying run through a vibrant, beautiful canyon, one that has had water and abundant wildlife in it every time I've visited. The central route, while seemingly less impactful, is not fundamentally better than the others. It is a difference of quantity, not quality.

2 Any of the routes would require an amendment to the forest management plan because of their substantial negative impacts to scenic integrity and remoteness in the national forest. But it is the transmission line plan that

3 needs amending or scrapping, not the forest plan. Of the alternatives presented in the DEIS, the no action alternative is the best.

4 Tucson Electric Power Company, (TEP), has grafted its purpose, its desire on to the only real need here, that of increasing electrical reliability to Nogales. TEP is using Nogales' need, and the ACC mandate for improvement, to

http://www.soazconnection.com/feature/ 10/27/2003

Comment Nos. 1-10

Refer to the responses to Peter Ragan in the public hearing transcript from Green Valley, Arizona, September 25, 2003, 7 p.m. to 9 p.m., for each respective comment.

Ragan, Peter
Page 2 of 3

4 cont. expedite their speculative money making scheme. The DEIS dismisses any suggestion of what may happen in Mexico as speculative. There is nothing more speculative in the DEIS than the concept of selling power to and from Mexico, yet it is taken for granted in the DEIS. There is no legal or technical framework to get power across the border. This speculative business venture, for which there is no present need, should not be allowed to trash the national forest, pretending that it serves a legitimate need, that of Nogales. Many flaws and omissions occur in the DEIS. Examples are:

5 1) TEP dismisses alternatives out of hand and the DOE seemingly looks the other way. A smaller line down the existing utility corridor is a viable alternative. TEP says it's too close to others and they may all fall prey to the same natural catastrophe. This is no industry standard or construction code. This is an excuse to avoid a simple, inexpensive and efficient alternative. Consideration and analysis of a new power plant in the U.S. near the border was specifically mentioned by the DOE in the federal register of July 10, 2001. In the DEIS, its consideration is dismissed summarily as not serving the purpose of TEP. Which raises the question; is this a TEP document or a DOE document?

6 2) No consideration is given to the impact of people on the ground, hiking, backpacking, even hunting; using the national forest as it is currently intended. It may come as a shock to TEP or DOE, but many people get out of their cars and hike in this, the central and most beautiful part of the Tumacacori EMA. Between Peña Blanca Lake and Ruby, the area near Sycamore canyon and north is a popular place to camp.

3) This unfamiliarity with leaving the car permeates the DEIS. Time after time, regarding wildlife, regarding plant life, regarding cultural artifacts, the DEIS states no surveys were done or no specific survey information is available. Nobody has gotten out and walked and surveyed most of these routes. Now we are supposed to take this lack of information and make an important, informed decision. How is this possible?

7 4) The maps for the routes are too vague. The routes should be plotted on USGS 7.5 minute topographic maps, at a minimum.

8 5) Sycamore Canyon is a candidate for Wild and Scenic River status and, per a recent court decision, is entitled to full protection as such. This is not considered in the DEIS.

9 6) The negative socioeconomic impact of a large transmission line on any of these routes is not considered. The greatest asset of this area, of this entire region, is its natural beauty. It is the key to the quality of life and to
10 present and future economic prosperity. This transmission line is essentially a taking of a public asset for private gain. It will do much more harm than good on any route. It serves only TEP's interests and seeks to serve Nogales' need only as an afterthought. People come to the national forest, and to the communities surrounding it, for the beauty of its mountains and canyons, not the spectacle of its power lines.

9 cont. I ask the federal agencies to do what is best for the area and its people, not simply what is best for TEP. We need to save our public lands and bring forward a better solution to the problem. In the absence of any other

Ragan, Peter
Page 3 of 3

3 cont. reasonable alternatives, please choose the no action alternative. Thank you.

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Rhoades, Diana
Page 1 of 1

Diana Rhoades • 425 W. Paseo Redondo Suite 5A • Tucson, AZ 85701 • 520.623.0908

September 23, 2003

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington, D.C. 20585
Jerry.Pell@hq.doe.gov

Re: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

Dear Mr. Pell:

1 I am a new resident in southern Arizona, having moved here from Alaska to enjoy the wild character this landscape has to offer. I am opposed to your current plans to build 20 miles of road through beautiful hills of oak savanna. This area is home to spectacular wildlife including jaguar. How many people get to see a jaguar? Not very many, which is why we need to keep this area wild.

2 I understand TEP proposes to close many of these road miles, but such closures are often unsuccessful. Even when closed, road scars in these fragile arid areas take generations to recover and once built, they will be used by motorized vehicles which will further disturb the jaguar and other wildlife.

3 The Western and Crossover routes slice through a citizen's proposed Wilderness Area and would forever scar the outstanding natural characteristics of the area. A smaller, less obtrusive powerline, such as a 115 kV line was not considered for any route. Why not? A 115 kV line is cheaper, can more easily be buried in sensitive areas near homes, and would serve the long-term needs of Santa Cruz County.

4 I do not support the proposed routes because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. It is unfortunate that agencies never actually consider the "no-action' alternative, but this is what is needed in this instance. None of the proposed alternatives are acceptable or will serve the best interests of Santa Cruz County.

Sincerely,

Diana Rhoades
Southern Arizona Resident

Comment No. 1

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to jaguar.

The Western Corridor would require construction of approximately 20 mi (32 km) of temporary new roads for construction on the Coronado National Forest, and the Central and Crossover Corridors would require fewer roads. Unnecessary project roads would be closed following construction (see Section 4.12, Transportation).

Comment No. 2

Regarding the effectiveness of road closures, any authorizationI issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate.

Section 3.1.2 of the Draft EIS states that there is off-highway vehicle use in the project area, and Section 4.1.2 analyzes the impacts of off-highway vehicle use as one of many recreational uses of the project area, including the Coronado National Forest.

Refer to the response to Comment 1 above regarding impacts to biological resources.

Comment No. 3

The citizen-initiated proposal for an addition to the National Wilderness Preservation System is acknowledged in Section 5.2.4.

Section 4.3.2 states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Comment No. 3 ***(continued)***

A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 4

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Rhoades, Diana
Page 1 of 1

Diana Rhoades • 425 W. Paseo Redondo Suite 5A • Tucson, AZ 85701 • 520.623.0908

September 23, 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

RE: Opposition to Tucson Electric Power (TEP) Company Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement (DEIS)

Dear Ms. Kozacek:

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kV powerline. Southern Arizonans do not need a powerline that threatens the habitat of Jaguar. Yes, jaguar live in this area. We have to do all we can to preserve this important habitat.

I oppose TEP's proposed "Western Route" and "Crossover Route" and believe this is an unnecessary project.

2 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to serve Nogales, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline which would primarily serve Mexico.

3 **The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline** which would provide reliable service without destroying our environmental and cultural heritage, and which would not require massive increases to consumers' electricity bills.

I urge DOE to issue a new draft EIS which fully explores all options (including a local power plant and smaller power lines which would not serve Mexico) which would meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Diana Rhoades

Diana Rhoades
Concerned Southern Arizona Resident

Comment No. 1.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to jaguar.

Comment No. 2

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 3

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable

Comment No. 3 ***(continued)***

range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Rhodes, Jonathan
Page 1 of 2

From: noisedr@yahoo.com
Sent: Sunday, October 12, 2003 6:52 PM
To: Pell, Jerry
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27) 1000 Independence Avenue. SW Washington, DC 20585

Dear Dr. Pell,

1 You should withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed routes go through critically important wild areas. You should withdraw the EIS and completely scrap building a powerline through wild country that provides habitat for a number of important desert species.

3 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

4 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all

Comment No. 1

The Federal agencies note the commentor's suggestion that DOE should withdraw the current Draft EIS.

Comment No. 2

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to the endangered, threatened and special status species.

Comment No. 3

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Rhodes, Jonathan
Page 2 of 2

4 cont. available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

You sinecures should also get real jobs.

Sincerely,

Jonathan Rhodes
P.O. box 15286
Portland, Oregon 97293

Comment No. 4

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Rogers, John
Page 1 of 2

COMMENTS BY JOHN L ROGERS, REGISTERED PROFESSIONAL ENGINEER WITH FOUR YEARS OF POWER COMPANY EXPERIENCE IN TRANSMISSION AND DISTRIBUTION SYSTEMS.

LIST OF PREPARERS AND CONRIBUTORS, CHAPTER 13 –

1 **Only one registered professional engineer as a civil engineer. Professional electrical engineers have not certified with a stamp.**

APPENDIX B

Appendix B covers Electric and Magnetic Fields Background information. However, the EMF interaction between the proposed 345KV-transmission line and the natural gas line in the central corridor is not discussed.

2 **The potential of an induced current in the natural gas line should be addressed in detail. The induced current could cause early failure of the natural gas line, which could lead, to catastrophic damage to people and property.**

ELECTRIC AND MAGNETIC FIELDS, CENTRAL CORRIDOR 4.10.1.2 The effects on the natural gas pipeline, which would parallel the power line, is not addressed.

Comment No. 1

An EIS is not a detailed engineering design document meant to certify a project's design, but rather an EIS is a document that identifies and discloses potential environmental impacts. No professional engineer stamp is required.

Comment No. 2

Section 4.10 of the Final EIS has been revised to include discussion on safety considerations for collocating natural gas pipelines and transmission lines. A minimum distance of 100 ft (30 m) would be maintained between any of the proposed transmission line structures and the edge of the existing EPNG pipeline ROW, in compliance with the Amended Certificate of Environmental Compatibility issued to TEP on October 29, 2001, ACC (see Section 4.10 of the Final EIS). As shown in Table 10-2 of the EIS, the Federal agencies consulted with EPNG regarding safety requirements, and EPNG concurred that the ACC's requirement is adequate.

Rogers, John
Page 2 of 2

2 cont.

The parallel pipe line and transmission line creates a dangerous potential for an accident. One question in particular is how will the induced current on the gas pipeline affect the potential for early pipeline failure. The EIS keeps stating that the natural gas pipeline will be within a distance of one-half mile, which could mean that the transmission line and pipeline could be within a distance of only 50 feet for many miles. This needs to be specifically addressed at to how far the transmission line will be kept from the existing natural gas pipeline plus the total miles the two will be paralleled. Corrosion of the gas line could cause a leak, which could be ignited by a random spark. This needs to be addressed.

Rogers, John
Page 1 of 1

Fwd: Comments of EIS Draft DOE/EIS-0336

From: JROGERSINC@aol.com
[SMTP:JROGERSINC@aol.com]
To: Pell, Jerry
Cc: LMagruder@aol.com

Subject: Fwd: Comments of EIS Draft DOE/EIS-0336
Sent: 10/14/2003 4:21 PM
Importance: Normal

An additional thought regarding the safety of co-locating the transmission and gas lines.

A "qualified" registered professional engineer should put his or her reputation on the line by stamping/certifying that the co-location of the power and gas lines as proposed by TEP are completely safe and there have been no problems in the
1 past with closely paralleling these types of utilities.

Of course it would be better is TEP would also certify the same and assume full responsibility for any human or property damage that might occur in the future. However, I doubt that TEP would have the guts to do this since they are run by lawyers who would not want to be held responsible.

John Rogers, PE
PO Box 4567
Tubac, AZ 85646

520-398-2109
Comments of EIS Draft DOE/EIS-0336

Comment No. 1

An EIS is not a detailed engineering design document meant to certify a project's design, but rather an EIS is a document that identifies and discloses potential environmental impacts. No professional engineer stamp is required.

Assessment of liability is outside the scope of the EIS.

Section 4.10 of the Final EIS has been revised to include discussion on safety considerations for co-locating gas and transmission line.

Rosen, Philip C.
Page 1 of 1

Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

From: Philip C. Rosen [SMTP:pcrosen@u.arizona.edu]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS
Sent: 9/22/2003 10:33 PM
Importance: Normal

Dear Sir,

1 The powerline proposal connecting Arizona and Sonora through the wilderness in southeastern Arizona may seem like a good money-making idea, but its cost in values you might not ordinarily tabulate far outweighs your benefit. I am strongly opposed to your plan, and request you put the lines underground or along some pre-existing eyesore, or abandon the plan altogether.

Philip C. Rosen,
Assistant Research Scientist Renewable Natural Resources
University of Arizona
Tucson, AZ 85721
520-621-3187
Ph 520-670-5001 fax
pcrosen@u.arizona.edu

Comment No. 1

Because of the disadvantages and cost differential associated with burying transmission lines, this alternative is not evaluated in detail in the EIS. Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis, has been revised to indicate that the option of burying transmission lines was considered but eliminated from further analysis in the EIS.

A portion of each of the action alternatives follows or crosses an existing natural gas pipeline (see Table 2.3-1, Summary Comparison of Potential Environmental Effects of Alternatives) that is within a utility corridor and has some access roads and other associated ground disturbance. Building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5 of the Final EIS).

Rudy, Michelle
Page 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/09/2003 06:51 PM -----
mrudy@u.arizona.edu
10/09/2003 05:54 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I realize that this is a form letter, but it fully and completely expresses my views on the subject. I wholeheartedly support a local power plant in Santa Cruz County. These transmission lines do not serve the needs of the public.

Thank you, Michelle...

2 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

3 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori

Comment No. 1

Refer to the responses to Comments 4 and 6 below.

Comment No. 2

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 3

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Rudy, Michelle
Page 2 of 2

3 cont. Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

4 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

5 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

6 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

MICHELLE RUDY
725 E. 10TH STREET #16
TUCSON, Arizona 85719

Comment No. 4

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 5

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 6

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Rueb, John
Page 1 of 2

John Rueb
HC 65 Box 6259
Amado, Az. 85645

9/24/03

I'm John Rueb, a resident of the Arivaca area near the proposed western route. Thanks for the opportunity to make a few comments concerning your draft EIS.

1 I'm entirely against the construction of the 345kV lines in any location. I believe they are totally unnecessary and complete overkill for the needs of Nogales and Santa Cruz county. A 115kV line would be more than sufficient , and a local

2 power plant would be even more appropriate for providing excess capacity for future energy needs. Curiously, there is no comparative effects analysis of this alternative in your draft.

3 So, why are Santa Cruz County residents, one of the poorer counties in the state, forced to pay for an intrusive monstrosity which will be of little incremental benefit to them? They are being adversely impacted financially as well as environmentally by this powerline.

4 So, let's get to the real reason for the lines which of course is to trade power with Mexico- part of a North American Energy Alliance- a NAFTA of sorts for energy which has sprung from energy deregulation. This deregulation has played a significant role in energy disasters on both coasts. Apparently we need less horse trading and more public regulation of energy markets. We're learning the hard way that we can't rely on the Kenneth Lays of the world to deliver power where it's needed. One of the California energy swindle perpetrators has gone "belly up", but others are lining up to sell power to the state from new plants constructed just south of the border. As many as 20 such plants are in the works. Why? Low construction costs, cheap labor, quick licensing, and lax environmental regulations. So, even though Arizona currently has excess generating capacity, the intentions are obvious and the energy will flow through these lines from the cheapest source. It's not about backup power for Nogales- that's just the cover story - a weapons of mass destruction type diversion .

Unfortunately, our environment has little concern for lines on a map. our prevailing winds come from Mexico, what's left of the Santa Cruz river flows from Mexico, and we share the same Sonoran Desert Ecosystem. Your document does not address the (and I quote National Environmental Policy Act guidelines)

Comment Nos. 1-5

Refer to the responses to John Rueb in the public hearing transcript from Green Valley, Arizona, September 25, 2003, 7 p.m. to 9 p.m., for each respective comment.

Rueb, John
Page 2 of 2

"cumulative effects of reasonably forseeable future actions regardless of what agency or persons undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time." " These effects include indirect effects, which are caused by the action and are later in time or farther removed in distance , but are still reasonably forseeable."

4 cont. In other words, this is the last opportunity we will have to mitigate the environmental effects of a foreseeable consequence of this line- poorly regulated powerplants at the other end operating in our ecosystem. After this powerline is built , it's out of our hands and into the arms of the multinational energy corporations which will seek only to maximize shareholder value. Further environmental degredation is inevitable- beyond that of the lines themselves.

In summary, I urge DOE to include these "reasonably forseeable future actions" and "indirect effects" in your final draft and decision. NEPA guidelines lead you 2 cont. to a cumulative effects analysis which considers "expanded geographic and time boundaries." Also, include a comparative effects analysis of a local Nogales powerplant alternative. And 3, settle on the no action alternative since a return to 5 an analysis of Nogales' alleged energy shortfalls will show that subsequent upgrades and existing backup power may be sufficient.

Thank you,
John T. Rueb

Sandlin, Betsy
Page 1 of 1

From: BeGrace [begrace@mindspring.com]
Sent: Wednesday, September 24, 2003 5:27 PM
To: Pell, Jerry
Subject: power lines

RE: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

1 Why is the electric line recommended at 345 kV, and not a smaller line?

Why wasn't a smaller powerline, e.g. 115 kV, considered? A 115 kV line is cheaper, can be buried safely near homes, and would serve the needs of Santa Cruz County.

2 I do not support any of the proposed routes, which, as currently conceived, are an economic and environmental burden on Southern Arizona. Please withdraw the Draft Environmental Impact Statement and develoop instead an acceptable solution to power needs in Santa Cruz County,

1 cont. perhaps a smaller powerline and/or a locally run power plant.

Thank you for your consideration,

Betsy Sandlin

Comment No. 1

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore, is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 2

The Federal agencies note the commentor's opposition to all proposed corridors.

Santello, Barton E.
Page 1 of 7

Barton E. Santello
14560 West Jalisco Road
P.O. Box 778
Arivaca, AZ 85601

PUBLIC COMMENT

On

Tucson Electric Power Company
Sahuarita-Nogales Transmission Line
Draft Environmental Impact Statement (DEIS)
Summary Report
Dated July 2003
DOE/EIS – 0336

Presented to

U.S. Department of Energy
Office of Coal and Power Import & Export
Fossil Energy, FE-27
Washington, DC 20585-0000; USA

U.S. Department of Agriculture Forest Service
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

U.S. Department of the Interior
Bureau of Land Management
222 N. Central Ave
Phoenix, AZ 85004-2203

U.S. Section of the International Boundary and Water Commission

Presented on

September 26, 2003

At the

County Board Hearing Room
Santa Cruz County Office Building
2150 N. Congress Drive
Nogales, Arizona 85621.

Santello, Barton E.
Page 2 of 7

Barton E. Santello Public Comment (DOE/EIS – 0336) 26 September 2003

REQUEST:

1 I respectfully request that the Depratment of Energy (DOE) extend the public comment period 30 days beyond the 14 October 2003 deadline (per 68 FR 51570 Dated: 26 August 2003), in order for the public to adequately address the magnitude of the subject DEIS.

GENERAL STATEMENT:

2 As a private citizen from Arivaca, AZ in the effected area of Tucson Electric Power Company's (TEP) Proposed Sahuarita-Nogales Transmission Line, I urge all the cooperating U.S. Government agencies to decide the "No Action" alternative, following the submittal of the final Environmental Impact Statement (EIS) in 2004.

3 The applicant's original state mandate from the Arizona Corporation Commission's (ACC), as discussed on page S-10, of the Summary DEIS, requires only a 115-kV line be constructed. TEP's expanded scope to include a 345-kV line across the international boundary, is a corporate decision based on the economics of electrical transmission and not one in the public's interest. The final EIS should also make clear for the record, what this proposal is not: This proposal by TEP is not the result of a federal directive to improve, expand or secure the nation's electrical transmission infrastructure; and this project is not national security related. Nogales is an 'end-node' in the nations electrical grid system and a 115 kV line, as mandated by the ACC would suffice, in providing sufficient and reliable electrical power to the greater Nogales area.

4 The cooperating agencies will find, based on a review of the Final EIS, that TEP's 345 kV transmisison line proposal exceeds mandated improvements to electrical reliability; imposes significant environmental hardship on the biologically rich and visually attractive Coronado Nation Forest and that TEP's *"Purpose and Need"* is self-serving. Thus this proposal is not in the public interest, or, national interest. The EIS must contain all the esssential information and facts in its final form. I believe a quality final version of the EIS, that includes all relevant public comment, will reveal the damaging aspects of this proposal and that reasonable alternatives exist t the proposed lines. A "No Action" decision by the cooperating agencies, would allow TEP to pursue other

5 electric generation and distribution projects that are truly in the public interest; that would protect the environment and create new sustainable business opportunities for TEP.

Comment Nos. 1 – 10

Refer to the responses to Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m., for each respective comment.

Santello, Barton E.
Page 3 of 7

Barton E. Santello Public Comment (DOE/EIS – 0336) 26 September 2003

6 BACKGROUND: I would like to speak today primarily about the consideration of "Cumulative Effects" under the National Environmental Policy Act (NEPA) And how the current draft of the said DEIS may not adequately address or be consistent with precedural provisions of NEPA with respect to Cumulative Effects. Pages S-14 and
7 S-15 of the referenced Summary DEIS, discuss issues that are considered out-of-scope of the EIS. I contend that some of these issues are not out-of-scope, and further argue that these matters addressed by the public in past scoping meetings, may be actually be critical issues that would assist the DOE is properly meeting the intent of NEPA.. The local community is intimately familiar environment and needs of this area and thus we are a good source of ideas and alternatives to this proposal to create a win-win solution for everyone.

Let us look at some of the laws and policy that make up the framework of the EIS process and will need further consideration in the final version of the EIS:

The Council of Environmental Quality's (CEQ) regulations (40 CFR 1500-1508) implementing the procedural provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 *et seq*) define Cumulative Impact as:

"..the impact on the environment which results from incremental impact of the action when added to the past, present and reasonably foreseeable future actions, regardless of what agency (Federal or non-federal) or person under takes such other actions. Cumulative Impacts can result from individually minor but collectively significant actions taking place over time (40 CFR 1508.7)"

The Council of Environmental Quality codifies Cumulative effects in relation to the EIS process by saying:

"Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided and minimized."

Indirect Effects under NEPA Paragraph 1508.8(b) are defined as follows:

"..Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, popultation density or growth rate, and related effects on air and water and other natural systems, includeing ecosystems."

Given this framework, contentous out-of-scope issues can be discussed further.

Santello, Barton E.
Page 4 of 7

Barton E. Santello Public Comment (DOE/EIS – 0336) 26 September 2003

DISCUSSION: (On Issues out of Scope of the EIS – Page S-15, Summary DEIS)

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1) Issue: Mexico may build power plants resulting in the sale of electricity to the United States.

DEIS Comment: *"..The DOE is not aware of any proposals by Mexico to build power plants and to sell electricity to the United States in the area covered by this EIS. Thus, DOE considers this assertion to be speculative.."*

Public Comment: InterGen and Sempra Energy each have a new power plant in Mexicali, Mexico. The United States, Canada, Europe and Japan have upwards of 20 power plants in planning and/or development in northern Mexico. For this DEIS to suggest that the climate for construction of new power plants in Mexico is speculative is misleading. The DOE's own website has information web-page heading called "Facilitating U.S. Trade in Electricity" that States: *"U.S. trade in electric energy with Canada and Mexico is*
8 *rising, bringing economic and reliability benefits to the United States and its trading partners. Within the Office of Fossil Energy's Coal & Power organization, an electricity import/export team is responsible for authorizing the export of electric energy and the issuance of permits for the construction, connection, operation, and/or maintenance of electric transmission facilities at the international border."*

The current adminstration is aggressively backing exporting electricity to Mexico and US electric utility companies are beginning to buy stakeholding positions in Mexican power plants in order to capitalize on future import/export of electricity. I will be submitting additional details of power plant planning and development in my report to the DOE by the deadline of the public comment period on this DEIS.

These new power plants will be major sources of air pollution impacting the United States and effecting health and the clean air many of us have moved to southern Arizona to enjoy.

2) Issue: The public discussed alternatives that included TEP or another entities building a power plant in Nogales.

DEIS Comment: *"..These suggested alternatives would not fulfill TEP's purpose and need, and therefore not within the scope of this EIS."*

Public Comment: The DOE's own Federal Register Notice FR 01-17224, 66 FR 35952 dated Tuesday July 10,
9 2001 states that *"The EIS will consider alternatives to the proposed transmission lines including to the extent practicible, including construction of a powerplant closer to the US-Mexico border with a transmisison line extending to the border,as an alternative concept to supplying electrical power to the target region."*

This July 10, 2001 statement is in conflict with the DOE's rejection of this consideration in the subject DEIS. Further, the DOE states that the alternative power plant does not fulfill TEP's purpose and need. This statement is in conflict with page S-11 of the subject DEIS where it is stated that the DOE's mission in undertaking the EIS process is to determine whether the proposed action is in the public interest – not TEP's interest. Therefore, the EIS must be rewritten to address reasonable alternatives as published in the said Federal Register notice.

Santello, Barton E.
Page 5 of 7

3) Issue: The impact of Public Service of New Mexico's (PNM) proposed transmission line project.

DEIS Comment: *"..The consideration of impacts from the PNM proposal in this EIS is limited to potential cumulative impacts because TEP and PNM proposals are at different stages of decision making."*

Public Comment: Regardless whether PNM's proposed project is a separate EIS, it is reasonable to assume that PNM's will move forward and such a project will have a compounding damaging effect on the envionment, people and it is plausable that PNM and TEP line someday could run parallel to each other into Mexico.

10 Why should this not be considered? Page S-14 of said Summary DEIS provided verbiage of CEQ guidence of Cumulative Effects by stating: *"..cumulative impacts have been address in this EIS to the extent that future projects are 1) reasonably foreseeable, 2) the potential resource area impacts overlap, and 3) inclusion of the potential future projects would not be arbitrary."*

"Arbitrary" as defined by the Random House Dictonary as: *Subject to individual judgment"* Is the subject DEIS being "arbitrary" by leaving out PNM's proposal under cumulative effects analysis when it meets all the CEQ guidence requirements in the aforementioned paragraph on Cumulative Effects?

The DOE's own website states on the matter of PNM: *"Public Service Company of New Mexico (PNM) is proposing to build power line(s) originating at the switchyard of the Palo Verde Nuclear Generating Station 30 miles west of Phoenix, Arizona, and extend south approximately 160 miles, crossing the U.S.-Mexico border in the vicinity of Nogales, Arizona."*

SUMMARY

The purpose of TEP applying for the Presidential permit is to connect to the Mexican electrical system. Per page S-11 of the Summary DEIS, the purpose and need for DOE action is to determine whether it is in the public interest to grant or deny a Presidential Permit; and that the DOE must comply with NEPA (environmental assessment); and that includes Cumulative Effects Analysis.

8 cont. Since TEP's lines are going to connect into the Mexican power grid, the public should be allowed to create a reasonable framework for speculation on the future effects and impact of the 345-kV transmisison line and have those assumptions included in the EIS.

The DOE is in effect, allowing TEP to propose to build these transmission lines and speculate on selling energy to Mexico, when no contracts (that the public is aware of) exist. Further, the Mexican government has not even committed to any level of participation to this international interconnect concept. If the DOE does not allow the

7 cont. public (for whose interest the DOE is working), to provide reasonable input with regards to Cumulative Effects Analysis under NEPA, then the DOE must vote "No Action" in order not to support corporate speculation.

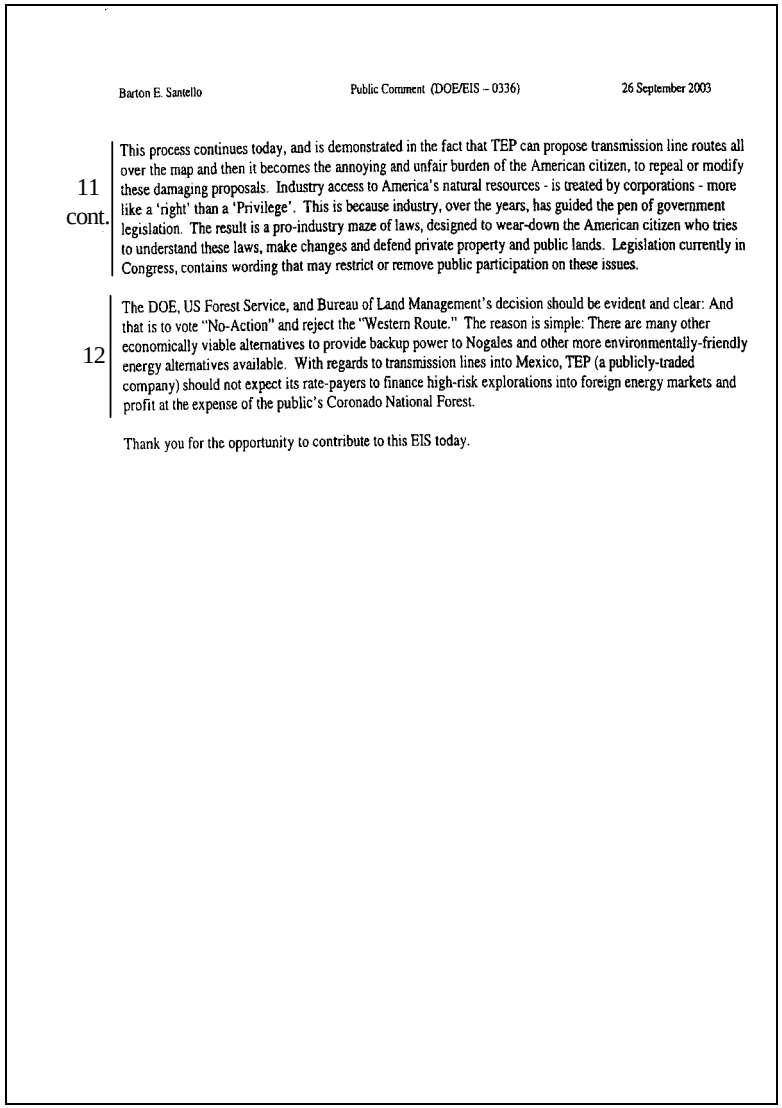
11 Should TEP provide power to Mexico as they propose, it would necessitate using resources (fuel, water, air emissions) from the United States, in order supply a foreign country with power. Thus, a corporation will profit from the use of US natural resources and impact our air quality. One corporation should not profit against the will of the people at the expense of the environment (which in this case includes our Coronado National Forest). If we look at the biggest companies from the industrial era, most have made their fortunes off America's natural resources. Whether it was land grants to the railroads; mining claims on government owned land, or oil drilling in environmentally-sensitive areas.

Comment No. 11

Chapter 3 describes the affected environment of the area by resource area, and Chapter 4 evaluates the potential impacts of the proposed project on each of these resources.

Analysis of governmental policies and potential economic benefit to TEP from the proposed project is outside the scope of the EIS.

Santello, Barton E.
Page 6 of 7



Barton E. Santello Public Comment (DOE/EIS – 0336) 26 September 2003

11 cont. This process continues today, and is demonstrated in the fact that TEP can propose transmission line routes all over the map and then it becomes the annoying and unfair burden of the American citizen, to repeal or modify these damaging proposals. Industry access to America's natural resources - is treated by corporations - more like a 'right' than a 'Privilege'. This is because industry, over the years, has guided the pen of government legislation. The result is a pro-industry maze of laws, designed to wear-down the American citizen who tries to understand these laws, make changes and defend private property and public lands. Legislation currently in Congress, contains wording that may restrict or remove public participation on these issues.

12 The DOE, US Forest Service, and Bureau of Land Management's decision should be evident and clear: And that is to vote "No-Action" and reject the "Western Route." The reason is simple: There are many other economically viable alternatives to provide backup power to Nogales and other more environmentally-friendly energy alternatives available. With regards to transmission lines into Mexico, TEP (a publicly-traded company) should not expect its rate-payers to finance high-risk explorations into foreign energy markets and profit at the expense of the public's Coronado National Forest.

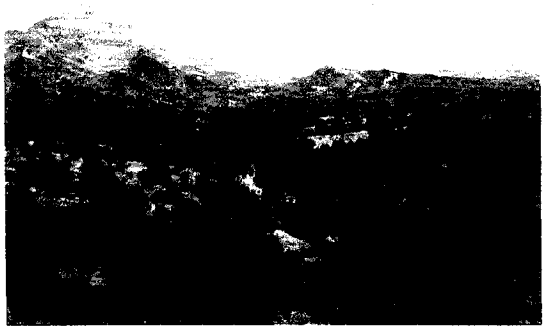
Thank you for the opportunity to contribute to this EIS today.

Comment No. 12

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

After a regulated utility such as TEP constructs a project in Arizona, the ACC determines whether, or to what degree, an investment by a utility is recoverable through retail (consumer) electricity rates. Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS.

Santello, Barton E.
Page 7 of 7



Apache Pass Coronado National Forest

Jan 1, 2003

Barton Santello

Santello, Barton E.
Page 1 of 117

Barton E. Santello
14560 West Jalisco Road
P.O. Box 778
Arivaca, AZ 85601

PUBLIC COMMENT

On

Tucson Electric Power Company
Sahuarita-Nogales Transmission Line
Draft Environmental Impact Statement (DEIS)
Summary Report
Dated July 2003
DOE/EIS – 0336

Presented to

U.S. Department of Energy
Office of Coal and Power Import & Export
Fossil Energy, FE-27
Washington, DC 20585-0000; USA

U.S. Department of Agriculture Forest Service
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

U.S. Department of the Interior
Bureau of Land Management
222 N. Central Ave
Phoenix, AZ 85004-2203

U.S. Section of the International Boundary and Water Commission

Postmarked on

October 13, 2003
Phoenix, Arizona

Santello, Barton E.
Page 2 of 117

Barton E. Santello
15460 West Jalisco Road
P.O. Box 778, Arivaca, AZ 85601
480-620-5386, *BSantello@cox.net*

October 12, 2003

Dr. Jerry Pell
U.S. Department of Energy
Office of Coal and Power Import & Export
Fossil Energy, FE-27
1000 Independence Avenue, S.W.
Washington, DC 20585-0350

RE: Public comment on Tucson Electric Power Company, Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement (DEIS), Dated July 2003, DOE/EIS – 0336

Dear Dr. Pell:

Please find attached my public comments on the Draft EIS for the above-referenced Transmisison line proposal, to be considered in the final Environmental Impact Statement, as requested by the DOE under Federal Register Notice "68 FR 51570" dated: 26 August 2003

1 As a private citizen from Arivaca, AZ in the effected area of Tucson Electric Power Company's (TEP) Proposed Sahuarita-Nogales Transmission Line, I urge all the cooperating U.S. Government agencies to decide the "No Action" alternative, following the submittal of the final Environmental Impact Statement (EIS) in 2004.

2 The applicant's original state mandate from the Arizona Corporation Commission's (ACC), as discussed on page S-10, of the Summary DEIS, requires only a 115-kV line be constructed. TEP's expanded scope to include a 345-kV line through a national forest and across the international boundary, is a corporate decision based on the economics of electrical transmission and not one in the public's interest. Nogales is an 'end-node' in the nations electrical grid system and a 115 kV line, as mandated by the ACC would suffice, in providing sufficient and reliable electrical power to the greater Nogales area.

3 The cooperating agencies will find, based on a review of the Final EIS, that TEP's 345 kV transmisison line proposal exceeds mandated improvements to electrical reliability, imposes significant environmental hardship on the biologically rich and visually attractive Coronado Nation Forest and that TEP's *"Purpose and Need"* is self-serving. The EIS must contain all the esssential information and facts in its final form. I believe a quality final version of the EIS, that includes all relevant public comment, will reveal the damaging aspects of this proposal and that reasonable alternatives exist to the proposed lines.

2 cont Furthermore, the final EIS should also make clear for the record, what this proposal is not: This proposal by TEP is not the result of a federal directive to improve, expand or secure the nation's electrical transmission infrastructure.

Sincerely,

Barton Santello
Arivaca, AZ

Comment No. 1

Refer to the response to Comment No. 2 from Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m.

Comment No. 2

Refer to the response to Comment No. 3 from Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m.

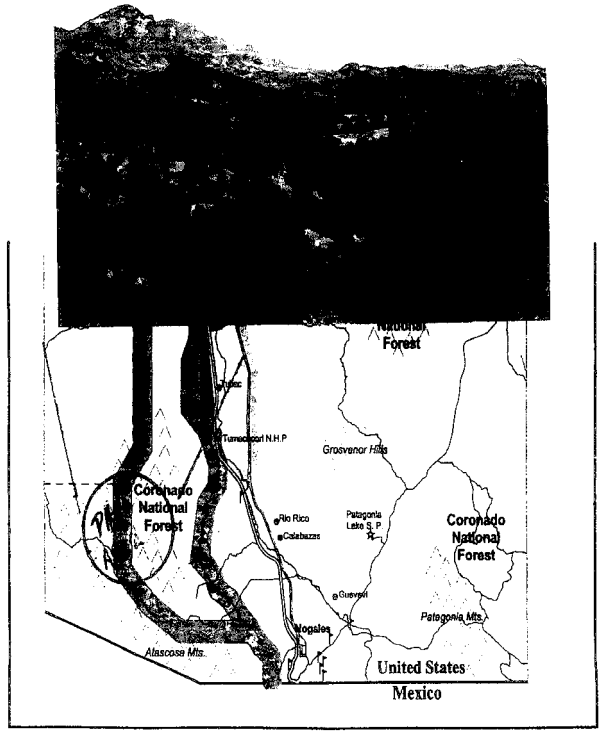
Comment No. 3

Refer to the response to Comment No. 4 from Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m.

Santello, Barton E.
Page 3 of 117

VISUAL IMPACT
IN
CORONADO NATIONAL FOREST

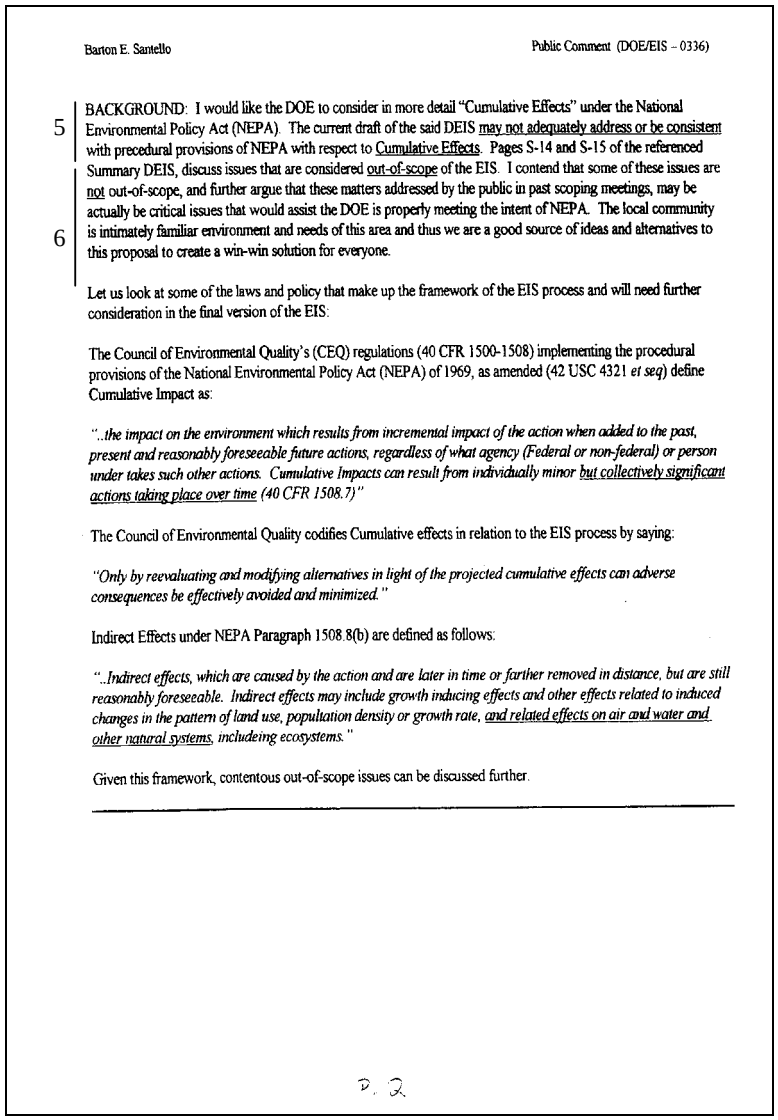
4 The photo below was taken New Years Day 2000 at an area near Apache Pass. The direction of the photo is looking southeast. The map below shows that the proposed transmission lines will cross directly through this photo. The loss of this scenic view would be a tragedy to all Americans now and future generations.



Comment No. 4

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project. The photo provided by the commentor is in the same general area as Visual Simulation 6 of the proposed project in the EIS.

Santello, Barton E.
Page 4 of 117



Barton E. Santello Public Comment (DOE/EIS – 0336)

5 BACKGROUND: I would like the DOE to consider in more detail "Cumulative Effects" under the National Environmental Policy Act (NEPA). The current draft of the said DEIS may not adequately address or be consistent with precedural provisions of NEPA with respect to Cumulative Effects. Pages S-14 and S-15 of the referenced Summary DEIS, discuss issues that are considered out-of-scope of the EIS. I contend that some of these issues are not out-of-scope, and further argue that these matters addressed by the public in past scoping meetings, may be actually be critical issues that would assist the DOE is properly meeting the intent of NEPA. The local community
6 is intimately familiar environment and needs of this area and thus we are a good source of ideas and alternatives to this proposal to create a win-win solution for everyone.

Let us look at some of the laws and policy that make up the framework of the EIS process and will need further consideration in the final version of the EIS:

The Council of Environmental Quality's (CEQ) regulations (40 CFR 1500-1508) implementing the procedural provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 *et seq*) define Cumulative Impact as:

"..the impact on the environment which results from incremental impact of the action when added to the past, present and reasonably foreseeable future actions, regardless of what agency (Federal or non-federal) or person under takes such other actions. Cumulative Impacts can result from individually minor but collectively significant actions taking place over time (40 CFR 1508.7)"

The Council of Environmental Quality codifies Cumulative effects in relation to the EIS process by saying:

"Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided and minimized."

Indirect Effects under NEPA Paragraph 1508.8(b) are defined as follows:

"..Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, includeing ecosystems."

Given this framework, contentous out-of-scope issues can be discussed further.

D. 2

Comment No. 5

Refer to the response to Comment No. 6 from Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m.

Comment No. 6

Refer to the response to Comment No. 7 from Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m.

Santello, Barton E.
Page 5 of 117

Barton E. Santello — Public Comment (DOE/EIS - 0336)

DISCUSSION: (On Issues out of Scope of the EIS – Page S-15, Summary DEIS)

---

1) Issue: Mexico may build power plants resulting in the sale of electricity to the United States.

DEIS Comment: "*..The DOE is not aware of any proposals by Mexico to build power plants and to sell electricity to the United States in the area covered by this EIS. Thus, DOE considers this assertion to be speculative..*"

Public Comment: InterGen and Sempra Energy each have a new power plant in Mexicali, Mexico. The United States, Canada, Europe and Japan have upwards of 20 power plants in planning and/or development in northern Mexico. For this DEIS to suggest that the climate for construction of new power plants in Mexico is speculative is misleading. The DOE's own website has information web-page heading called "Facilitating U.S. Trade in Electricity" that States: *"U.S. trade in electric energy with Canada and Mexico is rising, bringing economic and reliability benefits to the United States and its trading partners. Within the Office of Fossil Energy's Coal & Power organization, an electricity import/export team is responsible for authorizing the export of electric energy and the issuance of permits for the construction, connection, operation, and/or maintenance of electric transmission facilities at the international border."* 7

The current adminstration is aggressively backing exporting electricity to Mexico and US electric utility companies are beginning to buy stakeholding positions in Mexican power plants in order to capitalize on future import/export of electricity. I will be submitting additional details of power plant planning and development in my report to the DOE by the deadline of the public comment period on this DEIS.

These new power plants will be major sources of air pollution impacting the United States and effecting health and the clean air many of us have moved to southern Arizona to enjoy.

2) Issue: The public discussed alternatives that included TEP or another entities building a power plant in Nogales.

DEIS Comment: "*..These suggested alternatives would not fulfill TEP's purpose and need, and therefore not within the scope of this EIS.*"

Public Comment: The DOE's own Federal Register Notice FR 01-17224, 66 FR 35952 dated Tuesday July 10, 2001 states that *"The EIS will consider alternatives to the proposed transmission lines including to the extent practicible, including construction of a powerplant closer to the US-Mexico border with a transmisison line extending to the border,as an alternative concept to supplying electrical power to the target region."* 8

This July 10, 2001 statement is in conflict with the DOE's rejection of this consideration in the subject DEIS. Further, the DOE states that the alternative power plant does not fulfill TEP's purpose and need. This statement is in conflict with page S-11 of the subject DEIS where it is stated that the DOE's mission in undertaking the EIS process is to determine whether the proposed action is in the public interest – not TEP's interest. Therefore, the EIS must be rewritten to address reasonable alternatives as published in the said Federal Register notice.

P.3

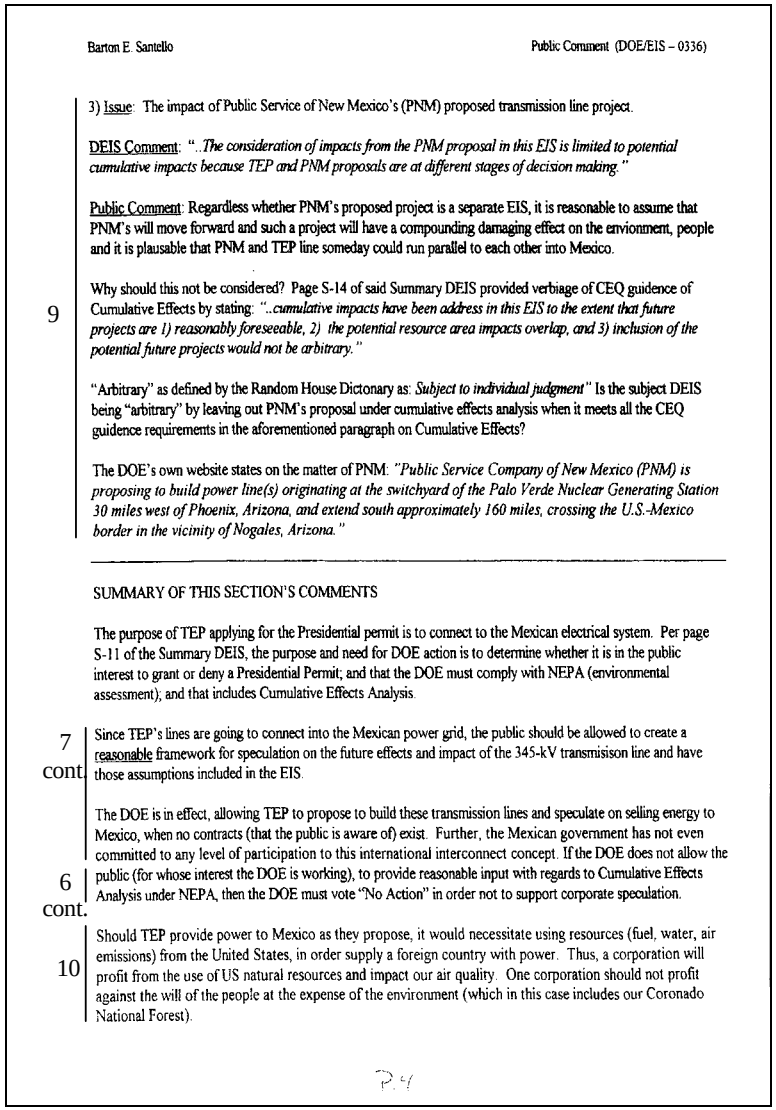
Comment No. 7

Refer to the response to Comment No. 8 from Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m.

Comment No. 8

Refer to the response to Comment No. 9 from Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m.

Santello, Barton E.
Page 6 of 117



Barton E. Santello Public Comment (DOE/EIS – 0336)

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SUMMARY OF THIS SECTION'S COMMENTS

The purpose of TEP applying for the Presidential permit is to connect to the Mexican electrical system. Per page S-11 of the Summary DEIS, the purpose and need for DOE action is to determine whether it is in the public interest to grant or deny a Presidential Permit; and that the DOE must comply with NEPA (environmental assessment); and that includes Cumulative Effects Analysis.

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P.4

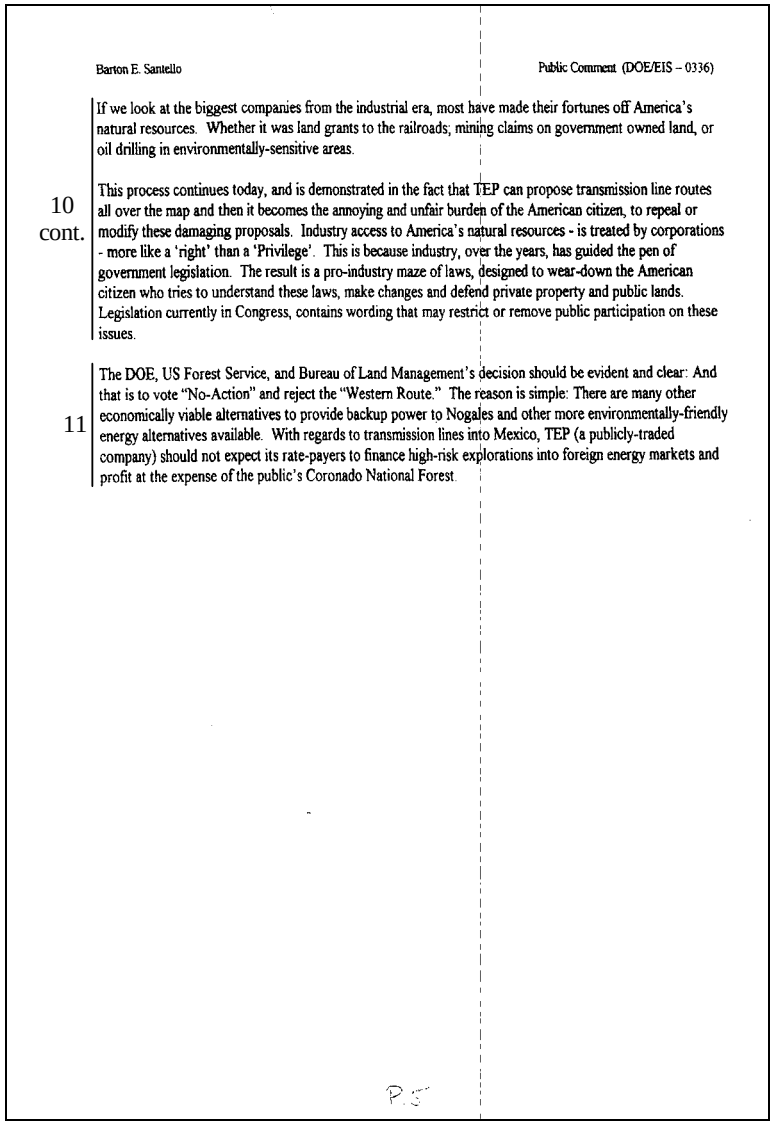
Comment No. 9

Refer to the response to Comment No. 10 from Barton Santello in the public hearing transcript from Nogales, Arizona, September 26, 2003, 5 p.m. to 7 p.m.

Comment No. 10

Refer to the response to Comment No. 11 from Barton Santello in the previous submittal.

Santello, Barton E.
Page 7 of 117



Barton E. Santello Public Comment (DOE/EIS – 0336)

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P 5

Comment No. 11

Refer to the response to Comment No. 12 from Barton Santello in the previous submittal.

NOTE: The balance of the material submitted by Barton E. Santello (pages 8-117) includes materials previously provided to DOE during public scoping for the EIS, a copy of his ACC hearing transcript, and articles on the following topics:

- Raptor Safety
- Transmission line ROW and economics
- Jaguar and other wildlife
- Background and arguments against TEP's proposed project
- Citizens proposed wilderness in the Tumacacori-Atascosa Highlands
- International Sonoran Desert Alliance
- Existing and proposed power plants in Mexico
- Bibliography of references

The Federal agencies note the commentor's opposition to the proposed project. The supplementary material provided by the commentor does not include any specific comments on the Draft EIS, and does not identify any new topics which are within the scope of the EIS that should be added to the Final EIS. The public scoping materials previously provided to DOE were considered by the Federal agencies in determining the alternatives, issues, and environmental impacts to be analyzed in the EIS. Section 1.6.2 of the Final EIS explains which issues raised during public scoping the Federal agencies considered to be within or outside the scope of the EIS.

Santello, Barton E.
Page 8 of 117

Barton E. Santello
P.O. Box 778
Arivaca, Arizona 85601
480-940-7728
bsantello@aol.com

August 14, 2001

Mrs. Ellen Russell
Office of Fossil Energy (FE-27)
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0350

RE: *Notice of Intent to Prepare an Environmental Impact Statement – Tucson Electric Power (TEP) Presidential Permit Application*
Reference: *Federal Register, Volume 66, No. 132, Tuesday 10 July 2001*
Applicability: *All proposed south-central Arizona transmission line routes (Eastern, Central and Western).*

Dear Mrs. Russell:

Please consider the following comments, questions and/or concerns in the public record, for consideration in preparation of the above-referenced Environmental Impact Statement:

Topic: Raptor Safety on Power Lines

Please find attached an article published in the newsletter of the Friends of Buenos Aires Wildlife Refuge, regarding the installation of "Raptor-Safe" perches on transmission lines serviced by Tirco Electric's transmission poles in the Altar Valley area.

Please have TEP address the topic of raptor safety in the EIS, to include, but not limited to the following questions:

1) How does TEP plan to address to issue of bird electrocutions?
2) Does TEP's pole design account for the safe perching of raptors and other birds?
3) To what extent will 'insulators' be used to protect birds in areas of the pole which they will be most likely to land?
4) What is the estimated loss of birds due to electrocutions?
5) What will be the impact of electrocutions on the populations of threatened or endangered birds in the study area of the proposed transmission line routes?

Thank you for considering these comments.

Sincerely,

Barton E. Santello

Cc: Jerry Pell (DOE)

Santello, Barton E.
Page 9 of 117

Raptors resting or nesting on the cross arm or wires could be at risk of electrocution.

Friends of Buenos Aires NWR Board of Directors

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Contributing Editor Melissa Owen
Education Committee Janine Higgins, Director

Friends of Buenos Aires NWR
P.O Box 65855
Tucson, AZ 85728

December 2000 Volume 2, Number 3

TRICO Installs Safe Raptor Perches

Text and photos by Melissa Owen

Good neighbors are precious. They are especially precious in the Altar Valley where distances are long and communication can be a matter of life and death. So it makes us at Buenos Aires NWR particularly happy that one of our good neighbors, Trico Electric Cooperative is working at being a good neighbor to the Valley's avian residents too.

