

FILE

EH-25

**VOLUME 2B
Comments and Responses
L-310 through L-372 and
SL-1 through SL-134**

**FINAL
ENVIRONMENTAL IMPACT STATEMENT
ENVIRONMENTAL IMPACT REPORT**

**FOR THE
CALIFORNIA-OREGON
TRANSMISSION PROJECT**

**AND THE
LOS BANOS-GATES
TRANSMISSION PROJECT**

FILE

EH-25

**DOE/EIS-0128
SCH#85040914**

JANUARY 1988

SECTION 2.0
CORRESPONDENCE AND
RESPONSES ON THE DRAFT EIS/EIR

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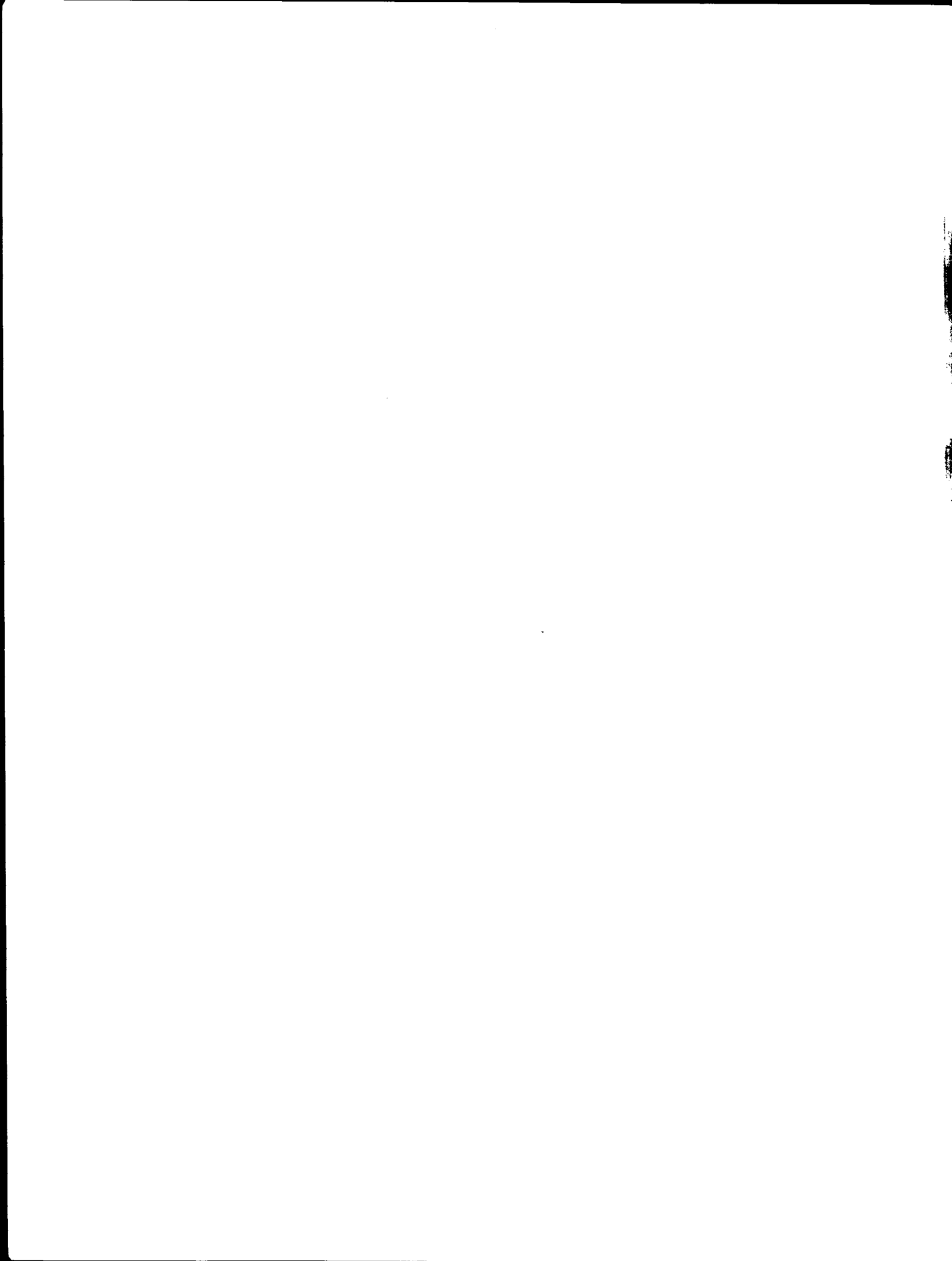
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2.0 Correspondence and Responses on the Draft EIS/EIR (Cont'd)

Letters L-310 through L-372 containing specific comments on the Draft EIS/EIR are reproduced and bracketed on the following pages. Responses to the specific comments are identified or referenced and appear across from the comment they address.

See Section 3.0 of this volume for comments and responses on the Supplement to the Draft EIS/EIR. See Section 1.0, Index to Correspondence, of Volume 2A of this Final EIS/EIR for a list of the comments presented in this Volume.



L-310



Department of Energy

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February 27, 1987

Cheryl Shields
Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Cheryl:

Attached are the Oregon Review Committee's comments on the Draft EIS/EIR for the California-Oregon Transmission Project. Included are:

- Comments from a subcommittee of local representatives
- Appendix to citizen concerns
- Comments from State agency representatives
 - Department of Environmental Quality
 - Aeronautics Division
 - Forestry Department
 - Department of Fish and Wildlife
 - Department of Land Conservation and Development
 - Department of Transportation, Highway Division
- Comments from public meetings and individuals
- Route comparison study

A

At the February 24 meeting a subcommittee of the ORC, including the three local citizen representatives and two local government representatives, expressed concern about several issues. Although not all of these deal directly with the Draft EIS/EIR, they were a major theme for the meeting and represent serious concerns. I feel it is important to communicate them to TANC. They are listed below.

- 1 Bill Graham, the Malin representative, said that the Draft shows a systematic bias toward the preferred route, Route D, in the Malin corridor. To local citizens and some committee members, these biases cast doubt on the objectivity, reliability and validity of the entire Draft EIS/EIR. Here are some of the concerns:

B

- The conclusions don't match the summary findings. It is not clear how impacts were weighted to come up with Route D as the environmentally superior route. Some examples of these discrepancies are included in the Appendix to Citizen Concerns.

A

Alternative D was selected as the preferred route because it would result in less overall environmental impact than Alternatives A, B, or C. See responses to L-310 B, L-310 C, and L-310 D.

B

See response to L-371 E for a discussion of how Alternative D as prescribed in the Draft EIS/EIR was selected as the environmentally superior route. Impacts were not weighted, as this has proved to be an ineffective means of reaching consensus. See also responses to your specific comments in the Appendix.

L-310 (continued)

- C [• The language used in text descriptions is not consistent between route alternatives. Examples are also in the Appendix.
- D [• The project sponsors are trying to obtain permission to do surveying along the preferred route before the comment deadline on the Draft EIS/EIR. Other routes were not scheduled for this surveying. The timing of this work shed doubt on the objectivity of route comparison in the study.
- E [2 There is genuine concern over health effects from electric and magnetic fields created by the lines. Friends of Greensprings, a citizen's organization in Pinehurst, is particularly concerned about health effects. They do not believe that TANC takes the concern seriously.
- F [3 Local land owners believe that the value of real estate adjacent to power line ROWs is reduced because of impacts on visual resources, and land use.
- G [I hope that TANC will consider these concerns in future action about the project.

Thank you for your help and cooperation. We appreciate the opportunity to comment on the project. Call me if you have any questions. My phone number is (503) 378-8328.

Sincerely,



Charlie Grist, Energy Analyst
Planning Division

- C Variations in the description of alternatives are due to differences in terminology between resource disciplines in the description of environmental conditions and the analysis of impacts. See responses to your specific comments in the Appendix.
- D Survey activities were initiated to confirm the feasibility of the preferred route and to support the project schedule.
- E See response to L-330 F3.
- F See response to T-82 C and L-184 A.
- G Comment noted.

L-310 (continued)

A subcommittee composed of local citizen, local government representatives, and a representative from the local office of Fish and Wildlife, met to comment on the Draft EIS/EIR. After reviewing the draft EIS/EIR, the subcommittee offers the following comments and recommendations.

- H 1 The final EIS should show how impacts across the different route are weighted to come up with the preferred route. The method used to translate impacts should be consistent between routes. The attached Appendix to Citizen Comments gives some specific examples to address.
- I 2 For the final EIS, the project sponsors should study the impacts of the citizens proposed route in the Mallin corridor. The route has several apparent advantages. It is further from Loveness Airstrip; it reduces hazards for aerial spraying of adjacent agricultural fields; it bypasses a planned residential area; it crosses more public land, rather than private land; and it is further away from existing residences than the preferred route.
- J 3 The final EIS should consider the citizens proposed substation site in the Mallin corridor. This site is north of the proposed E2 site. The two existing proposals will have unacceptable impacts on visual resources, agricultural land, and noise pollution. Effects of the Citizens' Proposed Site would be less.
- K
- L 4 Chapter 3.10 of Volume 2A should more fully discuss the long-term health impacts from exposure to electric and magnetic fields. The final EIS should consider recent studies that add weight to previous suspicions about the public health effects of weak magnetic fields. In particular, reference to the following recent studies should be addressed in the final EIS.
 - a. David Savitz of the University of North Carolina at Chapel Hill with Frank Barnes and Howard Machtel of the University of Colorado in their November 1986 study which supports the 1979 Wertheimer Leeper leukemia study. His findings were reported at the Denver meeting on health effects sponsored by EPRI and USDOE.
 - b. Wertheimer and Leeper, in Bioelectromagnetics (Volume 7, Number 1). They report effects on users of electrically heated water beds.
 - c. Jerry Phillips of the Cancer Therapy Research Center in San Antonio, Texas which appears in the November 1986 Immunology Letters. His work discusses findings of abnormal increases in the growth of cancer cells exposed to ELF fields.
 - d. The section on effects of weak magnetic fields (pages 41 to 43) in BPA's review of the literature, Electrical and Biological Effects of Transmission Lines: A review, revised June 1986.

H See response to L-371 E and Section 1.2.2 of Volume 1 of this Final EIS/EIR for a discussion of how the environmentally superior route was selected from the four northern alternatives. See also responses to your specific comments in the Appendix.

I This route is analyzed in the Supplement to the Draft EIS/EIR as routing option North 1. It has been adopted as the Project preferred route in this Final EIS/EIR.

J This switching station site is analyzed in the Supplement to the Draft EIS/EIR as switching station site E3. It has been selected as the Project preferred site in this Final EIS/EIR.

K The Supplement to the Draft EIS/EIR concludes that switching station site E3 would have the fewest impacts of the three sites.

L See responses to L-330 F3 and SL-51 A, and Section 1.2.3 of Volume 1 of this Final EIS/EIR.

- a. The study by Dr. Savitz is addressed in the above referenced responses and Section 1.2.3. Also, there is an associated study by Dr. Stevens of Battelle, who investigated the Wertheimer finding of an association with EMF exposure and adult cancer. The Stevens study was negative and did not support the Wertheimer findings.
- b. We are familiar with the Wertheimer and Leeper study of electric blankets and heated waterbeds. We have considered this study, but unfortunately, the effects of heat on pregnancy outcome tends to confound the results.
- c. The work by Dr. Phillips was investigated by independent reviewers and found to be heavily flawed. Not surprisingly, a very recent replication of the Phillips cancer growth work by Dr. Cohen at the University of Maryland was completely negative and failed to confirm Phillips. The work was also funded by the State of New York Power Lines Project under the direction of the Department of Health.
- d. The new section on the effects of weak magnetic fields in BPA's booklet "Electrical and Biological Effects of Transmission Lines - A Review" is a good summary of the studies and the issue. Many studies point to problems with much lower voltage and pervasive distribution lines or certain assumed occupational exposures. There is even more information available since BPA prepared the booklet. We have considered the BPA document and all new study results in our decisions.

L-310 (continued)

- M** 5. The forest and agricultural resource data for Oregon sections of the route may be dated. For example, the unavailability of LUDA maps for Oregon mentioned in the last paragraph on page 3.6-9 of Volume 2A sheds doubt on the classification of forest land. Misclassified timber lands in the Malin area are an example of questionable resource data. Here, 4.28 miles of land is classified as Non-Prime forest (Table 3.6 of Volume 2A). There is no forest in this area.
- N** 6. Increased frequency of fires due to construction and operation of the project are noted in the Draft EIS/EIR. The final EIS should include estimates of the probable cost of timber losses from fire and increased cost of fire suppression attributable to the construction and operation of the project. (paragraph 3.8.4.7 of Volume 2A).
- O** 7. The Draft EIS/EIR does not adequately separate effects between Oregon and California on proposed route segments that cross the state border. Economic effects in timber, agriculture, and taxes should be separated by state.
- P** 8. Because the power line separation in parts of the the Malin corridor is much closer than five miles, the final EIS should provide detailed evaluations of reliability in regard to credible three line outages in this corridor. The importance of the separation criteria should be discussed.

Mitigation

- Q** 9. The final EIS needs to be more specific about mitigation measures. The effectiveness of mitigation cannot be judged without more specific descriptions. In particular:
- R** a. Vegetation height control under lines needs to be specified. What heights are allowed and why?
- S** b. No mention is made about what methods will be used for vegetation control on private lands.
- T** c. Topping live trees is not effective mitigation for the removal of snags.
- U** d. Why is it that "all snags and live trees with disease and decay" (Volume 2A page 3.5-2) need to be removed. Are there height exceptions?
- V** e. Mitigation in Volume 1 Summary page 18 does not address snags on private lands.
- W** f. Reliance on trespass control for private lands as a method of reducing access impacts on wildlife is not effective mitigation (Table 2, Volume 1). Not creating permanent roads is the most effective method of reducing disturbance to wild life.

M LUDA (a land use and cover classification system) maps were available and used for Oregon. Only Timber Production Zone (TPZ) maps of Oregon were not available. Juniper savannah in the Malin area is classified as non-prime timber.

N Construction of the COTP in timber and other areas will be performed in accordance with all federal, state, and local laws, rules, and regulations pertaining to fire safety. It is not believed that construction of the COTP presents a significant increase in the potential for forest fire.

O In the Draft EIS/EIR, data on the economic effects of the COTP are separated by county in the tables and by state in the text. For example, Table 3.8-4, Estimated Property Tax (Volume 2A of the Draft EIS/EIR) projects data for each county, including the Oregon counties of Jackson and Klamath. Examples of discussions on the economic effects of the COTP by state are found throughout Volume 1, Sections 3 and 4, and Volume 2A, Phase III Report of the Draft EIS/EIR.

P There are many existing 500-kV transmission lines located in the area around Malin Substation. One of the reasons the COTP is not planned to terminate at the Malin Substation is to increase the reliability of the power system. It is considered to be more reliable for the COTP to be terminated in a substation located along the Meridian-Malin line northwest of Malin. In the Newell area, without the danger of forest fire, it is the opinion of COTP Participants that the 2,000 feet of separation that is provided is adequate to prevent the simultaneous outage of the three AC lines. The importance of the reliability of the COTP is further discussed in Volume 1 of the Draft EIS/EIR, Section 2.0, and in Sections 1.1.2 and 1.2.2 of Volume 1 of the Final EIS/EIR.

Q See responses to L-310 R through L-310 Z.

R Minimum conductor to ground clearances would typically be 36.3 feet in most areas, 40.3 feet above railroad tracks, and ranging from approximately 130 feet to 170 feet for navigable river crossings. This information can be found on page 2.1-3, paragraph 6 of Volume 1 of the Draft EIS/EIR. Vegetation would be controlled by natural or mechanical methods so that it would not interfere with the conductor to ground clearances. Typically, when vegetation reaches 20-25 feet in height it could potentially interfere with the conductors and would be removed.

S Vegetation height control under transmission lines is a function of conductor sag, conductor blow-out, and tower location. Clearing will be accomplished using a selective process that will result in minimizing vegetation removal. Vegetation will, for the most part, be controlled in the same manner as for federal lands. However, the use of herbicides is presently restricted on federal lands. Herbicides may be used on private lands with the permission of the landowner.

L-310 (continued)

- T** Comment noted. The mitigation is valid as written. Topping live trees to replace snags which have been removed is a common mitigation method to replace habitat for cavity-dependent species.
- U** Only those snags or live trees with advanced stages of disease and decay and that could fall into the conductors or towers would be removed.
- V** Snag management on private lands must be the subject of negotiation with individual landowners.
- W** Some permanent access roads will be necessary through forested areas and, where none exist, they must be constructed. The need for new roads will be coordinated with landowner transportation planning where possible. Access control will be negotiated with the individual landowners as part of the land acquisition process.

L-310 (continued)

- X** [g. The methods of controlling erosion from roads identified in Volume 1, Table 2 would be significantly reduced by vehicular use of the roads. Long term impacts of permanent roads on water quality and erosion are understated.
- Y** [h. The final EIS should clarify how mitigation reduces significant impact on big game from ten miles to two miles in the Malin corridor (Table 3.5-7 of Volume 2A on segment N-10A). This is an area of dense deer populations.
- Z** [i. The concept of "totally effective mitigation" as noted in Table 2 of Volume should be clearly defined.

Earth Resources

- AA** [10. Soil loss exceeds soil loss tolerance on all Oregon routes as stated in Table 3.2-1 of Volume 2A. This should be noted as a significant impact in the final as defined on page 3.2-9 of the draft.
- BB** [11. The draft EIS should define geological hazard zones 2 and 3.

Water Resources

- CC** [12. The final EIS should identify the names and classifications of the small streams and bodies of water crossed on all the routes in chapter 3.3 of Volume 2A. Impact on these streams, including the recreational use, should be discussed.
- DD** [13. The Draft EIS states that no springs are crossed in any of the routes through Oregon. Many small springs would be crossed in the Pinehurst and Keno routes.

Wildlife and Vegetation

- EE** [14. Water fowl collision impact on the western most route in the Malin corridor (Route N-10D) is understated (Volume 1 page 4.1-22). There are serious concerns for water fowl collisions here because of the flight way between Clear Lake and Tululake. Significant impacts should be noted in the final EIS.
- FF** [15. The final EIS should discuss impacts on big game in the Malin corridor routes N-10Alt2, N-10Alt3, and N-10Alt4. This is omitted from Volume 2A chapter 3.5 in the Draft. These areas are used by Oregon deer as winter range. Line routing and access roads in this area would have negative impact on these animals. Mitigation would need to be applied.
- GG** [16. The Draft EIS understates the negative impact on nesting raptors in the Malin corridor (Volume 2A pages 3.5-27 and 3.5-28). Sensitive raptors, including Swainson's Hawk, use the escarpment immediately to the east of the proposed line near Malin.

X The COTP will use existing roads wherever possible. Where no existing road proves usable, a new road will be constructed. Many of these roads will be seeded and returned as near as possible to their natural state after construction; few permanent roads will remain. The roads which do remain would be required for long-term COTP maintenance and repair and will be properly graded (along rather than across contours) and equipped with drainage controls (berms and ditches). In addition, gates and earthen barriers can be used to minimize unauthorized use of temporary roads and any permanent roads which remain.

Y For big game, Table 3.5-7 of Volume 2A of the Draft EIS/EIR displays the miles of important habitat crossed, followed by the number of miles (in parentheses) that could be significantly impacted and would require mitigation. Impacts were assessed by evaluating the number of existing miles of roads, the approximate miles of new roads to be constructed for the COTP, and the total number of permanent roads to remain following construction. Miles of road were compared against threshold standards derived from the literature and from discussion with agency personnel. These thresholds were calculated separately for areas with different habitat values and susceptibility to disturbance (due to openness of habitat).

Not all important big game range crossed would be significantly impacted because: 1) some areas were above the threshold for road density and additional roads would not make the areas less suitable, and 2) other areas would be below the significance threshold even after construction of COTP roads. Areas where impacts would be significant would require mitigation such as road closures. Where this is not practical due to topography and vegetation conditions, habitat would be improved in nearby undisturbed areas to offset impacts in the vicinity of the alignment.

Z "Total effective mitigation," as referred to in Table 1 of the Summary, means that when an appropriate mitigation measure is applied, the impact will be reduced below the level of significance defined for that impact. The impacts and their criteria for significance are discussed for each resource in the Draft EIS/EIR, Volume 2A, Phase III Report.

AA The potential significance of this impact depends on whether the rate of soil loss exceeds soil loss tolerances and whether or not erosion and sediment controls will be effective given local conditions. The mitigation measures adopted by the COTP and listed under "Soils" in Section 1.1.5 of the Final EIS/EIR will reduce the potential impact below the level of significance in this area. See Section 1.1.4 of Volume 1 of this Final EIS/EIR.

BB The Uniform Building Code, 1970 edition, contained the first seismic zone map for the United States and categorized the county into four hazard zones:

Zone 0 - No damage.

Zone 1 - Minor damage.
Corresponds to intensities V and VI of the Modified Mercalli Scale.

Zone 2 - Moderate damage.
Corresponds to VII on the Modified Mercalli Scale.

Zone 3 - Major damage.
Corresponds to VIII or higher on the Modified Mercalli Scale.

A footnote which summarizes the definition of Hazard Zones 2 and 3 has been added to Section 1.2.3 of Volume 1 of this Final EIS/EIR to clarify Table 3.2-1 that was presented in Volume 2A of the Draft EIS/EIR.

CC Data on stream names, locations, size, elevation, and surrounding bank slope was collected for every stream crossed by all route alternatives. This data is summarized in Table 3.3-2 in Volume 2A of the Draft EIS/EIR, since inclusion of the raw data would make the Draft EIS/EIR too voluminous. Recreational uses of streams in the COTP area are discussed on pages 3.6-16, 3.6-30, 3.6-45, and in Table 3.3-14 of Volume 2A of the Draft EIS/EIR.

DD Springs were not designated as such in the analysis unless the route crossed directly over the spring. Streams that are crossed which originate from these springs are quantified as "small streams," of which there are many in the Pinehurst and Keno routes. All springs or small streams shown on the most current USGS 7.5 minute topographic maps were included in the analysis.

EE Route N-10D is not part of Alternative D; it is therefore not discussed in the Draft EIS/EIR, Volume 1, page 4.1-22. Route N-10D would have the highest collision potential of the N-10 routes; partly for this reason it was not selected as part of Alternative D. The selected routes in this area are located further east, at the base of Clearlake Hills escarpment. The siting of the new line at the base of the escarpment would further reduce the chances of bird collision, since the birds would be flying at higher elevations to clear the escarpment. (Jones and Stokes Associates 1987).

L-310 (continued)

FF Significant impacts to big game ranges are displayed in the Draft EIS/EIR, Volume 2A, Tables 3.5-6 and 3.5-7. Big game impacts would be greater on these eastern routes than on the preferred route identified in the Draft EIS/EIR.

GG We received no reports of Swainson's hawk nests near the Malin routes in Oregon during extensive contacts with personnel from the Oregon Department of Fish and Wildlife (ODFW). In the Clearlake Hills in California, impacts to known Swainson's hawk nests will be avoided by careful routing of the line within the selected corridor and through seasonal restrictions on construction, if needed. If nest locations are identified in Oregon or elsewhere prior to construction, those with potential for impacts will also be protected.

L-310 (continued)

Forestry and Agriculture

- HH** 17. Agricultural effects are represented in a confusing way in Tables 3.8-6 and 3.8-7 of Volume 2A of the Draft EIS/EIR. Agricultural effects in dollars per mile of total route segment spreads the value over the entire segment. If this Index is used for a comparison of routes in the Final, a more accurate Index should be used. Perhaps effects in dollars per mile of agricultural land use within a segment. Many segments have both agriculture and other land uses. The same is true for timber effects.

Socio-Economic

- II** 18. The Final EIS should more fully discuss the property value issue mentioning possible impacts from reduced visual quality.
- JJ** 19. Oregon has no sales tax. Table 3.8-10 of Volume 2A should be corrected in the final.
- KK** 20. If BPA owns and operates the line, there will be no property taxes. Table 3.8-10 in Volume 2A should show probable tax effects.

Land Use

- LL** 21. The Draft EIS understates the negative impact of the lines on recreational hunting on all of the routes in Oregon. Increased access roads lead to increased hunting effectiveness. This necessitates a reduction in the number of deer and elk permits issued by the State which reduces the value of recreation in the area.
- MM** 22. The Draft EIS should discuss the effects of the transmission lines on radio, TV, and microwave communication systems. The ORC routing criteria puts communication stations in its "avoid criteria". The following known communication stations along the route corridors should be addressed in the EIS:
- a. Forest Service has agency radio communication from Hamacker Mountain near Keno, Parker Mountain near Pinehurst, Bryant Mountain near Malin, and Chase Mountain.
 - b. Pinehurst has microwave telephone communication.
 - c. KSOR radio station has a relay station in Pinehurst.
- NN** 23. The Malin corridor has no residential zoning (Table 3.6-19 of Volume 2A).
- OO** 24. The Box R Ranch is a developing area near the Pinehurst corridor. The ranch is located in Township 39S Range 4E, Sections 29 and 32. It is about two miles from the proposed Route A. It should be mentioned as a developing area in the final.

Climate

- PP** 25. The rainfall listed for Ashland in Table 3.1-3 seems too low. It could be a typo.

- HH** Agricultural effects were analyzed on an average loss per segment mile to avoid dilution of impacts resulting from averaging losses over the entire route. The losses per corridor mile are presented in the far right-hand column of Tables 3.8-6 and 3.8-7, entitled "Average per Corridor Mile".

- II** Although the view from a property may have an effect on its value, studies have not been able to demonstrate this or quantify it. See responses to T-82 C and L-184 A.

- JJ** This correction has been made to Tables 3.8-9 and 3.8-10 that were presented in Volume 2A of the Draft EIS/EIR. These corrections are included in Volume 1, Section 1.2.3 of this Final EIS/EIR.

- KK** Table 3.8-3, presented in Volume 2A of the Draft EIS/EIR, lists the assumptions that were used to prepare Tables 3.8-4, 3.8-9, and 3.8-10 also presented in Volume 2A of the Draft EIS/EIR. These tables were prepared under the assumption that Bonneville Power Administration's (BPA) ownership interest would be the same as Western's interest (6.25%). As stated in Table 3.8-3, "if BPA owns and operates 100 percent of the facilities in Oregon, no property taxes would be paid." Since all counties located in Oregon would be equally affected, the preferred route analysis would remain unchanged.

- LL** This impact has been added to the recreation discussion that was presented in Section 3.6.4.3 of Volume 2A of the Draft EIS/EIR. See Volume 1, Section 1.2.3 of this Final EIS/EIR for the addition.

- MM** Comment noted. Transmission lines generally do not affect microwave and radio station transmission signals. If a hardware problem on the transmission line were to cause noise and interference, the faulty hardware would be identified and replaced. The route of the transmission line would not be across the top of the radio/TV/microwave facilities and would be separated by a considerable distance, thereby preventing interference.

- NN** Table 3.6-19 in Volume 2A of the Draft EIS/EIR has been revised in Volume 1, Section 1.2.3 of the Final EIS/EIR to reflect "agriculture" and "forest/range" zoning in the Malin corridor.

- OO** Box R Ranch has been added to the Planned Land Use discussion in the Draft EIS/EIR, Section 3.1.6 of Volume 2A and to Table 3.6-21 in Volume 2A. This is noted in Section 1.2.3 of the Final EIS/EIR.

L-310 (continued)

PP

The annual rainfall amount listed for Ashland, Oregon, in Table 3.1-3, Volume 1 of the Draft EIS/EIR, is in error. The amount should read 18.90 instead of 11.79. Please refer to Section 1.1.3 of this Final EIS/EIR for a full citation.

L-310 (continued)

APPENDIX TO CITIZEN CONCERNS

A. SOME DISCREPANCIES AS EXAMPLES OF BIASED CONCLUSIONS

1. Soil Loss.

QQ

There is a discrepancy between conclusions regarding soil loss in paragraph 4.1.2.1 page 4.1-11 of Volume 1, and the summary Table 1A. In the paragraph, Route D is rated as having the least impact because soil loss per acre per year is low. However, Table 1A displays a different conclusion because it shows total soil loss for the Route D as the second highest of the routes. The text is misleading by using an inappropriate index for comparison. It appears to be used in order to make the preferred route look better than it is.

RR

3. Wildlife.

Significant impact on wildlife from paragraph 4.1.5.1 page 4.1-20 to 4.1-22 of Volume 1 draws an invalid conclusion from the data presented. Route D has more miles of significant impact, after mitigation, on big game habitat than some of the other routes. It cannot be environmentally superior as the reader is led to believe.

SS

4. Cumulative effects of adding a line in the Malin corridor are overlooked.

B. SOME EXAMPLES OF BIASED LANGUAGE

TT

1. It is not obvious from Table 1A that Route D is the environmentally superior route as stated in paragraph 3 on page 2 of the Summary in Volume 1.

UU

2. The first paragraph on page 4.1-18 of Volume 1 also uses the words "environmentally superior" in regard to Route D before it has been demonstrated as such. The Draft is leading the reader.

VV

3. Paragraph 4.1.4.1 page 4.1-17 of Volume 1 regarding special plant species status. In talking about avoiding areas of special plant species, the words "can be" and "could be" are used for Route Alternatives A, B, and C. However, for Route D the words used are "will be" implying the selection of route has already been decided. Also the words "such limited extent", regarding the expected occurrence of special plants, are used only about Route D, and not about the other routes. These again lead the reader.

WW

4. Paragraph 4.1.5.1 of page 4.1-20 to 4.1-22 of Volume 1 discussing big game habitat. For Routes A, B, and C the Draft uses the words "Important big game habitat". For Route D the word "Important" is omitted from the phrase implying some missing quality that has not been provided.

QQ

While it is true that Alternative D, like northern Alternatives A-C, has areas which will be susceptible to significant earth resources/geologic hazard impacts, the discussion on pages 4.1-12 and 4.1-13 of Volume 1 of the Draft EIS/EIR correctly identifies Alternative D as having the lowest soil erosion potential of the northern alternatives. The problem with Table 1A is that the longer the alternative, the greater its aggregate erosion potential is shown to be (it shows tons/year instead of tons/acre/year. Table 1A has been revised to be consistent with the discussion on pages 4.1-11 and 4.1-13. Please refer to Table 1A in Volume 1 of the Final EIS/EIR for this revision.

RR

Ranking the overall wildlife impacts of alternatives was based upon impacts to all species, not just deer. Alternative D would significantly impact more miles of deer habitat than Alternatives B and C and less than Alternative A. However, impacts to endangered and sensitive wildlife species were lower on Alternative D than on others. The environmentally preferred alternative was not selected solely on wildlife impacts but on impacts to all environmental resources.

SS

See revised Section 4.4 in Section 1.1.4 of Volume 1 of the Final EIS/EIR regarding cumulative impacts in corridors with existing transmission lines.

TT

The data presented in Table 1A shows many, but not all, of the quantified impacts that were examined and compared by the resource specialists. It is important to note that there were two types of alternative comparisons made by the specialists. The first was a comparison of the alternatives from the perspective of their particular discipline. The second comparison was based on the specialists' professional opinion of which alternative was superior when all resource categories were considered. The results of the second comparison determined the overall ranking of the alternatives. A more complete explanation of the rationale and issues that were considered by the specialists are presented in response to L-371 E.

UU

The summary section at the beginning of the document summarizes key COTP features, including the identification of Alternative D as the COTP preferred and environmentally superior route (page 2, second paragraph). The mention of Alternative D as the "environmentally superior" route early in the text is meant to inform rather than to lead the reader.

L-310 (continued)

VV Comment noted.

WW The word "important" was omitted for brevity only. Deer habitats discussed for this alternative are also considered important.

L-310 (continued)

- XX [5. Paragraph 4.1.6 page 4.1-37 of Volume I regarding significant agricultural impacts. The language implies that land must be considered an Agricultural Preserve by the Williamson Act to have significant adverse agricultural impacts. This is not true. Land in this area has very high agricultural value. Because the County did not adopt the Act does not imply agriculture is not important there.
- YY [6. Page 4.1-41 to 4.1-42 of Volume I discussing the Copic Bay Alternatives. This entire section is filled with inaccuracies and misleading statements that lead the reader to believe that these routes are not a viable option. In fact if a serious analysis were performed on these alternatives, environmental impact may be significantly lower than for other routes. There appears to be some other predisposition against the Copic Bay

XX The agricultural preserve factor was only part of the agricultural impact significance criteria; impacts to irrigated cropland were considered equally important. We recognize that the Tulelake Basin area contains valuable agricultural land, and we found that Alternative D would have an adverse impact in this area because more than 0.5 mile of irrigated agricultural land may be crossed. Also, see response to L-297 I.

YY See responses to L-330 H and L-330 I.

L-310 (continued)



Department of Environmental Quality

811 SW SIXTH AVENUE PORTLAND OREGON 97204 PHONE (503) 229 5696

February 12, 1987

John Savage
Planning Division
Oregon Department of Energy
625 Marion Street, N.E.
Salem, OR 97310

Re: Environmental Impact Review
California-Oregon Transmission
Project

Dear Mr. Savage:

This letter serves to document my comments during our conversation regarding the Transmission Agency of Northern California study. This study is the Draft Environmental Impact Statement on the California-Oregon Transmission Project (COTP) including the northwest intertie portion of the project.

ZZ [It appears that impacts of air and water quality have been adequately addressed in these volumes. It appears the comments in the study regarding environmental noise pollution do not adequately address the possibility, magnitude or mitigation of impacts.

Comments are made here in the order of their appearance in the report:

A1 [1. Regarding general mitigation, Volume 1, page 5.1-4 states that an ambient noise survey will be conducted at selected sites along the route. Data would then be available "if complaints are received after the line is placed in operation". The purpose of this study is to avoid adverse environmental impacts. Comparison of the ambient noise information, expected project noise emission levels and State of Oregon, Department of Environmental Quality allowable noise limits will provide information regarding potential impacts. The project can then be designed for compliance with State noise pollution standards.

B1 [2. Mitigation of the Pacific Northwest Reinforcement Project, Volume 1, page 5.3-1, refers to Oregon Administrative Rule (OAR) Chapter 340, Division 35. More specifically this reference should be OAR 340-35-035(1). The rule reference appears but there is no mention of mitigation.

V3 [3. In the COTP Supporting Environmental Report, Volume 2A, page 3.10-28, mentions corona hiss or humming noise from transmission lines. This hiss is a narrow band noise that may occur in the 2000, 4000 or 8000 Hertz (Hz) octave bands. Within our experience, excessive noise emissions can also

ZZ The COTP line will be designed to have low noise levels and comply with all federal and state noise regulations. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.

A1 See Section 1.1.5 of Volume 1 of this Final EIS/EIR for a listing of the adopted mitigation measures. COTP will comply with all applicable regulatory requirements.

B1 Comment noted. See response to L-329 C1.

V3 The design of the transmission line will result in noise emissions less than or equal to those of existing transmission lines in the immediate vicinity. An increase in the ambient noise levels is not expected beyond the guidelines appropriate for such a facility.

L-310 (continued)

John Savage
February 12, 1987
Page 2

V3

occur where power transformers are located. This is also a narrow band noise which has its fundamental frequency (120 Hz.) in the 125 Hz octave band. The report refers to an EPA guideline of 55dBA, but the State of Oregon does not consider that number adequate to protect residents from narrow band noises. These are noises such as transmission line corona hiss or transformer hum. These are addressed in Oregon DEQ allowable median octave band noise limits referenced in OAR 340-35-035(1)(f) and Table 10. Furthermore, where new facilities are placed in areas which have not been previously used according to Oregon DEQ definitions, the ambient L₁₀ and L₅₀ noise levels may only be increased by 10dBA over the previously existing ambient. This rule is contained in OAR 340-35-035(1)(b)(B). The appropriate measurement location is on noise sensitive (usually residential) property as required under OAR 340-35-035(3)(b).

Where there are no narrow band noise emissions or the ambient degradation requirement is not a factor then the constraining requirement will be the nighttime allowable L₅₀ limit of 50 dBA.

C1

4. In Volume 2C, page 28, Section 3.5, entitled Noise, there is not enough information yet presented to confirm the statement that no significant noise effects are expected. This would be especially true for new transmission lines and new substation equipment sited on previously unused locations that are near residential or other noise sensitive properties.

C1 See response to L-310 A1.

D1

5. In Volume 2C, page 30, Section 3.6 on Electrical and Biological Effects, a paragraph appears discussing "Corona" noise. The paragraph cites an Oregon limit of 50 dBA which is the hourly nighttime statistical L₅₀ limit at noise sensitive property referenced in OAR 340-35-035(1). Again, no mention is made of the limitation on the increase of pre-existing ambient sound levels by new noise sources referenced in OAR 340-35-035(1)(b)(B) or limitation on potential narrow band and corona noise by the Department's allowable median octave band standards referenced in OAR 340-35-035(1)(f).

D1 See response to L-310 A1.

E1

6. In Volume 3A, Section 3.1.10 on Corona, Field, and Safety Considerations for Southern Oregon Switching Station Sites, reference is made to noise emissions on page 3-14. A sound level of 50 dBA is cited for a transmission line as measured at a distance of 100 feet.

The example fails to provide line voltage, humidity, frequency content, distance to nearest insulators and other pertinent data that might allow use of this information in predicting noise pollution impacts. No information is given here or elsewhere in the report about the distance from either transmission lines or transformer substations to nearest residences or other noise sensitive uses.

E1

Specific information regarding the distance of transmission lines, transformers, insulators, and other equipment to the nearest residences for the Southern Oregon switching station will be developed in conjunction with the site work and design of the substation facility. The need for acoustical screening of the type you mention will also be considered if noise is identified as a problem at the selected site.

L-310 (continued)

John Savage
February 12, 1987
Page 3

E1

This section concludes with the statement, "Screening the substation with a fence, and/or vegetation, should reduce the noise produced." Concerning vegetation, unless this refers to well over 100 feet of dense vegetation or forest and the blockage of all line of sight, the statement is in error. Noise screening of a substation can be accomplished with a properly designed acoustical barrier. This barrier must be high and wide enough to intervene in the line of sight between the noise emitting components of the source and the receiver. It ought to extend to the ground and must not have openings in the direction of the receiver which would compromise its effectiveness. The barrier should be constructed with materials of sufficient mass, thickness and/or layers to prevent transmission of the noise through the barrier with special care being given to contain the 120 Hz fundamental emission frequency of power transformers.

F1

In summary, it appears this study does not adequately address the potential for noise pollution impacts, the magnitude of the impacts or the types of effects that would be experienced by those exposed to the noise pollution. Neither does the report adequately describe the noise mitigation measures that are available to control excessive noise emissions in the event that the project were to create adverse impacts. We appreciate the chance to comment on these issues. If you have questions please contact me at DEQ's Noise Control office in Portland at (503) 229-5365 or 1-800-452-4011 toll free within Oregon.

F1

Comment noted. See responses to specific comments above.

Sincerely,



Gerald T. Wilson
Environmental Noise Specialist
Noise Pollution Control

GTW:d
AD220

cc: T. R. Bispham, Air Quality Administrator, DEQ
R. J. Nichols, Water Quality Administrator, DEQ
Maggie Conley, Intergovernmental Coordinator, DEQ

L-310 (continued)



State of Oregon Aeronautics Division

3040 25th STREET S.E. SALEM, OREGON 97310 PHONE 378-4880

January 16, 1987

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

California-Oregon Transmission Project

G1 The Oregon State Aeronautics Division has reviewed the proposal made by the Transmission Agency of Northern California (TANC) to construct a powerline connecting into Southern Oregon. The primary route currently under consideration lies to the east of the City of Malin, Oregon. We wish to propose an adjustment to this route to avoid endangering the traffic pattern of general aviation aircraft using a long-established private airport. We wish to add a further adjustment to the powerline siting so as to avoid a small area of farmlands frequently sprayed by aerial applicators whose operations might be endangered by the positioning of the powerline as presently proposed.

Our records show an airport at the Loveness Farms, three miles east of Malin in the western half of Section 18, Township 41 South, Range 3 East, W.M. This airport has been in existence since prior to July 5, 1947 and has been registered with this Division since 1970. Although private in ownership and use, it is visited by business and pleasure aircraft regularly at the invitation of the owner because of its longer, safer runway than the nearby Malin public-use airport.

Since its beginning, the Loveness Farms Airport has had uninhibited approach and departure routes to the north and south. The proposed route of the TANC project would angle close on the east edge of the Loveness Airport and cut across the northern approach path very close to the runway. Depending on the decision for actual placement, the powerline could become a hazard eliminating safe use of the northern access to the airport. The long existence and use of the Loveness Airport has earned it prescriptive rights to a safe approach/departure path. We believe the route should be repositioned to the east and north of the proposed alignment.