Trico's major goal is to provide dependable electric service to 25,000 consumers in a large area that includes parts of Pima and Pinal counties and stretches from Madera Canyon and Buenos Aires NWR in the south to Mt. Lemmon in the north. All of this area is prime habitat for raptors, especially buteos, (soaring hawks) which typically rest or hunt rodents from a high lookout perch. In an area with few tall trees, power poles provide just such perches. When a hawk's talons grip a live wire and its wing brushes another, a deadly circuit is completed – one that may end in death by electrocution.

Trico's concern with raptor protection began about eight years ago, according to Maintenance Supervisor David Bailey, and was largely in response to customer calls reporting raptor deaths. "Some of our solutions then were makeshift," he says. But now, "we have identified a number of design alterations that make it virtually impossible for birds to

(continued on page 4, col. 1)

Seeds

Published by Friends of Buenos Aires National Wildlife Refuge

Santello, Barton E.
Page 10 of 117

Hawks-eye view of the newly paved entrance road to BANWR Headquarters

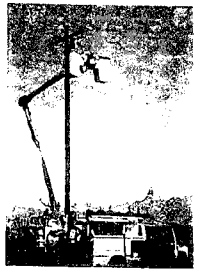
Trico Safe Raptor Perches (cont. from p1)

cause shorts at the primary voltage level. We have also asked our engineering personnel to design special structures for particular situations where known bird problems exist and where we have heavy seasonal activity."

"In 1998, we instituted a policy that dictates the use of bird-guard material on all new equipment installations.

A Trico field crew assembles a new safe raptor perch for installation across from the entrance to BANWR headquarters

We also respond promptly to all reports of bird fatalities by issuing written orders to install guard material on all equipment in the area of the contact. We hope to have 80% protection coverage by 2005.

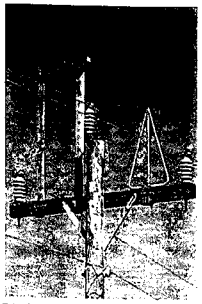


Dale Tucker, foreman; Dave Briley, lineman; and Clayton Brown, equipment operator use a "cherrypicker" to install a raptor perch on the power pole across from the Refuge's main entrance.

Perching on power poles and lines is not the only problem faced by both raptors and Dave's ten-man crew. "Our Arivaca substation was lost because of nesting, but our people are now trained to handle nesting problems. If a nest is found on a routine patrol, the patrolman will determine if the nest is active. If the nest shows any sign of

4

P.8



Trico has, to date, installed about 15 of these perches along Rt. 286 near and on the refuge

bird activity, we will trim the nest to prevent contact with live conductors and the location of the nest is then recorded for follow-up action when it is empty."

Dave's crew is now installing perches on some existing power poles along Highway 286 and on the refuge; as poles are replaced, a new design will eliminate the crossarms that attract raptor perching and nesting. Other innovations may include silicone coverings for bushings, devices that emit a low-level electric shock, and sound wave devices at substations.

Santello, Barton E.
Page 11 of 117

Barton E. Santello
P.O. Box 778
Arivaca, Arizona 85601
480-940-7728
bsantello@aol.com

August 6, 2001

Mrs. Ellen Russell
Office of Fossil Energy (FE-27)
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0350

RE: Notice of Intent to Prepare an Environmental Impact Statement - Tucson Electric Power (TEP) Presidential Permit Application

Reference: Federal Register, Volume 66, No. 132, Tuesday 10 July 2001

Applicability: All proposed south-central Arizona transmission line routes (Eastern, Central and Western)

Dear **Mrs. Russell**:

Please enter the following comments, questions and/or concerns, in the public record, for consideration in preparation of the above-referenced Environmental Impact Statement:

Topic: **Transmission line right-of-way rights, privileges and economics**

13 Point #1: The proposed transmission lines, if built, should be built along a 'right-of-way', that has a width as-small-as possible, to minimize environmental impact.

14 Point #2: Concern over future uses of the right-of-way. The EIS should consider environmental impact of the applicant "sub-leasing" the right-of-way for other uses; such as railroads, pipelines, etc., unless applicant agrees contractually to forgo any rights to sub-lease, sell, transfer, and/or partner with any third party or new corporate proposal, for any reason that would physically alter, impact the land, or change any structures outside of the applicants original permit application.

Point #3: The applicant's EIS should be based solely upon the specific proposed transmission line project, with any subsequent future expansion, changes, modifications and/or additions, requiring a separate EIS.

15 Point #4: The applicant should be required to compensate the federal government for federal land and/or national forest contained within the right-of-way, in an amount based on appraised fair market value, and such compensation should be in the form of a lease or annual fee. And such lease or fee shall contain escalation clauses to account for the indexed cost of living increase, and property value increases.

P.9

Santello, Barton E.
Page 12 of 117

Barton E. Santello Page 2

RE: Notice of Intent to Prepare an Environmental Impact Statement - Tucson Electric Power (TEP) Presidential Permit Application

15 cont. Point #5: A surcharge fee should be levied on the applicant, by the U.S. Forest Service, to pay for re-vegetation, erosion control, biological impact studies (and corrective environmental action) and purchase of additional buffer lands, as a result of this project.

16 Point #6: The applicant should be required to post a bond, specifically for the decommissioning of transmission lines at the end of the normal economic and physical life of the structures. And such a bond shall reflect the projected future cost of such decommissioning, which should include re-vegetation and restoration of the desert environment.

Point #7: The project's financial viability and feasibility study, as contained in the EIS, should account for any costs incurred in points #4-7 herein-above, because this would represent the true cost of this project, and avoid the pitfalls of the past, for example, in which utilities companies building nuclear power plants, did not financially account for decommissioning of such plants and the cost of long-term storage of spent nuclear fuel. This omission of the past, is today now the burden of American taxpayers, both financially and environmentally.

Thank you for considering these comments for inclusion in the EIS.

Sincerely,

Barton E. Santello
Arivaca

cc: U.S. Forest Service
Bureau of Land Management

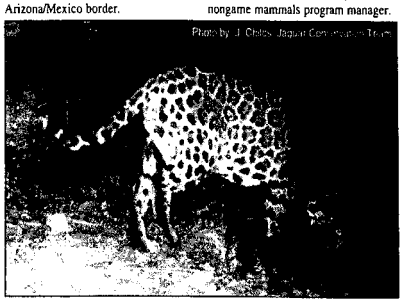
2.10

Santello, Barton E.
Page 13 of 114

Jaguar Photographed In Southern Arizona

Arizona Game & Fish Dept.
Press Release: February 4, 2002

A young male jaguar has been photographed south of Tucson, according to Arizona Game and Fish Department officials. The photograph was taken by a surveillance camera that was monitoring potential jaguar travel corridors on the Arizona/Mexico border.



In an effort to conserve the rare endangered species, the exact location at which the photograph was taken isn't being released at this time.

"This photograph is really exciting. It is great to know that jaguars are roaming our borderlands, at least occasionally. We will continue to monitor the area to see if the animal is a transient or attempting to establish a territory. Since we are unsure whether the animal is still in the area, there are no proposed changes for land or recreational use, " said Bill Van Pelt, Arizona Game and Fish Department's nongame mammals program manager.

Van Pelt said a Jaguar Conservation Team (JAGCT) was formed in 1997 in cooperation with residents in southern Arizona/New Mexico to gather jaguar data and monitor potential travel corridors on the borderlands. The U. S. effort has also stimulated a parallel conservation effort in Mexico. All JAGCT members, along with federal and state wildlife managers, have been notified to be on the alert and to watch for jaguar.

As part of this cooperative effort, the Malpai Borderlands Group, founded in 1997, has established a fund to cover depredation expenses if a proven jaguar livestock kill is identified.

Jaguars were placed on the federal endangered species list July 22, 1997 and illegal take of the species could result in state and federal fines of up to $100,000 fine and a year in prison.

There have been 63 jaguar sightings in Arizona since 1900. The last Arizona photograph was taken in August 1996.

The closest known population of jaguars is 135 miles south, deep in the Sierra Madre of Mexico.

Jaguars (Panthera onca), which are the third largest cat in the world, are secretive cats that are muscular with relatively short limbs and a deep-chested body. They are cinnamon-buff in color with many black spots that are often broken circles or rosettes. A black or melanistic phase can occur.

Jaguars are the only cat species found in the Western Hemisphere to truly roar, like an African lion, tiger, or leopard.

Historically, jaguars were found in virtually every habitat type known to Arizona and New Mexico.

These habitats include everything from shrub-invaded desert grasslands to montane-conifer forest. In recent times, they have been most closely associated

Borderland Jaguars
Tigres de la Frontera

David Brown and Carlos A. López González

"What is it about these borderland cats which has so fired up people? Scarcity combined with beauty explains some of the appeal. So does the animal's legendary strength and power as befits its role as the region's top predator. The jaguar's neotropical origins also add to its mystique. . . But there is something more. That such a large cat is out there somewhere . . . invokes the depths of our imagination. Nor does it matter one whit that the chance of any one individual actually seeing one is almost nil. The thought of such a cat's presence is enough in itself."

In 1996 a rancher hunting mountain lions just north of the Arizona-Mexico border treed a jaguar. Instead of reaching for a rifle, the rancher went for his camera. Later that year another party photographed a jaguar in Arizona's Baboquivari Mountains. These compelling photographs sparked public interest in jaguars and have resulted in calls for listing jaguars as an endangered species.

Borderland Jaguars documents the human-jaguar contact in the Southwest and presents jaguar folklore from both sides of the border.

But the book is primarily a natural history of the jaguar, and discusses its distribution, habitats, and hunting and breeding characteristics before concluding with a section on the status and management of borderland jaguars, and a proposed conservation plan. Written in an engaging style, and replete with a wealth of photographs, Borderland Jaguars is a wonderful introduction to this elusive resident of the Southwest.

"The work is not only significant, it is an important contribution, because it serves to dispel many myths and misconceptions regarding the jaguar. It will be the major source on the species for many years to come." —Harley Shaw, wildlife biologist.

Available at www.azwildlife.org

Page 8 ARIZONA WILDLIFE FEDERATION • www.azwildlife.org Winter 2002

Santello, Barton E.
Page 14 of 117

with evergreen-oak woodlands extending northward from Mexico.

Jaguars once ranged from southern Argentina, up along the coasts of Central America and Mexico, and into the southwestern United States as far north as the Grand Canyon. Today, this range is greatly reduced and fragmented.

Throughout their entire range, jaguars are recognized and protected under the Convention on International Trade in Endangered Species (CITES). In the United States and Mexico, they are considered an endangered species under each country's Endangered Species Acts.

In addition, an Arizona-New Mexico Conservation Agreement, involving participation by state and federal agencies, local governments, nongovernmental entities, such as the ranching community, houndsmen, and private citizens has been established to help conserve the species. The goals of this agreement include educating the public, identifying habitat and travel corridors for population maintenance, and the development of strong public-private partnerships using innovative and adaptive management to conserve the jaguar in Arizona and New Mexico.

Recognizing the lack of information about jaguars, the team has been aggressive in collecting sound scientific data. In 1998, members from the working group traveled to Brazil to collect information on jaguar depredation on livestock and published a book on jaguar sign. Working group members are also monitoring remote-census cameras in mountain ranges recently occupied by jaguars. JAGCT is currently printing an informational brochure on jaguars.

If you see a jaguar, it is extremely important to note several things:

Observe specifics of the area so managers can find the exact location.

Note the specific characteristics of the animal coloration, size, posture and behavior.

If possible, take a photograph or video of the jaguar and the area.

Collect any sign (scat, hair, track tracing) if possible, without destroying the integrity of the track.

Report the sighting immediately to Van Pelt at (602) 789-3573.

It's High Noon And Past Time For Cows To Take A Powder

This column originally appeared in Writers on the Range and is reprinted with their permission.

By Rob Breeding

Arizona environmentalist Dan Dagget recently came up with a new mantra for the Western range: Public-land health follows the cow. Why does this approach remind me powerfully of the first territorial governor of Colorado, William Gilpin? Because Gilpin was the man who famously assured settlers that "rain would follow the plow."

Dagget's method is high-intensity, short-duration grazing, and he wants a showdown, he tells Westerners, because he's confident he's the fastest draw. So this writer on the range offers a challenge to all comers: He'll pit his grazing scheme against the "Getimoff" approach any time, any place, in side-by-side pastures. He promises his side will be healthier.

Dagget—whose rhetoric is increasingly that of a cattle industry apologist rather than a reformer—backs his claim with examples of grazing used to restore severely degraded sites. But it's a lot like suggesting that we line the banks of Western rivers with riprap because it prevented a trophy home from washing away last spring.

That's not to say that quick and careful grazing doesn't have a place. But in the Southwest, where big grazers have been largely absent since the Pleistocene, widespread application of cows on our disappearing semi-arid grasslands would have disastrous consequences.

The real surprise is that Dagget offers his challenge with the cavalier suggestion that grazing reformists are too yeller to take him up on it. Many are dying for a chance.

As Dagget surely knows, the Arizona Wildlife Federation has been bucking for just such an experiment on the Coconino National Forest southeast of Flagstaff. The federation is involved in a contentious debate about the future of Anderson Mesa's herd of pronghorn antelope. The group has challenged grazing management on the mesa, arguing it's responsible for the pronghorn's near-extinction.

Dagget, as a member of the Diablo Trust, which includes the two major grazing operations on the mesa, should know that ongoing research by a Northern Arizona University professor, Tom Sisk, has already indicated that by at least one of Dagget's measures of rangeland ill health—bare dirt—the "Getimoffs" may be right.

More importantly, the side-by-side plots of high-intensity grazing and cattle exclosures reveal why the grazing debate doesn't lend itself to schoolyard dares. For while the ungrazed plots have less bare dirt and more forbs that antelope like to eat, the high-intensity plots have more grasses.

"Which is healthier?" may be the wrong question. "What are you managing for?" is probably the right one.

There is a larger debate that underlies the movement to end public-lands grazing. It's a challenge to the status quo, where a small group of ranchers hold dominion over lands owned by all of us. They are there by right, these ranchers seem to assume, and nonprofit groups like the Arizona Wildlife Federation are bad sports for suggesting otherwise.

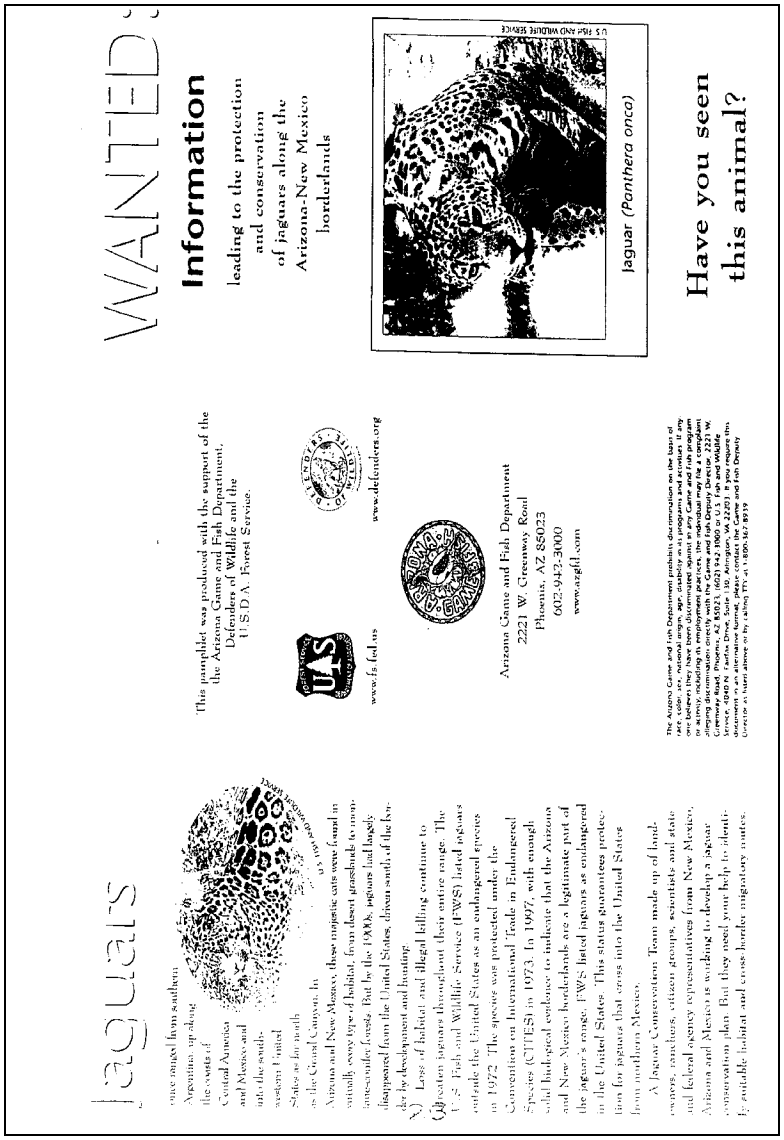
But if it's a showdown Dan Dagget wants, I've got one for him. We can face off at high noon, and as my weapon, I'll draw my vision of Anderson Mesa.

It's a vision of restored wetlands brimming with cinnamon teal and pintail. Of abundant prairie dogs, reptiles and the hawks that feast on them. I see graceful pronghorn racing across the grasslands in their historic abundance, with Mexican wolves in futile pursuit. I imagine Ashurst Lake, the mesa's lone coldwater fishery, restored and brimming with endangered Gila trout.

There's even room for cattle, though

Cont'd on page 18 - "High Noon"

Santello, Barton E.
Page 15 of 117



WANTED

Information

leading to the protection and conservation of jaguars along the Arizona-New Mexico borderlands

Jaguar (*Panthera onca*)

Have you seen this animal?

JAGUARS

once ranged from southern Argentina, up along the coasts of Central America and Mexico, and into the southwestern United States as far north as the Grand Canyon. In Arizona and New Mexico, these majestic cats were found in virtually every type of habitat, from desert grasslands to snow-covered forests. But by the 1900s, jaguars had largely disappeared from the United States, driven south of the border by development and hunting.

Loss of habitat and illegal killing continue to threaten jaguars throughout their entire range. The U.S. Fish and Wildlife Service (FWS) listed jaguars outside the United States as an endangered species in 1972. The species was protected under the Convention on International Trade in Endangered Species (CITES) in 1973. In 1997, with enough solid biological evidence to indicate that the Arizona and New Mexico borderlands are a legitimate part of the jaguar's range, FWS listed jaguars as endangered in the United States. This status guarantees protection for jaguars that cross into the United States from northern Mexico.

A Jaguar Conservation Team made up of land owners, ranchers, citizen groups, scientists and state and federal agency representatives from New Mexico, Arizona and Mexico is working to develop a jaguar conservation plan. But they need your help to identify suitable habitat and cross-border migratory routes.

This pamphlet was produced with the support of the Arizona Game and Fish Department, Defenders of Wildlife and the U.S.D.A. Forest Service.

www.defenders.org

www.fs.fed.us

Arizona Game and Fish Department
2221 W. Greenway Road
Phoenix, AZ 85023
602-942-3000
www.azgfd.com

The Arizona Game and Fish Department prohibits discrimination on the basis of race, color, religion, sex, age, disability, or national origin in its programs and activities. If you believe that you have been discriminated against in any program, activity, or facility, you may write to the Arizona Game and Fish Department, 2221 W. Greenway Road, Phoenix, AZ 85023, or to the Office for Human Resources, U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 130, Arlington, VA 22203. If you require this document in an alternative format, please contact the Game and Fish Deputy Director at the address or telephone number listed above.

Santello, Barton E.
Page 16 of 117

Jaguar Spotting: What to Look For

Jaguars are large, muscular cats with relatively short, powerful limbs and deep-chested bodies. Adults measure six to eight feet from head to tip of tail. Average weights are 200 pounds for adult males, 150 pounds for adult females and 80 to 100 pounds for juveniles. Stunningly beautiful, jaguars are cinnamon-buff in color with many black spots often in the form of broken circles or rosettes. An all black, or melanistic, phase also occurs.

Jaguars are easily distinguished from mountain lions (pumas), the only other big cats found in the borderlands, by their pronounced spots.

Jaguars are shy and elusive animals and generally travel at night. They are at home in a variety of habitats, from high spruce-fir forests of the mountainous "sky islands" to the lowland thornscrub deserts. Their habitat preferences in the United States are not well-documented and may be determined as much by the availability of food and water as by habitat type.

Borderlands Jaguar Range

	FRONT	HIND
Jaguar: Foot pads broad, not inverted at top, toe pads rounded.	← 4.8 inches →	← 3.7 inches →
Puma: Top of foot pad indented, toe pads tapered, almost pointed.	← 3.4 inches →	← 3.2 inches →

To Report a Jaguar Sighting

If you see a jaguar or signs of jaguar activity:

1. Note the exact location. Be as specific as possible.
2. Note the coloration, size, posture and behavior of the animal.
3. Look for tracks, scat, hair and other sign. Make a tracing of a track if you can do so without destroying it. Collect hair and scat samples for analysis by wildlife officials.
4. Report the sighting immediately to:

Arizona Game and Fish Department
602-789-3573
or
New Mexico Department of Game and Fish
505-522-9796.

Jaguars are found in habitats ranging from mountain conifer-oak forests to lowland thornscrub deserts.

© CHUCK JACOBS/JAGUAR CONSERVATION TEAM

Throughout the past 100 years, jaguars have been consistently documented in the borderlands of Arizona and New Mexico. To develop a sound plan for protecting and conserving jaguars in the United States, the Jaguar Conservation Team needs more information about jaguars in the borderlands — information you can help provide.

If you see a wild jaguar, please note as many details as possible and promptly call the appropriate state agency. Your observations may prove to be a valuable contribution to jaguar conservation and help to preserve a precious part of America's wildlife heritage.

Santello, Barton E.
Page 17 of 117

Photos and Text from National Geographic May 2001

Watch for Speeding Jaguars — the Kind With Four Paws

Most people think of a jaguar as roaming jungles, but the sneaky cat slinks through the arid lowlands of southeastern Arizona. Confirmed jaguar sightings in the state were recorded as early as 1890. As the largest cat native to the Western Hemisphere with adult males weighing in at as much as 300 pounds, the jaguar evokes spine-tingling fear and wide-eyed awe. Civilization is fragmenting the jaguar's Arizona territory. But, just to be safe, keep your eyes open for the creatures while out in the borderlands.

Where New Mexico and Arizona come together just north of Mexico, the Malpai Borderlands Group of ranchers was working in the early 1990s to restore rangelands that support imperiled life-forms such as the Chiricahua leopard frog, Yaqui topminnow, and Cochise pincushion cactus. Then Warner Glenn's puma-hunting dogs put a jaguar at bay up on the side of the Peloncillo Mountains in 1996. The lanky, lifelong Arizona cowboy's photos of the encounter were widely published, and interest in the wildlife of this desert outback immediately jumped to new levels.

People had almost forgotten jaguars were a part of U.S. fauna before the 20th century. The cats were noted north of Los Angeles in 1855. General Sam Houston reported them to be "abundant" along tributaries of the Rio Grande in 1850, and Texas still had at least one in the 1940s. In Arizona the last jaguar was killed in 1986. Not long after Glenn ran into el tigre, hunting hounds bayed a jaguar in Arizona's Baboquivari Mountains, more than a hundred miles west of the Peloncillos.

As we wandered up Hog Canyon past cottonwoods and blackjack oaks, Glenn, a founder of the Malpai group, said, "We call this a working wilderness. We're trying to make a living off cattle but in a way that takes care of the grass cover and the streams and springs wildlife depends on. There are rare snakes, bats, Aplomado falcons, and such to keep in mind, and then we have to provide for bigger animals like peccaries and mule deer and Coues' deer."

The closest known breeding population of jaguars was about 140 miles south of us, hanging on in riverside woodlands and thorn scrub where the Yaqui and Aros Rivers meet in the Mexican state of Sonora. Will they be there a decade from now? A century? Could enough follow the route of the jaguar Glenn saw to reclaim a piece of their U.S. range? The Malpai group contributes to jaguar research on the Mexican side of the international line. On the U.S. side, they maintain cameras furnished by the state game department to record the passage of large animals along likely travel routes. Ready for jaguars.

Animals can still move pretty freely around here. That's the secret. You've got to keep your wildlife corridors open." Only it's not a secret any longer. ▯

Santello, Barton E.
Page 18 of 117

Tuesday, 5 February 2002

Elusive jaguar caught on film

Arizona Game and Fish Department
This photo of a jaguar was taken in December by a remote, motion-activated camera set out to monitor potential jaguar corridors near the border.

Big cat roamed south of Tucson
By Mitch Tobin
ARIZONA DAILY STAR
An elusive jaguar has been caught on film south of Tucson, offering fresh evidence that the endangered cat visits - and maybe resides - in Southern Arizona.

The Arizona Game and Fish Department isn't revealing the location of the December siting to protect the jaguar - the biggest cat in the Western Hemisphere, and the only one that roars.
Jaguars were last documented in Arizona in 1996. They have been known to travel 500 miles in search of food or a mate.

"It is great to know that jaguars are roaming our borderlands, at least occasionally," said Brad Van Pelt of the Arizona Game and Fish Department. "We will continue to monitor the area to see if the a animal is a transient or attempting to establish a territory."

The photograph was taken in early December by a remote, motion-activated camera that was set out to monitor potential jaguar corridors near the border. Such cameras have been in place since 1997, but until now none had recorded a jaguar.

The last known photographs of a jaguar in Arizona were taken in 1996, one in the Baboquivari Mountains west of Tucson and one in the Peloncillo Mountains, along the New Mexico border near San Simon.

Biologists believe the two 1996 photos and the one shot in December captured three separate cats.
The most recent photo shows a young male jaguar weighing around 175 pounds. It was taken at about 5,000 feet in elevation in an oak woodland.

A team of biologists hopes more photos like the December one will help pinpoint the location of a jaguar. The plan is to capture one, attach a collar with a radio transmitter, then return the jaguar to the wild and monitor its movement.

Arizona is believed to be at the northern end of the jaguar's historic range, which once covered nearly all of Latin America. Now, the closest known population to Tucson is 135 miles south, deep in the Sierra Madre of Mexico, according to Arizona Game and Fish. Conservation groups that want to see the jaguar repopulate the American Southwest were delighted by the new photographic evidence.
"The fact that jaguars are still making it as individuals back to their old habitat means there's hope for eventual recovery," said Michael Robinson of the Center for Biological Diversity's Silver City, N.M., office.

Robinson said his group's first priority is to stabilize the remaining jaguar populations in Mexico - which are threatened by habitat loss - and to assess what land on both sides of the border is suitable for jaguars. "We're not pushing reintroduction at this time," Robinson said, "but everything should be on the table." Reintroduction of another of the Southwest's top predators - the Mexican gray wolf - has been fought tooth-and-nail by some ranchers and other residents along the New Mexico-Arizona border, where about 30 wolves now roam.

P.16

Santello, Barton E.
Page 19 of 117

Ranchers' livestock would be one potential food source for jaguars. Biologists believe the cats photographed in Arizona have mostly eaten deer and javelina. David Hodges, executive director of the Tucson-based Sky Island Alliance, said the jaguar was photographed in a large, roadless area with abundant deer that was previously identified as prime habitat for reintroduction of wolves.
"This points to the importance of large roadless areas if we're going to have species like jaguars and wolves as permanent residents," Hodges said.
Hodges said there's evidence the jaguar filmed in December has taken up residence in the area because several campers have sighted "a large spotted cat" in the past few months. Game and Fish officials say they routinely field calls about possible jaguar sightings, but many people misidentify a bobcat or mountain lion.

The stealthy, muscular jaguar is a formidable beast. Its sharp claws sink into fish, lizards, monkeys, cattle and dozens of other species in habitat that ranges from swampy savannas to pine forests.
In Latin America, where the jaguars' numbers are greater, the creature is still considered a threat by some, while its spotted form was a powerful icon for the Mayans, Incas and Aztecs.

Arizona biologists say the shy cat poses virtually no risk to humans since it prefers unpopulated areas and avoids contact with people. "If you're not cornering the animal, there's no indication they would be a harm to people," said Tim Snow of the Game and Fish Department's Tucson office. "Personally, I'd like to see one myself. I think it's fascinating that a large animal like this can still occur here."

** Contact Mitch Tobin at 573-4185 or mtobin@azstarnet.com.*

P.17

Santello, Barton E.
Page 20 of 117

Barton Santello
P.O. Box 51106
Phoenix, AZ 85076-1106
480-620-5386
DesertHomestead@aol.com

November 20, 2002

Michelle Harrington
Center for Biological Diversity
202 E. McDowell Road, Suite 277
Phoenix, AZ 85004

RE: Wildlife Report from Hell's Gate Area - North and East of Ruby, Arizona, near Corral Nuevo in the Coronado National Forest – in Area of Proposed Transmission Line Corridor

Michelle:

Can you please forward this document to the appropriate people working on the Roadless/Wilderness Designation for this area and the Proposed TEP/PNM Transmission Line E.I.S. I believe this would cover individuals at both the Center for Biological Diversity and the Sky Island Alliance.

Enclosed are some wildlife photos and notes that were taken on November 9th 2002, during an exploratory hike (w/ Peter Ragan) in the Hell's Gate area of the Coronado National Forest (see attached map). Hopefully, this document will aid in the documentation effort of species for this area (photos follow this page).

Here is a summary of what was observed in the Hell's Gate wash, just north and east of Corral Nuevo in the Coronado National Forest. Standing pools of water were present. Daytime temperature was approximately 70 degrees:

1) Toad/Frog – Species unknown (see photo)
2) Black Bear scat (see photo)
3) Ringneck Snake (photo scanned from National Audubon Society field guide)
4) Turtles (2 sightings in pooled water) Approximately 6" length. Possible species: Yellow or Sonora Mud Turtle – but no positive identification was obtained.

Should you have any questions, please do not hesitate to call.

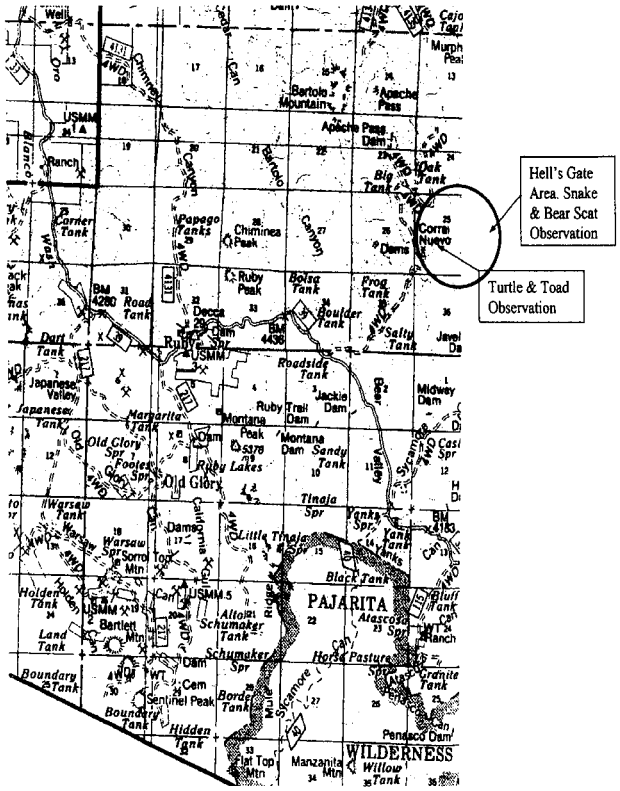
Sincerely,

Bart Santello
Phoenix / Arivaca

P.18

Santello, Barton E.
Page 21 of 117

MAP SHOWING HIKE/OBSERVATION AREA
CORONADO NATIONAL FOREST NEAR RUBY, AZ



P.19

Santello, Barton E.
Page 22 of 117

UNIDENTIFIED AMPHIBIAN SPECIES

Size: Approximately 1-1/2 to 1-3/4" in Length
Location: 300 yards east of Corral Nuevo in dry wash

Santello, Barton E.
Page 23 of 117

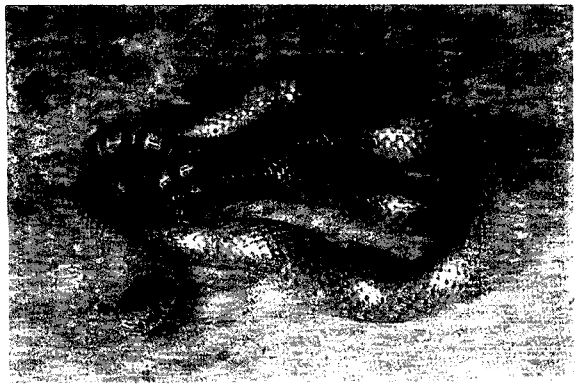
SUSPECTED BLACK BEAR SCAT
Location: Hell's Gate Area – Approximately 1 mile northeast of Corral Nuevo

Santello, Barton E.
Page 24 of 117

RINGNECK SNAKE
(Colors Observed Similar to Photo)

Location: Hell's Gate Area – Approximately 1 mile northeast of Corral Nuevo

Note: This photo scanned from National Audubon Society's Field Guide to North American Reptiles & Amphibians



D11

Santello, Barton E.
Page 25 of 117

Public Comment Hearings

On

Tucson Electric Power Company's
Proposed Sahuarita to Nogales Transmission Line Project

Presented to the

Department of Energy

Monday July 30th, 2001
Rancho Resort, Sahuarita, AZ

By

Barton E. Santello
P.O. Box 778, Arivaca, AZ 85601

D13

Santello, Barton E.
Page 26 of 117

TEP Public Comment Hearings Sahuarita, 30 July 2001

In opening, I would like to thank the representative(s) Department of Energy (DOE) for coming to Arizona at the hottest time of the year to host these important public hearings.

My name is Barton Santello. I am a property owner in Arivaca, Arizona, a unique rural community located approximately 12 miles north of the international border; adjacent to the Buenos Aires Wildlife Refuge to the west; the Coronado National Forest to the south; and a mix of private, state and federal land to the town's north. The composition of the community is roughly divided among ranching/prospecting, retirees, people that seek a rural lifestyle or solitude, and those pursuing an alternative living environment. Activities of which include: Building earthen homes; generating off-the-grid renewable power through solar or wind; organic farming; wildcrafting medicinal herbs; arts & crafts and eco-tourism.

Tucson Electric Power Company's (TEP) proposed "Westerly" transmission line route would run north-south, just east of the Arivaca community, first through state land then through national forest for at least 26 miles before reaching Nogales. I would like to state that I am opposed - not only to the construction of transmission line along the 'westerly' route - but also to the entire project, which in my opinion, has questionable merit.

For the record, I would like to make the following points for consideration in the Environmental Impact Statement and for DOE assessment, in determining whether this project is consistent with the public interest.

Consideration 1: Is this project consistent with the vision, plan and thinking of people in the greater Tucson region?

Pima County has drafted the Sonoran Desert Conservation Plan in order to fully understand the impact of development on the fragile desert region. Although this plan has not yet been signed into law, a project of the magnitude that TEP is proposing, I believe, should be shown consistent with the thinking and spirit of the Sonoran Desert Conservation Plan. It would be unwise to cut through some of the most pristine areas of the Northern Sonoran Desert, before the County and State have yet to finalize the overall conservation plan that would be the template for all future growth. Copies of this plan can be obtained by contacting the Pima County Board of Supervisors.

Barton E. Santello Page 2 of 6 P.24

Santello, Barton E.
Page 27 of 117

TEP Public Comment Hearings Sahuarita, 30 July 2001

Consideration 2: Does the proposed 'westerly' route degrade the spiritual living experience for the people and communities that have established rural micro-cultures?

A. Cultural Impact

1) The remote desert-mountain environment in the Arivaca area has shaped the people that live there. Thus creating a micro-culture. A micro-culture of people that conform to the current environment. Ranching, farming, eco-tourism, artistic pursuits, alternative lifestyle, a rural mindset, quiet, peace-of-mind, self-sustaining, dark skies with stars. The people that live rurally have sacrificed to be part something greater than themselves. A negative alteration to the environment has a direct negative consequence to quality of life.
2) The proposed transmission lines represent "no value" to the people or communities living in the Arivaca community. Transmission lines are the anti-thesis to the lives of Arivacian's', and certainly add "no value" to the environment.

B. Historical / Archeological

1) Any study conducted by the EIS would be inadequate and incomplete. The fact that there is a 2-mile wide study area for over 30 miles north of Arivaca Road to Nogales, would yield over 60 square miles of potential study area, including mountainous and canyons.
2) The State lands and National Forest lands of the proposed "Westerly" route have never had a detailed survey of Native American historical sites.

Consideration 3: Can the expected environmental impact near and within the Coronado National Forest and associated mountains be adequately assessed, properly mitigated/contained and legally enforced?

We have experience in Arivaca when dealing with water rights issues, that at times, there can be upwards of 6 federal, state or county governmental regulating offices that have overlapping authority in a single area. That leads me to the following questions related to TEP proposed project:

a. What agency or organization would oversee and enforce any environmental damage above-and-beyond the agreed scope of the project? Would it be state regulating agencies, county boards, federal government, any or all sub-agencies of these bodies of government?
b. What would be the procedure to inspect for, review and determine extent of environmental damage as a result of this project?

Barton E. Santello Page 3 of 6 P.25

Santello, Barton E.
Page 28 of 117

c. By what process would there be available compensation or reparation for environmental damage? And how would it be calculated?
d. What laws and legal mechanisms are in place to enforce contracts and agreements with respect to environmental damage?
e. Would there be any post-construction environmental studies that would examine operational impacts on wildlife, botanical species and the watershed? And for how many years after?
f. How would recommendations of such post-construction studies be instituted and potential for long-term damage be remedied?

Even if all these questions could be answered, and compensation for environmental damage be achieved, the environment would still be left damaged. I feel that all the different agencies that overlap with conflicting rules, regulations, statutes and laws, in this situation, would create legal loopholes for the permitted corporation to exploit. More than likely, any legal process to extract reparation from any permitted corporation or contractor, would be so bogged-down in appeals and extend for years, that it would be an unfair burden on finances and time to any person or regulating agency that would want to pursue it. Therefore, what incentive would there be for the permitted corporation to be protective of the environment, other than their word?

Consideration 4: Would TEP plans open the floodgate to future development?

a. Would the construction of power lines create a gateway for future development in the rural areas west of the I-19 and south of Green Valley?
b. Would construction of transmission lines in previously low impacted areas be both a symbolic endorsement and/or set a legal precedent for all future proposed residential and commercial development?
c. Being that this project is so large in magnitude, would any subsequent applications to develop, be able to ride the coattails of this project.

Consideration 5: Socioeconomic Impact

a. Can TEP justify, that the use of the Coronado National Forest to benefit a single corporation, outweighs the collective use by people of the same land for recreation, in a state where tourism accounts for approximately $1.8 billion in annual revenues; a figure three times that of Arizona's copper production?
b. The Arivaca area that includes the Buenos Aires Wildlife Refuge and the Coronado National Forest is a world-class birding and wildlife viewing area with over 314 species of birds identified many are rare and migratory. There are also approximately 58 mammal species, 11 amphibian & 42 reptiles species.

Santello, Barton E.
Page 29 of 117

c. People come from all over the world to visit this area and this is part of the local economy and will probably continue to increase as population grows and people seek to get away to rural areas on Sunday drives, vacations and recreational opportunities. Ecological and wildlife preservation must continue to stand in order to maintained the integrity of existing protected areas. People need an intact natural environment as a means for personal spiritual recovery.

Consideration 6: Visual Impact on Scenic Areas

a. How will TEP quantify or articulate the magnitude which the proposed transmission lines will have on the 'visual' impact of any of the proposed routes?
b. Impact on the rural scenic character of the region.
c. Permanently lost photographic opportunities of numerous unspoiled landscapes.
d. Spiritual impact on the people who came to these very areas to get away from this type of intrusion.
e. Psychological impact of development (depression, anxiety, cynicism, mistrust).

Consideration 7: Is this project a highest-and-best use of TEP's capital?

a. TEP has not clearly articulated the risk/benefit analysis of this project to the public.
b. Could other alternative power generation projects be demonstrated that can meet the customer's demand for power with less impact on the environment?
c. TEP will spend tens of millions of dollars building transmission lines that produce no Power. If TEP is so concerned about providing power to people in the Tucson area, that same money could be better spent producing it. Smaller local power plants remove the need for huge transmission lines.
d. Energy production can be scaled from local power generating plants, down to individual households, through the use of renewable energy. TEP's Parent company has a division called Global Solar. Southern Arizona would be an ideal place to market renewable energy products, such as solar.

Consideration 8: TEP's transmission line proposal is vulnerable to technological advances and changes in national energy policies, laws and regulations.

a. Transmission lines of the type proposed by TEP can no longer be proven critical to the electrical needs of the American people.

Santello, Barton E.
Page 30 of 117

b. Centralized vs. decentralized power generation. Decentralized power plants that are locally situated in the area of need, will ensure people that they will receive the energy need they create at a more stable cost.
c. Future deregulation of utilities means that transmission lines will carry power to customers willing to pay whatever the market price will command. Therefore it is conceivable that transmission lines will carry electricity away from the area where the power is generated. Therefore transmission lines may not bring any added security to the people and areas that they pass through.
d. TEP will spend tens of millions of dollars building transmission lines that produce no power is so concerned about providing power to people, the tens of millions of dollars that will be spent to transmit power, could better be spent producing it. Energy production can be scaled from local power generating plants, down to individual households through the use of renewable energy.
e. I believe transmission lines are an industrial-age technology, in contrast with an 'information age' world. Although owning transmission lines is currently seen as the 'hip' place to be in a deregulated energy market where power is moved around and sold as a commodity, future advances in energy production technologies could render power transmission lines obsolete.

Consideration 9: TEP as a corporate neighbor.

a. TEP has not been a good corporate neighbor in the dissemination of knowledge about the proposed transmission line project. It has failed to adequately inform the Arivaca community of the intent and scope of its transmission plans. TEP has been working on this project for years and most Arivacian's' just learned of it, when an article was published in June local "Connection" newspaper.
b. TEP has shown indifference by presenting proposed routes through historically, culturally and environmentally sensitive areas, without first soliciting input from the people.
c. TEP has been brash and overconfident in designating that its 'favored' route, would be one laid-out straight through the picturesque Coronado National Forest with all the associated legal barriers to entry and when a "Use Permit" from the U.S. Forest Service has not yet been granted.
c. The use of National Forest for the purpose of constructing transmission lines, contrasts with the perception of what the American people believe national forests are there for.
d. TEP's proposal of the "Westerly" route asks the question to the people of Arivaca: "Would TEP have considered a costly route through mountains and the environmentally sensitive Coronado National Forest as its 'preferred' route, if it were not for the fact that Arivaca has small population, lower-than-average per capita income, and does not have much in the way of political connections?"

Santello, Barton E.
Page 31 of 117

e. Are any of the following TEP corporate officers in the room today: James S. Pignatelli (Chairman of the Board, President & CEO)? or Steven J. Glaser (Senior Vice President & Chief Operating Officer, Transmission & Distribution)? If they are I invite them to speak and justify the merits of this project to the people. If they are not here, I must say that if this project is so important to TEP, why aren't its top officials here to speak on behalf of it? They must not have the same level of commitment for the project, that all the people who came here tonight have against it.
f. If this project does not move forward, TEP can simply transfer capital to another investment vehicle. TEP has nothing to lose by submitting this proposal, in contrast, the local environment and community has everything to lose.

Consideration 10: TEP Proposed actions are in conflict with the intent of The Sonoran Desert Biosphere Reserve Project.

The International Sonoran Desert Alliance, a tri-national organization made up of Mexico, the United States and the Tohono O'odham Nation, has launched the Sonoran Desert Biosphere Reserve Project. The project area covers a vast area extending west from Interstate 19 into eastern California and south into northern Mexico. The purpose of the organization is to promote cooperative protection measures of the Sonoran Desert; ecologically sound economic development; shaping of public policy; promoting international cooperation; environmental education; research and application of indigenous knowledge (see separate document).

Arivaca is part of the Sonoran Desert. Arivaca has a role in the bigger picture of environmental preservation. The Arivaca community is currently participating with the spirit of the Sonoran Desert Biosphere Reserve Project with a local group known as the 'Arivaca Watershed Educational Taskforce' (AWET). AWET is a local group committed to help the community sustain an adequate water supply, promote responsible development and maintain its rural character.

Consideration 11: The "No Action" Alternative

a. The environment is preserved and thus allows its value to increase dramatically with time.
b. No visual impact on the landscape. This would maintain the rural character and promote tourism, photography opportunities and peace of mind.
c. A positive long-term impact on TEP as a utility, by allowing the company to think creatively about alternative uses capital, it may find exciting new energy technologies to help diversify and that would work to ensure their long term financial survival.
d. In the "No Action" alternative by the DOE, TEP moves to another investment opportunity, the environment is preserved and the people are happy and empowered, rather than beaten-down and cynical.

Santello, Barton E.
Page 32 of 117

Conclusion:

How this project is challenging us as human beings, is not just whether this single decision, if approved, has a negative yet 'mitigated' impact spiritually on the people and the environment, but whether this decision as part of the sum total all future development decisions, will have the net effect of permanently altering a once pristine area. To put it another way, will the sum total of each small seemingly rational development decision, result in a final living environment devastating to the environment and spiritually sterile to the people for which it was meant to benefit. Judging the way so-called 'managed' and 'consensus' development has already spread across American, I don't necessarily hear people taking about a utopia; rather I hear of increased stress and anxiety. The people, regardless of their small numbers, who have moved out to these rural areas that the power lines proposed to cross, have made the decision to trade convenience for peaceful empowered living in harmony with the environment. The proposed power line project does not support or harmonize with the current status of this area.

Why is it that our government, whether state or federal, can effectively guaranty a profit to a private company by granting depletion rather than conservation our natural resources? Our government has a mindset, attitude and policy traceable to the founding of this country, that somehow the resources we have are so vast, they will be available indefinitely. It's several hundred years later now, and many of us are trying to protect pockets of areas that are still unspoiled. And now these areas are being eroded because the mentality hasn't changed. Federal lands, wildlife refuges, national parks, national forests, national monuments & state parks. These are lands set aside for special reasons: wildlife habitat, recreation, and natural wonders.

We have reached the point where "the people's" lands are now threatened, to meet the needs and support what is called the American way of life. If this is the case, we need to stop and look inside ourselves and question what we are doing, before progressing further.

In the case of TEP's proposal, it is fair to ask people to sacrifice a portion of our remaining environment to support energy projects, built in desperation, because our government has not provided long-term vision, leadership, research and business incentives, to prepare for a post-fossil fuel world? Especially when we have had 30 years since the last energy crisis to mobilize and unleash the great scientific minds and entrepreneurial talent this country has to offer, to work the problem.

Santello, Barton E.
Page 33 of 117

And it is extraordinary that a corporation can petition to exploit resources managed by United States government, for the purpose of making a profit, at the same time having it being a detriment to the very people for which the land is suppose to be managed for. Many of the people hear tonight don't want to cut a deal, or work to mitigate potential damage. We don't want this project. Collectively as a nation, we have already compromised away a majority of our wild-lands. Southern Arizona, Arivaca and the Coronado National Forest have their backs up against the border. How is it not reasonable for citizens of this area to stand-up and fight to protect the small, unspoiled percentage wild-lands that remain.

I would like to close by quoting Dr. Cornel Pewewardy of the Comanache Nation, which I believe speaks for many in this room tonight: "I am no chief, but, I am a warrior in education; and a warrior's role is greater than merely protecting and providing for the well being of the nation. It involves looking after the welfare of the people seven generations from now. It means we need to recognize threats to future generations and act accordingly. We need not only to understand but to live by saying, we do not inherit the land from our ancestors, we rent it from our children".

Thank you.

Santello, Barton E.
Page 34 of 117

BACKGROUND ON T.E.P.'S TRANSMISSION LINE PROPOSAL

Low Reliability in Santa Cruz County. This concerns our local electrical distributor, Citizens Utilities. Citizens does not generate electricity but is tied to the "world" by a single 115,000 kilovolt (115 kV) transmission line from Nogales to the Tucson "tap." This is like a long extension cord, called a radial, on which most of Santa Cruz County depends for electricity that Citizens buys on the market for us. When this line breaks, our lights can go out. Both lightning and rainstorms along with other reasons may cause this line to fail. In 1998, through a series of long-term failures, we had several significant outages, mostly perceived as the fault of Citizens. A class-action lawsuit was filed. The City of Nogales terminated their franchise with Citizens. After large public protests, the Arizona Corporate Commission (ACC) issued an order to Citizens to "improve reliability" by installing a second transmission line by December 31, 2003, or face a fine of $30,000 per month. This ACC Order also required Citizens to file for a Certificate of Environmental Compatibility (CEC), which is the state's permit to construct a large transmission line.

PNM files for a DOE Presidential permit for electricity sales with Mexico. In late 1998, the Public Service Company of New Mexico (PNM) filed for a Presidential permit, from the Department of Energy (DOE), for electrical sales with Mexico. The PNM proposal is for a 345,000 volt line from Palo Verde switchyard, next to the Palo Verde Nuclear Generation Station, to go from there, through Maricopa, Pinal, Pima and Santa Cruz Counties to Santa Ana, Sonora Mexico, about 60 miles south of Nogales. One of their present five routes goes through Sasabe and avoids Santa Cruz County but the others do. This is PNM's fourth set of routes, as their previous routes had major environmental flaws. This is a complex system, with the goal for PNM to collect fees for users of this "electrical superhighway." A 345,000 to 230,000 volt converter station will be build near Nogales, so that both the US and Mexican electrical grids (circuits) remain independent of each other (failure on one does not impact the other). Electricity will be sold going in both directions, from Mexican power plants or from US power plants, depending on who needed electricity.

TEP files for an ACC CEC and a DOE Presidential Permit for electricity sales with Mexico. TEP, around May 2000, decided that the Citizens' problem in Nogales, could be solved if they build a larger 345,000-volt line (at 500 megawatts, MWs) to Nogales and to Mexico and not let their rival PNM have the business. TEP could then collect the transportation charges (about $2,300 per MW per month). bTEP then joined with Citizens to jointly apply for the CEC for a transmission line system from Sahuarita (West Pima Mine Road, TEP's south substation) to a new Gateway Substation in western Nogales, and from there a 115 kV line to Citizens and another 345 kV line to Mexico. Three 345 kV volt transmission line corridors from Tucson to Nogales are in TEP's August 2000 Presidential permit application. In March 2001, TEP/Citizens filed with the ACC for a CEC for two of the three: the Western (or preferred) and Central (preferred alternative) corridors. TEP publicly stated the Eastern (which mostly expands their present 115 kV easement) corridor as "not viable." This system at 500 MW carries enough electricity for about 25% of Tucson and at least 10 times that ever used in Santa Cruz County, obviously for Mexico. TEP does not provide any electricity services in Santa Cruz County since this is Citizens service area. Utilities are required by Arizona law to provide service in their area as first priority; thus, Santa Cruz County is a secondary or may even be considered less important than a possible Mexican customer.

DOE and USFS requires an EIS to make a decision on a Presidential Permit. The DOE has determined that there could be "significant environmental impact" if either the PNM or TEP transmission lines were ever build. The DOE requires TEP and PNM obtain a favorable Record of Decision based on an Environmental Impact Statement (EIS) before issuing a Presidential permit. In addition, both have routes that go through the Coronado National Forest's Tumacacori and Atascosa Mountains, including Bear Valley, Sycamore Creek and Sycamore Canyon, along Ruby Road and skirts the Pajarito Wilderness Area, all inside the NF. Only a few hundred feet separate the Pajarito Wilderness Area and the Forest Service roadless area along Ruby Road. In addition, the Forest Service roadless area, to the East, requires an additional variance from the USFS designated utility corridor.

P.32

Santello, Barton E.
Page 35 of 117

BACKGROUND

Thus, all TEP and PNM routes proposed in Santa Cruz County require a completed EIS and a favorable Record of Decision by the DOE before a Presidential permit can be issued and by the US Forest Service before a Use Permit can be issued. TEP last testified that the "draft" EIS would be finished about February 2002 (a doubtful date), with public hearing soon afterward, and their Final EIS and RODs by July 1, 2002, (a more doubtful date). TEP says this is needed in order to meet the Dec. 31, 2003 deadline established by the ACC. It is noted such a deadline could be changed by the ACC.

Maestros Group proposes an electricity generation plant in Nogales. After PNM's public series of EIS Scoping Meetings brought wide-scale opposition throughout Pima and Santa Cruz Counties, a local group of environmentally aware and sensitive residents determined that a local electrical generation plant, with all of the EPA air and water pollution controls, could solve all the above issues, without any long power lines, and provide many benefits for this county (win-win situation). This group, called Maestros Group, filed with the DOE for a natural-gas, 500 MW electrical generation plant, near Nogales, to transmit electricity to Mexico and will built another 100 MW plant for Citizens for our county. This can meet the ACC Order, sell to Mexico, provide excellent jobs where the unemployment rate exceeds 20%, provide an environmental safe facility (with US law enforcement) and also provide natural gas to Sonora, which has none. Nogales, AZ is an EPA air pollution impacted community due to particulate matter (dust). Nogales has not been able to submit any plan that will attain the minimum EPA air (PM) standards. The Maestros' proposal to use its cooling water (effluent) from its plant spayed on dirt roads in Mexico may reduce our significant air pollution problem. The only possible significant environmental impact will be a new natural gas line from Tucson to Nogales. When compared to the impact of transmission lines, this appears to have the best cost-benefit solution for all including Mexico. Our 40-year old natural gas line requires replacement and several gas line routes appear to cause minimal environmental impact other than trenching, filling and proper rehabilitating. There is no ground water impacts as the proposed plant will use effluent from the Nogales International Wastewater Treatment Plant that "legally" is owned by Mexico, based on a 1944 treaty. Use of Mexican-owned water to provide Mexico electricity appears to all as a satisfactory trade off.

TEP's CEC undergoes extended CEC hearings with 'western' corridor recommended. The TEP, ACC-CEC application has undergone a series of eight hearings since May 2001 finally resulting in a recommendation by the ACC Power Plant and Transmission Line Siting Committee on October 19 for a 345-kV transmission line in a 2-mile wide Western (the TEP Preferred) Corridor. TEP will decide actual tower sites for their 120 to 140 foot tall towers, after it does preliminary engineering (not yet done). We really don't know where inside a two-mile wide corridor they want to go. One ACC Siting Committee member said "they can be anywhere between Sahuarita and Nogales." TEP's request for 120 foot high by 118-foot wide "lattice" towers was disapproved. These recommendations were made prior to even the "draft" EIS being released (still in the NEPA Scoping phase) and was based solely on TEP-provided and paid consultants and very simple analysis. Various Intervenors found gaping holes in TEP's lack of understand of the terrain, the environment, and the historic/cultural impacts they will have on Santa Cruz County.