A short distance to the northwest of the Loveness Airport, in Section 1, 2 and 12 of Township 41 South, Range 12 East, lie several areas of prime irrigated farmland. These lands require fertilization by aerial applicators (spray planes), but the TANC proposal crosses a portion of the farmlands. If the line is positioned over these lands, safety will be reduced for the aerial

G1

A new route option, the Loveness-Graham option, is presented and analyzed in the Supplement to the Draft EIS/EIR. This new option should mitigate most of your concerns. (This option is not the John Cross Alternative.) The Loveness-Graham option has been adopted as the Project preferred route.

L-310 (continued)

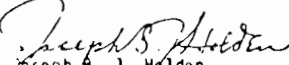
California-Oregon Transmission Project
Page Two
January 16, 1987

G1 applicators attempting to spray the land. By moving the proposed alignment a short distance to the northeast, the margin for safety and the operating area of the spray pilots will be increased considerably.

Mr. Loren Loveness, owner of the Loveness Airport, has approached us with an alternate proposal for routing the line. His proposal insures safety for the airport and the aerial applicators. We concur with the proposal, which we believe is referred to as the "John Cross Alternate". We believe this alternate route is designed to insure safety to aviation, and we endorse that feature most readily.

Sincerely,

PAUL E. BURKET
Aeronautics Administrator


Joseph B. J. Holden
Assistant Administrator
Air Operations and Safety

JBH:cal/ltr

cc: Oregon Energy Siting Council
Terry Virnig, COTP Siting Committee
Loren Loveness

L-310 (continued)



General File # 7-0-8-100

Forestry Department

OFFICE OF STATE FORESTER

2600 STATE STREET, SALEM, OREGON 97310 PHONE 378-2560

January 21, 1987

John Savage
Senior Energy Analyst
Oregon Department of Energy
625 Marion Street, NE
Salem, Oregon 97310

SUBJECT: COMMENTS ON EIS/EIR - DOE #0128

Dear John,

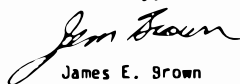
H1 [Thank you for the opportunity to comment on the Draft EIS/EIR for the
I1 [California-Oregon Transmission Project. Department of Forestry concerns
W3 [are: the difficulty of identifying data concerning the project segments
located in Oregon; the need to address a long term strategy for intertie
development; and, a lack of information on costs and benefits attributable
to northwest utilities and rate payers.

J1 [This project is to provide a third 500 KV AC transmission path between
K1 [southern Oregon and central California to tie in with major transmission
L1 [lines crossing Oregon. Once this route is selected, two possible intertie
routes remain that may be developed in the future, if intertie capacity
increases are needed. Long term intertie development plans need to be
addressed by the BPA because these land use decisions impact a dwindling
forest resource land base. Further, the uncertainty of the regional
capacity surplus needs to be clarified so that the long term effects
and potential alternatives can be brought into perspective. Ideally,
these determinations should be made before selecting a final route for
this project.

L1 [We find that data regarding the Oregon segments of the transmission project
are scattered throughout a much larger amount of data about the California
portion. We believe that policies and effects for the Oregon segment
are sufficiently different to warrant separate treatment.

M1 [We agree that the Malin route is the best route, given a goal of minimizing
the effects to Oregon's forest resource. However, if this route is selected
before the ultimate intertie needs are identified, additional long-range
effects on Oregon's forest lands are likely.

Sincerely,


James E. Brown
State Forester

JEB/RM: jp

H1 See response to L-310 L1.

I1 The IDU EIS, cited in the COTP Draft EIS/EIR, is a more
comprehensive examination of alternative Intertie upgrade
proposals and the use of federally owned Intertie facilities in
the PNW.

W3 See responses to L-3 T, L-329 A, T-30 B, T-67 B, and T-69 D.

J1 Each year, BPA prepares a Pacific Northwest Loads and Resources
Study, which presents a 20-year forecast of the loads and
resources for the Pacific Northwest Region and the Federal
system. The study establishes a base from which forecasts can be
made. Generally, forecasted loads are deducted from available
generation to determine whether a surplus or deficit prevails.

This is done for each of three cases: high, medium, and low load
growth. If the balance is positive in any particular year, a
surplus of energy and capacity is available for sale. If the
balance is negative, generation or conservation additions are
needed. Detailed information pertaining to energy load and
capacity for the years 1987 - 2006 can be found in BPA's 1986
Pacific Northwest Loads & Resources, Executive Summary, December
1986.

Until the loads and resources study and the system electrical
data studies show a need for a specific increase in transmission
capacity, it is difficult to predict where and when other lines
would be needed. At present, these studies do not show a need
for another 500 kV Intertie line (within the next ten years)
beyond that currently proposed between Oregon and California.
Therefore, we do not foresee using the two alternative corridors
discussed in the COTP EIS/EIR.

L-310 (continued)

J1
(cont.)

In the meantime, however, before we have specific proposals, we continue to work with land management agencies through their land use planning process to identify potential future corridor needs in critical areas, those where BPA needs to maintain an east to west corridor across major maintain passes.

K1

See response to L-310 J1.

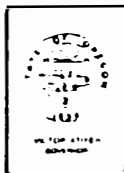
L1

In the Draft EIS/EIR, the analysis of impacts was first divided into sections for the northern, central, and southern parts of the COTP. The analysis was further divided by state and by county. Examples of this subdivision are found throughout the Draft document. (See Section 6.0 of Volume 1, Section 3.8 of Volume 2A, and the Affected Environment maps in Volume 1, which show routes that occur in Oregon, for specific examples.)

M1

See response to L-310 J1.

L-310 (continued)



Department of Fish and Wildlife

506 SW MILL STREET, P.O. BOX 59, PORTLAND, OREGON 97207

January 20, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, California 95866

RE: Draft EIS/EIR COTP

Dear Sir:

The Oregon Department of Fish and Wildlife has reviewed the above referenced environmental statement.

N1 [The Department supports the Northern Section Preferred Alternative D (Malin route) as having the least impact on Oregon's fish and wildlife resources.
O1 [We have a concern, however, over the general treatment with respect to wildlife impacts and mitigation given to the more recently identified "options within the alternative". More specifically, the possibility of new lines to the east of existing lines (vol. 1 p. 2.1-19).

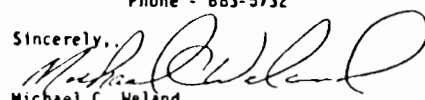
P1 [New construction in the area as noted on p. 3.1 - 27, will impact big game winter ranges, raptors, waterfowl and non-game species. A number of mitigation measures identified on pages 5.1 - 12, 13 will have to be applied.

Q1 [We look forward to more specific discussions of impacts and mitigation to be applied in the Compliance Monitoring Plan during the Project Design phase.

For site-specific information regarding the above, please contact local Department biologists noted below:

Ralph Opp/John Toman
ODFW
4343 Miller Island Road
Klamath Falls, OR 97601
Phone - 883-5732

Sincerely,


Michael C. Weland
Assistant Director
Habitat Conservation Division

c Central Region
Opp/Toman
Savage - DOE
Coenen/Faast

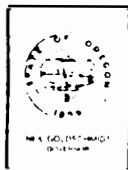
N1 See response to L-23 A.

O1 See response to L-23 B.

P1 See response to L-23 C.

Q1 See response to L-23 D.

L-310 (continued)



Department of Land Conservation and Development

1175 COURT STREET NE, SALEM, OREGON 97310-0590 PHONE (503) 378-4926

February 20, 1987

Charles Grist, Energy Analyst
Planning Division
Department of Energy
625 Marion Street, N. E.
Salem, Oregon 97310

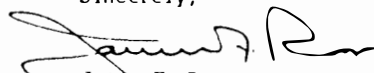
Dear Mr. Grist:

The purpose of this letter is to provide comments to the Oregon Review Committee on the draft EIS for the California-Oregon Transmission Project (COTP).

- R1 The Oregon Department of Land Conservation and Development recommends that the TANC Draft EIS/EIR more fully address state land use requirements that pertain to the siting of the COTP. Specifically, the EIS/EIR needs to state the following points.
1. Necessary local land use approvals (e.g., plan or zoning amendments, conditional use permits, etc.) must be obtained from Jackson or Klamath County. Such local approvals must be based upon the applicable county's acknowledged comprehensive plan and land use regulations.
 2. Oregon state agency permits and actions affecting land use which relate to the COTP must: a) comply with the Statewide Planning Goals adopted by the state Land Conservation and Development Commission and b) be compatible with the Jackson or Klamath County acknowledged comprehensive plan, as appropriate.

Thank you for the opportunity to provide comments on the draft EIS/EIR. Please contact Jim Knight of our office at 378-2973 if you have any questions concerning our letter.

Sincerely,


James F. Ross
Director

JFR:JBK/sp

cc: Jim Knight, DLCD

R1 Comment noted. The COTP has benefited from contact with Jackson and Klamath County planning officials. The comprehensive plans and land use regulations were taken into consideration in the planning of the COTP.

S1 Comment noted.

L-310 (continued)



Department of Transportation
HIGHWAY DIVISION
TRANSPORTATION BUILDING, SALEM, OREGON 97310

Neil Goldschmidt

In Reply, Refer to
File No.

ORG

DATE: February 12, 1987

TO: John Savage, Project Coordinator
Oregon Department of Energy

FROM: Cam Gilmour, Manager
Environmental Section

A handwritten signature in cursive script, appearing to read "Cam Gilmour".

SUBJECT: BPA and TANC Study Reviews

T1 [The Highway Division and State Parks Division have reviewed the Draft EIS for the proposed Oregon-California Transmission Line Project and found no concerns to bring to your attention. There appears to be no direct effects on the state highway system or on property managed by the State Parks Division. I understand that the Aeronautics Division supplied you with a separate set of comments.

leb

T1 Comment noted. The Aeronautics Division letter is addressed in response to L-310 G1.

L-310 (continued)

THIRD AC LINE SUMMARY

U1 Comment noted.

U1

SUBJECT: Engineering

REFERENCE: _____

<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
Pine-	Keno	Keno	Keno	
hurst	N-6A	N-6A	N-6A	Malin
N-1B	N-6AAlt	N-6B1	N-6C	N-10A
N-1E			N-6E	

ORC AVOID CRITERIA

Credible 3 line outage	No	No	No	No	5 miles
Malin Substation	No	No	No	No	No
Round Mountain	No	No	No	No	No
Slopes greater than 50%					
Communication stations					

L-310 (continued)

THIRD AC LINE SUMMARY

U1

SUBJECT: Air Quality

REFERENCE: Volume 2A, Chapter 3.1-4

<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
Pine-	Keno	Keno	Keno	
hurst	N-6A	N-6A	N-6A	
N-1B	N-6A1t	N-6A	N-6C	Malin
N-1E	N-6BA1t	N-6B1	N-6E	N-10A

No significant air quality impacts for any routes.

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Earth Resources

REFERENCE: Volume 2A, Chapter 3.2

	<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
	<u>Pine-</u>			<u>Keno</u>	
	<u>hurst</u>	<u>Keno</u>	<u>Keno</u>	<u>N-6A</u>	
	<u>N-1B</u>	<u>N-6A</u>	<u>N-6A</u>	<u>N-6C</u>	<u>Malin</u>
	<u>N-1E</u>	<u>N-6BAlt</u>	<u>N-6B1</u>	<u>N-6E</u>	<u>N-10A</u>
<u>ORC AVOID CRITERIA</u>					
Elevation greater than 8000'	No	No	No	No	No
Slope greater than 50%					
Oregon miles (estimated)*	1.2	0	0.5	0.4	0
Total segment miles	1.2	0	0.69	0.65	0
Unstable Slope	0.5	0	0	0	0
Landslide					
Undercuts					
Mud Flow					
Volcano					
Hydro Compaction					
Effectuated by volcanic eruption	No	No	No	No	No
<u>OTHER CRITERIA FROM THE DRAFT EIS**</u>					
Route length (miles)	12.0	17.4	22.1	15.6	9.2
Slope 30% to 50% (miles)	0.62	0.83	0.85	1.10	2.3
Slope greater than 50% (miles)	1.20	0	0.69	0.65	0
Soil Loss (TPY)	201	279	358	227	163
Soil loss/soil loss tolerance (tons per acre per year)***	4.5/3	4.9/4	5.0/3	5.0/3	4.7/2
Miles Hazard zone 2	8.9	3.5	9.5	11.2	5.4
Hazard zone 3	3.1	0	12.6	4.3	3.8
Expansive soil (miles)	0.5	0	0	0	0

* Estimated Oregon Portion

** Numbers include Oregon and California sections of route.

*** Where loss is greater than tolerance, permanent damage can be done to the productivity of the topsoil.

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Vegetation/Wildlife

REFERENCE: Volume 2A, Chapter 3.4, 3.5

<u>A</u>	<u>B-Alt</u>	<u>8</u>	<u>C</u>	<u>D</u>
Pine- hurst	Keno	Keno	Keno	
N-1B	N-6A	N-6A	N-6C	Malin
N-1E	N-6BA1t	N-6B1	N-6E	N-10A

ORC AVOID CRITERIA

Jeopardy of T&E species					Low
Habitat destruction					Low

OTHER CRITERIA FROM THE DRAFT EIS

Plant

Tall growth removed (acres)	224	296	184	218	75
Range cleared permanent (acres)	5.0	0.4	0	9.6	18
Number new structures in wetland or flood plain	1	0	0	0	0
Potential habit for special plant species (number taxa)	14	9	9	7	6
(number miles)	10.2	14.4	15.6	7.6	8.9
Unique plant community (miles)	0	0	0	0	0

Animal

High collision potential for birds (miles)	(1.5)*	(4.0)	(4.5)	(2.0)	0
Big game habitat crossed (miles)	4 (4)	6	7	7 (6)	10 (2)
Sensitive nesting raptors (miles)	2.1	0	0.5	0	0
Special status bird habitat (miles)	1.5	0	(5.5)	(3.0)	0
New access roads (miles)	8.0	23.4	25.8	16.9	14.4

* Numbers in parens () are after appropriate mitigation.

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Water Resources

REFERENCE: Volume 2A, Chapter 3.3, Table 3.3-2

<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
Pine- hurst N-1B N-1E	Keno N-6A N-6BA1t	Keno N-6A N-6B1	Keno N-6A N-6C N-6E	Malln N-10A

ORC AVOID CRITERIA

Parallel to lake or stream	No	No	Yes	Yes	No
Crossing reservoirs or lakes	No	No	No	No	No

OTHER CRITERIA FROM THE DRAFT EIS

Large streams crossed	0	0	0	0	0
Small streams crossed	5	10	5	5	3
Springs crossed	0	0	0	0	0
Total water bodies crossed	5	10	5	5	3
Miles Steam Paralleled	0	0	1	1	0
Endangered fish streams crossed	No	No	No	No	No
Number high slope crossings	1	1	2	1	1

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Land Use (Forest)

REFERENCE: Volume 2A, Chapter 3.6

<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
Pine- hurst N-1B N-1E	Keno N-6A N-6BA1t	Keno N-6A N-6B1	Keno N-6A N-6C N-6E	Malin N-10A

ORC AVOID CRITERIA

Conflicting use areas	airport	airport	airport	
Institutions				
Designated recreation				
Developed residential		Macdoel	Dorris	Malin

OTHER CRITERIA FROM THE DRAFT EIS

Timber

*Forest miles					
Prime	3.7	7.4	7.0	7.0	0
Non-Prime	0	6.1	2.6	0.5	4.28
Hoodland	7.1	0	0	2.7	0
Acres forest land					
Prime	89	180	169	171	0
Non-Prime	0	147	62	11	104
Hoodland	171	0	0	64	0
Annual Value \$					
Prime	6888	13888	13048	13253	0
Non-Prime	0	4702	1994	350	3320
Hoodland	412	0	0	154	0
TOTAL	7300	18590	15042	13757	3320
Timber production zone	No	No	No	No	No
Significant timber impacts	Yes	Yes	Yes	Yes	No

* California and Oregon route sections included.

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Land Use, page 2 (Agriculture and Recreation)

REFERENCE: Volume 2A, Chapter 3.6, Table 3.6-10

	<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
	<u>Pine-</u>			<u>Keno</u>	
	<u>hurst</u>	<u>Keno</u>	<u>Keno</u>	<u>N-6A</u>	
	<u>N-1B</u>	<u>N-6A</u>	<u>N-6A</u>	<u>N-6C</u>	<u>Malin</u>
	<u>N-1E</u>	<u>N-6BA1t</u>	<u>N-6B1</u>	<u>N-6E</u>	<u>N-10A</u>
<u>Agriculture</u>					
Agriculture miles crossed			*	**	
Row Crops	0	0	0	0.9	0.3
Field Crops	0	0	1.4	0	0
Orchard/Vineyard	0	0	0	0	0
Total Irrigated	0	0	1.4	0.9	0.3
Non-Irrigated	0	0	2.7	0.9	0
Range	1.2	3.2	8.3	2.7	4.3
Agricultural Reserve crossed	No	No	yes*	yes**	NA
Significant Ag Impacts	No	No	yes*	yes**	NA
Short term Ag Effects (\$1000)	0	0	3.0	5.3	1.9
Long term Ag Effects					
(Annual)(\$1000)	0	0	0.4	1.4	0.5
(Life Project)(\$1000)	0	0	21.1	70.1	26.4
Diagonal orientation	NA	NA	100%	100%	0%

Recreation

Nearby recreation	Copco Lake	Klamath R.	Klamath R.	Klamath R.	
	1 mile east	1.5 mile	1.5 mile	1.5 mile	
	Hunting	Hunting	Hunting	Hunting	Hunting

* California portion only.

** Mostly California.

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Land Use, Page 3 (Residential and County Land Use)

REFERENCE: Volume 2A, Chapter 3.6 - 18

	<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
	<u>Pine-</u>			<u>Keno</u>	
	<u>hurst</u>	<u>Keno</u>	<u>Keno</u>	<u>N-6A</u>	
	<u>N-1B</u>	<u>N-6A</u>	<u>N-6A</u>	<u>N-6C</u>	<u>Malin</u>
	<u>N-1E</u>	<u>N-6BAlt</u>	<u>N-6B1</u>	<u>N-6F</u>	<u>N-10A</u>
<u>Residential</u>					
Residences					
Number in R.O.W.	0	0	1	0	0
Number within 1,000 ft	0	0	1	0	2
Number within 1.2 mile	26	3	41+Macdoel	3+Dorris	31
Dwellings per mile					
within 1000 feet	0	0	0.1	0	0.2
Airports	Pinehurst		Burke		Loveness Malin
<u>County Land Use Criteria</u>					
Proposed Developments	No	No	No	No	Residential Development in Loveness Road area.
Land type crossed					
Forest Service (acres)	0	74	182	2.4	0
BLM (acres)	58	103	103	66	48
Planned Development (miles)	0	0	0.7	0	0
Miles Ag Preserve	0.6	2.7	2.4	0.04	1.4
Miles Timber Preserve	0	0	0	0	0
Nearby Land Status Units	A,E	B,D,F	B,D,F	B,O,F	C

Land status codes:

- (A) Soda Mountain Wilderness Area
- (B) Bear Valley National Wildlife Refuge
- (C) Tulelake Area
- (D) Lower Klamath National Wildlife Refuge
- (E) Klamath National Forest
- (F) Meliss Lake

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Visual Resources

REFERENCE: Volume 2A, Chapter 3.7

<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
Pine- hurst N-1B N-1E	Keno N-6A N-6BAIt	Keno N-6A N-6B1	Keno N-6A N-6C N-6E	Hallin N-10A

ORC AVOID CRITERIA

National Historic Register

Oregon Review Committee
Sensitive Viewing Areas

OTHER CRITERIA FROM THE DRAFT EIS

Crosses					
Scenic Highways	1	1	2	2	0
Wild/scenic Rivers	0	0	0	0	0
National Trails	0	0	0	0	0
Dwellings in foreground	26	3	41+Macdoel	2+Dorris	31
Cross Visual Management Areas (miles)					
USFS Retention Zone	0	0	0	0	0
USFS Partial Retention Zone	0	1.5	8.0	0	0
BLM Class II	0.3	0	0	0	0
BLM Class III	0	1.6	1.6	2.0	1.8
Miles Incompatible Crossing					
High	0	0.1	4.4	1.6	0.5
Moderate	2.3	5.1	11.6	2.9	6.6
Relative Visibility					
High	0	0.8	0.8	0.8	0
Medium	1.5	3.9	9.5	4.2	0
Low	10.5	0.6	11.8	10.5	9.2
Scenic Impact Miles					
High	0.4	2.0	8.1	2.2	3.5
Moderate	1.4	4.8	10.7	6.0	4.8

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Socio-Economic

REFERENCE: Volume 2A, Chapter 3.8

<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
Pine- hurst N-1B N-1E	Keno N-6A N-6BA1t	Keno N-6A N-6B1	Keno N-6A N-6C N-6E	Malin N-10A

ORC AVOID CRITERIA

None

OTHER CRITERIA FROM THE DRAFT EIS

Jackson County property tax	\$84.0	NA	NA	NA	NA
Klamath County property tax	NA	\$66.8	\$55.4	\$70.7	\$68.1
Route length (miles)	11.96	17.44	22.18	15.59	9.21
Dwellings within 1.2 miles	26	3	41+Macdoel	3+Dorris	31
Dwellings per mile average	2.17	0.17	1.85+M	0.19+D	3.37
New miles access road	17.4	23.39	25.88	20.37	14.41
New miles access road per mile	1.46	1.34	1.17	1.31	1.56
Estimated Long Term Ag Cost (\$1000 per mile)	0	0	0	0	0
Adverse Timber effects (jobs & tax lost)					
Annual lost earnings (Jackson)	\$6,541	NA	NA	NA	NA
Annual lost earnings (Klamath)	NA	\$16,826	\$13,131	\$12,452	\$3,005
Estimated Local Expenditures					
Total Jackson Co. (\$1000)	352.9	NA	NA	NA	NA
Total Klamath Co. (\$1000)	NA	372.2	384.4	446.9	405.8
Estimated Total Local Taxes Generated					
Jackson Co. (\$1000)	88.4	NA	NA	NA	NA
Klamath Co. (\$1000)	NA	77.97	65.0	76.34	73.16

L-310 (continued)

U1

THIRD AC LINE SUMMARY

SUBJECT: Cultural

REFERENCE: Volume 2A, Chapter 3.9 - 9

<u>A</u>	<u>B-Alt</u>	<u>B</u>	<u>C</u>	<u>D</u>
Pine-	Keno	Keno	Keno	
hurst	N-6A	N-6A	N-6A	
N-1B	N-6A	N-6A	N-6C	Malin
N-1E	N-6BA1t	N-6B1	N-6E	N-10A

ORC AVOID CRITERIA

National Registered
Historical Sites

Potential Historical Sites

Sites of Historical Importance

Native American Sites

OTHER CRITERIA FROM THE DRAFT EIS

Native American by corridors					
Standard Score*	4.4	3.5	3.5	3.5	7.8
Total Sites	19	11	11	11	33
Sites	3	5	6	4	4
Sites per mile	0.25	0.29	0.27	0.27	0.43
Sites within 0.75 mile	3	5	6	4	4
within 1000 ft	2	0	0	0	0

* Higher scores mean relatively greater impacts.

CG:ja
2195K(d1)
02/03/87

L-310 (continued)

T R A N S C R I P T

**California-Oregon Transmission Line Project
Public Hearing**

**Klamath County Public Library
126 Third St.
Klamath Falls, Oregon**

January 21, 1987

7:00 p.m.

Oregon Review Committee Members Present:

Paul Caffrey, Pinehurst Citizen Representative
Bill Graham, Malin Citizen Representative
Mavis McCormic, Keno Citizen Representative
Kerry Lay, Jackson County
John Toman, Department of Fish and Wildlife
John Savage, Administrator, Planning Division, ODOE
Charlie Grist, Utility Energy Analyst, Planning Division, ODOE
Cheryl Shields, Transmission Agency of Northern California (TANC)
Tim Murray, Bonneville Power Administration (BPA)
Jim Hartman, Western Area Power Administration

L-310 (continued)

Participants in Order of Appearance:

Mark Valens
Box 61
Beaty, Oregon

Glen Arthur
1145 Tamara
Klamath Falls, Oregon

Andrew Gigler
4230 S. 6th St.
Klamath Falls, Oregon

Forest Cooper
Attorney at Law
Lakeview, Oregon

John Toman
Assistant District Biologist
Oregon Department of Fish and Wildlife
Klamath Falls, Oregon

Mark Slezak
Klamath County Chamber of Commerce
Klamath Falls, Oregon

Nancy Roeder
5827 Valley Fort
Klamath Falls, Oregon

Mary Taylor
Malin, Oregon

L-310 (continued)

Transcript

COTP Public Hearing

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Page 1

JOHN SAVAGE: I just found out that our sound system is for recording, but not for amplifying so I'm going to have to talk up and then when we have any commentors if you would please speak up for the rest of the audience.

Welcome to this Public Hearing of the Oregon Review Committee on the Proposed 500 kV Transmission Line.

I am John Savage, Administrator of the Planning Division of the Oregon Department of Energy. On my left is Paul Caffrey and on my right is Bill Graham and Mavis McCormick. They are the citizen members of the Oregon Review Committee. We are conducting this hearing tonight to get public comment on the proposed power line that would be a third 500 kilovolt AC link between the northwest and California. The Western Area Power Administration (Western) and the Transmission Agency of Northern California (TANC) are planning this line in cooperation with public and investor-owned utilities in California. The project, called the California-Oregon Transmission Project, includes the upgrading of an existing California transmission line and the building of a new transmission line from near the southern Oregon border into California. The project sponsors have chosen three corridors for the proposed line. One is near Malin; a second is near Keno, and a third is near Pinehurst. A map showing proposed routes for each of the corridors and proposed sites for a substation placement, I think in the Malin corridor, are on the wall over here. The preferred route now is the one near Malin. Western and TANC, as lead agencies, have prepared a draft Environmental Impact Statement on the project. The Draft Study looks at, analyzes the environmental impacts of the alternative routes and substation sites, and looks at the economics of the project. The Oregon Review Committee must soon prepare its written comments on the

L-310 (continued)

Transcript
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Study. In part, that's why we are holding this hearing tonight. The Committee was created to coordinate a State and local review of the project and to make certain, to ensure that citizens had full and fair access to information about the project. The Committee includes citizen representatives from the Keno, Pinehurst and Malin communities; staff from the Jackson, Klamath County Planning Departments and representatives from eight Oregon State agencies. We are focusing on two issues. One, whether the project makes sense for Oregon; and second, the physical impacts of the project. What we want tonight is your opinions about the routes, the substation sites, the environmental impacts, actions to lessen environmental impacts and your opinions on the need for the project. We will be recording your comments and they will be included in the Committee's written comments to the project sponsors. You may also send in written comments on the study. The deadline for written comments has been extended from February 3 to March 2. Representatives from TANC and Western and Bonneville Power Administration are here tonight. After everybody has had a chance to make their comments there will be some time to talk with these representatives and to get answers to any questions you have about the routes or the substation proposals or the need for the project. This likely will be the last time that the Oregon Review Committee will hold a formal hearing on the proposed power line. However, the Committee will continue to meet over the next month to continue its review of the project. These meetings are publicized and opportunities for public comments are provided at each meeting. Our next meeting is tomorrow, in fact, at the Courthouse Annex in Klamath Falls. The address is 305 Main St. and the meeting will start at 9 a.m. and run until 1 p.m. Now, I would like to start taking -- we don't have a formal sign-in sheet -- could I get a show of hands on how many people will be testifying tonight -- six. We will just do this orally and informally, so please just come up to the podium. Please give your name and address and if you are speaking in behalf of an organization, please give the name of the organization.

L-310 (continued)

Transcript

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Page 3

V1 [MARC VALENS: I just want to briefly address a question
which I don't see anybody addressing really is whether we need or want
this project at all -- any of the routes. I'm from Beatty and if you look
at the map we have three huge transmission lines right through our area
already and it really disrupts landscape, numerous ranchers think that
there are problems with cows underneath it, and what is happening is
W1 [Oregon is turning into a freeway for power from the Columbia and
ultimately from perhaps further north for California. I think we have to
X1 [look at the cumulative effect each time we add one more power line. If
you look at just one power line here or one power line there you say,
well, it doesn't make that much difference. But, no one is looking at
the cumulative effect of all of them. Sitc in British Columbia is a
proposed dam which will produce 900 megawatts and their proposals for a
total of 3,000 megawatts. If those come on line there will be a big push
to move that power down to California through Oregon and we are just like
I say, a freeway for the power moving from the north down to California.
Many of these powerlines, as I understand it, we don't even get any
property tax or any other tax benefit out of it, and we are giving up our
environment for this power to go through. I'm not saying we ultimately
don't want it, but I'd like to see somebody address the total question
of...do we want Oregon to just be this freeway for power to pass through
us and everytime we get one of these new proposals like this one -- is
there somehow we can look at the cumulative effect of all?

Y1 [GLEN ARTHUR: I am going to address this from the
consumers point of view for Oregon. I also am a landowner in the path of
this thing in California, so I am getting a double whammy out of it. You
mentioned in your opening statement that you are here to determine
whether there is any benefit for the State of Oregon in this and I am
glad to hear that there is somebody from the State of Oregon down at one

V1 Comment noted.

W1 See response to L-329 A.

X1 Cumulative impacts are addressed in Volume 1, Section 1.1.4 of
the Final EIS/EIR. The purpose and need for the COTP is
addressed in the Draft EIS/EIR, Volume 1, Section 1 (Purpose and
Need) and Volume 3A, Appendix B (Evaluation of the Economic
Benefits of the COTP). Socioeconomic considerations (e.g. tax
benefits) are analyzed in the Draft EIS/EIR Volume 1,
Section 4.1.8 and in Volume 2A, Phase III, Section 3.8 (Data and
Impact Analysis Report).

Y1 Upgrading the Intertie facilities is projected to reduce net
costs of generating power for Pacific Northwest utilities (due to
the sales of surplus firm and non-firm power and capacity), and
therefore to help keep electric rates low for Oregon ratepayers.

L-310 (continued)

Transcript
COTP Public Hearing
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Y1 of these meetings finally that is going to address this question a little
bit because up to this point I'm disappointed in the reaction that Oregon
has had to this thing because there is no way in the world that Oregon
will benefit from this -- none whatsoever. And I will go through a
Z1 series of things here and show you why I believe that is a fact. The
first thing, every consumer in Oregon, and for that matter the whole
Pacific Northwest, should be against this because we will be able to use
in a very short period of time every bit of power, especially hydro power
that's generated in the State or anywhere on these rivers in the
northwest territory. So any Oregonian in his right mind, especially
consumers should be against this 100% and by the same token the electric
representatives and the people who work for the voters in the State of
Oregon should be against it too because that's what their job is -- to be
against things that are bad for Oregon. Because what's going to happen,
as the gentleman ahead of me pointed out, you are going to allow this
power to be siphoned out of here bit by bit and we will replace it with
much more expensive power from a great deal of distance away from here,
probably Wyoming. It will be maybe a 1,500 mile transmission line to
bring us power that costs twice as much as we now pay for it. In 1986
the Congress passed enabling act to create a Northwest Power Council,
which has been pretty quiet on this subject up to this point in time. I
hope to remedy that. I don't know whether that will happen or not, but I
hope to remedy that. And that is, they were at a point, the four states
in the Northwest territory, Oregon, Washington, Idaho, Montana were to
form a committee each of them put two on it and they were to decide what
the future needs and the present needs of this area is for power.
Nowhere in this do I see anything where it says anything about California
-- nowhere. So, obviously Congress felt that we had the potential to use
this power up here where we are at right now -- all the power is here.
In fact, under the present conditions with Washington having lost their

Y1
(cont.)

The COTP is projected to have substantial benefit to ratepayers throughout the Pacific Northwest, including residents of Oregon. The sale of surplus firm and non-firm power and surplus capacity would help reduce net costs of generating electricity, and thus help keep electric rates in the Pacific Northwest low. In addition, in later years, after the region's firm surplus power has disappeared, capacity/energy and seasonal exchanges with California will allow the PNW to defer building new generating resources.

For further discussion of the many COTP benefits to the Pacific Northwest see the response to L-329 A.

Z1 See response to L-310 Y1.

L-310 (continued)

Transcript

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atomic plants that they were projecting, I would say that probably Washington could absorb a lot of it right now without going any further. Washington borders the Columbia River. I mean it would take a very short transmission line to deliver to almost any part in Washington. So they should be against it on that basis. And it goes without saying that the others, since they are part of this pact, should be against it too because we have this power up here and I'm reminded of what has been happening over the years in California. Now I have been a California resident for a lot of years and I've seen a lot of their actions -- I've seen a lot of things that went on. I also have been an Oregon resident for a lot of years too. Southern California siphoned every bit of water in Southern California out from under everybody they could siphon it out from to get water for their various cities down there and left deserts behind them and they don't care -- not the faintest bit about what happens out there in those deserts after that once they get that water. I can assure you they will leave behind a similar situation, a little different, but a similar situation in this power steal that they are attempting to make right now. They couldn't care less. But we should care a lot for our people. Now it goes without saying, that the Oregonian people are paying a pretty fair price for their electricity right now and if you double it which will happen, there is going to be a lot of crying going on. Now, there's another coincidence that takes place here -- this enabling legislation was passed in 1986 -- within months California was busy concocting this scheme to start siphoning power away. Does that strike a cord in your mind? It should. But, at any rate, for this power taken away, now it sounds reasonably fair to share this power -- it's a public deal supposedly. However, the rivers are in the Northwest that produce this power. Bonneville may not be a Northwest deal, it may be a public deal, but they are using our waters to produce this electricity, but they are proposing to make it public, but

A2

A2

The COTP is projected to have substantial benefits to ratepayers throughout the PNW, including residents of Oregon. The sale of surplus firm and non-firm power and surplus capacity will help reduce net costs of generating electricity, and thus help keep electric rates in the PNW low. In addition, in later years, after the region's firm surplus power has disappeared, capacity/energy exchanges with California will allow the PNW to defer building new generating resources.

L-310 (continued)

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B2

generally they are proposing to give it to California which don't seem to me that that's completely public. The first thing that happens there is that they give this power away and they give it to these people down there and they guarantee them so much power for a certain number of years. What guarantee have we got? Ask yourself that question -- what guarantee do we have. It's only been a very few years since you had a brown-out all over the State of Oregon because you didn't have enough water coming down the Columbia River to produce enough power to feed, for instance, your aluminum plants and most of your industrial complexes were in trouble in the Portland area and all around in the major parts and the same thing will happen again. In fact, right now as it stands today there's a good possibility that you will have a 20 percent reduction or more unless we have a very wet spring in the Columbia's flow. Already the stage is being set for a reduction in the flow of the Columbia. So, we are back to a situation we're guaranteeing California X number of kilowatts of power, but we aren't guaranteeing Oregon nothing -- they can take what is left or they can go buy expensive power from Wyoming -- coal-fired power. So you can readily see that no Oregonian in his right mind, and I'm surprised that the Governor isn't turning flip-flops and right on down through the whole thing to see that we get this thing straightened out a little bit. Now I have an interesting letter here that I received today from The Honorable Senator Cranston. I want to read part of this or all of it -- It's very short into the minutes, and let you draw your own conclusions. This is addressed to me here in Oregon, but as I also said I have land in California and I have been at these meetings and they have heard from me. It says...

B2

See response to L-310 A2.

L-310 (continued)

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"Dear Mr. and Mrs. Arthur:

Knowing your interest in the California-Oregon transmission line I want to be sure that you are aware that the Western Area Power Administration and the Transmission Agency of Northern California has just released its Environmental Impact Statement and so on as required by federal and state law. As you know, this project would provide additional capacity to transmit power from the Pacific Northwest to California with excess to surplus hydro power in the Pacific Northwest California utilities would be able to purchase cheaper hydro electric power and reduce dependence on oil and gas-fired plants. I appreciate the valley property owners concerns about the new transmission line impact on land prices, wildlife habitats, use of land adjacent to the transmission corridor, farming practice, public health and scenic qualities of the area. I'll be looking into this to see how this is addressed."

GLEN ARTHUR: Well it's nice that he is going to look into this because he sure hasn't shown his face before up to this point in time. He's starting to get a little hot and so he is entering the (inaudible). Now I'll let you draw your own conclusion. He is saying in effect that he wants this cheap power. They don't give a hoot what happens to Oregon -- not one little bit. They want this cheap power, period. Probably everybody here will get one of these letters, but you can draw your own conclusions. This Honorable Senator has become involved in it now that it's getting a little rough sledding, but otherwise he wasn't about to enter this thing. I have been in the process for the last couple of days trying to contact Norma Paulus. I understand that she has been appointed to the Northwest Power Council. It's my opinion, from the consumers standpoint of view, that we are going

L-310 (continued)

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C2

to be steamrolled if we don't get some political pressure into this thing. I don't care where we get it or how much of it we get, just so we get enough to do it. I think the project should be stopped in its track. The first thing this Environmental Impact Statement -- we saw that the other night down in Tule Lake -- that is the most flawed, inaccurate and suggestive document that I have ever laid a pair of eyes on that was supposed to have went through a routine procedure and answered all the impact questions that was supposed to be. I mean you can find very little fact, you can find a lot of story -- that's it. I mean you can't find anything to back it up. We have been lead to believe that they are considering what the people on the other side of the line suggested they do and in turn the people on your side of the line suggested to match up with it, but we can't find any fact that they are doing it. Every indication is that they are not doing it. They are going right ahead with the same thing that they plan to steamroller their way through if they can get the permits to do so. Now, it's obvious that California is going to approve those permits. It's pretty obvious that they are going to do it. It's equally obvious that Oregon should not, if they have an opportunity, which I understand they don't have too much opportunity, because Bonneville, in my understanding, is building that line right down to within less than 12 miles of the border to side step that. Now whether Bonneville should get involved in this political issue to that extent that the State of Oregon has no effect on what they think or don't think is a question beyond me, but I think Oregon should be addressing that question to find out why. So, in conclusion, speaking for the consumers of Oregon, I say the project should be stopped in its tracks right now.

D2

C2

Your opposition to the COTP is noted.

D2

Your opposition to the COTP is noted.

L-310 (continued)

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E2 [ANDREW R. GIGLER: I got to sort of go along with the last gentleman that this thing should be stopped in its tracks. I think the Environmental Impact Statement, of which I have right here...I went through it fairly good. I've been for 10 years trying to do something on human health in connection with power lines. I can go back right here to a little speech I had prepared over the Hill School on November 9, about 1986 or something. 1976..yeah, 1976. O.K., I mentioned human health and the hazards of these power lines. You have never addressed them, you have never properly addressed them. I've talked about the L Study (spelling), I've talked about many different studies. It was brought out at all these meetings that this has never been addressed. I have to say again and again that you are not safe within 30 miles of these power lines. We have throughout America today an explosion epidemic of yeast related diseases which is called Condideosis (spelling), a precursor of all diseases of mankind and part of it, of which I told you at these meetings, that Hans Nlper (spelling), one of the world's greatest Cancer specialists in the world stated that they called this field pollution from all these electrical lines and all the other things that mankind has brought about, but power lines was mentioned in this. Now, and again, I say I have to conclude with this guy that all this crap that you got -- there's three big books there -- I think it is the biggest bunch of garbage and the biggest disgrace to mankind for you to put out such stuff and waste your money -- waste the people's money and wasting the peoples time to come to these meetings to try to stop you. Again, I say it should be stopped in its tracks. Now, I want to talk about the nuclear -- the fact that in connection with, I think the power companies is...they have no morals. The only reason and there's nobody here, nobody at any other meeting that has ever said that they ever had stock, both common and preferred stock in power companies any longer than I have. I used to be proud of power companies. I still have those stocks.

F2 [

G2 [

E2 Your opposition to the COTP is noted.

F2 The effects of electrical power lines on human health are presented in the Draft EIS/EIR in Volume 2A, Section 3.10, "Corona, Field, and Safety Considerations." See also the responses to L-330 F3 and SL-51 A.

G2 Your opposition to the COTP is noted.

L-310 (continued)

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but I am ashamed of it. I think that this time I'm going to cash them in, because I don't want to be connected. Today, besides the rape and the plunder of the rivers through their dams, through the coal-fired plants in Montana and all the other power facilities they have, but what we have right in this area is the Hanford plant. What we are finding out -- there's all kinds of news releases where they don't know what to do with the waste -- the biggest waste they have is the plutonium which they make the nuclear bombs. It's a threat to mankind, I mean we talk about first strikes and stuff like that. There will only be one strike and all of mankind is down the tube. This is all part of this power company business that has no morals. Now, I'll go through this -- I went through it time and again, but I have a little deal again. I mainly want to just address the health hazards of these lines, the fact it doesn't stop just with 500 kV lines, it stops with the atomic plants which is the by-products that make the nuclear bombs, which is...man can't exist on this kind of stuff. Again, I'm criticized for stating that I say Oregon for Oregonians. We don't have to be an energy forum for Californians. Those guys down there in California have bred themselves out of existence. Let them settle their own problems. There's all kinds of windmills down there; there's all kinds of other facilities that you might say been capped off; there's different kinds of small dams and stuff like that, of which there would be no hazards when you get small dams here and there. But when you get this going down a grid to where...Oregonians are going to have to get on a 50 year lease to furnish this power for California -- where we don't know about our water whether it will furnish the power properly and stuff like that, but we're still committed to you guys in California for 50 years. I guess that's what it is, isn't that what it is...50 years? Well, can't you say something?

JOHN SAVAGE: On what? First of all, I want to mention that we are not the project sponsors.

H2 Contract terms for the COTP have not as yet been negotiated. Generally, contract terms are long term (longer than ten years). Many different types of energy purchases with varying contract terms could occur on the COTP.

L-310 (continued)

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ANDREW GIGLER: Well, the commitment is 50 years.

JOHN SAVAGE: On the life of the facilities?

ANDREW GIGLER: On power...no I mean...when they signed a contract to ship that power down there.

JOHN SAVAGE: No, the contracts have a number of different durations.

ANDREW GIGLER: Yeah, well when you're dealing with power companies...again, they have no morals. O.K., this gets back to the health. The burden of proof, and I guess I don't know, is this in there? Well, I don't know....for the people that haven't heard this I'll just...the burden of proof of 500 kV lines or more lies in the hands of transmission industry, not in the hands of the people. The little published hazards of electric power transmission lines are quite normal of the short-sighted materialistic greed of the corporate (inaudible).

I2 This is nothing less than criminal. All health hazards should be properly addressed in the Environmental Impact Statement. To not pursue all health matters in the field of biological effects would be immoral and illegitimate. Running these 500 kV lines in a already planned 1500 kV lines...in fact, that's what's going to be on the grid here. Through J2 Klamath, through Oregon, Tule Lake area, that poor guy there has, well, something to show you the greed and the immorality of the power companies when they come on his place without even asking him, and here already surveying when the contracts are not even let and stuff like that. He has to go out there and protect his place. This is hard on a man -- that kind of stuff -- to try and run these phonies off -- you could cause his death. I, myself, hate to fight you guys all the time. But I happen to

I2 See response to L-310 F2.

J2 Surveying activities were conducted along the COTP preferred route to obtain aerial photography information for various routes. Permissions to enter were obtained from private landowners.

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K2
L2
M2
N2
O2

know how to take care of my health. I'm going to fight you for a long time. I say...Oregon for Oregon. This power is very valuable, we need it, we need it for the economic growth of Oregon. He could care less about what happens to California. O.K., 500 kV lines is only to Klamath and Tule Lake. It makes area residents guinea pigs and in turn could turn the rich farm lands into waste land where the true health hazards of these lines are steady and the facts brought out. Further, this should not be made by power companies of which these fake studies were made by the power companies which is the fox and chicken coop approach. It should be made by private research. I challenge the wisdom of semi-secret government and industry decision-making. Since cancer and cardiovascular diseases are taking the number one spot in the death rate in America, and they are increasing at a catastrophic per capita rate faster than any other 20th Century degenerative disease. It is time to stop this concept of energy at any price and adopt policies of conservation rather than waste. We must balance between ill-planned forces of industry, a livable environment and curtail such sledge-hammer threats as a power of eminent domain. This guy here -- you already started this eminent domain. We've talked about this -- when you guys make up your mind -- that's why we have to in Oregon try to protect ourselves, but you'll go anywhere you want. It's pretty well concluded when you went on his land the other day, and those other two farmers down there. That area interest should not be sacrificed to the electric power needs of the metropolitans hundreds of miles away. I'm talking about Los Angeles, San Francisco and all of that. Field pollution, which surrounds all of us in the form of high-voltage power lines is a health threat to all. I have the L Study (spelling) where you say nothing is conclusive to the health. Nothing will ever be conclusive to the power companies 'til the last man is dead. Then you won't have to be conclusive. I'm not going to bring more Oral Roberts in on this or nothing like that.

K2 Comment noted.

L2 See response to L-310 O2.

M2 See response to L-3 S.

N2 Comment noted.

O2 Results of major scientific literature reviews by the World Health Organization, State of Florida - Department of Energy Regulations and American Institute of Biological Sciences do not indicate an obvious health hazard. We understand that concern still exists. See response to L-310 L.

L-310 (continued)

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but these power companies -- they're not sacred. Now, this book here, Power Over People, should be in everybody's hands. I'll bet there isn't a power company guy here today, Bonneville or anybody who's got that book. You can get it at any dimestore pert-near. Shows it's good enough -- I mean it's written by a great lady, Louise B. Young. High Voltage Over People -- very conclusive. You guys say that there's nothing conclusive, how conclusive, again, do we have to wait until everybody lays down and dies. I just said one out of three people are dying with cancer now -- I talk about field pollution -- I talk about the immorality of power companies. High Voltage Overhead -- tells the whole story -- health hazards. You seem to want to ignore all of this stuff. It's ancient history. High Voltage Lines-Hazard at Any Distance -- you hear that? Of course I don't have to talk about the ducks and stuff like that. We have five refuges in this area -- great on the economy. These immoral, high-power lines -- they're terrible for our environment, terrible for the migratory deer. The power companies are terrible for the fish. You mentioned that in your own environmental reports -- at least thank you for that -- how the fish are disappearing. This here little one-page deal -- The Sense of High Voltage. You never have properly addressed the health hazards of these lines. Get off your hind ends and wake up. America is a sick nation, the sickest nation in the world. I'm not trying to sell vitamins or anything, I'm trying to talk about health. Thank you. Any questions? Oh, I see something here addressed to the Indians. Yeah, the archeology here -- we have an Indian right there. What we did to America -- we taken 18 inches of top pumice soil -- we've raped America from one end to another -- run these power lines everywhere. There's an Indian that's suffered...L. Nathan Davis.

You haven't properly addressed the archeological -- just a half-assed deal when you go running those power lines.

P2 Comment noted.

Q2 Impacts to wildlife are discussed in Volume 2A, Phase III report, Section 3.5 of the Draft EIS/EIR.

R2 See response to L-310 Q2.

S2 The impacts to archaeological resources are extensively discussed in Volume 1, Sections 3 and 4, and Volume 2A, Section 3.9 of the Draft EIS/EIR. The exact location of sensitive archaeological sites were not disclosed in the document in order to protect them from intrusion by unauthorized individuals. Site-specific studies of cultural resources were conducted in 1987.

L-310 (continued)

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JOHN SAVAGE: Thank you for your comments.

FOREST COOPER: I am appearing here tonight on behalf of a request from the Lake County Board of Commissioners, and the subjects as big as the previous speakers have pointed out -- I'm here to talk about just one aspect thereof and that's the financial impact of this line is going to be built down from the north to hook onto the one that's going to come up from the south. There's no doubt in my mind but what it is going to be built -- there's thirty million people in California and trying to stop them of course, would be difficult. I'm more inclined to let them have my way insofar as paying for it is concerned. For 27 years now, power has been shipped out of Oregon and across Oregon and through Klamath County, a good deal of it, into California tax exempt, and over the Bonneville lines, and why should that be if a rancher went out here and decided to ship his livestock and didn't have any licenses on his trucks or PUC permit or what -- why the State Police would be right in his lap as you well know. But, we've had for 27 years now this tax exemption of the transmittal of power, both from the south going north and from the north going south, and there are subjects that have been mentioned here tonight which no one but the Congress itself can change if it cares to. But when it comes to the matter of taxation that is one thing that we Oregonians can take care of. Tonight in the paper there is a story about the Legislature working overtime trying to find some way to get a safety net under the schools and come up with some new revenue for the schools, but right now when this line comes through that's going to be built -- there's no doubt in my mind that's it's going to be built. When it comes through it's going to be worth -- oh, I don't know, probably \$750,000 a year in taxes to the people of Klamath County. Now, I can't imagine any tax that the Legislature is going to put on any school system for this area that's

T2 The amount of estimated property taxes to Klamath County from the transmission line depends upon which route is built and the ownership interest of BPA. If BPA owns and operates the Oregon portion of the line, Klamath County will not receive property taxes, but may be eligible for BPA's Impact Aid Program. Otherwise, Klamath County would receive approximately \$68,000 in annual property taxes if the Alternative D route is built.

L-310 (continued)

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going to come anywhere near that in matching it in dollars. It just won't -- that's all. And then, of course, there are the contracts which were signed this last summer under the terms of which PP&L is to build a line from Eugene to Medford -- a large line, a much larger line, and then sell to Bonneville a half interest in that line plus a half interest in the line from Medford over to Malin and then north, an existing line that's already built -- it goes clear on through and up to just about Madras -- so that comes off of the tax roll. And here in the last few days, you may have noticed in the papers of our State where the assessed valuation of our Oregon counties has dropped substantially. I don't know what it is for Klamath County. I just call it to your attention and suggest that you go down to the Courthouse and find out for yourself. I know what it is in Lake County. It's gone down 11 percent, which means taxes for everybody goes up 11 percent because that kind of money has got to be there for the schools and the counties and the community college district and what have you and so we've got to get some help on the taxes and here is a chance for Klamath County to get something like, at least I'd say \$750,000 a year and maybe you want it and maybe you don't -- maybe you'd rather go without it, but it's there and there is one thing I've noticed in the lines that have been built to date, that there's been no approach to the local people buying through our local governments regarding the routing insofar as may infringe upon our national forest acreage. The gentleman from Beaty mentioned a while ago about three lines that run through the Beaty area right now. They're cutting a big wide slot through a couple of national forests and up on north they cut a slot through the Deschutes National Forest and they are going to put another right along side of it and when you go through a national forest acreage, well, of course, you cut out the trees and you keep them cut out and those trees if, but for the line, would produce timber and perpetuity and 25 percent of the (inaudible) goes to the schools and goes to the

L-310 (continued)

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U2 [County Road Department and so...but, we never asked about that -- Is anybody willing to move the line over here or over there? I take your Klamath Falls paper and I've watched with interest the various opinions expressed about from the stateline southward, but I've never seen any interest shown so far by the federal people. They are the ones that are going to build these lines on the Oregon side and that's Bonneville about trying to see how little it can impinge upon the national forest income of these national forest acres because they mean a great deal to all of us and we have to protect this revenue as much as we can. The mention was made about -- there's a plan underfoot and it's in the Bonneville material which was at the last meeting here about the plan to--the British Columbia to build a big plant up in Canada and to ship that power right down across here. Well, as I say, there's thirty million people in California -- they want the power they needed and the thing to do was to put the tax right on the bill and send it on down to them. I don't know, I have no desire to get into any argument with anybody here that has a contrary opinion to my own, but I realize that the people of Klamath County raise and export into California every year a big potato crop, a big livestock crop, and a (inaudible) and we do with the cattle in my own County and we saw a lot of timber out of these Counties into California. That's our best market -- your best market is always your nearest market. Speaking for myself, I see no objection to taking power and bringing it in from Montana the way it is now -- tax exempt across Klamath County from the big plant out there east of Billings and going right on into Southern California. If I was any closer to education and young people than I am -- why should I get excited about how we are going to fund our schools and so forth if I am going to sit here or stand here year after year and see this big tax loss for local government at the present time because I see no way for our Legislature with the strained budget we have putting more money into the schools of Klamath County than

U2 The decision as to who will build the COTP facilities in Oregon has not been made and is still under negotiation. It is very possible that BPA will build the facilities.

V2 Comment noted.

L-310 (continued)

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W2

you are losing right now through this tax exemption, and you are going to lose more as time goes on so you either have to face up to this situation which I say the Legislature can handle if it wants to -- we have the power to tax the power that passes across Oregon in both directions and we either are going to do something about it or we're not going to do anything about it. But, I am further frightened by two things and that is the contract of last summer between Bonneville and PP&L whereby Bonneville will acquire a half interest in these big transmission lines that are on the tax roll in your County now or when they buy one-half -- that half of course -- I mean when Bonneville buys that half that half goes off of the tax roll and then if the private power companies continues to use that half, tax exempt, which they will do, why you are getting a whammy from the other direction. So, it's just a question of how much the people of Klamath County want to stomach this and how much they want to get it changed. One other thing, and that is we got about five billion dollars now of Veteran's bonds, Veteran's Housing and Farm bonds out in the hands of the... what I call the land of the coupon clippers back east, and there's a shortfall right now of better than five hundred million dollars in the financial plan for the payment of those bonds -- that's about 10 percent. The State of Oregon spent several million dollars last year through the Attorney General's office foreclosing on 1800 veterans -- they'll foreclose on as many this year. And it is agreed by all who we call knowledgeable people that inside the next two, three or four years we'll be levying a property tax in Oregon to pay those bonds to get that five hundred fifty million shortfall on that bond program and if we are going to tax the beneficial use of the Bonneville Power lines across Klamath County then we're going to pick up some help from that direction because the tax is inevitable. We'll get some help from that direction or if you are going to continue this tax exemption that we have had for these people for the last 27 years, why

W2 See response to L-310 T2.

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they are going to get a free ride, but why they should get a free ride when you when some of you have never asked for and never received a Veteran's loan are going to dig up extra money to pay those bonds and the people who are going to ship power across Oregon are going to continue to do it tax exempt. That doesn't look very fair to me and I think it will be rather remiss on our part to just let it continue on as it has in the past. Now, we are either going to do something about it this session of Legislature or we're not -- It's just that simple. We can do it...our Legislature can do it. We taxed 1947, we killed the tax exempt empire of the Kelzer family in Portland by the State Legislature passing two laws -- one of which tax (inaudible) interest and federal property using competition with private property. One example is the Lodge up here at Crater Lake. Whoever holds the lease on that lodge, and somebody does, it's taxed at the value of that lease at true cash value and it pays taxes here in Klamath County. If the electricity goes by 34 miles to the west or the east and it's tax exempt, you also have a Portland football stadium that is publicly owned, but it's used for games -- baseball and what have you. It's on the tax roll. Even your Game Commission, public shooting grounds, are on the tax rolls. Your Legislature has so declared. So here we are. We've got this big exemption and what are they going to do about it. We've got 30 million people in California to help pay the bill and, of course, as somebody pointed out at the last meeting you had here in the Community that (inaudible) Bonneville -- that's a four hundred million dollar business, shipping power across Oregon as well as from Oregon producers, we had three producers in Oregon this last year and one thing about Bonneville -- they have been very very fair, very efficient in furnishing the figures. They own the lines, if I was to put a bucket of power there, they would charge me for it and they'd tell me or anybody else where it went to and where it came from and how much the tax was -- I mean the fee they charge for the

L-310 (continued)

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transmission. So, all the facts and so forth are there on the table and I'm going to leave with the Committee three copies of a synopsis that we have worked out in Lake County from our Board of County Commissioners. There's their address there, you can write and get more of them if you like. But, there's one line that doesn't show on there on the back page and that is the big DC line that runs from The Dalles down to out east of Bend and then gets off down through Lake County and runs into Nevada at Adell (spelling). Now, that line from Adell (spelling) on south is owned by the City of Los Angeles, San Diego Gas and Electric, the City of Glendale and so forth that pays taxes all across Nevada and the power that crosses the state line that pays taxes. There are some taxes to be paid on the line coming up from Central California that is to be built to hook in here at the Oregon line and some of that will be federal power -- it will be tax exempt, some of which will be non-federal that will not be taxed, because of California law. They'll have to change that. But, in Oregon we don't have any law at all -- that's the beauty of it if you're in the business of shipping power. The only question is whether or not we have the power to get the interest of the Legislature to put a tax upon that. Beneficial use of the public power lines, the federal lines across Klamath County and, of course, that goes on for Deschutes and on north and either we get some revenue there -- either we get some help on paying this property tax to pay these five hundred million dollars worth of Veteran's bonds that go into default or we don't get it -- it's just that simple. Either you're going to ask for it and get it or you're not.

JOHN TOMAN: Good Evening. What I want to read into the public record is our general comments on the EIS/EIR of the COTP Project. The Oregon Department of Fish and Wildlife has reviewed the above environmental statement. The Department supports the northern section preferred Alternative D - Malin Route, as having the least

X2

X2

Comment noted.

L-310 (continued)

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X2
Y2
Z2
A3
B3
C3

Impacts on Oregon fish and wildlife resources. We have a concern however with the general treatment with respect to wildlife impacts and mitigation given to the more recently identified options within the alternative. More specifically, the possibility of new lines to the east of the existing lines. New construction in the area is noted on page 3.1-27 - Will impact game winter ranges - raptors, waterfowl and non-game species. A number of mitigation measures identified on pages 5.1-12 and 13 will have to be applied. We look forward to more specific discussions of impacts and mitigation to be applied in the Compliance Monitoring Plan during the project design phase. I might clarify a little bit of that statement. One is that any changes in the routing or the preferred routing, we will have to re-analyze for the impact, because the impacts will change from what we see on the preferred alternative. The other thing is we need more detailed information to really give the fish and wildlife impacts. We need to know the exact route -- what type of mitigation measures will be used, not just the suggested or the possible mitigating measures, but what will actually take place on ground before we can actually give the actual impacts on wildlife. Thank you.

D3
E3

MARK SLEZAK: The Position Statement that has been drafted by the Klamath County Chamber of Commerce Board of Directors is the following: The Klamath County Chamber of Commerce Board of Directors recommends that the proposed 500 KV California-Oregon Transmission Project be kept off of farm land in the Klamath Basin. Based on the review and recommendation of the Chamber's Agriculture Forest Industries Committee, the Board urges that the proposed power line be moved east of the proposed route and east of the existing line crossing into California in order to tie into the John Cross alternative thus avoiding farm land in the basin. Moving the lines east of the proposed route and east of the existing line would preserve the integrity of the basins important farm

Y2 Comment noted.

Z2 See responses to L-23 A, L-23 B, L-23 C, and L-23 D.

A3 See responses to L-23 A, L-23 B, L-23 C, and L-23 D.

B3 Comment noted.

C3 The adopted mitigation measures are listed in Section 1.1.5 of the Final EIS/EIR.

D3 Comment noted.

E3 Comment noted. See response to L-330 H.

L-310 (continued)

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E3 land and thus eliminate problems for farming operations such as interfering with irrigation systems and weed control. Signed, Jim Yearling, President, Board of Directors.

F3 NANCY R. ROEDER: I happen to be a intervenor in the UE-52 which is a rate case. It's surprising what goes on with the electrical business on the local level, the state level, the federal level and so on. Oregon is trying to survive economically, but in the meantime we're getting Colstrip 3 and Colstrip 4 into our rate base, and I feel we shouldn't be getting Colstrip 3, Colstrip4 into our rate base if we could get cheap BPA power. I'm not against sending this power to California. I think it would be a good idea because aluminum plants have been closed down and they have to sell that power to someone. At this time Oregon cannot use this power so it has to go someplace, but I do not believe that BPA should be sold to California and that's what always comes up. I talked to Mark Hatfield's aide over the telephone and Packwood's aide and Mark Hatfield's aide told me..."Oh, no, it won't be sold to California." But, if some strings can be pulled in the backroom in Washington, D.C. within five years they'll sell it to California. If BPA has ever sold to California, we in Oregon will have to pay sky-high rate in our electrical bill, and this just goes to show you they won't be regulated by the federal government. They'll be regulated by the state government and they say O.K., we have this power, we're going to sell it back to Oregon for the price we want -- and that's wrong, if they ever sell BPA to California. PP&L raised their rates 3 percent recently. O.K., BPA wants to raise their rates approximately 10 percent as soon as BPA raised their rates 10 percent what do you think is going to happen to PP&L -- they're going to raise another probably 8 or 9 percent. It's just a chain reaction. That's about all I wanted to say, except I want to quote these electrical rates. Oregon PP&L we have a little over 5¢ a

F3 Comment noted. See response to L-329 A.

L-310 (continued)

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kilowatt. O.K., this is from The Oregonian, Wednesday, January 14, 1987 and it says... "the Bay area pays approximately 8¢ a kilowatt. Detroit and New York City, which has the highest electrical rate in the Nation pays 11.7¢ a kilowatt. Chicago - 9¢. Houston - 8.1¢. San Diego - 11.6¢. Cleveland, Ohio - 7.7¢. Portland, Oregon - 3.9¢. Now, I don't know if this is correct -- I know Eugene, Oregon, where my daughter lives, they have very cheap electricity, but I didn't know Portland had such cheap electricity. Our other daughter lives in Seattle, I know they have very cheap electricity - 4.1¢. And, what really ticks me off is this Colstrip 3 and 4 clear from Montana and all this cheap BPA power going to California. Let California pay for it and get a tax on it. Thank you.

JOHN SAVAGE: Would anyone else like to speak?

GLEN ARTHUR: Mr. Chairman, I have one comment that I would like to add. The news media is well represented here tonight. I'd like to present a radical suggestion to you. When you have a situation like this, you have to fight fire with fire. If you want to quote me, I would say that every Oregonian should get on the phone in the next week and call the Governor of our State. Talk about political power -- you'll see political power in action if that happens. If everybody will get on that phone and call that Governor, I hope that they would all agree that we kill the project until we can further study it, but if they don't I got egg on my face, but nevertheless -- do it. And, express yourself if you do it and the news media can pass this word around and get the people going on this and at least they can pay a tax and other things. Like the lady said here, we're going to pay more and more and more and more. It's a racheting effect. Thank you.

G3 As discussed in the responses to L-329 A and L-3 T, the market for power, protections afforded Northwest customers of BPA through the Pacific Northwest Electric Power Planning and Conservation Act, and most importantly, the peak season diversity between California and the Northwest will preclude Northwest utility ratepayers from exporting low cost power to California if that power could otherwise have been used first by Northwest utilities.

H3 See response to L-310 G3.

L-310 (continued)

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JOHN SAVAGE: Any other speakers?

MARY TAYLOR: I live in Malin, born there and lived there all my life. I'm familiar with the land that the power line is designed to cross. That is prime farm land, excellent farm land. I feel I know farm land in this area -- my father homesteaded here. That is good farm land, that should not ever, ever have a power line on it. Number Two point is the fact that my husband and I farm potatoes and barley. We use wheel lines and solid sets. You cannot run a wheel line on anything that has a power line or any interference -- you cannot use your sprinkler system. You are in effect, out of business. If you put a power line, let's say just diagonally across one corner, you've got this wheel line they have to either disconnect, reconnect. One person can disconnect, but it takes two people to reconnect. You've got extra labor. It is going to be dynamite for farmers to have to deal with that type of thing. They are out of business essentially is what it amounts to. Even if it takes a small corner of their property, plus that's prime farm land. We have bought seed potatoes from the (inaudible) in years past. They grow good potatoes. We shouldn't damage that production area. I feel like the John Cross alternative, tying into that, staying east of the lines is probably the best alternative that you could hope for and probably would be the most reasonable. You would get acceptance from the agriculture community and you would get acceptance from possibly the fish and wildlife and all the other areas that have any interest in that. Stay off the farm land...please. Thank you very much.

JOHN SAVAGE: Thank you. Anybody else want to speak?
Anybody here want to make any comments?

I3 Your opposition to routing transmission lines across prime farmland is noted.

J3 We agree that the presence of towers on farmland can affect irrigation practices. The impact of transmission lines on irrigation practices is discussed on Page 3.6-4 in Volume 2A of the Draft EIS/EIR. The transmission line will be located within the preferred route to avoid displacement of existing wheel line irrigation systems.

K3 See response to L-330 H.

L-310 (continued)

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Well, that concludes the Hearing. As I said before, we have representatives from TANC, Western, and from the Bonneville Power Administration. They have agreed graciously to stay on for some time to answer any of your questions that you might have about the routes, substations, sites or need for the project. Thank you.

The Hearing was concluded at 8:15 p.m.

385-Sitmisc

md

L-310 (continued)



COUNTY CHAMBER OF COMMERCE

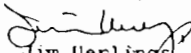
125 NO. 8TH STREET
KLAMATH FALLS, OREGON 97601
TELEPHONE AREA CODE 503/884-5193

L3 The Klamath County Chamber of Commerce Board of Directors recommends that the proposed 500KV California-Oregon Transmission Project be kept off farmland in the Klamath Basin.

M3 Based on the review and recommendation of the Chamber's Agriculture/Forest Industries Committee, the Board urges that the proposed powerline be moved east of the proposed route and east of the existing line crossing into California to tie into the John Cross alternative thus avoiding farmland in the basin.

N3 Moving the lines east of the proposed route and east of the existing line would preserve the integrity of the basin's important farmland and thus eliminate problems for farming operations such as interfering with irrigation systems and weed control.

Sincerely,


Jim Uerlings, President
Board of Directors

JU/cr

L3 Your recommendation that the COTP be kept off farmland in the Klamath Basin is noted. A route east of the proposed route in the Klamath Basin which would avoid farmland was analyzed in the Supplement to the Draft EIS/EIR (North 1 routing option). This option was adopted as the Project preferred route.

M3 See response to L-310 L3.

N3 See response to L-310 L3.

L-310 (continued)

2/22/87

Oregon Department of Energy
Dear Sirs:

When the farmers of Malheur, Oregon and Tulelake, California object to the COTP crossing their prime farm land, they have good cause. These are some of the points that should be considered so the power line avoids prime farm land.

1. devaluates prime farm land
2. noise pollution near family farm
3. noise pollution near farm animals
4. transmission line creates a barrier
 - a. ducks & geese
 - b. airplanes, crop duster etc
5. creates an ugly view (metal giants) are not the same as a peaceful pastoral scene
6. the dangerous hazards of farming around metal giant
7. metal giant could become a target during a time of war
8. electric sub-station could become a war time target

Why can't the metal giant (500 KV) line be routed on aerial lead to annulate the farmers and people interested in environmental concerns?

The farmers have a very long tale of "WOE" concerning government regulations, bankruptcy, low price of products, high cost of transportation, so the proposed location of the power line on their PRIME farm land is another sad situation in my estimation. This sad situation could be rectified if the 500 KV line is built to have

03

Comment noted. These impacts have been identified and discussed in the Draft EIS/EIR for the COTP.

P3

Comment noted. See response to L-310 L3.

L-310 (continued)

P3 said line (power) built on MARGINAL farm land.

Q3 I have no idea of the reasoning behind the proposed 500 KV line tentatively being routed through PRIME farm land. The initial California, Oregon Transmission Project meeting was held at the "Winema," if I'm not mistaken and a statement was made during the meeting that PRIME farm land would be excluded if at all possible. I wonder at what point in time the policy was changed to include PRIME farm land in the route?

R3 If and when the line is built it will last for an eternity unless it falls on bad times and is not maintained or up-graded. The people or farmers directly involved with the (500 KV) line will have to contend with the disadvantages of a power line marching through their PRIME farm land if this is constructed.

S3 Since Pacific Power & Light buys a percentage of power from BPA. This power could no longer be available if all the surplus power then into C.O.T.P. or CalPex on a 20 year contract, (the surplus may only last 10 years).
②

Q3 See response to L-27 D.

R3 Your comment regarding disadvantages of having power lines through prime farmland is noted. See response to L-310 L3.

S3 The economic analyses of the COTP are based on current projections of the amount and cost of PNW surplus power. Although the current PNW surplus of firm power is expected to dissipate by the late 1990's, the COTP will have value even after that time, because of the continued availability of surplus non-firm power and surplus firm capacity. The COTP would allow the PNW to sell more surplus power, and thus help keep PNW rates low. The COTP by itself, should not lead to new resource development in the PNW. The Draft and Final IDU EIS's include analysis of the effects of long-term firm contracts on new resource development in the PNW and California. The analysis suggests that in some cases (particularly exchange contracts) long-term firm contracts can reduce the cost of new resource development in both regions.

L-310 (continued)

T3 See responses to L-310 S3 and T-126 A.

T3 [I predict it and when surplus power is sold to California then Oregon electric rates will double or maybe triple in ten years unless a safeguard is sustained.

Representative Bob Smith explained that he was quite confident BPA would not be sold to California if and when this sale takes place. Oregon rate payers are up a creek without a paddle.

U3 [The bottom line is hold the line and keep power lines (500KV) off PRIME farm land - keep Oregon electrical power affordable!

Sincerely,
 George F. Fisher
 BPP Policy Group
 Harwood Hills, Ca.
 97603

U3 Comment noted.

(Copy of the letter & information given to Rep. Bob Smith from Burns, Oregon; Governor G. Bushener; Mr. & Mrs. Paul Tachy, Dulles, Va.)
 ③ RRR

Byron Union School District

CONTRA COSTA COUNTY

ROUTE 1 BOX 48, BYRON CALIFORNIA 94514 9231
TELEPHONE (415) 614 2128

BYRON ELEMENTARY SCHOOL
ROUTE 1 BOX 48
BYRON, CALIFORNIA 94514 9231
415/614 2128

DISCOVERY BAY ELEMENTARY SCHOOL
1700 WILLOW LAKE ROAD
BYRON, CALIFORNIA 94514 9175
415/614 2150

February 27, 1987

James Beck, Chairman
The Transmission Agency of Northern California
and
William Clayett, Administrator
Western Area Power Administration
P.O. Box 661030
Sacramento, CA 95866

RE: California-Oregon Transmission Project
Draft EIS/EIR

Gentlemen:

As Superintendent of the Byron Union School District in Contra Costa County, I am writing you to present the concerns of our School Board, staff, parents and community.

One of the proposed routes of the California-Oregon Transmission Projects is contiguous with a designated school site for our district. The 10-acre property will support nearly five-hundred students from Discovery Bay homes. There is no other available remaining area for this school to be located and our District has every intention of utilizing this property for our students.

A The Klein Independent School District in Houston, Texas recently was awarded more than 25.1 million dollars in punitive damages when high-voltage electrical power lines were installed in the midst of three schools in this district. These school officials were concerned regarding the potential of non-ionizing electromagnetic radiation. The possible link between this radiation omitted from transmission lines and cancer became the basis of this landmark case.

B In Byron these health hazards also concern us, and we believe that questions about such hazards have not been answered completely by scientist and/or environmentalists. In checking with the State Department of Education I have been advised that our district would not qualify for future building funds if the proposed power lines were installed adjacent to our school site.

C For the above reasons we strongly support the actions of PROPP

A COTP is familiar with the Klein Independent School Litigation and we have reviewed the transcripts and exhibits. This case was not representative of similar litigation results because the utility did not attempt to present a detailed case. The case is under appeal. The link with cancer is a very serious claim and we are carefully considering various evidence on this issue. See responses to L-330 F3 and SL-51 A.

B The S-8 Alt. 2 route, which runs east of the Discovery Bay School site, is not part of the preferred route. The planned school was one of the major reasons why this route was not considered part of the preferred alternative.

C Your opposition to the COTP is noted.

L-312 (continued)

Mr. James Beck and
Mr. William Clagett
Page 2

C (Positive Resolution of Powerline Problems) and join them in
opposition to the California-Oregon Transmission Project.

Sincerely yours,

Mary Beth Wolford

Mary Beth Wolford, Ed.D.
Superintendent

MBW/lc

cc: PROPP Committee
Representative George Miller
Assemblyman Phil Isenberg
Supervisor Tom Torlakson
Mr. Ken Hofmann
Governing Board of Trustees, B.U.S.D.
File

L-313

301 Ackley
Mt. Shasta, CA. 96067
26 February, 1987

California - Oregon Transmission Project
Environmental Coordinator
P.O. Box 660970
Sacramento, CA. 95866

This letter is in response to your solicitation of comments on the Draft Environmental Impact Statement (DEIS) for the proposed 500KV transmission line. My specific area of concern is over the segment that crosses the Giant Crater Lava Flow on U.S. Forest Service lands north of State Highway 89.

A The DEIS is flawed and incomplete, some of its deficiencies are listed:
1. The current preferred route through this area is unclear. I understand that it is different from the route described in the DEIS. If the actual route and the possible specific impacts are not assessed, then the release of this DEIS is not timely and your subsequent insertion of a new segment invalidates the document.

B 2. The preferred alternative route crosses an area designated in the U.S. Forest Service Draft Land and Resources Management Plan as a Geologic Special Interest Area and in the U.S. Forest Service Medicine Lake Planning Unit EIS as an area to be managed for its scenic and recreational values. The Affected Environment section of the DEIS makes only passing mention of the status and values of this area. It fails to adequately describe the geologic interest, wildlife, scenic and recreational amenities of the Giant Crater Lava Flow. The Environmental Consequences section of the DEIS fails to assess any impacts to these amenities, in fact they are not even mentioned in this section. These important issues are inadequately described and they are not tracked through the document.

C 3. TANC has presented its separation requirements as a given; minimum separation alternatives were not considered. This is a fundamental flaw in the scoping for this analysis. Forest Service experts have since discredited the Sargent and Lundy report on the basis of its inaccurate and biased fire history figures, its faulty calculations on the rate of fire spread, and its failure to consider enhanced fire suppression capability in this area. The justification for disqualifying minimum separation alternatives is unsupportable. TANC must do a thorough examination of a minimum separation alternative or the analysis will not conform to the National Environmental Policy Act requirement that a reasonable range of alternatives be addressed.

D 4. The proposed mitigation measures are ludicrous. Painting the towers in non-reflective color is not an effective mitigation of the gross impacts of a monstrosity that will be dominantly visible for miles in the open, panoramic lava flow country. The local impacts of the power line are not realistically mitigatable. However, fire hazards and other outage risks can be mitigated by fuels control and well maintained fire breaks. The risks associated with minimum separation can be mitigated to a non-significant level but the impacts caused by a five mile separation to timber, wildlife, and scenic and recreational values can not be mitigated to any meaningful degree.

A The Draft EIS/EIR identified N-10 Alt. 5 as part of the preferred route in the area you mention. This route avoids the Burnt Lava Flow Virgin Area, and no routes have been proposed that do cross it. As a result of comments on the Draft EIS/EIR, the COTP has reconsidered the original N-10M route which passes east and south of the Burnt Lava Flow Virgin Area. This route is discussed in the Supplement to the Draft EIS/EIR. See also the Draft EIS/EIR, Volume 2A, page 3.2-15 for a discussion of the Giant Crater Lava Flow.

B A discussion of the impacts associated with the route segment N-10 Alt. 5 crossing the Medicine Lake area is located in Section 3.0, Volume 2A of the Draft EIS/EIR.

C For the results of COTP and USFS discussions regarding fuels management and the need for separation, see Section 2.3 of Volume 1 of this Final EIS/EIR. Separation requirements were established to support the reliable operation of the COTP. This new 500 kV transmission system is very important to the proper functioning of the interconnected bulk system in the Western United States. The simultaneous loss of the three 500 kV AC transmission lines between Oregon and California could affect every major utility in the west to as far east as Texas. The planning of the COTP is being closely monitored by the Western Systems Coordinating Council.

The Sargent and Lundy report was prepared from a transmission line operations point of view. Operators require up to eight hours to respond to a forest fire by rescheduling the energy carried over the Intertie from Oregon to California. The fastest possible (extreme) response time to reschedule 3,200 MW of energy has been determined to be two hours; in other words, the best case. Similarly, the fastest (extreme) fire rate of spread from the data furnished Sargent & Lundy was determined to be two miles per hour; in other words, the worst case. The potential for such rate of speed was verified upon consultation with the California Department of Forestry in Redding. These two opposite extremes were combined to determine the consequences of responding to a fire contingency. If a slower rate of fire spread is used, such as 1/2 mile per hour, then it should be combined with a longer response time by the operators of eight hours.

L-313 (continued)

- C**
(cont.) Regardless, the minimum separation in forest areas is being carefully reviewed with the Forest Service, and the Forest Service has suggested that certain fuels management strategies would supplant the need for greater separation in some areas. Where route adjustments do not compromise the reliability of the interconnected transmission system of the Western United States, they will be employed. See responses to L-295 B, L-295 U, L-295 V, L-295 GG, L-295 V2, and SL-99 E. See also the discussion of the North 2 routing option in the Supplement to the Draft EIS/EIR.
- D** See response to L-309 F1 and L-309 K1; although much of the volcanic high land terrain of northeastern California is also acknowledged to be open, this terrain exhibits local relief and features extensive stands of juniper and/or pine forest, making the referenced mitigation measures also listed in Section 1.1.5 of Volume 1 of this Final EIS/EIR likely to be even more effective than in the Delta. It is still unlikely, with the natural finish of the towers dulling further with age, that painting of the towers would significantly reduce any visual impacts.
- E** The possibility of fuels management and well-maintained fire breaks have been discussed with the Forest Service and will be incorporated into the operation and maintenance plans for the COTP.
- F** See the discussion of the North 2 routing options in the Supplement to the Draft EIS/EIR.

L-313 (continued)

G [the DEIS is incomplete, it is flawed by untimely alterations, it is not readable and it does not meet NEPA requirements. It should be withdrawn, revised and reissued. If this project continues with the preferred route, the project can expect concerted, organized opposition.

Peter Van Susteren



G Your concerns regarding the Draft EIS/EIR are addressed in the above responses. They have been considered and incorporated into the Supplement to the Draft EIS/EIR and this Final EIS/EIR. See responses to your comments above. Your opposition to route N-10 Alt. 5 is noted.



Mount Shasta Area

Audubon Society

Box 530, Mount Shasta, Ca. 96067

February 27, 1987

Environmental Coordinator
California-Oregon Transmission Project (COTP)
P. O. Box 660970
Sacramento, CA 95866

PE: COTP DRAFT EIS/EIR

Gentlemen:

We wish to thank COTP for not selecting a route for its proposed 500-kV AC transmission line that would impact Shasta Valley, Putte Valley, or Mt. Shasta and vicinity.

Of greatest concern to us now, is that segment of the proposed line between Malin and Pound Mountain, and most particularly the portion running through Modoc and Shasta-Trinity National Forests and nearby private lands (segment A-10, alt 5).

Based on our review we have selected three recommendations for resolution of the powerline question. These recommendations are submitted in order of our preference:

A 1. "No Action" Alternative, i.e., no new line:

We do not believe the perceived need for the powerline justifies the environmental impact any route would have. Promoting energy conservation and more efficient distribution of existing power sources within the Pacific Northwest and California may meet power needs until such time as technology comes up with a more environmentally sound method of power transmission.

B 2. Powerline within existing corridor:

Either the existing AC or DC interties could be upgraded to supply the additional 500-kV. Arguments presented in the EIS/EIR for establishing a new corridor are weak in our opinion. Your decision to select a new corridor is a classic case of pre-existing bias coloring the formulation of a decision. We wonder if this bias is augmented by your interest in considering yet another 500-kV intertie which obviously would bolster the "need" for a new corridor.

C 3. Powerline near to or east of existing AC corridor:

continued...

A BPA and the Pacific Northwest utilities have implemented some of the most extensive conservation programs in the electric utility industry. The BPA IDU EIS describes the planned impact of conservation on the forecast of future need for power in the Northwest. The forecasted need for power in California in the economic analysis of the COTP in the COTP Draft EIS/EIR reflects the major conservation programs implemented by the California utilities. The COTP is planned to help secure lower cost Pacific Northwest power to meet a portion of the electrical load which remains after the effects of conservation. A major purpose of the COTP is to provide a means of distributing the diverse power resources of California and the Pacific Northwest to better meet the power needs of both regions without construction of new generation facilities. For a more complete discussion of the need for the COTP, its purpose and its benefits to California and the Pacific Northwest, see Section 1.2, 1.3, 1.4, and 1.5 of Volume 1 and Appendix B of Volume 3A of the Draft EIS/EIR.

B The existing AC and DC Interties have already been uprated to their maximum capacity. To increase the power transfer level from 3,200 MW (AC) and 3,100 MW (DC) (6,300 MW total) to 7,900 MW, as the COTP would do, calls for another transmission line. If it were possible, however, to further upgrade the existing Intertie, this would compound the reliability problem by concentrating a very large amount of capacity on two adjacent transmission lines.

C By near to we mean within one mile of the existing AC corridor. A routing east of the existing corridor is suggested based on the assumption that such a routing would have much reduced impacts on areas of high environmental significance such as "old growth" forest, wildlife habitat, unusual geologic features, scenic roads and productive timberlands.

D We question the validity of the conclusion of the Sargent and Lundy Report, which recommends there be a minimum five mile separation between the existing and proposed AC corridors. Increased resistance to forest fires could be obtained by widening the existing corridor to accept a new line or establishing a new corridor nearby. In the first case, a wider corridor would make a more effective fireline. In the second, one corridor could serve as a fireline for the other.

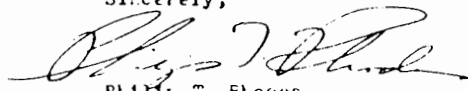
E The selected alternative routing enters the eastern and southern portions of the Medicine Lake Highland volcanic area, a recently active and potentially hazardous volcanic zone. The five mile separation route west of the existing corridor would put the new line in greater danger of disruption due to volcanic activity than a route further east. A more easterly route would also be less prone to weather damage.

F

G As an organization dedicated to birds, we are concerned about the impact of the selected route on important avian species in the area. Final route selection and construction must minimize impacts to the following species, among others: Bald eagle, golden eagle, goshawk, prairie falcon, osprey, spotted owl, and Swainson's hawk.