Both Applicants and Intervenors challenge the Siting Committee's recommended CEC. Since the recommendation on 19 October, several interveners have requested a "review" or rehearing by the Corporation Commissioners. TEP/Citizens and the Arizona Utilities Investors Association (AUIA) have also requested a "review" for a specific issue. The Interveners are mostly interested in delaying the project until the EIS has been completed, expected rate increased due to this new TEP line that Citizens will not use, and lack of environmental understanding by TEP which is necessary to build such a project in the wilderness regions of our county. In particular, the selection of the Western corridor, without a competent environmental assessment is frightening. This Bear Valley area is filled with historic sites, from the Hank and Yank's defense against an Apache raid, the last Indian raid in Arizona, stretches for miles with no people or any connection with civilization. Such places are disappearing at a fast pace, this is one that opening up to construction roads will lead to continual destruction.

P.33

Santello, Barton E.
Page 36 of 117

ARGUMENT AGAINST T.E.P.'S TRANSMISSION LINE PROPOSAL

General Arguement: TEP proposal has been shown at the Power Plant and Line Siting Committee Hearings to be flawed, incomplete and inaccurate. TEP's proposal was not demonstrated superior as compared to a local, natural gas, generation plant (that exceeds all EPA requirements) in Nogales.

As a simple ratepayer, I would not want this TEP proposal, since it will raise my rates based on high capital cost and continuous costs of over $1M per year for unused electricity being transported hundreds of miles, when three or so miles locally transmitted will do. As an engineer, I wouldn't submit such a technically deficient proposal to my management; I would be embarrassed. As a citizen, my ethical standards would never let me destroy the environment by slicing through a national forest and such places as Bear Valley and Sycamore Canyon. Nor would I ever let anyone trample on the historic sites these power lines and access roads will destroy. As a utility company, I would never waste my shareholders funds on such an ill-conceived, destructive, 50-year project, when more viable alternatives are readily available that are less risky with significantly higher electrical reliability and quality for all consumers. As a Mexican electrical utility, I would not want to pay the highest possible prices for electricity, and thus would reject this highest-cost option to sell electricity to my newly democracy-energized and developing nation. As a parent, I expect my great-grand children will be able to see and enjoy the natural and historic beauties found in our area and the same for later generations to come. As a human, I would prefer to defend all of these rare, endangered, threatened and special animal and plant species, who have no voice no say in these matters. I would want to protect all of these wonderful, diverse sky islands, riparian areas and deserts, we all love so much. As an American taxpayer and voter, I expect our utility and government officials to remember that our federal laws require, in these cases, a complete assessment of the environmental impact before granting any approvals to move forward.

The application appears deficient in each areas required by the Arizona statutes under A.R.S. 40-360.06A and B. These are numbered below, to parallel the legal sections of the statute:

360.06A1. It failed to coordinate it plan with others (PNM and Maestros) to prevent duplication of facilities.

360.06A2. It failed to account for all fish, wildlife, and plant life by "excluding" from further study endangered 31 species including the Sonoran Chub, which was noted found in Sycamore Canyon. Really, this fish lives only in Sycamore Creek, whose watershed is Bear Valley that drains westward, not like most other Arizona rivers into the Gila River. This small watershed, listed with USFWS, is quite unique and with its unique species deserves a highest degree of protection. One dead Sonoran Chub was found on the dirt and rugged Ruby Road where this Creek crosses, where a new bridge has been constructed by the USFS for protection. Other species, including the cactus ferruginous Pygmy-owl, five-stripped sparrow, Pima pineapple cactus, lesser long-nosed bat, and the jaguar, amongst dozens of others require field survey work, analysis and in-depth habitat understanding. The computer printout and weak "expert" testimony left knowledgeable residents with significant doubts that TEP's long-term and paid consultants understood these corridors' natural environments. About 200 hours of field work, mostly so they could align photographs and Pygmy surveys, was done. No Pygmy owl surveys were done south of Arivaca Road or inside the National Forest, where documented sightings are known.

360.06A3. It failed to provide the required noise "levels" which means numerical measures in decibels, other than to state "acceptable" a very subjective, non-defined term.

360.06A4. It failed to discuss "recreational benefits" and ignored the significant investment by the USFS and Arizona Fish and Wildlife Service for Lake Pena Blanca, campgrounds, world-famous butterfly sighting areas, and superb hiking trails with grand vistas only famous in Arizona. From a safety point, the applicants never mentioned that the Central (Preferred Alternative) route's safety problems with its shared natural gas line. The radiated energy from these lines penetrates the ground and can corrode the 40-year old gas line, can induce electricity into the gas line with "shocking" effects by a consumer who stove or clothes dryer receives gas and electricity simultaneously. In addition, natural gas leaks can also explode and damage the power lines.

P.34

Santello, Barton E.
Page 37 of 117

ARGUMENT AGAINST

TEP does not even have the gas line owner's permission to share the easement. The Hearings determined that there are no National standards for a safe separate distance between high voltage electric and natural gas lines. They said that is some other (FERC, DOT, or ?) agency's problem. TEP said such a liability would be "decided in court" but most want issues solved before going to court.

360.06A5. It failed to even list all the National Historic Register sites along these routes. Only this incomplete list was provided, and after a month's recess, TEP was only able to make minor changes. At least two local historical societies have expressed concern that local cemeteries, Native American ruins and sacred sites were missing from the list. The TEP "environmental" consultant testified that at least 60 to 70% of these routes had never had an archaeological or biological survey. Another TEP "environmental" consultant then testified that "conducting a survey" would cause more damage than construction. Serious doubts as to her credibility resulted as foot prints caused by cement trucks, lowboys, bulldozers, cranes, and "tension" vehicles are surely more damaging than those by humans. But she was an "expert" so her sworn testimony must be true.

360.06A6. If failed to view the "total" environment, which includes the desirable scenery, viewed by thousands of tourists, artists and residents. The stretch of road between Nogales and Green Valley contains welcome open spaces for our Mexican visitors. Tubac, Tumacacori, and Arivaca have dozens of professional artists with painting classes of the Santa Rita, San Cayetano, Sardinia Peak, Tumacacori and Atascosa Mountains. Residents design houses and place windows for views, which have significant personal and property values. As one speaker said, it is the "visual integrity" that's so important to everyone who lives in this rural area.

360.06A7. If failed to provide the technical means to ensure high reliability by not properly connecting the US and Mexican electrical systems. Instead, TEP has proposed to add two Mexican states, over 650 miles south of the border, into the US western grid. TEP testified that none of these 50 or more generation plants are known to meet the US reliability standards. This April, both of these Mexican states experienced a catastrophic cascading electrical failure for 7 hours to over 24 hours of outage. Contrary to all other "grid boundaries," TEP has no plans to make this connection reliable. Both PNM and Maestros Group have assured reliability at the border.

360.06A8. The $72 M cost for the Western Corridor is the most expensive as there is no easement along most of the route in Santa Cruz County, it is longer, and through the National Forest where the greatest number of protected species have habitats. Of the three proposals, the TEP's provides no employment in Nogales, where unemployment is over 20% for many months of the year, and provides the least increase in the property tax base. The "forever" new transportation charges on the TEP lines will cost the ratepayers at least $50 and maybe $100 million over the lifetime of this project.

360.06A9. It failed to disclose that the TEP south substation lies within the 100-year Floodplain and should be removed to a safer location. It now is adjacent to the Santa Cruz River. TEP did testify that the Santa Cruz River had a 100-year flood every 10 years. Well, those are 10-year floods. The US Army Corps of Engineers requires critical facilities, such as this substation, to be able to withstand a 500-year flood. The EIS is doing a Floodplain and wetlands analysis.

360.06B. It failed to consider the overall impacts on the environment and completely failed to consider other, reasonable alternatives. Nowhere were route-to-route comparisons made. The selection criteria of one route could not be assessed. Most additional areas considered by the EIS were not mentioned in the CEC application. These include impacts of socioeconomic impacts and a comparative effects analysis (CEA). The TEP EIS will include a CEA comparing TEP, PNM, and local generation plant, versus No Action. Without such a comparison, the overall impacts cannot be assessed and were not assessed during the Siting Committee hearings; due to the limited role this Committee performs its hearings on an application-by-application basis and does not consider the larger picture.

P.35

Santello, Barton E.
Page 38 of 117

ARGUMENT AGAINST

Both Applicants and Intervenors challenge recommended CEC. Since the Siting Committee recommendation on 19 October, several intervenors have requested a "review" or rehearing by the Corporation Commissioners. TEP/Citizens and the Arizona Utilities Investors Association (AUIA) have also requested a "review" for a specific issue. The Intervenors are mostly interested in delaying the project until the EIS has been completed. The selection of the Western corridor, by the Line Siting Committee, without a competent environmental assessment is not fair to the public or environment. The Bear Valley area is filled with historic sites, from Hank and Yank's defense against an Apache raid; the last Indian raid in Arizona; unspoiled stretches for miles, with no people, or any connection with civilization. Such places are disappearing at a fast pace. This project proposal will open up this fragile land to the construction of roads, which ultimately will lead to severe environmental degradation.

P.36

Santello, Barton E.
Page 39 of 117

APPENDIX I

Santello, Barton E.
Page 40 of 117

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Chairman William Mundell
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Case 111, TEP/Citizens Tucson-Mexico Joint Transmission Line Proposal

PUBLIC HEARING COMMENT
December 12, 2001 - Tucson

I am speaking today as private citizen and a property owner from the town of Arivaca, in opposition to TEP's proposed '*Western Route*' as recommended by the Arizona Corporation Commission (ACC) Transmission Line Siting Committee. Several residents of Arivaca who could not attend today's hearing, due to work responsibilities, have asked me to speak on behalf of them, against the subject '*Western Route*'. A proxy-petition containing the signatures of these individuals, is attached to a copy of my public comment.

Collectively, we are outraged at TEP's proposal to permanently disrupt a rural outback and national forest, in trade for a self-serving business plan. These hearings have made it clear that TEP's 345 kV - '*Western Route*' option, not only has pu in jeopardy the Commission's mandate to provide Nogales with reliable power by December 2003, but they have proposed a route with extreme environmental consequences.

Point 1) Let Us Look at TEP's Proposal For What It Really Is

When I go to the building department to file a permit for a house, I must submit a blueprint, specifications and complete all the required forms. If the plan and paperwork does not and satisfy all the requirements of the state and county, my application is not even considered for acceptance. TEP's proposal, as submitted to the ACC, seems more like an outline, than a well-defined document. The proposal asks more questions than it answers. For example: Where are these lines going to be placed and how wide will the right-of way be? Or, what are the 'real' reasons for crossing the border? To buy power? To sell power? And what are the environmental consequences? How can the ACC make a decision on a moving target? The proposed '*Western Route*' through the Coronado National Forest, reveals itself as a separate, flawed and greed; proposal by TEP. In my opinion, TEP is using the requirement to supply Nogales with power, to push their own agenda at the expense of a unique southern-Arizona scenic outback, the people's wishes, and the environmental integrity of our national forest. The Commission should reject TEP's proposal, because it fails to deliver acceptable levels of accountability quality, completeness and integrity.

Point 2) Let Us Preserve Arizona's Rural Character and Environment

In the Coronado National Forest, besides the visual obstruction of the transmission towers, construction will result in new access roads being built, leveling of areas for storage of equipment, dumped/piled materials, off-road driving, erosion and result in plant and animal habitat degradation. We cannot allow this level of destruction to happen in the biologically sensitive area of the Pajarita Wilderness, containing the perennial stream within Sycamore Canyon.

The area's scenic beauty must be preserved. According to state figures, Arizona's population will grow from approximately 5 million people today, to 11 million in 50 years. Will people have sufficient destinations to go in the future where they can feel that they have truly gotten away in the wilderness? Tourism accounts for 3 times the revenue compared to that of Arizona's copper industry. This unspoiled land has great economic value to Arizona.

When I moved to Arizona, my intention was to build an energy efficient adobe home and power it 100% with solar photovoltaics. I chose the remote town of Arivaca because I found it to be a micro-culture of people who are trading-off conveniences for an alternative living style. For some, that includes off-the-grid power generation and earthen homes. Also, Arivaca is also the place where people from Tucson and around the world come to escape cities, recreate and nature

Santello, Barton E.
Page 41 of 117

watch in the Coronado National Forest and the Buenos Aires National Wildlife Refuge. Transmission lines are a total contradiction to the town's rural character and the independent determination of the people of Arivaca.

Point 3) Let's Embrace More Choices For Real Energy Security

I am not here today to be an obstructionist. I am a realist that understands the growing need for electric power. We have potential energy problems in Arizona because people are moving to the desert in great numbers due to population expansio and demographic shifts. Most arrive without fully understanding the risks associated with living in the desert: A desert th is short on water and services. As a culture, we take for granted that there will be reasonably priced gas for whatever vehicle we choose to buy; heat for whatever size house we build; or, ample water for irrigation, pool and gardens. We buy electric appliances never considering the energy they consume. This is because these resources seem to have always been there and are perceived they always will be. We expect them; we demand them; and convenience has been defied in our culture. But the simple truth is we are dependent on the production and distribution of energy. We have to become aware, self-observe and begin to take responsibility for our energy choices.

Decisions made from crisis and fear, are not good decisions. And in a crisis, choices are limited. In this proposal, the people have been given only 2 choices. 1) Power by transmission lines, 2) or, 'no power'. TEP's idea to build transmissio lines into Mexico connected to the US grid could make this so-called reliable power, vulnerable to terrorists. The recent collapse of the Enron Corporation has shown us that trading energy on the commodities market is an immature concept at best. By building this line, TEP is strengthening its position to move power around a grid and set up a tollbooth. Thus, connecting to a national grid may mean that a power plant in your backyard is no guaranty that you will have power; unless you pay what the market says. And if you don't, the energy will be distributed to the state willing to pay the price. Look at California as an example. The 'no power' option is fear-based. The people have never been given a third choice; that of decentralized, alternative, and locally generated/distributed power. Where are these options for 'real' security? What is personally transformative about alternative and decentralized power generation is that one can take responsibility for the power they use. The conscious use of electricity becomes the mechanism for energy conservation. No vote should be cast against the environment, so it can be a sacrificial lamb to our appliances.

Point 4) Let Democracy Carry The Day

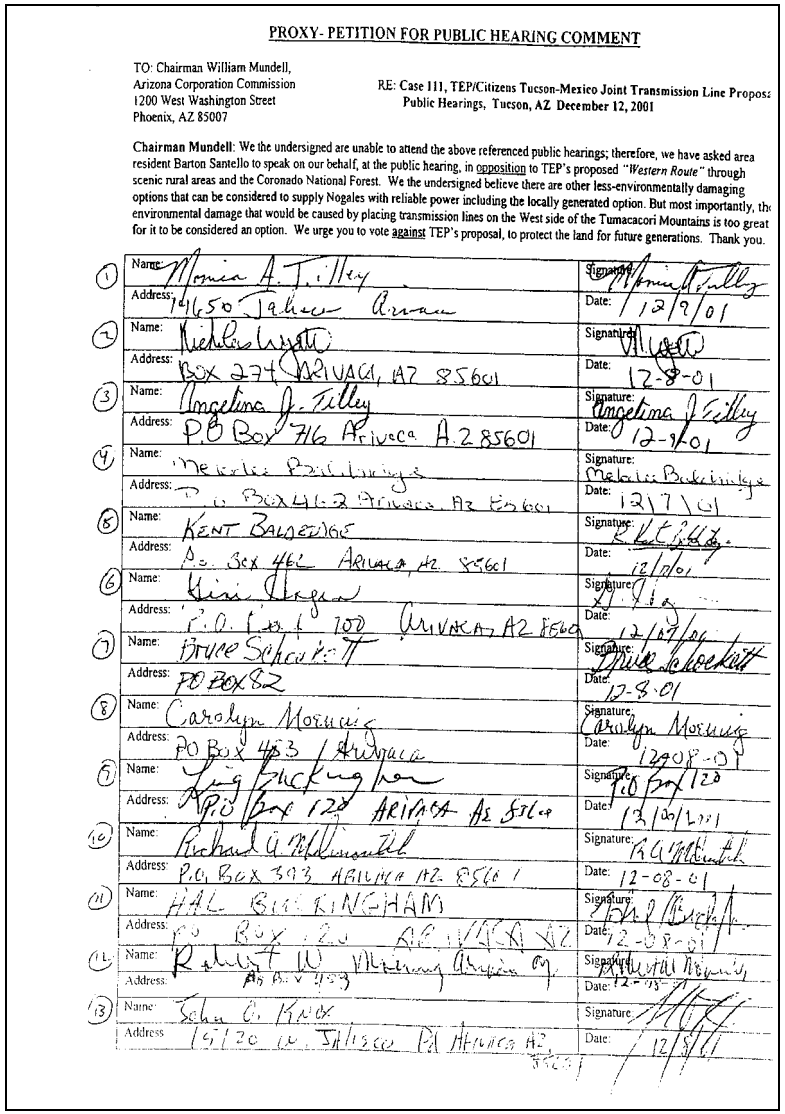
What has happened to the people's voice? We have special interest lobbyists influencing legislation over the majority's consensus. And we have decisions being made by remote governmental bodies that override local citizen's input.

Recently, while pondering the issue of dependency on transmitted power in relation to what it means to have energy choices, I realized TEP's proposal is their model of how things should be. In other words, it is their 'dream'. We have to realize that all these years we have passively bought into someone else's dream. The dream of transmitted power. While that may have been acceptable in the past when options were limited and energy supplies were more plentiful, today, science and technology have given us new choices. But for reasons of corporate expediency, these options have been kept hidden from our view.

I am an aerospace engineer that has worked on the Space Shuttle, helped develop advanced automotive gas-turbine engines and project managed the development of commercial jet engines. In my career, I have seen scientists and engineers innovate and develop machines and systems of incredible complexity. Based on these experiences, I can never accept those who say our alternative energy options are limited, or that we are not prepared to implement decentralized energy systems. The only thing not prepared; is our focus, commitment, and will.

In reviewing the records of the Transmission Line Siting Committee Hearings, I believe the ACC Commissioners will find that the Intervenor's have effectively exposed the shortcoming and inappropriateness of TEP's proposal. And the Commissioner's will notice that an overwhelming majority of the people have spoken knowledgeably and articulately against TEP's proposal. I urge the Commissioners of the ACC to vote against the proposed '*Western Route*'. Saying NO to TEP, still leaves options to address the needs of Nogales, yet buys us time to consider less harmful options for long-term power needs for south-central Arizona. We want to be empowered and part of the process, not beaten-down and cynical. TEP has only money to loose by submitting these proposals; the people and wildlife have everything to lose - forever. Commissioners: Give us options we can get excited about, and allow us to have a choice in taking responsibility for our own 'dream': The dream of true energy independence. Thank you.

Santello, Barton E.
Page 42 of 117



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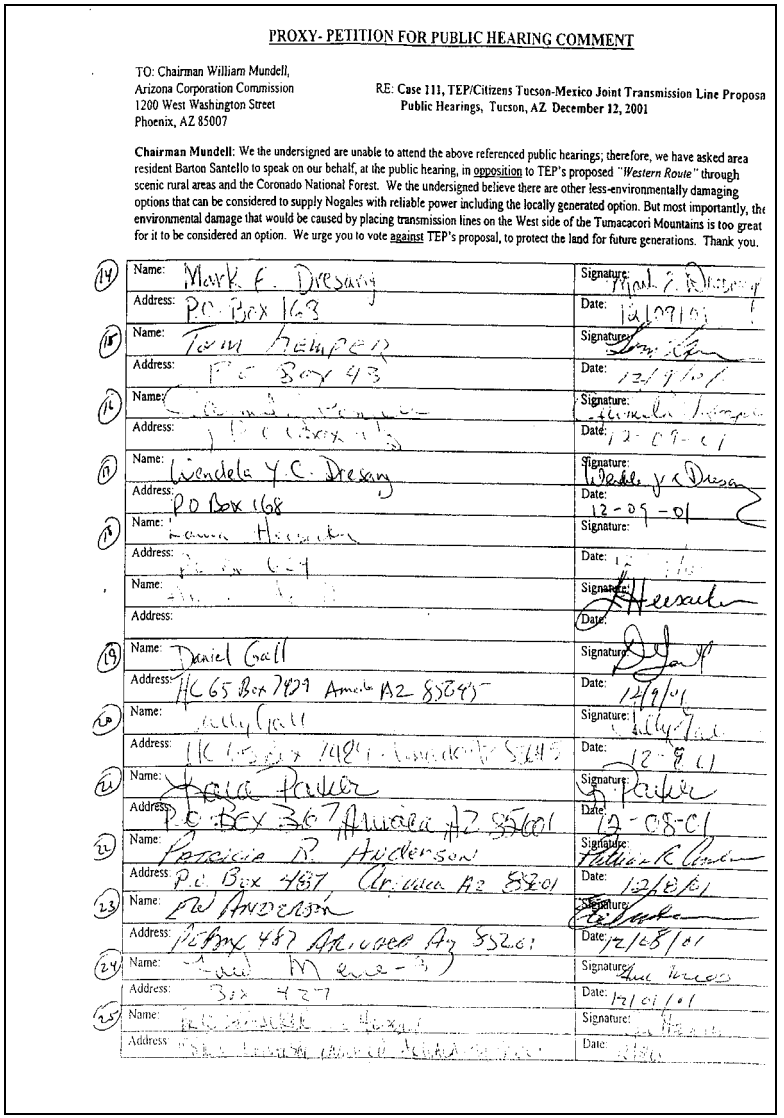
	Name	Address	Signature	Date
1	Monica A. Tilley	14650 Jalisco Arivaca	Monica A Tilley	12/9/01
2	Nicholas Wyatt	Box 274 ARIVACA, AZ 85601		12-8-01
3	Angelina J. Tilley	P.O Box 716 Arivaca A.Z 85601	Angelina J Tilley	12-9-01
4	Melanie Bakkinigs	P.O Box 463 Arivaca, AZ 85601	Melanie Bakkinigs	12/7/01
5	KENT BALDRIDGE	P.O. Box 462 ARIVACA, AZ 85601		12/9/01
6	Kim Hogan	P.O. Box 709 Arivaca AZ 85601		12/09/01
7	Bruce Schaeffer	PO Box 82	Bruce Schaeffer	12-8-01
8	Carolyn Morris	PO Box 463 Arivaca	Carolyn Morris	12908-01
9	Greg Buckingham	P.O Box 120 ARIVACA AZ 85601	P.O Box 120	12/10/2001
10	Richard G McDonald	P.O. Box 393 ARIVACA AZ. 85601		12-08-01
11	HAL BILLINGHAM	P.O. Box 220 ARIVACA AZ		12-08-01
12	Robert W Whitney	PO Box 709		12-08-01
13	John C. Knox	15120 N. Jalisco Pl Arivaca AZ 85601		12/8/01

Santello, Barton E.
Page 43 of 117



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	Name	Address	Signature	Date
14	Mark E. Dressang	P.O. Box 163	Mark E Dressang	12/09/01
15	Tom Kemper	P.O. Box 43		12/9/01
16		P.O. Box 43		12-09-01
17	Wendela Y.C. Dressang	PO Box 168	Wendela Y C Dressang	12-09-01
18	Laura Hessler	P.O. Box 64	Hessler	
19	Daniel Gall	HC 65 Box 7029 Amado AZ 85645		12/9/01
20	Kelly Gall	HC 65 Box 7029 Amado AZ 85645	Kelly Gall	12-8-01
21	Joan Parker	P.O. BOX 367 Arivaca AZ 85601	Parker	12-08-01
22	Patricia R. Anderson	P.O. Box 487 Arivaca AZ 85601	Patricia R Anderson	12/8/01
23	RW Anderson	PO Box 487 Arivaca Az 85601		12/8/01
24	[illegible]	Box 427		12/01/01
25	[illegible]	[illegible]		[illegible]

Santello, Barton E.
Page 44 of 117

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	Name:	Signature:
26	Address: mailing: P.O. Box 209, ARIVACA, AZ. 85601 35280 S. Gold Nugget Trail, ARIVACA, AZ. 85601	Date: 12-7-01
27	Name: Rick Germany Address: mailing: P.O. Box 209, Arivaca AZ. 85601 35280 S. Gold Nugget Trail, Arivaca, AZ 85601	Signature: Date: 12-7-01
28	Name: Jay Lucas Address: P.O. Box 550 13560 W. UNIVERSAL RANCH RD ARIVACA AZ 85601	Signature: Date: 12-8-01
29	Name: Leslie B. Brewer, M.D. Leslie Brewer Address: P.O. Box 550 13560 W. Universal Ranch Rd. Arivaca, AZ 85601	Signature: Date: 12/8/01
30	Name: James R. Bradley Address: P.O. Box 729 Arivaca AZ 85601	Signature: Date: 12-8-01
31	Name: Robert Fricchione Address: PO Box 444 Arivaca Az 85601	Signature: Date: 12-8-01
32	Name: EDWARD Lee MARSHALL Address: PO Box 212 ARIVACA AZ 85601	Signature: Date: 12/8/01
33	Name: RAFFAELA G. ANDREWS Address: 12333 N. St. POBox 145 ARIVACA AZ 85601	Signature: Date: 12/8/01
34	Name: Gloria Williams Address: P.O. 31951 W. Wedgeford Arivaca AZ 85601	Signature: Date: 12-8-01
35	Name: Address:	Signature: Date:
36	Name: Address	Signature: Date:
37	Name: Address	Signature: Date:
38	Name: Address	Signature: Date:

Santello, Barton E.
Page 45 of 117

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	Name:	Signature:
39	Address: 5522 W. CINDY ST CHANDLER, AZ	Date: 12.5.2001
40	Name: Sherri L. West Address: 2560 W. Plata Ave. Mesa, AZ 85224	Signature: Date: 12/6/01
41	Name: Sam SEBRING Address: 6536 E QUARTZ ST MESA AZ 85215	Signature: Date: 12/6/01
42	Name: Jim Kern Address: 2802 E. Rockledge Rd, Phx AZ 85048	Signature: Date: 12/6/01
43	Name: Address: ~~LARRY M. BECKELMAN~~	Signature: Date:
44	Name: LARRY M. BECKELMAN Address: P.O. Box 85 ARIVACA, AZ 85601	Signature: Date: 12-7-01
45	Name: Francine Pierce Address: PO Box 9 Arivaca, AZ 85601	Signature: Date: 12-7-01
46	Name: JOHN REGAN Address: POB 1035 ARIVACA AZ 85601	Signature: Date: 12-7-01
47	Name: Jeanne Ferris Address: P.O. Box 94 Arivaca AZ 85601	Signature: Date: 12-8-01
48	Name: Address:	Signature: Date:
49	Name: Address:	Signature: Date:
50	Name: Address:	Signature: Date:

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Page 46 of 117

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	Name:	Signature:
51	Address: 35955 Mesquite St Arivaca AZ 85601	Date: Dec 8-01
52	Name: James H Johnson	Signature:
	Address: 16670 Arivaca Rd	Date: 12-08-01
53	Name: Charlie Tucker	Signature:
	Address: 16200 Penny Lane Arivaca	Date: 12-8-01
54	Name: Nancy Tucker	Signature:
	Address: ~~26~~ 16000 Ranger Rd	Date: 12-8-01
55	Name: Rhianne Tucker Rexanne Tucker	Signature:
	Address: 16200 Penny Lane Arivaca P.O. Box 72	Date: 12-8-01
56	Name: Jon Tucker	Signature:
	Address: 16000 Ranger Rd	Date: 12-8-01
57	Name: John Hamilton	Signature:
	Address: 6994 N Saucedo Dr Tucson AZ	Date: 12-8-01
58	Name: Kathleen C. Mannella	Signature:
	Address: 913 E. 3rd St. Tucson AZ	Date: 12/8/01
59	Name: Janet M. Arnaudy	Signature:
	Address: 12615 E. Sands Ave Vail AZ	Date: 12-8-01
60	Name: Stanley Peterburg	Signature:
	Address: [illegible]	Date: 12/8/01
61	Name: Sarah D. Cook	Signature:
	Address: 16725 W. Arivaca Rd Arivaca AZ 85601	Date: 12-8-2001
62	Name:	Signature:
	Address:	Date: 12-[illegible]-2001
63	Name:	Signature:
	Address:	Date: 12-8-2001

Santello, Barton E.
Page 47 of 117

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	Name:	Signature:
64	Address: PO Box 393, Arivaca, AZ	Date: 12-8-01
65	Name: VANCE HANSEN	Signature:
	Address: PO Box 441 Arivaca AZ	Date: 12-8-01
	Name:	Signature:
	Address:	Date:
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Santello, Barton E.
Page 48 of 117

APPENDIX II

Santello, Barton E.
Page 49 of 117

TUMACACORI – ATASCOSA HIGHLANDS

Proposed Wilderness Area
77,200 acres

These mountains are known for their spectacularly eroded, lichen drenched cliffs and undulating hills of grass and madrean oaks. The area is also an exceptional arena for the intermingling of sub-tropical and northern species plants and animals. The Atascosa mountains host an array of species that are absent or very rare further north, including the Tarahumara leopard frog, Brown vine snake, and Whiskered screech owl. Vegetation is primarily Madrean Oak Woodland, dominated by Mexican Blue and Emory oak. Semi-desert grassland covers the lower elevations, especially in the east, with Velvet and Western Honey mesquite comprising most of the woody cover. Riparian strips contain Velvet ash, Bonpland's and Desert willow, Arizona black walnut, Fremont cottonwood, and Desert hackberry among other water loving trees and shrubs. Chiricahua leopard frogs have been documented in Ramanote Canyon and a smaller tributary, Lion Canyon.

The Tumacocori – Atascosa Highlands is one of the largest, wildest roadless areas on the Coronado National Forest. Elevations range from approximately 3,500 to 6,440.

These highlands include the Tumacacori Mountain range in the north and the Atascosa Mountains to the south. Major vegetative types are Desert Grasslands, Chapparal and Madrean Oak Woodlands.

Cedar, Peck and Pine Canyon riparian areas and Atascosa ridge are considered to be special ecological and geological features of the area according to the Forest Service. The scenic value of the entire area is rated at the top of the scale by the Forest Service, in the Coronado National Forest Land and Resource Management Plan.

The topography of the area is a mosaic of rolling hills and deep draws cut by many steep, rough canyons. The surface is arid and rocky with little topsoil. Vegetation is not dense, but presents a pleasing pattern of golden grasses dotted liberally with green Oaks and Chaparral species. The visitor is presented with a climatically mild, colorful, spacious terrain of endless rolling hills and valleys in this truly beautiful area.

This area is very productive wildlife habitat, especially for Coues white-tailed deer and Javelina. This large expanse of wild roadless country serves as special wildlife habitat for larger species that cannot survive in smaller core habitat areas. Indeed, *Canis lupus baileyi* – the Mexican gray wolf, once existed in this wild area in great numbers.

Santello, Barton E.
Page 50 of 117

Archive Site for State Department information prior to January 20, 2001.
This site is not updated.
RETURN to the current State Department web site.

Biosphere Reserves in Action: Case Studies of the American Experience

INTERNATIONAL SONORAN DESERT ALLIANCE Click here for MAP

The International Sonoran Desert Alliance, a recently incorporated tri-national and tri-cultural organization, is seeking to promote cooperative protection of resources, ecologically sound economic development, and improved responsiveness of public policy to local needs and is applying research and local indigenous knowledge to issues and needs. The story is remarkable for the sizeable barriers it has overcome. Despite the three nations and three languages, an international border dividing developed and developing economies, and uncontrolled development of a sparsely populated area spread over five million hectares, progress to date has been impressive.

I. AREA DESCRIPTION

The transborder region of southwestern Arizona and the adjacent areas in Sonora and Baja California Norte in Mexico contain a cluster of three biosphere reserves (BR)--Organ Pipe Cactus National Monument (ORPI) in the United States and El Pinacate y El Gran Desierto de Altar and Alto Golfo de California y Delta del Rio Colorado in Mexico. According to UNESCO classification, the biosphere reserves are in the Sonoran biogeographical province of the warm desert/semidesert biome.

Much of the northern part of the area has basin and range topography with uplifted block type mountain ranges of volcanic origin. To the south are the volcanic craters of the Pinacate lava fields; several mountain ranges; the extensive high dunes of the Gran Desierto; and the riparian, estuarine, and marine areas of the northern Gulf of California. This is one of the world's most biologically rich warm deserts. The diverse fauna includes particularly large numbers of small mammals and reptiles. The flora includes a remarkable variety of succulents, including the columnar cacti, the Organ Pipe and Saguaro, which are widely recognized symbols of the Sonoran Desert region.

The area has been occupied by indigenous people for over 10,000 years, most recently by the Hia-Ced and Tohono O'odham who have lived here since pre-Columbian times. Father Kino arrived in the 17th century and established a mission near Sonoyta. European exploration continued into the 19th century, with one noteworthy explorer, R. W. H. Hardy. The first permanent white settlers were cattle ranchers and miners who moved to the area in the late 19th century. The rise and demise of the copper industry, steadily increasing tourism, recent development of agriculture in the Sonoyta Valley, and attractiveness as a retirement location have influenced current settlement patterns. The area is sparsely populated with a few communities located at some distance from each other.

II. MAJOR ISSUES

The most significant issues are dealing with projected population growth and developing a regional economic base that includes an ecologically sustainable mix of traditional and contemporaneous land uses. Of particular concern are the actual and potential effects of the changing U.S.-Mexico trade relationships on the development of a sustainable regional economy.

Santello, Barton E.
Page 51 of 117

Within the BR's zone of cooperation, the principal concerns are maintaining the traditional dry land farming and ranching practices of indigenous people, supporting ecologically sustainable commercial agriculture and farming in Mexico, and accommodating expanding tourism and establishing an economic base for small businesses in U.S. communities. Potential implementation of the North American Free Trade Agreement provides a strong catalyst for regional planning to accommodate anticipated needs for highway improvements, industrial and residential development, and tourist services in ways that enhance the well-being of the region's people without degrading the health and diversity of its ecosystems. The rural region lacks an effective governmental framework for coordinating economic development and environmental protection. Increasing recognition of their vulnerability to the effects of rapid change has increased the interest of residents in identifying their shared regional interests and in working together to define their collective future.

III. BACKGROUND

The transborder region of northwestern Sonora and southwestern Arizona has long been the focus of conservation interest in both the U.S. and Mexico. Established in 1976, the 133,278 hectare Organ Pipe Cactus BR was among the first designated in the U.S. By the late 1970's, Mexico's biosphere reserve program was well underway, although it was nearly 20 years later that two recently designated BR's were established in the state of Sonora. In 1982, a bi-national workshop of scientists and managers proposed the idea of a Sonoran Desert Biosphere Reserve.

In 1988, the Friends of PRONATURA (FPN) and ORPI held a conference that brought together Mexicans, O'odham, and other U.S. residents in an effort to identify mutual needs and interests compatible with the BR concept. With the assistance of the Sonoran Institute, a non-profit organization that seeks to reconcile conservation and development needs, residents in the BR zone of cooperation have established the International Sonoran Desert Alliance.(ISDA)

THE INTERNATIONAL SONORAN DESERT ALLIANCE

*Open to all BR stakeholders
*Grew out of need for new regional economic base
*Overcame apathy and distrust
*Developed recognition of regional interdependence
*Created regional identity
*Well supported by Mexicans, Indian Nation, and other U.S. residents
*Building expanded BR program that will integrate conservation, research, education, and sustainable use

A 12-member governing board consisting of four residents each from Mexico, the U.S., and the O'odham nation was elected to office in January 1994 and will serve to guide ISDA whose membership is open to all residents in the region. Public officials are not members of ISDA but serve in an advisory capacity. The concerns of ISDA are:

Consensus building and information sharing about ecologically sound economic development and shaping public policy to better serve a region divided by an international border.
Developing a framework for cooperation among the protected areas in the BR
Expanding the scope of the BR program to include environmental education and go beyond traditional scientific studies to addressing a broad spectrum of regional needs and concerns.

CHRONOLOGY FOR ESTABLISHMENT OF SONORAN DESERT BIOSPHERE RESERVES

Santello, Barton E.
Page 52 of 117

1960's to early 1970's Various proposals for establishing national and international parks discussed, but not implemented.
1976 UNESCO designates ORPI a biosphere reserve.
1977 Mexico establishes BR as a legal protected area category.
1980 Governor of Sonora begins study of Pinacate region as a possible BR.
1982 National Park Service (NPS) completes regional science program assessment. Regional meeting proposes further study of Sonoran Desert BR with units in U.S. and Mexico.
1986 ORPI dedicates Sonoran Biosphere Reserve Center and launches sensitive ecosystems research program.
1988 First International Symposium on the Pinacate, sponsored by the Sonoran-Arizona Commission and FPN.
1989-90 FPN documents broad support for BR concepts and proposes regional consultative forum. NPS incorporates BR into general management planning process for ORPI.
1992 Sonoran Institute (SI) and FPN coordinate a regional forum, offered by the Lincoln Institute of Land Policy, on regional land-use change and BR's.
1992-3 SI and FPN established ISDA to coordinate participation in BR program. Two BR's are established under Mexico's federal system; nomination now being considered for inclusion in UNESCO BR system.
1994 ORPI received $300,000 appropriated by Congress to further the ongoing efforts of ISDA.

(See Appendix A for a more detailed history of BR's in the Sonoran Desert.)

IV. IMPLEMENTATION

The BR program began with a focus on conservation, education, and scientific activities within the ORPI BR. The park was one of the first to routinely include regional BR concepts in its public interpretation programs through a variety of media, including brochures (in Spanish and English), slide presentations, and ranger programs which emphasize ORPI's relationship to the surrounding ecological and multicultural region. BR status was an important factor in launching the Sensitive Ecosystems Program in 1986. This long-term program of inventory, monitoring, and research has collected information on the status of flora and fauna (including rare and endangered species), documented adjacent land-use trends, and initiated development of a geographic information system in cooperation with adjacent land managers.

In recent years, the BR program has increasingly pursued an ecosystem approach in understanding the co-evolution of people and the desert. The geographic scope of the research has expanded to include neighboring lands and involved researchers from both sides of the border. Important emphases include comparative ecology, risk assessment, ecosystem restoration, and watershed management. Recent studies by NPS and Mexican scientists on regional hydrology and irrigation practices on commercial farms have documented withdrawals far in excess of natural recharge. The project has strengthened the scientific basis for restructuring agricultural practices to reduce water use and contributed to a moratorium on drilling of new wells in the Sonoyta Valley adjacent to ORPI. These and other projects have helped provide the scientific basis for regional land-use planning and for improving the ability of area residents to make informed decisions on the use of their land.

ISDA provides the mechanism for expanding the BR program to involve an ever increasing number of regional interests. The ISDA serves as a regional cooperative that empowers its members to achieve community goals compatible with maintaining a healthy desert ecosystem. During the past several months, ISDA has collected information about regional economic trends, started work to change border management practices, and obtained funding for an environmental education program.

ISDA will seek incorporation as a non-profit with IRS 501(c)3 status. ISDA will act as an independent, international body that will guide future activities in the region. Incorporation as an asociacion civil in

Santello, Barton E.
Page 53 of 117

Mexico, a counterpart to the U.S. non-profit designation, is now being pursued. Public officials from federal, state, local, and tribal governments will serve in an advisory capacity to the ISDA Board of Directors. The funds received from Congress by ORPI in 1994 are specifically for the following projects and are underway.

* Produce an action plan based upon the results of the ISDA conference held in January 1994, addressing health care, environmental education, tourism, protected areas, information exchange, trade and transportation, and economic development.
* Organize and carry out a series of public workshops to be held in rural communities and ejidos throughout the region to present the ISDA action plan.
* Carry out training programs in institutional management and similar needs.
* Produce materials informing resource managers and the public about conservation and economic development needs and activities in the western Sonoran Desert.
* Prepare a report assessing the historical, present, and projected economic activity in the region surrounding ORPI, including the role of tourism and other "clear" or non-extractive industries, and outline alternatives for sustainable economic development.
* Develop and carry out an environmental education curriculum for school children in Arizona, O'odham Nation, and Sonora. This multicultural curriculum will emphasize the unique heritage of the region, human impact on the natural environment, and changing land uses over time. Educators for the United States, Mexico, and Tohono O'odham school districts will participate. This includes program development, teacher training, and field trips.
* Prepare a report assessing the feasibility of establishing a facility that will serve as a center for interpreting the natural and cultural resources of the region and encourage bi-national cooperation in research.
* Prepare and widely distribute an easily accessible, well-illustrated, succinct report identifying the region's natural, cultural, and economic resources and explaining the collaboration among resource managers, residents, and other organizations.
* Inventory and analyze the status of mapped (digital and non-digital) information of the natural, cultural, and economic resources of the region. Prepare a report identifying known information relating to regional resources including detailed regional thematic maps (i.e., land use, vegetation, etc.). Produce a catalog of regional spatial data and resource information sources. Gather digital data and make available for use with ongoing planning, management, and research in the region. Identify gaps in the existing regional database and provide recommendations regarding future data acquisition.

V. BENEFITS, CONSTRAINTS, AND OPPORTUNITIES

The primary benefit enjoyed by all BR stakeholders is their collective ability to shape and benefit from the expanded BR program. ISDA offers a forum for building a common understanding of the ecosystem and for resolving conflicts associated with the management and development of resources. By encouraging communication among people who have traditionally not spoken with each other, ISDA is building recognition of the BR as a meaningful concept of practical value in their lives. As the ISDA's Board of Directors continues to plan and implement activities that persuade remaining skeptics of its good will and effectiveness, the BR will become increasingly relevant to its members and to those it serves.

The recently designated BR's in Mexico offer a means to develop coordinated research and information systems with U.S. land managers to help define goals and objectives for cooperative management.

The new federally designated biosphere reserves in Mexico will attract cultural and ecotourists. The BR program can provide information to help communities take advantage of opportunities to encourage and accommodate increased tourism in ecologically sustainable ways. For example, the Chamber of Commerce of Ajo in the U.S. has received small grants and attracted new enterprises that increased visitation to the

Santello, Barton E.
Page 54 of 117

area for nature-oriented activities such as night sky watching.

Developing effective communication and an atmosphere of mutual trust and understanding is a long-term process. Diverse cultural backgrounds, philosophies, and languages among BR participants are constant reminders of the tri-national aspect of the region. Federal agency managers and residents of the BR are still learning to be open and comfortable with each other.

Lack of funds for ISDA to administer the BR program on behalf of its stakeholders remains an important constraint. More active participation by governmental agencies (other than the long-involved NPS) in program planning and implementation will also be needed.

VI. OBSERVATIONS

The International Sonoran Desert Alliance story is remarkable for the sizeable barriers it has overcome. Three nations, three languages, an international border, people spread over five million hectares, a depressed economy, and the imminent threat of uncontrolled development could not prevent the establishment of an alliance that has put the people more in control of their own destiny. Fundamentally a private, grass-roots initiative, ISDA has begun to find ways to improve the economic situation of the people living in the region while furthering the goals of nature conservation and environmental protection. ISDA relies upon its partners in BR protected areas for assistance in research and educational activities. Incorporating regional sustainable land use into a very successful conservation and research based BR program has produced a framework for fully implementing the BR concept.

The BR program is working well in the Sonoran Desert because:

- BR managers are willing to join as partners with ISDA in advancing the BR program, without taking a lead role.
- ISDA grew out of a private, mostly local, initiative which has succeeded in building self-confidence and self-reliance among its members.
- ISDA was able to build a regional identity and a common understanding and support for the BR program.
- A well-established scientific database has supported a number of projects outside the protected areas of the BR.

Ultimately, the successes noted and yet to come are due to dedicated and effective leaders. For more than 10 years the superintendent of ORPI has committed himself to integrating BR concepts into planning, research, public education, and management involving ORPI in its relationships with its neighbors. He has contributed funds and other types of support to efforts that have resulted in the new BR's in Mexico and the ISDA. The leaders of FPN and SI worked in partnership to bring together a population with a few commonalities and many differences.

PRINCIPAL CONTRIBUTORS

Harold Smith, Superintendent, Organ Pipe Cactus National Monument
Carlos Nagel, President, Friends of PRONATURA
Luther Propst, Executive Director, Sonoran Institute
Wendy Laird, Director, U.S.-Mexico Borderland Program, Sonoran Institute

APPENDIX A: HISTORY OF BIOSPHERE RESERVES IN THE SONORAN DESERT

Organ Pipe Cactus National Monument was officially designated a biosphere reserve in 1976.

Santello, Barton E.
Page 55 of 117

Unlike the United States where BR status entailed no legal obligations, Mexico established biosphere reserves by law as a separate legal category of protected area managed for conservation, research, sustainable economic uses, and local participation. Around 1980, the governor of Sonora sponsored resource studies for assessing the Pinacate region as a potential biosphere reserve.

During the early 1980's, the National Park Service prepared a history of scientific study for the ORPI area. In 1982, a bi-national workshop of scientists and managers reviewed the study, recommended future research directions, and proposed that the concept of a Sonoran Desert Biosphere Reserve, with areas in both countries, be considered for strengthening regional scientific cooperation.

In the mid-1980's, delays in the nomination of the Pinacate Biosphere Reserve in Mexico provided a catalyst for interagency meetings to explore possibilities for developing a regional BR program in the U.S. Linking ORPI with the Cabeza Prieta National Wildlife Refuge and perhaps other adjacent areas was recommended. To provide a base of operations for scientific cooperation, ORPI dedicated a facility near the international border crossing as the Sonoran Desert Biosphere Reserve Center. The park also initiated a major cooperative interdisciplinary research program to assess the status of sensitive ecosystems and support ecosystem management. However, the federal agencies (Department of Defense, Bureau of Land Management, Fish and Wildlife Service, and National Park Service) involved did not act on the BR expansion proposal.

In 1988, U.S. MAB provided a small grant to Friends of PRONATURA to study applications of the biosphere reserve concept in the region. (FPN is a U.S. non-profit organization established to assist its Mexican counterpart PRONATURA in promoting education, research, and information dissemination on environmental issues affecting southwestern North America). During the following year, FPN's president successfully expanded the discussions on the biosphere reserve to include leaders of the Tohono O'odham and local communities, state and local governments, and nongovernmental organizations. These efforts fostered a willingness to explore further the role of the BR in empowering these parties to work more effectively together in addressing shared problems. In 1990 FPN and SI, with support from several agencies and organizations, proposed a regional town hall meeting to enable more than 40 potential BR stakeholders to define the geographic area for cooperation and to develop a coordinating structure for maintaining future dialogue. A regional forum on land-use changes in the Western Sonoran Desert Border Area was held in October 1992. The forum focused on many complex issues, including the potential environmental and socioeconomic effects of the North American Free Trade Agreement, and expanded communication among interested agencies, organizations, and citizens on BR concepts and how to implement them.

Following the forum, SI and FPN organized a series of informal meetings through which area residents agreed to establish the International Sonoran Desert Alliance. ISDA's broad mission is to promote international and multicultural information sharing and consensus-building at the grassroots level within the context of a regional biosphere reserve program.

In Mexico, government officials in Sonora and Mexico City have accelerated efforts to implement BR concepts. In October 1988, the First International Symposium on the Pinacate brought 220 participants to focus on regional resource issues and strengthened interest in establishing a BR in the Pinacate region. A series of meetings and conferences followed which led, in the spring of 1993, to the establishment of two federally protected BR's in Mexico with a total of 1.7 million hectares. El Pinacate y El Gran Desierto de Altar BR has two core areas--302,000 hectare Sierra El Pinacate y Bahia Adair and 42,000 hectare Sierra del Rosario; Alto Golfo de California y Delta del Rio Colorado BR has one core area--160,620 hectare Cienega de Santa Clara. Mexican law requires that management plans for the BR zone of managed use be developed within one year after declaration. The plans are currently being developed with several academic and conservation groups in Sonora.

Santello, Barton E.
Page 56 of 117

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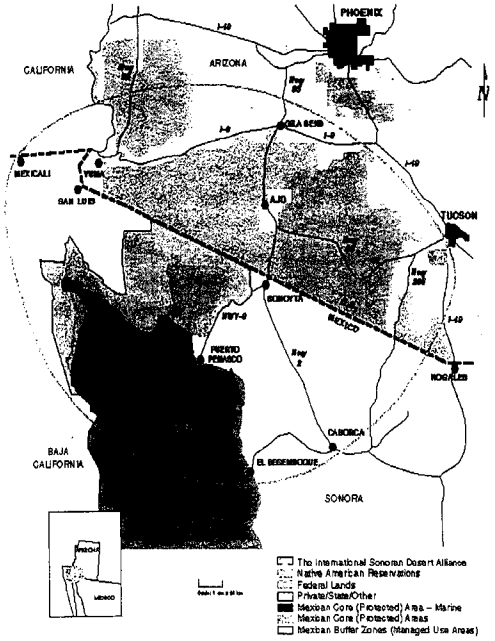
The International Sonoran Desert Alliance

La Alianza del Desierto Sonorense



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Santello, Barton E.
Page 57 of 117

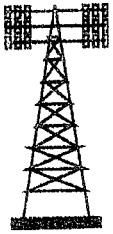
September 2001

Vermilion Flycatcher

Tucson Audubon Society
Leaders in Conservation & Education since 1949

Volume 46, Number 1 ISSN 1094-9909

Power Line Threat to Sycamore Canyon



by Mary Kasulaitis,
Member of Friends of Sycamore Canyon

Tucson Electric Power (TEP) has proposed to build a 345kv power line through a virtually untouched area of Southern Arizona known as the Atascosa Highlands and immediately adjacent to Sycamore Canyon, one of the birding hot spots on the route between Patagonia and the Buenos Aires National Wildlife Refuge at Arivaca.

Sycamore Canyon is within the Goodding Research Natural Area, which is within the Pajarita Wilderness, Coronado National Forest, 26 miles west of Nogales in Santa Cruz County, Arizona on the Ruby Road. Sycamore Canyon has a perennial stream, which is intermittent in places, flowing eventually into the Sonora River in Mexico. Big sycamore, Goodding willow and black walnut can be found here.

Walking perhaps a quarter mile downstream from the parking lot at Hank and Yank Spring, the canyon walls begin to rise steeply around you, forming spires and craggy cliffs. As you go down the canyon you will pass through a number of different ranges and their corresponding bird species. Rose-throated Becards, Elegant Trogons and tropical species from the south can be found here, including, reportedly, the cactus

See SYCAMORE CANYON on page 4

Mt. Lemmon Hotline for Road Repair Status 751-9405

Inside

ANWR 13-14
Arizona Conservationist 11
Calendar 10
Dastardly Ducs 21
Education News .. 30-31
Field Trips 6-7
Field Trip Reports 8-9
In Memoriam 18
KidzBooks 32
Mason Audubon Center News 26-29
Membership information 9
Nature Shop 33
Volunteer Profile 34

Patagonia Roadside Rest Area - Birding Site Still at Risk

by Linda Kennedy
Assistant Director
National Audubon Society Appleton-Whittell Research Ranch

If you've ever visited the Roadside Rest area south of Patagonia on Highway 82, you know the area is not only beautiful, but rich in bird species including the Rose-throated Becard, the Thick-billed Kingbird, and the Violet-crowned Hummingbird. Enjoy it while you can. The Arizona Department of Transportation (ADOT) declared the site a severe rock fall hazard. According to the ADOT rating scale, the potential that some day a rock will fall and hit a vehicle or cause an accident is sufficient to move the highway towards Sonoita Creek and to restructure the cliff. Despite the fact that there have been no reported injuries or accidents at the site, and despite the strong local sentiment to leave the site alone, plans are being developed that could radically alter the area.

In response to emphatic criticism of ADOT's plans by local residents and members of the birding community, a group of citizens has been meeting with members of ADOT and their consultants to explore options. Members of the citizens' committee

See PATAGONIA on page 5

Santello, Barton E.
Page 58 of 117

SYCAMORE CANYON – continued from page 1

Ferruginous Pygmy Owl. R.C. Taylor's *A Birder's guide to Southeastern Arizona* has a good description of the Canyon. The annual Christmas bird count is done in this area, and there is a summer butterfly count here too.

In the canyon bottom and cliff faces can be found unusual ferns, fungi and lichens. Botanist Leslie Goodding campaigned for the protection of Sycamore Canyon, as he realized the value of the unusual habitat found here. He called it "a natural botanical garden." Native fish, including the endangered Sonoran chub, inhabit the waters. Upstream from Sycamore Canyon, the watershed that feeds Sycamore is known as Bear Valley. The watershed is crucial for the protection of Sycamore Canyon, and the Forest Service has spent years gradually increasing the protection, limiting grazing, fencing off areas, and most recently constructing a bridge.

The next canyon to the west is California Gulch, where Five-striped Sparrows can be found. Ruby mining camp is at the top of that watershed.

TEP has chosen the "Western Route" as its preferred route for a power line through Nogales into Mexico. To go into Mexico it needs a Presidential Permit from the Department of Energy. Once built, power could travel either way, north or south. The power line would travel from Sahuarita west of Green Valley to the Arivaca-Amado road, go west for a few miles and then make a turn to the south at about milepost 18. From there it would go south along the foothills of the Tumacacori Mountains past Bear Grass Tank, through Apache Pass, to Sycamore Canyon, skirting the Pajarita Wilderness and Atascosa Peak. It would follow the Ruby Road to Peña Blanca Canyon and go around Castle Rock, (in front or behind, they haven't decided yet) and from thence to Nogales. In this rugged area it will probably have to be a lattice style pole, not just single poles. There are virtually no people on this Western Route, only beautiful scenery, wildlife, and very few roads. The lack of roads and rugged terrain is what has saved this area in the past. There is nothing now to mar your view – no power lines or gas lines at all.

This is part of the Sky Islands group of mountains and is a natural corridor from Mexico for the migration of birds and interesting species like the jaguar. Herbalists find special plants growing in this area. In the early 1990s the Atascosas were considered wild enough for reintroduction of the Mexican wolf. The stream that flows through Sycamore Canyon has been designated as one of the wild and scenic rivers. Further along the route, Peña Blanca Canyon will also be impacted. It has some of the same characteristics as Sycamore. The Tarahumara Frog was once found here.

Most of this route is through the Coronado National Forest, but the Environmental Impact Statement will not be done until the Arizona Corporation Commission approves a route. Another route, the "Preferred Alternate Route" would go down the Santa Cruz Valley. Neither of these routes is preferable to the other, but the Alternate passes by more people in the vicinity of Tubac, who, of course, also object to a power line in their neighborhood. However, consolidation of infrastructure, rather than dispersal into unspoiled areas, is a consideration.

A power plant at Nogales is being proposed by the Maestros Group, which would remove the need for this power line. The Western Route has few people whose homes are threatened, but the wildlife there needs our voice. This is truly one of those last best places!