Thank you for this opportunity to comment on the proposed California-Oregon Transmission Line. We look forward to the Final EIS/EIR.

Sincerely,



Philip T. Flores,
President

PTR/pr

C See responses to T-69 F and L-177 A.

D See responses to L-3 P and L-313 C.

E Please see the Draft EIS/EIR, Volume 2A, page 3.2-9, for a discussion of geologic hazards in the Medicine Lake Highlands area. See response to L-312 LL.

F Comment noted. See response to T-69F.

G Much effort has been made to avoid sensitive raptors during corridor and route selection. Where potential effects may be significant, avoidance and mitigation measures have been proposed to eliminate impacts or reduce them to less-than-significant levels. See Section 1.1.5 of this Final EIS/EIR.

L-315

WRITTEN COMMENT FORMS
FOR THE DRAFT EIS/EIR
FOR THE
CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BAÑOS-GATES TRANSMISSION PROJECT

If you have comments on the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be mailed by February 3, 1987. Thank you.

- A We would like to know alternative route N-9P of
the Oregon-California Transmission Project be deleted as a
possible route for this line.
- B The route crosses over best dairy pasture land
and will eliminate a water bird habitat and other wild
life.
- C We would be grateful if you could consider another route

- A Your opposition to alternative route N-9P is noted. N-9P was considered as an alternative and is therefore discussed in the Draft EIS/EIR but is not part of the preferred route. N-9N and N-9O are the preferred alternatives.
- B Comment noted. See response to L-315 A. The transmission line would not be expected to have significant impacts on pasture land or the use of this land by dairy cattle.
- C No marsh habitat will be eliminated in the northern Central Valley. The small wetland areas present here can be avoided by careful location of tower sites and access roads.

Bearing Date: 3-3-87

Location: Bill's Ferry + Webb Roads

Name/Address: Walter E. & Ruth L. Matthews
4291 Bill's Ferry Rd - Colton, CA 92322

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866
(916) 924-3995

L-316



"Modoc - Where the West
Still Lives!"

John E. Dederick
Assessor
COUNTY OF MODOC
COURTHOUSE
Alturas, California 96101
(916) 233-2163 Ext 217



February 27, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

I would like to make the following comments regarding the Project.

Volume 1 Page 4.1-37

This page represents that Alternative D would have the least impact on land use resources. This assumption was based on the statement that the route only crosses 1.0 mile of TPZ land and 0 miles of agricultural preserve land.

It must be understood that

- A [1. although the route only crosses 1 mile of TPZ land, it crosses 19.66 miles of prime timberland owned by the government which is not eligible for TPZ status;
- and
- B [2. Modoc County does not participate in an agricultural preserve program. If Modoc County did have an agricultural preserve program, nearly all of privately owned lands in the route area would be classified as agricultural preserve, and Alternate D would be shown as having the greatest land use impact.
- C [In addition, it states that "Alternative D would cross 1.37 miles of irrigated cropland". In volume 2A, Table 3.6-10 it states that section N-10D alone crosses 5.66 miles of row crop land (which is irrigated).

It appears that somebody is comparing apples to oranges, and that a more detailed and correct land use study needs to be done.

Sincerely,

JOHN E. DEDERICK
Modoc County Assessor

JED:ds

A As summarized in Volume 1 of the Draft EIS/EIR, Tables 4.1-1 to 4.1-4, Alternative A, has 32.46 acres of prime timberland crossed, Alternative B has 29.13 miles of prime timberland crossed, Alternative C has 28.63 miles, while Alternative D has the least with only 19.66 miles of prime timberland crossed. It should be understood that the amount of prime forest land and TPZ areas crossed are only two of many factors considered in selecting the preferred route.

B Because of public policy favoring the preservation of farmland as expressed by the Williamson Act, these areas were recorded. However, as stated in the Draft EIS/EIR, Volume 2A, page 3.6-28, the amount of land in agricultural preserve was not used in determining significance levels. Significance levels were based upon the crossing of a minimum of one-half mile of Prime Farmland or Farmland of Statewide Importance. When farmland classification information was not available (such as in Modoc County) the crossing of more than 1/2 mile of irrigated cultivated land was considered to be a significant impact. The irrigated cropland and agricultural preserve factors were just two of the components among a number of land use items (e.g. prime timber, TPZ, residential areas) considered in the comparison of alternatives. Although Alternative D was judged to have the least overall impact on land use resources, the Draft EIS/EIR text and tables indicate that it will have a significant impact on irrigated cropland.

C The route segment N-10D is not part of Alternative D. In that area, route segments N-10G and N-10J make up the Alternative D. These two segments were chosen because of the reduced impact to agriculture compared to N-10D.

L-317

STATE OF CALIFORNIA: BUSINESS TRANSPORTATION AND HOUSING AGENCY

GEORGE DEURMEJIAN Governor

DEPARTMENT OF TRANSPORTATION

P.O. BOX 2107
PUEBLO, CA 96099
TEL (916) 225-3000



02-Environmental Services
IGR/CEQA Review
74-609540-37001
Various Co., Various Rtes.

February 27, 1987

Mr. Rich A. Lind
Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

Dear Mr. Lind:

Caltrans, District 2 has completed the review of the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the California-Oregon Transmission Project. The California-Oregon Transmission Project (COTP) proposes a 500kV AC transmission line between the California-Oregon border area and the Telsa Substation, just east of the San Francisco Bay Area. The COTP preferred alternate would include crossings of State Highways 139, 89, 299, and 44 in Caltrans, District 2.

A We find that the document adequately addresses our areas of concern, specifically mitigation of the project's visual impacts and consideration of safety measures to protect highway travelers during project construction.

B Although the document thoroughly addresses the reduction of the project's visual impacts, we believe there may be some confusion regarding transmission line crossings of the State Highway System.

The State is directed by the Public Utilities Code Section 320 to require "the undergrounding of all future electric facilities proposed to be erected in proximity to any highway designated a State scenic highway". This section is not applicable to the proposed project for the following reasons:

- 1) Although the preferred alternate crosses State Routes 139, 89, 299, and 44, all of which are eligible for scenic highway designation, none are officially designated.

A Comment noted.

B Comment noted. The preparers analyzed visual impacts on highways eligible for scenic highway designation, but not actually designated, in the interests of full disclosure of impacts; the preparers also recognize the Public Utilities Code Section 320 exempts high-voltage transmission lines from its undergrounding requirements.

L-317 (continued)

Mr. Rich A. Lind
Page 2
February 27, 1987

B

- 2) The Public Utilities Commission exempts high voltage transmission lines from Section 320, due to significant engineering constraints.

C

It is noted in the document that Caltrans' Encroachment Permits will be required for transmission line crossings of the State highways. When this project is approved, it will be necessary to submit the Record of Decision and Notice of Determination with the permit application to fulfill the environmental clearance requirements of our permit.

Encroachment permit applications can be obtained by writing Department of Transportation, Attention Permit Engineer, District 2, 1000 Center Street, P. O. Box 2107, Redding, CA 96099. Our Permit Engineer, Mr. Phil Haigh can also be contacted at (916) 225-3400 to answer any questions regarding our encroachment permit.

Thank you for the opportunity to review the DEIR/DEIS. If you have any questions regarding these comments, please do not hesitate to call me at (916) 225-3259.

Very truly yours,



L. MICHELLE GALLAGHER
IGR/CEQA Coordinator,
Environmental Planning Branch,
District 2

C

The COTP will comply with all applicable permit requirements.

WRITTEN COMMENT FORMS
FOR THE DRAFT EIS/EIR
FOR THE
CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be mailed by February 3, 1987. Thank you.

We would like you to delete the alternate route N-9P for the Oregon-California Transmission Line for the following reasons:

- A [This transmission line would greatly interfere with the wildlife that is undisturbed along the Sacramento River.
- B [This area is a wonderful recreation spot especially for its great fishing and this line would destroy that.
- C [Every winter hundreds of geese and ducks fly over this area and this line would be a danger to them.
- D [This transmission line would be an eye sore on this beautiful country side. The Balls Ferry area has no obstructions to detract from its natural beauty.
- E [The line would cross the intersection of Ash Creek and Balls Ferry Road. We live on Balls Ferry Rd., one half mile from this intersection. The line would cut across our ten acre parcel and other small parcels all the way to the Cottonwood substation. My family has worked very hard for the past nine years on this land so that we can enjoy the country atmosphere. This line would ruin that for us. Please do not consider using this alternate route and instead use

Bearing Date: the preferred route that could be upgraded to accommodate the added KV's.

Location: Thank you.

Name/Address: William A. and Pamela K. Johnson
4386 Balls Ferry Rd.
Cottonwood, Ca. 96022

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866
(916) 924-3995

- A The line should not cause more than temporary disturbance to resident wildlife at the Sacramento River crossing. Some animals will probably desert the immediate construction area during the active construction period. Following construction, species are expected to return to pre-project population levels.
- B Comment noted. The COTP is not expected to have significant impacts on fish or fishing in the Sacramento River.
- C See responses to L-117 C and L-223 B.
- D See response to L-273 A.
- E Your opposition to alternative route N-9P is noted. N-9N and N-9O make up the preferred route in this area. Although it is not possible to upgrade the existing lines on these route segments, the new line will be placed adjacent to the existing lines.

L-319



California State University, Sacramento

6000 J STREET, SACRAMENTO, CALIFORNIA 95819-2694

ETHNIC STUDIES CENTER

February 25, 1987

Mr. Robert A. Olson
Project Managing Director
California Oregon Transmission Project
P.O. Box 660970
Sacramento, California 95866

Dear Mr. Olson:

EIS-EIR CALIFORNIA-OREGON TRANSMISSION PROJECT

A [The Wintu People consider Grizzly Peak to be sacred; it is currently in use by our religious leader on behalf of the people and our sacred traditions.

Flora Jones lives in Bear Valley and should be contacted for input to this issue.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Frank LaPena'.

Frank LaPena
Director, Native American Studies
Professor of Art/Ethnic Studies
Wintu-Nomtipom

khn

A

The Project Native American Consultation Study report (Wirth Environmental Services 1986) identified Grizzly Peak as a Native American heritage site. Project ethnologists contacted Flora Jones as a part of this study. The Madesi Band of the Achumawi Tribe have also identified Grizzly Peak as a sacred place. It is one of nine sites listed in Table 3.9-3 of Volume 2A of the Draft EIS/EIR as located within 3.4 miles of proposed route N-7 Alt.1. Since this route segment was identified as a part of the final route, Project ethnologists will contact representatives of the Wintu and Achumawi communities to elicit their comments on this routing and its effects on the Grizzly Peak site.

L-320

Forest Owners of Shasta & Siskiyou Counties
2299 Benton Drive
Redding, CA 96003

Friends of Green Springs
1407 Highway 46
Astland, OR 97103

Private Resolution of Powerline Problems
PO Box 339
Bethel Island, CA 94511

February 26, 1987

Environmental Coordinator
California-Oregon Transmission Project
PO Box 660970
Sacramento, CA 95866

Reference: California-Oregon Transmission Project Draft EIS/EIR

Dear Coordinator,

Leaders of the above listed organizations, which represent major landowners, farmers, timberland owners, municipalities, chambers of commerce, business owners, and hundreds of individuals, have met and exchanged information. Each of our organizations will be submitting separate written comments on the Draft EIS/EIR before the deadline.

In addition to our separate comments, we want our organizations' mutual concerns made part of the comment record for the Draft EIS/EIR. At our last meeting we found that we were united in our opposition to the California-Oregon Transmission Project for the following reasons:

- A [1. Extensive research has shown us that the project is not cost effective and is not needed.
- B [2. The proposed right-of-way easement compensation plans presented by the Draft EIS/EIR do not take into account the continuing impact of the right-of-ways for years to come. The costs for taking forest lands out of production forever cannot be adequately mitigated by a one-time easement payment. It is impossible to calculate the future value of the lost productive land today. As supply and demand for forest products changes, the lost value of the non-productive land will change. We feel the only reasonable compensation for rights-of-way would have to be yearly payments based on actual costs and losses. This same reasoning can also be applied to the loss of productive farm land and the continuing costs associated with working around the tower bases. Labor cost will fluctuate over the years as will the price of farm products. Compensation for the continuing loss and continuing disruption to irrigation, planting, and land use practices required by the construction of the lines must be paid for on an annual basis, not a one time payment.

A The substantial analysis in the Draft EIS/EIR shows that the COTP is beneficial. See Appendix B to Volume 3A of the Draft EIS/EIR. For further discussion of need for the COTP and its cost-effectiveness, see the responses to letters L-306 and L-307.

B Land appraisers must take into account the productive value of the land that is lost as a result of a transmission line. In the case of timber land, the long-term growing cycle and the fluctuation, up and down, of timber prices can be accounted for in the appraised value of the property. See Table 3.6-5 of Volume 2A of the Draft EIS/EIR for net present value of forest land. See also response to T-37 I.

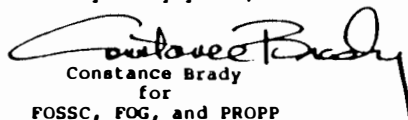
Annual compensation was identified as a potential mitigation measure that was considered. See the discussion in Section 1.1.5 of the Final EIS/EIR under the heading "Other Mitigation Considered".

L-320 (continued)

FOSSC, FOG, PROPP to C-OTP - page 2

- C [3. Health hazards concern us and we believe that questions about these have not been answered completely. Cumulative effects from additional systems is a question that has not yet been addressed.
- D [4. We also agree that Oregon ratepayers may suffer from the long term affects of the project. We want a more careful study done regarding the mutual benefit to both parties (Oregon and California) as was required by the federal enabling legislation. Oregon
- E [legislators and others studying the issue have found evidence that
- F [Northwest power sources will not have excess supplies in the near future. Insufficient information was presented on the effects of the transmission project on fisheries, particularly in Oregon.
- G [5. Another inadequacy of the Draft EIS/EIR is that it presents no alternative routes in the area south of Grizzly Peak.

Very truly yours,


Constance Brady
for
FOSSC, FOG, and PROPP

cc: Oregon Review Committee
Mike Burke, California Public Utilities Commission
U.S. Congressman George Miller
U.S. Congressman Wally Herger
State Assemblyman Phil Isenberg
State Assemblyman Jim Neilsen
State Assemblyman Stan Statham
State Senator Daniel Boatwright
State Senator John Doolittle
C.C. County 5th District Supervisor Tom Torlakson
California Energy Commission
Office of Planning & Research, State Clearinghouse
Zach Cowan, attorney

- C See responses to L-330 F3 and SL-51 A, and Section 1.2.3 of Volume 1 of this Final EIS/EIR. Cumulative effects are addressed in Section 1.1.4 of the Final EIS/EIR.
- D The commentor is referred to the Draft and Final Intertie Development and Use EIS's, which examine the long-term effect of expanded Interties, under a variety of long-term firm contract arrangements, on resource development. See also the responses to L-329 A and L-216 B for a discussion of the benefits of the COTP to the Pacific Northwest.
- E BPA's analysis, published in the IDU EIS, predicts that the PNW's firm surplus power will continue (in diminishing amounts) into the mid- to late-1990's. The PNW will have firm surplus capacity--the ability to meet peak loads for short periods--until well after the turn of the century. Although the current firm power surplus in the Northwest and the possibility that it may be declining demonstrate the prudence of building the Project on the planned schedule, the benefits of the Project do not depend on continuation of the current firm power surplus in the Northwest. Additional benefits come from power available when river flows are better than critical dry conditions used for planning, the fact that California has its highest power demands in the summer whereas the northwest has its highest demands in the winter, and the fact that generating resources added in the Northwest to meet energy load growth will provide ability to meet peak demands in excess of the peak loads in the Northwest.
- See the response to L-3 T for a more complete discussion of this issue.
- F The approach utilized for determining fisheries impacts consisted of identifying all water bodies crossed by proposed routes and collecting the following information for each stream: location, route segment, stream size, presence/absence of special status species, erosion potential based on slope, and miles of stream paralleled by the transmission line. These data were then summarized by route segment and presented in Table 3.3.2. Environmental impacts on fisheries were assessed from these data. Additional data collection efforts are beyond the reasonable and feasible level of detail required for evaluation of impacts. The effects of the overall Intertie development and use on fisheries in the Pacific Northwest is discussed in detail in the Intertie Development and Use EIS.

L-320 (continued)

G

Attachment D, Volume 2A of the Draft EIS/EIR shows several alternatives that were considered to the south and east of Grizzly Peak. A description of these routes is found on page 2.3-13 and impacts were summarized in Section 3.0. The Supplement to the Draft EIS/EIR included additional options in the Grizzly Peak area.

L-321

STATE OF CALIFORNIA

GEORGE DEUKMEJIAN Governor

BOARD OF FORESTRY

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February 27, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca 95866

Dear Sirs,

The California State Board of Forestry has completed its review of the draft California-Oregon Transmission Project EIS/EIR. Several areas of concern were identified during this review. The Board believes that the lead agencies should not accept a final EIS/EIR until these concerns are properly addressed. Neither should a Notice of Determination be issued.

By law, the Board is charged with protecting the State's interest in forest resources on private land, and developing and maintaining adequate statewide forest policy. The Board is further charged with representing the State's interest in federal land matters pertaining to forestry.

The Board has reviewed this EIS/EIR in a manner consistent with its Maintenance of Timber Supply policy. It is the Board's policy to oppose land use diversions which preclude timber growing on, and the harvesting of, privately owned prime timberland and TPL lands, except where the public values to be achieved by diversion exceed the public values to be derived from timber growing.

The areas of concern identified by the Board are: 1) route selection, 2) identified impacts, 3) mitigations specified, 4) compliance with laws and regulations, and 5) economic evaluation. These areas of concern are expanded upon as follows:

1. Route Selection

The Board is concerned that alternatives which would lessen the conversion of timberland to a use other than timber growing were not fully discussed. Volume 2A, Chapter 2, Phase III, Routing Investigations Report describes and explains the route segments considered. Some options which would lessen impacts on timberland were discarded with minimal discussion. One of the

A Your concerns are addressed in the responses below.

B See response to L-321 C.

L-321 (continued)

C

most obvious alternative routes discarded was to be located east of the existing north-south Intertie line. It was discarded on the basis that required transmission line crossovers would decrease the project reliability and raise the project cost. The discussion of crossovers supporting this action is unacceptably brief and only indicates one means of making a crossover. Additionally, there is no indication that a thorough review of existing and developing technology for an alternative to a crossover was considered. For example, exchanging parallel powerline destinations to avoid a crossover was not discussed.

D

There is also another possible alternative which is not discussed in the document. There is at least one other proposed powerline which will be crossing the Sierra and Cascade ranges. There is no mention of the possibility of coordinating the transmission of the Pacific Northwest power with this project to reduce the total acres of timberland which will be impacted. We have been informed by project personnel that these and other alternatives may be technically feasible but on the other hand are not likely to be considered economically feasible. If this is so, it is only the case under the existing energy rates charged. The document does not discuss the possibility of delaying construction until other potential routes would become economically feasible by increased returns from the sale of energy. The project need is now based on efficient use of power and reliability. Thus are very narrow gauges of social benefit and acceptability.

F

The Board questions whether there is a serious inconsistency in reasoning taken in the Routing Investigation Report. Volume 1, 2.5.1.1 Alternative Projects Evaluated Quantitatively, Upgrading Existing AC Lines, argues that upgrading is not feasible based on outage, physical, and reliability problems. On the other hand, Volume 2A, 3.11 Upgrade Route-Redding Area South to Sacramento River, claims that the upgrading of an existing line to project standards is clearly superior. This argument is made on the basis that upgrading is environmentally superior. It appears inconsistent to accept upgrading existing lines in the Sacramento valley while discarding a possible upgrade of existing lines in the segment from Oregon to Redding. It appears in the document that reliability would be equivalent if upgrading were utilized for both segments. Though the upgrading of the Oregon to Redding segment may require the use of larger towers and a wider clearance, we believe that this may lessen the total impact on timberland. Since this alternative was dismissed with minimal discussion, it is not possible to speak to a specific economic evaluation of this alternative; however, any economic evaluation

G

H

C

Exchanging power line destinations by utilizing the existing lines to avoid a crossover has been analyzed. Such an arrangement would not be technically acceptable without rebuilding the existing Intertie lines. The technical investigation disclosed that should the new line or its substitute line from Southern Oregon Switching Station become faulted with one of the existing circuits, the older line would become overloaded. This is because existing Intertie phase conductors are not large enough to withstand the overload current. Rebuilding would require reconductoring of the lines and, in addition, would require rebuilding of the existing towers. Such a solution was abandoned because it would not be economically feasible. See also responses to L-255 D and SL-121 P concerning technical investigations on undergrounding of transmission lines.

D

See response to T-69 F.

E

In addition to the long-term seasonal capacity exchange and resulting benefit to the COTP, construction of the Project on the schedule as planned provides the ability to secure surplus energy from the Northwest. Delaying the Project would reduce this unique opportunity. Furthermore, the COTP has been compared quantitatively to other Pacific Northwest-California transmission alternatives and has been found to be substantially economically superior. See also response to L-3 T.

F

It may appear to be inconsistent to plan to upgrade a double circuit 230 kV line to 500 kV, and at the same time to not upgrade an existing 500 kV line. The lines are of different importance and serve different needs within the power system. Upgrading the 500 kV system could provide the additional capacity, but the system would not be reliable since all capacity would reside in two lines. The COTP provides for the capacity to be split among three lines. See also response to L-321 C.

G

Larger towers would be required, and only two lines would exist. Costs would be significantly higher because both lines would have to be upgraded at a cost much higher than building one new line. The further costs of more severe or frequent outages of the Intertie lines are an additional consideration with this alternative.

L-321 (continued)

H I should include the consideration of increased income from higher electric rates. Regardless, the Board would favor upgrading as much existing line as possible to lessen impacts on timberland.

2. Impacts Identified & Adverse Environmental Effects

J The Board is concerned that all reasonably expected impacts are not identified in the environmental document. Additionally, some environmental effects are addressed in too general a fashion to be adequate under law.

K In Volume 1, Table 4.1.5, the acres of U.S. Forest Service land and Timberland Production Zone lands can be clearly identified. It is not possible to identify the acres of privately owned prime and non-prime forestland affected by the project. This should be made clear in the table or elsewhere in the report.

L In both Volume 1 and Volume 2A, the Universal Soil Loss Equation (U.S.L.E.) is used to estimate soil loss and indicate possible sedimentation impacts on water resources and fisheries. The limitations of this method are stated but there is little information included to explain possible impacts not covered using the U.S.L.E. For example, this system will underestimate the erosion from granitic soils on steep slopes. A better technique would be to use an evaluation comparing the occurrence frequency of high erosion hazard areas for each routing alternative. This will provide a more realistic overall summation of possible impacts on soil loss, water resources, and fisheries.

M There is a misleading conclusion made using the U.S.L.E. in Volume 1 on page 4.1-12. It is stated that Alternative D has the lowest estimated soil loss. This is technically correct based on the U.S.L.E. estimates. However, considering the margin for error in this evaluation, all estimated losses are sufficiently close to be considered equivalent.

N It appears that a reasonably possible impact of the project to vegetation was not considered in either Volume 1 or Volume 2A. Improper timing in removal or disposal of logging slash could provide a viable breeding ground for insects damaging to commercial tree species. This could result in an increased insect population with subsequent damage to adjoining timberlands. Steps should be taken to mitigate this impact.

Volume 1 and 2A address the impacts on wildlife. The possible impacts on most big game species are

H A broad range of the value and cost of power to be transmitted over the COTP has been considered in the economic evaluation of the COTP need in the Draft EIS/EIR as a sensitivity analysis. The total cost of purchasing power from the Northwest and delivery of power over the COTP must be lower than the alternative of generating or purchasing the power elsewhere or the project will not be undertaken. The alternative power values presented in the Draft EIS/EIR reflect what the COTP Participants consider to be representative of the value of power to be delivered by the COTP.

I Your preference for upgrading as much existing line as possible is noted. See responses to L-321 F and L-321 G.

J Comment noted. See responses to specific comments below.

K In Tables 4.1-1 to 4.1-8, Volume 1 of the Draft EIS/EIR, the amount of private prime timber for each alternative route segment can be extrapolated by subtracting "total prime timber crossed" from "miles crossed of prime timber on Forest Service lands." Private non-prime timber amounts for alternative routes can be calculated by subtracting the non-prime timber on Forest Service land in Tables 4.1-1 to 4.1-8.

L See response to L-295 K1.

M Comment noted. The difference may not be significant. See response to L-310 QO.

N Timber within the right-of-way will be removed in accordance with an approved timber harvest plan as required by and in accordance with the appropriate state and federal regulations. The timing in removal or disposal of logging slash would be part of this timber harvest plan. For further forestry mitigations, please see Section 1.1.5 of Volume 1 of the Final EIS/EIR.

L-321 (continued)

- O** [identified. However, impacts on wild turkey flocks in the area are not recognized either individually or cumulatively. There are significant numbers of wild turkey located within the proposed right-of-way from Grizzly Peak to Redding. There also is no discussion of possible impacts on nongame species which do not possess a special status classification.
- P** [Volume 1, 4.4, Cumulative Impacts, is not a full disclosure of the project effects on timberland when combined with impacts of other existing transmission lines. This section acknowledges the existence of other transmission lines in the vicinity of the proposed project but does not provide an adequate picture of the combined effect on the timberland resources of the state. The Board is concerned that the combined effect of powerlines in California will result in a significant loss of commercially available timberland. This will have a corresponding impact on other timberland related resources. The Board believes these impacts will include: 1) direct removal of timberland from a timber growing use, 2) secondary inducement of increased residential development of timberland, 3) increased obstacles to the efficient management of remaining timberland, and 4) lower quality of related resources such as water quality, recreation, and fisheries.
- Q** [Volume 1, 4.5, Long and Short Term Impacts, concludes that the impacts of this project will be offset by the benefits to human and natural environments from the increased efficiency of inter-regional power exchanges. In support, a statement is included that the project will stimulate local economies and create new jobs.
- This is an unacceptably narrow view which allocates a disproportionate part of the decision to economies of the electrical production. The lost value of timber and agriculture is discussed in Volume 2A under impacts, but it is not considered in the cost-analysis of the project. Further, the economic losses associated with other impacted resources such as recreation, wildlife, and water resources/fisheries are not defined or considered in this statement. The Board believes the statement of benefits is too high given losses or tradeoffs not mentioned. This leads to a biased statement of project benefits and leads us to question if there has been a real attempt to look at the net social benefit of the project.
- R** [
- S** [Volume 1, 4.6, Growth Inducing Impacts, acknowledges that lower cost power is likely to stimulate growth in the Pacific Northwest and Pacific Southwest. This appears to contradict the last paragraph which finds no significant growth inducing impacts will occur, as
- O** No significant impacts on wild turkeys are expected on private lands because small amounts of habitat in any given area will be affected. Human disturbance is controlled by private landowners. On public lands some impacts due to increased access are possible. Road closures should be feasible in this area because topography is steep and vegetation is dense. Access control can be resolved on USFS lands during issuance of special use permits.
- P** There are many other potential impacts to private timberlands beyond powerlines that cannot be analyzed in the COTP EIS/EIR. In order to draw reliable conclusions to the concerns raised by the Board, a more comprehensive review of all threats to private timber resources would be necessary.
- Q** Sample figures as costs for easements were included in the cost analysis for the COTP. The cost of an easement reflects the productive value of the land that is removed from production. In this direct way, the lost value of timberland is included in the costs of the COTP. See response to L-306 TT.
- R** See response to L-203 B.
- S** See revised Section 4.4 (Cumulative Impacts) in Section 1.1.4 of Volume 1 of the Final EIS/EIR.

L-321 (continued)

S there are no existing energy related obstacles to
T growth in California. If this is true, the EIS/EIR
U seems to challenge whether there is a current need for
the project. If the statement that growth will be
induced in local areas is correct, the section does not
sufficiently address impacts on natural resources
associated with such growth. The potential loss of
additional timberland or agricultural land to
residential and commercial development made feasible by
lower cost power is not addressed as a growth related
impact.

3. Mitigations Specified

V The Board is concerned that not all feasible
mitigations available to minimize impacts on timberland
and related resources were considered. The Board is
further concerned about the general and unenforceable
nature of mitigations.

W Volume 1, 5.1, California-Oregon Transmission Project,
states that environmental impacts were assessed under
the assumption that mitigations described will be
implemented. The section then indicates inspectors
will be assigned by COTP and may request redirection of
construction efforts to obtain implementation of
mitigations. This is not a strong statement and hardly
a guarantee that mitigation will take place. If the
real intent is to minimize impacts, the project
contract should provide the inspector authority to stop
operation if mitigations such as erosion control
efforts are not properly implemented. Also, most
significant erosion events result from unexpected
storms of high intensity or long duration. If
construction activities are allowed to proceed in
advance of erosion control efforts, the potential for
significant impacts is greatly increased. Inspectors
will need a clear charge and firm authority to prevent
this possibility.

X The EIR/EIS indicates that project construction will
take place during the winter period. This requires
that special care be taken to avoid possible increases
in surface erosion or mass movement. Specific
mitigations for construction operations during the
winter period were not identified in either Volume 1,
Section 5.0, Mitigations Measures or in Volume 2A,
Phase III. The forest practice rules will require
special practices for winter operations related to
logging. However, the potential for increased erosion
related to winter period construction activities must
be addressed in detail.

Z Volume 1 and 2A prescribes appropriate mitigation
measures for geologic hazards. One additional

T The Draft EIS/EIR states that there are no energy related
obstacles to growth in California or the PNW. It is anticipated
that sufficient power can be made available to meet California's
demands through a combination development of a number of new
power resources and continuation of the utilities conservation
programs. The COTP, however, in the economic analyses presented
in Section 1.5 and Appendix B to Volume 3A of the Draft EIS/EIR
is expected to be a more economic and environmentally superior
means of meeting that growth as compared to the alternatives.

The relatively widespread benefits of lower cost power discussed
under the no action alternative, Volume 1, page 2.4-1, to all of
the Participants is expected to avoid concentrations of lower
power cost benefits which would cause differential electric rates
between different locations in California. Therefore, the effect
of the lower cost power which can be delivered by the COTP is not
expected to reduce power costs between different locations within
California or within the Pacific Northwest to the extent that
land uses change.

U See response to L-321 S.

V The compliance and monitoring plan will identify the means for
monitoring the effectiveness of the mitigation measures. We do
agree with your comment, and many of the mitigation measures have
been revised to reflect the need for more specificity.

W The construction manager for the COTP will have authority to stop
activities if mitigation measures such as erosion control are not
properly implemented. This authority is properly placed with the
construction manager and not with individual inspectors in the
field. Individuals and inspectors will have the authority to
stop site-specific activities that are in violation of the miti-
gation requirements. The inspector's role is to see to it that
the transmission line is constructed in accordance with the plans
and specifications. Plans and specifications will contain the
mitigation requirements identified in the Final EIS/EIR.

X See response to L-362 R.

Y The USDA Forest Service Manual, "Water Quality Management for
National Forest Service Lands in California" (August 1982) con-
tains the following discussions for Road and Building Site
Construction: Practice No. 2.24 Traffic Control During Wet
Periods and Practice No. 2.25 Snow Removal Controls to Avoid
Resource Damage:

Y
(cont.)

PRACTICE: 2.24 Traffic Control During Wet Periods

OBJECTIVE: To reduce road surface disturbance and rutting of roads.
To lessen sediment washing from disturbed road surfaces.

EXPLANATION: The unrestricted use of many National Forest roads during wet weather often results in rutting and churning of the road surfaces. Runoff from such disturbed road surfaces often carries a high sediment load. The damage/maintenance cycle for roads that are frequently used in winter can create a disturbed road surface that is a continuing sediment source.

Roads that must be used during wet periods should have a stable surface and sufficient drainage should be provided to allow such use with a minimum of resource impact. Rocking, oiling, paving, and armoring are measures that may be necessary to protect the road surface and reduce material loss. Roads that are not needed for public access or forest administrative use should be closed to use during the wet season. In many cases, use can be discouraged, but not prevented. Where winter field operations are planned, roads must be upgraded, and maintenance intensified to handle the traffic without creating excessive erosion and damage to the road surfaces.

IMPLEMENTATION: Road closures and traffic control measures should be used outside active timber sale areas. Project-associated implementation procedures can be enforced by District personnel. Hauling activity can be controlled by the sale administrator within active timber sales. The decision for closure is based on local soil moisture conditions and other criteria.

Detailed mitigative measures are developed by design engineers, using an interdisciplinary approach as necessary. Forest Service foremen and supervisors are responsible for implementing force account projects according to design standards. Contracted projects are implemented by the contractor or operator. Compliance with plans, specifications, and operating plans is assured by the Forest Service CORE or ER.

PRACTICE: 2.25 Snow Removal Controls to Avoid Resource Damage

OBJECTIVE: To minimize the impact of melt water on road surfaces and embankments and to consequently reduce the probability of sediment production resulting from snow removal operations.

EXPLANATION: This is a preventative measure used to protect resources and indirectly to protect water quality. Forest roads are sometimes used throughout the winter for a variety of reasons. For such roads, the following measures are employed to meet the objectives of this practice:

L-321 (continued)

Y
(cont.)

1. The contractor is responsible for snow removal in a manner which will protect roads and adjacent resources.
2. Rocking or other special surfacing and/or drainage measures may be necessary, before the operator is allowed to use the roads.
3. Snow berms shall be removed or placed to avoid accumulation of melt water on the road and prevent water concentration on erosive slopes or soils. If the road surface is damaged, the purchaser or cooperator shall, prior to road use, replace lost surface material with similar quality material and repair structures damaged in blading operations, unless climatic conditions prevent necessary work from being accomplished or as otherwise agreed to in writing.

IMPLEMENTATION: Project location and detailed mitigative measures are developed by the interdisciplinary team.

Forest Service foremen and supervisors are responsible for implementing force account projects to design standards and EAR criteria.

Contracted projects are implemented by the contractor and operator. Compliance with criteria in the EAR, specifications, and the operating plan is assured by the COR, ER, and FSR.

RECOMMENDATION: Best Management Practices.

The appropriate information from this discussion and the references which have been listed have been incorporated into the Final EIS/EIR. Forest Service Best Management Practices will be implemented along the entire length of the preferred route.

L-321 (continued)

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|----|--|----|--|
| Z | mitigation measure should be included. Particular attention must be applied to drainage of water from unstable areas. Water from access roads or other areas of disturbed soil must be diverted from unstable areas. Where needed, water originating from the unstable area must be controlled and diverted to a safe discharge point. | Z | Comment noted. The purpose of draining water from disturbed soil and unstable areas is to dissipate concentrated flows and divert it to a location where it can be safely discharged at a low velocity. See mitigation measure II.A.7 in Section 1.1.5 of the Final EIS/EIR. |
| AA | Sufficient mitigations for water resources or fisheries are not provided in Volume 1, 5.1 Specific Mitigations for Water Resources or under Volume 2A, 3.3.5 Mitigation Measures. A fixed 100 foot buffer strip of undisturbed vegetation is provided near streams. Board experience with timber harvesting near streams shows that a 100 foot buffer zone is not always adequate. This is particularly true where steep slopes and sensitive soils are involved, as in this proposed project. Steeper slopes require wider buffer strips to separate streams from areas of disturbed soil. Mitigations for stream crossings include crossing at right angles, limiting crossings to one per mile of access road, and consultation with appropriate agencies and biologists. However, the mitigations are too permissive by using the qualifier "should". Mitigations protecting water resources and fisheries must be changed to be mandatory actions to meet the standards of regulations applied by responsible agencies. | AA | The mitigation measures have been revised in this Final EIS/EIR in Section 1.1.5 of Volume 1 to incorporate your comment. See responses to L-295 H2 and L-329 KK. |
| BB | | BB | Many of the site specific mitigation measures will be developed in close consultation with regulatory agencies through the permitting process once detailed design and access road locations are known. Qualifiers are present in the measures because they may not be applicable in all instances. The inclusion of these measures in the list of proposed mitigation indicates the COTP willingness to implement them where appropriate. The Final EIS/EIR, Notice of Determination, and Record of Decision will list all final mitigation measures. The Notice of Determination filed by TANC must identify whether mitigation measures were made a condition of the approval if the project (CEQA Section 15094). The Record of Decision prepared by Western must: "State whether all practical means to avoid or minimize environmental harm . . . have been adopted and if not why not". A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation. |
| CC | The installation of culverts on access roads is cited as a mitigation but sizing standards are not indicated. Culverts should be sized to match storms which may occur during the life of the project (50 years). The EIS/EIR indicates access roads will parallel streams for some distance but a specific mitigation is not provided. Roads should generally be kept as far from streams as possible to minimize potential sedimentation. A mitigation of this type should be included. | CC | Sizing standards will be included in the construction specifications. The exact sizes of culverts will be determined during the development of the design of the Project at a time when the access road locations are better known. See Volume 1, Section 1.1.5, mitigation measure III H. |
| DD | | DD | A mitigation measure was added to reflect the commentor's suggestion. See mitigation section II.A in Volume 1, Section 1.1.5. It is desirable to locate roads as far from streams as possible for a number of reasons. This practice reduces the potential for sediment (from roads) to reach the streams and it reduces the cuts and fills for road construction. A common rule of thumb some land management agencies use is to locate the roads on the upper one-third of a slope. We will coordinate closely with land management and regulatory agencies when planning access road locations. |
| EE | Mitigations for vegetation in Volume 1 and 2A rely on avoidance of sensitive plant and forest communities, to the extent practicable, during the construction phase to reduce impacts below a significant level. This is so unspecific it is meaningless. The final line location is not known and impacted communities can not be identified accurately. Without providing a stronger mitigation, such as changing routes, there is little guarantee impacts will be less than significant. There is no effective on-site mitigation available to reduce the loss of productive timberland. Therefore, off-site mitigations should be considered. At the extreme, reforestation of timberland currently occupied by brush or noncommercial hardwoods could partially offset the timberland lost to the powerline. | | |

L-321 (continued)

EE

Mitigation measure IV.H in Section 1.1.5 of the Final EIS/EIR indicates that detailed surveys of potential habitats for special status plant species will be conducted to determine occurrence of populations and to avoid during siting and construction (emphasis added). Also see mitigation measure IV.D.

A mitigation measure has been added to this Final EIS/EIR in Section 1.1.5, mitigation measure IV.L, which indicates that the need for off-site mitigation for loss of productive timberland will be determined through consultation with the California Department of Forestry and the USDA Forest Service.

L-321 (continued)

FF Wildlife mitigations in Volume 1 and 2A are admittedly inadequate in one area and tend to be very general in other areas. The document admits that proposed mitigations to avoid collisions of rare and endangered bird species with the powerlines will not be entirely effective. This will require a very thorough analysis to support a finding of overriding public benefit. The siting of towers below ridgetops is stated as a possible mitigation to avoid collisions with raptors or other bird species. Where this would be required, tower locations would increase the potential for mass movement. This does not appear to be a feasible mitigation from an overall viewpoint. Volume 2A, page 3.5-30 states the conduct of a survey on the impacts to special-status wildlife will be conducted during siting and construction. This is after the fact and is not adequate under the law. The purpose of the environmental review is to identify and mitigate impacts. Further, there is no indication any mitigations will be developed as a result of the survey. At a minimum, a proper mitigation would be to conduct a survey before beginning construction and develop mitigations with guidance by the Department of Fish and Game. The mitigations in Volume 2A, page 3.5-30 for impacts on game animal breeding seasons is designed to make efforts to avoid construction activities during these seasons. This should be mandated, except under unusual circumstances. This must also include construction activities near nests of special status bird species during the breeding season. Additionally, there is no specific mention of mitigations for non-game species. The last item in this area is the consideration of off-site mitigations. An effort should be made to work with the Department of Fish and Game and landowners to develop a more complete list of off-site wildlife mitigations than simply providing replacement snags.

GG

HH

II

JJ

KK

LL The mitigations in land use and land status do little to offset the loss of productive timberland. Off-site mitigations are not considered in Volume 1 and 2A. As previously stated, replacement of acres removed from timber production through reforestation is a possible mitigation. Another possible mitigation would be a land exchange with Pacific Gas and Electric (PG&E). PG&E owns timberlands in the vicinity of the project. Where feasible, affected landowners could be deeded acres equivalent to those lost to transmission lines. This would be in lieu of paying for right-of-way properties. Volume 1 and 2A acknowledge the effect of bisecting timberlands with transmission lines. However, the use of words "avoid and minimize" dilute the effect of the mitigation. Every possible effort should be made to eliminate this type of impact. If

MM

NN

FF Your comments regarding the effectiveness of mitigation to avoid bird collisions are noted. The lead agencies have reviewed all significant and residual impacts. Their findings and any statements of overriding consideration are a matter of public record. A consultation will be initiated with the Fish and Wildlife Service regarding potential collision impact on Bald Eagles as required under the Threatened and Endangered Species Act.

GG The commentor assumes that the towers would be located midslope where there is the highest potential for mass movement (of unstable soil areas). The intent of the mitigation measure is to locate the towers just below the crest of the ridge where instability problems and access requirements would be less than siting the towers midslope. This mitigation measure has dual benefits: 1) It minimizes the potential for bird collisions and 2) the transmission line is not skylined along the ridgetop, causing an adverse visual impact.

A biological assessment is being prepared for all threatened and endangered species potentially affected by the Project under Section 7 of the Endangered Species Act. Appropriate mitigation for unavoidable impacts, if any, will be developed through consultation with the U. S. Fish and Wildlife Service.

HH Mitigation measure number 7 page 5.1-13 states "Conduct detailed surveys along the preferred alternative right of way for special status wildlife species to more fully assess and avoid impacts and develop adequate mitigation measures during the siting and construction." The mitigation measure presupposed the site specific mitigations would only be developed upon close consultation with the federal and state agencies responsible for wildlife management.

II A mitigation measure has been added which responds to your comment. See response to L-295 02.

JJ Many of the adopted mitigation measures will protect special-status nongame species. Other measures will protect important habitats used by nongame species.

KK Off-site mitigation for wildlife will be developed in accordance with the U. S. Fish and Wildlife Service Mitigation Policy.

LL See response to L-321 EE.

MM Landowners will be compensated for the full appraised value of the easement. Land exchanges do not necessarily offset the loss of productive timberland in the aggregate, as PG&E has an active timber harvesting operation.

L-321 (continued)

NN

Every possible effort will be made to minimize clearing in timber lands. Only trees that present a hazard to the safe operation of the transmission line will be removed, and those necessary to constructing the line, roads, and communication facilities. The extent of the clearing required will be determined and the quantity of trees that pose a danger to safe operation of the transmission line will be determined. In areas where the terrain is well below the conductor, trees will not be removed at all. In other areas where trees grow on the side slopes that are above the elevation of the transmission line, danger trees may need to be removed outside of the 200-foot right of way area. Taller towers and careful tower locations will be incorporated with the specific intent of minimizing clearing. Recent 500 kV projects such as the Taft-Bell Transmission line in Montana and northern Idaho have been completed with excellent results using this concept.

L-321 (continued)

- NN [avoidance is not possible, then higher towers or other engineering solutions should be considered.
- OO [The mitigations for socioeconomic effects are very sparse. In effect, compliance with state unemployment regulations is the only mitigation proposed. If the purchase of biomass power was stressed, new jobs may result in the affected areas to offset the timber related jobs lost. This type of mitigation should at least be addressed in the document.
- PP [4. Compliance With Laws and Regulations
- QQ [The section states a timberland conversion permit will be required. This is not correct. Section 4628 of the Public Resources Code and Section 1104.1, Title 14, California Administrative Code, exempts transmission lines from the timberland conversion permit process. Since a portion of the project will be owned by investor-owned utilities, a Timber Harvesting Plan will be required for right-of-way clearance.
- RR [5. Economic Evaluation
- As stated before, the Board does not believe the project cost benefit analysis provides a true net social value of the project. The analysis states the benefits consist of the cost of the California capacity and energy displaced by the combined projects less the costs of capacity and energy purchased from the Northwest. These are compared with the combined cost of the project. The project cost considered is related to construction and does not appear to consider the value of lost timber and agriculture production. Neither does it assign cost values to lost recreation, water quality, fisheries, or wildlife. A net project cost effectiveness cannot be accurately estimated without consideration of these values. If these costs were considered the document needs revision to clarify the evaluation process.

Thank you for the opportunity to comment on the draft COTP EIS/EIR. Please contact Mr. Dean Cromwell, Executive Officer at phone (916) 445-2921 if you have any questions on our comments.

Sincerely yours,

Harold R. Walt

Harold R. Walt
Chairman

cc: Gordon Van Vleck
Jerry Partain

- OO We concur with your comment. A mitigation measure has been added which states: "Provide opportunities for logging slash to be utilized by individuals or companies that produce biomass power".
- PP This statement is correct; a timberland conversion permit will not be required. Table 6.1-2 has been corrected in Volume 1, Section 1.1.6 of this Final EIS/EIR.
- QQ The COTP will comply with applicable regulations for permit requirements. If it is determined that a timber harvest plan is required, one will be prepared.
- RR See responses to L-203 B, L-309 W, part 11, and L-329 A.



Sierra Club Mother Lode Chapter

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

please reply to: John K. Moore
5125 8th Avenue
Sacramento CA 95820

28 February 87

EIS/EIR Environmental Coordinator
California-Oregon Transmission Project
P O Box 660970
Sacramento CA 95866

Gentlemen:

The Mother Lode Chapter of the Sierra Club herewith submits its comments on the draft EIS/EIR for the California-Oregon Transmission Project. As far as timely receipt is concerned, this letter is being mailed on 28 February and picked up by the Postal Service the same afternoon. There should be no question of its being appropriately postmarked.

A [The Chapter recognizes the potential benefits of the line's supplying substantial amounts of electricity from regions with excess generating capacity. Of particular benefit is the supplying of energy that might otherwise be generated by California projects that would be very damaging to the environment and supply only small amounts of energy. The Clavey project in Tuolumne County, that would require 66 miles of transmission line and ~~about~~ 23 miles of an outstanding trout stream, is a particularly bad example of such a project; its proponent is a member of TASC. The document should discuss damaging projects foregone in greater detail.

On the other hand, the line may clearly have substantial environmental impacts which should be mitigated or avoided. As those most directly affected have been emphatically telling you, it does take a lot of nerve to disrupt them significantly by an immense project from which they derive little, if any, benefit.

B [The Sierra Club believes that conservation is very often the cheapest method to increase energy supplies, and is further unlikely to have adverse environmental impacts. The document's discussion of conservation is minimal.

At this time, the Chapter does not have a single preferred routing. Several distinctly different alternatives which appear to have merit have been proposed during the comment period, and the Chapter does not have the detailed information necessary for a comparison of these routes.

C [Generally, the Chapter believes that new utility lines should be located as close to existing corridors as feasible, provided that additional adverse

A It is correct that there would be environmental impacts from the projects which would be needed to replace the COTP. See Table 2.5-1 of the Draft EIS/EIR, Volume 1, for a tabulation of how various alternatives are related. The Draft EIS/EIR does not conclude which specific projects would be displaced, because this is dependent upon volatile, economic variables.

B Conservation by itself will not meet all of the objectives of the COTP, since, for example, it will not increase the reliability of the existing AC Intertie System. See response to L-159 A.

C See responses to L-177 A and L-295 FF.

L-322 (continued)

Mother Lode Chapter, Sierra Club
February 28, 1987

-2-

- C** environmental impacts do not result. Total disruption may thereby be reduced. The Chapter considers upgrading existing lines to be especially meritorious.
- D** The Chapter supports the alternative routing in the vicinity of Tule Lake proposed by Modoc County Planning Commissioner Cross because it would minimize disruption of agriculture in this area. The Chapter also requests that the alternative of reconstructing a segment of the existing line further to the east and locating the new line in the existing right-of-way in this vicinity be analyzed. Such a relocation would reduce aesthetic impacts on Lava Beds National Monument.
- E**
- F**
- G** The alternative proposed by timber companies, close to and east of the existing line to the intersection with the PC&E gas line, thence generally along the gas line to the valley, deserves detailed analysis because it would minimize the impact to commercial forestland.
- H** The Chapter prefers locating the line at a minimum feasible distance from the existing line to the preferred route about 5 miles distant. Many types of catastrophic events that might put the line out of service would seem to have the same potential for damage whether the lines are close or more distant. Examples of such events are high winds, heavy snows, and volcanic eruptions. Plane crashes seem generally not to affect areas a mile in size. The Forest Service, we understand, has vigorously disputed the plausibility of the project's analysis of forest fire hazard, arguing that a single corridor can be more easily defended than two corridors and pointing out that prescribed burning in the narrower corridor can more effectively reduce fuel loads. We presume the Forest Service's analysis to be highly credible, and suggest that the analysis be compared in detail before a final decision about routing is made.
- I**
- J** As for additional impacts on forest resources, the preferred routing has substantially greater impacts than those proposed by the timber industry and Forest Service. Because the old-growth forest will become so scarce and the status of the spotted owl so precarious if present timber harvesting practices continue, the corridor should be routed away from old-growth forests and spotted owl habitats.
- K** ^{adverse} The preferred alternative would have visual impacts on Black Mountain-Tionest Road and Powder Hill Road, major routes for travel to the Medicine Lake Highlands and Medicine Lake recreational area. The Chapter is also concerned about visual impacts in the vicinity of Glass Mountain and the Burnt Lava Flow.
- L** The Chapter is pleased that routes through the Capay Valley, whose very attractive agricultural landscape and forested backdrop are enjoyed by many visitors, are no longer under consideration.
- M** The preparer of these comments wishes to state that it is surprisingly difficult to find hard information in the dEIS/EIR, despite its astonishing bulk. The multi-colored maps are attractive, but (1) adding a color legend for lands outside the corridor and (2) indicating on which map routes are continued would have made them a great deal easier to read. If there is an overall location map for the map volume, the preparer couldn't find it.

Yours truly,

John K. Moore

John K. Moore, for the Conservation Committee

- D** Comment noted. Upgrading the existing two AC Intertie lines was considered but eliminated due to reliability concerns. See the Draft EIS/EIR, Volume 1, page 2.5-3. The COTP does include the upgrading of 170 miles of 230 kV transmission line between Redding and the Sacramento River.
- E** See response to L-330 H.
- F** See response to L-3 B and L-3 C.
- G** A route of this type would require crossing the existing AC Intertie line. The infeasibility of this is discussed in the Draft EIS/EIR, Volume 2A, page 2.4-4. See also responses to L-159 F, SL-121 P, and T-69 F.
- H** See responses to L-53 B and L-295 FF.
- I** See responses to L-295 FF, and L-313 C.
- J** Old-growth forest and spotted owl management areas were avoided during the routing of the line where possible. For a comparison of the Draft EIS/EIR preferred route with new route options developed in coordination with the Forest Service, see the Supplement to the Draft EIS/EIR.
- K** The commentor's concerns over these impacts, discussed in the Draft EIS/EIR, are acknowledged. New route options have been analyzed that will avoid the impacts addressed in this comment. These routes are discussed in the Supplement to the Draft EIS/EIR.
- L** Comment noted.
- M** The map legends for the Draft EIS/EIR Volume 4A maps (Land Use and Land Cover, Land Status/ Visual Resources, Biological Resources) identify discipline items both inside and outside the six mile corridor. A six mile wide highlight was used for Draft EIS/EIR maps to focus attention on environmental resources for three miles on each side of the reference centerline for the 1,500 foot wide routes. Grey shading indicates the boundary of the corridor and darkens the appearance of the colors, but does not alter the legend.

L-322 (continued)

M
(cont.)

The commentor's concerns over these impacts, discussed in the Draft EIS/EIR, are acknowledged. New route options have been analyzed that will avoid the impacts addressed in this comment. These routes are discussed in the Supplement to the Draft EIS/EIR. Section 1.2.2 of Volume 1 of the Final EIS/EIR lists and discusses the route options incorporated into the new Project preferred route.

L-323

Patricia Bello
P.O. Box 63
Knightsen, Ca. 94508
Feb 28, 1987

Environmental Coordinator
Cal. Farm - Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca. 95866

- A [Sir
- B [The Area of Knightsen, Ca. has power transmission lines running North-South which are already making an eyesore. Please look over this project proposal and reject it or move it to another area where it will not infringe on our visual environment.
- B [This project seems more a business venture than a need for power. Business, large or small, has a responsibility to the public to be reasonable.

Sincerely
Patricia Bello

- A Comment noted. Your preference to relocate the proposed line beyond the visual environment of Knightsen is noted.
- B The COTP is being developed by a diverse group of large and small California utilities, both publicly and privately owned. The vast majority of California ratepayers are represented by the Project Participants. The COTP is expected to reduce future increases in the cost of service to the Participant ratepayers. The benefits of additional power revenue to the Northwest and ability for California utilities to sell power to Northwest utilities during the Northwest winter peak season will provide economic benefits to Pacific Northwest ratepayers. See also response to L-3 T.

BETHEL ISLAND
FIRE PROTECTION DISTRICT

3045 Ranch Lane/P.O. Box 623
Bethel Island, CA 94511
Business Phone (415) 684-2211

Feb. 26, 1987

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, Ca. 95866

To whom it may concern:

After reviewing volume 1 and volume 2A of the draft environmental impact report and the COTP supporting environmental report, it appears that the fire protection concerns may not have been adequately addressed. The Bethel Island Fire District would like these problems addressed to our satisfaction prior to any physical activity starting on this project.

I will list concerns we have with your project, some of which are mentioned in volume 1 and 2A.

- A 1. On page 1.1-2 volume 1, last paragraph, December 22, 1982, power line and towers blown down. These power lines will be crossing open land in most instances and since a large percentage of the soil in the Bethel Island Fire District is peat dirt which burns and cannot be extinguished by means other than flooding, we feel that primary company responsible for this project should agree to pay for extinguishment of all fire started by or connected to this project. Depending on the size of the area affected the cost can be enormous.
- B 2. Page 2.1-20, Southern section alternatives and options. If the power lines in alternative A or B are installed they will add one more obstacle if they fall or otherwise block the roads leaving Bethel Island. We feel that this could happen during flooding or a major earthquake in addition to the towers and power lines being blown down.
- C 3. Page 5.1-18, J. Field, Corona, and Safety considerations.
- D 5. Equip all vehicles working along right of way with fire fighting equipment. Equipment should be outlined by the local fire district.
- D 6. Any plan for correct fire district response should be checked by the local fire district or formulated by the local fire district at the expense of agency controlling the project.
- E 4. Page 3.10-1, volume 2A, section 3.10.2 Potential Impacts, Paragraph 2. Main fire hazards. We agree that these are serious fire hazards and should be addressed. In addition to these considerations I will again direct your attention to the continuing problem of fires occurring from downed power lines. These fires can and will result in many thousands of dollars being spent for extinguishment.

A The transmission line will be equipped with devices that will detect any break in the lines and automatically interrupt the power flow within seconds. Instances of fires being caused by downed transmission lines are rare. This is because transmission lines have circuit breakers that can de-energize a downed line in about 1/10 of a second, much faster than some of the lower voltage distribution lines.

B It is true that a power line may cause an obstacle to access to Bethel Island if some severe weather were to cause the collapse of the towers, which may drop the conductors onto the road. If this were to occur, the distribution lines serving the Island would also be a problem. The COTP line will be designed to withstand all known severe weather loadings. See also response to T-81 D.

C We concur with your comment, and a statement has been added covering fire fighting equipment. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.

D We concur in part with your comment. It is appropriate that the plan be responsive to the local fire district's needs and capabilities. In order to prepare such a comprehensive plan, local fire districts and the California Department of Forestry input will need to be solicited. We suggest the mitigation measure is appropriate as written.

L-324 (continued)

**BETHEL ISLAND
FIRE PROTECTION DISTRICT**

3045 Ranch Lane/P.O. Box 623

Bethel Island, CA 94511

Business Phone (415) 684-2211

E [These costs cannot and will not be charged to the Bethel Island Fire District.

F [5. Page 3.10-17, 3.10.4.4 Field effects on cardiac pacemakers and flammable materials. Since numerous people from other states and areas of California may not know of the pacemaker hazard prior to contact with the problems associated with the power lines, it appears that short of having some one check all persons entering the Bethel Island area and in the Delta it may be impossible for us to keep persons with the inappropriate pacemakers from exposure.

Sincerely,



Joseph J. Whitener, Chief

Bethel Island Fire Protection District

E See response to L-324 A.

F The possibility of ignition of flammable materials is virtually nonexistent. In a recent research project into the probability and consequence of gasoline ignition under high voltage transmission lines it was found that, "There are no known cases of transmission line electric fields inducing spark ignition of gasoline in non-contrived situations." This should be expected, since calculations show the probability of such an event is extremely small. Pacemakers have not been seen by regulators to be a problem. See also response to L-309 E2.

L-325

ROGER BEERS
ATTORNEY AT LAW
380 HAYES STREET, SUITE ONE
CIVIC CENTER
SAN FRANCISCO, CALIFORNIA 94102
(415) 861-1401

February 27, 1987

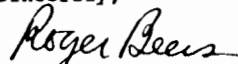
Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Re: Shasta Valley C.A.T.L.E.

Dear Environmental Coordinator:

Please find enclosed a copy of Comments of Shasta
Valley C.A.T.L.E. on Draft EIS/EIR for the California-Oregon
Transmission Project.

Sincerely,



ROGER BEERS

Attorney for Shasta Valley
C.A.T.L.E.

RB:jm

cc: Susan Hart
Shasta Transmission Line

L-325 (continued)

COMMENTS
OF
SHASTA VALLEY C.A.T.L.E.
ON
DRAFT EIS/EIR
FOR THE
CALIFORNIA-OREGON
TRANSMISSION PROJECT

ROGER BEERS
380 Hayes Street, Suite One
San Francisco, CA 94102

Attorney for SHASTA VALLEY
C.A.T.L.E.

L-325 (continued)

Shasta Valley C.A.T.L.E. ("C.A.T.L.E.") submits the following comments on the draft EIS/EIR for the California-Oregon Transmission Project:

I. INTRODUCTION

Shasta Valley C.A.T.L.E. was organized specifically to oppose the siting of this transmission line through the Shasta Valley. "C.A.T.L.E." is an acronym for "Citizens Against Transmission Line Easement." It has broad support from a variety of interests and groups in the Shasta Valley.

A It opposes any siting of this transmission line through the Shasta Valley because of the significant impacts it would have on:

- agricultural activities, ranch lands and timber lands;
- the rural character and communities in the Shasta Valley;
- wildlife; and
- the unique visual setting of the area.

B C.A.T.L.E. also opposes any siting through the Shasta Valley because there are better alternatives -- in conjunction with existing lines, and other alternative facilities. C.A.T.L.E. has participated vigorously in the siting process at every stage.

C The DEIS has selected the eastern route as the project preferred and environmentally superior route. Nevertheless, C.A.T.L.E. submits these comments to affirm its support for a choice that doesn't traverse Shasta and Butte Valleys; C.A.T.L.E. also wants to make clear its view that

A&B Your opposition to siting the transmission line through the Shasta Valley is noted.

C Comment noted.

L-325 (continued)

C | there is not sufficient documentation or analysis of the
environmental impacts of any siting through Shasta Valley.

D | II. THE DRAFT EIS/EIR DEMONSTRATES NOT ONLY
THAT THE EASTERN ROUTE IS ENVIRONMENTALLY
SUPERIOR, BUT THAT THE SHASTA VALLEY ROUTE
IS ENVIRONMENTALLY UNACCEPTABLE

E | The summary chart, Table 1A, beginning on page 3 of
the DEIS, discloses that among all alternatives a Shasta Valley
route would have the worst impacts on the following important
resources:

Clearing: Right-of-way (acres)	986.41
Estimated construction cost	\$36,803,000
Soil loss tons/year	1024.94
Tall-growing vegetation removed, forest land (acres)	1,217.92
Permanent clearing of roads and tower sites (acres): Forest	201.64
Miles of raptor nesting area crossed	5.60
Total prime timber crossed (in miles)	32.46
Miles crossed of agricul- tural preserve lands	14.83
Native American sites within 1,000 feet of line	2
Native American sites within 3.4 miles of line	20

F | Moreover, the DEIS makes clear that any routing
through the Shasta Valley would have impacts that are sig-
nificant and can't be adequately mitigated for the resources
of greatest concern to that area as disclosed in the prior

D | Comment noted.

E | These figures are correct.

F | Comment noted.

L-325 (continued)

F

chart. Those impacts that cannot be mitigated are described on page 12 as follows:

Land Use: Land use impacts include crossing prime timberland, Timberland Production Zones, Prime Farmland or Farmland of Statewide Importance (or irrigated, cultivated farmland), and agricultural preserves. All of these impacts would remain significant following application of the proposed mitigation measures.

Visual: Although mitigation measures would reduce effects, the effects would remain significant following application of the measures.

. . . Effects from construction of new access roads and the location of transmission lines near communities may be significant and unmitigatable.

G

III. THE ANALYSIS IN THE DRAFT EIS OF IMPACTS ON THE SHASTA VALLEY IS SUBSTANTIALLY INCOMPLETE

C.A.T.L.E. submits that the Draft EIS Analysis is incomplete and inadequate in its analysis of the following impacts of any siting through the Shasta Valley:

H

A. WILDLIFE IMPACTS

1. The California Department of Fish and Game's "jeopardy opinion" on Shasta-Butte Valley is not mentioned.

I

2. Information provided to TANC by C.A.T.L.E. that is available in Region 1 of the Department of Fish and Game in Redding is inexplicably not in the Draft EIS. Examples include: (1) the presence of a Bald Eagle winter roost area on the Shasta River, and use area and suspected nest area near Hart Meadows; (2) the existence of a migratory water fowl pathway up Butte Creek; (3) the existence of an

G

See responses to your specific comments L-325 H, L-325 I, L-325 J, L-325 K, L-325 L, and L-325 M.

H

See response to L-353 C.

I

The bald eagle roost site near Table Rock near the Little Shasta River was known. It was not discussed, but the presence of the roost and use of the area by cranes and golden eagles contributed to the low ranking of this route. None of the many agency and local contacts reported bald eagle nest or use area at Harts Meadow. The area does not appear suitable as a bald eagle use area due to the lack of a nearby foraging area.

A waterfowl flight pathway was not identified during agency contacts. A flyway may well exist here.

The proposed Table Rock peregrine falcon introduction was known, but not mentioned because publicity may jeopardize the success of peregrine reestablishment. The identified routes are within the expected flight range of peregrines and some impacts due to collisions may be possible.

We emphasize that the analysis of wildlife impacts concluded that Alternative A would have significant unmitigable impacts; this contributed strongly to the decision not to choose this alternative as the preferred route.

L-325 (continued)

I | endangered species reintroduction site for peregrine falcon
| near Table Rock.

J | 3. Inadequate field studies.

C.A.T.L.E. has previously complained about the lack
of field studies conducted for any siting in the Shasta Valley.
The DEIS does not disclose that this deficiency has yet been
repaired.

K | Apparently the only field work has consisted of
| two fly overs by helicopter and fixed wing aircraft, during
| which the consultants took some videotapes. But the DEIS
| does not mention what information they got. More signifi-
| cantly, the DEIS does not reflect any on-the-ground studies,
| except for visual studies. For biology data, the DEIS does
| not show any studies done on the ground.

L | If such studies had been performed, particularly
| for different seasons, C.A.T.L.E. expects that these studies
| would have found much more wildlife use than is set forth in
| current literature. C.A.T.L.E. understood that the Project's
| consultants were going to send people out last summer for
| biological field surveys on the ground -- but the DEIS
| doesn't reflect that this was done.

In order to gauge the impacts on Shasta Valley,
it would be essential first to walk the ground in order to
determine habitats used by water fowl, and habitats that
endangered species are likely to use. Second, observers
should be stationed in corridors to determine water fowl
usage -- e.g., migratory birds -- which tends to increase

J | Ground field surveys were conducted by routing team members at
| various times from August 1985 to April 1986. Analyses were
| conducted by visual, biological, earth resources, and land use
| specialists and provided adequate information for the
| environmental process.

K | See response to L-325 J.

L | Surveys were conducted in certain key areas where additional
| information was needed. Eight days of field work were conducted
| in the Klamath River area near Copco and Iron Gate Reservoirs to
| evaluate occurrence of wintering and nesting bald eagles,
| peregrine falcons, prairie falcons, ospreys, golden eagles, great
| blue herons, Canada geese, and other waterfowl. Other field work
| was conducted in Butte Valley, Grass Lake, and the Klamath Basin.

Certainly, additional information could have been collected in
Shasta Valley and Butte Valley. However, Alternative A was
determined to have such a large number of significant impacts to
wildlife resources and watershed protection that it was unlikely
to be selected as the preferred route. As a result, no
additional work was warranted at the time.

L-325 (continued)

L when Butte Valley is frozen. This would need to be done in late fall, or early winter. In this respect, Butte Valley has been studied, but Shasta Valley has not. Third, it would be important for field studies to determine prime elk calving areas -- which would be missed unless observers went in the spring to examine such areas. Finally, field studies would be essential to spot Bald Eagle winter roosts. The observer would only have to be there once in the winter to see it -- e.g., on Shasta River in area of Table Rock.

M C.A.T.L.E. understands that the project consultants are now doing more elaborate field studies for the preferred route. Nevertheless, C.A.T.L.E. wants to make sure that readers of the EIS are alerted to the deficiencies in information regarding Shasta Valley. C.A.T.L.E. does not quarrel with this procedure to extent the project consultants are doing more refined work on preferred routes and only flyovers of Shasta Valley. The result of this procedure, however, is that there is an insufficient basis in this draft for selecting Shasta Valley.

N B. OTHER CONCERNS

1. The DEIS contains no mention of property values and the impact of a transmission line on adjoining properties in terms of property values.

O 2. Visual Impacts.

The DEIS does not take into account the long view -- e.g., from I-5. Obviously, the visual analysis program is

M Comment noted.

N As stated in the Draft EIS/EIR, Volume 2A, Section 3.8.2.4, the value of the encumbrance resulting from the transmission line easement will be established by appraisal and negotiations. Property owners will be compensated for the value of their losses. This process is intended by law to keep the property owner financially "whole".

Section 3.8.2.4 also states that research on the effects of transmission lines upon nearby property outside of the right of way is not conclusive. The majority of studies indicate that neighboring residential properties do not experience significant losses in value. See response to L-184 A.

O Long views such as those mentioned were taken into account during corridor and route evaluation.

L-325 (continued)

O not used to working 15-20, or 30 mile distances, but this is essential for this area.

P 3. Southern California Edison has volumes of unpublished data regarding collisions of water fowl with transmission facilities, which should be considered. Most information on this topic in the DEIS came from only two symposium proceedings.

Q 4. The DEIS fails to take into account that dryland farming on slopes is more affected by transmission lines. These farming operations use helicopters for spraying, fertilizing, seeding. The DEIS discusses irrigated land only, rather than this dryland farming.

R 5. The DEIS does not take adequate account of the project's impact on community values. If it were sited in the Shasta Valley, clearly the project would have a major impact on the rural, farm-like, non-industrialized setting of the area and the attitudes of people relating thereto. Yet there is no discussion in the EIS regarding this subject.

IV. OTHER DEFECTS IN THE DRAFT EIS HAVE BEEN RENDERED MOOT BY THE SELECTION OF THE EASTERN ROUTE

S By letter dated May 19, 1986, C.A.T.L.E.'s counsel complained that the analyses performed of alternative transmission routes or projects were insufficient. Those comments are incorporated here by this reference. The DEIS
T does not remedy these deficiencies, but so far as C.A.T.L.E. is concerned, they have been rendered moot by the selection of an eastern route.

P Southern California Edison personnel that conducted bird collision studies report to us that few waterbird collisions occurred in their study areas (Pearson pers. comm.). The potential for waterfowl collisions is determined mainly by site specific conditions such as numbers of birds, flight directions and heights, and visibility conditions. We believe that the method used to assess impacts was adequate. Impacts in the COTP study area are expected to be greater than in southern California.

Q The Draft EIS/EIR stated that the overall impacts to non-irrigated farmlands are similar to those associated with irrigated row and field crops. The COTP's potential impact on dryland farming is discussed on page 3.6-5 in Volume 2A of the Draft EIS/EIR.

R The Draft EIS/EIR discusses impacts to the "quality of life" of the residents in the vicinity of the transmission lines in the Draft EIS/EIR, Volume 2A, page 3.8-4. The quality of life within a community or region is generally a very subjective issue and, therefore, objective measurement becomes very difficult. The analysis considered the number of dwelling units within 1.5 miles of the transmission centerline and miles of new access roads per corridor mile. These criteria were used as indicators of the number of people that would be affected by the various routes and the degree that previously remote areas might become accessible. Use of these criteria generated significant impacts in some areas where the proposed routes passed close to population centers. The visual impact analysis further considered the visual impacts of the transmission lines on views from residences. In addition, a social analysis was added to the Final EIS/EIR in Section 1.2.3.

S Comment noted.

T Comment noted.

L-325 (continued)

U In other respects, C.A.T.L.E. has had difficulty obtaining information from the project's consultants, and information previously provided by C.A.T.L.E. regarding the impacts of any siting through the Shasta Valley have been inexplicably omitted from the DEIS. Although this information apparently has not been considered by the project's sponsor, this complaint is also rendered moot by the selection of the eastern route.

V V. CONCLUSION
In sum, Shasta Valley C.A.T.L.E. does not believe there is sufficient information in the DEIS to support any routing through the Shasta Valley. At the same time C.A.T.L.E. affirms its support for any route selection that avoids the Shasta Valley -- as does the eastern route, preferred in the DEIS.

Dated: February 27, 1987

Respectfully submitted,

ROGER BEERS
380 Hayes Street, Suite One
San Francisco, CA 94102

By:


ROGER BEERS

Attorney for SHASTA VALLEY
C.A.T.L.E.

U The interested public in Shasta Valley was very cooperative in providing information on the area's environmental resources. We cannot respond to this comment without specific information.

V Comment noted.

L-326

STATE OF CALIFORNIA—OFFICE OF THE GOVERNOR

GEORGE DEUKMEJIAN Governor

OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814



February 27, 1987

Rick A. Lind
Transmission Agency of
Northern California
P.O. Box 661030
Sacramento, CA 95866

Subject: California-Oregon Transmission Project/Los Banos-Gates Transmission
Project, SCH# 85040914

Dear Mr. Lind:

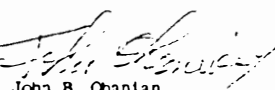
A The State Clearinghouse submitted the above named draft Environmental Impact Report (EIR) to selected state agencies for review. The review period is closed and the comments of the individual agency(ies) is(are) enclosed. Also, on the enclosed Notice of Completion, the Clearinghouse has checked which agencies have commented. Please review the Notice of Completion to ensure that your comment package is complete. If the package is not in order, please notify the State Clearinghouse immediately. Your eight-digit State Clearinghouse number should be used so that we may reply promptly.

B Please note that recent legislation requires that a responsible agency or other public agency shall only make substantive comments on a project which are within the area of the agency's expertise or which relate to activities which that agency must carry out or approve. (AB 2533, Ch. 1514, Stats. 1984.)

These comments are forwarded for your use in preparing your final EIR. If you need more information or clarification, we suggest you contact the commenting agency at your earliest convenience.

Please contact Norma Wood at 916/445-0613 if you have any questions regarding the environmental review process.

Sincerely,


John B. Ohanian
Chief Deputy Director
Office of Planning and Research

cc: Resources Agency

Enclosures

A The individual Agency comments and responses are included as L-355 to L-362.

B Comment noted.

OFFICE OF COMPLETION AND ENVIRONMENTAL DOCUMENTATION FORM

PROJECT NAME: California-Oregon Transborder Project
 PROJECT NUMBER: 85040914
 PROJECT LOCATION: California-Oregon border, near the town of Calexico, California
 PROJECT TYPE: Water Project
 PROJECT STATUS: Completed

DATE OF COMPLETION: 12-2-86
 DATE OF REVIEW: 12-2-86
 REVIEWER: John Wood
 REVIEWER TITLE: Project Manager

NOTE: This document is a summary of the project and is not intended to be used as a legal document.
It is the responsibility of the project manager to ensure that all information is accurate and up-to-date.

PROJECT DESCRIPTION: The project consists of the construction of a water pipeline from the Colorado River to the town of Calexico, California. The pipeline is 10 miles long and will provide water to the town and surrounding area.

PROJECT OBJECTIVES: The project objectives are to provide water to the town of Calexico, California, and to improve the water quality in the area.

PROJECT SCOPE: The project scope includes the construction of the pipeline, the installation of pumps and valves, and the operation and maintenance of the system.

PROJECT BUDGET: The project budget is \$10 million.

PROJECT RISK: The project risk is low.

PROJECT IMPACT: The project impact is positive.

PROJECT BENEFITS: The project benefits include improved water quality, increased water availability, and economic development.

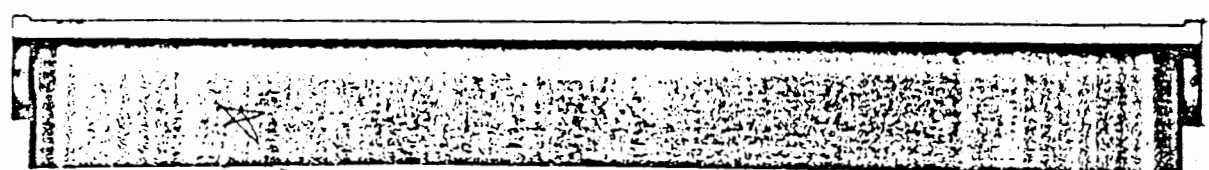
PROJECT CHALLENGES: The project challenges include the construction of the pipeline, the installation of pumps and valves, and the operation and maintenance of the system.

PROJECT CONCLUSIONS: The project was completed successfully and has provided water to the town of Calexico, California.

PROJECT RECOMMENDATIONS: The project manager recommends that the project be replicated in other areas.

PROJECT CONTACT INFORMATION: John Wood, Project Manager, California-Oregon Transborder Project, 12-2-86.

PROJECT REFERENCES: California-Oregon Transborder Project, 12-2-86.



L-327



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
ALTURAS RESOURCE AREA

P.O. Box 771
Alturas, California 96101

IN REPLY REFER TO

(C-020)
2800/CA 19518

Mr. Rick A. Lind
Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

Dear Mr. Lind:

The Bureau of Land Management has reviewed the Draft Environmental Statement for both the California-Oregon Transmission Project and the Los Banos-Gates Transmission Project, and offer the following comments. For your ease of use, they are presented by major topic area.

Visual Resources

- A** [Volume 1, Page 4.1-26. Impacts occur along the entire route, not just at "key places" as noted. The discussion would indicate that the project is only concerned with these areas and not the area in between. The analysis should include effects along the entire route.
- B** [Volume 1, Pages 5.1-16 and 17. Mitigation #1 versus #7 (design). It should not be assumed tubular structures in foreground situations are better than conventional structures. In some cases the lattice structures with the right vegetation and color can be more effective. Tubular structures are not transparent even when color is used. The use of tubular structures in more developed areas may be more effective but that is not the case in wild land situations. The approach in item #7 is more agreeable and we suggest deleting #1 and incorporating it into #7.
- C** [Mitigation should also include an item on vegetation retention (feathering and clumping) and maintenance. One of the biggest impacts is created by removing or changing vegetation cover to create an edge. Retention of vegetation within and/or feathering along the corridor reduces the edge effect particularly in growth (mature) over 10 feet in height.
- D** [Volume 2B, Pages 3.7-5 and 3.7-6. Wilderness study areas (WSAs) are managed as Class II regardless of the class rating until such time as Congress designates the WSA as suitable or unsuitable for wilderness. WSAs designated as wilderness areas would automatically become a Class I.

Ethnological and Cultural Resources

- E** [Volume 2A, Page 3.9-1. Mitigation on ethnographically significant resources cannot be accomplished unless such sites are specifically identified. No such specification is provided in the EIS/EIR or supplemental Appendices. Specific impacts and associated mitigation recommendations should be developed by the contractor for each area of such potential impact. This is particularly

- A** The visual impact assessment includes analysis of impacts along the entire route, as well as impacts at particularly sensitive points outside the route such as developed recreation areas. Please see Section 3.7, Visual Resources, in the Phase III Report included in Volume 2A of the Draft EIS/EIR for a full description of the analysis methodology.
- B** It is acknowledged that the use of tubular structures is generally more effective as a visual mitigation measure in developed areas than in rural or wild land situations. It is also acknowledged that placement of tubular structures next to existing steel lattice structures is not usually an effective way to mitigate visual impacts.
- C** Mitigation measure E-3, pages 5.1-5 and 6 of the Draft EIS/EIR addresses your comment.
- D** Comment noted.
- E** COTP ethnologists identified a total of 400 Native American heritage sites located within the COTP routing study corridors. Information about the site locations and study methods is contained in the Native American Consultation Study report (Wirth Environmental Services 1986). The portion of this report containing site locations is not released to the public due to the sensitive nature of the sites.

L-327 (continued)

- E** important for "impacts" which the contractor suggests may greatly exceed the applicant's project area, i.e., "aural and visual" impacts. The special allusion to effects upon "opportunity for solitude" sounds much like wilderness act values. Please identify specific locations for which this is a significant consideration and site specific mitigation if appropriate.
- F**
- G** Volume 2A, Page 3.9-6. The EIS should provide operational criteria for the identification of "ethnologically" significant areas. The rating of selective significance is not particularly useful in this context as it is apparent that everything is moderately or highly important to the Native Americans interested. This suggests that no matter where the project proponent needs to construct the project the Native Americans will have a problem with it. The EIS should seek to identify a means of avoiding adverse effects.
- H** Volume 2A, Page 3.9-8. The "sensitivity model" is not as useful as a straight forward description of ethnographically significant sites and attendant impacts. The point here is to assure that the concerns of the Indian community are considered, not what the preparer of the EIS thinks the community is concerned about. There is a need to provide basic information: specifically describe types of sites, directly associated types of effects, and the communities which have identified these concerns, not just data on presence of absence of "something" as in Table 3.9-3.
- I** Volume 2A, Page 3.9-15. The "mitigation" measures for ethnographic concerns on this page amount to simple avoidance, i.e., "find out what people are concerned about, where it is and see if you can go around it". This is a good and straight forward approach. The majority of ethnographically significant values described in this report cannot be mitigated; however, in the traditional sense if the specific sites will be destroyed by construction.
- J** General. The EIS should address how a determination will be made as to whether the concerns expressed are valid, i.e., "is an area considered "sacred" or traditional just by virtue of the fact that someone says so?" The specific basis for evaluating the quality of site data represented in the EIS and the credibility of the individuals providing these data should be included. The EIS should also address the relationship between "ethnographic sites" and other cultural values.
- K** The compliance document is referred to as an MOU in Table 6.1-2. While possibly only an error in terminology, this should be changed to MOA (Memorandum of Agreement). The EIS should contain a project specific Section 106 compliance document.
- L**
- M** It is also noted that determinations of eligibility will be submitted to the Secretary of the Interior. All such submissions should/can be handled between the agency and the SIBO under current procedures.
- N** Threatened and Endangered Species
Volume 1, Page 3. A section on Threatened and Endangered Habitat should be included among the alternatives listed in Table 1A.

E
(cont.)

Route planners used this information to help make decisions about proposed route locations. The study was focused on study corridors four miles in width during the routing phase, not on the route segments themselves, since they are subject to frequent change during the route planning process. COTP ethnologists will implement an additional phase of Native American contacts to develop measures to mitigate adverse impacts along the final route, including visual and aural ones, to the sites.

The Memorandum of Agreement (MOA) between TANC, Western, the California State Historic Preservation Officer, the Oregon State Historic Preservation Officer, and the Advisory Council on Historic Preservation provides for specific steps to be taken in developing mitigation measures. The MOA is included in the appendix.

F

See responses to L-327 E and L-327 G.

G

COTP ethnologists did not apply operational and generic criteria alone to assess the significance of Native American heritage sites located in the study corridors. The sites have significance in terms of their cultural value to a specific community. For this reason, COTP ethnologists determined significance through in-depth consultation with members of the communities for which the sites are important, rather than by solely collecting facts about the sites and applying operational significance criteria.

Once Native Americans identified the sites, COTP ethnologists applied generic and operational criteria to classify sites in terms of potential site significance. The classification process involved a consideration of sources of information about the sites (literature or interview) and the site type (sacred, mythological, resources gathering, etc.). COTP planners used the site location maps and this classification during the routing phase as a planning aid for avoiding sensitive areas. Table 3.9-1 of Volume 2A of the Draft EIS/EIR presents the sensitivity classification criteria. It classifies potential site significance as Low, Medium, or High.

This generic classification is not a substitute for consultation at the mitigation planning phase. COTP ethnologists will base final significance assessments on in-depth interviews that are specifically focused on issues of significance involving particular sites. These assessments are made in the context of site-specific mitigation planning for the final routing alignment.