The Sierra Club, Grand Canyon chapter, has come out against the project. Some local concerned citizens have formed the Friends of Sycamore Canyon. Letter writing is very important. The DOE deadline is the end of August, 2001, but all parties below would probably take comments until the end of September. For more information, you may contact Mary Kasulaitis at: rmkasulaitis@msn.com; 520-398-2344 or: Barton Santello at: bsantello@aol.com. The Friends' address is P.O. Box 613, Arivaca, AZ 85601.

Please contact the Forest Service, the Department of Energy, and the Arizona Corporation Commission and let them know that you oppose the TEP proposal to damage these natural areas in Santa Cruz County, Arizona: Sycamore Canyon, the Pajarita Wilderness, Bear Valley, and Peña Blanca Canyon.

Mr. John McGee, Forest Supervisor,
Coronado National Forest

U.S. Forest Service
300 W. Congress St, 6th Floor
Tucson, AZ 85701
jmcgee@fs.fed.us

Ms Laurie Woodall, Chairman
Power Plant and Transmission Line
Siteing Committee
RE: TEP-Citizens Utility, Case 111
The Arizona Corp. Commision
1200 West Washington Street
Phoenix, AZ 85007

Dr. Jerry Pell
Ms. Ellen Russell

Santello, Barton E.
Page 59 of 117

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Santello, Barton E.
Page 60 of 117

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Santello, Barton E.
Page 62 of 117

APPENDIX III

Santello, Barton E.
Page 63 of 117

Desert Homestead

Transmission Lines Don't Belong Here

No place is sacred they say. That statement is especially true if there is a profit to be made. Arivaca is not exempt from the shortcomings of human nature, where rural areas simply looked upon as untapped resources waiting for the right set of conditions to develop.

The proposed transmission lines by Tucson Electric Power (TEP) will stretch from Sahuarita to Nogales, on the Arivaca side of the Tumacacori Mountains. Huge 140-foot structures will be erected to support cables carrying 345,000 volts along the boundary of Pima & Santa Cruz counties just east of residences in the 40's. Cutting a 125' wide right-of-way scar along its path through the mountains near Apache Pass into the Coronado National Forest, this eyesore will surely ruin people's sense of wilderness and chance to soak in the unblemished natural landscape. The proposed route continues south crossing the Ruby Road, then turns east toward Nogales at the northern boundary of Pajarita Wilderness and beautiful Sycamore Canyon.

TEP claims that the purpose of the transmission lines is to provide needed power to Nogales. But the large power capacity of these lines, suggest additional motivations. With deregulation of energy in full swing, the prospect of selling power to Mexico is a business opportunity for the utility company. It's about moving power around a grid to the highest paying customer. The focus and excitement of the electric industry now, is the business of buying and selling power to new major markets. The transmission lines will have nothing to do with Arivaca.

Further troubling would be the potential building of power plants just across the border in Mexico, where the environmental laws are nonexistent. Some see cheap power flowing back across the border, but it could also mean that the prevailing winds may someday carry foul air and acid rain into Arivaca and the rest of the southwest. If Nogales needs power, they should build their own power plant locally. Why should a corporation be allowed to scar public lands and a beautiful national forest, simply because it looks good on a financial sheet? National forests have been selected for their visual beauty and biological uniqueness. The needs of the many should outweigh the 'greed' of the few. At the time if this writing, I found it quite ironic and sad to hear the Bush administration is in the process of proposing legislation, as part of their national energy plan, to enact new laws to make it easier for the federal government to seize private property, in order to open up construction corridors to run pipelines and power transmission lines.

Even more shocking, buried in one of the proposals, is a government request to install television cameras for 30 miles on these structures to watch for illegal border activity. I see that as a visit from 'the helicopter' every time you're taking a walk in the desert, or 24-hour surveillance of your property for those who live on the east side of the 40's, within sight of a power line. Being watched while recreating in a national forest, or wilderness area, is an unthinkable government intrusion of privacy.

I attended the public hearings in Phoenix on May 17th and was grateful to have had the opportunity to speak against the proposed transmission lines. My public comment in front of the Arizona Corporation Commission had nothing to do with the technical merits of the transmission line proposal. I left that to others. My arguments were philosophical. I found it interesting that maps of the route provided at the hearings by those in favor of the transmission lines conveniently did not show the town site of Arivaca. And the aerial photos seemed to be taken in a manner to visually minimize areas where people were living along the proposed path of development.

Transmission lines do not fit into the direction where energy technology should be heading. Transmission lines are a product of the 'industrial age'. We should now be thinking in terms of the 'information age'; where words like decentralization, wireless, conservation and renewable, better fit a future world of sustainable energy systems.

Santello, Barton E.
Page 64 of 117

Power generation should be adapted to regional and local sources of energy. Examples: Arizona should be focused on solar power; whereas, Kansas may be better suited for wind generation; Hawaii for geothermal energy; and Maine for tidal power. Much of the problem behind the shortage of power in this country is that energy is taken for granted. People can buy whatever electric equipment they want and simply plug it in. The power is waiting at the doorstep. But the power comes at an ever-increasing price. And the longer one works because of their dependency on 'centralized' energy, the less time one has to enjoy life.

What is transformative about a personal solar or wind power system is that one can take responsibility for the power they use. On a renewable system, each appliance purchased, every light bulb illuminated and every decision to use power, is considered for efficiency and necessity. If you install a renewable power system to meet your needs and budget, the conscious use of energy becomes the mechanism for you to live an energy independence lifestyle.

Many Arivacian's that have chose to live in this area, have been willing to make sacrifices. Some people still go without electricity and telephone as a tradeoff to enjoy the scenic beauty and peace of mind that comes with living in a rural area. Those who have taken responsibility to generate 'off-the-grid' power through solar, wind or other renewable means, would probably find it offensive and spiritually degrading to have to look at transmission lines from their homesteads. For most people that live sustainably, it would be a contradiction of everything they believe in. On a larger scale, it's a corporate invalidation of the use of clean renewable energy resources that this country needs to be truly energy independent.

Transmission lines would symbolize the beginning of a slow erosion of the environment and sense of freedom around Arivaca. These structures simply don't belong here and represent the antithesis of the natural surroundings. For those who came here to be part of something different, I could see the power lines creating a psychological wound on the spirit of the people.

As the nation's population continues to grow, urban centers become congested and work consumes more time and life, people will need to get away into nature and rediscover that they are human. Our wilderness areas and national forests are special places set aside for this purpose. Towns found at the end of a long twisting road, provide solace from the stresses of urban life. Areas rich in ancient Native American culture or the recent past where ranchers, prospectors and farmers set roots, conveys a sense of history and common heritage. And quiet places where people can hike, bike, bird watch, camp under the stars, view wildlife and take pictures, allow exploration and a chance to provide educational, athletic and creative outlets.

There were other routes proposed for these transmission lines, but it seems that the power brokers are thinking that the little town of Arivaca can easily be rolled-over by the industrial machine. The corporate suits obviously haven't yet dealt with any Arivacian's

Desert Homestead
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Santello, Barton E.
Page 65 of 117

Desert Homestead
Transmission Lines "1" - Democracy "0"
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As I listened to the Arizona Corporation Commission (ACC) hearings by a special dial-in telephone line on January 3rd, 2002, I could only visualize the image of a giant rubber-stamp pressing down upon a stack of bureaucratic documents as the Commissioners of the ACC unanimously approved the recommendations of their Power Line Siting Committee, and issued a Certificate of Environmental Compatibility (CEC) for Tucson Electric Power (TEP) & Citizens to construct massive transmission lines across rural Arivaca into the unspoiled Coronado National Forest, then onward to Nogales and Mexico. Earlier last fall the ACC's Power Line Siting Committee voted to recommend the so-called "Western Route", over two other proposed routes through Green Valley. After a year of extensive hearings, public comment, and seeing TEP/Citizen's proposal being ripped to sheds from every angle, by sharp and dedicated "Interveners" (volunteer community activists), it was obvious nobody in the Commission was 'hearing' the message brought-forth by 95% of the people. That message was clearly: We do not want power lines; we want other choices.

When someone goes to the county building department to file a permit for a house, they must submit a blueprint, specifications and complete all the required forms. If the plan and paperwork does not satisfy all the requirements of the state and county, the application is not even considered for acceptance, and you have to keep coming back until it meets exact codes. TEP's proposal, as submitted to the ACC, seems more like an outline, than a well-defined document. The proposal asked more questions than it answered; yet as far as the state is concerned, the details were a secondary matter. The other more disturbing aspect of this whole proposal is that no corporate official from TEP or Citizens has ever appeared before the public in the path of these transmission lines to explain the scope of the project, or, justify the environmental impact. They have remained shadow figures, protect by state and corporate laws from accountability to the people. If that isn't absurd enough, now think back to that person going to get their building permit and the irony of the Fascist nature of that oversight process including the excessive fees. And pity the poor individual who wants to build a simple home, on his or her own land, 'without' a permit. They would have the full weight of the government on their ass, including fines and civil action. All the while TEP could be building power lines over their heads and there would be nothing they could do about it.

It was clear to the slightly more-than-casual observer that TEP's proposal failed to deliver acceptable levels of accountability, quality, completeness and integrity. This can best be illustrated by the fact that the Commissioners at the decision hearing on 3 January 2002, were still asking TEP what type of structures (lattice or monopole) were going to be installed along the route. This was the final irony. It is the type of pole that determines the amount of blasting conducted in the mountains; equipment transported along the length of the lines; and the size of roads that have to be built through the wilderness. Think of the potential damage to our national forest? Yet the ACC Commissioners on that day gave TEP a Certificate of "ENVIRONMENTAL" Compatibility, before they knew the exact specifications of one of the most basic building components of the project!

This whole mess started because someone or some entity in Nogales filed a complaint, under state law, to the ACC stating that Nogales had unreliable power. The ACC compelled by its state charter, mandated that Citizens rectify the situation by installing a second redundant 115 kV power line to increase reliability. TEP, smelling a business opportunity by the unfolding events, approached Citizens with a scheme to submit a joint-venture proposal for massive 345 kV transmission lines, that not only could supply power to Nogales, but would continue-on into Mexico and connect into the Mexican grid. TEP said they want to sell power to Mexico (using America's fuel and water resources - what about OUR energy crisis?); but possibly the transmission lines are really for yet-to-be-built powerplants in Mexico along the border, to ship power north, along with smog clouds and acid rain within the prevailing winds and monsoons.

Moving power along transmission lines, must be a big money concept for these utility companies, considering it will cost over $70 million just to construct the lines. Power is a commodity, now traded on security exchanges like coffee, wheat or gold. The companies that own their lines can charge the equivalent of a toll for other utilities to move power through their grid (turf). TEP/Citizens must be salivating at the potential for transmission lines connected from Mexico to the entire western electrical grid. However for the consumer, connecting to a national grid may mean that a power plant, even in your backyard, may be no guaranty that you will have power, unless you pay what the financial markets dictate. And if you don't, the energy will be distributed to the state willing to pay the price. Look at California as an example.

Santello, Barton E.
Page 66 of 117

Tucson Electric Power has 3 hoops to jump through, and they made it through the first one with the ACC decision of 3 January 2002. The battle now moves to the Department of Energy (DOE) and National Forest Service (NFS). Any company proposing to build an electric transmission line across the international border must first obtain a Presidential Permit from the DOE. The National Environmental Policy Act of 1969 (NEPA) requires federal agencies analyze the environmental impact of such projects that may significantly affect the quality of the human environment along with the range of reasonable alternatives for the proposed action. Federal executive orders provide that a Presidential Permit may be issued after finding that the proposed project is consistent with the public interest. In determining consistency with the public interest, the DOE considers the impacts of the project on the reliability of the U.S. electric power system and on the environment. For these reasons, Tucson Electric Power is preparing an Environmental Impact Statement (EIS). The EIS will be administered and reviewed by the Department of Energy. This is our next opportunity to defeat this proposal using existing environmental laws to protect species, the environment and the health and welfare of people. A draft copy of the EIS for public comment will be available soon.

Finally, we must encourage the National Forest Service to deny TEP/Citizens a "Use Permit" to use the Coronado National Forest as a right-of-way for their transmission lines. If TEP cannot go through the national forest, their project is dead in the water.

In reviewing the records of the Transmission Line Siting Committee Hearings, I can't believe that the ACC Commissioner's did not see the shortcoming and inappropriateness of TEP's proposal. And that the Commissioner's overlooked the fact that an overwhelming majority of the people had spoke knowledgeably and articulately against TEP's proposal. The Commissioner's could have took the politically bold step and voted against the proposed *'Western Route'*. Saying "no" to TEP, would have still left options to address the needs of Nogales, and would have bought us time to consider less harmful options for the long-term power needs for south-central Arizona. The people want to be empowered and part of the process, not beaten-down and cynical trying to fight political and corporate shadow figures and ghosts. TEP has only money to loose by submitting these proposals; the people and wildlife have everything to lose, forever.

People in communities all over this country are fighting the exact same "David vs. Goliath" battle as we are. One transmission line standoff in the Jefferson National Forest of Virginia has been in the courts for 11 years. An appropriate quote here would be from a Native American medicine woman named Florence Jones of the Wintu Indian Tribe in Mt. Shasta, Washington. Her tribe's land, in the 1800's, had the misfortune of being rich in mineral deposits. As prospectors poured in, the tribe was not only displaced, but also massacred, as bounties we placed on their heads. Now today, the remaining few in the tribe fight the government and corporations for their last piece of sacred ground. It happens that the National Forest Service wants to lease their sacred space, so it could be developed into a ski resort. As she reflects on her situation, she spoke these words:

"Maybe someday we'll wake up and see the light, see the good and the beautiful world in nature. We might wake up and see all that. Somebody's got to do that - somewhere. We just all can't be dumb then die."

Santello, Barton E.
Page 67 of 117

Desert Homestead
Closing Comments

This month I am presenting my closing comments from the July 30, 2001 Department of Energy's (DOE) hearings on Tucson Electric Power's proposed transmission line project from Sahuarita to Mexico, through our National Forest. I was not the only speaker. Many Arivacian's made the pilgrimage and expressed their feelings to the DOE about this proposed project, on behalf of the rural community and our wild lands. Many other people from the greater Green Valley area also attended and spoke their minds. I hope to get a transcript of these proceedings, for the library, so everyone will have the opportunity to read this wonderful collection of thoughtful, informed, and eloquent speeches. My closing comments to the DOE were as follows:

While going through the process of preparing, documenting and writing for this hearing, I found that the tangible facts sought after by the DOE, such as information on endangered species, was in parallel with other intangible considerations of equal magnitude; for example: The visual impact of the transmission lines; the physical intrusion of towers into scenic rural areas; and the incompatibility of the transmission lines with the lifestyle of the individuals that chose this area specifically for the unblemished landscape.

The people who have moved out to these rural areas, regardless of their small numbers, have made the decision to trade convenience, for the peaceful, simple and empowered life of a homestead in the northern Sonoran Desert. The proposed power line project does not support or harmonize with the unique "micro-culture" of people, found on the west side of the Tumacacori Mountains.

During the morning of December 31st, 1999, I put on a backpack and headed out into the Coronado National Forest for my own special New Years celebration. I hiked over Apache Pass and made camp near Corral Nuevo. I photographed the last fiery sunset of the 20th century and slept out under the stars that night in peace and silence. I wanted to get away from the hype; to experience the complete antithesis of New York City's Times Square. And that's what I got. The next day I explored the mountains and photographed the sweeping vistas. What is the value of my experience? How do I break it down and put it in a tangible form so it could be weighed against the cost/benefit analysis of the proposed transmission lines? How does my message and the feelings of many other people get conveyed and considered, by those far away making the decisions?

In the case of TEP's proposal, is it fair to ask people to sacrifice a portion of our remaining wilderness to support energy projects, built in desperation, because our government has not provided long-term vision, leadership, research and business incentives, to prepare this country for a post-fossil fuel world? Especially when we have had 30 years since the last energy crisis to mobilize and unleash the great scientific minds and entrepreneurial talent this country has to offer, to address this problem. We have reached the point where the last of our wild lands are now threatened, to meet and support what is called the American way of life. If this is the case, we need to stop and look inside ourselves and question what we are doing, before progressing further.

There seems to be a mindset, attitude and policy traceable back to the founding of this country, that somehow the resources we have are so vast, they will be available indefinitely. It is several hundred years later now, and many of us are trying to protect the few pockets of area that are still unspoiled. And now these areas are being encroached and eroded because the mentality hasn't changed. Federal lands, wildlife refuges, national parks, national forests, national monuments & state parks. These were lands set aside for special reasons: wildlife habitat, recreation, historical/cultural and the preservation of natural wonders.

Santello, Barton E.
Page 68 of 117

Closing Comments

Many of the people hear tonight don't want to cut a deal, or work to mitigate potential damage. We don't want this project because history and experience has shown that the sum total of each seemingly rational development decision, ultimately results in a final degraded living environment, which is spiritually sterile to the people for which these development projects were meant to benefit in the first place. Judging the way so-called 'managed' and 'consensus' development has already spread across America, I don't necessarily hear people taking about a utopia; rather I see increased congestion, stress and anxiety.

Southern Arizona, Arivaca and the Coronado National Forest have their backs up against the border. Collectively as a nation, we have already compromised away a vast majority of our wild-lands. How is it not reasonable for citizens of this area to stand-up and fight to protect the small percentage of unspoiled wilderness that remains?

Where I camped on New Years Eve 1999 (Corral Nuevo in the Apache Pass area of the Coronado National Forest) is now directly in the path of TEP's proposed transmission line. That doesn't settle right with me. I thought I had gotten far enough away to the safe zone called our National Forest. I look at the forest as a buffer, a protector, and a refuge for people & wildlife. I am stunned at the arrogance of TEP's plan. And that's why I am here today.

Tucson Electric Power has nothing to lose by submitting these proposals; the people and wildlife have everything to loose.

I would like to close by quoting Dr. Cornel Pewewardy of the Comanache Nation, which I believe speaks for many in this room tonight. Ironically, these words were in the liner notes of a music CD is was listening while preparing this writing: "I am no chief, but, I am a warrior in education; and a warrior's role is greater than merely protecting and providing for the well being of the nation. It involves looking after the welfare of the people seven generations from now. It means we need to recognize threats to future generations and act accordingly. We need not only to understand, but live by saying: We do not inherit the land from our ancestors, we rent it from our children". Thank you.

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Santello, Barton E.
Page 69 of 117

Desert Homestead
Behind the Transmission Lines

Public comment against Tucson Electric Power's (TEP) proposed transmission line route through southern Arizona has grown to thousands of pages. The "Western Route" takes the power lines through roadless areas of the Coronado National Forest (east of Arivaca), where approximately 191 line-towers, and over 20 miles of new roads could be constructed in the forest for this project. Many corporate lawyers, politicians, Washington bureaucrats and ordinary citizens, will be responding to the newly-released Draft Environmental Impact Statement (DEIS). The public comment period on the DEIS (available at all local libraries) ends October 14th.

The Department of Energy (DOE) must decide whether to issue a "Presidential Permit" that would allow TEP to erect 140' line towers through the biologically-rich and wilderness-like Coronado National Forest south into Mexico; or, they can declare "No Action" effectively stopping the project. Likewise, the U.S. Forest Service can either approve the route and amend its 'Land and Resource Management Plan' accordingly, or, declare "No Action" and deny TEP a 'Use Permit' through the forest.

If we look back at the origins of this proposal, TEP found a way to slip-in a larger 345 kV transmission line from the Arizona Corporation Commission's (ACC) Order 62011, which mandated that only a small backup 115 kV power line between Sahuarita and Nogales be provided to improve reliability. What ultimately transpired was that the ACC passed the (political) buck and handed the Department of Energy a can-of-worms, by approving a transmission line proposal larger than the ACC itself had asked for. Is it just coincidence that just after the ACC's granted the route to TEP, the then Governor flew to Mexico with the state's leading utility executives to promote a cross-border energy sale? To quote "The Arizona Republic" from January 17, 2002 (14 days after the ACC's decision) "*Gov. Jane Hull and a group of Arizona power executives will be in Mexico City next week to lobby for permission to build high-voltage connections on the border and sell electricity to the Mexican power grid.*"

TEP's transmission line scheme was proposed several years back during the 'Enron era', when the new excitement was to trade energy over the grid. Utilities with power lines can charge a toll for electricity transmission across the 'grid'. To maximize the investment, the utility must encourage and promote electrical use. This is the most environmentally damaging consequence of the proposed subject transmission line, other than the construction itself. To quote the late Jacques Cousteau while he was studying effects of development in the Amazon: "*Where power lines go, industry follows.*" Power lines will lead to the eventual building of power plants and heavy industry across the Mexican border, which all will be connected. According to a Greenpeace study, the 600 megawatt Sempra Energy Mexican power plant now on-line in Baja, just south of the US border, will generate 180 tons of Carbon Monoxide emissions (Mexico has no Carbon Monoxide limits) and 200 tons of Sulfur Dioxide (Mexico allows twice the US levels) annually. In addition, there are approximately 20 other power plants being proposed along the US border along California, Arizona and Texas, encouraged by the current administration.

Should TEP provide power to Mexico as they propose, it would necessitate using resources (fuel, water, air emissions) from the United States, in order supply a foreign country with power. Thus, a corporation will profit from the use of US natural resources and impact our air quality. One corporation should not profit against the will of the people at the expense of the environment (which in this case includes our Coronado National Forest). If we look at the biggest companies from the industrial era, most have made their fortunes off America's natural resources. Whether it was land grants to the railroads; mining claims on government owned land, or oil drilling in environmentally-sensitive areas. This process continues today, and is demonstrated in the fact that TEP can propose transmission line routes all over the map and then it becomes the annoying and unfair burden of the American citizen, to repeal or modify these damaging proposals. Industry access to America's natural resources is treated by corporations, more like a 'right', than a 'privilege'. This is because industry, over the years, has

Santello, Barton E.
Page 70 of 117

guided the pen of government legislation. The result is a pro-industry maze of laws, designed to wear-down the American citizen who tries to understand these laws, make changes and defend private property and public lands. Again; the current administration is now working to enact laws that restrict or remove public participation on these issues.

Many of the corporate officers that dream-up these projects (like building power lines), usually cash-in their chips and move-on, by the time these projects go online. Like professional stock traders, they buy on the rumor and sell on the news. It will be the people living around these power lines, or hiking in the spoiled forest areas that will have to live with the snap-crackle-and-pop, where they hoped would be silence. Back-country photographs will be marred by towers. Those who hiked the day to get-away will come across these power lines in the national forest and be sadly reminded that places of solitude are not respected.

The DOE, US Forest Service, and Bureau of Land Management's decision should be evident and clear. And that is to vote "No-Action" and reject the "Western Route." The reason is simple: There are many other economically viable alternatives to provide backup power to Nogales and other more environmentally-friendly energy alternatives available. With regards to transmission lines into Mexico, TEP (a publicly-traded company) should not expect its rate-payers to finance high-risk explorations into foreign energy markets. TEP should not be allowed to profit at the expense of the public's Coronado National Forest, simply to boost its stock price to satisfy shareholders. Further, the Mexican government has not even committed to any level of participation to this international interconnect concept.

We the American people really have no idea what's going on nationwide with our energy and electrical systems. Vice President Dick Cheney has never released the documents containing backroom dealings behind the administration's current National Energy Policy. Also Energy Secretary Spencer Abraham has declared that investigation results into the cause of the recent blackouts in the northeast will be kept secret from the public. This is unprecedented and unconstitutional. Energy issues are directly related to the United States being involved in wars, and energy is the cornerstone of our foreign policy which comes back to haunt us in the form of terrorism.

Many citizens have expressed a sense that Washington's decisions and actions on America's energy future, are unfolding too fast; that there is no coherent plan; and the impact on future generations is not being considered. It is like someone else has hijacked our future. Whose dream are we living anyway?

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Santello, Barton E.
Page 71 of 117

Desert Homestead - *The Importance of Buffer Zones*

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Every fall I make a pilgrimage to southeastern Utah to explore that regions vast expanse of canyons, eroded sandstone formations and archeological mysteries. A big part of this experience however, has nothing to do with the act of hiking or backpacking in this area; it is the prospect of leaving what is known and familiar with road map in hand and accumulating distance from the clutter, static and regimen of the city. And as the drive to Utah begins, high density gives way to small towns, then to sparsely populated areas, followed by farms, ranches, reservation and ultimately empty federal lands.

A buffer zone of open space along with the element of time, allows contemplation of where one has been and where one is going. The insights derived from a journey into the wilderness come from facing fears, like sounds emanating from the darkness; overcoming physical challenges; making animal, plant and geological discoveries; observing and appreciating natural cycles. I notice while in this environment, that you begin to slow down and the cycle of the sun and the moon take over as your internal clock. Undistracted by others, a connection between this world and your inner being takes place and you realize that this feeling of empowerment is something that has been inside you all along waiting to be unleashed.

When I get back to my car after a completing a backpacking trip in Utah, just the drive to a paved road from the trailhead may take an hour or more. Tack-on several more hours to reach the Arizona border, along the way taking a swim in Lake Powell, cook a tailgate dinner, write in my journal and maybe stop at an Indian trading post. That to me, is the ideal buffer zone experience. And I really feel like I got away from it all.

Although profound insights can take place in solitude, it is not until one emerges from the wilderness with new visions of the future in hand, can they be thought of in the context of everyday life. Thus the importance of the buffer zone is the quiet time between the trailhead and the welcome mat back home. A transition between one reality and another, where ideas can take form and root.

Unfortunately, these rural corridors are becoming the new expansion areas for population growth and commerce. A current example of a threat to such a buffer zone is the proposed huge Canyon Forest Village development project to be built adjacent to the Grand Canyon National Park's south entrance. The development plan consists of stores, restaurants, and over 1,200 hotels rooms along with roads and other supporting businesses. This type of development removes the buffer zone that an individual needs to process a wilderness experience. Can you imagine emerging from a week in the Grand Canyon and immediately find yourself in a bustling small town. This type of immediate sensory intrusion will short-circuit your whole reintroduction from the canyon and reduce the whole adventure to a simple memory: rather than having time to allow a transformative experience to slowly soak in.

I'm sure that most Arivacan's are conscious, if not subconscious, of the buffer zone that surrounds our town. The national forest and mountains to the south and east and the wildlife refuge to the west. The only vulnerable area is along Arivaca Road heading north. The state lands and private ranch lands along the roads could eventually be sold and it is possible that a large Green Valley-sized development to could appear someday and bring traffic, bright lights, fast food restaurants and convenience stores to the doorstep of Arivaca.

People here in Arivaca have chosen this area specifically because of its rural lifestyle and character. Developments bring people that have other expectations. And these expectations are convenience and comfort. Arivacan's have chosen a place where there is room to breathe, explore and have solitude, at the expense of convenience. Arivaca is already backed-up against the international border and should large developments remove the buffer zone between Arivaca and Green Valley, where would there be left to go, to find what we already have?

So lets give protection of buffer zones in this country some thought, lest we eventually ruin something sacred to the human spirit; that is, the ability for anyone at any time, to transform themselves through a personal vision quest in the wilderness.

Santello, Barton E.
Page 72 of 117

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE JOINT APPLICATION OF TUCSON ELECTRIC POWER COMPANY AND CITIZENS COMMUNICATIONS COMPANY, OR THEIR ASSIGNEE(S), FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY FOR A PROPOSED 345 KV TRANSMISSION LINE SYSTEM FROM TUCSON ELECTRIC POWER COMPANY'S EXISTING SOUTH 345 KV SUBSTATION IN SEC. 36, T.16S., R.13E., SAHUARITA, ARIZONA, TO THE PROPOSED GATEWAY 345/115 KV SUBSTATION IN SEC. 12, T.24S., R.13E., NOGALES, ARIZONA, WITH A 115 KV INTERCONNECT TO THE CITIZENS COMMUNICATIONS COMPANY'S 115 KV VALENCIA STATION IN NOGALES, ARIZONA, WITH A 345 KV TRANSMISSION LINE FROM THE PROPOSED GATEWAY SUBSTATION SOUTH TO THE INTERNATIONAL BORDER IN SEC. 13, T.24.S., R.13E.	CASE NO. 111 DOCKET NOS. L00000C-01-0111 L00000F-01-0111 SPECIAL OPEN MEETING

At: Tucson, Arizona

Date: December 12, 2001

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REPORTER'S TRANSCRIPT OF PROCEEDINGS

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Santello, Barton E.
Page 73 of 117

with what the Commission did in Big Sandy, which we commend, and I realize that it's obviously a difficult situation for you to be in when there's millions of dollars at stake, and orders like this which are requiring power, however in this case I don't see a way out of it with respect to the western route.

This is one of Arizona's last best places, and it's not an issue about litigation, it's an issue about protecting Arizona's heritage and also recognizing what these areas could mean to us in the future.

COM. SPITZER: Thank you very much.

CHMN. MUNDELL: Thank you for your comments.

MS. HOOD: Bart Santello.

MR. SANTELLO: Hi. My name is Barton, B-a-r-t-o-n, Santello, S-a-n-t-e-l-l-o. I'm speaking today as a private citizen and a property owner in the Town of Arivaca in opposition to the western route and all routes. And several residents of Arivaca could not be here today, so I have attached to my comments and distributed a proxy petition containing 65 signatures which would represent about 7 percent of the people of Arivaca.

Collectively, we are outraged at the proposal to permanently disrupt the rural outback and the

Santello, Barton E.
Page 74 of 117

national forest in trade for a self-serving business plan.

We feel these hearings have made it clear that the 345 kV route by TEP not only puts in jeopardy the Commission's mandate to provide Nogales with reliable power by 2003, but the proposed route has extreme environmental consequences. And I'm speaking of the western route.

With regards to reliable power by 2003, I'd like to bring up the case of American Electric Power in Virginia that's trying to put a line through the Jefferson National Forest. To go through a national forest, that project has been in litigation for 11 years. So to meet the 2003 deadline, just like some other people alluded to here today, that can be problematic from a standpoint of trying to meet that goal.

One other comment before I get started is I'd like to thank all the intervenors who have worked so hard on behalf of the public during these hearings. They're citizens just like us, and they're taking the time and volunteering and going against some big corporations here, so they've done a commendable job, and I've been trying to write this for this couple of weeks, so I can understand their efforts.

Santello, Barton E.
Page 75 of 117

Another thing, to the Commission, you have time now, between now and January, but I encourage you to take a Sunday drive, take your families and drive out to Arivaca and the Ruby Road and some of the area where the power lines may go along the western route, and kind of get a feel for yourself what that environment entails. Maybe you've already been there, but that's some recommendations from the people in Arivaca. That is I'd like to point out that as far as I know, no Arivaca resident has spoken in these hearings or any other hearings or the Department of Energy hearings to place the power lines anywhere else in the valley.

We've looked at this proposal and we rejected TEP's proposal based on its merits, and also the concerns of the environment. And I feel that some people have spoken here today and in the past about from the other areas, and talked about putting the power lines on the western route, and one sentence they talk about the property value, in the next sentence they talk about moving to the western route. So I think you have to take that comment for what it is.

We feel TEP's proposal submitted to the ACC seems more like an outline than a well-defined

Santello, Barton E.
Page 76 of 117

document. It seems to ask a lot of questions. We've had a lot of questions about where these lines are going to be placed, how wide the corridor is. We never really got a good answer to that, especially when you're going through rural areas and national forest. We don't know whether they want to buy power from Mexico or sell power to Mexico, the environmental consequences of potentially building dirty plants from Mexico and the air coming back into Arizona and affecting wildlife and people's health. So their proposal is a moving target.

I know that makes your decision very difficult. The proposed western route through the Coronado National Forest reveals itself as a separate, flawed, and greedy proposal by TEP. In my opinion they're using the requirement to supply Nogales with power to push their own agenda at the expense of unique southern Arizona, scenic outback, the people's wishes and the integrity of our national forest. I believe the Commission should reject the proposal because it fails to deliver acceptable levels of accountability, quality, completeness, and integrity.

Let's help preserve our rural character and environment. In the Coronado National Forest, besides the visual obstruction of the towers, the construction

Santello, Barton E.
Page 77 of 117

will result in roads being built, leveling of areas for storage of equipment and trucks, dump areas and piles of material, some off-road driving, and of course, erosion, and that will result on plant and animal habitat degradation.

We can't allow this level of destruction in a biologically sensitive area of the Pajarita Wilderness, and the perennial stream in Sycamore Canyon. The scenic area must be preserved. According to state figures, Arizona's population will grow from 5 million today to 11 million people in 50 years. And we need to have sufficient destinations for people to go where they feel they have truly gotten in the way of wilderness.

I'm not trying to be an obstructionist. I feel we're not fighting for all wildlife, we're fighting for what is left now, maybe only 7 percent of what's left of our wild lands in this country. Tourism is very important. From an economic standpoint it represents approximately three times the revenue compared to that of Arizona's copper industry. The unspoiled lands as they are have a great economic value to Arizona.

I believe decisions made from fear and crisis are not good decisions. And in crisis, choices are

Santello, Barton E.
Page 78 of 117

limited. I feel in this proposal we've seemed to have only two choices here, transmission lines or you don't meet your mandate. We believe there's some, especially with terrorist attacks, there may be some building lines in Mexico, may represent vulnerable terrorism. The recent collapse of the Enron Corporation has shown us the trading industry in the commodities market is immature.

By building this line, TEP is strengthening its position to move power around the grid and set up a toll booth. Thus, connecting to a national grid may mean a power plant in our backyards, and lines, there's no guarantee we'll have power someday because unless you pay what the market says, the energy will be moved to other states to whoever is willing to pay the price. And we saw this evident in California.

We believe that no power option is fear based. I believe people have never been given a third choice, that of a decentralized alternative, and locally generated and distributed power. I think the Maestros Group proposal in some ways does that. And we'd like these other options for real security with our energy.

Considering this whole thing of TEP's proposal, I realize it's their model of how things

Santello, Barton E.
Page 79 of 117

should be. In other words, it's their dream, and we have to realize all these years we've been buying into someone else's dream, and that's the dream of transmitted power. And since it may have been acceptable in the past, when we had limited options and energy supplies were more plentiful, today science and technology have given us new choices. For reasons of corporate expediency these options seem to be hidden from our view.

I'm an aerospace engineer. I've worked on the space shuttle. I've helped develop advanced automotive gas turbine engines and project managed development of commercial jet engines. In my career I've seen scientists and engineers innovate and develop machines of incredible complexity. Based on these experiences I can never accept those who say our alternative energy options are limited, or that we are not prepared to implement decentralized energy systems. The only thing we're not prepared currently is our focus and our commitment and our will.

In reviewing records of the Transmission Line Siting Committee hearings, I believe the ACC Commissioners will find that the intervenors have sufficiently exposed the shortcomings and the inappropriateness of TEP's proposal. The

Santello, Barton E.
Page 80 of 117

Commissioners will notice an overwhelming majority of the people have spoken knowledgeably and articulately against the proposal.

I urge the Commission to vote against the proposed western route. Saying no to TEP still leaves options to address the needs of Nogales, yet buys us time to consider less harmful options for long-term power needs of south central Arizona. We want to be empowered and part of the process, not beaten down and cynical. TEP has only money to lose by submitting these proposals, but the people and wildlife have everything to lose forever.

Commissioners, give us options to be excited about and allow us to have a choice in taking responsibility for our own dream, the dream of true energy independence.

Thank you.

CHMN. MUNDELL: Thank you.

COM. SPITZER: Thank you.

MS. HOOD: Bruce Buchanan.

MR. BUCHANAN: I'm Bruce Buchanan, the owner of the Arivaca Ranch. I'm here with my wife Karen back here.

And first of all, I guess I'd have to say we're opposed to the western route. We're opposed to

Santello, Barton E.
Page 81 of 117

BEFORE THE POWER PLANT AND TRANSMISSION LINE SITING COMMITTEE

IN THE MATTER OF THE JOINT APPLICATION OF TUCSON ELECTRIC POWER COMPANY AND CITIZENS COMMUNICATIONS COMPANY, OR THEIR ASSIGNEE(S), FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY FOR A PROPOSED 345 KV TRANSMISSION LINE SYSTEM FROM TUCSON ELECTRIC POWER COMPANY'S EXISTING SOUTH 345 KV SUBSTATION IN SEC. 36, T.16S., R.13E., SAHUARITA, ARIZONA, TO THE PROPOSED GATEWAY 345/115 KV SUBSTATION IN SEC. 12, T.24S., R.13E., NOGALES, ARIZONA, WITH A 115 KV INTERCONNECT TO THE CITIZENS COMMUNICATIONS COMPANY'S 115 KV VALENCIA SUBSTATION IN NOGALES, ARIZONA, WITH A 345 KV TRANSMISSION LINE FROM THE PROPOSED GATEWAY SUBSTATION SOUTH TO THE INTERNATIONAL BORDER IN SEC. 13, T.24S., R.13E.	CASE NO. 111 DOCKET NOS. L00000C-01-0111 L00000F-01-0111

At: Phoenix, Arizona

Date: May 17, 2001

Filed: May 21, 2001

REPORTER'S TRANSCRIPT OF PROCEEDINGS
VOLUME III
(Pages 494 through 735)

ARIZONA REPORTING SERVICE, INC.
Court Reporting
Suite Three
2627 North Third Street
Phoenix, Arizona 85004-1103

By: CECELIA BROOKMAN, RPR
CCR No. 50154

Prepared for:
TEP

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Santello, Barton E.
Page 82 of 117

Magruder. And then we have a request for denial of applicant's request for Certificate of Environmental Compatibility by Mr. William Kurtz, which I am interpreting as being comments with respect to the proposed certificates.

Are there any others?

(No response.)

CHMN. WOODALL: In that case, we all have a set of those, and if you brought extra I appreciate your courtesy, you might want to make them available for any of the members that might want them.

We'll adjourn for an hour and 15 minutes. Thank you.

(The lunch recess ensued from 12:30 p.m., to 1:57 p.m., upon which Member Sandie Smith exited the proceedings.)

CHMN. WOODALL: We're going to go back on the record on this matter.

Before we take the opportunity to ask questions of the representative of the Department of Energy, I understand there is another member of the public that wishes to make a brief comment concerning the application.

Mr. Santello.

MR. SANTELLO: Thank you, Madam Chairperson,

Santello, Barton E.
Page 83 of 117

for the opportunity to speak.

My name is Barton Santello. I have a property at 15460 Jalisco Road in Arivaca. And I am representing myself as an individual.

I'm here today to express my opposition to the power lines. My argument is philosophical, because it seems like there's been enough discussion about the technical aspects. I believe Arivaca and the community around there is a rural area that's relatively unscathed. It has significant historical value, Apache, Pima Indians, ranching and mining history. The Arivaca community has about a thousand people. Most are divided into ranchers, some retirees, and people that want to live an alternative lifestyle.

The Arivaca community is surrounded by the national forest and the Buenos Aires Wildlife Refuge, and I believe those places were put there because of significant research by scientists, biologists, and they're there for a reason.

The area is enjoyed by birders from all over the world. Biking, hiking and photography is very popular in this area. It's a recreation, it's an important area. With the population growing in Arizona, there's a need for people to have a place to

Santello, Barton E.
Page 84 of 117

get away from the development, to get away and spend time with themselves and their families. I believe the power lines do not fit in with the valley's character, and I believe they're an industrial age solution for an information age world.

The people that live in Arivaca are mostly into sustainable development, the building of alternative homes such as adobe, straw bale, cob, bamboo homes, and there are many who live still without electricity, and sorry to the electric company, that don't want it, and there are a lot of people still without telephones.

Therefore, I believe the power lines would be a contradiction to the life that these people are living. It would be a slow erosion of the natural environment, and I believe that would have a wearing down effect on the people, the psychology of the people living there.

I hope that the Commission takes these human factors into account on this issue.

For those who have not ever been into that area, I would encourage them to take a Sunday drive and bring their families down and spend a day in the area in the refuge, and bring your birding book and binoculars, and you can stop at the bakery there and

Santello, Barton E.
Page 85 of 117

get a dozen chocolate chip cookies for a dollar.

I'd just like to end what I say by a quote from a filmmaker named Godfrey Regio. To quote him. We live in a world today where to be a human being in my opinion is to be heroic. We have to look at the mass societies we live in. Those are, from my point of view, mass technologies. The choices we have before us is to be heroic today, to deal with freedom, and freedom might now be defined as the ability to say no to what is perceived as technological necessity.

Thank you.

CHMN. WOODALL: Thank you.

Mr. Smith.

MEMBER WAYNE SMITH: I was wondering if you could delineate on the map just for the record where the community is, please.

MR. SANTELLO: Is there a map I can point to?

CHMN. WOODALL: We have a large size version of A-3 up on the board. Could you maybe turn it so that we could see it?

MR. SANTELLO: Arivaca would be --

CHMN. WOODALL: You're showing us a topographic map which appears to have depicted on it alternative routes, and I believe it's labeled TEP-12.

MR. SANTELLO: Arivaca, the town site of

Santello, Barton E.
Page 86 of 117

Arivaca is right here. Over to the east is what's known as the 40s, and that was a 10,000 acre ranch that was divided up in 1972 into 40-acre homesteads, and that is this section right here.

CHMN. WOODALL: About how far in miles from the westerly route is this community?

MR. SANTELLO: I would say from the edge here, which is, there's a thing called Clifford Well, which is probably where the state land begins, and each of these squares in the forest map is a mile. That would be one, two, three, four, four and a half miles or so.

CHMN. WOODALL: Mr. Smith.

MEMBER WAYNE SMITH: That's fine, thank you very much.

CHMN. WOODALL: Thank you, Mr. Santello.

At this time, Committee members, we have available Ellen Russell, a representative of the Department of Energy.

Ms. Russell, I wonder if you could come forward, please.

Ms. Russell, Staff's notice of filing testimony, they included a copy of a letter dated February 9th, 2001 signed by Ellen Russell, NEPA document manager. Are you she?

Santello, Barton E.
Page 87 of 117

APPENDIX IV

Santello, Barton E.
Page 88 of 117

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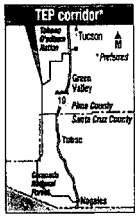
ACC gets an earful over power line to Nogales

GARRY DUFFY
Citizen Staff Writer
Dec. 13, 2001



Tucson Electric Power Co.'s plan for high-voltage transmission lines from Sahuarita to Nogales would destroy property values and scar a beautiful desert landscape 40 miles south of Tucson, area property owners told the Arizona Corporation Commission yesterday.

TEP and Citizens Communications Co. are seeking permission to build 345- and 115-kilovolt power lines to provide power to the border city and possibly into Mexico in the future.

More than 140 neighbors and other interested onlookers filled one hearing room and spilled over into another at the State Office Building downtown yesterday, many anxious to tell the ACC how angry they are about the project.

Like a separate proposal by Public Service of New Mexico to run 345,000 volts on transmission lines held aloft by giant towers from the Palo Verde Nuclear Generating Station, west of Phoenix, also to Nogales, the TEP-Citizens Utility proposal has legions in opposition.

Almost every one speaking said he would prefer the transmission lines and towers not be built. But if the looming towers must be built, most said they should be built near someone else's home.

Residents of toney Tubac are aghast that a route preferred by TEP would bring the towers close to the historic and artistic community. They say the towers, standing as high as 140 feet, would be a devastating hit to property values.

"This would be disastrous for the whole Santa Cruz Valley," Dale Devick, a Tubac retiree, told commission members William Mundell and Marc Spitzer. Commissioner Jim Irvin was not at the meeting.

Besides harming property values, giant towers near communities on

Santello, Barton E.
Page 89 of 117

the Santa Cruz would destroy scenery almost unchanged since Spanish Colonial days, commissioners were told.

"There are fields that have been farmed, historically, since 1740," Richard Halpenny, a member of the Tubac Historical Society, said.

The route also would take the towers close to Tumacacori National Monument, Halpenny said.

"The power lines would go straight through there and completely destroy that vista," Halpenny claimed.

Some Tubacans told commissioners that they reluctantly favored a different route, one recommended recently by a committee formed to examine environmental issues related to choosing a route for the high-voltage power lines.

The Arizona Power Plant and Transmission Line Siting Committee recommended a route west of the TEP-preferred alignment, along a path that would take the giant towers west of the individualistic community of Arivaca through scenic and environmentally sensitive lands.

"For a power line of any kind to go through here would be an abomination," Arivaca rancher Mary Kasulaitis told the commissioners.

The committee's recommended route would put the transmission lines and towers near Sycamore Creek, a riparian area with a rare perennially running stream, and encroach on several endangered species, including the tiny Sonoran chub.

"The western route will go through some of the most unique land in southern Arizona," Brian Segee of the Center for Biological Diversity said. "This is one of Arizona's last best places."

TEP officials did not address the commission and were unavailable for comment yesterday afternoon.

The ACC is facing a self-imposed timeline for TEP to be able to provide Citizens Utilities with access to 115 kilovolts. The commission responded to complaints from its customers in Nogales and ordered Citizens to secure adequate electrical supplies to the city by Dec. 31, 2003.

Commissioners could reverse the earlier order and timeline and consider alternatives to the power lines, several speakers told Mundell and Spitzer.

Among alternatives, commissioners were told, is locally generated electricity from small power plants, which would eliminate the need for a long string of tall power poles and transmission lines carrying tens of thousands of volts.

Commissioners are set to vote on the line-siting committee's recommendation Jan. 3 in a meeting in Phoenix.

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Santello, Barton E.
Page 90 of 117

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Thursday, 13 December 2001

TEP line plan draws sparks

[PICTURE]

Benjie Sanders / Staff
***Earl Wilson**, of Tubac, tells ACC commissioners why he opposes the planned 60-mile, high-voltage power line from Sahuarita to Nogales.*

Crowd majority tells ACC to deny link to Nogales

By Alan D. Fischer
ARIZONA DAILY STAR

Most of the 130 people attending a Tucson public comment session on a proposed 60-mile, high-voltage transmission line to Nogales let regulators know they oppose the project.

An overflow crowd attended the Arizona Corporation Commission's special meeting Wednesday to discuss Tucson Electric Power Co.'s planned 345,000-volt transmission line, which would link a TEP substation near Sahuarita and the power system serving Nogales to improve service reliability for residents there. The line would also allow TEP to connect with the power grid in northern Mexico.

The ACC mandated in January 1999 that a second power line connecting the Nogales area to the western power grid be operational by Dec. 31, 2003. Problems with the single 115,000-volt line currently serving Nogales and the surrounding area brought on a high number of power outages there, leading regulators to intervene.

About four dozen speakers told Commissioners Bill Mundell and Marc Spitzer that TEP's $70 million project, which would have a 125-foot-wide right of way and would feature poles up to 140 feet tall, would have a negative impact on property values, the environment, health and tourism.

Gary Brasher, president of the Santa Cruz Valley Citizens' Council, asked the crowd how many preferred to see no power line at all. The majority raised their hands.

Some in attendance said they found a western route recommended to the ACC by the Arizona Power Plant and Transmission Line Siting Committee acceptable. Some requested modifications to the plan as it currently stands.

Earl L. Wilson, of Tubac, said the area's energy needs could be served with a smaller 115,000-volt line through 2035, so the larger 345,000 line is not currently necessary.

Santello, Barton E.
Page 91 of 117

Wilson told the commissioners that while the area had suffered poor service and outages in the past, the reliability problems have been resolved.

In addition, he recommended that the commission consider small, regional power plants rather than transmission lines from large, centralized generating facilities.

Hugh Holub, vice president of international relations for the Maestros Group, agreed. He said a Nogales power plant proposed by Maestros Group could solve reliability problems in the area.

Holub said he feared approval of TEP's line would preclude the success of other plans, including the Maestros Group's proposal.

Mundell said TEP's project would not prejudice other possible projects, and he said a new power plant could possibly offer an alternate solution to the area's reliability problems.

Mundell said the Maestros Group has yet to apply for approval of its project with the ACC or the Line Siting Committee. "There is not even anything in the pipeline yet," he said.

The Maestros Group in May applied for a U.S. Department of Energy permit to export energy to Mexico.

Spitzer said a power plant in Nogales would worsen pollution in a city that already fails to meet air quality standards.

A new regional power plant would still require transmission lines and distribution lines, Spitzer said.

Brian Segee, of the Center for Biological Diversity, said his group opposes all routes, and said: "The western route would carve through some of the most unique lands in Southern Arizona."

He said the recommended western route cuts through three designated wilderness areas and would harm the habitat of several species that don't occur anywhere else.

Mundell said the three-member commission, which also includes Jim Irvin, is scheduled to vote on the matter Jan. 3 in Phoenix. The ACC can vote to approve, amend or deny the project, he said.

The evidence-based decision will weigh the need for economical, reliable power for Nogales against protecting the environment, he said.

TEP's Bill Norman said the utility is optimistic about moving forward with the project, and said he respected the ACC's desire to let the public have its say on the matter. He said Wednesday's meeting was the 11th held where public comments were taken on the project.

Norman said the recommended western route also requires approval from the U.S. Forest Service to cross lands controlled by that agency. TEP must also acquire the right of way along the route, he said.

Public comments will again be taken prior to the vote at the Jan. 3 Phoenix meeting. People may also comment in writing to the ACC, Attention Docket Control Center, 1200 W. Washington St., Phoenix, Ariz., 85007. Correspondence should refer to Line Siting Docket 111.

Santello, Barton E.
Page 92 of 117

* Contact Alan D. Fischer at 573-4175 or at afischer@azstarnet.com.

Back to Story

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Santello, Barton E.
Page 93 of 117

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Page One
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ACC hears many objections to plans for big power lines

By Jim Lambs

Three Tubac residents who appeared at Wednesday's corporation commission hearing were, from left, Gary Brasher, Richard Bohman and Earl Wilson Brasher is president of the Santa Cruz Valley Citizens Council which opposes any power line route through the Santa Cruz Valley, preferring a route west of the Tumacacori Mountains. He said several other groups, including the Green Valley Community Coordinating Council and Green Valley Chamber of Commerce agree.
(News photo by Jim Lamb.)

TUCSON—Giant power lines from Tucson to Nogales will damage property values, endanger wildlife, blight the views, and shed and intrude on the historical treasures, some protesters told the Arizona Corporation Commission Thursday.

At a hearing on a power line route sought by Tucson Electric Co. and Citizens Communications, at least 30 speakers said they either objected to any power lines, opposed lines west of the Tumacacori Mountains or through the Santa Cruz Valley.

They also differed on whether lines should transmit 345,000 or 115,000 volts.

But one speaker, Ken Lilly of Santa Cruz County, said opposing large power lines to Nogales is shortsighted and might blight future growth.

Lilly was a member of a joint city of Nogales and Santa Cruz County group that recommended a 345,000-volt line west of the mountains.

The corporation commission will meet Jan. 3 in

Santello, Barton E.
Page 94 of 117

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Phoenix to hear some more testimony and then decide the issue currently before it—the route and size of the line.

Citizens has been ordered improve its reliability by Dec. 31, 2003.

One of three proposals

The TEP - Citizens proposal is one of three ideas advanced to provide power to northern Mexico and also to provide backup power to Nogales, Ariz., and Santa Cruz County.

For five and a half hours Thursday, corporation commission Chairman William Mundell and Commissioner Marc Spitzer listened and frequently asked and answered questions on the issue.

They took only three breaks, two of 15 minutes and another—"let's make this one seven minutes"—said Mundell near the end.

In 1998 after years of complaints of poor power reliability, the ACC ordered local utility Citizens to erect a backup 115,000-volt line by Dec. 31, 2003.

Tucson Electric Power joined Citizens on that project and then asked for permission to build instead a 345,000-volt line that could also connect to northern Mexico's power grid.

Speaker Earl Wilson of Tubac faulted the current process saying the proposal was really designed to serve Mexico and not Arizona.

Said Wilson: "We're not talking about supplying power to Mexico. We're talking about Arizona.

"The need for 345 (kilovolt line) is just not there," he said saying projected population growth doesn't require the large lines no matter the location.

Gas line venting a worry

Marge Kinkead of Tubac said she lives near an underground gas line and it occasionally "vents" to relieve pressure.

She said she told the local fire chief about it and "he was horrified."

Santello, Barton E.
Page 95 of 117

Kinkead said she worried about gas-line venting when there are high power lines overhead.

The preferred alternative route follows the gas line part of the way.

Brian Segee of the Center for Biological Diversity and David Patterson of the Sierra Club faulted the TEP - Citizens environmental report.

They said it didn't mention some species found along the western route that are endangered or threatened, including the Sonoran chub in Sycamore Canyon.

The first two speakers were Hugh Holub and Nancy Valentine Holub representing Maestros Group.

Maestros wants to attract power-plant builders to construct generating stations near Nogales to meet local needs and connect to the Mexican grid, they said.

Asks for delay

Holub urged the commissioners to delay their decision until the idea of local plants was settled.

But during testimony by supporters of local generation, Mundell said Maestros has not applied to the commission for permission to build.

The line-siting issue would not prejudice future proposals, said Mundell.

Commissioner Spitzer said power plants in Nogales would increase pollution there.

On Jan. 3, the commission will decide whether TEP-Citizens can use its alternative route through the Santa Cruz Valley if it's preferred route doesn't work out.

The commission may order the companies to follow the state's Power Plant and Line Siting Committee ruling. That committee recommended that TEP - Citizens can use only the western "preferred" route.

That's the one west of the Tumacacori Mountains.

Two years to deadline

Santello, Barton E.
Page 96 of 117

TEP-Citizens filed legal papers asking permission to use the alternative route if they run into trouble meeting the Dec. 31, 2003, deadline.

Mundell and Spitzer said the commission can accept, reject or amend the line siting committee's decision.

The preferred route would run mostly west of the mines near Green Valley and the Tumacacori Mountains.

The preferred alternative route would run east of the Tumacacori Mountains and generally follow the gas line slightly west of Interstate 19.

A third player is Public Service of New Mexico. It also wants to construct a 345,000-volt power line that would run mostly east of the river near the current Citizens main power line.

That line would also connect to Mexico and also provide emergency backup power to Citizens.

PNM would transmit energy from the Palo Verde switching yard near the Palo Verde generating station southwest of Phoenix. The switching yard is part of a western grid of power companies.

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Santello, Barton E.
Page 97 of 117

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Arivaca residents say they're opposed to TEP's proposed westerly route

By Kathy Engle

SAHUARITA--Representatives of the community of Arivaca weighed in on the Tucson Electric Power power line proposals Monday night at a Department of Energy public hearing at Rancho Resort. They made it clear that the westerly route proposed by the utility was unacceptable to them.

The western route, which would run through the Coronado National Forest, west of the Tumacacori Mountains and Atacosa Mountains, is the one preferred by the town of Sahuarita, the Green Valley Community Coordinating Council, Tubac Chamber of Commerce and Santa Cruz County Board of Supervisors.