L-327 (continued)

- H** See response to L-327 E referring to the Native American Consultation Study report (Wirth Environmental Services 1986), which provides the information requested, and L-327 G regarding the consultation process. The sensitivity model is useful for planning routes through corridors. Since it is not usually possible to have Native Americans participate directly in the earliest phases of the routing process, the COTP at this stage depends upon the knowledge, experience, and training of an ethnological consultant whose task it is to elicit comment from members of Native American communities having traditional territory in the COTP area. When final routing (alignment of towers and access roads) takes place, the ethnologist will develop site-specific mitigation measures in consultation with Native Americans.
- I** See response L-327 E for discussion of the routing and mitigation planning processes. Avoidance is the preferred mitigation measure for Native American heritage sites. COTP ethnologists will consult with Native Americans about any sites that are located in the final route in order to plan avoidance or mitigation.
- J** COTP ethnologists base judgments about the validity of Native American heritage site data on their understanding of a traditional culture and experience in conducting ethnographic interviews. COTP ethnologists collecting data for the Native American Consultation Study (Wirth Environmental Services 1986) cross-checked the data with more than one Native American consultant if applicable. They also analyzed the data for congruence with the ethnographic record about a particular culture. The Native American Consultation Study report discusses the methods used in gathering and evaluating the ethnological data for the COTP.
- The Native American Consultation Study report also contains ethnographic overviews for each Native American group having traditional territory in the COTP area. These overviews discuss the relationship between ethnographic sites and the Native American cultural systems.
- K** Memorandum of Agreement (MOA) is correct. The correction has been made in Volume 1, Section 1.1.6 of the Final EIS/EIR.
- L** The Memorandum of Agreement that the Transmission Agency of Northern California (TANC), Western Area Power Administration, the Oregon and California State Historic Preservation officers, and the Advisory Council on Historic Preservation signed is the project-specific Section 106 compliance document. It is included in Section 1.5, Appendix H, of Volume 1 of this document.

L-327 (continued)

- M** Stipulation IV of the Memorandum of Agreement regarding the treatment of cultural resources states that determinations of eligibility will be made by Western, TANC, the SHPOs, and BLM or USFS. Stipulation IV.a states that if Western and the SHPOs cannot agree on eligibility, Western will request a formal determination from the Keeper of the National Register of Historic Places.
- N** Threatened and endangered species habitat was considered in the comparison of alternatives. Tables 3.4-2, 3, and 5, and Tables 3.5-2, 3, 4, 5, and 7 in Volume 2A of the Draft EIS/EIR list potential threatened and endangered species impacts by route segment. Site-specific impacts are now being studied and will be assessed in the Biological Assessment prepared under Section 7 of the Threatened and Endangered Species Act.

L-327 (continued)

Wildlife Habitat

- O** Volume 2B, Page 3.5-6. The identification of wetlands as the only important wildlife areas seems extremely biased. There is still no reference to the Panoche National Cooperative Land and Wildlife Management Area designated in 1962 in cooperation with the Bureau of Land Management, California Department of Fish & Game, and the U.S. Fish & Wildlife Service. The Panoche Hills/Coalinga Area of Critical Environmental Concern (ACEC) management plan should also be referenced under this section.
- P** Volume 2B, Page 3.4-6, Paragraph 3. There is still the need to reference A. spinifera and the importance of these shrubs for wildlife nesting and escape cover in these communities.

Area of Environmental Concern (ACEC)

- Q** Volume 2B, Page 4.7-12. There is still no reference to the Moreno Paleontological ACEC. The Panoche Hills/Coalinga ACEC includes the Moreno Paleontological ACEC and protects it against unregulated fossil hunting.

Panoche WSA

- R** Volume 2B, Page 4.7-12. (Table 4.7-4) From the Panoche WSA, we believe the impact of the preferred alternative to be at least low to moderate (probably moderate when compared to the East alternative). The rationale for this is contained in the following section.
- S** Volume 2B, Page 4.7-13, Paragraph 3. The EIS is correct in stating that the preferred route would not be visible from Viewpoint 6. However, the preferred route would be highly visible from the eastside of each WSA. (A more suitable viewpoint for analysis purposes would have been Panoche Mountain where the A.T.&T. towers are located). Accessibility by the public is not considered to be a factor in assessing impacts within the WSA. Potential impacts on wilderness values (primarily naturalness) are the key issue as it relates to visual resources.
- T** Volume 2B, Page 4.7-16, Paragraph 4. If a different viewpoint had been used, the preferred alternative would be more highly visible than the "East Route".
- U** Volume 2B, Page 4.7-20. (Mitigation Measures) - Adoption of certain mitigation measures such as extending the distance between towers would be appropriate to lessen the impacts of the preferred route.

General Comments

- V** Volume 1, Page 4.4-5, Paragraph 5, Line 3. Change "San Joaquin Pipeline" to "San Joaquin Valley Pipeline".
- Volume 1, Page 4.4-6, Paragraph 2, Lines 2 and 3. Change "San Joaquin Pipeline" to "San Joaquin Valley Pipeline".

- O** The text has been modified to address this comment. See Section 1.3 of Volume 1 of this Final EIS/EIR for discussion.

- P** The text has been changed to address this comment. See Section 1.3 of Volume 1 of this Final EIS/EIR.

- Q** The text has been changed to incorporate this reference. See Section 1.3 of this Final EIS/EIR. Please note the change is within the paleontological resources Section 3.10 as well as within Table 4.7-4.

- R** See response to T-177 A.

- S** Analysis of the impact of the preferred route and alternatives was conducted from viewpoints selected as representative of those from which the public is most likely to see the COTP. Interstate 5 (I-5), the major travel route and scenic corridor, was chosen as the location for Viewpoint A, the most representative viewpoint from which the public would see the preferred route in the Panoche WSA area. Viewpoint A is shown in Figure 4.7-1. The view from I-5 of the preferred route was simulated graphically through computer-generated and manually rendered illustrations. Figure 4.7-2 shows the computer-generated and manually rendered depictions of transmission towers in the preferred route, West-7 segment, in westward views from Viewpoint A. The towers are seen against the backdrop of the Panoche Hills WSA at a distance of 1 to 2 miles. This view represents the most frequently observed view of the preferred route in the Panoche hills WSA vicinity.

Key observation points (KOPS) 6 was also identified as a sensitive viewpoint (see discussion in Appendix J-3). KOPS 6 is selected as the site most often used by wilderness users and representative of views from the Panoche Hills WSA.

Even though the preferred route may be more visible from areas in the eastern part of the WSA than from either I-5 or KOPS 6, it was necessary to select viewpoints that would represent views most often seen by users. No use data was available from the BLM at the time of viewpoint selection to indicate that the eastern slopes were often used by recreationists in the WSA. In addition, the suggested viewpoint, Panoche Mountain, where the AT&T towers are located, is outside of the WSA according to BLM maps for the area.

L-327 (continued)

T

See response to L-327 S.

U

While extending the distance between towers is a possible mitigation measure to minimize the impacts of the transmission line, it should be pointed out that the height of the towers increase rapidly as the distance between the towers is extended.

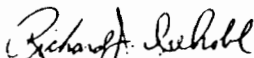
This increased height could result in a more visually intrusive impact. Since the overriding concern is visual impact, extending the distance between towers would not be considered appropriate to minimize the impacts of the preferred route.

L-327 (continued)

- V [Volume 1, Page 4.4-7. Figure 4.4-1. Change "San Joaquin Pipeline" to San Joaquin Valley Pipeline."
- Volume 1, Page 4.4-8. Table 4.4-3. Change "San Joaquin Pipeline" to "San Joaquin Valley Pipeline".
- W [Volume 2B, Page 3.2-4. Figure 3.2-3 was replicated twice.
- X [Volume 2B, Page 3.6-15, Paragraph 4, Line 1. Change to read as follows, "San Joaquin Valley Pipeline Project--The San Joaquin Valley Pipe Line Company...".
- Volume 2B, Page 4.6-9, Paragraph 4, Line 2. Insert "Valley" between "Joaquin" and "Pipeline".
- Y [General. Upon selection of a final alternative, a detailed analysis should be prepared to address the transmission route, particularly areas designated for clearing, construction of access roads, foundation installation, etc. The analysis should determine ways to avoid impacts on unique and sensitive plant communities (e.g., riparian areas, wetlands, and vernal pools), threatened and endangered species, important wildlife habitat, and cultural resource values. In addition, mitigation measures should be developed to avoid environmental disturbances or compensate for losses where adverse impacts cannot be mitigated.

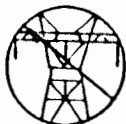
We appreciate the opportunity to comment on this document.

Sincerely yours,


Richard J. Dreihobl
Area Manager

- V These changes have been incorporated in the text, see Section 1.1.4 of Volume 1 of the Final EIS/EIR.
- W We apologize for any inconvenience.
- X The suggested corrections have been incorporated, see Sections 1.3 of Volume 1 of the Final EIS/EIR.
- Y As stated in the Mitigation measures (Volume 1, Section 5.0 of the Draft EIS/EIR), detailed surveys will be conducted for biological and cultural resources. These resources will be avoided wherever possible by adjusting the reference centerline within the 1,500-foot wide planning route. If significant adverse impacts on these resources cannot be mitigated by avoidance and/or the other proposed mitigation, additional mitigation may be agreed upon through consultation with the appropriate agencies.

L-328



CONCERNED CITIZENS OF BUTTE VALLEY
P. O. Box 603
Dorris, CA 96023

February 26, 1987

Jesse Beck, Chairman
Transmission Agency of Northern California
P.O. Box 661030
Sacramento, California 95866

Dear Sir:

A [Enclosed are copies of reasons the Concerned Citizens of Butte Valley are against 500kv transmission lines crossing Butte Valley. This package confirms the vocal outcry against this project we have made to you at meetings in the Northern California/Southern Oregon area for the past two years.

B [We have enclosed copies of a petition circulated in the Butte Valley area which shows that approximately 800+ residents are against this installation (all M-6 routes).

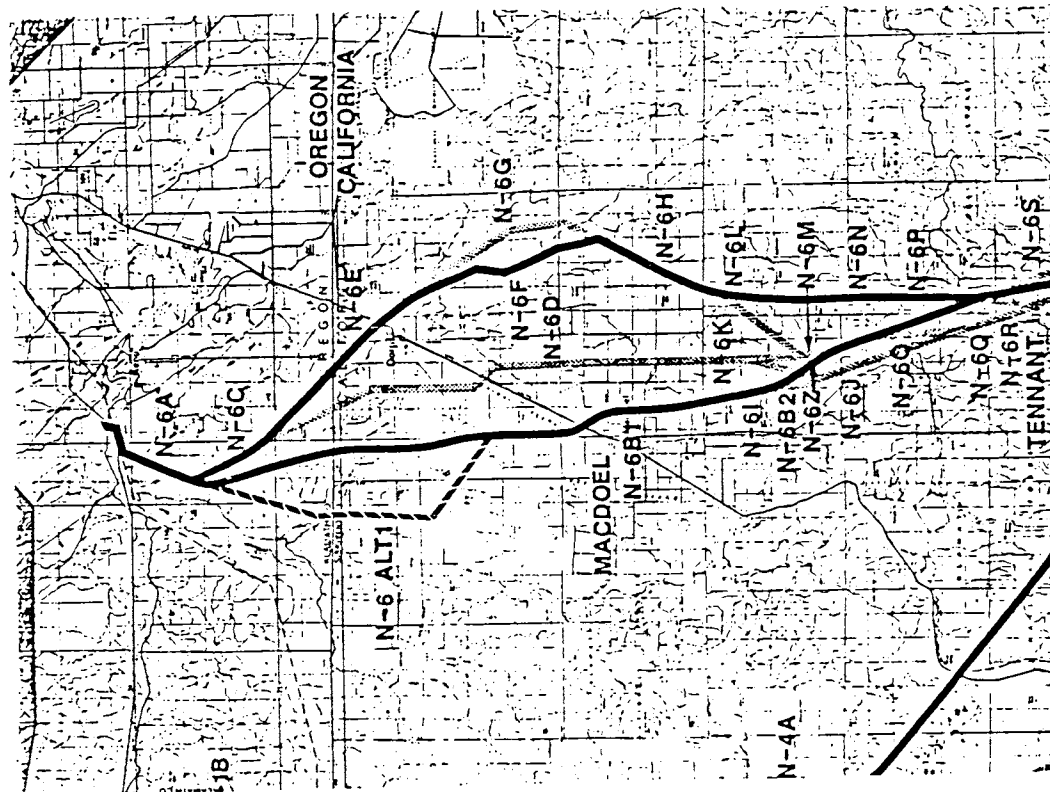
Sincerely,

Roger A. Meagher, Chairman
Concerned Citizens of Butte Valley

A Your opposition to the siting of the transmission line in Butte Valley is noted. The letters addressed to the COTP have been added to the hearing testimony as Roger Meagher requested and are coded as T-181 through T-192. Responses to the comments can be found in Volume 3 of the Final EIS/EIR. T-186 through T-192 are not reproduced in Volume 3 as these are form letters similar to T-185.

B We have reviewed the multi-page petition and have noted your opposition to the COTP. Due to a space limitation, only the first page of the petition is reproduced. Thirty-two pages of the petition listing an additional 778 names have not been reproduced but are noted and recorded in lead agency files.

L-328 (continued)



L-328 (continued)

OPPOSITION PETITION

CONCERNED CITIZENS AND LAND OWNERS AGAINST THE CALIFORNIA-OREGON
TRANSMISSION PROJECT GOING THROUGH BUTTE VALLEY/PLEASANT VALLEY HIGH-
LANDS (CENTRAL CORRIDOR)

Name	Address
1. Jackson Keller	Box 202 Harris Co. 96023
2. Jeff O'Sullivan	Box 325 Harris Co. 96023
3. Joe R. Gault	Box 166 Harris Co. 96023
4. Karl Cress	Box 866 Davis Co. 96022
5. Gumbirao	" " " "
6. Hwy Highway	87905 MISSISSIPPI AVE. 96058
7. John G. Gault	Box 225 Davis Co. 96023
8. Robert Gault	Box 245 Davis Co. 96023
9. John Gault	Box 124 Davis Co. 96023
10. John Gault	Box 124 Davis Co. 96023
11. John Gault	Box 124 Davis Co. 96023
12. John Gault	Box 124 Davis Co. 96023
13. John Gault	Box 124 Davis Co. 96023
14. John Gault	Box 124 Davis Co. 96023
15. John Gault	Box 124 Davis Co. 96023
16. John Gault	Box 124 Davis Co. 96023
17. John Gault	Box 124 Davis Co. 96023
18. John Gault	Box 124 Davis Co. 96023
19. John Gault	Box 124 Davis Co. 96023
20. John Gault	Box 124 Davis Co. 96023
21. John Gault	Box 124 Davis Co. 96023
22. John Gault	Box 124 Davis Co. 96023
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25. John Gault	Box 124 Davis Co. 96023
26. John Gault	Box 124 Davis Co. 96023
27. John Gault	Box 124 Davis Co. 96023
28. John Gault	Box 124 Davis Co. 96023
29. John Gault	Box 124 Davis Co. 96023
30. John Gault	Box 124 Davis Co. 96023
31. John Gault	Box 124 Davis Co. 96023
32. John Gault	Box 124 Davis Co. 96023
33. John Gault	Box 124 Davis Co. 96023

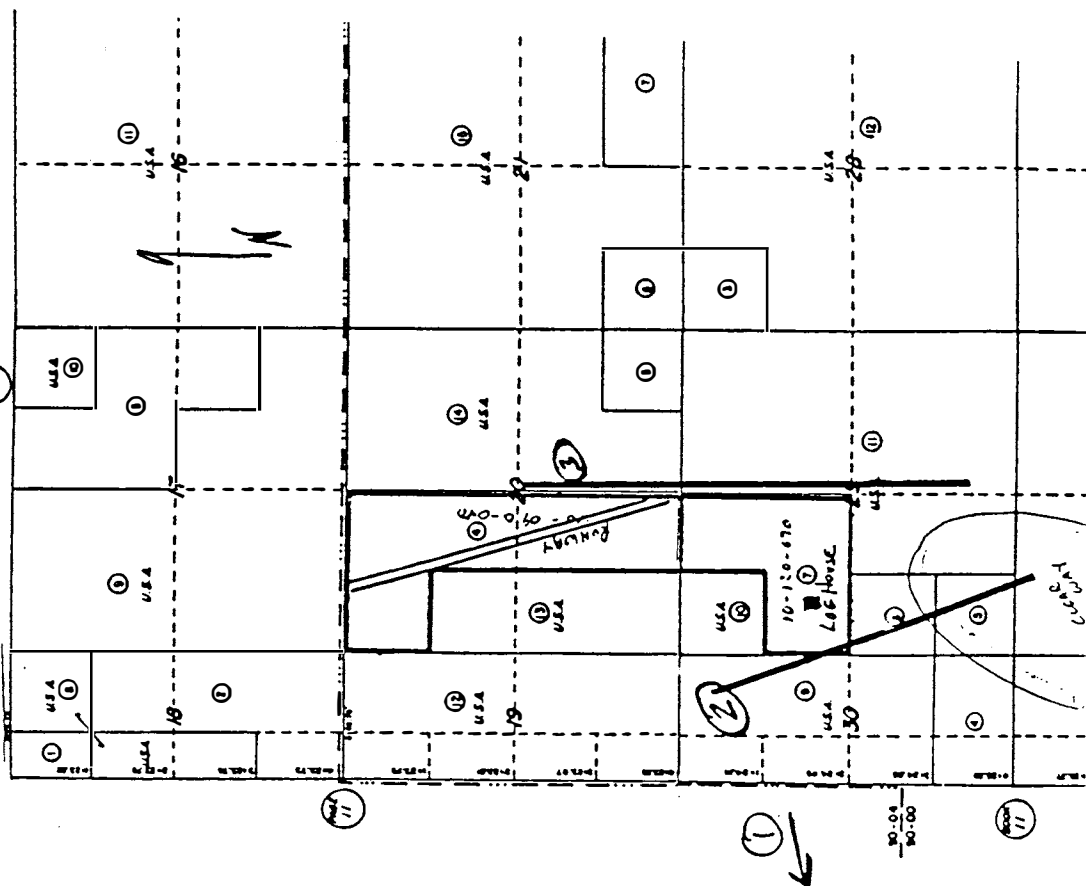
[illegible]

JO ANN & ERNEST BARTER
17471 LONG PRAIRIE ROAD
TENNANT
MACDOEL, CALIFORNIA 96058

L-328 (continued)

30 ANN A ERH451 BANILA
17471 LOC PRATIE ROAD
TENNANT
MACOEL, CALIFORNIA 96058

T 44 N R 1 E



L-329

Friends of the Greensprings
16399 Highway 66
Ashland, Oregon 97520

February 27, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Subject: Draft Environmental Impact Statement/Environmental
Impact Report for the California-Oregon Transmission Project

The Friends of the Greensprings is an organization of citizens residing in and/or concerned about the Greensprings area of Southern Oregon. We are specifically affected by this EIS/EIR since our area is located in one of the three alternative corridors.

The following is a list of our comments and concerns in response to the Draft EIS/EIR as pertains to our area and to the State of Oregon in general. We have chosen to comment on economic as well as environmental issues.

ECONOMICS OF THE PROPOSED POWERLINE

General Comments

- A We found the economic analysis of the proposed action to be wholly insufficient. The fact that "the economic impacts of the Combined Projects, as viewed from the perspective of the Northwest utilities and their ratepayers" were not "recognized or assessed" has resulted in a one sided, incomplete analysis of the costs and benefits of the project. Furthermore, we feel that need for the project has not been adequately or accurately quantified for the Northwest, nor for California. We also feel that the benefits have been consistently overstated and the costs consistently understated.
- B
- C

Proof of Need

- D A major basis for the project is the alleged existence of an "energy surplus" in the Northwest. Need for the project is said to revolve around the BPA's need to sell this power and California's need to buy it. Yet it has not been clearly demonstrated that the surplus really exists. For instance, would the surplus exist without the operation of thermal plants in the Northwest? There are no scenarios of this type analyzed for the

A

The overall benefit of the COTP is analyzed in Bonneville Power Administration's (BPA's) IDU EIS which is cited in the COTP Draft EIS/EIR. The IDU EIS concludes that there is an overall benefit considering the costs and benefits within the Pacific Northwest.

The benefits to Pacific Northwest (including Oregon, Washington, Idaho, and Western Montana) consist of:

- Revenues from sales of firm capacity
- Revenues from sales of firm surplus energy
- Revenues from sales of non-firm energy
- Revenues from sales of transmission services
- Reduced requirements for construction of new resources to meet firm energy loads

Although these benefits will be spread widely throughout the region, it is not feasible to establish what share each individual ratepayer will receive. Most, if not all utilities (and their ratepayers) in the Pacific Northwest will benefit. Utilities with their own generating resources would have the opportunity to sell power using the COTP. Utilities which buy their power requirements will share in the benefits directly received by BPA or other utilities from whom they purchase. For a discussion of how benefits are treated in ratesetting processes see the response to T-126 A.

L-329 (continued)

A
(cont.)

For a discussion of how the COTP allows the Pacific Northwest to construct less generating capability, see the response to L-3 T. As discussed there, capacity for energy exchanges allow California to obtain reduced cost capacity but require California utilities to commit to return firm energy to the Pacific Northwest. Usually this energy can be obtained by purchasing non-firm energy within the Northwest or from Canada or Montana. On rare occasions it may be necessary for California utilities to burn additional fuel in existing generating stations to return the energy. (Net energy flow would substantially reduce total energy generation in California due to much larger amounts of surplus firm and non-firm energy purchases.)

Capacity for energy exchange agreements have existed between the Northwest and California for many years. For a current discussion of how BPA treats such agreements in establishing rates, see BPA's 1987 Wholesale Power Rate Development Study, WP-87-E-BPA-06 at pages 37 and 38, and BPA Cost of Service Analyses for prior rate proceedings. Capacity for energy exchanges have been recognized by the U. S. Congress as providing benefits to the Northwest. See, for example, section 9(1) of Public Law 96-501, the Pacific Northwest Electric Power Planning and Conservation Act.

B

The IDU EIS (cited in the COTP Draft EIS/EIR) includes analysis of the overall value of the COTP to the PNW and California. The final distribution of benefits will depend upon the contractual arrangements entered into between the Pacific Northwest and the California utilities. The IDU EIS and the COTP Draft EIS/EIR both show substantial expected economic benefits from the COTP. Since the majority of these benefits are in the form of lower electric power costs, these benefits are expected to be realized directly by the utility ratepayers.

C

This general comment is addressed in the responses to L-329 D through L-329 FF, where the comments provided are more specific.

D

Although the current firm power surplus in the Northwest and the possibility that it may be declining demonstrate the prudence of building the COTP on the planned schedule, the benefits of the COTP do not depend on continuation of the current firm power surplus in the Northwest. Additional benefits come from power available when river flows are better than critical dry conditions used for planning, the fact that California has its highest power demands in the summer whereas the Northwest has its highest demands in the winter, and the fact that generating resources added in the Northwest to meet energy load growth will provide ability to meet summer peak demands in excess of the summer peak loads in the Northwest. No resources are assumed to be built in the Northwest for the purpose of making power available to sell in California.

L-329 (continued)

D
(cont.)

The economic analyses of the Third AC/COTP do assume that existing PNW thermal plants continue to be available for generation (until, as in the case of the Hanford Generating Plant, they are scheduled to be retired during the study period), and are operated to serve regional and Intertie loads as long as it is economic to do so. Failure of owners to operate thermal plants when revenues from sales of their power could cover all of their variable and at least part of their fixed costs would result in wasteful and costly management of installed resources, and higher costs for ratepayers.

See response to L-3 T for a more complete discussion.

L-329 (continued)

- E** Combined Projects. In fact, this possibility is not even considered, but it is real nonetheless. In addition, it is not taken into consideration in any of the analyses and scenarios that this "surplus" is predicted to run out in the mid to late 1990's. The Northwest Power Planning Council has acknowledged this as a possible scenario and the Oregon Department of Energy has predicted energy shortfalls to occur as early as 1998. We must question the wisdom of building the COTP and committing the Northwest to 20 year contracts if the "surplus" may not last for even half of this time. We request that this aspect of the Combined Projects be addressed and calculated in to the final draft analyses of feasibility and cost effectiveness.
- F** The legal basis for the proposed actions is stated to be P.L. 98-360. (Vol. 1, 1.0-1) This law does not mandate the project, as the EIS/EIR seems to imply, but it does allow it if deemed "necessary" to allow mutually beneficial power sales between the Pacific Northwest and California. Without mutual benefit, the proposed actions lose legal justification, yet this mutual benefit has not been analyzed in any quantifiable way. It has merely been assumed by project proponents. The historical facts point to a lack of mutual benefit: the BPA, in the course of analyzing recently expired contracts with California, found that 81% of the benefits of these power sales went to California, and only 19% to the Northwest. These sales were obviously not necessary for the benefit of the Northwest. Analysis and quantification, backed up by historical fact, of the real benefit to the Northwest must be included in the final draft.
- G**
- H** Another justification for the proposed actions is to allow bi-directional flow of electricity between the two regions. Where is the proof that this would in fact happen? Is there an historical precedent upon which to base this assumption? If so, it should be included in the report. If California is so in need of electricity from the Northwest, how will it afford to ship power north if the Northwest should need it? Where are the figures to show this ability? Further more, on page 1.1-1 of this document, it is stated that the Northwest has surplus power even in years of low rainfall. This is a blatant contradiction between stated justification of the Combined Projects and supposed reality. If this is the case, and the Northwest is able to meet its power obligations, surplus or no, as also stated in this segment of the document, why would the Northwest ever need to buy power from California?
- I**
- J**
- K** We believe that the above reasons illustrate that this EIS/EIR has inflated the need for the Combined Projects to justify a proposed action which is in fact not necessary.

E See the response to L-329 D and L-3 T for a more complete discussion of the energy expected to be available from the Pacific Northwest in the long term.

F The mutual benefit of the COTP has been evaluated quantitatively for the combined Pacific Northwest and Pacific Southwest regions in the BPA Draft IDU EIS, which was incorporated by reference into the Draft EIS/EIR.

G The specific BPA evaluation of benefits referenced in this comment has not been provided with this comment and therefore cannot be addressed specifically in this response. "Mutual benefit" does not require an equivalent dollar allocation between two parties. Power market forces determine the allocation of transaction benefits between sellers and purchasers of power. Any sale of power by the Northwest to California at a price above cost constitutes a benefit if the alternative is no power sale transaction with any party and loss by the Pacific Northwest utilities of a future opportunity to sell that unit of energy or capacity. Furthermore, future conditions and not historical fact will determine the allocation of benefits between the two regions.

See responses to L-329 A and L-3 T for an explanation of the unique ability of the two regions to benefit from additional transmission intertie capacity.

H There is historical precedent to justify the enhancement of bidirectional flow of electricity between the two regions by this present COTP. A large multipurpose transmission interconnection such as this allows many types of individual company to company transactions, most of which will be expanded with more transmission capacity. One type of transaction is called an "entitlement capacity contract". In order to finance the original Interties, Congress authorized BPA to sell enough power and energy out of the Northwest to justify the expense for providing the facilities. This is a transaction from the Northwest to California.

Another type is "non-firm surplus energy contract", whereby energy available from the Columbia River drainage that is available due to a wet-water year is sold to California. This "dump energy" would flow past unloaded hydroturbine generators unless transmitted to California.

L-329 (continued)

H
(cont.)

A third type of transaction is a "diversity exchange energy contract", created due to the different load demand characteristics that exist between the Northwest and California. The Northwest can rely upon some of California resources during the winter when its demand is high, while California can rely upon Northwest resources during the summer when its demand is high. Diversity exchange requires a bidirectional flow of electricity between the two regions.

Obviously the transmission interconnection handles all of the transactions simultaneously. The present Intertie, heavily utilized for the first two types of transactions, does not show a seasonal historical reversal of power flow. Historically, it does demonstrate a summer hourly demand much higher than the winter hourly demand. The summer characteristic is presently limiting. The COTP capacity will not carry with it the "entitlement" bias but will be available for both of the latter type transactions. This will permit expanded diversity exchanges and will encourage more of the bidirectional type.

I

Even after the PNW's firm surplus power has ended, in all but the worst water years, the PNW will always have surplus non-firm energy. However, because the amount and shape of this non-firm energy cannot be known far enough ahead of time to plan on its use, the PNW cannot rely on non-firm energy to serve firm loads. Long-term exchange contracts are one way of building on the unique strength of the PNW hydroelectric system. After the end of the current firm power surplus, exchange contracts would allow the PNW to trade its hydroelectric capacity--the ability to meet momentary or short-period peak loads--for surplus energy from baseload resources in California. Seasonal exchanges of power can also exploit the seasonal diversity in power requirements that exists between the Northwest and California. Because exchange arrangements would be fixed by contract, utilities in both regions could rely on such arrangements to serve firm loads. This type of contractual resource would become more and more valuable to the PNW as the PNW's firm power surplus diminishes in the mid- to late-1990's.

For a discussion of how California can make power deliveries to the Northwest and provide substantial benefits to the Northwest see the response to L-329 A.

J

See response to L-329 I.

K

See the above responses to L-329 A through L-329 J for an explanation of the individual reasons the COTP does provide significant benefits to the Northwest and California utilities and rate-payers.

L-329 (continued)

Costs and Benefits

- L** — We have major questions about whether the economic returns to the Northwest region will justify the economic and environmental costs and we do not feel that the EIS/EIR adequately answers these questions. There is more Northwest involvement in this project than just the construction of a few miles of powerline in Southern Oregon, as is illustrated by the Pacific Northwest Reinforcement Project. The Combined Projects will involve resources all over the Northwest and, as such, the costs and benefits should be analyzed on a Northwest-wide basis in order to avoid inaccurate conclusions. This is not done in the draft document.
- M** —
- N** — The potential economic impacts on the anadromous fisheries of the Columbia River Basin must be taken into consideration in this analysis. (The draft EIS/IDU of the BPA left out considerations of major importance as well.) The spring "spill" water of the Columbia River System is cited as a loss of potential power, to be rectified by the COTP, but for the anadromous fisheries it is a matter of life and death. If the dams are not overflowing during the spring migration because the water is being stored to supply California with power, the young fish are forced through the electric turbines, resulting in high mortality. If there is not enough flow in the reservoir, they lose their sense of direction and cease migrating. One of the most critical needs for the survival and revitalization of the Columbia River fisheries is adequate "flushing flows". What will be the economic impact on commercial, Native American and sport fishing industries that results from decreased fish production? What will be the economic impact on coastal communities? On Native American tribes? Was the Columbia River Intertribal Fish Commission contacted for their analysis of the impacts? Without analysis of these potential impacts, the overall cost of the Combined Projects in Oregon, and therefore in total, cannot be known. We ask that the economic values for salmon and steelhead which have been developed by the National Marine Fisheries Service be used in these analyses, as we believe these figures best reflect the true economic value of these fish to the State of Oregon and the Pacific Northwest.
- O** —
- P** — We believe that the value of deferred resource use as a result of the proposed action has been vastly overstated. The Combined Projects may defer new generation resources in California, but if the Pacific Northwest commits its power resources south, and the assumed surplus runs out in the mid 1990's, as predicted, Oregon may be forced to construct less economical and environmentally acceptable power sources such as nuclear and coal fired. This could result in higher electricity rates for Northwest ratepayers.
- Q** — We would like to see this benefit value reconsidered in light of this scenario.
- L** See the BPA IDU EIS for the discussion of costs and benefits of the COTP to the Northwest.
- M** See response to L-329 L.
- N** The Intertie Development and Use Draft EIS (IDU EIS), prepared by BPA, addresses the potential impacts to fisheries resources in the PNW. It does not include, however, estimates of the economic value of the PNW fishery. Potential impacts to PNW fisheries were estimated to be so minor as not to justify additional economic analysis.
- O** See response to L-329 N.
- P** The economic analyses of the COTP are based on current projections of the amount and cost of PNW surplus power. Although the current PNW surplus of firm power is expected to dissipate by the late 1990s, the COTP will have value even after that time, because of the continued availability of surplus non-firm power and surplus firm capacity. The COTP should continue to be a beneficial resource to PNW ratepayers even if PNW electricity costs rise substantially, since the COTP will allow the PNW to sell surplus power and thus help keep PNW rates low. In addition, in later years, after the region's firm surplus power has disappeared, capacity/energy exchanges with California may allow the PNW to defer building new generating resources.

The Draft and Final IDU EIS include analysis of the effects of long-term firm contracts on new resource development in the PNW and California. The analysis suggests that in some cases (particularly exchange contracts) long-term firm contracts can reduce the cost of new resource development in both regions, leading to substantial savings to ratepayers.

L-329 (continued)

P
(cont.)

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Q

See response to L-329 P.

L-329 (continued)

R We believe that the costs to private land owners have been underestimated and that the tax revenue benefit to counties has been overstated. Nowhere in this document is it mentioned that the presence of a powerline on private property could lower the value of that property as well as the adjacent properties. In fact, it is stated that the transmission line project would be considered an improvement to property (Vol. 2A, 3.8-3). In whose eyes? Not only does this go against common sense, but there is no factual evidence to back it up. Is a powerline considered an improvement over prime forest, agricultural and residential use? The EIS/EIR itself states that "there is a loss of employment and tax revenue associated with the removal of forestland from production". (Vol. 2A, 3.6-2) The Jackson County Tax Assessors Office, when recently contacted, did not agree with the assumption that a transmission line is an property improvement and they stated that the market value of a piece of property is a primary criteria for determining property taxes. We believe that market value is wholly determined by the perceived value of a piece of property and that a high voltage transmission line would not be considered an asset by a prospective buyer. For this reason we feel that the stated benefit of increased property tax revenue to counties is vastly overstated and would like to see a study done of the actual effects of powerlines on private property values. There is a legal precedent which in fact backs up our position on this. In the recent court case Florida Power and Light Company, appellant, v. Putnam County Landowners, the Fifth District Court of Appeals of Florida found that the appellant should pay Putnam County private land owners twice the market value of their property because the perceived health risks of high voltage transmission lines lower market values. Furthermore, the EIS/EIR states a great benefit through increased revenue while at the same time indicating that the BPA could own 100% of the line, thus resulting in no property taxes being paid. (Vol. 2A, Table 3.8-3) Where is the benefit analysis of this scenario? There is not one, but there should be if we are to accurately assess the value of the Combined Project.

U

V In the discussion of economics of the proposed action, TANC and its consultants overstated the firm capacity benefits and benefits of nonfirm energy deliveries at every turn. TANC's results are inconsistent with the BPA's draft IDU/EIS and in the EIS/EIR it has concealed the results of studies which disagree with its own overestimates. As a result of this, its EIS/EIR is deficient and its analysis of the "No Action" alternative is therefore incorrect, misleading and inaccurate. To be specific:

W

X

Y

Z

- All of TANC's oil forecasts are too high.
- TANC understates the price which Northwest utilities would charge for nonfirm energy, thus again overstating the value of the line. TANC's estimates are in contradiction to the BPA's own estimates.

R See responses to L-325 N, L-184 A, T-10 D, and L-330 W13.

S In the Draft EIS/EIR, Volume 2A, Section 3.8.2.4, the statement is made that "Since transmission line projects are considered an improvement to property there would be an overall increase in property tax revenue from the COTP." In this sense, the word "improvement" is used in a real estate context, not as a value judgment. In the real estate sense, an "improvement" includes something that enhances the utility of property or adapts it for a new use. Construction of transmission lines constitutes an adaptation of the property for a new use.

T The property taxes to counties from the transmission line are not determined by the county assessor's valuation on an individual parcel by parcel basis. Property taxes for transmission lines are generally based on the construction cost of the line. In Oregon, the value of the easement is considered in the tax assessment, while in California it is not. According to BPA, county tax assessors have rarely responded to right of way easement acquisition by reducing the assessed value of the property in question (U. S. Department of the Interior, Bonneville Power Administration. 1977. The role of the Bonneville Power Administration in the Pacific Northwest power supply system. Appendix B: BPA power transmission. Portland, Oregon). Consequently, it is likely that property taxes paid by the owner will not be reduced by the county assessor and taxes will also be paid by the utility (except for that portion of the transmission line that is owned by federal agencies -- BPA and Western).

The legal precedent referred to in the comment (Florida Power & Light Company v. Roberts, filed June 5, 1986), is a case dealing with severance damages under Florida law, not property devaluation from proximity to a transmission line. Where an easement is acquired from private property owners, they may also be eligible for severance damages depending on Oregon or California law.

U If BPA owns the entire Oregon portion of the transmission line, it will not pay property taxes, thus reducing the economic benefits to counties. Since this condition will apply to every alternative route, the comparisons of the alternative routes will not change. However, counties having an estimated impact from the construction of a transmission line of more than \$1,000 are eligible for reimbursement of costs under BPA's Impact Aid program.

V See the responses to your specific comments below.

L-329 (continued)

- W** See the responses to L-306 R1, L-306 V1, and L-306 W1 regarding comparisons of the COTP Draft EIS/EIR Northwest power availability and economic analysis with such analyses in the BPA IDU Draft EIS.
- The economic analyses prepared by BPA and by the COTP analyze different aspects of the value of the COTP, and thus cannot be directly compared. The studies prepared by the COTP estimate only the costs and benefits to California participants as a group. The studies prepared by BPA examine the total economic costs and benefits, without addressing their regional distribution.
- X** The differences between the BPA IDU/EIS and the COTP Draft EIS/EIR can be attributed to differences in assumptions and analytical techniques in modeling two very complex regional electric utility systems. These differences do not compromise the reasonableness of the conclusions in both documents that the COTP is expected to be economically beneficial to both regions.
- Y** The forecasts in the Draft EIS/EIR are based on the forecasts of a number of nationally recognized economics firms. The broad range of oil and gas price forecasts used, by definition, will include forecasts which could be considered "too high" as well as forecasts which could be considered "too low." The purpose of the forecast range is to test the impact of fuel prices on COTP economics. See also the responses to L-309 BB, L-306 C3, and L-307 Y.
- Z** The price for power from the Northwest is not a set value, but rather is subject to negotiations between buyer and seller to establish a market price.

L-329 (continued)

- AA** [-TANC makes unexplained predictions of much higher nonfirm energy availability than the BPA predicts.
- BB** [-In the draft EIS/EIR it is mentioned that the current transmission lines are almost always used to capacity, thereby necessitating a third intertie. This is in direct contradiction to the BPA's testimony that "The capability of the Southern Intertie is no longer the principal factor in determining the quantity of surplus firm power and nonfirm energy that could be marketed in the PSW" (1987 BPA Wholesale Power and Transmission Rate Hearing, Exhibit WP-87-E-BPA-23, p. 3)
- CC** [-The BPA found that if only nonfirm energy were delivered over the Third AC Line, there would be a net loss to ratepayers in both regions combined of \$249 million.
- DD** [-Acquisition of capacity by TANC itself does not benefit the State of California as a whole. Benefits to TANC ratepayers are offset by equal increased costs to PG&E's other retail ratepayers.
- EE** [We believe that all of the above clearly illustrate that the value of the Combined Projects has been overestimated and therefore the need for the project overstated. We would like to see these issues incorporated in the final draft and the "No Action" alternative given more detailed analysis.
- FF** [

ENVIRONMENTAL IMPACTS OF THE PROPOSED POWERLINE

General Comments

- GG** [We feel that while many issues were addressed in the draft EIS/EIR, there are many environmental impacts which were not analyzed in enough detail. While standard methods of overlay and mapping may have been used, the maps are not nearly detailed enough. Perhaps this is due to a lack of available information in certain areas, but it is the responsibility of the project coordinators to get the information necessary to make an informed decision. Once again, the real costs of the project cannot be adequately judged without complete knowledge of all the costs involved. We feel there should be more analysis given to the human impacts. Many physical environmental impacts are linked directly to the health and quality of life of a community. The long term human costs of environmental losses which cannot be mitigated to less than significant levels must be analyzed for
- HH** [

- AA** See response to L-309 W, part 3.
- BB** The statement from BPA's rate testimony alludes to the fact that during 1986, when oil and gas prices dropped precipitously, BPA was not always able to sell all of its available non-firm energy over the Intertie at the rates in effect at that time. Since then, BPA has marketed non-firm energy under a new flexible non-firm rate, which is designed to allow BPA to increase revenues by dropping the price of non-firm energy to expand sales to California utilities. While it is true that with the rigid rate structure that was in effect during part of 1986, Intertie capacity was not the limiting factor for Intertie sales, with the new flexible rate structure, Intertie capacity is expected again to be the constraining factor on Intertie sales of certain times of the year (especially during the spring runoff months).
- CC** BPA's analysis for the IDU Draft EIS found that if used only for non-firm sales over the life of the project, the COTP, added after the DC Terminal Expansion Project, is not cost-effective. However, with firm contracts at modest capacity levels, the COTP was shown to be cost effective. The level of capacity purchases delivered over the COTP may vary over the life of the project.
- DD** The analysis in the Draft EIS/EIR addresses the benefits on a statewide basis. See response to L-309 W, Part 7.
- EE** Sees responses to L-329 L through L-329 DD.
- FF** See responses to the specific comments above.
- GG** See response to L-306 F.
- HH** The effects of the COTP on the aesthetic values of the landscape, recreation sites, and dispersed recreation; income, economic activity, housing, public service, property values, and tax base are all examples of human impacts addressed in the Draft EIS/EIR, Volume 1, Sections 3.0 and 4.0, and throughout Volume 2A.

L-329 (continued)

- II [this project. We are also very concerned about enforcement of mitigation measures. We would like some assurance that TANC can be trusted to thoroughly enforce and monitor the proposed mitigation measures upon which the EIS/EIR analysis is based.

Specific Comments

Listed below are some of our comments and concerns. We have listed them by section, as delineated in Volume 2A.

- JJ [3.2.2.3 Soils Impacts
Soils impacts (erosion) are stated to be only short term due to proposed mitigation measures of revegetation and drainage control. Were sites which resist revegetation considered in this analysis? This type of information cannot be found in an equation. Was research done or were field studies conducted to analyze the significance of this scenario? There are many such areas in the Southern Oregon Cascades and in Northern California. The BLM office in Medford, at least, would have some information on this. Other factors which contribute to this potential problem are frost pockets, gopher damage, excessive exposure and lack of water during hot summer months. Were any of these things studied? It cannot just be assumed that all areas will be able to be revegetated. This would increase soil loss, thereby raising this impact to significant levels.

- KK [3.3 Water Resources/Fisheries
In the Northern section of the COTP, most segments have potentially significant water quality impacts. (Table 3.3-3) The judgment stated in the draft, however, indicates that these impacts would be reduced to less-than-significant levels by mitigation measures. (p. 3.3-13) We have some questions about the effectiveness of the mitigation measures and the accuracy of data collected. For instance, does the analysis compare existing sedimentation levels (as a result of other activities) and post project projections (worst case scenario) with allowable Threshold of Concern levels for the many quality water resources that would be affected? If not, when do they plan to do so? If so, where is this data in the EIS/EIR? It is not listed in the data collection section, (3.3.3.1). Since basic fisheries information is lacking for most of these streams, how were current fisheries, food organisms for the fish populations, and locations of spawning beds determined and how was this information incorporated into the analysis? Were field studies conducted in any locations? In terms of temperature increase of cold water streams, a three year revegetation term seems optimistic. What is the data to back this assumption up? How long can the fisheries withstand increased temperatures? Current research and experience indicate that a 100 foot buffer zone is not enough to maintain the health of a cold water stream and to prevent herbicides leaching into the water. The State of Oregon rules for the management of Riparian Zones are currently under

- II [The mitigation measures adopted by the COTP proponents will be identified in the Final EIS/EIR, Notice of Determination and Record of Decision. They will also be detailed in a Compliance Monitoring Plan which will be coordinated with the appropriate agencies. It is standard for public agencies to propose a project, prepare the environmental analyses, and monitor implementation of the project in cooperation with land management agencies such as the Forest Service or the BLM. Monitoring of mitigation will be conducted by TANC, Western, and/or the appropriate land managing agencies.

- JJ [Areas are usually difficult or impossible to revegetate when there is no topsoil or they are in areas of severe exposure to sun or wind. The productivity site can be impaired if the topsoil is removed. Mitigation measures under the earth resources portion of Section 1.1.5 of Volume 1 of this Final EIS/EIR provide for the protection of the topsoil. Mitigation measure 10 will be carried out in consultation with land management agencies and landowners to ensure successful revegetation of disturbed areas.

- KK [Your concerns regarding the effectiveness of the type and accuracy of the data collected are valid. Because of the size and nature of this project, most research was limited to available data and information gathered from discussions with agency representatives. No field studies were conducted, and water quality/sedimentation levels for every stream that might be crossed could not be determined within the scope of this study. Since basic fisheries data on many of these streams is lacking, impact analysis must be limited to a more generic level of detail until precise site-specific routing adjustments are made. Existing food organisms and exact locations of spawning beds cannot be determined at this time.

For purposes of analysis, vegetative buffer zones are assumed to be a minimum of 100 feet wide at all streams, and may be wider depending upon applicable agency policies or upon the sensitivity of the watershed (see response to L-295 H2). Specific buffer zone needs will be established with agency personnel during final route adjustments. These buffer zones will do much to alleviate any significant impacts to fisheries caused by increased stream temperatures, since the stream will remain shaded. If the western corridor were the site of the preferred alternative, herbicide use at the W1 switching station would be subject to the controls cited in the mitigation section which include erosion and runoff control measures, buffer zones along the stream, and other precautions to assure that the water quality of Jenny Creek would not be significantly affected. The water resources and fisheries portion of Section 1.1.5 of Volume 1 of this Final EIS/EIR describes the mitigation adopted to minimize impacts.

L-329 (continued)

KK

revision and the Oregon Department of Forestry has recommended a 200 foot wide buffer zone. 1000 Friends of Oregon has recommended a 250 foot buffer zone. In the Siskiyou National Forest they have found that a 150 foot wide buffer zone, with 85% canopy cover near any Class I or II stream is still not sufficient. They have recently started cutting only one side at a time. Will the COTP reconsider this mitigation measure in light of current research? We believe it must in order to reduce significant impacts to less-than-significant, or it will be seriously underestimating this water resource cost.

We are concerned about the location of the W1 switching station in the Pinehurst corridor. It goes against the EIS/EIR's own mitigation measures by being sited directly adjacent to a Class I stream, (Jenny Creek). It is stated that herbicides would be used to control vegetative growth. What kind of herbicides would be used, how often and in what quantities? Has the impact of this been included in the analysis of the overall impact to Jenny Creek? Will herbicide levels be monitored on an ongoing basis? Although we realize that the Pinehurst Corridor is not the preferred corridor, we would still like to request that this location for the W1 switching station be dropped from the alternatives being considered.

LL

3.4 Vegetation

As a mitigation measure to long term significant impacts in this area it is stated that the COTP will enhance or maintain vegetative diversity in the course of revegetating. What methods will be employed to do this? There is no mention, except in general terms, of how the project coordinators plan to do this. Will native plants species be used in the same proportions as the pre-construction environment? On page 3.4-2 it is stated that "disturbed or cleared areas are frequently invaded by aggressive pioneer plants that inhibit the re-establishment of the pre-existing vegetation". How does the COTP plan to mitigate this impact to less-than-significant levels? The EIS/EIR implies that re-vegetation is simply a matter of putting out a few plants. Our understanding of this scenario is presented in the soils impact section above. It is stated that where necessary, herbicides will be used for long term management of right-of-ways, roads and switching stations. (p. 3.5-3) Yet there is no quantified data on this and the long term effects of these poisons on animals and humans does not seem to be included in the impact analysis. Exactly what types of herbicides will be used? In what quantity and frequency? Will levels be monitored and in what way? Without more detail in this area, the impacts of vegetation clearing and long term management cannot be accurately judged.

LL

Mitigation measure IV.F in Section 1.1.5 of Volume 1 of this Final EIS/EIR encourages the retention and revegetation of native vegetation. Mitigation measure IV.B encourages existing vegetation to be left on-site where excavation is not required. Brush blades will be used to preserve grass and low-growing brush (Mitigation measure IV.E). We believe these mitigation measures are adequate to encourage or maintain vegetative diversity. In addition, a vegetative management plan is to be prepared in consultation with the Forest Service. This plan will address right-of-way maintenance and vegetative management requirements. It is to our benefit to encourage low-growing native vegetation to the maximum extent possible that minimizes the need for right-of-way maintenance.

Herbicides will be used to maintain the right-of-way only under specific conditions as detailed in the response to L-364 K.

L-329 (continued)

MM 3.5 Wildlife
It is stated (p. 3.4-2) that herbicide use may significantly reduce habitat diversity, availability of forage, browse or mast plant species in the managed area. There is no mitigation listed for this particular impact and it is not listed as a significant impact in the conclusion. It would seem that it will remain a significant impact if not mitigated and therefore must be calculated into the overall impacts of the Combined Projects. We do not find any evidence that it was.

It is stated that clearing within large homogeneous blocks of older vegetation may increase regional diversity (p. 3.5-3). While this may be true it must be pointed out that it is often the less sensitive plant and animal species that are able to survive and increase. The report itself states that gophers and ground squirrels would probably increase in the disturbed areas. (p. 3.5-2) Were the potential impacts of increased gopher populations on pre-existing vegetation and efforts at revegetation considered in the analysis of long-term impacts? If not, they should be as this could cause significant impact in several areas of concern.

The Biological Resources Maps do not seem to coincide very accurately with the various tables (ie: Tables 3.5-4 & 3.5-5). Neither Table 3.5-6 nor the maps mention the Agate Flat area (sections N-1A & N-1C) as an important deer and elk winter range area. Furthermore, the Oregon Department of Fish and Wildlife considers this area to have the potential for being a very unique area in Oregon for bird species. Why is this area not specifically identified for impact analysis? If this area has been missed due to lack of detailed study what other areas are missing? We do not feel that the EIS/EIR is detailed enough as regards the potential impacts to Southern Oregon and we would like to see this rectified in the Final Draft.

3.6 Land Use and Land Status, 3.8 Socioeconomics, 3.9 Cultural Resources, 3.10 Corona, Field, and Safety Considerations

NN
OO We found the human, social impacts of the Combined Projects to be understated and insufficiently analyzed. For instance, as was mentioned earlier, there is no quantitative analysis of the effects on human populations of long term herbicide use. What analyses were done on the likelihood of herbicide contamination of domestic water sources? Are there any plans to monitor this potential? We felt that land use, land status, corona, field and safety considerations all need to be considered with the socioeconomic impacts as they are essentially social in nature.

QQ Fair market value compensation is stated as a mitigation measure for loss of property due to acquired right-of-ways. (p.3.6-2) The draft EIS/EIR states that there will be long-term impacts on forest resources due to loss of timber production capacity

MM Herbicide impacts are addressed in the Draft EIS/EIR, Volume 2A, page 3.5-3. Herbicide use will be minimized by implementation of an integrated vegetation management program. This program will use selective means and remove only vegetation which either compromises safe operation of the line or must be removed for access. Based on the low level of expected herbicide use, impacts will be less-than-significant. See also response to L-364 K.

Certain species removed during construction are not likely to recolonize the disturbed sites. Most species will continue to occur, but at different abundances. Highly sensitive species will be avoided.

Ground squirrel and gophers may cause revegetation problems in some areas. Standard control techniques (as used regularly in forest management) may be implemented in areas where damage severely affects regeneration. Control techniques could include trapping or poisoning. All control efforts will conform to state, federal, and local regulations.

The biological resource maps in the Draft EIS/EIR contain some errors. These have been corrected in the Final EIS/EIR. The Agate Flat area's values for big game and birds were not identified in contacts with Oregon Department of Fish and Wildlife representatives. The routes passing through this area are not included in the preferred alternative. Thus, no impacts will occur.

NN See responses to L-329 OO and L-329 PP.

OO The likelihood of herbicide contamination of domestic water supplies was considered. Previously, it was assumed aerial application of herbicides might be employed; mitigation measures included vegetative buffer zones, site-specific field studies, and herbicide use restrictions. It has now been decided that there will be no aerial application of herbicides. Herbicides will be sprayed directly onto the stumps of deciduous trees and tall-growing brush stumps within the right of way using handheld sprayers. See response to L-364 K for further detail on mitigation measures for this activity.

PP People, their cultures, and values are directly or indirectly affected by most of the disciplines analyzed in an environmental document, and are therefore sociological to some degree. However, by considering these disciplines in the manner presented in the Draft EIS/EIR as with most environmental impact documents, a more detailed analysis can be prepared and the expected impacts can be more accurately assessed in relation to the whole.

L-329 (continued)

QQ

The land appraisal process, when conducted by a qualified appraiser, accounts for crop loss, suitability of the land for a given purpose, and improvements to the property. A landowner could invest the payment for the easement and arrange to have payments as an annual payment if desired. Western, as a federal agency, is prohibited by law from committing the federal government to annual compensation for easements, unless specifically authorized by Congress. See response to T-37 I.

Page 4.8-1 of the Draft EIS/EIR states there are 1,656 residences within 1.2 miles (the visual foreground) of the proposed route. Only those residences affected by the final right-of-way would need to be removed. It appears that the preferred route can be sited to avoid most, if not all, residences.

L-329 (continued)

QQ

(p.3.6-2), and long term alteration of irrigation and other farming activities, due to the placement of towers, in the form of restricted types of irrigation systems, need for additional weed control, reduced crop yields, modification of agricultural aircraft operations and loss of cropland under and around towers (p. 3.6-3). It also states that there are 1,656 residences within proposed right-of-ways which may have to be removed (Vol. 1, p. 4.8-1). Despite the fact that these long term socioeconomic impacts are acknowledged and that the long term impacts to agriculture and forestry could not be mitigated to less than significant levels (p. 3.6-79), it is still proposed that land owners be compensated with current market value. The COTP should reconsider compensation methods. We would like to request that long term impacts be considered in the compensation method. We suggest that a more fair method would be annual compensation, reflecting real annual value loss, as well as an initial lump sum compensation of the market value of the land acquired. Another variable to be included in the compensation method should be the potential loss of resale value to the land owner. If compensation is more fairly given, it could significantly increase the costs of the project, and therefore must be considered in the overall cost/benefit analysis of the proposed action.

RR

There is no quantified analysis for the loss of forestry and agricultural production capacity in the draft EIS/EIR. The only quantified analysis is on the short term loss of production. We would like to see this quantified and calculated in the analysis, along with the expense factor for land use inconvenience due to the presence of the transmission line. A socioeconomic analysis must be done as regards potential personal and community economic hardship caused by the unmitigatable long term impacts. It is not sufficient to include only the costs associated with short term loss of property use. We would also like to see the longer term costs associated with orchard and other perennial crop loss analyzed and included in overall agricultural costs of the Combined Projects.

SS

The draft EIS/EIR states that "Prime, Statewide, Unique and Locally Important Farmlands were identified using the California Department of Conservation/USDA Soil Conservation Service Important Farmlands Maps". (p.3.6-20) It also states that these maps were not available for several counties, including Jackson and Klamath counties in Oregon. If these maps were not available, how was this information determined and was it adequately analyzed in the agricultural land loss, cost scenario?

TT

Tables 3.8-5, 3.8-7, 3.8-8, and 3.8-10 show social effects, comparison of long-term forestry and agricultural effects, and comparison of local tax revenue generated. As we have stated several times, we feel the impacts have been understated and the tax revenue overstated. What has not been considered at all in

RR

A discussion of the long term forestry impacts is contained in the Draft EIS/EIR, Volume 2A, Section 3.6.2.1 ("Forestry"), under "Potential Long Term Impacts". Quantified impacts are presented in Tables 3.6-9 and 3.8-8. Similarly, long term agricultural impacts are discussed in the Draft EIS/EIR, Volume 2A, Sections 3.6.2.2 and 3.8.3.2. Quantified impacts are presented in Tables 3.6-10 to 13, and 3.8-7. The long term impacts to orchards and vine crops are presented in Table 3.8-7.

SS

The crossing of irrigated croplands was considered to be equivalent in significance to the crossing of Prime Farmland and Farmland of Statewide Importance. Please refer to page 3.6-20 and page 3.6-28 in Volume 2A of the Draft EIS/EIR for a discussion of the agricultural impact analysis.

TT

Lost income through the indirect loss of timber related jobs is considered in the Draft EIS/EIR, Volume 2A, Table 3.8-8. The "Total Jobs" column includes a multiplier to account for jobs lost in other economic sectors. If BPA owns the Oregon portion of the transmission line, no property taxes will be paid. However, Oregon counties suffering economic impacts greater than \$1,000 are eligible for reimbursement from BPA's Impact Aid program. It is unlikely that counties (except possibly those in Oregon) will suffer any loss in property taxes. As stated in the response to L-329 T, county assessors have rarely responded to right of way easement acquisition by reducing the assessed value

L-329 (continued)

TT

the analyses are potential side effects to counties as a result of lost income and property tax revenues. For instance, the EIS/EIR acknowledges loss of tax revenue due to lost timber production. In Jackson County, where schools and other social services depend on timber revenues for their survival, this loss will create a significant impact. Also endangered are jobs in small communities due to lost timber and agricultural income. These factors must be considered in the final analysis in order to accurately analyze actual costs of the proposed action.

UU

We would like to know what the baseline conditions are that were used to judge significance levels of the various land use and social impacts. These are not delineated in the draft and we can not make an accurate assessment without them. The significant impact levels listed on page 3.8-30, for instance seem far too high to be realistic. In the Pinehurst corridor, where at least one third of the budget for the Pinehurst School District comes from timber revenue, a loss in revenue from property taxes, timber revenue taxes and federal fees of even half the stated amount of \$50,000 could result in school cuts and possible closure. We consider this to be a very significant impact and would like to know what factors were used to determine the stated significance values.

VV

There should also be included a psychological analysis of the impacts of community disruption, perceived depreciation of the quality of life and disruption of individuals' life and livelihood caused by home removals from the right-of-way included in the final EIS/EIR. All of the above listed long term impacts could have significant psychological impact.

WW

It is our belief that the number of sensitive Native American sites has been underestimated, at least in the M-1A, 1B & 1C segments. It is our understanding that there are several sites in this area, as acknowledged by the Shasta Indians. Were all possible sources used in this analysis? Please re-evaluate the figures in Table 3.9-3 for these segments. If this aspect of cultural impacts has been overlooked, it will once again point to underestimated costs.

XX

Corona, field and safety considerations is still an area of unresolved controversy, despite efforts in the draft EIS/EIR to indicate to the contrary. We would like to point out that whenever the health and safety of the public are in question by a proposed action, proponents can be found to "prove" that there is no danger. Yet history has often proved, too late, that the dangers were underestimated. We feel that, as in the case of DDT, Dioxin, and lead water supply pipes, (to name only a few), the danger to the public living in close proximity to high voltage transmission lines has been understated. We would also like to point out that if the majority of the studies have been conducted by organizations with a vested interest in putting in

TT
(cont.)

of the property in question. California counties (and Oregon, if BPA does not own the Oregon portion of the line) will experience a property tax revenue increase as a result of taxes paid by the transmission line.

UU

To a large degree, the determination of significance levels is one of professional judgment. The amount of total county revenue received in FY 1985-86 is presented in the Draft EIS/EIR, Volume 2A, Table 3.8-10. As shown therein, Jackson County received \$40.9 million in revenue. Fifty thousand dollars is only about twelve hundredths of one percent (0.12%) of the County's total budget. Loss of this amount is not considered significant. Since Alternative A is not the preferred route, Jackson County should not experience any timber loss. However, if Alternative A were constructed, the annual loss to Jackson County revenues from timber taxes is estimated to be approximately \$100.

VV

See response to L-325 R. Note that, as discussed in the response to L-329 QQ, there will be very few, if any, homes removed from the right-of-way. See also response to L-329 PP.

WW

COTP staff undertook an extensive Native American consultation program during the route evaluation phase of the COTP. COTP ethnologists consulted sources such as ethnographic accounts and records of public agencies including the Bureau of Land Management, the Native American Heritage Commission, the U. S. Forest Service, and the National Register of Historic Places to identify sensitive Native American heritage sites. The study program also involved requests by mail, through group meetings, and in individual interviews that Native Americans identify heritage sites near the proposed routes that transmission line construction might effect. Members of the Shasta Nation were consulted during this process.

XX

See responses to L-330 F3 and SL-51 A.

L-329 (continued)

XX

the lines, as stated on page 3.10-2, the results of these studies are highly questionable. As more of these lines are proposed and as the public becomes more aware of the potential problems, we will see more decisions such as the case of Florida Power and Light Company v. Putnam County, where the court rules that there is in fact a perceived and/or actual health risk that must be considered. At this point, without further study, it cannot be accurately judged that there is no health risk, and therefore this must be considered a significant impact in the final analysis. Further more, the reasoning used in the Draft EIS/EIR regarding the comparison of household v.s. transmission line electric field values is misleading.(pp. 3.10-2-3.10-14) The fact of the matter is that no matter how high household appliance field levels may go, they are only induced intermittently. Especially those appliances with the highest values. The electric/magnetic fields of a transmission line are constant. This is what must be used to judge the potential effects. In the final draft we hope to see a more reasonable consideration of this issue.

UNADDRESSED ISSUES

Below are listed, in brief, the issues which we formally requested be addressed by the EIS/EIR. While some have been addressed, there are still some that have not been addressed and it is these that are listed here. By law (NEPA and other legislation), all issues formally submitted must be addressed. We will expect to see these addressed in the Final EIS/EIR. Issues and concerns submitted in February 14, 1986 letter to TANC:

YY

-Will routes be moved to comply with the Federal Aviation Regulation 77 and Oregon Aeronautics Division Rule 70 as regards local private and public air strips within proposed corridors? Who will be contacted to ensure these rules and regulations will not be violated?

ZZ

-Will you take into consideration the lengthening of the Mountain View airport in the Pinehurst corridor in your assessments of the impacts of the powerline, as required by law?

A1

-What provisions for fire-fighting are planned should downed lines or capacitor discharge result in a forest fire?

B1

-Would emergency fire fighting equipment be stored near substation facilities? Should medical or fire emergencies arise due to powerline operation, will there be information posted along the route regarding who should be contacted?

YY

The lead agencies and COTP Participants will consult with the FAA and the Oregon Aeronautics Division, if necessary, and comply with all necessary permit requirements. The COTP Manager will have on-site field monitors and construction inspectors who will ensure all permit and mitigation requirements are adhered to.

ZZ

The distance between Alternative A and the airport is approximately two and one-half miles. This distance will not present any hazards to aviation, unless the runway is lengthened by a substantial amount.

A1

The provisions for fire-fighting in the area of the transmission line will be coordinated with the private timber companies, the USDA Forest Service, and the California Department of Forestry who have the responsibility for fire-fighting.

B1

See response to L-329 A1.

L-329 (continued)

- C1 [-Please characterize the frequency and nature of noise complaints received from persons living near 500KV power-lines.
- D1 [-Please address the potential health hazards of herbicide use on livestock, fish, and wildlife.
- E1 [-Would herbicides be used even if public opinion was shown to be overwhelmingly against it?
- F1 [-How will herbicide levels be monitored, not only on the ground and in surface and ground water, but also in meat, milk, and wild fish?
- G1 [-We'd like you to assess the potential economic impact that the powerline may have on each private property owner within half-mile on either side of proposed right-of-way.

Issues and concerns submitted in April 29, 1986 letter to TANC:

- H1 [-Biological and other data inadequacies for the State of Oregon have not been sufficiently resolved.
- I1 [-We have major questions regarding the "surplus power" available in the Northwest and would like to see listed the projected period of surplus as compared to the projected duration of the power sales.
- J1 [-The Land Status considerations indicate a failure of the planning process to identify and consider proposed land status designations. For example, the proposed George Wright Wilderness area, one of two units in the Soda Mountain Wilderness Study Area. The BLM has the authority to designate it a WSA during the Management Plan process. There are undoubtedly a number of other areas in a similar situation - proposed Research Natural Areas and National Natural Landmarks - which are not being considered in the planning process.

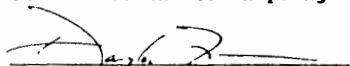
- C1 Transmission line noise complaints are related to noise levels. Some 500 kV lines constructed about 20 years ago received noise complaints. Since that time, research and operating experience have been available to engineers to design lines like the COTP to reduce any noise problem. A study published in 1987 by Bonneville Power Administration indicates that noise above 58dB(A) will be high and cause numerous complaints. The study reported that noise below 52dB(A) is low and produced no complaints. The COTP will be designed to be below the 52dB(A) level.
- D1 No wildlife, fish, or livestock health impacts are expected from the use of herbicides for the COTP in the manner discussed in the response to L-364 K.
- E1 Herbicides are not planned to be used for controlling vegetation growth along the right of way without the permission of the landowner.
- F1 We intend to comply with all federal, state and local guidelines regarding the use of herbicides. Since herbicides will only be applied to the stumps of deciduous tree and tall-growing brush species, there will be no residual herbicides in the soil, or in surface or ground waters. Monitoring of herbicide levels in meat, milk, and wild fish should be the responsibility of the county agricultural commissioners.
- G1 See responses to L-115 A and L-184 A.
- H1 Without specific information on what was lacking, we cannot address this comment.
- I1 See response to L-3 T. The sale of power over the COTP is expected to occur throughout its commercial life. Surplus power sales are expected to be replaced by firm power sales and seasonal capacity/energy exchanges after the surplus conditions expire. Furthermore, in wet years seasonal surplus sales are expected to continue.
- J1 In June 1986, the COTP contacted Eric Stone of the BLM office in Portland to determine the status of the George Wright Wilderness Area. According to Mr. Stone, the BLM has no information concerning the wilderness area, nor is it aware of any plans to designate one in the future.

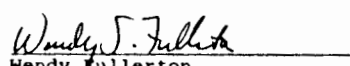
L-329 (continued)

K1

Thank you for the opportunity to comment on the draft EIS/EIR. We look forward to seeing the final draft, which will incorporate the comments above and, considering the above stated potential costs to landowners and the State of Oregon, will contain a more indepth consideration of the "No Action" alternative.

Sincerely,
Friends of the Greensprings


Douglas Frank
Chairperson


Wendy Fullerton
Vice-Chairperson

cc: Bonneville Power Administration
Oregon Department of Energy
Governor Neil Goldschmidt
Representative Nancy Peterson

K1

Comment noted. See the above responses to your economic comments L-329 A through L-329 FF.

L-330

MICHAEL C. MILLER

ATTORNEY AT LAW

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February 27, 1987

SUBJECT: DRAFT EIS/EIR FOR THE CALIFORNIA - OREGON TRANSMISSION
PROJECT (COTP) (DOE/EIS - 0128; SCH # 85040914)

Dear Environmental Coordinator:

INTRODUCTION

The following comments on the DEIS/EIR for the COTP are hereby submitted on behalf of the Modoc Co./Klamath Co. Powerline Committee (MCKCPC), which is a coalition of more than 100 residents and property owners in the intensively farmed and highly productive Tulelake Basin agricultural area located between Malin, Ore. on the north and approximately 10 miles south of Newell, Ca. on the south. In addition, a broad spectrum of local government agencies and community, civic, agricultural and environmental organizations have strongly supported the MCKCPC. The major objectives, policy positions and recommendations of the MCKCPC and its supporters represent an almost totally unanimous consensus of agreement among local government agencies, organizations, residents and property owners in the entire Tulelake Basin, with substantial concurrence from surrounding counties and communities. A set of supporting letters is included as Attachment A, and a set of newspaper articles relating to the proposed project is included as Attachment B.

The purpose of our comments is to address the accuracy, adequacy and completeness of the subject DEIS/EIR as it relates to the Tulelake Basin. Our comments do not address the merits or desirability of the overall project itself. Frankly, we don't have the time, money or technical expertise to properly evaluate the Lead

L-330 (continued)

Agencies' perceived need and justification for the project.

A Nonetheless, we do wish to go on record as being highly concerned about the continuing and repeated use of Ore. and northern Ca. as "high voltage powerline freeways" to transport electrical power from the Pacific Northwest to central and southern Ca. In addition to all

B of the numerous individual and cumulative environmental, social, aesthetic and economic impacts which such projects inflict upon residents, property owners and travelers along their long linear routes, we believe that they may also contribute to increasing future electrical energy costs for the local residents in our area. This effect would be due to the fact that the cheaper hydroelectric power would be provided by the COTP to central and southern Ca. as firm supply via long term contracts, and any future energy shortages in Ore. or northern Ca. may have to be resolved by developing additional high cost electrical generating plants. And it is likely that the consumers of that newly developed high cost electrical energy would have to pay for its production and delivery. As at least a partial

C alternative to the construction of additional high voltage powerlines, we strongly support a comprehensive and aggressive energy conservation program throughout the west coast states.

D Also, we feel compelled to express our deep concern and reservations about the overall planning/environmental review/approval process for this project. A primary purpose and intent of environmental documents prepared pursuant to NEPA and CEQA is to objectively provide full-disclosure environmental information to the public and decision makers. We believe that the review and approval process for the COTP is inherently suspect and questionable, and that attaining the above-

A Your concern about the number of high voltage transmission lines crossing Oregon and northern California is noted. See the response to L-330 B.

B The COTP is projected to benefit all customers of PNW utilities, including residents of the Klamath and Modoc County area. Upgrading the Intertie facilities is projected to reduce net costs of generating power for PNW utilities (due to the sales of surplus firm and non-firm power and capacity), and therefore to help keep electric rates lower than they would be otherwise. The Draft and Final IDU EIS's include an analysis of the effects of long-term firm contracts on new resource development in the PNW and California. These analyses indicate that in some cases (particularly exchange contracts) long-term firm contracts can reduce the need for and cost of new resource development in both regions.

For further discussion of the Project benefits to the Northwest see response to L-329 A.

For a discussion of why fewer, not more, resources will be required to meet PNW and California utility customer need if the COTP is constructed see response to L-3 T.

C Comment noted. The COTP participants are aggressively involved in energy conservation. For an analysis of energy conservation as an alternative to the Project, please refer to Section 2.5.2 of Volume 1 of the Draft EIS/EIR.

D Comments noted. You are correct to note that the same agencies that decide whether to carry out the proposed action also carry out the environmental review procedures. That responsibility is built into both NEPA and CEQA for the numerous instances in which government agencies propose to carry out projects or actions.

Each agency is required to prepare an environmental analysis for any major action they propose. CEQ regulations for implementing NEPA state that "each agency shall interpret the provisions of the act as a supplement to its existing authority and as a mandate to view traditional policies and missions in the light of the Act's national environmental objectives. Agencies shall review their policies, procedures, and regulations accordingly and revise them as necessary to insure full compliance with the purposes and provisions of the Act. . ." 40 CFR 1500.6.

L-330 (continued)

D

indicated purpose and intent of NEPA and CEQA are virtually impossible due to the fact that the same two agencies (TANC and WAPA) are primarily responsible for virtually every single aspect of the process, as follows:

1. They determine whether a need and justification exist for the project.
2. They formulate the project concept.
3. They formally propose the project.
4. They provide all of the funding for analysis of the project.
5. They hire and pay the environmental consultants.
6. They determine what information to include in the project newsletters, the specific wording of that information, and equally important, what information to exclude from the newsletters.
7. They conduct the scoping and workshop meetings.
8. They determine what information to include in the summaries of the scoping meetings and workshops, the specific wording of that information, and equally important, determine what information to exclude from those summaries.
9. They determine which project alternatives will be evaluated in the DEIS/EIR, and equally important, which alternatives will be excluded.
10. They select a so-called Preferred Alternative.
11. They prepare and/or supervise the preparation of the DEIS/EIR including determinations about what information to include, the specific wording of that information, and equally important, what information to exclude.
12. They conduct the public hearings.
13. They prepare and/or supervise the preparation of the responses to comments and other portions of the FEIS/EIR, including determinations about what information to include, the specific wording of that information, and equally important, what information to exclude.
14. They certify the adequacy of the FEIS/EIR.
15. They determine the significance of all environmental impacts identified in the FEIS/EIR.

L-330 (continued)

D

16. They determine if, when and how their staff's recommended mitigation measures may be implemented, and if they choose to do so, they may perform whatever self-monitoring of these measures they deem appropriate.

17. They prepare the wording of, and later approve, any Findings of Overriding Consideration which may be necessary.

18. They render the major approval decisions for the project.

19. They prepare and file a Notice of Determination and a Record of Decision for the project.

Clearly, the purpose and intent of NEPA and CEQA in terms of providing maximum objectivity and full disclosure would be tremendously enhanced if all of these actions and decisions didn't rest squarely in the laps and under almost total control of the project proponents. The current process makes it virtually impossible for the public to have faith or confidence that their environmental concerns, values and recommendations which differ from those of the project proponents will receive the fair, adequate and non-biased consideration which they deserve. For these reasons, many members of the MCKCPC are thoroughly disillusioned with the current process, and believe that the only way their concerns and recommendations can be fairly and objectively considered is by litigation at the conclusion of the EIS/EIR process.

E

To the members of the MCKCPC, the portion of the so-called Preferred Alternative which crosses over the prime, irrigated and highly productive farmland in the Tulalake Basin represents a severe, unjustified, unnecessary, highly destructive and intolerable threatened intrusion into the lives, private property and livelihoods of the residents of this important and long-established agricultural area. In response to that threatened intrusion, the MCKCPC intends to do everything within its power to assure that any new high voltage

E

Comment noted.

L-330 (continued)

E | powerline within this region shall be located far enough away from the
| existing prime irrigated farmland that it will not create a permanent,
| ugly, obstructive, offensive, hazardous and costly burden for the
| Tulelake Basin farmers who are already struggling to survive with
| today's highly depressed farm economy.

L-330 (continued)

SUMMARY OF MAJOR ISSUES OF CONCERN

The following is a list and summarized analysis of the MCKCPC's major concerns regarding the threatened intrusion of the so-called Preferred Alternative across prime irrigated farmland in the Tulalake Basin. This list and analysis is based in part upon the content of the DEIS/EIR and in part upon several cumulative centuries of combined agricultural experience by Tulalake Basin farmers, including in some cases decades of living near and farming around and between existing high voltage towers and powerlines.

1. Totally Inadequate Consideration of Cross's Alternative

F [Our foremost and paramount concern involves the inadequate identification and evaluation of alternatives in the DEIS/EIR. And to properly address this inadequacy, the entire history of the COTP planning process must be considered. The DEIS/EIR incorporates by reference the Summaries of all 34 scoping meetings and 21 workshops. In addition to these meetings, the MCKCPC organized a special public meeting on 8-11-86 at the Tulalake Grange Hall, which included representatives of both Lead Agencies. Since the COTP staff didn't make the effort to publish a Summary of that meeting, as they had done for the other meetings, we have included our own secretary's minutes as Attachment C. We've also reviewed all 8 of the project newsletters. At the beginning of virtually every meeting, and in virtually every newsletter, the concerned citizen participants were encouraged to express their views and provide information regarding environmental issues associated with the project. Lead Agency staff

F See responses to L-330 G through L-330 Q.

L-330 (continued)

have stated on numerous occasions that such concerns and information would be important and useful to the preparation of the DEIS/EIR, the identification of alternatives for consideration in the report and the selection of a so-called Preferred Alternative. Even at the DEIS/EIR public hearings in Klamath Falls, Ore. and Newell, Ca. on 1-5-87 (and probably at every one of the 12 scheduled DEIS/EIR public hearings), members of the Lead Agency hearing panel stated that "Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects." Probably the most consistently repeated and stressed concern of participants at virtually every single scoping meeting and workshop -- and at the 8-11-86 public meeting in Tulelake (Attachment C) -- was that the proposed powerline must not be routed across prime agricultural land. On numerous occasions, the same concern has likewise been conveyed to the Lead Agencies via written correspondence.

Further, we also note that the Lead Agencies' Routing Guidelines for the project, as contained on pgs. B-7 and B-9 of Vol. 2A read as follows:

- Minimize (use of) highly productive agricultural land
- Emphasize (use of) barren and low productivity land
- Minimize (use of) prime farmland
- Minimize (use of) other productive farmland

G [We therefore find it appalling that despite virtually unanimous public opposition to the routing of the proposed powerline across prime agricultural land, and in direct conflict with the Lead

G The COTP preferred route is 1,500 feet wide. Within that route, a study centerline has been identified in the Tulelake/Newell area to represent a 200-foot wide easement that would cross only one irrigated agricultural field. This would involve the transmission line spanning the field and would not involve placement of a tower in the field. See also response to T-175 A.

L-330 (continued)

G

Agencies' own Routing Guidelines, we are nonetheless still confronted with a so-called Preferred Alternative that crosses directly over prime, irrigated, intensively farmed and highly productive agricultural land in the Tulalake Basin.

This unfortunate and undesirable situation has occurred despite extensive efforts by the MCKCPC. During the workshop in Newell, Ca. on 11-25-85, Lead Agency representatives specifically requested that farmers and other concerned citizens in the Tulalake Basin area identify and recommend an alternative powerline route in that area that would be satisfactory and acceptable to the farmers and other residents. Consequently, these citizens formed the MCKCPC and put an extensive amount of time, effort and expense into identifying an acceptable route. That effort involved aerial flyovers; ground field inspections; review of aerial photos, USGS maps, and other map references; coordination with local planning officials, drafting work to plot the route on a map and the preparation of a narrative summary of the route. The selected route is commonly referred to as Cross's Alternative after John Cross, who is the Chairman of the Modoc Co. Planning Commission and who was instrumental in identifying its specific alignment.

Cross's Alternative, which is described and illustrated as part of written comments from John Cross that are included in Attachment A, was formally presented to Lead Agency representatives at the 8-11-86 public meeting which was organized by the MCKCPC and was held at the Tulalake Grange Hall (Attachment C). At that meeting, copies of a narrative summary and a map illustrating that alternative were provided to the Lead Agency representatives, and John Cross gave a presentation to them and answered questions about it. The second to

L-330 (continued)

last sentence of Attachment C indicates that one of the Lead Agency representatives stated at the meeting that "it is very possible" that Cross's Alternative may be used in the alignment for the COTP.

Subsequently, Ore. representatives of the MCKCPC met with Lead Agency representatives on 9-4-86 to explain their recommended alignment for the Ore. portion of Cross's Alternative. A follow-up letter dated 9-9-86 from the COTP's Asst. Project Director to our Ore. Chairman stated that "I want to emphasize that we are open to new routing information at any point during our environmental process. It may be possible to include your routing information as an option in the Draft EIS/EIR due in November." A copy of that letter is included as Attachment D.

H However, despite all of this time, work, effort and expense, the only reference to Cross's Alternative contained in the entire DEIS/EIR is a statement on pg. 4.1-41 of Vol. 1 which reads: "This option (referring to the N-10 Alt 2+3+4 route) is very similar to the one proposed by the Modoc County Powerline Committee." Needless to say, the MCKCPC is extremely distressed and disappointed at the fact that after all their effort, which in fact was expended at the request of Lead Agency representatives, their recommended alternative has been almost totally ignored.

I The N-10 Alt 2+3+4 option, as described in the DEIS/EIR, would require clearing, construction and access roads along two new corridors, while Cross's Alternative would only involve one new corridor. Some members of the MCKCPC believe that the Lead Agencies have deliberately included the N-10 Alt 2+3+4 option rather than Cross's Alternative in the DEIS/EIR because:

H The John Cross Alternative, as presented to the lead agencies on August 11, 1986, is not feasible from an engineering standpoint since it would place the COTP and one line of the existing Intertie lines in abutting rights-of-way. Stated succinctly, it is acceptable from a reliability standpoint for the COTP to fail by itself, or for both the two existing Intertie lines to fail by themselves, but it is not acceptable for the COTP and even one of the existing Intertie lines to fail together. This is because the COTP, by itself, can withstand the surge of power that would result if both existing Intertie lines failed, but should the COTP and one of the existing lines fail, the remaining line could not withstand the surge of power that would result. It would fail, and an unacceptable three-line outage would result.

The lead agencies, however, do not interpret public support for the John Cross Alternative as limited to the drawing presented on August 11. This would be unfair, since the basic concept of the alternative, that of moving the two Intertie lines to the east and placing the COTP on the vacant right-of-way, is acceptable from a reliability standpoint. It is this version of the John Cross Alternative that the lead agencies believe to be the publicly supported routing option.

As a matter of record, the idea for such a route was first discussed between the Tulalake/Newell area public and the lead agencies on May 8, 1986, during a COTP-sponsored public meeting at the Newell Elementary School. Based on discussions at that meeting, the lead agencies in June and July developed what came to be known as the Copic Bay option, N-10 Alt. 2+3+4. This route option was analyzed by the COTP environmental contractor in July 1986 along with other new route options that developed as a result of the COTP's public meetings in May 1986. The Copic Bay option was considered as an option to a portion of the preferred route and displayed as such on a map contained in the COTP

L-330 (continued)

H
(cont.)

newsletter for August 1986. This newsletter had been printed and was being mailed when the lead agencies first heard the route option being referred to as the John Cross Alternative at the special public meeting on August 11, 1986. As noted in the minutes of that meeting attached to MCKCPC's comments, the lead agencies talked at the meeting about "the option that the agency is considering that is similar to John Cross'."

The lead agencies have been responsive to the suggestions of the public regarding the John Cross Alternative. The agencies have not, however, adopted the option as a part of the preferred route. This is because the option has been found to have prohibitively high cost, and a 200-foot right-of-way can be sited within the preferred route that minimizes impacts to agricultural land.

See response to L-330 G for a discussion of the opportunity for minimizing impacts to agricultural land within the COTP preferred route. See also Section 1.2.2 of Volume 1 of this Final EIS/EIR for further discussion of this option.

L-330 (continued)

I 1. They wanted to ensure that the DEIS/EIR provided as much justification as possible for them to reject or any alternative east of their so-called Preferred Alternative.