All have gone on record as saying, in effect, that if push comes to shove and the TEP power line proposal is approved, they prefer a 115,000-volt, 60-megawatt line that would run west of Interstate 19 from the Sahuarita south substation to Nogales and then 60 miles into Mexico.

The other routes proposed are the central route, which would run west of Interstate 19 along the existing gas pipeline past Amado and Tubac, and the easterly route, which would run east of the Interstate through Continental, Green Valley, Elephant Head, Amado and west of the Interstate at Tubac. (See map of proposed routes)

TEP has proposed that it build a double-circuit 345,00-volt line that would terminate at an existing substation in the city of Santa Ann in Sonora, Mexico.

Reiterating the Green Valley Community Coordinating Council's position at Monday's hearing was Mikel Shilling, GVCCC president. She said the council strongly objects to "placement of

Santello, Barton E.
Page 98 of 117

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any transmission line through the Santa Cruz Valley."

"The visual and environmental effects would be detrimental to our quality of life and substantially reduce our property values," Shilling told DOE officials and an audience of more than 100 people.

"In addition, there would be a direct negative impact on the cultural and historic values of the Canoa Ranch properties and the visitors to this important site in our area's history," Shilling said.

"A transmission line through the valley would also seriously and negatively impact the historic community of Tubac and the Tumacacori Mission National Historic Park to the south of Green Valley," she continued.

Shilling said the impacts of all alternative routes on recreation resources "must be discussed in the environmental analysis."

"We are specifically concerned," she said, "about the negative impacts on the Southern Pima County Trail System and the potential for negative impacts on the natural and biological elements of the Mountain Park segments of Pima County's Sonoran Desert Protection Plan."

Opportunity for comment

The purpose of the hearing was for DOE to receive comments from the public on the TEP proposal to assist in DOE's preparation of an Environmental Impact Statement by identifying significant environmental issues.

TEP has applied for a Presidential Permit from DOE because it is required to do so in order to construct electrical transmission lines across the U.S.-Mexico border.

TEP has agreed to jointly build a backup line with Citizens Energy Services, which has been ordered by the Arizona Corporation Commission to have the backup line for emergencies completed by Dec. 31, 2003.

TEP also wants to use the proposed 345,00-volt line to transmit surplus power to northern Mexico and, possibly, purchase power from Mexico, a prospect that drew several comments from area residents about possibilities of increased pollution

Santello, Barton E.
Page 99 of 117

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Mary Noon Kasulaitis, librarian at Caviglia Arivaca Library, whose family has ranched in Arivaca for 122 years, said she objected to the westerly route, which runs west of the Tumacacori and Atascosa Mountains through Bear Valley and Sycamore Canyon to Nogales "because it will ruin a virtually pristine natural area."

"It's too beautiful and too rugged and it doesn't appear that TEP has substantive information on the western route," she said, noting that Bear Valley and Sycamore Canyon have riparian ecosystems and are well-known to biologists and naturalists."

She said she doubted power lines could be constructed in that area and if they were it would require construction of roads and open up a previously inaccessible area.

She said the power lines would despoil a scenic area, which is now "beautiful and unspoiled."

Barton Santillo, a property owner in Arivaca, said TEP has "not been forthright" with people in that community.

"People in Arivaca learned about this plan only in the last couple of months," he sad.

"The question is would TEP consider its westerly route were it not for the fact that Arivaca has a small population, a lower-than-average per capita income and not much in the way of political connections?" he asked rhetorically.

Opposed to entire project

Santillo said he and many others in Arivaca are "opposed to the western route and to the entire project, which has questionable merit."

He said the powerline would "degrade the rural micro-culture" and have a detrimental effect on scenic areas and endangered species .

"The visual impacts, the physical intrusion of the towers" are incompatible with the lifestyle of the people in Arivaca, he said.

"Is it fair to ask people to sacrifice a portion of a remaining environment to support energy

Santello, Barton E.
Page 100 of 117

Hull, state power executives lobby for business in Mexico

Tom Zoellner
The Arizona Republic
Jan. 17, 2002 12:00:00

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<http://www.azcentral.com/news/articles/breaking/0117Limit17.htm>

Gov. Jane Hull and a group of Arizona power executives will be in Mexico City next week to lobby for permission to build high-voltage connections on the border and sell electricity to the Mexican power grid.

Such cross-border deals were rare under previous Mexican administrations, but President Vicente Fox has opened doors by promising to deregulate the state-owned electricity monopoly and calling for private investment.

Tucson Electric Power has already announced plans to build a $70 million transmission line to the border, and another power company says it wants to run a 1,000-megavolt line from the Palo Verde Nuclear Generating Station to a city in Sonora.

"This would be a tremendous advancement," said James Ahlers, a special assistant to Hull for Mexico policy. "It's a whole new area of exchange that doesn't exist right now."

Hull and executives from Arizona Public Service, Salt River Project, Southwest Gas and the Tucson utility are scheduled to meet with Fox and Energy Secretary Ernesto Martens Rebolledo on Jan. 25 as part of a three-day trade mission that will include a trip to Guadalajara and meetings with other government authorities and business people.

A number of regulatory, technological and political problems have kept the vast Mexican market off-limits to American power companies in recent years. There are several small power transfer stations at various points along the U.S.-Mexico border, but they exist mostly to help local communities in times of brownouts or other shortages.

The Ohio utility American Electric Power connected the western U.S. power grid with Mexico in July 2000 at Eagle Pass, Texas. AEP used a special direct-current system to overcome the difference in national power standards.

Arizona power companies, with the help of Hull, now want to break into that market.

"It's definitely going to be a tremendous benefit to everybody if we can get these grids connected," said Jan Bennett, vice president of customer service at APS. Everyone is

Santello, Barton E.
Page 101 of 117

interested in opening up new markets and if you wait until they develop, somebody will beat you to it."

But he acknowledged: "We still have some very, very bureaucratic problems to get through on both sides of the border."

The potential client is the Federal Electricity Commission (CFE), Mexico's state-run power giant, which provides 92 percent of the nation's electricity. It has dominated the market since the early 1960s, when Mexico successfully bought up American and Canadian power suppliers south of the border.

The rallying cry "*La Electricidad Es Nuestra* (The Electricity Is Ours)" was widely advertised at the time. Nationalistic pride still plays a role in Mexico's energy policy, according to a background paper prepared by the U.S. Federal Reserve Bank. "Foreign participation in energy remains a politically charged subject in Mexico, as dangerous to political careers as talk of cutting entitlements or raising taxes in the United States," the report noted.

Bennett acknowledged: "There is a fear about being too dependent on U.S. power among some Mexican officials."

But Mexico is facing a potential energy crisis. Growth in some places along the border is approaching 8 percent annually, and there is also a lack of private capital to build new power plants that feed into the Mexican power company's grid.

Public Service Company of New Mexico has already announced plans to build a line from the Palo Verde Nuclear Generating Station switchyard to the city of Santa Ana, Sonora, said company spokeswoman Julie Grey in Albuquerque.

With a capacity of up to 1,000 megawatts, the line would carry enough power to supply a city the size of Tucson. The New Mexico company would charge American companies to transport the electricity to Mexico through its line, Grey said.

Tucson Electric won approval this month from the Arizona Corporation Commission to build a 60-mile line from a substation near Sahuarita to the border at Nogales. The project will be complete by next year but still needs special approval from the U.S. Department of Energy to cross the border, company spokesman Art McDonald said.

Public records show that all of the companies participating in the trade mission made nominal donations to Hull's successful 1998 bid for reelection, with SRP donating the most at $3,790.

Santello, Barton E.
Page 102 of 117

Power Pique

Governmental agencies and environmentalists disagree over the expansion of electric power lines.

By Tim Vanderpool

As the energy wolves circle in Southern Arizona, their hunger to connect with Mexico's electricity grid--and mushrooming power market--has caused fur to fly between state and federal agencies and kept environmentalists priming their legal muskets.

In early January, Tucson Electric Power received Arizona Corporation Commission approval to run a 345,000-volt transmission line to a substation in the Sonoran burg of Santa Ana. The route would dissect remote and biologically sensitive areas of the Coronado National Forest southwest from Tucson and cross lovely Sycamore Canyon near the border.

But while TEP gloats over its success with state regulators, the terms of its triumph might prove the project's ultimate undoing.

One could say the seeds were sown last May in Nogales, during a public hearing before the ACC's Line Siting Committee. The committee evaluates environmental impacts of utility projects and then forwards its recommendations to corporation commissioners.

At the hearing, TEP officials stumbled through a flurry of questions from the committee and audience members. Residents grumbled over the utility's vague maps and about shoddy presentations by its hired environmental consultants.

Nogales hosted the meeting because TEP's transmission line would connect with that town's troubled electricity supplier, Citizens Energy Services. Citizens doesn't generate its own power for the city, but instead imports it along a single 55-mile, 115 kV line from the north. After years of lousy reliability, the utility is now under an ACC order to have at least one more 115 kV line in place by late 2003.

While TEP portrays itself as Nogales' savior, the massive lines it proposes far outstrip that city's needs; obviously, tapping Mexico's energy market is the big enchilada.

But the TEP/Citizens plum was apparently juicy enough for the ACC to bite in January. That hurdle behind it, Tucson Electric now faces federally mandated studies of how transmission lines might impact the Coronado Forest.

Given their druthers, TEP officials probably wouldn't have preferred the forest route, where they face rising opposition from environmentalists and additional government regulations. But if so, the company has only itself to blame for the results of a divide-and-conquer strategy that proved only too successful.

Initially, TEP offered three possible routes for the transmission lines. Two would stretch more or less along I-19, and a third--the so-called "Western Route"--slices through the Coronado's core.

The I-19 paths raised the specter of power lines snaking right above Green Valley and scarring vistas from Tubac to Amado. Not surprisingly, this notion sparked ferocious opposition by residents, many of whom conceded that the western route--through the forest and away from communities--might be the lesser evil.

Environmentalists felt otherwise, fearing permanent damage to the forest lands and harsh impacts upon wildlife living there.

However, friends of the forest still have an ace up their sleeve, says Brian Segee of the Center for Biological Diversity: Under the National Environmental Policy Act, or NEPA, projects on federal land require extensive analysis with regards to their ecological and archaeological impacts. Findings must then be submitted for public comment before a final document is released.

To meet these requirements, TEP was allowed to hire its own consultants (pre-approved by the U.S. Department of Energy) to create a draft version of the environmental impact statement. Segee predicts the company will "release the draft in the hottest part of the summer, when no one's around." Indeed, according to DOE officials, TEP is expected to release the impact statement in the steamy month of July.

Santello, Barton E.
Page 103 of 117

Few are more eager to have a peek at that draft than John McGee, supervisor of the Coronado Forest. According to a letter released by his office to the *Weekly*, McGee is already a little unhappy with the status quo--and a bit miffed with the ACC's January decision.

In the snippy February 19 letter to the commission, McGee asserts that "As Forest Supervisor ... it is my responsibility to document and disclose environmental effects of a proposed use ...

"It appears to me," McGee continues, "that the Commission's January 3, 2002 action is either premature and/or circumvents federal jurisdiction and my authority. I suggest we meet and discuss the situation."

It's not clear whether such meetings have taken place, and when asked to comment, Jerry Conner, the Coronado's point man on this project, said he preferred to "let the letter speak for itself."

But Heather Murphy, spokeswoman for the ACC, defended the commission's decision. "As I recall, the chairman's office sent a letter (to McGee) in response, because the Coronado Forest was notified as one of the land holders, and there was quite a bit of publicity," she says. "The gist (of McGee's letter) was that he wasn't in the loop. But there was information to the contrary, and he had been properly notified."

"Part of the letter intimated that the land was going to be run over without his participation or knowledge. But the utilities have to work with (Coronado) now that they have a routing."

That work could prove dicey, since all of TEP's bets are currently hedged on approval of its western route by the Coronado--and a disgruntled John McGee. When TEP spokesman Steve Lynn was contacted for comment on this situation, he abruptly hung up.

To Brian Segee, this conundrum reveals a broken regulatory system. The ACC decision "sidestepped a really contentious issue by putting it in the laps of the Forest Service," he says. "It's forcing them into a situation where they have one approved route by the state, and it happens to be the route through the most sensitive Forest Service lands.

"We think the process should be revised," he says, "so that the ACC is not making a decision on a route that involves federal lands until the federal agency has made a decision on those lands."

Either way, the timing of the Corporation Commission's decision was convenient. Only a few weeks later, TEP chief Jim Pignatelli and the company's government relations honcho, Larry Lucero, joined Gov. Jane Hull on a friendly junket down to Mexico. In those gracious climes, they glad-handed with high officials from the administration of President Vicente Fox in what one Hull aide calls just "a mission to expand trade opportunities."

"She's neither here nor in Mexico advocating any particular project," says James Ahlers, Hull's Special Assistant for Mexico Policy. "She's simply advocating an opening of the energy market."

Asked whether Hull might have directly or indirectly placed pressure on the Corporation Commission to approve the TEP route--and boost her own free-trade profile in Mexico--Ahlers is indignant. "I don't think it's her place to discuss this project with them," he says. "Obviously they're going to go through their normal regulatory procedures and make a decision."

But to Brian Segee, the timing raises a few questions. "With friends like that, it's hard for companies like TEP to go wrong," he says. "I think there are much larger forces (than the ACC) at work here, and I don't see the commission going out on any sort of political limb to thwart these binational proposals."

Santello, Barton E.
Page 104 of 117

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Commentaries

Why should customers pay for more electricity than is needed?

By Marshall Magruder

This is a copy of a letter I recently wrote to Lee Frankel, president, Fresh Produce Association of the Americas in Nogales, Ariz.:

Recently, I obtained a copy of your letter of 8 May 2001 from the TEP/Citizens Transmission Line Case 111 Record because I intervened in this case. I look forward to agreement about ways to obtain the best results for your members and Santa Cruz County (SCC) electricity consumers.

May I provide you information presented at the Arizona Corporation Commission (ACC) Power Plant and Transmission Line Siting Committee hearings since your letter.

You mentioned reliable electricity is essential. We agree with the ACC mandate for Citizens [Energy Services] to provide a second source of electricity. We agree our future needs are more than the present capabilities.

From testimony in the Record, Citizens would provide a new 115 kilovolt (kV) transmission line, rated at 100 megawatts (MW), from a proposed Nogales substation.

Sufficient supply

All parties, Citizens, and ACC Staff, agreed 100

Santello, Barton E.
Page 105 of 117

MW would be sufficient for Citizens' consumers, at least for the next three decades. Citizens testified their 115 kV transmission line is being upgraded to 100 MW. This upgrade is almost complete; only seven miles to go.

With power from a new substation and upgraded line, Citizens would have two 100 MW electricity sources. An ACC staff electrical engineer testified this meets the mandate.

Another transmission line application by the Public Service Company of New Mexico (PNM), proposes nearly the same 115 kV line solution for Citizens, without the $7.5 million required by the TEP proposal. The TEP and PNM proposals would bring electricity from Palo Verde (west of Phoenix) or even from Springerville (northeast Arizona), both over 200 miles away, to Nogales.

Citizens has agreed to purchase from TEP reserves for 100 MW on the new line. Citizens testified it hopes to resell their 100 MW obligation to others.

Transportation costs

TEP testified their transportation costs now are $2.23 per kW per month or monthly $2,230 per MW. This would be at least $IM more in annual fees Citizens would have to pass to its 13,500 customers, if not resold.

Citizens testified they intend to use the present line and, to avoid these charges, not to use the new TEP line, except, if necessary, during a line outage. Are there any customers in SCC who need an additional 100 MW? No.

Why pay more?

We, as customers, want to avoid paying any unused transportation fees. Our monthly bills already include Citizens' transportation charges for their 115 kV line. Why pay a $1M or more for a service used a few hours per year?.

The ACC Staff "best business practice" recommends power plants have at least two connections from the plant. Staff testified a local power plant would require two 115 kV lines to Citizens, one to the Grand Avenue substation (identical to the TEP and PNM proposals) and a

Santello, Barton E.
Page 106 of 117

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second line to a Citizens' substation in Rio Rico. This solution would provide increased reliability through this second redundant transmission line.

A local generation station requires no long transmission lines. Our electric power could be from a local substation, similar to that proposed by TEP.

Now, do we really need 345 kV transmission

Both TEP and PNM have proposed 345 kV lines to carry 500 to 1,000 MW, about 25 percent to 50 percent of TEP's service for Tucson.

This greatly exceeds the average of 25 to 40 MW used by Citizens. Our peak load has exceeded 50 MW only four times. Citizens testified its Nogales "peaking" plant is capable of generating an additional 50 MW.

This backup, usually "spins in reserve" during storms, could rapidly assume the load, if an outage occurs. When added to its 115 kV line capacity of 60 MW (before upgrade), Citizens now could have over 100 MW available, without any changes, for limited peak augmentation.

Way too much

Obviously, 500 MW to 1000 MW is way too much electricity for this county, city or anyone here. Citizens, therefore, may not have any resales in Santa Cruz County and thus could lose millions on this deal.

I am sure we both agree a second source is critical to ensure reliability and availability. The present 115 kV transmission line five-year average annual outage is 2.043 hours.

This would be reduced to about 1.7 seconds by an independent, redundant 115 kV line with same 2.043 outage rate as our present line.

I assume this will satisfy all your members' electrical reliability concerns. A 60-mile long 345 kV transmission line may be more reliable than the present line, and using it would reduce the 1.7 seconds, at high cost-to-benefit ratio.

Using good electrical practices, a local power plant, with multiple, redundant generation sets, should be able to guarantee 100 percent

Santello, Barton E.
Page 107 of 117

uninterruptible electricity. A local plant with two short 115 kV lines, each rated at 100 MW could provide Citizens up to 200 MW, plus another 100 MW being available on its upgraded 115 kV line.

Now, how much available power is enough for our city and county?

Any 345 kV line would add additional, unnecessary monthly expenses for all your members and Citizens customers.

These 345 kV lines are most disruptive to the visual integrity. The 345 kV towers are 120 to 140 feet high with 12 electric wires between them. A 115 kV line can use telephone pole H-frames or monopolies 65 feet high with three electric wires.

Do they help our tourism and real estate industries? The total cost estimate for TEP's 345 kV preferred solution is over $72M. Citizens estimated about $20M for a second 115 kV line. Who would pay this $50M difference?

Tubac resident Marshall Magruder is retired Raytheon senior principal systems engineer. He served as a member of the Joint City County Power Line Commission.

Part 2 of his letter to Lee Frankel will be printed in next Wednesday's edition.

The opinions expressed above are the writer's own and do not necessarily reflect those of this newspaper.

Santello, Barton E.
Page 108 of 117

latimes.com.

http://www.latimes.com/la-me-mexsmog15jun15.story

Power Plants Sprouting at Border

Energy: In Mexico, they can emit more pollution than in U.S. Backers tout chance to serve 2 nations.

By GARY POLAKOVIC
Times Staff Writer

June 15 2002

The Mexican border, comparatively free of red tape and smog regulations, is becoming a magnet for U.S. power plants, which will be able to emit up to 10 times more pollution than is allowed under California law.

Sixteen big generating stations are under construction, being expanded or planned on both sides of the 1,500-mile-long border from California to Texas, with the majority of them in Mexico. Proponents of the trend see it as a natural response to favorable economic conditions—including cheap labor—as well as an opportunity to serve markets in the United States and Mexico.

Critics in Congress, air quality agencies and the environmental movement say companies are saving millions of dollars by evading stringent emissions controls that would apply if the plants were being built north of the border.

Some plants are being erected in sparsely populated areas. But in at least one location, south of Imperial County in Mexicali, about 1 million people—mostly poor Latinos—on both sides of the border could be exposed to plant emissions.

"Plants in Mexico are being proposed without any add-on controls. It's a convenient back door to put projects that are less palatable in the U.S.A.," said Bill Powers, a San Diego air quality consultant and spokesman for the Border Power Plant Working Group, which has filed a lawsuit to force more rigorous power plant cleanups along the border. Add-on controls capture or treat emissions before they leave plant smokestacks.

A microcosm of global trade, Mexico's expanding power plant industry will burn natural gas arriving via pipeline from Canada and the United States or from bulk marine terminals receiving shipments from South America and Asia.

The electricity will flow into a grid to be used anywhere between Mexico City and the Pacific Northwest. Indeed, an increasing amount of power will be needed just along the border as it becomes home to more people and industries.

"We certainly see heightened interest in projects along the border between Baja and California as investors look for ways to reach the California market and develop the northern reaches of Mexico. We're seeing a lot more energy integration across the border," said Jed Bailey, associate director for Latin America for Cambridge Energy Research Associates, a research and consulting firm.

Santello, Barton E.
Page 109 of 117

"Construction costs are low in Mexico; at the border there is more availability of fuel than in the rest of the country; and a company can receive a permit in six to eight months. That is why they are building here," said Alberto Ramos Elorduy, deputy director of Mexico's Federal Electricity Commission.

Two power plants in particular—being built by U.S. companies near Mexicali, three miles south of the border—are drawing intense opposition. Massachusetts-based InterGen Energy Inc. is erecting its La Rosita plant, a 1,065-megawatt facility that will cost $748 million and produce enough electricity for 1.5 million households. Nearby, Sempra Energy Resources is building Termoelectrica de Mexicali, a $350-million plant.

Officials of the companies downplay air pollution concerns. They say the plants employ some clean technologies to reduce emissions and are a vast improvement over older coal-fired generators still in use in some places in the United States.

The U.S. Environmental Protection Agency acknowledges that the Sempra plant will perform nearly as cleanly as one built on U.S. soil. Both facilities will burn natural gas, the cleanest fossil fuel available, and Mexican authorities say they will be the least polluting in that country.

"We did not come to Mexicali to avoid U.S. regulations. When we are building something this close to the border, we wanted to make sure we were not going to have environmental impacts on the other side of the border," said John Foster, InterGen's senior vice president for Latin America.

Yet even the most advanced plants in Mexico do not meet the stringent pollution controls of the U.S. Clean Air Act. Unlike a new power plant built in the United States, those in Mexico are not required to "offset" their emissions. Offsets are pollution reductions a company pays for at nearby factories, businesses or power plants to more than compensate for the added emissions created by the new power plant.

The InterGen plant will use four turbines to generate electricity. Two units will produce power for Mexico and will have no add-on emissions control devices. The two that feed energy to the U.S. will be fitted with the devices. The two uncontrolled units will be allowed to emit about 10 times more nitrogen oxide than would be permitted if the plant were built in California, according to the EPA.

Even the two units with add-on controls will emit about twice as much smog-forming gas as a comparable California plant, the EPA estimates. Nitrogen oxides contribute to ozone and tiny particles that obscure the sky and have been linked to asthma, heart attacks and premature death.

"We are very concerned about the emissions," said Jack Broadbent, director of air programs for the EPA's southwest office. "We believe they will negatively impact air quality" in California's southeastern desert.

But the EPA's jurisdiction ends at the border. The Energy Department issued permits for cross-border electrical transmission lines but says it cannot regulate the design or operation of power plants in Mexico, although environmentalists have filed a lawsuit disputing that.

"This just highlights the disconnect between those in the Bush administration who look at the environmental factors and those who are interested in promoting the business interests of energy companies," said Martin Wagner, director of international projects for the Oakland-based Earthjustice Legal Defense Fund.

Imperial County in California and neighboring Mexicali just across the border would probably bear the brunt of the pollution. Mexicali is a fast-growing city of 800,000.

A patchwork of farms and small towns spanning 580,000 acres, the Imperial Valley produces much of the nation's

Santello, Barton E.
Page 110 of 117

wintertime vegetables under a pall of some of the country's dirtiest air. The county violates national air quality standards for soot and smoke an average of one day in three, as well as occasionally exceeding limits for carbon monoxide and ozone.It is one of the poorest regions of the state, and about 85% of the population is Latino. Health officials say the incidence of respiratory disease there is twice the statewide average.

In a recent assessment, the EPA concluded that smoke and dust from various sources blowing across the border from Mexicali are primarily responsible for pollution violations in Imperial County. Indeed, the county would have met U.S. air quality standards eight years ago had pollution from Mexico been checked, according to the EPA.

The Imperial County Air Pollution Control District estimates that the InterGen plant alone will release about 4,000 tons of pollutants into the region annually, although company officials say the facility will not have a serious effect on California.

"We have some serious heartburn about the InterGen plant," said Steve Birdsall, air pollution control officer for Imperial County. "It's going to have a significant impact on the Imperial Valley."

Despite those concerns, expansion of energy resources in Mexico is a priority for the Bush administration and Mexico's leaders. It is precisely the sort of development envisioned when the North American Free Trade Agreement was approved to promote closer economic integration among Mexico, the United States and Canada.

The Mexican government has encouraged foreign companies to develop energy resources; the nation potentially faces blackouts nationwide by 2004 unless more power plants are built, analysts say. Regulators say the country needs about 40 mid-size plants in the next eight years.

Seizing the opportunity, a Spanish company has decided to build a 500-megawatt plant in Agua Prieta just south of the Arizona border town of Douglas; a French utility seeks to build two power plants near Matamoros a few miles south of Brownsville, Texas; and a Swiss-Swedish consortium is expanding a power plant near Ensenada, according to the Border Power Plant Working Group and Mexican authorities.

The national energy plan that President Bush unveiled last year calls for accelerating cross-border energy investment, improving electricity grids and expanding oil and gas pipelines.

Earlier this year, the Federal Energy Regulatory Commission approved construction of a 215-mile gas pipeline extension from Arizona to Tijuana to deliver the fuel from Canada and the United States to power plants along the border. The pipeline is expected to be completed this summer.

In December, Bush approved permits for cross-border power transmission lines to reach the controversial power plants in Baja. An Energy Department assessment concluded that the project will not significantly affect air quality along the border, but critics say the study was cursory and are calling for a more detailed review.

The Earthjustice Legal Defense Fund, Wild Earth Advocates and the Border Power Plant Working Group sued in March to block completion of the electricity transmission lines until a detailed study of power plant emissions is done.

In Congress, California lawmakers probably face an uphill fight to win passage of bills, introduced last week, to prohibit U.S.-produced natural gas from being used in power plants in Baja until the plants comply with California emissions standards. The legislation is sponsored by Democrats Dianne Feinstein and Barbara Boxer in the Senate and Republican Duncan Hunter of Alpine in the House.

"It is not unreasonable to ensure that companies making money in the California energy market meet strict environmental standards," Feinstein said. "This legislation will help ensure power plants along the border employ the

Santello, Barton E.
Page 111 of 117

best technology available to control pollution in Southern California and other border areas." 'It is not unreasonable to ensure that companies making money in the California energy market meet strict environmental standards.'

Sen. Dianne Feinstein,

on her bill aimed at forcing power plants in Baja California, such as this one going up near Mexicali, to meet California emissions rules

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Santello, Barton E.
Page 112 of 117

Untitled

GREEN VALLEY - Rare is the public hearing where ranchers, environmentalists and the world's largest maker of earth-moving equipment are on the same side.
But when federal officials asked Thursday for comments on Tucson Electric Power's plan to run a power line from Sahuarita to Nogales, all they heard was criticism.
At the first of four hearings in Southern Arizona, all 17 speakers attacked the $75 million plan, which is meant to improve electric reliability in Santa Cruz County and let TEP sell and buy power in Mexico.
Past blackouts around Nogales prompted the Arizona Corporation Commission in 1999 to mandate the building of another link between the border city and the Western power grid. Because TEP wants to extend the line into Mexico, it also needs a "presidential permit" from the Department of Energy.
Nearly half of the 66-mile proposed route would run through the Coronado National Forest, where nearly 200 140-foot power poles, mostly slender "mono-poles," would be erected in the mountains west of Interstate 19. The Coronado must also bless the plan but has yet to weigh in.
The only speakers who didn't condemn the plan outright were from Caterpillar Inc., which has a 6,000-acre proving ground west of Green Valley that the power line would cross. Manager Matt Turner said he didn't oppose the route, but if it isn't detoured around the $30 million facility, "it could seriously impact our business" and create safety risks.
TEP spokesman Joe Salkowski said opposition at the hearing didn't reflect that "there's plenty of people in Nogales who'd be happy to see this line built."
Salkowski said the project would also help Tucson because it could buy power from the south, while the environment in Mexico would benefit if the power line forestalled the building of generating plants there.
Although none spoke at the first of two meetings Thursday, some area residents support the proposed route - the westernmost of three options - since it would be farther from their homes than the other two.
Many speakers, however, said no new power line is needed and that Santa Cruz County can be served in other ways.
An official with the Maestros Group said her company could build a power plant in Nogales to improve reliability there, and she faulted federal officials for not considering that option.
Critics also said federal officials were too vague in their draft environmental study, which is expected to be finalized in three or four months.
Jim Webb of the Marley Cattle Co., one of Southern Arizona's largest working ranches, said he still can't tell where the line will go on the land, but it would surely attract more illegal border crossers.
"The disruption to our operation would be magnificent in its scope," he said.
TEP has promised to revegetate disturbed areas and close one mile of road for every one mile it builds. But members of the Sierra Club, the Audubon Society and the Sky Island Alliance said the power line would mar scenery and fragment wildlife habitat for the sake of TEP profits. "We'd like to preserve at least a little bit of America the beautiful," said Phil Gray of the Green Valley Hiking Club.

Page 1

Santello, Barton E.
Page 113 of 117

Untitled

* Contact reporter Mitch Tobin at 573-4185 or mtobin@azstarnet.com.

Page 2

Santello, Barton E.
Page 114 of 117

NewsArticleonTEP091203.txt

Tucson Electric Power says its $70 million project will improve the reliability of electrical service in Santa Cruz County. Past blackouts there and the area's dependence on a single transmission line prompted the Arizona Corporation Commission in 1999 to mandate construction of another link between Nogales and the Western power grid.

TEP also wants to extend the line another 60 miles south of the border so it can sell power to Mexico's national utility. To do that, it needs a special "presidential permit" from the U.S. Department of Energy.

Nearly 200 massive power poles and nearly half the proposed route would run through the Coronado National Forest. TEP says it will take pains to avoid an endangered cactus and to revegetate disturbed areas. The utility is backed up by a new federal study that concludes the power line will do little harm to Southern Arizona's environment, aside from degrading its aesthetics.

But critics argue that Nogales could be helped with a smaller power line, a different route or a new local power plant. They say TEP's proposal would spoil scenic vistas and slice across a vast roadless area.

"They couldn't have picked a worse place to put a power line," said David Hodges, executive director of the Tucson-based Sky Island Alliance. Since 1998, the group has devoted thousands of volunteer hours to surveying the rugged mountains west of I-19 and lobbying to make them a federal wilderness area.

If the Department of Energy approves the route, Hodges' group and the Center for Biological Diversity say they'll definitely go to court to block it.

The center has earned a national reputation for winning lawsuits against the federal government on behalf of 329 species.

It believes the TEP plan would violate rules that protect roadless areas on the Coronado, said Brian Segee, an attorney for the Tucson-based group. The Center would also argue the power line would hurt Syca-more Canyon - a renowned birding area west of Nogales that is a candidate for protection under the 1968 Wild and Scenic Rivers Act.

TEP's plan calls for putting two high-voltage lines on a single set of towers that would rise 140 feet above the desert and run through the Coronado for 29.5 miles. The 345,000-volt lines could carry 500 megawatts - enough to serve about one-quarter of TEP's customers in Tucson during peak usage on summer afternoons.

The Nogales utility, Citizens Communications, has committed to buying 100 megawatts from TEP to meet electricity demands beyond the 65 megawatts currently used in Santa Cruz County. TEP would send the remaining 400 megawatts to Santa Ana, Sonora, although power plants in Mexico could also send electricity north to Tucson and other U.S. customers.

"It's a two-way street," TEP spokesman Joe Salkowski said. "The need for transmission reliability has been made all too clear in the past few weeks. This line will improve the transmission reliability in Tucson. We're at the bottom of the Western electrical grid, and all of our links come from the north."

Without a link to the U.S. power grid, Mexico might need to build a power plant that would "have its own environmental impacts," he said.

TEP and state regulators had considered three possible

Santello, Barton E.
Page 115 of 117

routes, but last January the Arizona Corporation Commission approved the westernmost path and rejected the other two, both of which would have skirted Amado, Tubac and Tumacácori National Historical Park.

Many local residents were happy to see the power line shifted west, away from their homes.

"Putting the towers in that part of the county - where people don't live or spend any time to speak of - won't hurt the animals. It's really not an environmental threat," said Tubac resident Earl Wilson, 75.

But while the western route is preferable to some, that doesn't mean they agree with TEP's proposal overall.

"The problems we've had down here haven't been with transmission lines. It's been with the distribution network" that feeds energy into people's homes, said Wilson, a retired businessman who was appointed to air quality panels by former President Lyndon B. Johnson and the governor of Maryland.

"People down here are really upset because we'll end up paying for a transmission line we don't need. The answer is a local generating plant," he said.

It's true the Nogales area could get energy from a new power plant there, TEP's Salkowski said, but it would still need additional power lines run to the facility so it could send out surplus power. The extra electricity can't be stored, and it's far too costly for a power plant to keep lowering its output, he said.

Federal land agencies affected by the plan - including the U.S. Forest Service and the Bureau of Land Management - have yet to pick their preferred route, but will do so in the environmental study's final version.

The Coronado is waiting to weigh in until it sees the public's comments, spokeswoman Gail Aschenbrenner said.

The proposed route would entail about 429 poles or towers, including 191 on the Coronado and eight on BLM land. TEP would primarily use "mono-poles" that take up 25 square feet at their base. The familiar, lattice towers have a footprint of 3,600 square feet.

TEP would need to build about 20 miles of new, temporary roads, and it would temporarily disturb about 197 acres on the Coronado during construction, according to the environmental study. The project would permanently disturb 29 acres of the 1.8 million-acre national forest.

"Because the proposed project would be in an arid area, where vegetation recovers very slowly, disturbances due to construction could have long-term impacts," the study said. A government measure of "scenic integrity" would decrease on 18,511 acres on the Coronado, the study said.

TEP promises it will close and revegetate one mile of road for every new mile it builds.

Environmentalists, however, say closing a wildcat road in a heavily used part of the Coronado doesn't balance the building of a new road in a pristine area. "All roads are not created equal," Hodges said.

In building the power line, TEP would also expand its South Substation in Sahuarita by 1.3 acres and construct a new 18-acre Gateway Substation in an industrial park on the west side of Nogales.

Santello, Barton E.
Page 116 of 117

NewsArticleonTEP091203.txt

None of the proposed routes bisect any critical habitat the federal government has mapped for endangered species. But they do cross through areas occupied, either currently or historically, by seven to 10 species protected by the Endangered Species Act.

One such species - the endangered Pima pineapple cactus - is found along all three proposed routes. TEP says it will avoid the cacti and is offering to buy habitat elsewhere to help the plant.

Construction, expected to last 12 to 18 months, would create about 30 construction jobs and 31 other positions, according to the federal study.

In public meetings, some residents worried about the health effects of the power line's electromagnetic field. But the study found people in the nearest homes, schools and businesses would receive less exposure than they do from ordinary household appliances.

TEP says the federal government's delays in preparing the environmental study make it impossible to meet the Arizona Corporation Commission's Dec. 31, 2003, deadline for creating a backup power supply for Nogales. The panel is expected to decide next month whether to grant an extension, spokeswoman Heather Murphy said.

But while critics say Nogales' power supply isn't unreliable, Murphy said it's clear Nogales needs a new link to the Western power grid.

"If that existing line to Nogales goes out, customers in Nogales suffer," she said. "There will be a point at which Nogales and Santa Cruz County won't be able to grow anymore because they can't get a reliable source of energy for the future."

* Contact reporter Mitch Tobin at 573-4185 or mtobin@azstarnet.com.

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Page 3

Santello, Barton E.
Page 117 of 117

CURRENTS

Power Charge

TEP's greed will hove it slicing through Southern Arizona, one way or another.

BY TIM VANDERPOOL

ON THIS OTHERWISE disputatious planet, a few images still spark universal disgust—lecherous priests, battered kids, dying gulls heaped across an oily beach. And smarmy corporate lawyers putting the screws to Joe Public.

Which brings us into the world of Tucson Electric Power Co., more lovingly known as "The Energy People."

In their hell-bent drive to string 345-kilovolt power lines from Sahuarita to Nogales, The Energy People are pulling out all the stops. Sometimes, this means briefly dropping their affable, carefully honed public image to reveal the profit-hungry beast starking within.

It is not pretty. It is not the kindly corporate soul who bought our ballpark's name. It is the nasty telephone voice that demands cash and threatens darkness.

Joining TEP in this venture is pushier but no less paradoxical Citizens Energy Services, which currently provides the juice for Nogales and surrounding area.

Citizens doesn't generate its own power for Nogales, but instead brings electricity along a single 55-mile, 115-kilovolt line from the north. After years of lousy reliability, the utility is under an Arizona Corporation Commission order to have at least one more 115-kilovolt line in place by late 2003. Enter TEP, who sees the stealing opportunity in string a full-strength, much more intrusive 345-kilovolt line down to the border, thereby making millions selling power to Mexico, and rescuing flickering Nogales at the same time.

Helping Nogales is a big brownie point to win state approval. But everyone knows tapping into Mexico is the real plum.

TEP's preferred route would place power lines atop 150-foot towers running far to the west of Green Valley, down among the beautiful ridges and canyons of the Coronado National Forest, alongside the equally lovely Pajarito Wilderness.

The utility's second choice would run lines roughly parallel to Interstate 19, and quite near Green Valley, Amado and Tubac.

For TEP, the competing routes are devilishly clever, pitting the folks of Green Valley and Tubac—understandably opposed to ugly power lines nearly overhead—against environmentalists equally repulsed by the notion of huge transmission towers scarring the Coronado.

At the same time, TEP has a leg up on the Public Service Company of New Mexico, or PNM, which in the late '90s proposed stringing similar lines through the Sonoita-Patagonia area to Mexico. That proposal, now on hold, requires the acquiescence of private land owners. Unlike TEP, the New Mexico company lacks an Arizona territory it's legally obligated to serve. This means PNM also lacks the power of eminent domain.

TEP does have that power, but apparently prefers hedging its bet with the U.S. Forest Service. This strategy has gained new heft under the anti-environment George W. Bush administration.

Which brings us back to lawyers. Among the first steps in such an undertaking are public hearings before the state's Power Plant and Transmission Line Siting Committee. That committee had two of three required meetings last week in Nogales. The third is scheduled for today in Phoenix. The meetings are meant to gather public opinions, and evidence about environmental impacts of the project. They are conducted like a court of law, with testimony and questioning under oath.

Following these hearings, a majority of committee members will either reject the project, or grant approval in the form of a Certificate of Environmental Compatibility. The recommendation is forwarded to the Corporation Commission, which then makes a final decision in this very high-stakes affair.

The rumbling Super 8 Motel in Nogales was still mostly quiet when Larry Lucero wheeled his big black sport utility vehicle into the parking lot on a cool Monday morning. As TEP's public relations point-man for this project, it's Lucero's job to put the company's spin-machine in motion. Also favoring tailored black suits, and wire-rimmed glasses, the mustachioed Lucero is a disquieting blend of Emiliano Zapata and a North Jersey clean-up man.

His sidekick, fellow TEP spokesman Bill Norman, takes a different approach. Although Norman likewise cruises the company domain in a strapping, late-model sports machine, today he's gussied up like an aging Howdy Doody in cowboy boots, jeans and a measly leather vest. But make no mistake—this is calculated rusticity. Norman will spend his time inconspicuously among an audience largely comprised of rural folk, ranchers and such.

That audience appears to oppose unanimously both of the proposed routes, mostly for the same reason. They would destroy the landscape just to satisfy TEP shareholders. The only split comes to whether the high-voltage line would deface their own property, remote grassland or wilderness habitat. Still, most seem resigned that, one way or another, TEP will get what it wants.

Lucero spent all of Monday poker-faced, watching from behind a team of lawyers as residents rambled up to the microphone to decry TEP's plans, and Norman scribbled occasional notes.

By Tuesday, Norman had disappeared. But Lucero was still on the beat. Public comment had been gathered, and testimony for and against the plan was being given by "intervenors," i.e. concerned neighbors, industry honchos and government types who'd earlier signed up for a place at the table.

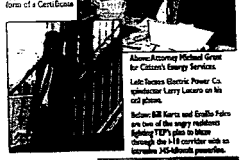
Slowly, subtly, the lawyers—the real meat behind Lucero's potatoes—were

continued on page 8

Above: Attorney Michael Grant for Citizen's Energy Services.

Left: Incase Electric Power Co. spindoctor Larry Lucero on his cell phone.

Below: Bill Norm and Emilio Falco are two of the angry residents fighting TEP's plan to blaze through the I-19 corridor with an intrusive 345-kilovolt powerline.



CURRENTS

TEP

continued from page 6

sharpening their swords.

One of the intervenors called on Dale Dovick, a white-haired, non-assuming Tubac native who operates the route skiing practically through his backyard. To highlight his neighborhood's dismay, Dovick had displayed pictures of affected houses on an easel at the front of the room.

The display was being entered into the record, as Dovick described the area and the people who live there. Listening intently was Michael Grant, an attorney for Citizens. Finally, peering smugly over reading glasses low on his nose, and in a resonant and somewhat sinister voice (the kind that might, say, remind the disturbed to take their lithium), Grant began methodically dismembering Dovick's testimony.

Referring to a vague map TEP had displayed before the committee, Grant asked Dovick to point out exactly where the homes are situated in regards to the proposed route along I-19.

He kept prodding the retiree—by now a bit shaky—to admit that, no, these homes weren't exactly right under the route, but only nearby. And heck, since they're only in the area of massive power lines, why the big fuss?

"I think I would object to the exhibit in terms of the way it was described," Grant then told Laurie Woodall, an assistant Arizona Attorney General who chairs the siting committee "since the houses are not on the proposed alternate route."

"Is that the only basis of your objection?" Woodall asked, irritated.

"That is true." Grant barely replied when Woodall cut him off with a snippy "Overruled." The audience snickered at the rebuke, and Dovick had hinted for his seat.

Grant leaned back and stoically removed the reading glasses.

TEP's hired legal gun, Kay Heyman tried his own hand at legal dissection following the testimony of Dr. Emilio Falco, a Whipple Observatory astronomer who's building a house near the I-19 route. Throughout the meeting, Falco, an official intervenor, had been quite articulate in skewering the project, saying he moved from the East Coast to Southern Arizona "just to get away from this sort of thing."

Throughout the hearings, TEP ballyhooed its great efforts to parley with affected residents. Falco felt otherwise, saying his own e-mail correspondences with Lucero ended abruptly, apparently when his opposition to the power lines became obvious.

Falco's remarks contradicted earlier TEP testimony that those correspondences had stopped for legal reasons, after Falco registered as an intervenor.

"I would like to point out that the last e-mail I received ... was March 18," the astronomer said. "That precedes by a month my intervenor status." He paused. "Mr. Lucero did send me [another] e-mail. I think his last one was April 13. So that also precedes my status as an intervenor. I think that reflects on how well TEP has actually communicated with the public."

Heyman leaned into the microphone. "Mr. Falco, I have here a copy of your intent for a motion to intervene, which is dated April 12, 2003 is that correct?"

"I believe that's correct," Falco replied.

"And you indicated that the last communication you had with Mr. Lucero was April 13?"

Brief silence. "Yes. I believe that is correct," Falco said, his voice faltering.

"Thank-you, no further questions," Heyman said, obviously rather pleased with himself. Behind him, a fleeting smirk flashed across Lucero's face.

Outside after the meeting, Falco was asked about the questionable April 13 e-mail.

"Actually, Larry Lucero only sent me that April 13 e-mail by mistake," Falco said. "It was supposed to go to Ed Beck, TEP's transmission planning supervisor.

"I can read it to you," he continued, whipping out a copy of the on-line note. "Mr. Lucero writes 'This individual is on the Santa Cruz County Energy Commission, as I thought previously. Have you responded to their questions?'"

Heyman and Grant stood chatting at a far corner, as Falco carefully folded the e-mail and placed it in his bag.

Grant lit up a cigarette, and blew the smoke above Heyman's head with a prolonged sigh.

Sure it's a dirty job. But hey, somebody's gotta do it. ◻

Schachat, Sandra
Page 1 of 2

From: dwimdtm@care2.com
Sent: Monday, October 13, 2003 9:20 PM
To: Pell, Jerry
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline. This issue is very important to me because although I live in the east, I have been to the southwest five times in the past five years and care deeply about the people and environment in this unique, beautiful area.

Having removed invasive species from the Santa Fe River, I have seen firsthand how horrible environmental destruction can be. But I have also been to the Grand Canyon (among other southwestern National Parks), witnessing the invaluable beauty of Arizona. And I have an appreciation of the rich cultural heritage of this area thanks to visits to Bandelier and Mesa Verde in addition to countless conversations with locals.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands.

Comment No. 1

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Schachat, Sandra
Page 2 of 2

2 cont. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Sandra Schachat
12060 Wetherfield Lane
Potomac, Maryland 20854

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

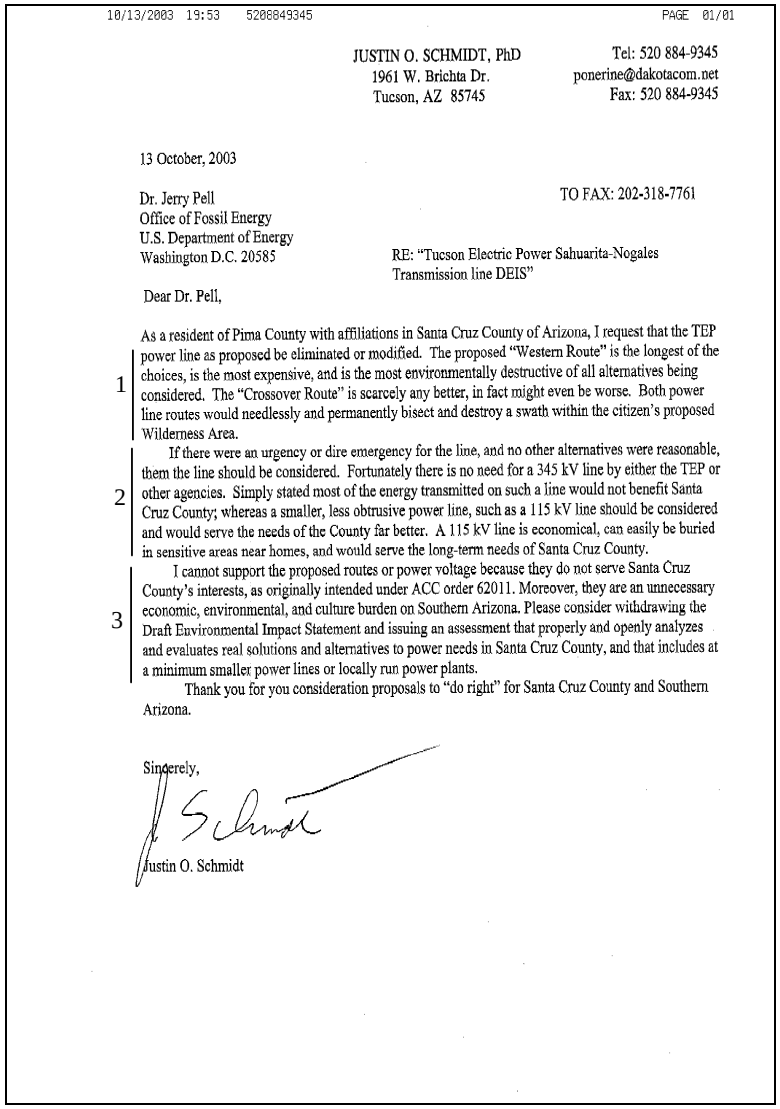
Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Schmidt, Justin O.
Page 1 of 1



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JUSTIN O. SCHMIDT, PhD
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ponerine@dakotacom.net
Fax: 520 884-9345

13 October, 2003

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585

TO FAX: 202-318-7761

RE: "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS"

Dear Dr. Pell,

As a resident of Pima County with affiliations in Santa Cruz County of Arizona, I request that the TEP power line as proposed be eliminated or modified. The proposed "Western Route" is the longest of the choices, is the most expensive, and is the most environmentally destructive of all alternatives being considered. The "Crossover Route" is scarcely any better, in fact might even be worse. Both power line routes would needlessly and permanently bisect and destroy a swath within the citizen's proposed Wilderness Area. 1

If there were an urgency or dire emergency for the line, and no other alternatives were reasonable, them the line should be considered. Fortunately there is no need for a 345 kV line by either the TEP or other agencies. Simply stated most of the energy transmitted on such a line would not benefit Santa Cruz County; whereas a smaller, less obtrusive power line, such as a 115 kV line should be considered and would serve the needs of the County far better. A 115 kV line is economical, can easily be buried in sensitive areas near homes, and would serve the long-term needs of Santa Cruz County. 2

I cannot support the proposed routes or power voltage because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. Moreover, they are an unnecessary economic, environmental, and culture burden on Southern Arizona. Please consider withdrawing the Draft Environmental Impact Statement and issuing an assessment that properly and openly analyzes and evaluates real solutions and alternatives to power needs in Santa Cruz County, and that includes at a minimum smaller power lines or locally run power plants. 3

Thank you for you consideration proposals to "do right" for Santa Cruz County and Southern Arizona.

Sincerely,

Justin O. Schmidt

Comment No. 1

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Comment No. 2

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

A smaller transmission line in lieu of the proposed 345-kV line (e.g., 115-kV line) would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

The Federal agencies concur with the commentor's statement that ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis). Refer to the response to Comment 2 above regarding a 115-kV transmission line.

Schmidt, Justin O.
Page 1 of 1

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13 October 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

RE: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendments

13 October 2003

Dear Ms Kozacek,

1 As an outdoor enthusiast and biologist, I find the Tumacacori and Atascosa Mountains to be an amazing and exceptional area for primitive recreation. A proposed TEP powerline will compromise and destroy the natural characteristics of the area.

I enjoy butterfly watching, hiking, biking, and recording insect sounds in the area. These pleasures will be affected by the powerline. The construction of the Western or Crossover Routes will be especially negative.

2 TEP proposes to build over 20 new miles of road for the there preferred route. The road density in the Tumacacori EMA is already above acceptable limits as set forth in the current Forest Plan: more road building, even with associated closures which are typically unsuccessful would be a major violation of the Forest Plan

1 cont. A Forest Plan Amendment would only decrease the already dwindling supply of remote recreational experiences in the region and would impact many sensitive wildlife and plant species that are an important aspect of our southern Arizona natural heritage.

3 I urge you to deny the special use permit for the Western and Crossover Routes because they are not compatible with the current uses of the affected area

Many thanks for your consideration and efforts to preserve this fantastic area from unnecessary development.

Sincerely,

Justin Schmidt

Comment No. 1

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project, including impacts to areas classified as semi-primitive in the Coronado National Forest. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project. Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to special status species.

Analysis of the proposed Forest Plan Amendment is contained in Appendix H.

Comment No. 2

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate . Based on these terms and conditions for ensuring the effectiveness of road closures, the proposed project is consistent with Forest Plan standards and guidelines for road density.

Comment No. 3

Sections 3.1 and 4.1 discuss the existing land use and analyze the potential impacts to these resources from the proposed project.

Schneller, Andrew J.
Page 1 of 1

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, D.C. 20585

Dear Mr. Pell: October 6, 2003

I am submitting official comments regarding the "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS"

1 The public and private lands in the Tumacacori and Atascosa Mountains are an exceptional area for primitive recreation and wildlife habitat – the powerline is incompatible with the area's natural characteristics, and I would hate to see an untrammeled tract of land sacrificed to a powerline that could be routed through an alternative location. The proposed Wilderness Area would be forever scared, and the outstanding natural characteristics of the area would be lost. I helped map and designate portions of this amazing proposed Wilderness Area, and would be personally insulted and harmed if the area were

2 desecrated by a powerline. There are cleaner and less obtrusive means of generating and distributing power in the US. Please pursue alternative energy sources and its distribution. There are much less pristine areas where a power line can be placed. Please consider the plethora of alternatives to permanently scaring the Tumacacori and Atascosa Mountains.

3 The recent massive blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully explores all options (including a local power plant and smaller power lines which would not serve Mexico) which would meet the important public interest of providing reliable energy service to Santa Cruz County.

I additionally would like to raise the following points:

4 The preferred Western Route is the longest, most expensive, and most environmentally damaging of all alternatives considered. The Crossover route is equally terrible.

5 There is no "Need" stated for a 345 kV line by either the applicant (TEP) or agencies – because most of the energy transmitted on the line would not benefit Santa Cruz County, why is the 345 kV, and not a smaller line, needed?
A smaller, less obtrusive powerline, such as a 115 kV line was not considered for any route. Why not? A 115 kV line is cheaper, can more easily be buried in sensitive areas near homes, and would serve the long-term needs of Santa Cruz County.

6 I do not support the proposed routes because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. They are an unnecessary economic, environmental, and culture burden on Southern Arizona. Please consider withdrawing the Draft Environmental Impact Statement and issuing an assessment that properly analyzes real solutions to power needs in Santa Cruz County that include a smaller powerline and/or locally run power plant.

Sincerely,

Mr. Andrew J. Schneller
911 N. Perry Ave.
Tucson, AZ 85705

Comment No. 1

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project. Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including impacts to wildlife habitat.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 3

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 4

The affected environment of the Western Crossover Corridors is described in Chapter 3, and the potential environmental impacts (including socioeconomic impacts) from these alternatives are fully evaluated in Chapter 4.

Comment No. 5

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

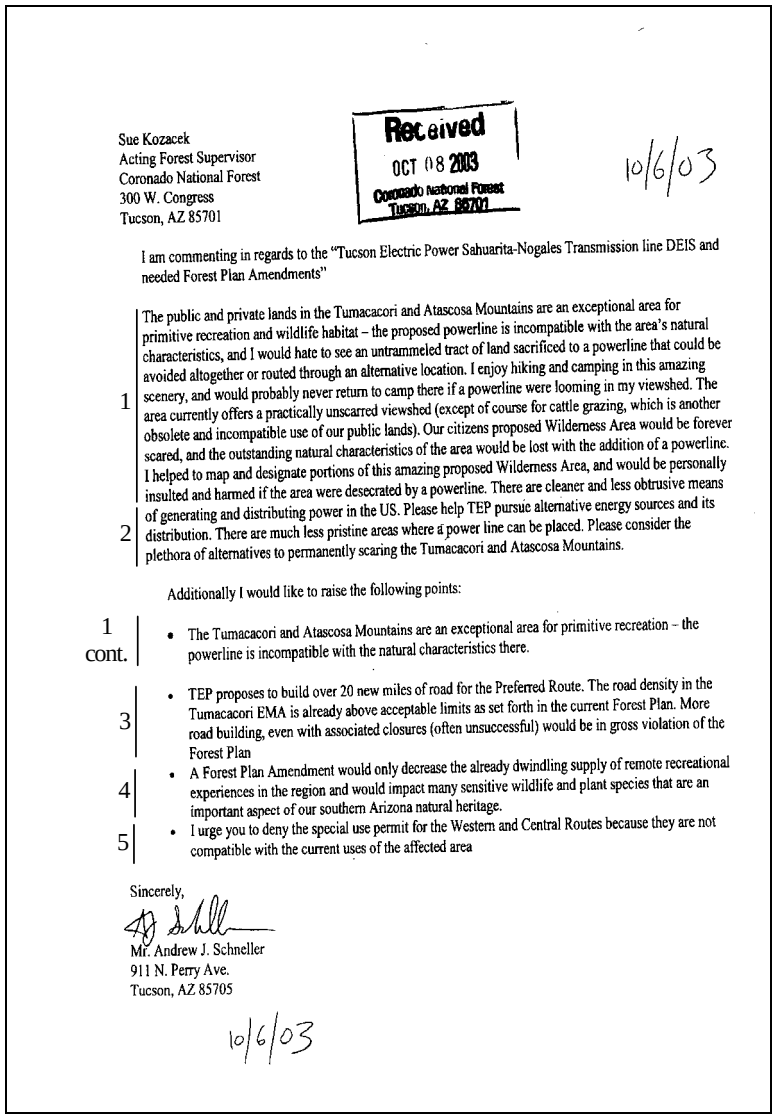
A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 6

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis). Refer to the response to Comment 5 above regarding a 115-kV transmission line.

Schneller, Andrew J.
Page 1 of 1



Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Received
OCT 08 2003
Coronado National Forest
Tucson, AZ 85701

10/6/03

I am commenting in regards to the "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendments"

1 The public and private lands in the Tumacacori and Atascosa Mountains are an exceptional area for primitive recreation and wildlife habitat – the proposed powerline is incompatible with the area's natural characteristics, and I would hate to see an untrammeled tract of land sacrificed to a powerline that could be avoided altogether or routed through an alternative location. I enjoy hiking and camping in this amazing scenery, and would probably never return to camp there if a powerline were looming in my viewshed. The area currently offers a practically unscarred viewshed (except of course for cattle grazing, which is another obsolete and incompatible use of our public lands). Our citizens proposed Wilderness Area would be forever scared, and the outstanding natural characteristics of the area would be lost with the addition of a powerline. I helped to map and designate portions of this amazing proposed Wilderness Area, and would be personally insulted and harmed if the area were desecrated by a powerline. There are cleaner and less obtrusive means

2 of generating and distributing power in the US. Please help TEP pursue alternative energy sources and its distribution. There are much less pristine areas where a power line can be placed. Please consider the plethora of alternatives to permanently scaring the Tumacacori and Atascosa Mountains.

Additionally I would like to raise the following points:

1 cont. • The Tumacacori and Atascosa Mountains are an exceptional area for primitive recreation – the powerline is incompatible with the natural characteristics there.

3 • TEP proposes to build over 20 new miles of road for the Preferred Route. The road density in the Tumacacori EMA is already above acceptable limits as set forth in the current Forest Plan. More road building, even with associated closures (often unsuccessful) would be in gross violation of the Forest Plan

4 • A Forest Plan Amendment would only decrease the already dwindling supply of remote recreational experiences in the region and would impact many sensitive wildlife and plant species that are an important aspect of our southern Arizona natural heritage.

5 • I urge you to deny the special use permit for the Western and Central Routes because they are not compatible with the current uses of the affected area

Sincerely,

Mr. Andrew J. Schneller
911 N. Perry Ave.
Tucson, AZ 85705

10/6/03

Comment No. 1

Refer to the response to Comment 1 in the previous submittal from Andrew Schneller.

Comment No. 2

Refer to the response to Comment 2 in the previous submittal from Andrew Schneller.

Comment No. 3

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Based on these terms and conditions for ensuring the effectiveness of road closures, the proposed project is consistent with Forest Plan standards and guidelines for road density.

Comment No. 4

Analysis of the proposed Forest Plan Amendment is contained in Appendix H.

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project, including impacts to areas classified as semi-primitive in the Coronado National Forest. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Comment No. 4 *(continued)*

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to special status species.

Comment No. 5

Sections 3.1 and 4.1 present a description of the existing land use and analyze the potential impacts to these resources from the proposed project.

Schockett, Bruce
Page 1 of 1

no to wilderness power lines

From: Fotogbw@aol.com [SMTP:Fotogbw@aol.com]
To: Pell, Jerry
Cc:

Subject: no to wilderness power lines
Sent: 10/13/2003 4:29 PM
Importance: Normal

Mr. Pell

1 Please pick the alternate more feasible route for the TEP powerlines. The I19 corridor is shorter, less costly and will not interfere with the natural wildlife. It is the latter that persuaded me to move to this area.

2 I've been a professional photographer in this region for nearly 30 years and feel it would be a travesty to rip up this god given area for power lines.

Please take a no action stand on this issue.

Bruce Schockett

Comment No. 1

Due to visual impacts through densely populated areas, and the potential impacts to cultural resources, the I-19 Corridor was eliminated from further analysis as viable action alternative (see Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 2

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Schweikhardt, Erik
Page 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 05:34 PM -----
eps@email.arizona.edu
10/11/2003 11:11 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush to name only a few of the diverse species of life which call this area home.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Schweikhardt, Erik
Page 2 of 2

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills. I ask you to consider this: what sort of policy and planning does not consider every other option, and alternative to achieve the greatest success in every way? Not a wise method of management.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options to meet the important public interest of providing reliable energy service to Santa Cruz County. I thank you in advance for listening, and I trust that you will make the best possible decision in accordance to citizen interest. Thank you and good day to you!!

Sincerely,

ERIK SCHWEIKHARDT
3950 E. BLACKLIDGE DR. APT. 214
TUCSON, Arizona 85712

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Scott, Mary
Page 1 of 2

FROM : FAX NO. : 3015893771 Oct. 13 2003 02:13PM P1

Mary Scott
2856 Monogram Avenue
Long Beach, CA 90815

Birding America
www.birdingamerica.com
Mary Scott Photography
www.maryscottphotography.com

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585
Jerry.Pell@hq.doe.gov
FAX: 202-318-7761

October 13, 2003

RE: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

Dear Dr. Pell:

I am a professional wildlife photographer and Internet birding specialist. I am also a lawyer and a businesswoman ~ I currently manage commercial properties in California. I was previously a corporate insurance executive in downtown Manhattan, and I spent almost a decade as the Risk Manager for MassMutual. I have no quarrel with necessary, carefully considered development.

I spent most of three years from 1999 to 2002 traveling around America visiting birding hotspots. I have created photo-essays on more than 190 birding hotspots in 22 states. These are available on my website, Birding America. One of the goals in my travels was to find the most pristine, bird-rich area of America, with the hope of establishing a residence there to serve as a base for my wildlife photography. Of all the places I visited, the area of southeastern Arizona between Green Valley, Nogales, and Arivaca was the most appealing. I now have a second home in Arivaca, Arizona. I often drive the Ruby Road from Arivaca to Nogales, and hike Sycamore Canyon, in my photographic pursuits.

It is rare to find huge expanses of wilderness anywhere in the contiguous 48 states. those few large tracts of wilderness that exist are precious to all of us. The Tumacacori and Atascosa Mountains are fabulous places ~ home to a huge diversity of wildlife and endless opportunities for outdoor enjoyment in an unspoiled setting. I am heartsick that the pristine nature of this resource may be lost forever for an ill-considered and unnecessary power project. 1

I have studied the materials made available regarding the TEP Sahuarita-Nogales Transmission line. I find absolutely no justification for a 345 kV line anywhere in the documents. Further, as the purpose of this project, according to ACC order 62011, was to serve the interests of Santa Cruz County, I am shocked that this line is even under consideration. This is a highly rural area, with limited population, and no economic need 2

Comment No. 1

Chapter 3 describes the affected environment of the area and Chapter 4 evaluates the potential impacts of the proposed project, including potential impacts to the resources (Sections 3.1.2 and 4.1.2, Recreation; and Section 3.3 and 4.3, Biological Resources) and areas cited by the commentor.

Comment No. 2

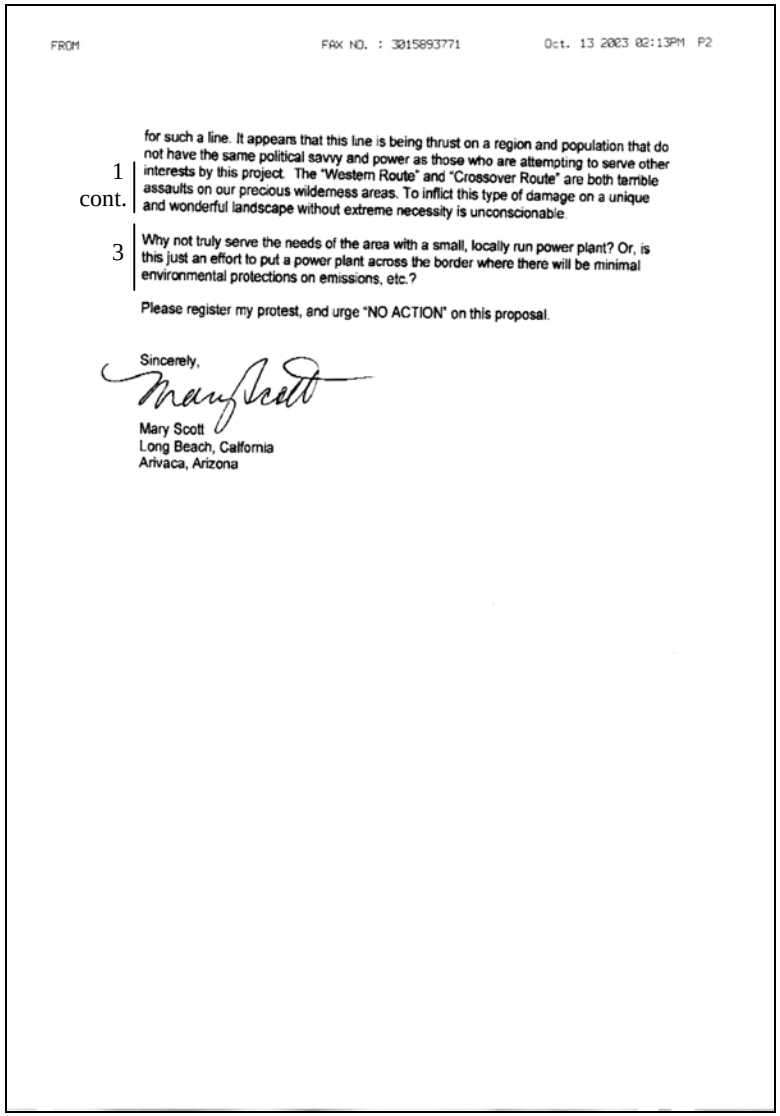
ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Comment No. 3

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS.

Scott, Mary
Page 2 of 2



FROM FAX NO. : 3015893771 Oct. 13 2003 02:13PM P2

for such a line. It appears that this line is being thrust on a region and population that do not have the same political savvy and power as those who are attempting to serve other interests by this project. The "Western Route" and "Crossover Route" are both terrible assaults on our precious wilderness areas. To inflict this type of damage on a unique and wonderful landscape without extreme necessity is unconscionable. 1 cont.

Why not truly serve the needs of the area with a small, locally run power plant? Or, is this just an effort to put a power plant across the border where there will be minimal environmental protections on emissions, etc.? 3

Please register my protest, and urge "NO ACTION" on this proposal.

Sincerely,

Mary Scott
Long Beach, California
Arivaca, Arizona

Comment No. 3 ***(continued)***

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the United States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States. (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

Seever, Nancy
Page 1 of 1

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 06:04 PM -----
"Nancy Seever" <nvseev@azgalaxyonline.com>
09/20/2003 08:01 PM

To: "skozacek@fs.fed.us" <skozacek@fs.fed.us>
cc:
Subject: Tucson Electric Power Sahuarita Nogales Line DEIS

To: Susan Skozacek

Surely you must understand what a loss it would be to the lands presumably needed for this power ploy. I have been blessed to visit these areas which so enrich our state. People who know much more about it than I do are convinced there are other less intrusive ways to go. Why not on the side of I-19? We who love this country know how hard it is to
1 replace the damage done. Please, Please listen to us, and maybe to that still small voice within yourselves, to save the magnificent canyons and grasslands which can never be replaced.

Best regards.

Nancy Seever
nvseev@azgalaxyonline.com
2003-09-20

Comment No. 1

The commentor's suggestion of building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5 of the Final EIS).

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to vegetation (Sections 3.3.2 and 4.3.2).

Shainen, Lee
Page 1 of 1

From: lee shainen [lshainen@dakotacom.net]
Sent: Wednesday, October 01, 2003 4:16 PM
To: Pell, Jerry
Cc: ducote@azstarnet.com
Subject: power lines and vistas

Dear Jerry,

Have you spent much time in S. Az? If you have, you know how fragile and beautiful the desert and forests are. If you have traveled much, you would also know how open spaces are disappearing around the planet. I'm not sure if I can put into words how much such vistas mean to the human spirit. I believe it is in such views of uninterrupted sky and land that we reconnect with our deep history, a sense of timelessness, and we are reminded of what this world was once like and what are ancient part in it was. From such places, comes hope. From such places comes art, peace of mind, creativity, the ability to look at life and its challenges anew. It is an essential vantage point. Without it, there is only the ever descending spiral of busyness and restlessness. We need reference points to measure where we are. S. Az is still such a space. Please, for everyone that comes after us, and all those who take such nourishment there, don't allow the power lines to compromise the sacred trust of our public lands. 1

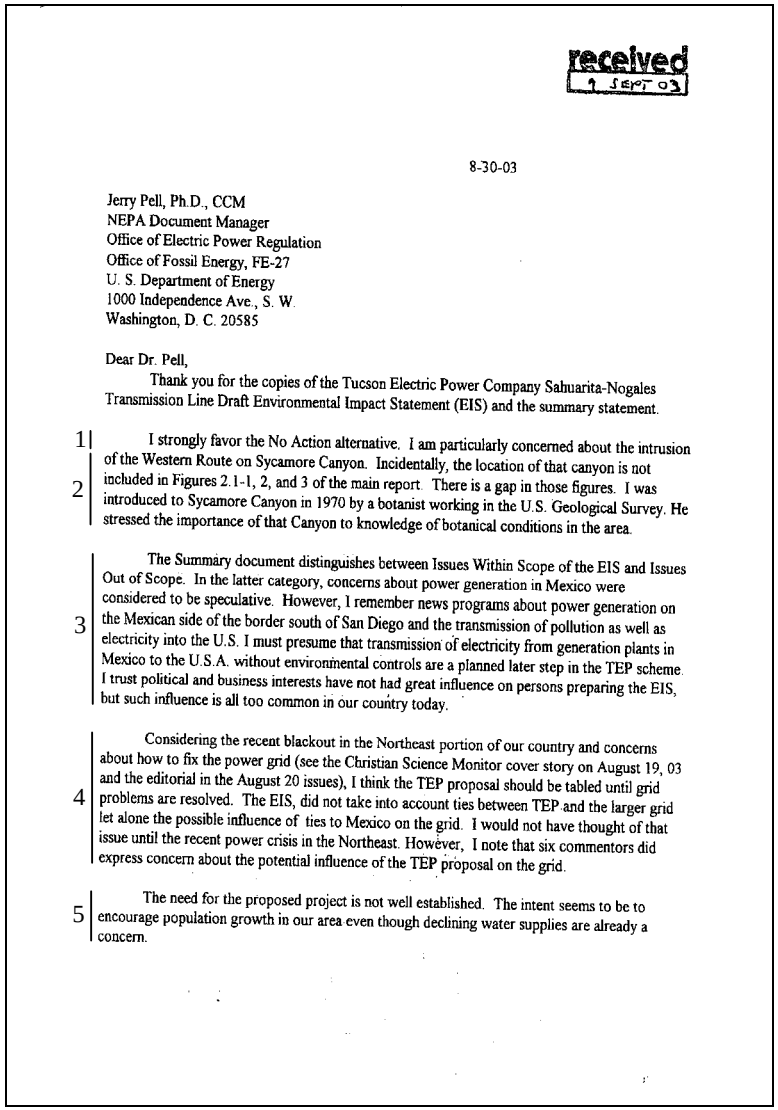
Thank you for considering the human spirit and our collective future in your thinking about this,

Lee Shainen
(520)577-8566

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed project.

Shelton, Ralph
Page 1 of 2



received
1 Sept 03

8-30-03

Jerry Pell, Ph.D., CCM
NEPA Document Manager
Office of Electric Power Regulation
Office of Fossil Energy, FE-27
U. S. Department of Energy
1000 Independence Ave., S. W.
Washington, D. C. 20585

Dear Dr. Pell,

Thank you for the copies of the Tucson Electric Power Company Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement (EIS) and the summary statement.

1 I strongly favor the No Action alternative. I am particularly concerned about the intrusion of the Western Route on Sycamore Canyon. Incidentally, the location of that canyon is not
2 included in Figures 2.1-1, 2, and 3 of the main report. There is a gap in those figures. I was introduced to Sycamore Canyon in 1970 by a botanist working in the U.S. Geological Survey. He stressed the importance of that Canyon to knowledge of botanical conditions in the area.

3 The Summary document distinguishes between Issues Within Scope of the EIS and Issues Out of Scope. In the latter category, concerns about power generation in Mexico were considered to be speculative. However, I remember news programs about power generation on the Mexican side of the border south of San Diego and the transmission of pollution as well as electricity into the U.S. I must presume that transmission of electricity from generation plants in Mexico to the U.S.A. without environmental controls are a planned later step in the TEP scheme. I trust political and business interests have not had great influence on persons preparing the EIS, but such influence is all too common in our country today.

4 Considering the recent blackout in the Northeast portion of our country and concerns about how to fix the power grid (see the Christian Science Monitor cover story on August 19, 03 and the editorial in the August 20 issues), I think the TEP proposal should be tabled until grid problems are resolved. The EIS, did not take into account ties between TEP and the larger grid let alone the possible influence of ties to Mexico on the grid. I would not have thought of that issue until the recent power crisis in the Northeast. However, I note that six commentors did express concern about the potential influence of the TEP proposal on the grid.

5 The need for the proposed project is not well established. The intent seems to be to encourage population growth in our area even though declining water supplies are already a concern.

Comment No. 1

The Federal agencies note the commentor's preference for the No Action Alternative.

Comment No. 2

Section 3.1, Land Use, discusses the affected environment of Pajarita Wilderness, which encompasses Sycamore Canyon. The structure locations, construction areas, and proposed access roads for all three corridors would not enter into Sycamore Canyon. Sections 3.3 and 4.3 discuss of the existing biological resources and potential impacts to these resources for each alternative.

Figures 2.1-1, 2.1-2 and 2.1-3 of the Final EIS show close-ups of the corridors in relation to certain towns, and are not meant to include the location of Sycamore Canyon. Refer to Figure 3.1-1, Specially Designated Areas on the Coronado National Forest, for a map showing the location of Sycamore Canyon.

Comment No. 3

The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS.

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the United States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

Shelton, Ralph
Page 2 of 2

6 1 cont. If, unfortunately, this project were approved and brought to pass, the Central Corridor is the logical one to use. Surely TEP favors the Western Corridor because there are fewer of us in the area to raise concerns about that route. However, most of my concerns apply to all three routes. Again, I favor the No Action alternative.

Thank you for considering my concerns.

Ralph L. Shelton
P. O. Box 578
Arivaca, Arizona 85601

Copy: Mr. John M. McGee
Forest Supervisor
U.S. Forest Service
300 West Congress
Tucson, Arizona 85701

Comment No. 4

As part of DOE's decisionmaking process on whether to grant a Presidential Permit for the proposed project, DOE will determine whether the proposed project will adversely impact the reliability of the U.S. electric system. Also, before authorizing exports to Mexico over the proposed 345-kV facilities, DOE must ensure that the export will not impair sufficiency of supply within the United States and will not impede, or tend to impede, the coordinated use of the regional transmission system.

Comment No. 5

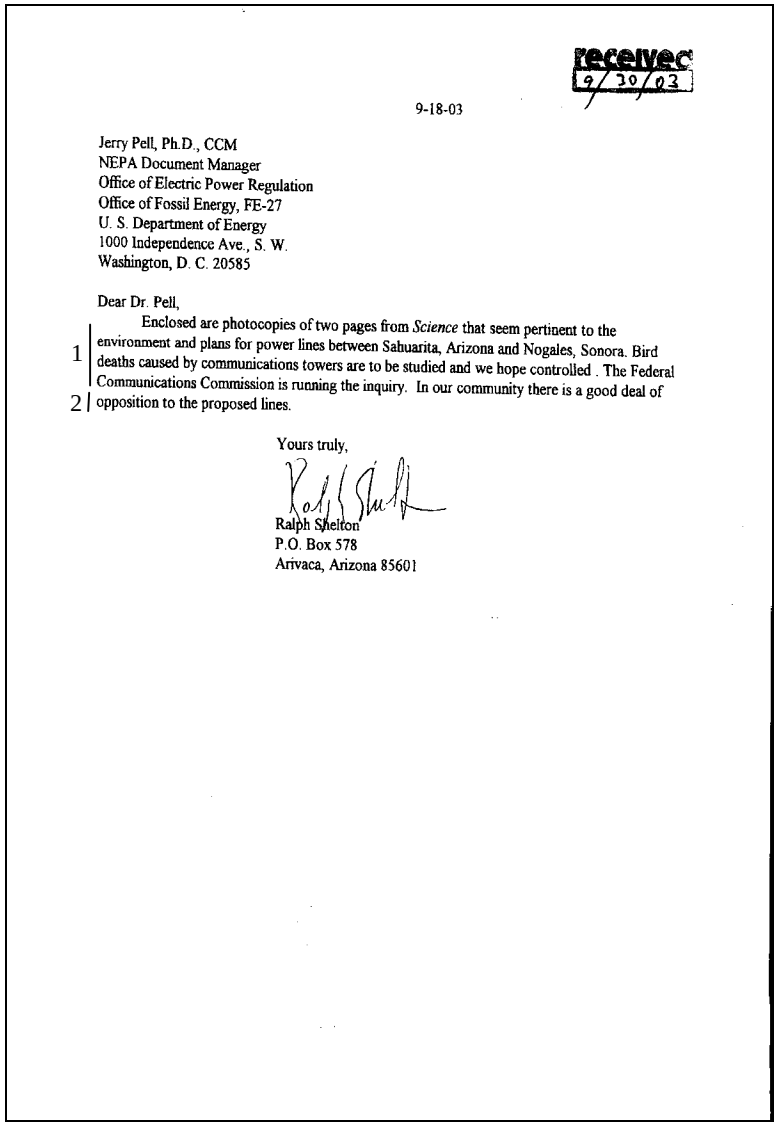
The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Whether or in what manner the proposed project may lead to development in southern Arizona is too speculative to be analyzed in the EIS.

Comment No. 6

The Federal agencies note the commentor's preference for the Central Corridor, if the proposed project is approved.

Shelton, Ralph
Page 1 of 3



received
9/30/03

9-18-03

Jerry Pell, Ph.D., CCM
NEPA Document Manager
Office of Electric Power Regulation
Office of Fossil Energy, FE-27
U. S. Department of Energy
1000 Independence Ave., S. W.
Washington, D. C. 20585

Dear Dr. Pell,

1 Enclosed are photocopies of two pages from *Science* that seem pertinent to the environment and plans for power lines between Sahuarita, Arizona and Nogales, Sonora. Bird deaths caused by communications towers are to be studied and we hope controlled. The Federal Communications Commission is running the inquiry. In our community there is a good deal of
2 opposition to the proposed lines.

Yours truly,

Ralph Shelton
P.O. Box 578
Arivaca, Arizona 85601

Comment No. 1

As discussed in Section 4.3.4, Migratory Birds and Raptors, some mortality resulting from bird collisions within the transmission line corridor is considered unavoidable. However, anticipated mortality levels are not expected to result in long-term loss of population viability in any individual species or lead to a trend toward listing under the ESA for any of the proposed corridors. In order to minimize bird mortality, TEP would follow the guidelines outlined in *Suggested Practices for Raptor Protection on Powerlines: the State of the Art in 1996* (APLIC 1996).

Comment No. 2

The Federal agencies note the commentor's statement that there is a lot of opposition to the proposed project in the community.

Shelton, Ralph
Page 2 of 3

ORNITHOLOGY

High-Flying Science Seeks To Reduce Toll at Towers

After years of debate about how best to reduce massive bird kills, researchers are beginning to receive funding to investigate solutions

Next spring, if all goes as planned, Bill Evans will spend his nights chasing migrating birds under cloudy Midwestern skies. Using bright lights that normally warn pilots away from tall communication towers, the independent scientist hopes to understand why flocks are drawn to deadly encounters with the spires and discover lighting schemes with less allure. It's the first significant research project to be spawned by a recent debate over the threat to birds from a growing thicket of towers, and—if successful—it could help reduce a massive avian death toll.

Ornithologists estimate that at least 4 million birds—mostly night-migrating warblers, vireos, and other songbirds—die annually at about 140,000 existing U.S. towers (*Science*, 16 March 2001, p. 2081). Conservationists worry that the toll will rise under plans to add thousands more towers to the landscape. But their pleas for studies that might identify solutions have gone largely unanswered. "It's been a Catch-22," says Ellen Paul, executive director of the Ornithological Council, a Washington, D.C.–based group that represents 10 major bird science societies. "Industry and [tower regulators] say they need better science to justify taking action, but then they won't fund the necessary studies."

Industry officials say it's partly a matter of finding money in a depressed economy. The Bush Administration also hasn't made it a priority. And some question whether tower kills are really a major problem: A host of other factors, from cats to habitat loss, are believed to kill far more birds. But bird advocates say that's no reason for inaction.

Some creative financing is now helping tower research get off the ground. The Evans study, for instance, will receive $50,000 from the settlement of an environmental lawsuit in Florida. And conservation groups are lobbying Congress for more money. Environmental attorneys, meanwhile, are preparing a legal challenge that could force regulators to cough up more cash. The legal strategy has already prompted one state, Michigan, to mull funding research in order to settle one case.

Researchers say that there's no shortage of questions. Members of the Communications Towers Working Group, set up by the U.S. Fish and Wildlife Service (FWS) to bring government, industry, and academia together, have called for a nationwide survey to refine tower kill estimates, which range from 4 million to 40 million birds a year. They'd also like to examine the conventional wisdom that the kills are limited, occurring primarily in eastern North America during the fall migration, and that the worst episodes—up to 12,000 birds in one night at a single tower—occur during overcast weather at towers higher than 75 meters, often marked by red, blinking lights.

Towering Idea. Bill Evans wants to see if lighting changes can reduce bird carnage.

But answering such questions could cost millions of dollars and take years. So Evans decided to focus on a narrower issue: the impact of the red-and-white blinking lights that the Federal Aviation Administration requires on all towers over 65 meters. On misty nights, the warning lights attract birds, which often become confused and smash into tower girders and cables.

Evans, who runs Old Bird, a nonprofit research organization in Mecklenburg, New York, is working with a tower-lighting firm to build a rack of multicolored bulbs that blink at various rates and intensities. Instead of putting the lights on a tower and waiting for next fall's migration, Evans decided to "take the lights to light box into the northern Midwest, where he expects to find plenty of spring migrants and overcast nights. Then he will monitor how the birds react to different lighting schemes, hoping to find one that could reduce collisions—but also meet federal visibility requirements and be inexpensive to install.

Other researchers are probing the underlying neurological reasons why some birds become confused when exposed to colored light. Ornithologists believe that night migrants typically navigate using the stars, but rely on Earth's magnetic field on overcast nights. But colored light can cause birds to become disoriented, suggest laboratory experiments by Roswitha and Wolfgang Wiltschko at Goethe University in Frankfurt am Main, Germany, and others. Red wavelengths, in particular, may interfere with vision-related pigments that also play a role in magnetic navigation, says Bob Beason of the University of Louisiana, Monroe, who has conducted similar work. The findings may explain "why towers with red lights seem to be a bigger problem," he says.

Further research might depend on some help from Congress. Representatives John Dingell (D–MI) and Edward Markey (D–MA) have proposed giving FWS $350,000 for peer-reviewed studies already identified by the agency's working group. But budget squabbles in Congress may block that earmark.

Other groups are looking to regulators and the courts for help. They want FWS to prosecute the owners of especially deadly towers under migratory bird laws, and they are also pressuring the Federal Communications Commission (FCC), which licenses towers. Over the last few years, the American Bird Conservancy, Friends of the Earth, the National Wildlife Federation (NWF), and other groups have challenged FCC permits for thousands of towers. They want the agency to conduct better environmental studies and consider the cumulative impact of all towers on birds. FCC has so far rejected most challenges on technical grounds, setting the stage for a federal court battle. In the meantime, NWF is negotiating with Michigan officials over remedies for apparent legal violations in building 181 towers for emergency communications, including several sited squarely in migratory pathways.

Evans and other scientists would prefer to work voluntarily with tower owners and users to find acceptable solutions. But legal wrangling may be unavoidable, he adds, noting that it took the threat of court sanctions to convince the wind-power and power-line industries to pour millions of dollars into understanding how to make their facilities safer for birds.

–DAVID MALAKOFF

Shelton, Ralph
Page 3 of 3

...bread and endanger compliance with the Biological and Toxin Weapons Convention, says Marylia Kelley, director of Tri-Valley CAREs, who believes that biodefense work should be done by a health agency.

Activists are trying to block or slow down other proposed BSL-3 and BSL-4 labs at various sites around the country, including the University of California, Davis; the University of Texas Medical Branch in Galveston; and National Institutes of Health (NIH) facilities in Bethesda, Mary- ... is expected to increase when NIH awards the first of several major construction grants next month.

"There's more noise about this now than there ever was," says Karl Johnson, a former chief of the Centers for Disease Control and Prevention's Special Pathogens Branch and a consultant to several of the proposed labs. He predicts that lab managers and researchers elsewhere will be watching the DOE suit "very, very carefully." –DAVID MALAKOFF

With reporting by Martin Enserink.

PACETIME

Einstein 1, Quantum Gravity 0

For 5 years, physicists have hoped that a flaw in Einstein's special theory of relativity might reveal that space and time aren't smooth at the smallest scale, but fuzzy and foaming. Now, that tantalizing prospect has vanished in a puff of gamma rays. Two independent measurements of cosmic gamma rays show that Einstein was right after all—and that current plans to detect the foam are doomed. "The results rule out these possibilities on empirical grounds," says Floyd Stecker, a theoretical astrophysicist at NASA's Goddard Space Flight Center in Greenbelt, Maryland.

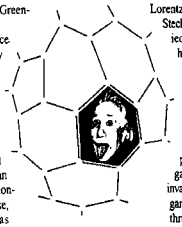
The frothiness of space and time is predicted by many theories that attempt to meld Einstein's theory of gravity and quantum mechanics. Physicists hoped to detect it by finding a hole in Einstein's dictum that it is meaningless to say an object is moving or stationary relative to the universe, a principle known as Lorentz invariance. One consequence of the principle is that all particles of light, or photons, travel through empty space at the same speed regardless of how much energy they pack.

In recent years, however, various quantum gravity theories have suggested that Lorentz invariance might not hold. In that case, a photon's speed would vary with its energy, so that light of different wavelengths would travel at slightly different rates. That would make intuitive sense, says Giovanni Amelino-Camelia, a theoretical physicist at the University of Rome, La Sapienza. After all, when light flows through water or air, its speed depends on its energy; perhaps foamy spacetime has the same effect.

Researchers might spot the tiny differences in high-energy light that had traveled far enough for faster photons to pull ahead of slower ones. In 1998, Amelino-Camelia and colleagues suggested that astronomers scrutinize gamma ray bursts—enormous extragalactic explosions that last only seconds—for evidence that rays of different energy reach Earth at different times. Such data will be collected by NASA's Gamma-ray Large Area Space Telescope (GLAST).

But 2 years before the launch of GLAST, Stecker and others have shown that Lorentz invariance holds firm. Stecker and colleagues studied gamma rays from the hearts of the galaxies Markarian 421 and Markarian 501, some 450 million light-years from Earth. En route the rays pass through a thin haze of infrared photons that fill intergalactic space. If Lorentz invariance were violated, the gamma rays would zip right through the haze. According to special relativity, however, the highest energy gamma rays should collide with the infrared photons to make electron-antielectron pairs. This process should soak up gamma rays above a well-defined cutoff energy—just what the researchers observed, Stecker reports in a paper to be published in the journal *Astroparticle Physics*.

Gamma rays from the Crab Nebula also bear out Einstein's theory, gravitation theorist Ted Jacobson and colleagues at the University of Maryland, College Park, report in this week's issue of *Nature*. The rays come from extremely energetic electrons spiraling in the magnetic fields inside the gargantuan cloud of gas. If Lorentz ▶



Nyah, nyah! Einstein's special relativity holds, so quantum gravity remains undetectable.

ScienceScope

Pacific Lab Debuts Fastest Unclassified U.S. Computer

Chemists and biologists who need massive computing power now have access to a new unclassified machine that rivals those available to nuclear weapons scientists. This week, Pacific Northwest National Laboratory (PNNL) in Richland, Washington, brought online a Hewlett-Packard machine with a peak performance of 11.8 teraflops (trillion operations per second). That's a couple of trillion faster than IBM's Seaborg machine at the National Energy Research Scientific Computing Center in Berkeley, California, although it trails Japan's Earth Simulator (*Science*, 1 March 2002, p. 1631).

Any project that fits PNNL's missions in environmental and biological chemistry is eligible. Built from 2000 processors connected by 80 km of cables, the $24.5 million computer eats up problems such as modeling protein folding and underground pollutants. "Chemistry is our bread and butter here," says Scott Studham of PNNL's Environmental and Molecular Sciences Lab.

The PNNL machine's reign as top U.S. unclassified peak performer promises to be brief, however. This fall, the National Center for Supercomputing Applications in Champaign, Illinois, will roll out a cluster that peaks at 17.7 teraflops. –KATIE GREENE

FCC to Probe Role of Towers in Bird Deaths

Bowing to pressure from bird advocates, the Federal Communications Commission (FCC) has launched a major inquiry into the impact that the nation's 100,000 communications towers are having on bird populations. The agency last week began collecting public comment on everything from the quality of existing studies to ideas for new research.

Bird researchers estimate that towers—from short cell phone antennae to towering TV spires—kill at least 4 million birds per year (*Science*, 11 October 2002, p. 357). But it is not clear what factors, such as tower height and lighting, cause the deadly collisions. "There does not appear to be systematic research ... regarding exactly how and to what extent, if at all, these factors contribute to any risk to migratory birds," says FCC, which is accepting comments until late this year with an eye toward better construction regulations.

Some observers are skeptical that the review will lead to more money for research. "Unless they generate new data, it's not answering the question," says Ellen Paul, executive director of the Ornithological Council in Washington, D.C.

–DAVID MALAKOFF

Shelton, Ralph
Page 1 of 2

9-29-03

Jerry Pell, Ph.D., CCM
NEPA Document Manager
Office of Electric Power Regulation
Office of Fossil Energy, FE-27
U. S. Department of Energy
1000 Independence Ave., S. W.
Washington, D. C. 20585

Dear Dr. Pell,

1 At one of the Green Valley, Arizona meetings concerning Tucson Electric Power line route proposals, we were advised to submit repetition of our reactions to the TEP proposal. I favor the No Action response to the proposal. At the meeting persons with technical and legal backgrounds raised serious problems with the proposal. Must this problem be dragged into court?

2 If more electricity is needed in Nogales, Arizona why not build a generating plant there? Reportedly one company is prepared to do so. Grid failures and other factors justify reducing dependence on long distance transmission lines and complex connections across distant communities. Roy McAlister, a former professor at Arizona State University, advocates use of
3 hydrogen power in his book *The Solar Hydrogen Civilization*. Is this the time for TEP or a different company to get into the use of hydrogen for power generation?

4 I continue to be concerned about preservation of Sycamore Canyon and other locales important for the understanding of nature as well as for their beauty. In an earlier letter I cited *Science* relative to Federal Communication Commission concerns about the impact of power lines on bird life. At the Green Valley meeting someone commented that those lines are also a threat to low flying military aircraft in the area. The next day I heard on the news that a military plane had crashed following impact with power lines in Arizona.

5 Use of the proposed lines to transmit power from Mexico to the U.S. was considered outside the scope of the environmental impact statement even though air pollution traveling from power generation plants in Mexico to California is a serious problem. The *Arizona Daily Star* for September 26, 03 cited a TEP spokesman as saying that the TEP project would permit Tucson to buy power from the south even though the building of power lines in Mexico would be forestalled. Strange. And what does forestalled mean?

Comment No. 1

The Federal agencies note the commentor's preference for the No Action Alternative.

Comment No. 2

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

Alternative power supply means such as hydrogen power do not meet TEP's proposal and are thus not evaluated in this EIS.

Comment No. 4

Section 3.1.1, Land Use, discusses the affected environment including nature study areas such as the Chiltipene Botanical Area and the Goodding Research Natural Area (including Sycamore Canyon). The structure locations, construction areas, and proposed access roads for all three corridors would not enter into any of these specially designated areas.

Sections 3.2 and 4.2 present discussion of the existing visual resources and potential impacts to these resources for each alternative.

Shelton, Ralph
Page 2 of 2

I was told that Mr. McGee is no longer in charge of this issue for the forest service, but I'm not informed about who took his place. I'll send a copy of this to Forest Supervisor.

6 Opposition to the Western route is close to universal among those of us who live in that area.

Yours truly,

Ralph Shelton, Ph.D.
P. O. Box 578
Arivaca, Arizona 85601

Copy: Forest Supervisor
U.S. Forest Service
300 West Congress
Tucson, Arizona 85701

Comment No. 4 *(continued)*

Regarding potential impacts on birds, refer to the response to Comment 1 in the previous submittal from Ralph Shelton.

As presented in Chapter 10 and Appendix A of the Final EIS, the Federal agencies and TEP had initiated consultation with Davis Monthan Air Force Base regarding potential impacts of the proposed transmission line on military flight operation. In response to the consultation, the Davis Monthan Air Force Base stated no relevant issues with any of the proposed corridors. The proposed Western Corridor could impact the FUZZY Military Operating Area, controlled by the 162nd FG Airspace in Tucson. Subsequently, information regarding the proposed project has been forwarded to the 162nd FG Airspace Manager and a copy of the Draft EIS has been sent for review and comment. No comment has been received.

Comment No. 5

The Federal agencies do not have any information suggesting that any power plant construction in Mexico is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS.

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the United States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

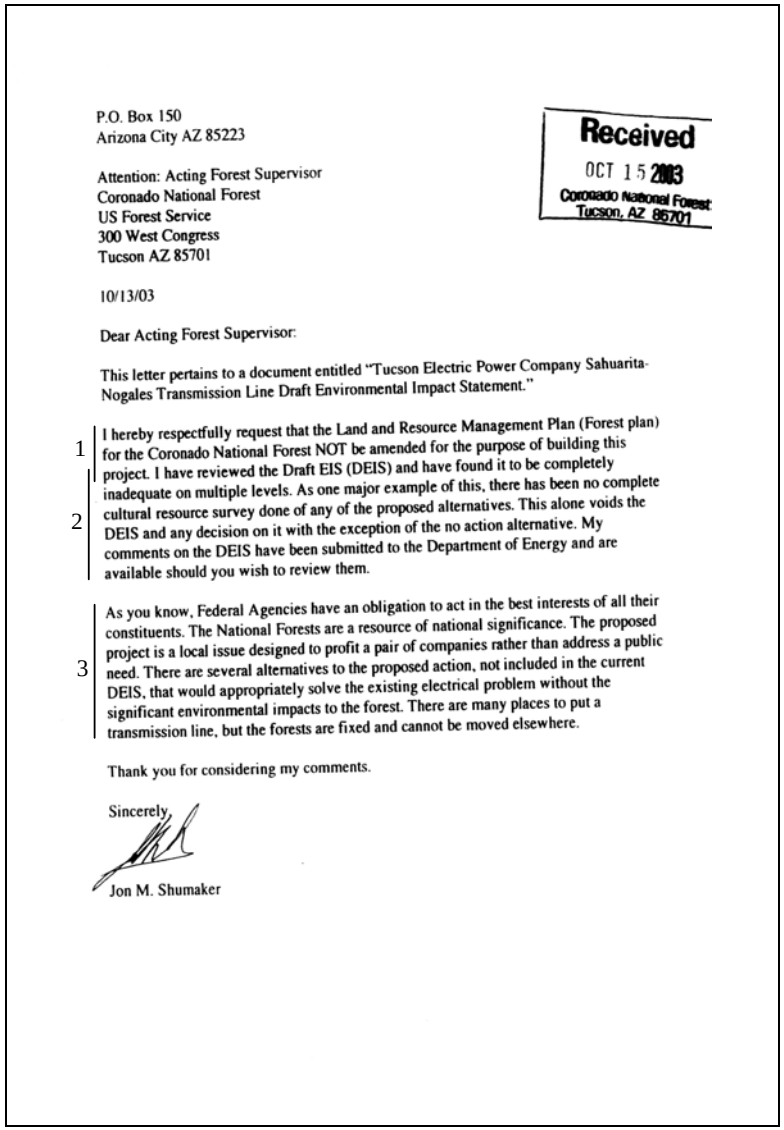
Comment No. 5 ***(continued)***

Section 1.1.1, The Proposed Action, has been revised in the Final EIS to clarify that the 345-kV transmission line that TEP proposes to construct would go just across the U.S.-Mexico border, where it would likely connect to another transmission line (that would most likely be constructed by CFE, but may be constructed by TEP).

Comment No. 6

The Federal agencies note the commentor's statement that the opposition to the Western Corridor is nearly universal among those who live in that area.

Shumaker, Jon
Page 1 of 1



P.O. Box 150
Arizona City AZ 85223

Received
OCT 15 2003
Coronado National Forest
Tucson, AZ 85701

Attention: Acting Forest Supervisor
Coronado National Forest
US Forest Service
300 West Congress
Tucson AZ 85701

10/13/03

Dear Acting Forest Supervisor:

This letter pertains to a document entitled "Tucson Electric Power Company Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement."

1 I hereby respectfully request that the Land and Resource Management Plan (Forest plan) for the Coronado National Forest NOT be amended for the purpose of building this project. I have reviewed the Draft EIS (DEIS) and have found it to be completely inadequate on multiple levels. As one major example of this, there has been no complete
2 cultural resource survey done of any of the proposed alternatives. This alone voids the DEIS and any decision on it with the exception of the no action alternative. My comments on the DEIS have been submitted to the Department of Energy and are available should you wish to review them.

3 As you know, Federal Agencies have an obligation to act in the best interests of all their constituents. The National Forests are a resource of national significance. The proposed project is a local issue designed to profit a pair of companies rather than address a public need. There are several alternatives to the proposed action, not included in the current DEIS, that would appropriately solve the existing electrical problem without the significant environmental impacts to the forest. There are many places to put a transmission line, but the forests are fixed and cannot be moved elsewhere.

Thank you for considering my comments.

Sincerely,

Jon M. Shumaker

Comment No. 1

The Federal agencies note the commentor's request that the Forest Plan not be amended for the proposed project.

Comment No. 2

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review.

If an action alternative is selected, the Federal agencies will follow a Programmatic Agreement with the Arizona State Historic Preservation Office (SHPO), interested tribes, and TEP guiding the treatment of cultural resources. Prior to ground-disturbing activities in any approved corridor, a complete on-the-ground inventory would be conducted by professional archaeologists in accordance with provisions of Section 106 of the National Historic Preservation Act (NHPA). Efforts to identify cultural resources would also include historical document research and continued consultation with Native American tribes regarding potential traditional cultural properties and sacred sites. Identified cultural resources would be evaluated in terms of National Register eligibility criteria and potential project effects in consultation with all parties who are participants in the Programmatic Agreement.

Wherever possible, power poles, access roads, and any other ground-disturbing activities would be placed to avoid direct impacts to cultural resources. A professional archaeologist would assist the pole-siting crew in avoiding impacts to cultural resource sites. In cases where avoidance of sites is not feasible, a site-specific Treatment Plan and Data Recovery Plan would be developed in consultation with tribes, the, appropriate land-managing agencies, and the Arizona SHPO. These plans will include an appropriate Plan of Action to implement the Native American Graves Protection and Repatriation Act. A Discovery Plan would be developed to establish procedures to be followed in the event of discovery of unanticipated cultural resources, and a Monitoring Plan would address issues of site protection and avoidance.

Comment No. 3

Section 1.2.2 of the Final EIS explains the Federal agencies' purpose and need and their authorizing actions for the proposed project. The purpose and need for USFS action is to determine whether the proposed project development is appropriate within the Tumacacori EMA within the Coronado National Forest.

Potential economic benefit to TEP from the proposed project is outside the scope of the EIS.

Section 1.2 of the Final EIS explains the roles of TEP and the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Shumaker, Jon
Page 1 of 7

Dr. Jerry Pell, Manager
Office of Electric Power Regulation
Fossil Energy, FE-27
US Department of Energy
Washington DC 20585
10/13/03

Dr. Pell:

This letter contains my comments on a document entitled "Tucson Electric Power Company Sahuarita-Nogales Transmission Line Draft Environmental Impact Statement."

1 I hereby respectfully request that the US Department of Energy (DOE) choose the "No Action Alternative" for this project. The above-named EIS in its present form completely fails to adequately follow both the spirit and the letter of the National Environmental Policy Act (NEPA), and is completely inadequate as a justification for the proposed action(s). The DOE has an obligation to look out for the best interests of the public at large, not simply that of specific corporations or business interests.

2 The document does not adequately address the purpose and need for this undertaking. It simply describes what is desired by TEP-Citizens. It does not adequately address a range of alternatives that are reasonable, prudent, practicable, or that would minimize impacts on the region's environment. The purpose and need are not rigorously described and are misleading at best.

3 Not all parts or phases of the proposed action are described adequately in the document. This project sets up infrastructure that will lead to other significant impacts in both the United States and Mexico which have not been adequately described or analyzed, such as

Comment No. 1

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review.

The purpose of the EIS is to evaluate and disclose the environmental impacts of TEP's proposed project and the No Action Alternative for use by the Federal agencies to make their decisions from among the alternatives in their respective RODs (see Section 1.6.6).

Section 1.2.2.1 explains that the purpose and need for DOE action is to determine whether it is in the public interest to grant or deny a Presidential Permit to TEP for the construction, operation, maintenance, and connection of the proposed 345-kV transmission line.

Shumaker, Jon
Page 2 of 7

3 cont. new power plants that would be built on either side of the border, or development resulting from bringing so much power into the region.

The document does not adequately or rigorously explore or objectively evaluate all reasonable alternatives. The listed alternatives do not include less environmentally sensitive alternatives that were arbitrarily and capriciously removed from consideration. This is entirely against both the spirit and the letter of NEPA. DOE is responsible for looking at a panel of reasonable alternatives.

2 cont. Because the purpose and need is not clearly explicated, the alternatives are inadequate for addressing that purpose and need. If the object of the project is to provide power to Santa Cruz County, why then is a Presidential Permit necessary?

The alternatives, rather than minimizing or avoiding significant environmental impacts, actually maximize those impacts and have been sited within the most environmentally sensitive areas. This is a stunning misinterpretation of NEPA for which DOE should be held responsible as lead agency.

4 The alternatives have not been rigorously or objectively evaluated. As an example, NONE of the routes has been subjected to a full cultural resources survey. How can alternatives be rigorously or objectively evaluated if there is no baseline data? This is a stunning omission. Knowing where the resources to be impacted are located is one of the basics required for an EIS and this has not been done. The three routes in the DEIS have had less than 15% of their routes surveyed by professional archaeologists. This is wholly inadequate. And what about the alternatives that

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal. A Presidential Permit is required because, under Executive Order 10485 of September 3, 1953, as amended by Executive Order 12038 of February 3, 1978, no one may construct, connect, operate, or maintain facilities at the U.S. international border for the transmission of electric energy between the United States and a foreign country without first obtaining a Presidential Permit from DOE, and accordingly, TEP applied to DOE for a Presidential Permit for their proposed project (see Section 1.1, Introduction).

Comment No. 3

This EIS evaluates the environmental impacts of TEP's proposed project and any connected or other past, present, or future actions that are reasonably foreseeable. The Federal agencies do not have any information suggesting that any power plant construction in Mexico or the United States is reliant upon or otherwise connected to TEP's proposed project. Therefore, the potential for construction of power plants in Mexico or the United States is not a connected action and is not analyzed in Chapter 4, Environmental Effects, of the EIS.

Shumaker, Jon
Page 3 of 7

were never looked at in the first place? Perhaps they have significantly smaller environmental impacts, but this was never examined.

The explanations for why certain alternatives were dropped are wholly inadequate. Again, the remaining alternatives have been placed within the most environmentally sensitive possible areas in the entire region. And nowhere has the issue of cultural resources been looked at adequately. 4 cont.

The document does not adequately evaluate all foreseeable direct and indirect impacts. Again, if the locations of historic properties are not known due to failure to adequately survey, how then can impacts to those properties be adequately evaluated for direct impacts, much less indirect impacts? This document fails to do what it is supposed to do.

5 The document fails to address the issue of continuing habitat fragmentation in the region and how this project will exacerbate that trend. Long linear projects such as this carve up once connected habitat into fragments, which significantly impact the biodiversity of the region. This is not something that can be mitigated.

6 The discussion of unavoidable adverse environmental impacts is inadequate. The discussion on cultural resources, for example, only attempts to address vehicular impacts.

7 The cumulative impacts of past, present, and reasonable foreseeable future impacts have not been adequately evaluated for any of the alternatives, including the ones arbitrarily discarded. For example, the roads and access routes necessary for this project will have significant and severe consequences for the future, as these routes will, intentionally or unintentionally, open up previously

Comment No. 3 *(continued)*

Chapter 5, Cumulative Effects, of the Final EIS has been augmented to discuss the growth of electricity demand in Mexico and the United States and the potential for new power plants, and to describe qualitatively the potential impacts in the United States (including air quality impacts) from power plant construction in southern Arizona and Sonora, Mexico. Chapter 5 has also been revised to describe the regulation of power plants in Mexico (including coordination between the United States and Mexico), potential fuel sources, and associated emissions.

Comment No. 4

Refer to the response to Comment 2 above regarding the procedures for the inventory and treatment of cultural resources.

Cultural, biological, and visual resource specialists, would be involved in the final placement of the 125-ft (38-m) ROW within the 0.25-mi (0.40-km) wide study corridors, and the siting of the support structures within the ROW, to identify and minimize impacts to each area of land to be disturbed. This would occur after each agency has issued a ROD, as stated in Section 3.1.1, Land Use.

Comment No. 5

Sections 3.3.2 and 4.3.2 of the Final EIS have been revised to address habitat fragmentation, specifically with respect to roads and linear corridors such as those associated with the proposed project.

As discussed in Section 4.3.1, the proposed project would not alter the convergence of the climatic zones, topographic relief, variable geology and

Shumaker, Jon
Page 4 of 7

protected and unspoiled areas to motorized traffic, UDA traffic, and associated noise, pollution, and other greatly increased human impacts. Nowhere does it appear that the CEQ handbook "Considering Cumulative Affects Under the National Environmental Policy Act" was actually utilized in preparing a comprehensive analysis of cumulative impacts, and this shows in the completely inadequate analysis of impacts. And again, without basic cultural resource survey data, how can impacts be adequately analyzed without baseline data regarding what's out there? 7 cont.

Impacts to cultural resources were not, as noted, evaluated because no archaeological survey work was ever done. Statistically guessing where sites might be is an unacceptable and scientifically invalid way to identify historic properties, much less evaluate impacts to those sites. Environmental justice impacts for the town of Arivaca were never adequately evaluated. Impacts to the proposed Santa Cruz Valley National Heritage Area were never evaluated. Impacts to the cultural landscape can't be evaluated due to no data on cultural sites. Why the omissions? 4 cont.

Reasonable and appropriate scientific methods were not adequately applied to the evaluation of environmental impacts. For example, no cultural resource survey was ever done for any of the proposed alternatives. This immediately invalidates the DEIS, the process, and any final decision other than the no action alternative. Guessing where sites are is not scientifically acceptable. Viewshed analysis is entirely inadequate in this document and seems to be merely an attempt to justify what the project proponent wants. There is no adequate discussion of how the simulations were made, assumptions made, software used, procedures, etc. Considering that the visual impacts of this project are a 10

Comment No. 5 *(continued)*

precipitation patterns on a scale that would cause a regional decline in biodiversity.

Comment No. 6

Chapter 6, Unavoidable Adverse Environmental Impacts, has been revised in the Final EIS to include a broader discussion of unavoidable adverse environmental impacts.

Comment No. 7

The Federal agencies followed the CEQ guidance *Considering Cumulative Effects Under the National Environmental Policy Act* (cited in the EIS as CEQ 1997b) to the extent feasible in conducting analysis of the cumulative effects of the proposed project. Chapter 5 of the EIS presents an analysis of cumulative impacts, as required under NEPA, that could occur as a result of the potential impacts of TEP's proposed project when added to impacts from other past, present, and reasonably foreseeable future actions. Chapter 5 has been revised in the Final EIS to more fully evaluate cumulative impacts from actions the involve the use of raods and trails, including illegal immigrants and off-road vehicle use. Refer to the response to Sky Island Alliance, Comment 6, for further discussion on how cumulative impacts were evaluated in the Final EIS.

Alternatives are eliminated from detailed study for not being technically and economically feasible; it is these criteria, and not any sort of impacts analysis, that drives the process of eliminating alternatives from detailed analysis. CEQ regulations (1502.14[a]) only require a brief discussion of the reasons for which alternatives were eliminated from detailed analysis, rather than an in-depth analysis (including a cumulative effects analysis).

Comment No. 8

Section 3.13 discusses minority and low-income populations in the vicinity of the proposed project, including Arivaca, and Section 4.13 concludes that

Shumaker, Jon
Page 5 of 7

10 cont. significant issue for members of the sensitive public, how is it that no adequate, scientific approach is described in the discussion and analysis of viewshed impacts? This too immediately invalidates the DEIS, the process, and any final decision other than the no action alternative.

11 The significance of each impact has not been adequately explained or well-documented. Again, in the case of cultural resources, if it is unknown what's out there, how can the impacts possibly be described or documented?

2 cont. The impact analyses appear to be biased and not objective. And without an adequate range of alternatives, the bias is even more apparent.

12 Native American concerns have apparently been neglected. There is zero documentation of Native American concerns beyond "they oppose it." No letters, no records of conversations or site visits, no feedback is present in the document. The DOE is required by law to consult on a nation-to-nation basis with the tribes and adequately address their concerns. This document appears to pay lip service to tribal consultation.

13 There appears to be no record of public comments in the document, whether from scoping, public meetings, meetings with agencies or tribes, etc. Additionally, public hearings on the DEIS were completely inadequate. They should also have been held in Tucson and Phoenix at times and places conducive to public input. Again, it appears that DOE is attempting to appease the project proponent rather than involve the public as per its obligation under NEPA.

14 There is no discussion of how approval of this project might affect approval of a transmission line from Palo Verde Nuclear Plant to Santa

Comment No. 8 *(continued)*

there would be no disproportionately high and adverse impact to the minority or low-income populations.

Comment No. 9

The Federal agencies have evaluated in the EIS the potential impacts from the proposed project on the cultural, historical, biological, visual, and recreational resources cited by the commentor. Chapter 3 describes the affected environment of the Tumacacori Highlands and Santa Cruz Valley in the vicinity of the proposed project for each resource area. Chapter 4 evaluates the potential impacts from the proposed project on each resource area (refer to Sections 3.4 and 4.4, Cultural Resources; Sections 3.3 and 4.3, Biological Resources; Sections 3.2 and 4.2, Visual Resources; and Sections 3.1.2 and 4.1.2, Recreation).

The ongoing effort to designate the Santa Cruz Valley as a National Heritage Area is expected to be completed in 2005. The significance of this designation is to gain recognition of the area as having a diverse natural and cultural heritage. This designation would not create any new Federal, state, or local regulatory oversight over the area, and the designation is not expected to affect or be affected by the proposed project.

Comment No. 10

Refer to the response to Comment 1 for discussion on sufficiency of the Draft EIS, and refer to the response to Comment 4 above regarding the evaluation of cultural resources.

The text box titled "Preparation of the Photo Simulations" in Section 4.2, Visual Resources, describes the procedure used for preparation of these figures. The photo simulations in the EIS are included to portray the range of visual impacts of the proposed project, from wide-open to partially blocked views at a range of distances, covering the most likely viewing areas. The photo simulations are augmented by descriptions of the vegetation and land use; Scenic Integrity values; and maps of visibility and various visual attributes, to support analysis of visual impacts.

Comment No. 11

All environmental impacts are presented in Chapter 4 of the EIS. The significance of potential environmental impacts are determined by the Federal agency decisionmakers and presented in their respective RODs.

Comment No. 12

Sections 3.4.2 and 4.4.2 present the Native American concerns that were communicated by Native Americans during the formal government-to-government consultations. Table 3.4-1 documents the Tribal Officials Contacted by DOE in project scoping, and the reference cited as SWCA 2002c in the EIS contains a more complete record of tribal consultation activities.

Comment No. 13

Section 1.6 of the Final EIS has been revised to explain the process conducted by the Federal agencies to invite public participation in the NEPA process, per CEQ requirements. This section includes general information on the numbers of comments received, and those issues that were deemed in and out of scope. Refer to the response to Comment 12 above regarding documentation of Native American consultations.

The Draft EIS public hearing dates, times, and locations were selected to provide a range of options for interested parties to attend.

Comment No. 14

Whether or how the approval of the proposed project may affect the approval of a transmission line from Palo Verde Nuclear Plant to Santa Ana, Mexico, is speculative and is outside the scope of the EIS. Section 5.2 has been revised in the Final EIS to update the status of the PNM proposal

Shumaker, Jon
Page 6 of 7

14 cont. Ana, Sonora, Mexico proposed by a company called Public Service of New Mexico (PNM). Approval of the TEP-Citizens project may pioneer a corridor for this other project, which has its own significant environmental impacts elsewhere. The current project does not exist in a vacuum, yet DOE seems to think it does. These larger impacts must be identified and evaluated.

15 The bulk of the project's power is intended for the Republic of Mexico. Thus the majority of purpose and need is for another country? This is inappropriate, as the real purpose and need was to stabilize the Santa Cruz County electrical system. And by focusing upon the real purpose and need, there can be other alternatives identified that have significantly less environmental impacts than what is proposed in the current DEIS.

16 It is noted early in the DEIS that TEP-Citizens may face financial penalties as a result of violating an order of the AZ Corporation Commission (ACC). It should be noted that a failure to plan appropriately on the part of the utilities does NOT constitute an emergency on the part of either the agencies involved in this project, the public, or with regard to impacts on the environment. This project, which far exceeds what TEP-Citizens is required to provide by the ACC, is a WANT, not a need. The environmental impacts of this project do not in any way justify fulfillment of a want by sacrificing the public's interest in protecting the environment as envisioned in NEPA.

17 Nowhere in the document are transboundary impacts of the project adequately identified or analyzed. Because the project is intended to cross the border, this is a particularly

Comment No. 15

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need. Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis. Also refer to the response to Comment 2 above regarding the alternatives evaluated.

Comment No. 16

The potential for penalties to TEP for failing to comply with ACC Decision No. 62011 (see Section 1.1.2) is provided as background information on the proposed project, but does not affect the Federal agencies' evaluation of the potential environmental impacts of the proposed project in the EIS.

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Comment No. 17

Section 4.8.3, PM_{10} Contributions from Transmission Line Construction in Mexico, in the Draft EIS analyzes air quality impacts in the United States that could result from construction of a connecting transmission line in Mexico. Any additional analysis of impacts that could occur as a result of a new transmission line or other actions in Mexico would be speculative, and therefore, is not included in this EIS.

Shumaker, Jon
Page 7 of 7

17 cont. | egregious omission. Again, this invalidates the DEIS, the process, and and decision other than the no-action alternative.

18 | Nowhere is there an adequate discussion of existing agency land-use management plans, potential conflicts, or how conflicts would be addressed or mitigated.

1 cont. | To summarize, this is a huge, confusing, inadequate, poorly thought out, and poorly prepared document. The more one looks, the more inadequate it becomes and the more questions that arise. Because of the document's deficiencies, a finding for the no action alternative is prudent and appropriate. Nothing about this project justifies the environmental impacts that would occur, in spite of the current document's deficiencies.

Thank you for considering my comments.

Sincerely,

Jon M. Shumaker

Comment No. 18

Sections 3.1.1 and 4.1.1 include a description of the existing land use management plans, and analyze potential impacts to these plans from the proposed project.

skyblue46@juno.com (Lee Shainen)
Page 1 of 1

From: skyblue46@juno.com
Sent: Friday, October 03, 2003 1:52 PM
To: Pell, Jerry; ducote@azstarnet.com
Subject: Fw: power lines and vistas

1 I could'nt have said it better! PLEASE NO MORE POWER LINES CROSSING PULIC LAND!
---------- Forwarded Message ----------
below is a letter i sent to the dept of energy regarding the power lines crossing public lands.they are taking letters until oct. 14th.if you have any concerns about this, now is the time to speak. thanks, lee

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed transmission line crossing public land.

Smith, Darrell
Page 1 of 1

Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

From: Darrells17@aol.com
[SMTP:Darrells17@aol.com]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS
Sent: 10/14/2003 9:58 PM
Importance: Normal

Dear Dr. Pell

1 I am sending this Email to protest the "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS." If you have ever spent time in this wilderness area then you know this is one of the most beautiful areas in the state. In particular I have spent lots of time camping in the area of Ruby Road and Sycamore Canyon. I'm also a Junior High teacher and I feel this State Treasure needs to be kept as pristine as possible for our children. I do not support the
2 proposed routes because I don't feel this project is necessary considering the huge Environmental and Scenic impact it would have.

Sincerely,
Darrell Smith
1633 E. Water St.
Tucson, AZ 85719

Comment No. 1

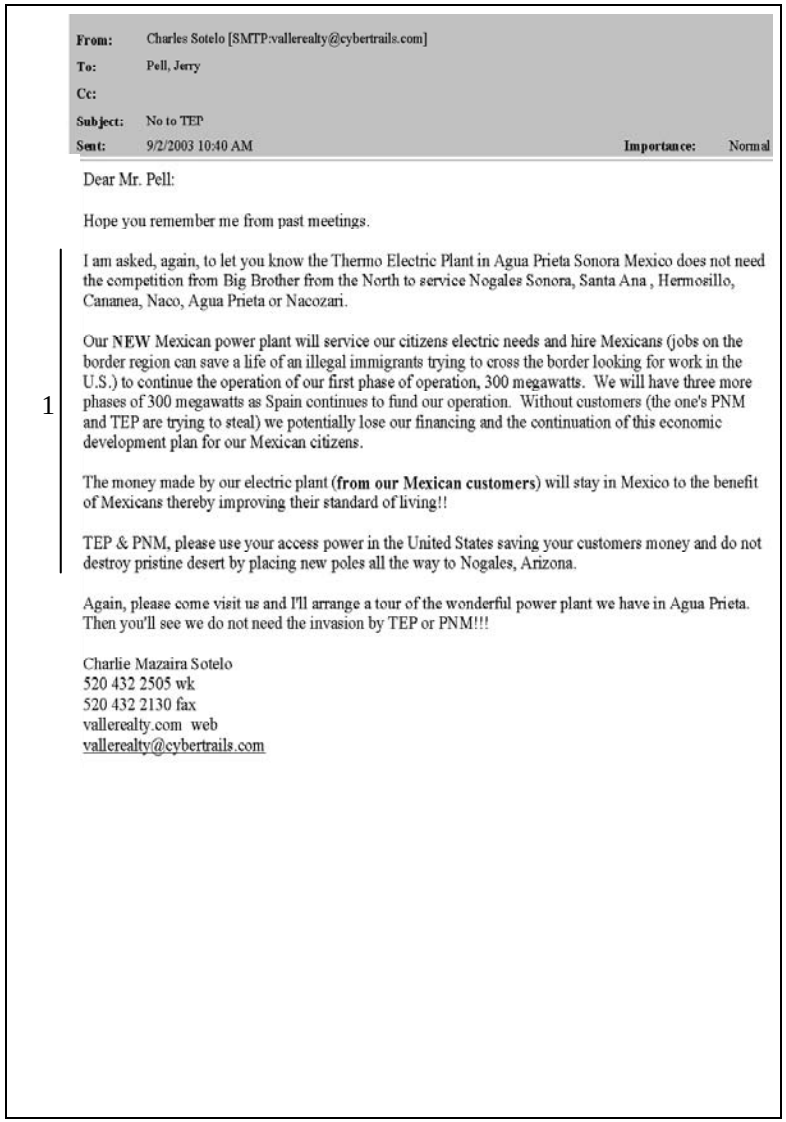
The Federal agencies note the commentor's opposition to the proposed project.

Comment No. 2

Chapter 3 describes the affected environment of the areas cited by resource area, and Chapter 4 evaluates the potential impacts of the proposed project on each of these resources.

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Sotelo, Charlie Mazaria
Page 1 of 1



From: Charles Sotelo [SMTP:vallerealty@cybertrails.com]
To: Pell, Jerry
Cc:
Subject: No to TEP
Sent: 9/2/2003 10:40 AM **Importance:** Normal

Dear Mr. Pell:

Hope you remember me from past meetings.

I am asked, again, to let you know the Thermo Electric Plant in Agua Prieta Sonora Mexico does not need the competition from Big Brother from the North to service Nogales Sonora, Santa Ana , Hermosillo, Cananea, Naco, Agua Prieta or Nacozari.

Our **NEW** Mexican power plant will service our citizens electric needs and hire Mexicans (jobs on the border region can save a life of an illegal immigrants trying to cross the border looking for work in the U.S.) to continue the operation of our first phase of operation, 300 megawatts. We will have three more phases of 300 megawatts as Spain continues to fund our operation. Without customers (the one's PNM and TEP are trying to steal) we potentially lose our financing and the continuation of this economic development plan for our Mexican citizens.

The money made by our electric plant (**from our Mexican customers**) will stay in Mexico to the benefit of Mexicans thereby improving their standard of living!!

TEP & PNM, please use your access power in the United States saving your customers money and do not destroy pristine desert by placing new poles all the way to Nogales, Arizona.

Again, please come visit us and I'll arrange a tour of the wonderful power plant we have in Agua Prieta. Then you'll see we do not need the invasion by TEP or PNM!!!

Charlie Mazaira Sotelo
520 432 2505 wk
520 432 2130 fax
vallerealty.com web
vallerealty@cybertrails.com

1

Comment No. 1

Whether or in what manner the proposed TEP project would compete with the Agua Prieta Thermo Electric Plant is outside the scope of the EIS. Approval of TEP's proposed project by any of the Federal agencies would only grant approval of the proposed project, but would not mandate that it be built.

It is the Federal agencies' understanding that the power plant facilities referenced by the commentor in Agua Prieta, Sonora, Mexico are the same facilities that Chapter 5, Cumulative Effects, has been revised to include (see Section 5.2.4, Power Plants in Mexico). This section describes current and planned construction of power generating facilities near Naco, Sonora, which is approximately 20 mi (32 km) west of Agua Prieta, Sonora.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including impacts to vegetation.

Spotts, Richard
Page 1 of 2

From: spotts@infowest.com [SMTP:spotts@infowest.com]
To: Pell, Jerry
Cc:
Subject: Please Withdraw Deficient DEIS on Tucson Electric Power's proposed 345 kilovolt powerline
Sent: 10/9/2003 8:44 PM **Importance:** Normal

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

1 Please withdraw the current Draft Environmental Impact Statement (DEIS) for Tucson Electric Power's proposed 345 kilovolt powerline.

2 This DEIS is deficient because it does not analyze a reasonable range of alternatives, as required by CEQ regulations. The DEIS must therefore be withdrawn so that additional reasonable alternatives can be added and analyzed in a revised or supplemental DEIS that would then be available for public review and comment.

3 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine

Comment No. 1
The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 3

Sections 3.1 and 4.1 of the EIS describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Spotts, Richard
Page 2 of 2

3 cont. falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

4 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

2 cont. The DEIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a supplemental DEIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Thank you very much for your consideration.

Sincerely,
Richard Spotts
1125 W. Emerald Drive
St. George, Utah 84770

Comment No. 4

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Stabel, Roberta
Page 1 of 1

September 23, 2003

Sue Kozacek
Acting Supervisor
Coronado National Forest
300 West Congress
Tucson, Arizona 85701

Dear Ms. Kozacek,

I am writing regarding the Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS and the needed Forest Plan Amendments

1 The Western and Crossover routes crossing the Tumacacori and Atascosa Mountains would dramatically and detrimentally affect an outstanding primitive area in Southern Arizona. We need to treasure and protect these area from these kinds of impacts. I enjoy hiking and birdwatching in these areas and live just east of the Tumacacori Mountains. The essentially roadlessness of these mountains makes them truly special and unusual.

2 TEP would be building miles of new road for the Preferred route. More road building in this area would impact sensitive and endangered species. Later closing these roads would be nearly impossible and the damage in terms of impact and introduction of invasive species would already be done. The draft EIS is clearly inadequate and this line would

3 serve no benefit to Santa Cruz County and Southern Arizona, but only serve corporate interests.

4 A Forest Plan Amendment to allow these impacts would decrease the small supply of remote recreational experiences. I urge you to please deny the special use permit needed for the Western and Central Routes. They are not compatible with the current uses of the affected area.

Sincerely yours,

Roberta Stabel
P. O. Box 213
Tumacacori, Arizona 85640

Comment No. 1

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project. Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to special status species.

Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Section 4.3.2, Biological Resources, states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Comment No. 3

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review.

Comment No. 4

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project, including impacts to areas classified as semi-primitive in the Coronado National Forest. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest. Analysis of the proposed Forest Plan Amendment is contained in Appendix H.

Sections 3.1 and 4.1 present a description of the existing land use and analyze the potential impacts to these resources from the proposed project.

Stabel, Roberta
Page 1 of 1

September 23, 2003

Dr. Jerry Pell
Office of Fossil Energy
U. S. Department of Energy
Washington, D. C. 20585

Dear Dr. Pell,

The following are my comments regarding the Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS:

1 The preferred Western Route and the Crossover routes both slice through environmentally sensitive areas and a citizens' proposed Wilderness Area. The areas would be forever scarred.

The preferred Western Route is the longest, most expensive and environmentally damaging of all the proposed routes, but the Crossover route is equally unacceptable.

2 Most importantly, there is no need for such a huge line. This would not benefit Santa Cruz County. A smaller line such as a 115 kv line is all that is needed and it hasn't even been considered. This line would be much cheaper and could be buried in some areas. This is the size line originally intended under the ACC order 62011.

3 I do not support any of the proposed routes and oppose a large 345 kv line altogether. It would benefit only TEP and its shareholders. They are an unnecessary economic, environmental and cultural burden on Southern Arizona.

4 Please consider withdrawing the Draft Environmental Impact Statement and issuing an assessment that properly analyzes real solutions to power needs in Santa Cruz County that include a smaller power line and/or a locally run power plant.

Sincerely yours,

Roberta Stabel

Roberta Stabel
P. O. Box 213
Tumacacori, Arizona 85640

Comment No. 1

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Chapter 3 describes the affected environment of the area by resource area, and Chapter 4 evaluates the potential impacts of the proposed project on each of these resources. Section 4.3.2, Biological Resources, states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Comment No. 2

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal and, therefore, is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis). Refer to the response to Comment 2 above regarding a 115-kV transmission line.

Steere, Peter and Susan
Page 1 of 2

Tucson Electric Power Company Sahuarita-Nogales Transmission Line - Draft EIS

From: Peter L. Steere [SMTP:psteere@toua.net]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Company Sahuarita-Nogales Transmission Line - Draft EIS
Sent: 10/14/2003 3:16 PM
Importance: Normal
DATE October 13, 2003

TO: Dr. Jerry Pell, Manager
Office of Electric Power Regulation
Fossil Energy, FE 27
U.S. Department of Energy
Washington, D.C. 20585

FROM: Peter and Susan Steere
P.O. Box 1508
Tucson, Arizona 85634

RE: Tucson Electric Power Company (TEP) Proposed Sahuarita-Nogales 345kV Electric Transmission Line Draft Environmnetal Impact Statement (EIS)

Thank you for the opportunity to review the Draft EIS for this proposed TEP 345 kV electric transmission line from Sahuarita to Nogales.

1 This draft EIS has documented a wide range of serious and significant impacts to natural and cultural resources located in or adjacent to the proposed corridors. The visual impacts
2 of the proposed corridors would be severe on the proposed

Comment No. 1

Chapter 3 presents a description of the affected environment and Chapter 4 analyzes the potential impacts to natural and cultural resources from the proposed project. Specifically, Section 3.4 presents a description of the existing cultural resources and Section 4.4 analyzes the potential impacts to these resources from the proposed project.

Comment No. 2

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 3

The Federal agencies have revised Chapter 5, Cumulative Impacts; Sections 4.1.1, Land Use; and Section 4.12, Transportation of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above

Steere, Peter and Susan
Page 2 of 2

2 cont. | western corridor and western corridor/Peck Canyon crossover routes.

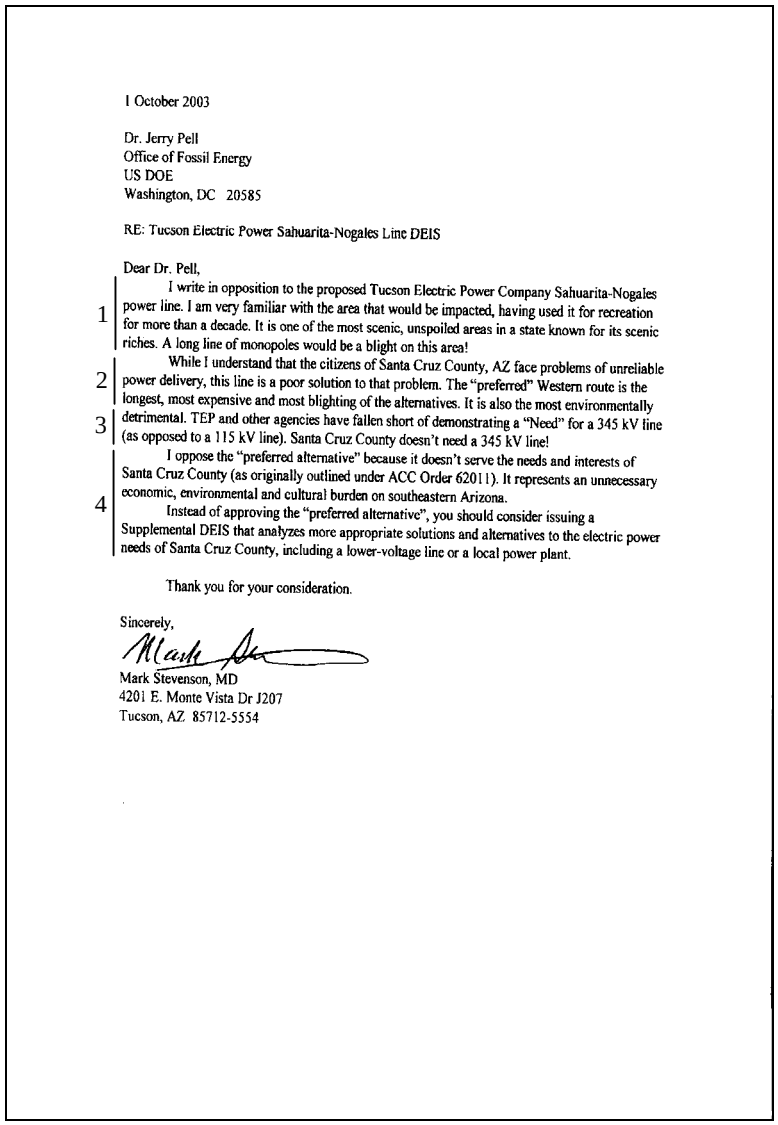
3 | It is significant that the Draft EIS has not addressed cumulative impacts to natural and cultural resources of illegal immigrant and smugglers making use of the selected corridor or of the cumulative impacts of law enforcement trying to apprehend the illegals and smugglers.

4 | For these reasons and others we recommend that the Department of Energy select the "No Action Alternative"

Comment No. 4

The Federal agencies note the commentor's preference for the No Action Alternative.

Stevenson, Mark
Page 1 of 2



1 October 2003

Dr. Jerry Pell
Office of Fossil Energy
US DOE
Washington, DC 20585

RE: Tucson Electric Power Sahuarita-Nogales Line DEIS

Dear Dr. Pell,

1 I write in opposition to the proposed Tucson Electric Power Company Sahuarita-Nogales power line. I am very familiar with the area that would be impacted, having used it for recreation for more than a decade. It is one of the most scenic, unspoiled areas in a state known for its scenic riches. A long line of monopoles would be a blight on this area!

2 While I understand that the citizens of Santa Cruz County, AZ face problems of unreliable power delivery, this line is a poor solution to that problem. The "preferred" Western route is the longest, most expensive and most blighting of the alternatives. It is also the most environmentally

3 detrimental. TEP and other agencies have fallen short of demonstrating a "Need" for a 345 kV line (as opposed to a 115 kV line). Santa Cruz County doesn't need a 345 kV line!

4 I oppose the "preferred alternative" because it doesn't serve the needs and interests of Santa Cruz County (as originally outlined under ACC Order 62011). It represents an unnecessary economic, environmental and cultural burden on southeastern Arizona.

Instead of approving the "preferred alternative", you should consider issuing a Supplemental DEIS that analyzes more appropriate solutions and alternatives to the electric power needs of Santa Cruz County, including a lower-voltage line or a local power plant.

Thank you for your consideration.

Sincerely,

Mark Stevenson, MD
4201 E. Monte Vista Dr J207
Tucson, AZ 85712-5554

Comment No. 1

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project.

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 2

The affected environment of the Western Corridor is described in Chapter 3, and the potential environmental impacts (including socioeconomic impacts) from this alternative are fully evaluated in Chapter 4.

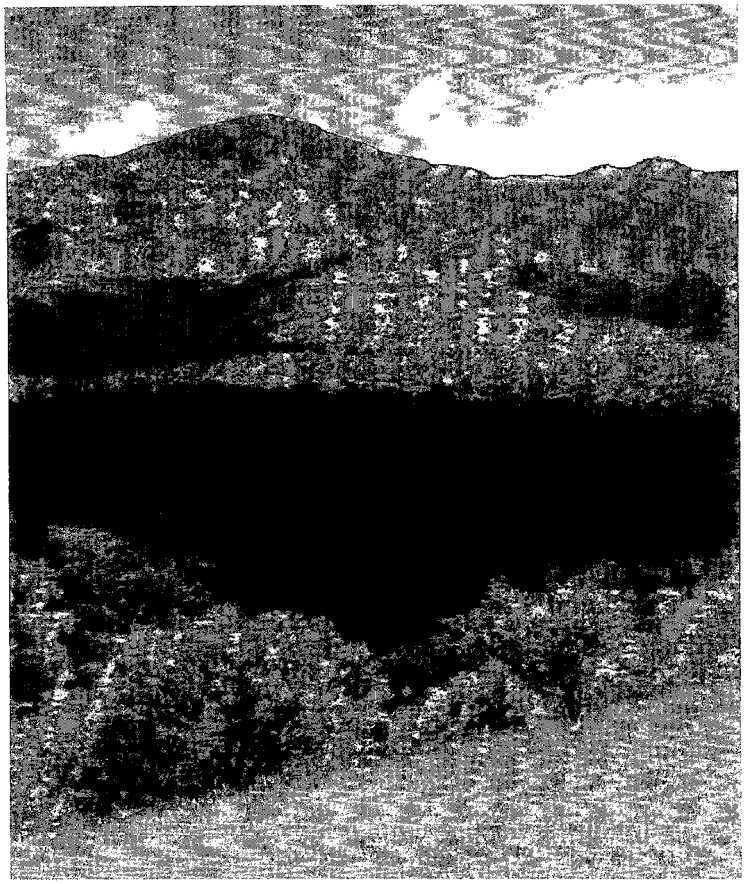
Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Comment No. 4

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Stevenson, Mark
Page 2 of 2



Comment No. 4 *(continued)*

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Stevenson, Mark
Page 1 of 1

1 October 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W Congress
Tucson, AZ 85701

RE: Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS and needed Forest Plan Amendments

Dear Ms Kozacek,

Last month as I drove the Ruby Road from Arivaca to Pena Blanca Lake I felt as though I was visiting one of the most scenic and unspoiled areas in the entire state. The green grass, rolling oak-dotted hills and sheer escarpments are marvels. Then I imagined a long train of tall monopoles and silvery strands of power line marring the scene.....what a travesty it will be if TEP is allowed to build that powerline!

1 I have been using the Atascosa/Tumacacori/Pajarito area for recreation for over a decade. These mountains and their canyons are an exceptional area for primitive recreation; exceptional even in a state as rich in public lands as Arizona! The hiking and bird watching opportunities there are unique in the United States. I have made many trips down Sycamore Canyon to the border and marveled at its beauty. I have been up Peck Canyon. And many others. The areas that would be impacted by the "preferred western alternative" deserve protection, not a powerline and its

2 concomitant roads. The road density in the Tumacacori EMA is already above the acceptable limits in the current Forest Plan. More road building, even with attempted closures, would be in violation of the Forest Plan.

3 I strongly urge you to deny the special use permit for the "preferred route" because it is not compatible with the current uses of the areas that would be affected. A Forest Plan Amendment is not in the interest of local citizens and forest users. The scenic and environmental values of the area need protection, not degradation.

Thank you for your consideration.

Sincerely,

Mark Stevenson
4201 E. Monte Vista Dr J207
Tucson, AZ 85712-5554

Comment No. 1

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to these resources from the proposed project, including impacts to areas classified as semi-primitive in the Coronado National Forest. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest.

Comment No. 2

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Based on these terms and conditions for ensuring the effectiveness of road closures, the proposed project is consistent with Forest Plan standards and guidelines for road density.

Comment No. 3

Sections 3.1 and 4.1 present a description of the existing land use and analyze the potential impact to these resources from the proposed project. Analysis of the proposed Forest Plan Amendment is contained in Appendix H.

Stone, Lee
Page 1 of 1

From: leeprairie@austin.rr.com [SMTP:leeprairie@austin.rr.com]
To: Pell, Jerry
Cc:
Subject: EIS for Tucson Electric Power's proposed 345 kilovolt powerline
Sent: 10/10/2003 4:30 PM **Importance:** Normal

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW Washington, DC 20585

Dear Dr. Pell,

1 The current draft EIS for Tucson Electric Power's proposed 345 kilovolt powerline is insufficient and should be withdrawn. It needs to propose some good alternatives. The

2 proposed "Western Route" and alternative "Crossover Route" are not needed and will bring construction to the beautiful wild Tumacacori Highlands and destruction to wildlife habitat.

1 cont. TEP should simply build the backup line needed for Nogales.
Sincerely,

Lee Stone
494 SH 71 W STE 140-318
Bastrop, Texas 78602

Comment No. 1

The Draft EIS was prepared in accordance with Section 102(2)(c) of NEPA, the Council of Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations* [CFR] Parts 1500-1508), and all applicable laws, regulations, and agency policies. The Federal agencies have determined that the Draft EIS does not need to be re-issued for additional review.

Section 1.2 of the Final EIS explains the roles the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 2

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including impacts to wildlife habitat.

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Taucher, Jamie
Page 1 of 1

Opposition to the Tucson ELectric Power Sahuarita-Nogales Transmission line DEIS

From: Jamie Taucher [SMTP:centereye@lycos.com]
To: Pell, Jerry
Cc: skozacek@fs.fed.us

Subject: Opposition to the Tucson ELectric Power Sahuarita-Nogales
Transmission line DEIS
Sent: 10/14/2003 3:40 PM
Importance: Normal

1 I strongly oppose the Western Route and the Crossover Route of the transmission line.It is expensive, environmentally damaging, and would slice thru citizen's hard work of a proposed wilderness area. Also a smaller,
2 less obtrusive line is cheaper, can be buried and would serve long term needs. Please issue an assessment that analyzes real solutions to power needs, including a smaller powerline and a locally run power plant- such as taking advantage of the solar energy that is available. This area is too special to be overlooked.

Thank you,

Jamie Taucher

Comment No. 1

The affected environment of the Western and Crossover Corridors is described in Chapter 3, and the potential environmental impacts (including socioeconomic impacts) from these alternatives are fully evaluated in Chapter 4.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Comment No. 2

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Alternative or renewable power supply methods do not meet TEP's proposal and are thus not evaluated in this EIS (see Section 2.1.5).

Thomas, David
Page 1 of 2

From: gwillc@mtn.org
Sent: Monday, October 13, 2003 5:37 PM
To: Pell, Jerry
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 Continuing to build old technology transmission lines running hundreds or thousands of miles is senseless. Smaller lines, distributed generation and other current technologies make much more sense.

3 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 1

The Federal agencies note the commentor's suggestion that DOE withdraw the current Draft EIS.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Thomas, David
Page 2 of 2

4 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

2 cont. The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

David Thomas

Comment No. 3

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 4

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Thornton, William C.
Page 1 of 1

October 13, 2003

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington, D.C. 20585

Re: Tucson Electric Power Sahuarita-Nogales Transmission Line DEIS

Dear Dr. Pell:

1 I am writing to express my opposition to the proposed Western and Crossover routes for the above referenced power line.

2 These routes are the most costly and environmentally destructive. A smaller line could be built using existing utility corridors. It would be less costly to build and maintain and avoid bisecting a proposed wilderness area that is home to many threatened and endangered species.

3 The Western and Crossover routes are an unnecessary economic, environmental and cultural burden on southern Arizona. Please consider withdrawing this Draft Environmental Impact Statement and issuing a new assessment that protects a valuable wild area while providing real solutions to Santa Cruz County's power needs.

Sincerely,

William C. Thornton
2955 E. Chula Vista Dr.
Tucson, AZ 85716
Tel: (520) 795-6028
E-Mail: Cactusworld@att.net

Cc: Sue Kozacek, Coronado National Forest

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed Western and Crossover Corridors.

Comment No. 2

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

The commentor's suggestion of building a transmission line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5).

Comment No. 3

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Titus, Jonathan
Page 1 of 1

618 W Placita de la Poza
Tucson, AZ 85704
520-877-8447
October 4, 2003

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington, D.C. 20585

1 This letter is in regard to the "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS". I am very opposed to the construction of this power line. The "preferred" Western Route is the longest, most expensive and environmentally damaging of all the alternatives. The Crossover Route is just as bad. Both the Western and Crossover Routes would slice through a proposed wilderness area and scar the area forever. The Tumacacori Highlands Proposed Wilderness is a wonderful area of scenic beauty, endangered species and plant communities that are now very rare.

2 Who is the power that this massive powerline will carry for? It is certainly not for Santa Cruz County. Either build a much smaller line (e.g., 115 kV) or don't build any powerline at all.

3 I do not support any of the proposed routes of this powerline. This powerlijne is a completely unnecessary economic, environmental, and cultural burden on Southern Arizona. Please withdraw the DEIS and issue a new DEIS that actually considers the power needs of Santa Cruz County. Thank you.

Sincerely,

Jonathan Titus

Comment No. 1

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 2

A smaller transmission line (e.g., 115-kV line) in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Comment No. 3

The Federal agencies note the commentor's opposition to the proposed project.

Titus, Jonathan
Page 1 of 1

618 W Placita de la Poza
Tucson. AZ 85704
520-877-8447
October 4. 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson. AZ 85701

This letter is in regard to the "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS". I am very opposed to the construction of this power line.

1 As you know, the Tumacacaori and Atascosi Mountains are exceptional areas and the powerline is incompatible with the natural characteristics of these two mountain ranges. I enjoy walking, botanizing and birding in the area that will be impacted by the powerline in either the Western or Crossover Routes. In addition to the powerline itself, TEP
2 proposes the construction of a lot of new roads. There's already too many roads in this area. We don't need any more roads in our natural areas.

1 cont. The Tumacacori Highlands Proposed Wilderness is a wonderful area of scenic beauty, endangered species and plant communities that are now very rare. If the powerline and
2 cont. associated roads are constructed they will be corridor for the spread of invasive species (a major problem in Coronado National Forest) into the area and into the nearby Pajarita Wilderness Area, Gooding RNA, and Sycamore Canyon. Powerline corridors also
3 disrupt wildlife movements and are conduits for ORV's and smugglers.

1 cont. Please deny the special use permits for the Western and Crossover Routes! These powerline routes are not compatible with the current uses of the affected area. Remember that a Forest Plan Amendment would only decrease the dwindling supply of remote recreational experiences in the region and would negatively impact many sensitive wildlife and plant species that are an important aspect of our southern Arizona Natural Heritage. Thank you.

Sincerely,

Jonathan Titus

Received
OCT 08 2003
Coronado National Forest
Tucson, AZ 85701

Comment No. 1

Sections 3.1 and 4.1 present a description of the existing land use and analyze the potential impacts to these resources from the proposed project, including potential impacts to Tumacacori and Atascosa Mountains.

Sections 3.1.2 and 4.1.2 present a description of the existing recreational opportunities and analyze the potential impacts to the proposed project.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to endangered species.

Comment No. 2

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Forest as a whole, not for individual land units or EMAs within the Coronado National Forest.

Section 4.3.2, Biological Resources, states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances. Sections 3.3.3 and 4.3.3 presents analyses of the existing special interest species, and potential impacts to these species as a result of the proposed project. Section 3.3.2 discusses the existing vegetation and wildlife in the proposed project area, and Section 4.3 analyzes habitat fragmentation impacts. Sections 3.3.6 and 4.3.6 discuss the existing invasive species (nonnative plants) in the project area, and potential invasive species impacts that could result from the proposed project.

Comment No. 3

Sections 3.3.1 and 4.3.1 of the Final EIS have been revised to include the additional information regarding habitat fragmentation, specifically with respect to roads and linear corridors such as those associated with the proposed project.

Comment No. 3 ***(continued)***

Section 3.1.2 states that there is off-highway (off-road) vehicle use in the project area, and Section 4.1.2 analyzes the impacts of off-highway vehicle use as one of many recreational uses of the project area, including the Coronado National Forest.

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above.

Truschel, Ann-Louise
Page 1 of 1

Ann-Louise Truschel
1213 South Johnson Road
Buckeye, AZ 85326

Acting Supervisor
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

RE: Tucson Electric Power (TEP) Company Sahuarita-Nogales Transmission Line
Draft Environmental Impact Statement (DEIS)

Dear Sir or Madam:

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kV powerline.

2 TEP's proposed "Western Route" and "Crossover Route" for this unnecessary project would carve through some of the most remote and wild areas in all of Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacocori Mountains and Atascosa highlands.

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to serve Nogales, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline which would primarily serve Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require massive increases to consumers' electricity bills.

5 The recent massive blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully explores all options (including a local power plant and smaller power lines which would not serve Mexico) which would meet the important public interest of providing reliable energy service to Santa Cruz County.

Yours truly,

Ann Louise Truschel

Ann-Louise Truschel

Comment No. 1

The Federal agencies note the commentor's suggestion that DOE withdraw the current Draft EIS.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit.

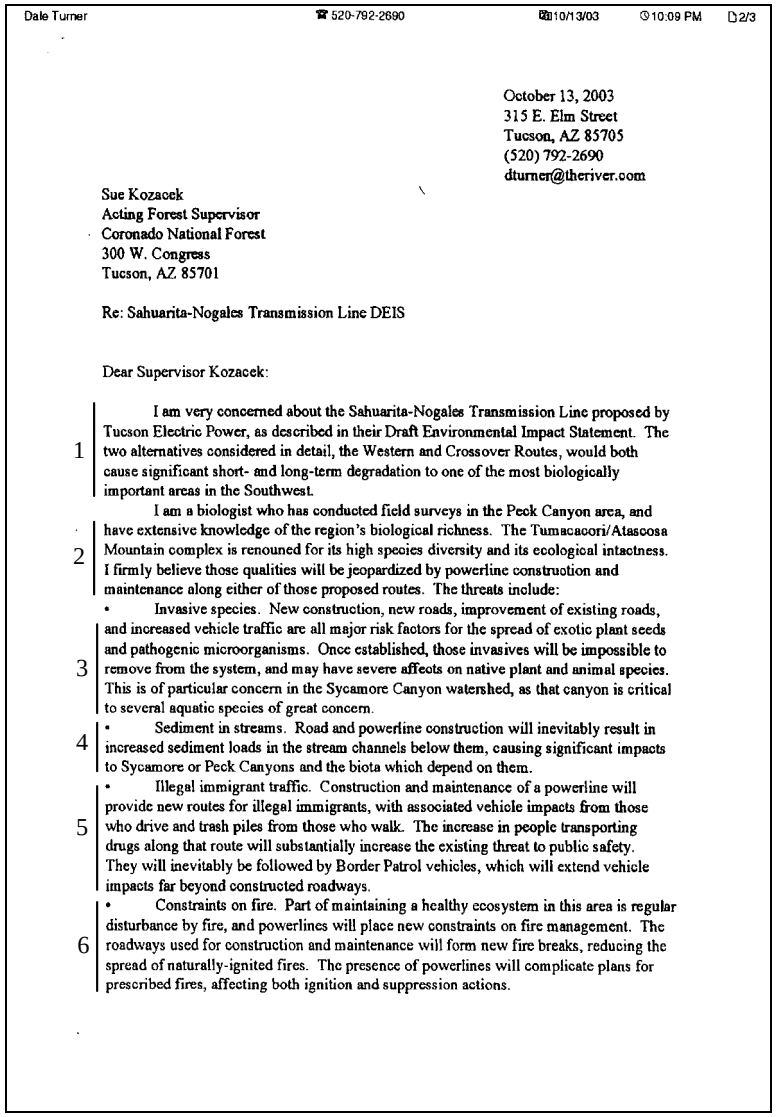
Comment No. 4 *(continued)*

The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Turner, Dale S.
Page 1 of 2



Dale Turner ☎ 520-792-2690 10/13/03 10:09 PM 2/3

October 13, 2003
315 E. Elm Street
Tucson, AZ 85705
(520) 792-2690
dturner@theriver.com

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Re: Sahuarita-Nogales Transmission Line DEIS

Dear Supervisor Kozacek:

1 I am very concerned about the Sahuarita-Nogales Transmission Line proposed by Tucson Electric Power, as described in their Draft Environmental Impact Statement. The two alternatives considered in detail, the Western and Crossover Routes, would both cause significant short- and long-term degradation to one of the most biologically important areas in the Southwest.

2 I am a biologist who has conducted field surveys in the Peck Canyon area, and have extensive knowledge of the region's biological richness. The Tumacacori/Atascosa Mountain complex is renouned for its high species diversity and its ecological intactness. I firmly believe those qualities will be jeopardized by powerline construction and maintenance along either of those proposed routes. The threats include:

3 • Invasive species. New construction, new roads, improvement of existing roads, and increased vehicle traffic are all major risk factors for the spread of exotic plant seeds and pathogenic microorganisms. Once established, those invasives will be impossible to remove from the system, and may have severe affects on native plant and animal species. This is of particular concern in the Sycamore Canyon watershed, as that canyon is critical to several aquatic species of great concern.

4 • Sediment in streams. Road and powerline construction will inevitably result in increased sediment loads in the stream channels below them, causing significant impacts to Sycamore or Peck Canyons and the biota which depend on them.

5 • Illegal immigrant traffic. Construction and maintenance of a powerline will provide new routes for illegal immigrants, with associated vehicle impacts from those who drive and trash piles from those who walk. The increase in people transporting drugs along that route will substantially increase the existing threat to public safety. They will inevitably be followed by Border Patrol vehicles, which will extend vehicle impacts far beyond constructed roadways.

6 • Constraints on fire. Part of maintaining a healthy ecosystem in this area is regular disturbance by fire, and powerlines will place new constraints on fire management. The roadways used for construction and maintenance will form new fire breaks, reducing the spread of naturally-ignited fires. The presence of powerlines will complicate plans for prescribed fires, affecting both ignition and suppression actions.

Comment No. 1

Chapter 3 describes the affected environment, and Chapter 4 analyzes the potential impacts to the environment from the proposed project, including potential impacts to biological resources (Sections 3.3 and 4.3).

Comment No. 2

Section 3.3 presents a description of the existing biological resources and Section 4.3 analyzes the potential impacts to these resources, including potential impacts to species within the Tumacacori and Atascosa Mountains.

Comment No. 3

Section 4.3.2, Biological Resources, states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances. Sections 3.3.3 and 4.3.3 presents analyses of the existing special interest species, and potential impacts to these species as a result of the proposed project. Section 3.3.2 discusses the existing vegetation and wildlife in the proposed project area, and Section 4.3 analyzes habitat fragmentation impacts. Sections 3.3.6 and 4.3.6 discuss the existing invasive species (nonnative plants) in the project area, and potential invasive species impacts that could result from the proposed project.

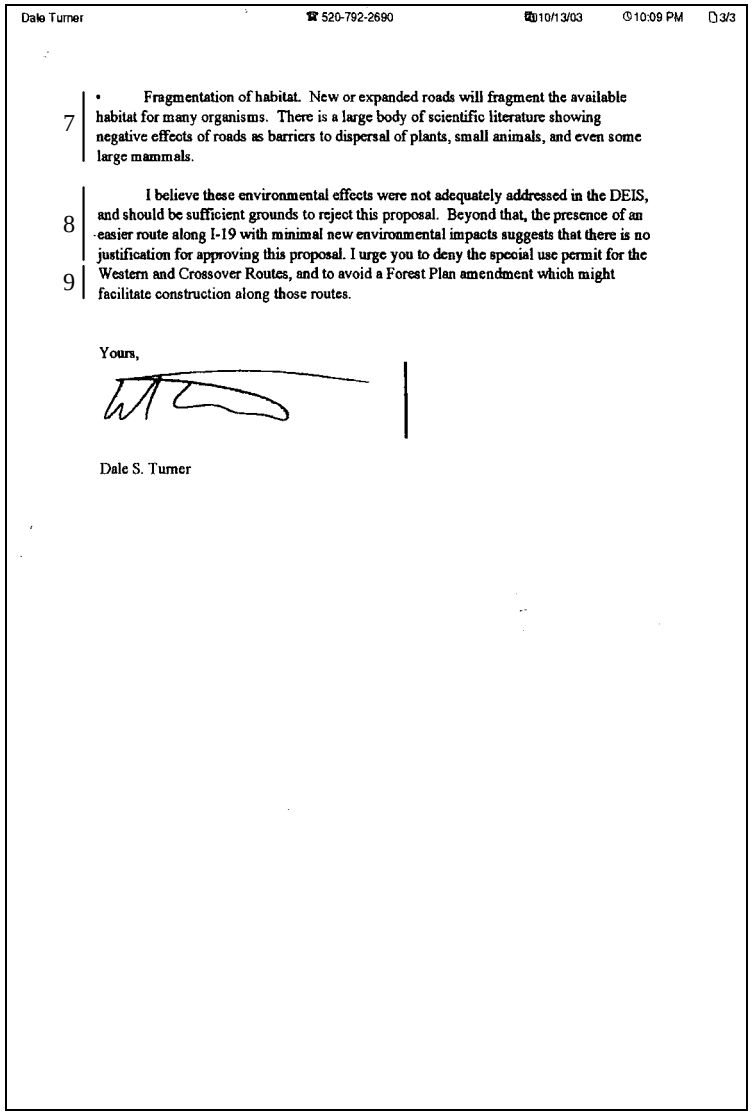
Comment No. 4

Refer to Section 4.7, Water Resources, for a discussion of erosion and sedimentation.

Comment No. 5

Section 4.12, Transportation, of the Final EIS has been revised to include the commentor's statement that illegal immigrants leave trash and waste behind as they pass through an area. The transmission line ROW and access roads would not provide a single continuous pathway from the U.S.-Mexico border.

Turner, Dale S.
Page 2 of 2



Dale Turner ☎ 520-792-2690 10/13/03 10:09 PM 3/3

7 • Fragmentation of habitat. New or expanded roads will fragment the available habitat for many organisms. There is a large body of scientific literature showing negative effects of roads as barriers to dispersal of plants, small animals, and even some large mammals.

8 I believe these environmental effects were not adequately addressed in the DEIS, and should be sufficient grounds to reject this proposal. Beyond that, the presence of an easier route along I-19 with minimal new environmental impacts suggests that there is no justification for approving this proposal. I urge you to deny the special use permit for the

9 Western and Crossover Routes, and to avoid a Forest Plan amendment which might facilitate construction along those routes.

Yours,

Dale S. Turner

Comment No. 5 (*continued*)

The Federal agencies have revised Sections 4.1.1, Land Use; Section 4.12, Transportation; and Chapter 5, Cumulative Impacts of the Final EIS based on the U.S. Border Patrol's response (USBP 2004) to the Federal agencies' request regarding illegal immigration and law enforcement activities in the proposed project vicinity. The U.S. Border Patrol's response generally re-enforced the information on which the relevant analysis in the Draft EIS was based. The U.S. Border Patrol stated that the roads associated with the construction and maintenance of the proposed project would contribute to an increase in illegal immigrant and narcotic smugglers in the area and affect U.S. Border Patrol operations. The effects of these activities are reflected in the Final EIS in the sections listed above

Comment No. 6

Section 4.1.1 of the Final EIS has been revised to discuss fires in the CNF. As discussed in that section, the presence of transmission lines in the CNF is not expected to result in any significant impacts related to fires, or introduce any significant constraints on the ability of the USFS to maintain a healthy forest.

Comment No. 7

Sections 3.3.2 and 4.3.2 of the Final EIS have been revised to address habitat fragmentation.

Comment No. 8

The commentor's suggestion of building a line adjacent to the existing transmission line in the I-19 corridor was considered but eliminated from further analysis in the EIS (see Section 2.1.5).

Comment No. 9

The Federal agencies note the commentor's opposition to a special use permit for the Western and Crossover Corridors and a Forest Plan amendment.

Turner, Dale S.
Page 1 of 2

Dale Turner ☎ 520 702 2600 10/13/03 10:12 PM 2/3

October 13, 2003
315 E. Elm Street
Tucson, AZ 85705
(520) 792-2690
dturner@theriver.com

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585

Re: Sahuarita-Nogales Transmission Line DEIS

Dear Dr. Pell:

1 I am very concerned about the Sahuarita-Nogales Transmission Line proposed by Tucson Electric Power, as described in their Draft Environmental Impact Statement. The two alternatives considered in detail, the Western and Crossover Routes, would both cause significant short- and long-term degradation to one of the most biologically important areas in the Southwest

2 I am a biologist who has conducted field surveys in the Peck Canyon area, and have extensive knowledge of the region's biological richness. The Tumacacori Atascosa Mountain complex is renouned for its high species diversity and its ecological intactness. I firmly believe those qualities will be jeopardized by powerline construction and maintenance along either of those proposed routes. The threats include:

3 • Invasive species. New construction, new roads, improvement of existing roads, and increased vehicle traffic are all major risk factors for the spread of exotic plant seeds and pathogenic microorganisms. Once established, those invasives will be impossible to remove from the system, and may have severe affects on native plant and animal species. This is of particular concern in the Sycamore Canyon watershed, as that canyon is critical to several aquatic species of great concern.

4 • Sediment in streams. Road and powerline construction will inevitably result in increased sediment loads in the stream channels below them, causing significant impacts to Sycamore or Peck Canyons and the biota which depend on them.

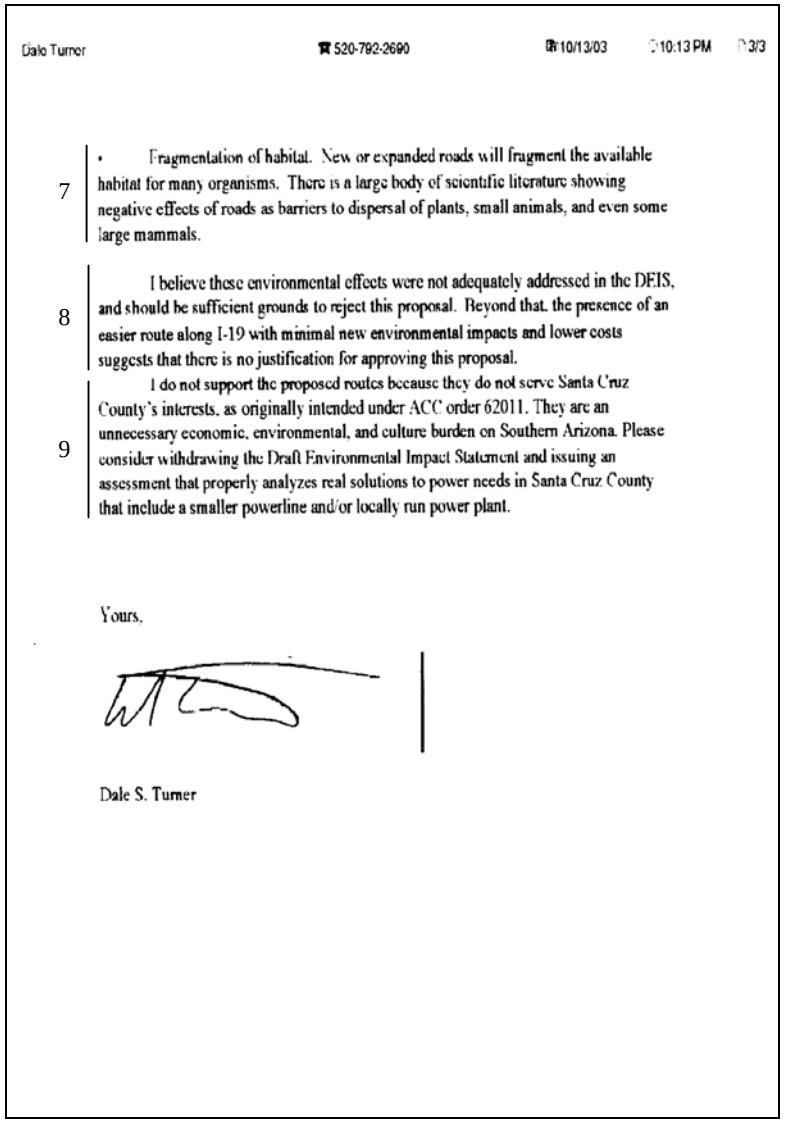
5 • Illegal immigrant traffic. Construction and maintenance of a powerline will provide new routes for illegal immigrants, with associated vehicle impacts from those who drive and trash piles from those who walk. The increase in people transporting drugs along that route will substantially increase the existing threat to public safety. They will inevitably be followed by Border Patrol vehicles, which will extend vehicle impacts far beyond constructed roadways.

6 • Constraints on fire. Part of maintaining a healthy ecosystem in this area is regular disturbance by fire, and powerlines will place new constraints on fire management. The roadways used for construction and maintenance will form new fire breaks, reducing the spread of naturally-ignited fires. The presence of powerlines will complicate plans for prescribed fires, affecting both ignition and suppression actions.

Comment Nos. 1-8

Refer to the responses to Comments 1-8, respectively, in the previous submittal from Dale S. Turner.

Turner, Dale S.
Page 2 of 2



Dale Turner ☎ 520-792-2690 10/13/03 10:13 PM 3/3

7 • Fragmentation of habitat. New or expanded roads will fragment the available habitat for many organisms. There is a large body of scientific literature showing negative effects of roads as barriers to dispersal of plants, small animals, and even some large mammals.

8 I believe these environmental effects were not adequately addressed in the DEIS, and should be sufficient grounds to reject this proposal. Beyond that, the presence of an easier route along I-19 with minimal new environmental impacts and lower costs suggests that there is no justification for approving this proposal.

9 I do not support the proposed routes because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. They are an unnecessary economic, environmental, and culture burden on Southern Arizona. Please consider withdrawing the Draft Environmental Impact Statement and issuing an assessment that properly analyzes real solutions to power needs in Santa Cruz County that include a smaller powerline and/or locally run power plant.

Yours,

Dale S. Turner

Comment No. 9

ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Van Deven, Bob
Page 1 of 1

From: Bob Van Deven [SMTP:bobvandeven@hotmail.com]
To: Pell, Jerry
Cc:
Subject: Proposed power line
Sent: 9/2/2003 8:18 PM **Importance:** Normal

Dear Mr. Pell,

1 For the life of me I cannot understand why TEP deems it necessary to string yet another power line through yet another roadless area. When I first considered expressing my opinion I figured I would include all the logical reasons why such a power line would be a bad idea: ruining the pristine beauty of the Tumacacori/Atascosa mountains, damaging fragile habitat, etc. But now I have a better idea.

I am extending a challenge to all who might be in favor of the proposed power line route. I hereby challenge all those persons to get in their cars, drive to the Atascosa Lookout trailhead on Ruby road (about 50 miles south of Tucson and 15 miles west of I-19; get a map), hike the 2.5 mile trail to the long-abandoned lookout, and ACTUALLY SEE the land across which those ugly poles and high-tension lines would be strung. Anyone who can look out on that gorgeous country and honestly say that bulldozing a road across it would be a fair price to pay for a few extra watts of power in Santa Cruz county and Mexico is welcome to their opinion--but only after they see.

Sincerely,

Bob Van Deven
332 E. 5th St.
Tucson, AZ 85705
bobvandeven@hotmail.com

Comment No.1

The Federal agencies note the commentor's opposition to the proposed project.

Van Deven, Bob
Page 1 of 1

September 25, 2003

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585

Dear Dr. Pell

1 I am writing to urge you to withdraw the current draft EIS for Tucson Electric Power's proposed 345 kV power line. TEP's proposed "Western Route" and "Crossover Route" for this unnecessary project would carve through some of the most remote and wild areas in all of southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori and Atascosa highlands.

2 The important goal of providing reliable electric service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to serve the area, TEP has proposed a massive, environmentally destructive, and extremely controversial power line which would primarily serve Mexico. The draft EIS is

3 inadequate because it does not address important alternatives to TEP's power line which could provide reliable service without destroying our public lands and which would not require large increases to consumers' electricity bills.

4 I urge the DOE to issue a new draft EIS which fully explores all options, including a local power plant and smaller power lines which would not serve Mexico. Santa Cruz County's electricity needs should be met, but not at the expense of our environmental and cultural heritage.

Sincerely,

Bob Van Deven
332 E. 5th St.
Tucson, AZ 85705
(520) 850-7706
bobvandeven@hotmail.com

Comment No. 1

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Comment No. 2

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 3

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's

Comment No. 3 *(continued)*

business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 4

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Van Deven, Bob
Page 1 of 1

September 25, 2003

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Re: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendments

Dear Supervisor Kozacek,

1 For the last 13 years I have greatly enjoyed birdwatching, photography, hiking, and camping in the Atascosa and Tumacacori Mountains. I was very disappointed to learn of Tucson Electric Power's proposal to build over 20 miles of new roads through this area to support the construction of (yet another) massive power line. As you know, the road density in that area is already above acceptable limits set forth in the current Forest Plan. Although TEP has proposed to close an equivalent length of "wildcat" roads in the area, I fail to see how this will mitigate the impact of 20 continuous miles and the dominating presence of steel towers and high tension power lines. As a photographer I can tell you that southern Arizona has more than enough of
2 these unsightly monsters crisscrossing the landscape; composing a shot in which one does not show up in the viewfinder has become nearly impossible.

3 I urge you to oppose any Forest Plan Amendment that would permit the construction of this power line. Surely there must be another way to deliver reliable electric power to Santa Cruz county.

Sincerely,

Bob Van Deven
332 E. 5th St.
Tucson, AZ 85705
(520) 850-7706
bobvandeven@hotmail.com

Comment No. 1

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Forest as a whole, not for individual land units or EMAs within the Coronado National Forest. Any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Based on these terms and conditions for ensuring the effectiveness of road closures, the proposed project is consistent with Forest Plan standards and guidelines for road density.

Comment No. 2

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Comment No. 3

The Federal agencies note the commentor's opposition to the Forest Plan amendment.

Vandeman, Mike
Page 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/09/2003 06:51 PM -----
mjvande@pacbell.net
10/09/2003 04:50 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

Comment No. 1

The commentor's opinion that the Draft EIS should be withdrawn is noted.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Vandeman, Mike
Page 2 of 2

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

6 Wildlife MUST be given top priority, because they cannot protect themselves from us.

Sincerely,
Mike Vandeman

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Comment No. 6

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project.

Vollmar, Warren and Ann
Page 1 of 1

Dr. Jerry Pell
Office of Fossil Energy
US Dept. of Energy
Washington, D.C. 20585

Sept. 30, 2003

Dear Dr. Pell,

This letter is in reference to the Tuscon Electric Power Sahuarita-Nogales Transmission line DEIS. My wife and I are winter visitors to the Arivaca area and we do much hiking, birding and mountain biking in the area. We were dismayed to hear of the plans for this power line. Why isn't a less obtrusive powerline being considered? We don't
1 believe there is a need for this huge line through this environmentally sensitive area. It would certainly be an eyesore and an unnecessary economic and environmental burden on this beautiful area of Southern Arizona.

2 Please consider withdrawing this DEIS and issuing a new assessment that properly analyzes real solutions to power needs in Santa Cruz Count and includes a smaller powerline and/or locally run power plant.

Thank you for your consideration.

Sincerely,
Ann E Vollmar

Warren & Ann Vollmar
94970 Little Muskrat
Cook, MN 55723
vollmars@uslink.net
218-753-8007

Comment No. 1

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the

Comment No. 2 ***(continued)***

proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Weaver, Craig
Page 1 of 2

TEP Sahuarita-Nogales Tranmission line DEIS (letter #2)

From: craig weaver [SMTP:craig@cybervault.com]
To: Pell, Jerry
Cc:

Subject: TEP Sahuarita-Nogales Tranmission line DEIS (letter #2)
Sent: 10/14/2003 8:40 PM
Importance: Normal
October 14, 2003

Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585

RE: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

Dear Dr. Pell,

1 I'm writing to object to the plan by Tucson Electric and zower to construct the Sahuarita-Nogales Transmission Line.

Having lived near the Palo Verde Nuclear Generating Station in Wintersburg Arizona I've seen the results of power lines crossing wild lands. Problems like habitat fragmentation and roads that are built during power pole construction and are never abandoned or reclaimed plus the destruction of the visual landscape that makes the southwest so unique are a few of the issues I've witnessed.
2 In this case of this application, I believe the favored

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed project.

Comment No. 2

Sections 3.2 and 4.2 present a description of the existing visual resources and analyze the potential impacts to these resources from the proposed project.

Likewise, Sections 3.3 and 4.3 present a description of existing biological resources and analyze the potential impacts to these resources from the proposed project.

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Comment No. 3

Refer to the response to Comment 2 above regarding the authority of the ACC.

Weaver, Craig
Page 2 of 2

2 cont. alternative (#2 Western) along with the other alternatives (#3-#4) would have severe long-term negative effects to wildlife and scenery. My familiarity with this spectacular region in Southern Arizona make me feel that the impacts I've seen occur with other similar power lines far outweigh the needs of Santa Cruz County in this case.

3 A new power house (and associated power infracture) near Bowie Arizona is more than adequate to insure that the residents of Santa Cruz County have a reliable power generation and delivery system. Also, other delivery options

4 exist which have not be reviewed. This proposed line is far in excess of the needs of Santa Cruz County. I believe the proposal you are reviewing is more about selling energy to Mexico than meeting the needs of Arizonans.

5 I favor the No Action alternative and feel other options for meeting the energy needs of Santa Cruz County should be reviewed before moving forward with this power line project.

Sincerely,

Craig Weaver
3601 N. 411 Ave
Tonopah AZ 86354

P.S. Sir: To my embarrassment I inadvertently sent a previous version of this letter which was not spell checked.this one might be more understandable.I hope. Thanks C. Weaver.

Comment No. 4

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…" In an applicant-initiated process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Comment No. 5

Section 1.2 explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Weaver, Craig
Page 1 of 2

--- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 06:04 PM -----
craig weaver <craig@cybervault.com>
10/14/2003 05:30 PM

To: skozacek@fs.fed.us
cc:
Subject: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS
October 14, 2003

Sue Kozacek

Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

RE: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

Dear Ms. Kozacek,

1 I'm writing to object to the plan by Tucson Electric and Power to construct the Sahuarita-Nogales Tranmission Line.

Having lived near the Palo Verde Nuclear Generating Station in Wintersburg Arizona I've seen the negative results of power lines crossing wild lands. Problems like habitat fragmentation and roads that are built during power pole construction and are never abandoned or reclaimed plus the destruction of the visual landscape, that makes the southwest so unique, are a few of the issues I've witnessed first hand.

Comment No. 1

The Federal agencies note the commentor's opposition to the proposed project.

Comment No. 2

Sections 3.1 and 4.1 present a description of the existing land use and recreation, and analyze the potential impacts to these resources.

Comment No. 3

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project.

Sections 3.1 and 4.1 present a description of the existing land use, and analyze the potential impacts to these resources from the proposed project.

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Weaver, Craig
Page 2 of 2

Further I feel the negative impacts on the Tumacacori and Atascosa Mountains and this region in general would be significant and would adversely affect everyone's enjoyment 2 of this natural environment in a multitude of ways. (Power lines which traverse the Tonopah Desert west of Phoenix certainly provide many examples of ruined vistas, fragmented habitats, and lost natural character of that region.)

Further my experience makes me believe that this new power line proposal is incompatible with protection of the 3 region's wildlife and wilderness characteristics. I support the no action alternative and further study to identify methods to meet the specific energy needs of Santa Cruz County only.

With options for regional power generation (like the new power house at Bowie AZ) I feel this power line proposal is less about meeting the needs of residents in Santa Cruz 4 County and more about exporting power to Mexico. The public's interest in protecting natural areas has been demonstrated by strong support for Monuments, County Preserves, and similar citizen initiatives. The long-term public interest is best served by denying this proposal.

I favor the No Action alternative and feel all options for meeting the energy needs of Santa Cruz County should be 5 reviewed before moving forward with this power line project. Please protect this important region by withdrawing the Draft Environmental Impact Statement.

Sincerely,

Craig Weaver
3601 N. 411 Ave
Tonopah AZ 86354

Comment No. 4

The ACC is vested with the state's authority to decide how it believes energy should be furnished within Arizona's borders (for example, the need for and effectiveness of transmission lines within its borders). Refer to the revised text in Section 1.1.2, The Origin of TEP's Proposal: TEP's Business Plan and the Proceedings of the Arizona Corporation Committee, that provides explanation of the jurisdictions and authorities of the state and Federal agencies, and their relationship to this NEPA analysis.

Comment No. 5

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Whitaker, Linda
Page 1 of 2

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 05:34 PM -----
lin@theriver.com
10/11/2003 08:11 AM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 Please do NOT support the current draft Environmental Impact Statement for Tucson Electric Power's (TEP) proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and "Crossover Route" will forever scar the irreplaceable landscape of the Tumacacori area. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to many unique species of animals, birds, bats and plants. A jaguar was sighted in this area only two years ago.

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive and environmentally destructive powerline designed to export power to Mexico.

Comment No. 1

The Federal agencies note the commentor's opposition to the Draft EIS.

Comment No. 2

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Section 5.2.4 acknowledges the citizen-initiated proposal for an addition to the National Wilderness Preservation System.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Whitaker, Linda
Page 2 of 2

4 I've lived in this area for many years and do not want the destruction of my environmental and cultural heritage.

5 I urge DOE to issue a new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Linda Whitaker
1520 E. Bristol Dr
Nogales, Arizona 85621

Comment No. 4

Chapter 3 presents a description of the existing environment and Chapter 4 analyzes the potential impacts to these resources from the proposed project, including potential impacts to cultural resources (Sections 3.4 and 4.4). The Federal agencies are developing a Programmatic Agreement with the Arizona State Historic Preservation Office (SHPO), interested tribes, and TEP guiding the treatment of cultural resources if an action alternative is selected. Prior to ground-disturbing activities in any approved corridor, a complete on-the-ground inventory would be conducted by professional archaeologists in accordance with provisions of Section 106 of the National Historic Preservation Act (NHPA). Efforts to identify cultural resources would also include historical document research and continued consultation with Native American tribes regarding potential traditional cultural properties and sacred sites. Identified cultural resources would be evaluated in terms of National Register eligibility criteria and potential project effects in consultation with all parties who are participants in the Programmatic Agreement.

Wherever possible, power poles, access roads, and any other ground-disturbing activities would be placed to avoid direct impacts to cultural resources. A professional archaeologist would assist the pole-siting crew in avoiding impacts to cultural resource sites. In cases where avoidance of sites is not feasible, a site-specific Treatment Plan and Data Recovery Plan would be developed in consultation with tribes, the, appropriate land-managing agencies, and the Arizona SHPO. These plans will include an appropriate Plan of Action to implement the Native American Graves Protection and Repatriation Act. A Discovery Plan would be developed to establish procedures to be followed in the event of discovery of unanticipated cultural resources, and a Monitoring Plan would address issues of site protection and avoidance.

Comment No. 5

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide

Comment No. 5 (*continued*)

whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Wrenn, George
Page 1 of 1

From: gwrenn@ucla.edu
Sent: Wednesday, October 15, 2003 3:07 PM
To: Pell, Jerry
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW Washington, DC 20585

Dear Dr. Pell,

I would like to comment on the current draft Environmental Impact Statement for Tucson Electric Power's and Citizens Communications' proposed 345,000-volt transmission line.

1 The proposed "Western Route" and alternative "Crossover Route" would permanently scar the remote Tumacacori Highlands in Southeast Arizona, including several roadless areas and important wildlife habitat. I urge the Department of Energy to withdraw the proposed draft because it does not address alternatives to this massive transmission line that would provide reliable electrical service to Nogales and Santa Cruz County without

2 destroying the environment and cultural artifacts. The Department of Energy should issue a new draft Environmental Impact Statement that includes alternatives such as a local power plant and smaller power lines that would not serve Mexico.

Thank you.
Sincerely,

George Wrenn
13250 Chandler Boulevard
Sherman Oaks, California 91401-6018

Comment No. 1

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

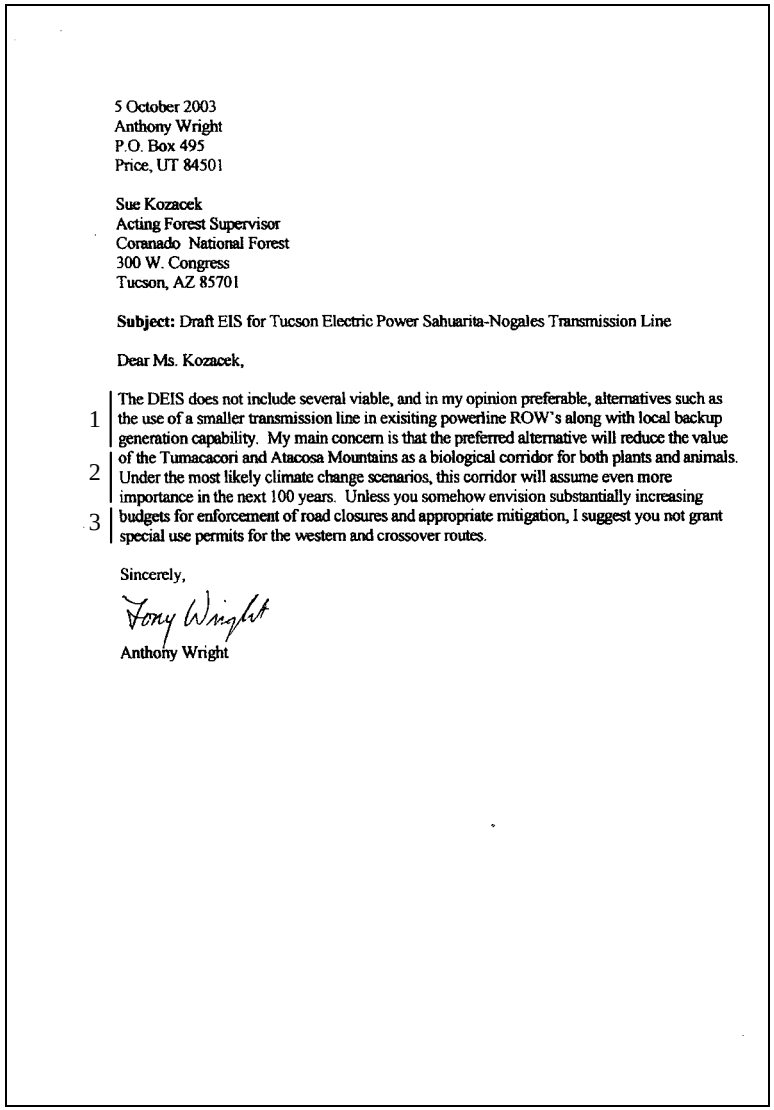
Comment No. 2

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Comment No. 2 ***(continued)***

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Wright, Anthony
Page 1 of 1



5 October 2003
Anthony Wright
P.O. Box 495
Price, UT 84501

Sue Kozacek
Acting Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Subject: Draft EIS for Tucson Electric Power Sahuarita-Nogales Transmission Line

Dear Ms. Kozacek,

1 The DEIS does not include several viable, and in my opinion preferable, alternatives such as the use of a smaller transmission line in exisiting powerline ROW's along with local backup generation capability. My main concern is that the preferred alternative will reduce the value
2 of the Tumacacori and Atacosa Mountains as a biological corridor for both plants and animals. Under the most likely climate change scenarios, this corridor will assume even more importance in the next 100 years. Unless you somehow envision substantially increasing
3 budgets for enforcement of road closures and appropriate mitigation, I suggest you not grant special use permits for the western and crossover routes.

Sincerely,

Tony Wright

Anthony Wright

Comment No. 1

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

A new power plant in Nogales is not a viable alternative to a new, second transmission line (part of TEP's proposal). Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. (Refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis.)

Comment No. 2

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources, including potential impacts to biological resources in the Tumacacori and Atascosa Mountains.

Comment No. 3

Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate.

Wyeth, Nathan
Page 1 of 1

----- Forwarded by Susan K Kozacek/R3/USDAFS on 10/16/2003 05:14 PM -----
nayythan@hotmail.com
10/09/2003 08:36 PM

To: skozacek@fs.fed.us
cc:
Subject: Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline

Ms. Sue Kozacek
Coronado National Forest
Federal Building, 300 West Congress
Tucson, AZ 85701

Dear Ms. Kozacek,

1 I am writing to urge you to withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 You need to consider the alternatives to the routing which has been proposed, which is unacceptable. Too many American landscapes have been crudely bisected by powerlines like these before, and there is nearly always a better way to do it than the initial proposal made by whatever energy conglomerate is involved.

Sincerely,

Nathan Wyeth
4717 Falstone Ave
Chevy Chase, Maryland 20815

Comment No. 1

The commentor's opinion to withdraw the Draft EIS is noted.

Comment No. 2

Section 1.2 explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

Yamate, Madeline
Page 1 of 1

Tucson Electric Power Powerline EIS

From: XSPAWS@aol.com [SMTP:XSPAWS@aol.com]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Powerline EIS
Sent: 10/15/2003 12:09 PM
Importance: Normal

Dr. Jerry Pell

U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW Washington, DC 20585

Dear Dr. Pell,

1 Tucson Electric Power's proposed 345 kilovolt powerline will carve up some of the last remote and wild areas in Southeast Arizona. I write to ask you to withdraw the project's draft Environmental Impact Statement. The proposed route crosses the Tumacacori Highlands, home of many rare and endangered species, and an area which still holds many roadless areas. Santa Cruz County certainly does needs reliable electric service, but that service can be provided by a much smaller powerline project than that 2 which TEP has proposed. The draft EIS does not contain any alternatives to the proposed powerline. The line has far more capacity than needed just to serve Santa Cruz County. TEP needs to scale back to a more reasonable proposal.

Sincerely,
Madeline Yamate
90 Arlington Ave.
Kensington, California 94707

Comment No. 1

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Sections 3.3 and 4.3 present a description of the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to the endangered, threatened and special status species.

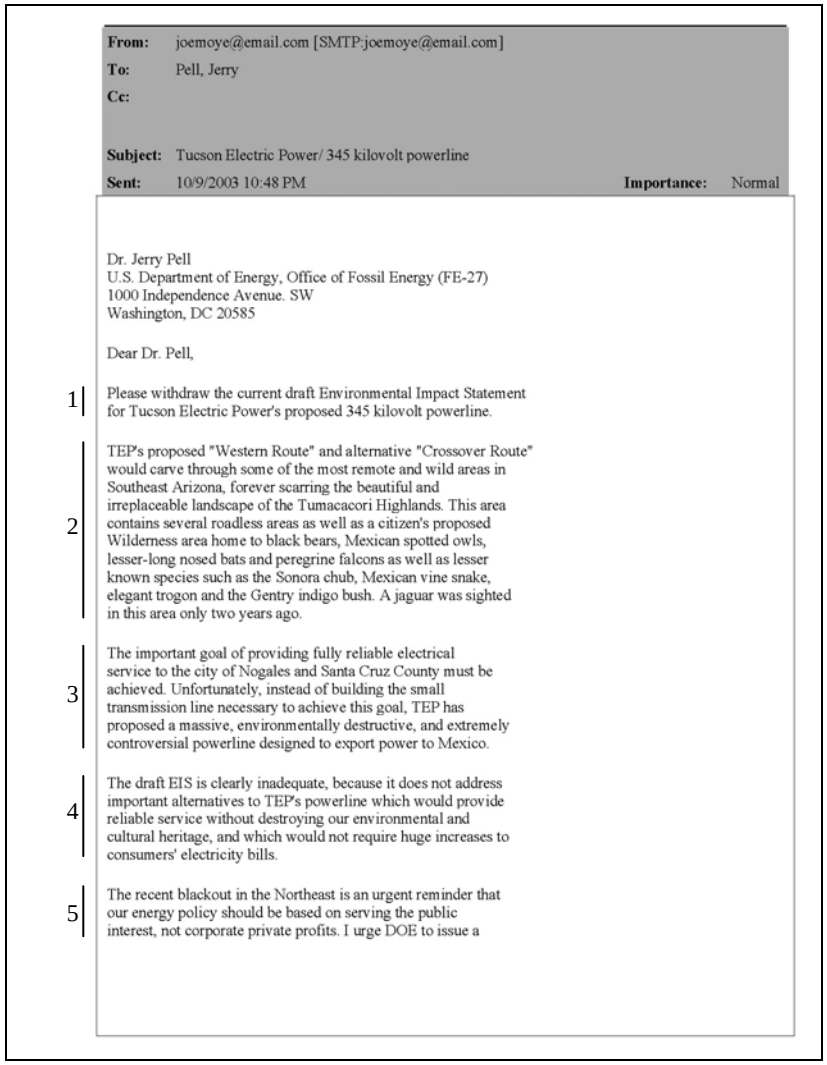
Comment No. 2

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS (refer also to Section 2.1.5, Alternatives Considered But Eliminated From Further Analysis).

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

2.4 Bulk Emails

Bulk Email #1
Page 1 of 2



From: joemoye@email.com [SMTP:joemoye@email.com]
To: Pell, Jerry
Cc:
Subject: Tucson Electric Power/ 345 kilovolt powerline
Sent: 10/9/2003 10:48 PM **Importance:** Normal

Dr. Jerry Pell
U.S. Department of Energy, Office of Fossil Energy (FE-27)
1000 Independence Avenue. SW
Washington, DC 20585

Dear Dr. Pell,

1 Please withdraw the current draft Environmental Impact Statement for Tucson Electric Power's proposed 345 kilovolt powerline.

2 TEP's proposed "Western Route" and alternative "Crossover Route" would carve through some of the most remote and wild areas in Southeast Arizona, forever scarring the beautiful and irreplaceable landscape of the Tumacacori Highlands. This area contains several roadless areas as well as a citizen's proposed Wilderness area home to black bears, Mexican spotted owls, lesser-long nosed bats and peregrine falcons as well as lesser known species such as the Sonora chub, Mexican vine snake, elegant trogon and the Gentry indigo bush. A jaguar was sighted in this area only two years ago.

3 The important goal of providing fully reliable electrical service to the city of Nogales and Santa Cruz County must be achieved. Unfortunately, instead of building the small transmission line necessary to achieve this goal, TEP has proposed a massive, environmentally destructive, and extremely controversial powerline designed to export power to Mexico.

4 The draft EIS is clearly inadequate, because it does not address important alternatives to TEP's powerline which would provide reliable service without destroying our environmental and cultural heritage, and which would not require huge increases to consumers' electricity bills.

5 The recent blackout in the Northeast is an urgent reminder that our energy policy should be based on serving the public interest, not corporate private profits. I urge DOE to issue a

Note: A total of 1,029 copies of this email, or a substantively very similar email, were received by either DOE or USFS. In addition, DOE and USFS received multiple emails and letters that included all or part of this email along with additional comments, and a copy of each of these emails and letters is reproduced in Section 2.3 of this CRD with the corresponding responses.

Comment No. 1

The commentor's request to withdraw the current Draft EIS is noted.

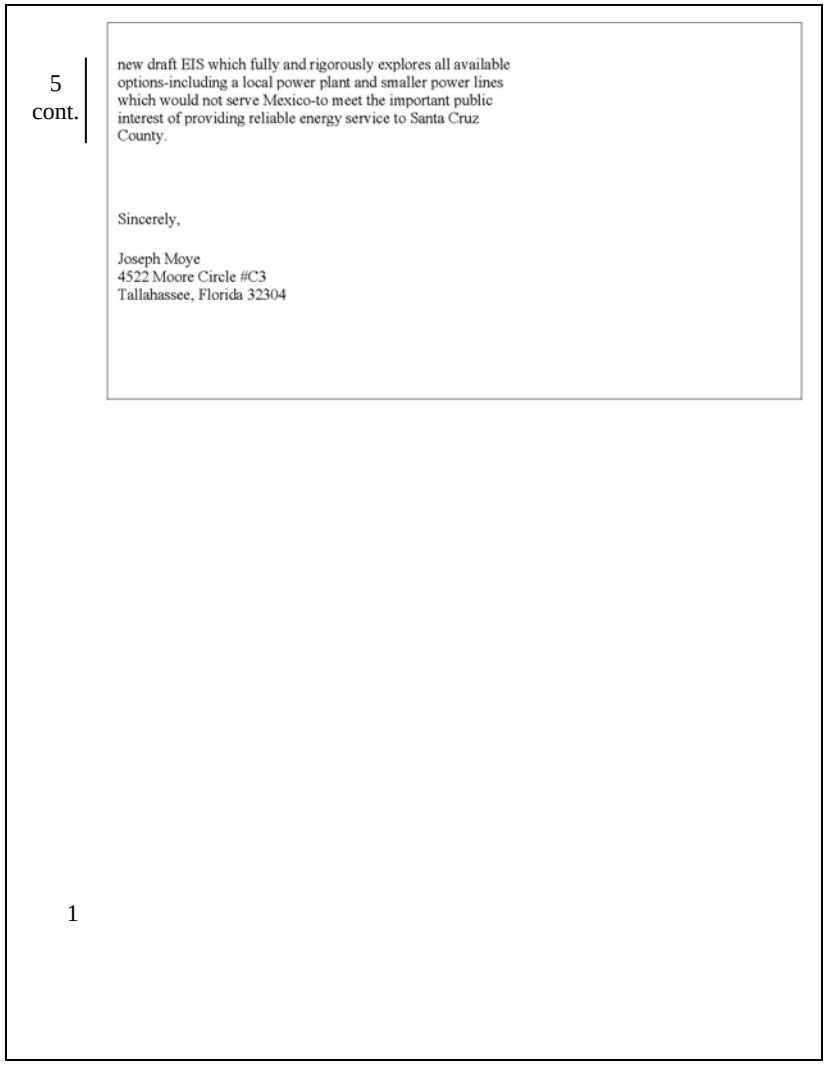
Comment No. 2

The Federal agencies recognize that many people value certain areas along the alternative transmission corridors as wild places and have a holistic concern for the natural beauty, undisturbed landscape features, and abundant plant and animal wildlife that characterize those areas. These unique natural characteristics give such wild areas their "sense of place," which includes people's visual and aural perceptions of the area's undisturbed sky, natural landscape, water resources, and plant and animal populations. The sense of place also includes the spiritual value that many people associate with these wild areas because of their cultural and religious significance. The Federal agencies recognize and appreciate this holistic sense of place and have revised the introductory sections of Chapters 3 and 4 of the Final EIS to acknowledge these values.

Clearly, the natural and cultural characteristics that contribute to a sense of place transcend the consideration of individual resource areas in a NEPA document. However, in order to analyze potential impacts effectively and document the analysis, it is necessary to consider the resource areas individually. Thus, the EIS discussions of affected environment in Chapter 3 and potential impacts in Chapter 4 are divided into distinct resource areas (e.g., visual resources, biological resources, cultural resources).

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources, including potential impacts to the Tumacacori Mountains and the Tumacacori EMA of the Coronado National Forest.

Bulk Email #1
Page 2 of 2



5 cont.

new draft EIS which fully and rigorously explores all available options-including a local power plant and smaller power lines which would not serve Mexico-to meet the important public interest of providing reliable energy service to Santa Cruz County.

Sincerely,

Joseph Moye
4522 Moore Circle #C3
Tallahassee, Florida 32304

1

Comment No. 2 (*continued*)

Sections 3.1, Land Use, and 3.12, Transportation, discuss the IRAs within the Coronado National Forest. Sections 4.1, Land Use, and 4.12, Transportation, evaluate potential impacts to IRAs.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to wildlife.

The federal agencies are aware that environmental groups are interested in achieving federal wilderness designation for a large portion of the Tumacacori Ecosystem Management Area (EMA). Maps provided by commentors indicate that all corridor alternatives considered in this EIS cross the area suggested for wilderness designation. Presence of a transmission line would not necessarily preclude wilderness designation, as the Wilderness Act of 1964 and Forest Service regulations (36 CFR 293.15) allow for the existence, establishment and subsequent maintenance of transmission lines in wilderness areas. Information about the wilderness proposal has been added to Section 5.2.4 of the FEIS as a potential future action.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system…." When a Federal agency is evaluating a request for a permit for a proposed action developed by a non-Federal applicant (e.g., TEP), CEQ has opined that Federal agencies should select alternatives which are feasible given the applicant's stated goals and reflect the "common sense realities" of the situation. Therefore, the Federal agencies are evaluating the proposed project presented by TEP to each of the Federal agencies (see Section 1.2.2, Federal Agencies' Purpose and Need Statements).

Comment No. 4

Section 1.2 of the Final EIS explains the roles of the Federal agencies in developing alternatives for the proposed project. Where an applicant seeks a permit for a particular business project, such as the case with TEP's proposed project, the Federal agencies generally limit their review of alternatives to those that would satisfy the applicant's proposal and decide whether that proposal is or is not worthy of receiving a permit. The Federal agencies do not review alternatives that are not within the scope of the applicant's proposal. Similarly, the agencies do not direct the applicant to alter its proposal; instead, the agencies decide whether a permit is appropriate for the proposal as the applicant envisions it. It is not for the agency to run the applicant's business and to change the applicant's proposal, but only to evaluate the environmental effects of the applicant's business proposal as offered. Accordingly, the EIS evaluates a reasonable range of alternatives, which include the full spectrum of alternatives that would satisfy the applicant's proposal.

After a regulated utility such as TEP constructs a project in Arizona, the ACC determines whether or to what degree an investment by a utility is recoverable through consumer electricity rates. Because the Federal agencies cannot anticipate how the ACC may adjust consumer electricity rates in light of the proposed project, the potential change in consumer electricity rates is too speculative for inclusion in the EIS. There have been no rate increases attributable to this proposed project.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line. Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. Section 2.1.5, Alternatives Considered but Eliminated From Further Analysis, was revised to provide additional information regarding these alternatives that were dismissed from detailed analysis.

Bulk Email #2
Page 1 of 2

Tucson Electric Power Sahuarita-Nogales Transmission line DEIS

From: David Scott Silverberg, Ph.D. [SMTP:silverberg87571@yahoo.com]
To: Pell, Jerry
Cc:

Subject: Tucson Electric Power Sahuarita-Nogales Transmission line DEIS
Sent: 10/13/2003 6:35 PM
Importance: Normal
Dr. Jerry Pell
Office of Fossil Energy
U.S. Department of Energy
Washington D.C. 20585
Jerry.Pell@hq.doe.gov
FAX: 202-318-7761

Dear Dr. Jerry Pell

My comments are regarding the "Tucson Electric Power Sahuarita-Nogales Transmission line DEIS"

1 · The preferred Western Route is the longest, most expensive, and most environmentally damaging of all alternatives considered. The Crossover route is equally terrible.

2 · The Western and Crossover routes slice through a citizen's proposed Wilderness Area and would forever scar the outstanding natural characteristics of the area.

3 · There is no "Need" stated for a 345 kV line by either the applicant (TEP) or agencies – because most of the energy transmitted on the line would not benefit Santa Cruz County, why is the 345 kV, and not a smaller line, needed?
· A smaller, less obtrusive powerline, such as a 115 kV line was not considered for any route. Why not? A 115 kV line is cheaper, can more easily be buried in sensitive areas near homes, and would serve the long-term needs of Santa Cruz County.

4 · I do not support the proposed routes because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. They are an unnecessary economic, environmental, and culture burden on Southern Arizona. Please consider withdrawing the Draft Environmental

5 Impact Statement and issuing an assessment that properly analyzes real solutions to power needs in Santa Cruz County that include a smaller powerline and/or locally run power plant.

Note: A total of 9 copies of this email, or a substantively very similar email, were received by DOE. In addition, DOE received two emails and letters that included all or part of this email along with additional comments, and a copy of each of these emails and letters is reproduced in Section 2.3 of this CRD with the corresponding responses.

Comment No. 1

The Federal agencies recognize that many people value certain areas along the alternative transmission corridors as wild places and have a holistic concern for the natural beauty, undisturbed landscape features, and abundant plant and animal wildlife that characterize those areas. These unique natural characteristics give such wild areas their "sense of place," which includes people's visual and aural perceptions of the area's undisturbed sky, natural landscape, water resources, and plant and animal populations. The sense of place also includes the spiritual value that many people associate with these wild areas because of their cultural and religious significance. The Federal agencies recognize and appreciate this holistic sense of place and have revised the introductory sections of Chapters 3 and 4 of the Final EIS to acknowledge these values.

Clearly, the natural and cultural characteristics that contribute to a sense of place transcend the consideration of individual resource areas in a NEPA document. However, in order to analyze potential impacts effectively and document the analysis, it is necessary to consider the resource areas individually. Thus, the EIS discussions of affected environment in Chapter 3 and potential impacts in Chapter 4 are divided into distinct resource areas (e.g., visual resources, biological resources, cultural resources).

The affected environment of the Western and Crossover Corridors is described in Chapter 3, and the potential environmental impacts (including socioeconomic impacts) from these alternatives are fully evaluated in Chapter 4.

Comment No. 2

The federal agencies are aware that environmental groups are interested in achieving federal wilderness designation for a large portion of the Tumacacori Ecosystem Management Area (EMA). Maps provided by commentors indicate that all corridor alternatives considered in this EIS

Bulk Email #2
Page 2 of 2

With best wishes,

David Scott Silverberg, Ph.D.
5710 South Freeman Road #4
Tucson, AZ 85747 USA

520-245-3711

silverberg@alum.mit.edu

Comment No. 2 (*continued*)

cross the area suggested for wilderness designation. Presence of a transmission line would not necessarily preclude wilderness designation, as the Wilderness Act of 1964 and Forest Service regulations (36 CFR 293.15) allow for the existence, establishment and subsequent maintenance of transmission lines in wilderness areas. Information about the wilderness proposal has been added to Section 5.2.4 of the FEIS as a potential future action.

Section 4.3.2, Vegetation and Wildlife, states that the long-term reductions in biological activity (e.g., lack of vegetation in an area due to construction traffic) tend to be more pronounced in arid areas such as the proposed project area where biological communities recover very slowly from disturbances.

Comment No. 3

TEP's purpose and need for the proposed project, as provided to DOE in TEP's Presidential Permit Application, is "…to construct a double-circuit 345 kV, alternating current ("AC") transmission line to interconnect the existing electrical systems of TEP and Citizens Utilities ("Citizens") in Nogales, Arizona, with a further interconnection to be made from Nogales, Arizona to the CFE transmission system located in Sonora, Mexico." In an applicant-driven process, such as TEP's proposed project, the range of reasonable alternatives analyzed in detail in the EIS is directly related to the applicant's purpose and need.

Comment No. 3 (con't)

A smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. Section 2.1.5, Alternatives Considered but Eliminated From Further Analysis, was revised to provide additional information regarding this alternative that was dismissed from detailed analysis.

Comment No. 4

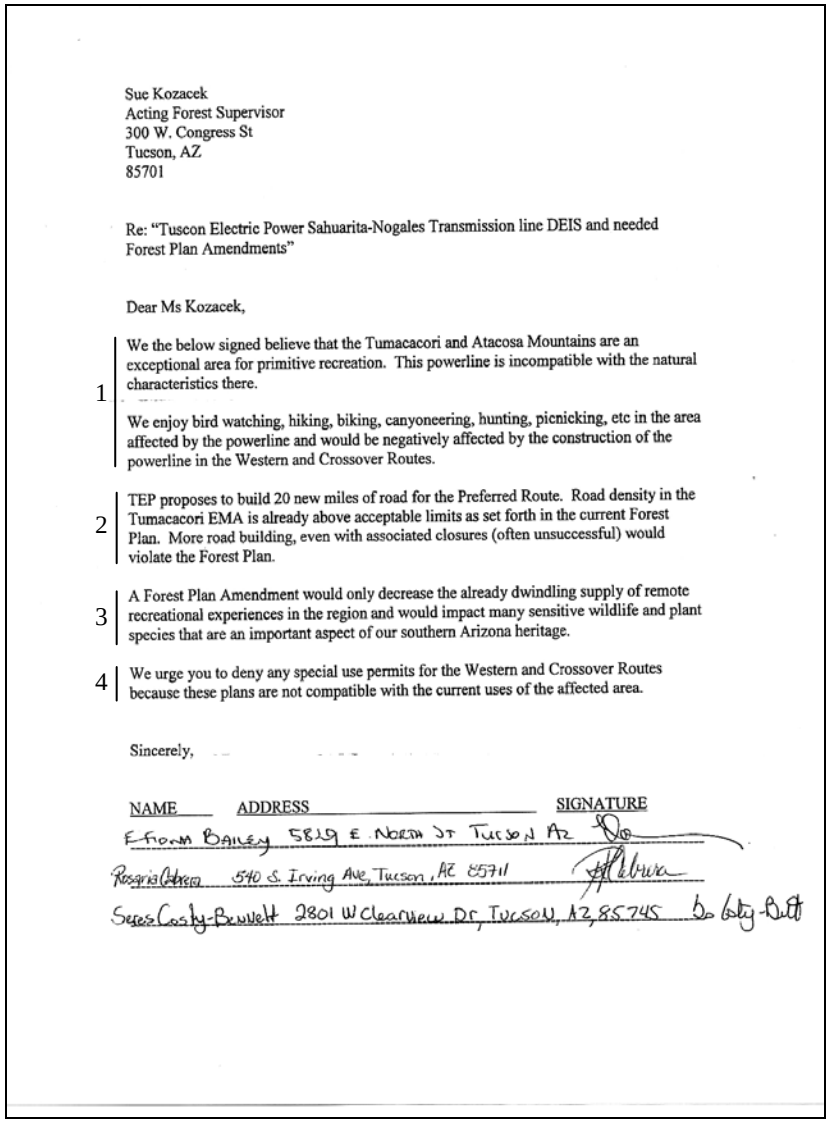
ACC Decision No. 62011 (ACC 1999) mandates the construction of a second transmission line to serve customers in Santa Cruz County, and does not reference the export of electricity to Mexico. However, a second ACC order (Decision No. 64536, issued in January 2002) grants a CEC to TEP to construct only a 345-kV transmission line with the dual purpose of addressing the service reliability problems in Santa Cruz County and providing interconnection with Mexico. TEP's stated purpose and need for the proposed project is a dual purpose and need of benefiting both southern Arizona and Mexico.

Comment No. 5

A new power plant in Nogales is not a viable alternative to a new, second transmission line. Therefore, the alternative of a new power plant is not evaluated in detail in this EIS. Likewise, a smaller transmission line in lieu of the proposed 345-kV line would not meet the international interconnection aspect of TEP's proposal, and therefore is not evaluated in detail in this EIS. Section 2.1.5, Alternatives Considered but Eliminated From Further Analysis, was revised to provide additional information regarding these alternatives that were dismissed from detailed analysis.

2.5 Multiple Signatory Letters

Multiple Signatory Letter #1
Page 1 of 2



Sue Kozacek
Acting Forest Supervisor
300 W. Congress St
Tucson, AZ
85701

Re: "Tuscon Electric Power Sahuarita-Nogales Transmission line DEIS and needed Forest Plan Amendments"

Dear Ms Kozacek,

1 We the below signed believe that the Tumacacori and Atacosa Mountains are an exceptional area for primitive recreation. This powerline is incompatible with the natural characteristics there.

We enjoy bird watching, hiking, biking, canyoneering, hunting, picnicking, etc in the area affected by the powerline and would be negatively affected by the construction of the powerline in the Western and Crossover Routes.

2 TEP proposes to build 20 new miles of road for the Preferred Route. Road density in the Tumacacori EMA is already above acceptable limits as set forth in the current Forest Plan. More road building, even with associated closures (often unsuccessful) would violate the Forest Plan.

3 A Forest Plan Amendment would only decrease the already dwindling supply of remote recreational experiences in the region and would impact many sensitive wildlife and plant species that are an important aspect of our southern Arizona heritage.

4 We urge you to deny any special use permits for the Western and Crossover Routes because these plans are not compatible with the current uses of the affected area.

Sincerely,

NAME	ADDRESS	SIGNATURE
E. Fiona Bailey	5819 E North St Tucson AZ	
Rosaria Olivera	540 S. Irving Ave, Tucson, AZ 85711	
Sesee Cosby-Bennett	2801 W Clearview Dr, Tucson, AZ, 85745	

Comment No. 1

Sections 3.1.2 and 4.1.2 discuss existing recreational settings and activities, and analyze potential impacts to recreation from the proposed project. Section 4.1.2 specifically evaluates impacts to ROS indicators such as remoteness and naturalness, both of which would have changes that are "inconsistent" with the existing ROS classes for much of the length of the Western and Crossover Corridors within the Coronado National Forest. Analysis of the proposed Forest Plan amendments is contained in Appendix H.

Commentor No. 2

The Tumacacori EMA of the Coronado National Forest in and of itself does not exceed road density limits set forth in the Forest Plan. Road density limits set forth in the Forest Plan are for the Coronado National Forest as a whole, not for individual land units or EMAs within the Coronado National Forest.

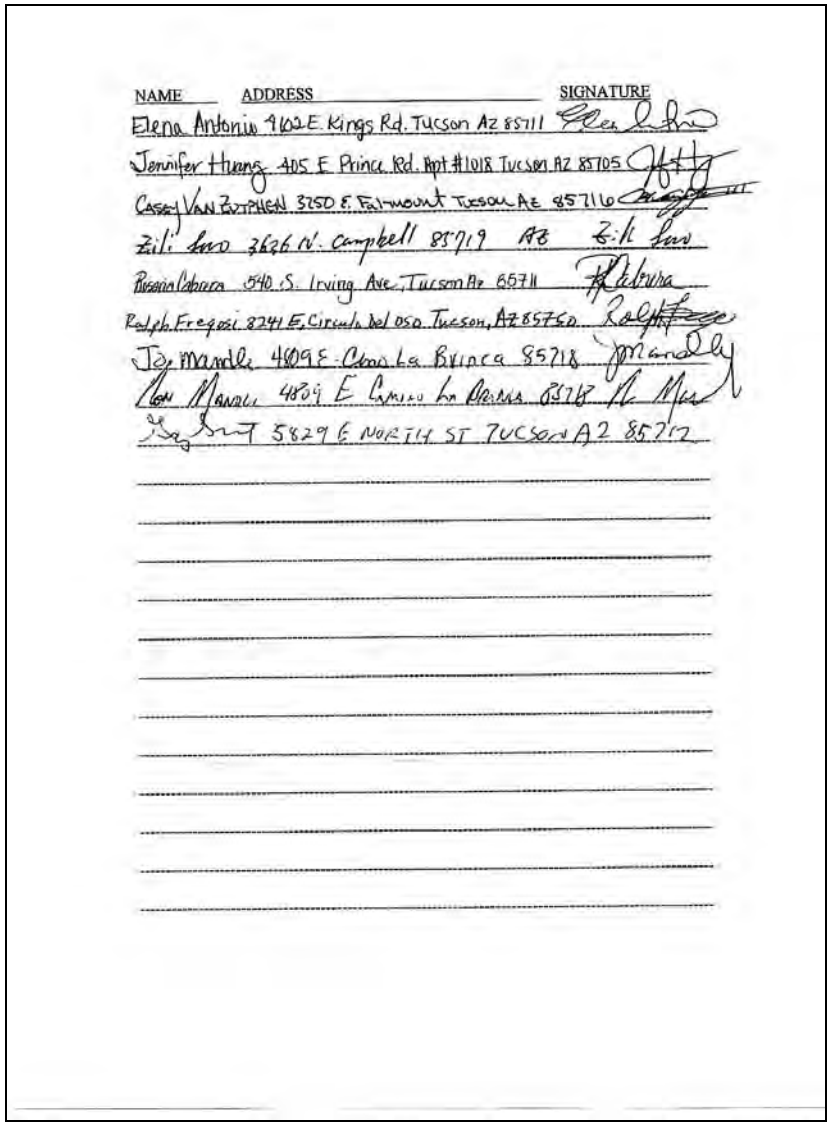
Regarding the effectiveness of road closures, any authorization issued to implement the proposed project on the Coronado National Forest would contain terms and conditions to ensure road barrier effectiveness and maintenance, as appropriate. Based on these terms and conditions for ensuring the effectiveness of road closures, the proposed project is consistent with Forest Plan standards and guidelines for road density.

Comment No. 3

Refer to the response to Comment 1 above regarding the impacts of a Forest Plan amendment.

Sections 3.3 and 4.3 discuss the existing biological resources and analyze the potential impacts to these resources from the proposed project, including potential impacts to endangered, threatened and special status species.

Multiple Signatory Letter #1
Page 2 of 2

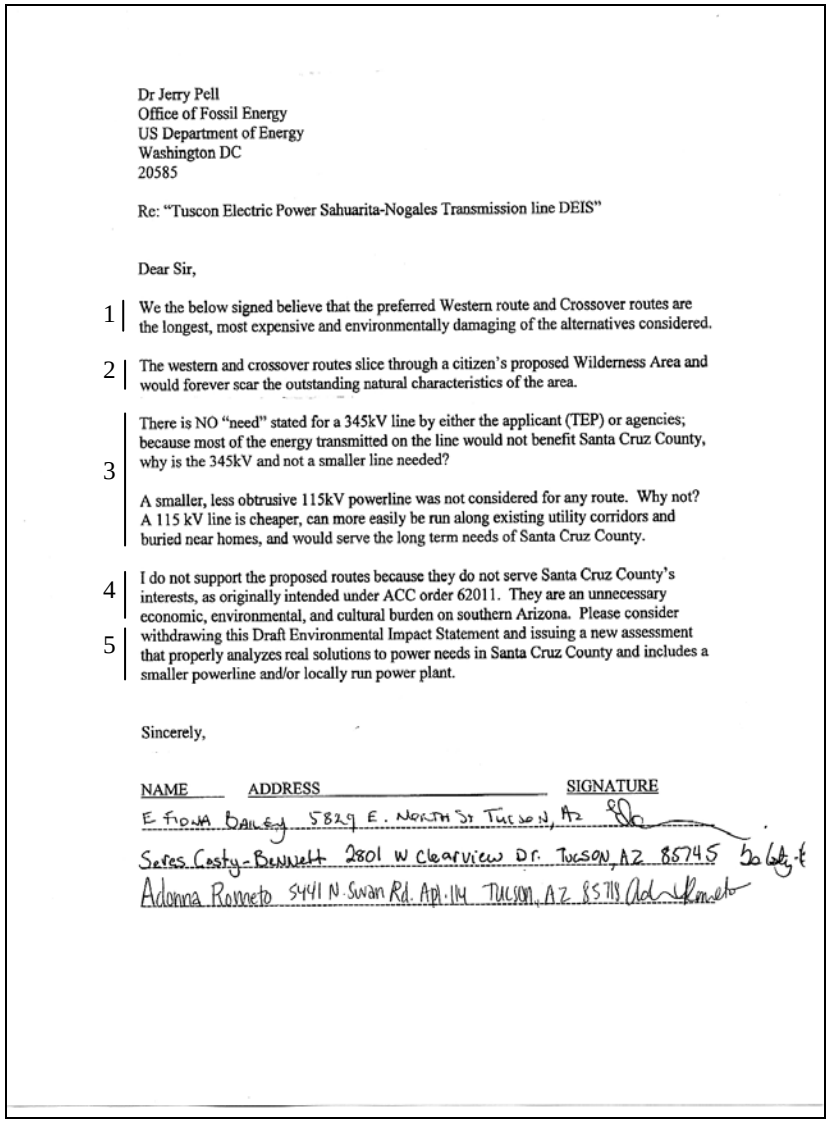


NAME	ADDRESS	SIGNATURE
Elena Antonio	9102 E. Kings Rd. Tucson AZ 85711	
Jennifer Huang	405 E Prince Rd. Apt #1018 Tucson AZ 85705	
Casey Van Buskirk	3250 E. Fairmount Tucson AZ 85716	
Zili Luo	3626 N. Campbell 85719 AZ	
Rosario Cabrera	540 S. Irving Ave, Tucson Az 85711	
Ralph Fregoso	8241 E. Circulo del Oso Tucson, AZ 85750	
Jo Mandle	4809 E Calle La Blanca 85718	
Glen Mandle	4809 E Calle La Blanca 85718	
	5829 E. North St Tucson AZ 85712	

Comment No. 4

Sections 3.1 and 4.1 describe existing land use resources and analyze potential impacts to these resources.

Multiple Signatory Letter #2
Page 1 of 2



Dr Jerry Pell
Office of Fossil Energy
US Department of Energy
Washington DC
20585

Re: "Tuscon Electric Power Sahuarita-Nogales Transmission line DEIS"

Dear Sir,

1 We the below signed believe that the preferred Western route and Crossover routes are the longest, most expensive and environmentally damaging of the alternatives considered.

2 The western and crossover routes slice through a citizen's proposed Wilderness Area and would forever scar the outstanding natural characteristics of the area.

3 There is NO "need" stated for a 345kV line by either the applicant (TEP) or agencies; because most of the energy transmitted on the line would not benefit Santa Cruz County, why is the 345kV and not a smaller line needed?

A smaller, less obtrusive 115kV powerline was not considered for any route. Why not? A 115 kV line is cheaper, can more easily be run along existing utility corridors and buried near homes, and would serve the long term needs of Santa Cruz County.

4 I do not support the proposed routes because they do not serve Santa Cruz County's interests, as originally intended under ACC order 62011. They are an unnecessary economic, environmental, and cultural burden on southern Arizona. Please consider

5 withdrawing this Draft Environmental Impact Statement and issuing a new assessment that properly analyzes real solutions to power needs in Santa Cruz County and includes a smaller powerline and/or locally run power plant.

Sincerely,

NAME ADDRESS SIGNATURE

E Fiona Bailey 5829 E. North St Tucson, Az

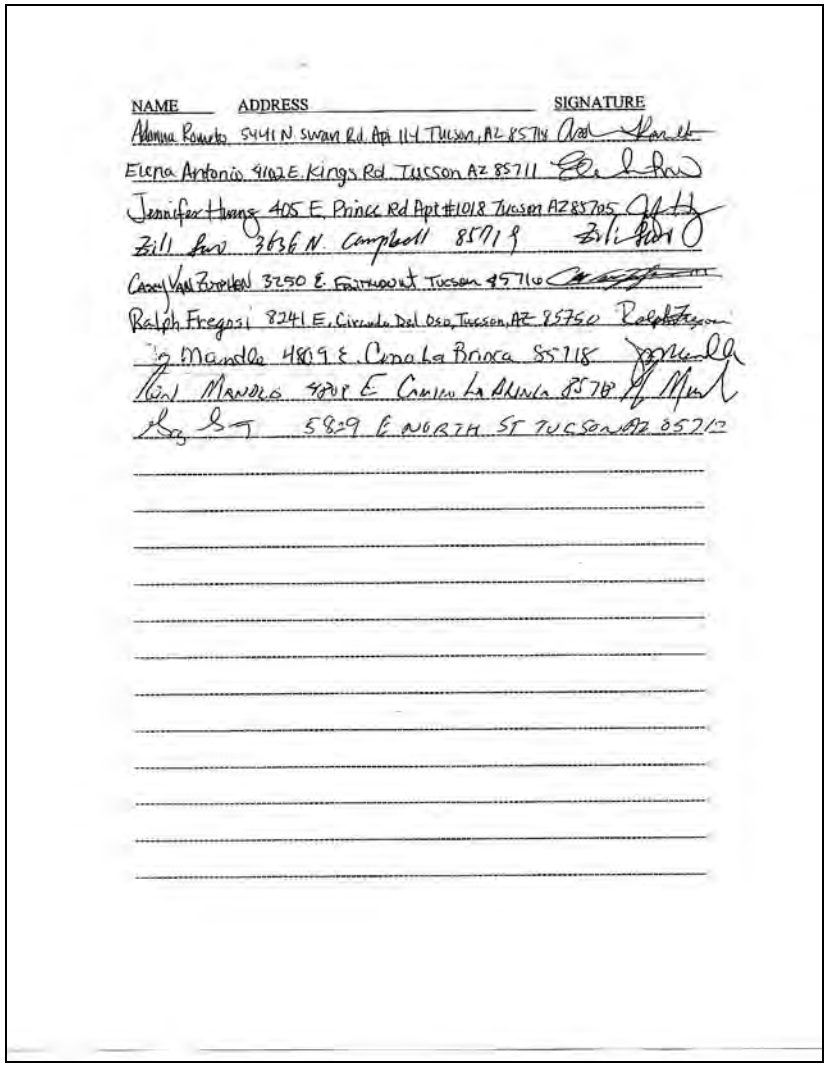
Seres Cesty-Bennett 2801 W Clearview Dr. Tucson, AZ 85745

Adonna Romero 5441 N. Swan Rd. Apt. 114 Tucson, AZ 85718

Comment Nos. 1-5

Refer to the responses to Comments 1-5, respectively, in Bulk Email #2.

Multiple Signatory Letter #2
Page 2 of 2



NAME	ADDRESS	SIGNATURE
Monica Rosales	5441 N. Swan Rd. Apt 114 Tucson, AZ 85718	
Elena Antonio	4102 E. Kings Rd. Tucson AZ 85711	
Jennifer Hung	405 E. Prince Rd Apt #1018 Tucson AZ 85705	
Bill Ford	3636 N. Campbell 85719	
Casey Van Buskirk	3250 E. Fairmount Tucson 85716	
Ralph Fregoso	8241 E. Circulo Del Oso, Tucson, AZ 85750	
[illegible] Mandle	4809 E. Cima La Blanca 85718	
[illegible] Mandle	4809 E. Cima La Blanca 85718	
[illegible]	5829 E NORTH ST TUCSON AZ 85712	