2. The N-10 Alt 2+3+4 option provides them with more of such additional justification than does Cross's Alternative, based upon the following:

a. By requiring clearing, construction of access roads and powerline construction along two new corridors, the cost would increase and it would be easier for them to make a claim of economic infeasibility.

b. By requiring clearing, construction of access roads and powerline construction along two new corridors, the amount of environmental disturbance and damage would be greater, allowing them to make a claim of environmental inferiority.

c. A representative of the U.S. Forest Service has indicated that while one new corridor on Forest Service land (as would occur with Cross's Alternative) may be acceptable, two new corridors on Forest Service land (as would occur with the N-10 Alt. 2+3+4 option) may not be acceptable. Since the N-10 Alt 2+3+4 option would involve two new corridors on Forest Service land, the potential Forest Service rejection of two new corridors would render that option infeasible.

I The lead agencies developed N-10 Alt. 2+3+4 in response to input from the Tulelake/Newell area public. In order for any Intertie relocation to be acceptable from a reliability standpoint, as discussed in response to L-330 H, both Intertie lines must be moved. The option considered in the final decision process (See Section 1.2.2 of Volume 1 of this Final EIS/EIR) involved moving both of the two existing lines into a common, 350-foot wide right-of-way on N-10 Alt.4. However, given the opportunity to minimize crossing of farmland on the preferred route as described in the response to L-330 G, the prohibitively high costs and disruption of the Intertie operations that would result from the proposed relocation makes this option infeasible.

J The DEIS/EIR contains several statements which contend that the so-called Preferred Alternative is the environmentally superior alternative. The MCKCPC strongly disagrees with those statements as they apply to the portion of the route within the the Tulelake Basin. Such statements totally ignore the obvious fact that intensive farming operations on highly productive prime agricultural land are predominant and critically important components of the existing environment of the Tulelake Basin, and that the crossing of this land by the so-called Preferred Alternative would be extremely disruptive, detrimental and damaging to the farming environment and operations of the area. As an illustration of the magnitude of the importance of farming to the area, a portion of the oral comments of Mr. Joe Cordonier (representing the Tulelake City Council) during the

J See responses to L-330 G and L-330 K.

L-330 (continued)

J

DEIS/EIR public hearing in Newell, Ca. on 1-5-87 is quoted as follows:

"The City of Tulalake would not be where it is today if it wasn't for agriculture. The City of Tulalake goes the way of agriculture. In a poor (agricultural) year, the City does poorly. In a good (agricultural) year, it's just the reverse. Anytime an issue hits the local farming community with the magnitude that this issue has, the City of Tulalake is very concerned."

K

Based upon the preceding and subsequent information contained in these comments, the MCKCPC contends that Cross's Alternative is BY FAR environmentally superior to the portion of the so-called Preferred Alternative which would be located within the Tulalake Basin. The evidence of that fact is so overwhelming and convincing that we consider any claim to the contrary to be absolute nonsense. Further, it is hardly conceivable that conservation organizations such as the Klamath Basin Audubon Society, the Klamath Group of the Sierra Club, the Isaak Walton League and the California Planning and Conservation League would endorse Cross's Alternative (see correspondence from those organizations contained in Attachment A) if they felt that the so-called Preferred Alternative was environmentally superior. The so-called Preferred Alternative cannot reasonably be considered the "Environmentally Superior Alternative" unless it is modified to include Cross's Alternative.

L

The MCKCPC contends that construction of the so-called Preferred Alternative would create a multitude of individually and cumulatively significant adverse impacts and problems upon the residents, land use and economy of the Tulalake Basin, and that all of these impacts and problems can be avoided by including Cross's Alternative in the so-

K

An environmental comparison of the John Cross proposal is discussed in Section 1.2.2 (Environmentally Superior Route Meeting, 4.4.2) and Section 2.3 (Supplement to the Draft EIS/EIR North Routing Options) of Volume 1 of this Final EIS/EIR. The comparison showed the John Cross Alternative to be environmentally superior to the preferred route for land use and socioeconomics, but inferior for earth, wildlife, and vegetation resources. Overall, the lead agencies found the John Cross Alternative (N-10 Alt.4) to have prohibitively high costs compared to slight environmental benefits and is therefore not feasible from an economic perspective. See also responses to L-330 H and L-330 I.

L

See responses to L-330 H, L-362 M, and T-10 F.

L-330 (continued)

L L called Preferred Alternative. Further, since the purpose of the COTP
M is to benefit public power users in central and southern Ca., it would
be far more fair and appropriate to locate the powerline on publicly
owned multi-purpose land east of the Tulelake Basin rather than to
impose all of the severe hardships, burdens, problems and economic
impacts associated with the project on the Tulelake Basin farmers,
their families and their privately owned prime agricultural land.
For these reasons, Cross's Alternative is strongly supported by
virtually every local government agency, organization, resident and
property owner in the entire Tulelake Basin.

The National Environmental Policy Act (NEPA), Executive Order
11514, the Council on Environmental Quality's Regulations for
Implementing NEPA, the U.S. Department of Energy (DOE) NEPA
Guidelines, the California Environmental Quality Act (CEQA) and the
State CEQA Guidelines all contain policy statements and/or legally
binding requirements which compel the Lead Agencies to adequately and
properly consider reasonable alternatives to the proposed project,
particularly when alternatives are identified which would avoid
significant adverse impacts that would result from implementation of
the proposed project. Examples of such policy statements and
requirements are as follows:

NEPA, Sec. 102(2)(e):

"... all agencies of the Federal government shall. .
.(e) Study, develop and describe appropriate alternatives to
recommended courses of action in any proposal which involves
unresolved conflicts concerning alternative uses of available
resources. . ."

Executive Order 11514 entitled "Protection and Enhancement of
Environmental Quality":

"By virtue of the authority vested in me as President of the
U.S. and in furtherance of the purpose and policy of the
National environmental Policy act of 1969, it is ordered as

M See responses to L-330 H and T-38 D.

L-330 (continued)

follows: Sec. 2: ...the heads of Federal agencies shall: (a) Monitor, evaluate and control on a continuing basis their agencies' activities so as to protect and enhance the quality of the environment... (d) ...bring their authority and policies into conformance with the intent, purposes and procedures of the Act (NEPA)

Sec. 3: The Council on Environmental Quality shall: (h) Issue regulations to Federal agencies for the implementation of the procedural provisions of the Act... They will be designed to ... emphasize the need to focus on real environmental issues and alternatives."

NEPA Regulations (CEQ), Sec. 1500.2(e) and (f):

"Federal agencies shall to the fullest extent possible:

...(e) Use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment. (f) Use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment."

NEPA Regulations (CEQ), Sec. 1502.1:

"The primary purpose of the environmental impact statement is to serve as an action-forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government. It shall provide full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. . ."

NEPA Regulations (CEQ), Sec. 1502.9 (a):

"...The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action."

NEPA Regulations (CEQ), Sec. 1502.14:

"This section (Alternatives including the proposed action) is the heart of the environmental impact statement. . . In this section agencies shall: (a) Rigorously explore and objectively evaluate all reasonable alternatives. . . (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits."

Fed. Register, Vol. 46, No. 55 (Questions and Answers About the NEPA Regulations - 1981):

"1a.Q: What is meant by 'range of alternatives' as referred to in Sec. 1505.1(e)?

A: The phrase 'range of alternatives;...includes all

L-330 (continued)

reasonable alternatives which must be rigorously explored and objectively evaluated. . . ."

"2a.Q: If an EIS is prepared in connection with an application for a permit or other federal approval, must the EIS rigorously analyze and discuss alternatives that are outside the capability of the applicant or can it be limited to reasonable alternatives that can be carried out by the applicant?

A: Section 1502.14 requires the EIS to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on the word 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant."

"5b.Q: Is the analysis of the 'proposed action' to be treated differently from the analysis of alternatives?

A: The degree of analysis devoted to each alternative in the EIS is to be substantially similar to that devoted to the 'proposed action.' Section 1502.14 is titled 'Alternatives including the proposed action' to reflect such comparable treatment. Section 1502.14(b) specifically requires 'substantial treatment' in the EIS of each alternative including the proposed action. . . ."

CEQA (Public Resources Code Sec. 21002):

"The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures which would substantially lessen the significant environmental effects of such projects. . . ."

State CEQA Guidelines, Sec. 15021:

"(a) CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. (1) In regulating public or private activities, agencies are required to give major consideration to preventing environmental damage. (2) A public agency should not approve a project as proposed if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant effects that the project would have on the environment."

State CEQA Guidelines, Sec. 15126(d)(3):

"The discussion of alternatives shall focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

L-330 (continued)

N

The MCKCPC contends that virtually totally ignoring Cross's Alternative constitutes not only a betrayal of the public trust and confidence, but also reflects a serious deficiency in the alternatives analysis portion of the DEIS/EIR. Further, we contend that this deficiency alone provides more than sufficient justification to render the DEIS/EIR legally inadequate pursuant to both Federal and State regulations. In this respect, the following additional Sections of the State CEQA Guidelines are also noted:

Sec. 15003:

"...the courts of this state have declared the following policies to be implicit in CEQA: (f) CEQA was intended to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language."

Sec. 15151:

"...The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."

The MCKCPC contends that if the Lead Agencies simply put their heads in the sand and push forward, while continuing to ignore Cross's Alternative, they will severely jeopardize the entire planning process on the basis of negligence, prejudicial abuse of discretion, noncompliance with the Federal NEPA Regulations and noncompliance with the State CEQA Guidelines. We believe that it would be in everyone's

O

best interest, including the project proponents', for the Lead Agencies to simply admit their mistake and direct their staff to begin preparing a Supplemental DEIS/EIR to evaluate the environmental effects of Cross's Alternative, which is BY FAR environmentally superior to all alternatives under consideration in the Tulelake Basin vicinity except the No Project Alternative.

P

It is likely that the preparation of responses to comments on the

N

See responses to L-330 H and T-4 L.

O

See responses to L-330 H and T-9 D.

P

The John Cross/Copic Bay option is presented and analyzed in the Draft EIS/EIR as an option within the preferred route. There would be no need for a Supplement to the Draft EIS/EIR in order for it to be part of the final route of the COTP.

L-330 (continued)

P

current DEIS/EIR will require at least 6 months of work. It is also likely that a new Supplemental DEIS/EIR for Cross's Alternative can be completed within approximately 3 months, and that the review period, hearings and responses to comments can be completed such that the date of publication of both the original FEIS/EIR and the new Supplemental FEIS/EIR can easily be dove-tailed to allow for concurrent processing. And to assist in expediting the processing of the new Supplemental DEIS/EIR, the MCKCPC would have no objection to a reduction in the public review period for the new Supplemental DEIS/EIR to the minimum time required by Federal and State regulations. Thus, preparation of the new Supplemental DEIS/EIR would probably have no affect whatsoever on the planned completion date for the Final version of the current EIS/EIR, or on the subsequent decision-making time schedule.

Q

The MCKCPC feels compelled to make one final point regarding Cross's Alternative. As indicated by the preceding information, our members have thus far been reasonably cooperative with the COTP--far more so than the residents of all or most other potentially impacted areas. While the residents of some areas have taken the position of strong and total opposition to the project, and while the only alternative recommended by many residents along other corridors is to push the project into Modoc. Co., the MCKCPC has made a good faith effort to be cooperative with the COTP by identifying a reasonable and acceptable alternative within our own corridor. (Refer to the oral comments of Mr. Otto Huffman during the public hearing in Newell, Ca. on 1-5-87) Identifying an acceptable alternative has required a substantial amount of time, effort, and expense, but we have done it, and it is Cross's Alternative. As is clearly evident from Attachment

Q

The lead agencies sincerely appreciate the amount of effort that the MCKCPC members have expended to identify an alternative in the eastern corridor, and their cooperative spirit. The lead agencies, in turn, have seriously considered a version of the John Cross alternative (Copic Bay Option), conducting engineering studies on it to bring both the Copic Bay option and the preferred route to an equal level of treatment. See responses to L-330 G and L-330 H.

L-330 (continued)

Q

A. Cross's Alternative has virtually unanimous support from throughout the Tulelake Basin and surrounding areas. If the COTP continues to demonstrate its unwillingness to cooperate with us by failing to modify the so-called Preferred Alternative to keep it totally off Tulelake Basin farmland, it is likely that the MCKCPC and many of its supporters would join the efforts of those groups and individuals who are in total opposition to the project, and would aggressively support them in their work.

2. Unnecessary Severe Long-Term Economic/Agricultural Land Use Impact Upon Tulelake Basin Farmers: A Cumulatively Significant Adverse Impact.

R

Construction of the so-called Preferred Alternative within the Tulelake Basin would impose numerous adverse long-term economic/agricultural land use impacts upon Tulelake Basin farmers. While some of these impacts may be considered individually minor, the overall combined magnitude would clearly be substantial and severe. Furthermore, given the existing seriously depressed condition of the farm economy, the fact that several farm bankruptcies and foreclosures have recently occurred within the Tulelake Basin, and other various economic problems of individual farmers, the additional economic burdens and problems that would be caused by the so-called Preferred Alternative would likely be devastating to some of the impacted farmers.

Specific economic/agricultural land use impacts within the Tulelake Basin which would result from the so-called Preferred Alternative are as follows:

S

a. The possibility of being forced to eliminate certain otherwise profitable crops from production.

R

See response to L-330 G.

S

It is recognized that certain farming operations may no longer be possible given the siting of the line within the final preferred route. The method for compensating the impacted landowner is described in response to T-162 B.

L-330 (continued)

- T** b. The use of circle irrigation systems, which are labor-saving and highly efficient, would be precluded in fields containing towers.
- U** c. The inability to irrigate under and between transmission towers by using wheel lines.
- V** d. The reduction in the normal life of aluminum due to electrolysis caused by high voltage powerlines. (Virtually all types of irrigation systems used in the Tulelake Basin are made almost exclusively of aluminum.)(See oral comments of Mr. Colin McAuliffe during the DEIS/EIR public hearing in Newell, Ca. on 1-5-87.)
- W** e. Increased labor costs in fields containing wheel irrigation systems due to requirements for dismantling and reassembly of wheel lines in the vicinity of transmission towers. The alternative to dismantling and reassembly is the purchase of additional wheel lines at a cost of approximately \$30,000 per mile.
- X** f. Reduced crop production due to transmission tower interference with the irrigation pattern planned for proper water application. The interference results in over-watering and/or under-watering of crops, with resulting reduced yields.
- Y** g. Increased cost for the purchase, installation and dismantling of pack line to properly irrigate the land within the 200-ft. wide powerline corridor. The purchase cost of pack line is approximately \$12,000 per mile.
- Z** h. Substantially increased fuel and labor costs associated with pesticide spraying, seeding and fertilizing by aircraft on fields containing transmission towers. Also, loss of crop production caused by transmission tower interference with aircraft spraying, seeding and fertilizing operations as
- AA** a result of over-spraying/seeding/fertilizing in some areas and

T,U See response to L-330 G. The potential impacts of the proposed line on the use of center pivot irrigation lines and wheel lines are discussed on pages 3.6-4 and 5 in Volume 2A of the Draft EIS/EIR. The study centerline of the preferred route would not have any structures located within existing irrigated fields.

V See response to T-4 H.

W See responses to L-330 T and L-330 U.

X See responses to L-330 T and L-330 U.

Y See responses to L-330 T and L-330 U.

Z, AA, BB Comments noted. The impacts of transmission lines on aerial spraying are discussed on pages 3.6-4 and 5 in Volume 2A of the Draft EIS/EIR. See also response to T-175 H.

L-330 (continued)

AA

under-spraying/seeding/fertilizing in other areas. If proper pesticide coverage cannot be accomplished by aerial spraying, the alternative is to spray from the ground. Ground spraying for some crops is totally infeasible because the tractor would destroy the crop. The likely result would be that the crop could not be sprayed, or could only partially be sprayed, with a high probability that a pest infestation would destroy the entire crop, and the creation of potential liability problems from adjacent and nearby farmers whose land and crop may also become contaminated.

BB

i. The difficulty of aerial and ground spraying in the vicinity of transmission towers would also cause a potential loss of certification for certified seed crops due to contamination by weed seeds, insects, rodents, nematodes, viruses, bacteria, fungus, etc.

CC

j. Increased labor and operating costs associated with crop cultivation and harvesting on land containing transmission towers due to interruptions of crop rows by the towers, and the need to maneuver farm equipment around and between the towers.

DD

k. Substantially reduced appraised value of farmland containing transmission towers, resulting in a reduction in credit allowed by lending institutions to finance future crop production on that land. (See oral comments of Mr. Paul Tschirky during the DEIS/EIR public hearing in Newell, Ca. on 1-5-87.)

EE

l. Potential problems associated with honeybee pollination in alfalfa and clover seed production fields located beneath or near the high voltage powerlines.

FF

m. Potential problems associated with the use of ladybugs which are used for biological control of aphids in portions of the Tulalake

CC

See response to L-330 G. The study centerline of the preferred route would not have any structures located within existing fields.

DD

See responses to L-330 CC and T-82 C. According to a study done by BPA (U. S. Department of the Interior, Bonneville Power Administration. 1977. The role of the Bonneville Power Administration in the Pacific Northwest power supply system. Appendix B: BPA power transmission. Portland, Oregon), county tax assessors have rarely responded to right-of-way easement acquisition by reducing the assessed value of the property in question.

EE

See response to L-309 E2 for a discussion of effects on honeybees and L-243 B for plants (e.g. clover).

FF

No studies have indicated that ladybugs would be adversely affected by COTP. A full-scale, long-term ecological study by BPA at the Lyons 1200 kV research facility found no indication of a negative effect or hazard.

L-330 (continued)

FF
GG

Basin where organic farming occurs.

n. Significantly reduced resale value of farmland across which the high voltage powerline would traverse, including some farmland which is already adversely impacted by existing high voltage powerlines. (See oral comments of Mr. Paul Tschirky and Mr. Colin McAuliffe during the DEIS/EIR public hearing in Newell, Ca. on 1-5-87.)

HH

Also, during the DEIS/EIR hearing in Newell, Ca. on 1-5-87, Mr. Dan Byrne of the MCKCPC presented oral comments regarding the economic impact of the so-called Preferred Alternative on his own individual farm operation. The information which Mr. Byrne presented is included in the public hearing record, and the conclusion of his analysis was that the economic impact of the so-called Preferred Alternative upon Tulelake Basin farmers would be far greater than is reflected in the DEIS/EIR.

II

Additional economic impact information is included in comments of the Ca. Farm Bureau Federation, which are included in Attachment A.

JJ

Further, the high degree of unfairness with regard to the proposed imposition of severe economic burdens and hardships on Tulelake Basin farmers becomes far more offensive and objectionable when we read quotes in newspaper articles such as the Sacramento Bee article dated 1-7-87 in Attachment B, wherein a representative of the project proponents states that, "For relatively small money, the California utilities can get fairly high capacity."

Conclusion:

KK

Based upon the preceding information, the MCKCPC contends that the cumulative long-term economic/agricultural land use impact of the so-called Preferred Alternative upon Tulelake Basin farmers would be

GG

See response to T-82 C.

HH

See response to T-36 A and T-36 C.

II

Comment noted. The California Farm Bureau directly submitted its comments. See responses to L-297.

JJ

The lead agencies do not believe the proposed project will impose severe economic burdens and hardships on Tulelake Basin farmers. A study centerline has been identified within the preferred route that would avoid all farmland with the exception of the spanning of 0.15 miles of one irrigated agricultural field. No towers need to be placed on existing agricultural land. Fair and just compensation will be made for easement rights on any land crossed.

KK

See response to L-330 JJ.

L-330 (continued)

KK significantly adverse. In contrast, Cross's Alternative would totally avoid this impact.

3. Worsening of the Existing Substantial Safety Hazard Problem in the Tulalake Basin for Agricultural Aircraft Operators: A Cumulatively Significant Adverse Impact

Two high voltage powerlines and an assortment of smaller local distribution powerlines presently exist within the Tulalake Basin. These powerlines, when considered in combination, create a substantial adverse potential safety hazard problem for agricultural aircraft operators which are integral and necessary components of Tulalake Basin agriculture.

LL The so-called Preferred Alternative would place a third high voltage powerline within the Tulalake Basin, which would further worsen the existing safety hazard problem for agricultural aircraft operators. In addition, the so-called Preferred Alternative would add a new potentially severe safety hazard problem due to its close proximity to both the Tulalake Airport and the Loveness Farms Airport. Information concerning various specific impacts upon agricultural aircraft operations are contained in oral and written comments from many members of the MCKCPC, including the following:

- NN a. Oral testimony from Mr. Loren Loveness at the DEIS/EIR public hearings in Klamath Falls, Ore. and Newell, Ca. on 1-5-87.
- OO b. Written comments from Loren and Elsie Loveness included in Attachment A.
- PP c. Oral comments from Mr. Nick Macy at the DEIS/EIR public hearing in Newell, Ca. on 1-5-87.

LL See responses to L-14 A, L-330 Z, and T-175 H.

MM The North 1 routing option, discussed in the Supplement to the Draft EIS/EIR on page 3.1-1, is part of the preferred route and would avoid the impacts to the Loveness Farms Airport. See response to L-21. The preferred route would not present a hazard to the Tulalake Airport as it does not intersect the approaches.

NN Responses to Mr. Loveness' comments can be found at T-4 and T-30.

OO See responses to T-4 and T-30.

PP Responses to Mr. Macy's comments can be found at T-20.

L-330 (continued)

QQ [d. Written comments with attached information provided by Mr. Nick Macy in Attachment E of these comments.

Conclusion:

RR [Based upon the preceding information, the MCKCPC contends that the cumulative safety hazard impact upon agricultural aircraft operators that would result from the so-called Preferred Alternative in combination with existing hazards associated with the two existing high voltage powerlines, an assortment of smaller local distribution lines and the close proximity to two existing airports, constitutes a cumulatively significant adverse impact. In contrast, Cross's Alternative would have no or negligible impact upon agricultural aircraft safety.

4. Unnecessary Loss of Prime Agricultural Land within the Tulelake Basin: A Cumulatively Significant Adverse Impact.

The agricultural productivity of farmland has always been of major importance to the economy of this country, and to the health and well-being of its citizens. Further, a large portion of the world population is also partially dependent upon food produced in the U.S. Unfortunately, this country's highly productive prime farmland base is a finite and irreplaceable resource, and its preservation becomes more and more imperative with the passing of each and every day as its acreage is reduced by development, erosion, salinity, drainage problems and other factors, and as the populations of the world, U.S. and Ca. continue to increase.

SS [Although the amount of farmland and agricultural productivity which would be eliminated in the Tulelake Basin as a result of construction of the so-called Preferred Alternative would clearly be a small individual amount, it must be recognized that the continued

QQ We appreciate receiving and have considered the information provided by Mr. Macy on aircraft operations.

RR Comment noted. See responses to L-14 A and L-330 MM.

SS Comment noted. The impact of Alternative D on farmland is considered significant for its direct effect and on a cumulative basis. Refer to Table 2 on Page 19 of Volume 1 of the Draft EIS/EIR. There is a typographical error on Table 2. In the far right column, the fifth line should indicate "yes" rather than "no." This change has been incorporated into the Summary section of this Final EIS/EIR.

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SS nation-wide and state-wide conversion, erosion and loss of productive farmland--particularly prime farmland--is an existing cumulatively significant impact and that each and every additional incremental loss of such farmland further worsens that impact.

The following information reflects the magnitude of importance of protecting and preserving prime agricultural land:

1. According to the Ca. Dept. of Finance, the population of the world was approximately 4,836,645,000 as of 1-1-85 (increasing at a rate of 2%/yr.); the population of the U.S. was approximately 239,926,000 as of 1-1-86 (increasing at a rate of 0.9%/yr.); and the population of Ca. was approximately 26,981,000 as of 6-1-86 (increasing at a rate of 2.4%/yr.) These figures do not include legal or illegal immigration. During 1985, 3,750,000 births (7.13/min.) occurred in the U.S., and 458,000 births (0.87/min.) occurred in Ca.

2. In 1981, the U.S. Congress considered the protection of farmland in the U.S. to be of such critical importance to the long term interest of this country and its citizens that it enacted the Farmland Protection Policy Act (Public Law 97-98), which establishes Federal law and policy regarding the protection of farmland. The following sections are directly quoted from that Act:

Sec. 1540. (a) "Congress finds that -

(1) the Nation's farmland is a unique natural resource and provides food and fiber necessary for the continued welfare of the people of the United States;

(2) each year, a large amount of the Nation's farmland is irrevocably converted from actual or potential agricultural use to nonagricultural use;

(3) continued decrease in the Nation's farmland base may threaten the ability of the United States to produce food and fiber in sufficient quantities to meet domestic needs and the demands of our export markets;

(4) the extensive use of farmland for nonagricultural purposes undermines the economic base of many rural areas;

(5) Federal actions, in many cases, result in the

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conversion of farmland to nonagricultural uses where alternative actions would be preferred;

(6) The Department of Agriculture and other Federal agencies should take steps to assure that the actions of the Federal Government do not cause United States farmland to be irreversibly converted to nonagricultural uses in cases in which other national interests do not override the importance of the protection of farmland nor otherwise outweigh the benefits of maintaining farmland resources."

Sec. 1540 (b) "The purpose of this subtitle is to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to ensure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland."

Sec. 1541.(a) "The Department of Agriculture, in cooperation with other departments, agencies, independent commissions, and other units of the Federal Government, shall develop criteria for identifying the effects of Federal programs on the conversion of farmland to nonagricultural uses.

(b) Departments, agencies, independent commissions, and other units of the Federal Government shall use the criteria established under subsection (a) of this section, to identify and take into account the adverse effects of Federal programs on the preservation of farmland; consider alternative actions, as appropriate, that could lessen such adverse effects; and ensure that such Federal programs, to the extent practicable, are compatible with State, unit of local government, and private programs and policies to protect farmland."

Sec. 1542 (b) " Each department, agency, independent commission or other unit of the Federal Government, with the assistance of the Department of Agriculture, shall, as appropriate, develop proposals for action to bring its programs, authorities, and administrative activities into conformity with the purpose and policy of this subtitle."

Sec. 1543: "The Secretary is encouraged to provide technical assistance to any State or unit of local government, or any nonprofit organization, as determined by the Secretary, that desires to develop programs or policies to limit the conversion of productive farmland to nonagricultural uses."

Sec. 1544(a). "The Secretary through existing agencies or interagency groups, and in cooperation with the cooperative extension services of the States, shall design and implement educational programs and materials emphasizing the importance of productive farmland to the Nation's well-being. . ."

3. The Federal Register, Vol. 49, No. 130 (7-5-84) contains the following statements:

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Pg. 27717: "The rule now encourages a procedure to make farmland protection evaluations part of an agency's review under the National Environmental Policy Act (NEPA)."

". . . Prior to the enactment of the (Farmland Protection Policy) Act, the Council on Environmental Quality (CEQ) was already requiring federal agencies to assess the direct and indirect effects of their proposed actions on prime and unique agricultural lands. . ."

Pg. 27722: "It is the Department's position that the purpose of the (Farmland Protection Policy) Act is to protect the best of the Nation's farmlands which are located where farming can be a practicable economic activity."

Page 27725: ". . . The purpose of the (Farmland Protection Policy) Act is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses."

4. In 1965, the Ca. Legislature considered the protection of agricultural land in that state to be of such critical importance to the long term interest of the state and its citizens that it enacted the Ca. Land Conservation Act of 1965 (Williamson Act), which establishes state law and policy regarding the conservation of farmland. Sec. 51220 of that Act, entitled "Legislative findings" contains the following wording:

"The Legislature finds:

(a) That the preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources, and is necessary not only to the maintenance of the agricultural economy of the state, but also for the assurance of adequate, healthful and nutritious food for future residents of this state and nation. (b) That the agricultural work force is vital to sustaining agricultural productivity. . . (c) That the discouragement of premature and unnecessary conversion of agricultural land to urban uses is a matter of public interest. . . (d) That in a rapidly urbanizing society agricultural lands have a definite public value as open space, and the preservation in agricultural production of such lands, the use of which may be limited under the provisions of this chapter, constitutes an important

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physical, social, esthetic and economic asset . . . (f)
For these reasons, this chapter is necessary for the
promotion of the general welfare and the protection of
the public interest in agricultural land."

5. Former Ca. Assemblyman Charles Warren and/or a national
organization named American Farmland Trust have indicated that:

a. "Since 1967, over 30 million acres of U.S. farmland have
been permanently converted to nonagricultural use. This is
equivalent to the combined area of Vermont, New Hampshire,
Massachusetts, Rhode Island, Connecticut, Delaware and New
Jersey. The rate of conversion during that period has been
approximately 12 square miles per day".

b. "Since the end of World War II, Ca. has suffered a
permanent loss of approximately 7-8 million acres of its
prime agricultural land".

c. "Depletion of Ca.'s agricultural resources now threatens
the future productivity of the state's leading industry.
Urbanization, soil erosion, salinity, drainage and water
supply problems are adversely affecting over 12 million acres
of agricultural land in Ca."

d. "Every year, more than 44,000 acres of Ca. cropland
including 36,000 acres of irrigated land, are converted to
urban uses. At this rate, from 1980 to the year 2000,
approximately 900,000 acres of farmland will have been
urbanized."

e. "Wind and Water erosion is removing soil from 28% of Ca.'s
farm and ranch land faster than nature can replace it."

f. "Soil salinity and drainage problems are reducing yields
on over 4.5 million acres of irrigated cropland in Ca."

g. "The membership brochure for American Farmland Trust

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contains the following relevant quotation: 'For once an impending problem has been identified before it reaches crisis proportions. It remains to be seen whether the will to do something about it can be summoned while the solutions are still relatively painless. The trick is to find ways to direct development away from farmland.'" (The Washington Post)

h. "Historically, enough land has been put under irrigation to offset losses to conversion, salinity and other factors. But in the future, expansion may be difficult because of two limiting factors--the inherent fertility of the potential cropland and the availability of water--neither of which is as favorable to irrigating the potential cropland as they were in the past."

i. "The resource problems now experienced by Ca. agriculture, although quite serious, are manageable. But unless they are addressed, Ca. agriculture could find that farmland conversion, erosion, salinity and irrigation shortages are so severe that its production of crops and livestock will decline rather than advance; the enormous public investment in agriculture will have been squandered; and a host of related economic and environmental problems could follow. In short, we must begin to manage Ca.'s agricultural resources wisely. That requires conservation - of soil, of water and of the land itself."

6. A report entitled, "A Hungry World: The Challenge to Agriculture" (U.C. Food Task Force, 1974) contains the following information:

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Pg. 6: "Not only have human numbers increased through the ages, but the population growth rate has accelerated. . . The world population, estimated at 3.86 billion in mid-1973, is now growing at 2% per year. . . The high variant projects a world population of 7.1 billion in the year 2000, and the low projection is 6.0 billion. World population in 2000 can reasonably be expected to fall somewhere between these two extremes."

Pg. 50: "The food situation beyond 1985 is more uncertain. . . World population is projected to increase by another 1-2 billion people from 1985 to 2000. At the upper population variant this means feeding about twice as many people in 2000 as existed in 1968. At the lower variant, the world population in 2000 would still be 50% larger than it is today."

Pgs. 59-60: "California, as an important producer of many crops, will play a significant role among the developed regions of the world in confronting and, it is hoped, helping to solve the food problems of the future. There are important implications to be drawn regarding policies and programs in this state. First, the present trend of diverting prime agricultural land to nonagricultural purposes must be analyzed and considered in a broad context of land use planning. Use of our best land for industrial, residential and other purposes, and relegation of agriculture to less productive land may not serve the long-range public interests."

7. A report entitled, "Perspectives on Prime Lands (U.S. Department of Agriculture, 1975) contains the following information:

Pg. 65: "It is also important to consider the costs of continued loss of productive land in the United States. . . including factors beyond the ability to provide sufficient food for a growing population. These include: (a) lessened ability to produce grain and other commodities needed to avoid balance of payments deficits; . . . (c) increased pressure to bring into production land that is highly vulnerable to erosion or that has other serious cropping limitations; (d) deterioration of agriculture as an industry in areas where an insufficient number of farms remain to provide an economic base for essential agribusiness services. . .

Pg. 121: "As a recent report from the National Academy of Sciences states, 'There is no reason to believe that growth. . . of the U.S. agricultural productivity. . . is assured. The report goes on to say that the rapidly increasing irreversible removal of lands from agriculture is a critical concern when measuring the future production capabilities of the U.S. agricultural industry.'"

Pg. 122: "Suffice it to say that the U.S. can expect to lose more agricultural land -- that appears inevitable. What we can change, however, is the pattern of prime land conversion. By directing development away from prime land, through local police power or state initiative, the non-agricultural demands on land can be met without seriously affecting the inventory of our most productive

L-330 (continued)

areas.

- Pg. 123: ". . . increasing numbers of people are seeing the conversion of agricultural land to urban-industrial uses as a threat to the nation and even to the planet."
- Pg. 124: "The appropriate attitude in approaching the problem of competition for agricultural land must be one of urgency and serious concern rather than one of contingent optimism."
- Pg. 133: "According to the Economic Research Service, each year nearly 1.2 million acres of rural land are shifted to intensive special uses that preclude agricultural use, . . . many of these acres are prime crop areas, and it is extremely shortsighted to continue this practice in a time of rising pressure on our agricultural capacity."
- Pg. 134: "World population, according to FAO, increased 35% in the first one-third of the century, 63% in the second one-third of the century, and, if present trends continue, will increase 100% in the last one-third of the century. . . this means there will be an additional 1.4 billion people by the year 2000, and the world population will have more than tripled in one century."
- Pg. 135: "Because of a limited land base, world food problems, environmental concerns, concern for future generations, and other reasons, many people believe there is a need to seriously consider the best use of our land."
- Pg. 212: "One of the most popular objectives in discussions of land use policy is the retention of land currently used for agriculture. During the past 20 years, there has been considerable activity on the part of state legislatures in enacting legislation with the general purpose of preserving farmland. . ."
8. A report entitled, "Recommendations on Prime Lands (U.S. Dept. of Agriculture, 1975) contains the following information:
- Forward: "The consensus that emerged was clear: The continued conversion of prime production lands to other land uses is a matter of growing concern that will require a great deal of attention in the future. Current concern for the loss of prime lands is based on local and regional impacts as well as those of national or international scope.
- Pg. 12: "USDA should, in light of these conditions, take appropriate action to encourage retention of the remaining acres of prime land to meet long-range demands for food, fiber and timber products... The future supply of US food, fiber and timber products will be determined by the amount of land in production and the productivity of those acres. Ultimately each of these factors has some upper limit."

L-330 (continued)

Pg. 14: "Extreme caution should be exercised in approving actions that result in irreversible conversions of prime farmland to other uses."

Pg. 17: "SUMMARY OF RECOMMENDATIONS. . .

Policy:

- a. USDA should take a major, defined, and well promoted role in the national questions of utilization, enhancement and retention of agricultural lands as an advocate of retaining the maximum possible base for the production of food, fiber and timber products, and minimizing actions that will diminish the Nation's capacity to produce these essential commodities.
- b. USDA should promote policies to build into the federal decision making processes clear recognition and concern for the impact of federal programs on the agricultural lands inventory.
- c. It should be USDA policy to avoid and to encourage others to avoid the diversion of highly productive farm and forest lands to non-productive uses wherever feasible alternatives exist.
- d. USDA should take the initiative to have prime lands for the production of food, fiber and forest products designated as an essential natural resource to be considered in environmental impact statements."

Pg. 25: "The Nation's ability to meet increasing food and fiber requirements must be conditioned with the recognition that the world's land base is finite."

Pg. 26: "In view of predicted restraints of energy supply, and the knowledge that technological improvements are approaching biological limits of production in some crops, emphasis and concern for the preservation of 'prime' agricultural land appear justified. . . There is cause for concern regarding the reduction in those lands that are particularly productive or valuable locally. These prime. . . lands should be maintained."

Pg. 28: ". . . USDA should promote policies to build into the federal decision making process clear recognition and allowance for the impact of. . . federal programs on the agricultural lands inventory. This policy should include a directive to avoid wherever feasible alternatives exist, the diversion of highly productive croplands to such nonagricultural uses."

9. A publication entitled, "Cry California" (California Tomorrow, 1976) includes the following information: "California is losing farmland at a rapid rate. Between 1954 and 1974, three million acres were taken out of agriculture. Prime land continues to be lost to

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urbanization."

10. A report entitled "California Soils: An Assessment" (Calif. Dept. of Conservation, 1979) includes the following information: "In California, 75% of the newly irrigated acres within the last five years were on medium and low potential Class III and IV lands. These are lands of lesser raw quality; they produce lower yields and usually require greater expenditures for tillage, residue management, drainage improvement and irrigation systems. Thus, the impact of removing prime farmland from production is intensified by the costs of substituting less desirable acres. When poorer lands are pressed into farming use, the results are declining yields, higher costs, greater environmental hazards, increased energy consumption, and land degradation."

Conclusion:

TT Based upon the preceding information and Appendix G(y) of the State CEQA Guidelines, the MCKCPC contends that the additional unnecessary loss of prime, irrigated and highly productive agricultural land which would result from the so-called Preferred Alternative crossing over the Tulelake Basin would constitute an incremental worsening of an existing cumulatively significant adverse impact. Appendix G(y) of the State CEQA Guidelines reads as follows: "A project will normally have a significant effect on the environment if it will: (y) convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural lands." In contrast, Cross's Alternative would totally avoid this impact.

5. Erroneous Implication that Modoc County Farmland is Somehow Less Important and Valuable than Farmland in Other Counties Simply Because Modoc County Does Not Participate in the Williamson Land Conservation

TT See responses to L-330 G and L-330 SS.

L-330 (continued)

Act Program.

- | | | | |
|----|--|----|---|
| UU | Several statements contained in the DEIS/EIR erroneously imply that Modoc County farmland is somehow less important and valuable than farmland in other counties simply because Modoc County does not participate in the Williamson Land Conservation Act Program. Those | UU | See response to L-297 I. |
| VV | statements were then used by the DEIS/EIR preparers in arriving at equally erroneous conclusions regarding the magnitude of impact in comparison with the impact upon land subject to Williamson Act contracts in other counties. Our determination that such information is misleading and erroneous is based upon the following: | VV | See response to L-297 I. |
| WW | a. Clearly, the highly productive irrigated farmland in the Tulalake Basin meets the definition of "prime agricultural land" as contained in the Williamson Act, despite the fact that Modoc County doesn't participate in the Williamson Act Program. | WW | See response to L-297 I. |
| XX | b. The fertility, quality and productivity of a particular parcel of land are determined by a combination of environmental factors such as soil type, soil depth, parent material, subsoil characteristics, organic material content, mineral content, climate, rainfall, pH, permeability, slope, erosion potential, etc. The fact that a given piece of paper (such as a Williamson Act contract) concerning the parcel may or may not be typed up in some far away office has absolutely no effect whatsoever on the fertility, quality or productivity of the land on that parcel. | XX | See response to L-297 I. |
| YY | c. A report entitled "Williamson Act Task Force Consensus For Action" (California Dept. of Conservation, 1986) indicates the following:

(1) 49 counties and 19 cities in Ca. participate in the Williamson Act Program. The categories of land and acreage under contract for both the counties and the cities are indicated in Table 1. | YY | Comment noted. See response to L-297 I. |

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TABLE 1

	URBAN PRIME LAND(acres)	OTHER PRIME LAND(acres)	NON-PRIME LAND(acres)
COUNTIES	619,009	4,621,454	9,959,759
CITIES	4,220	771	25,514
TOTAL	623,229	4,622,224	9,959,759

Table 2 provides the definitions of these land categories.

TABLE 2

CATEGORY I: PRIME LAND

	CRITERIA	SUGGESTED MIN SIZE
PRIME LAND	ALL OF THE FOLLOWING: 1) Soil Capability Class I & II 2) Adequate Water Supply 3) Suitable Climate	10 acres
LIMITED PRIME LAND	Lacking in one or more of the above factors, but having a gross ag. income of \$1000/acre/ year or more.	10 acres
URBAN PRIME LAND	As above, within cities or within 1 mile of a city limit.	10 acres

CATEGORY II: NONPRIME LAND

	CRITERIA	SUGGESTED MIN SIZE
IRRIGATED CROP LAND	Irrigated, cultivated land with good conditions but not meeting prime land definition.	40 acres
DRYFARMED CROP LAND	Cultivated land which receives only rainfall as its water supply. A gross income of less than \$1000/acre/year. May include orchard, vineyard or grain crops.	160 acres
RANGE LAND	Commercially grazed native pasture land.	640 acres
COMPATIBLE NATURAL AREAS	Non-income producing native lands.	100 acres

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YY

Table 1 indicates that approximately 65.3% of all of the land in California that is subject to Williamson Act contracts is "non-prime" land (primarily livestock grazing range land). The MCKCPC contends that the prime agricultural land in the Tulalake Basin of Modoc County is far more important and valuable for agricultural production than much or all of the extensive amount of non-prime land in other counties which is subject to Williamson Act contracts.

(2). Pg. 14 contains the following paragraph: "A recent controversy has been the inclusion of very small parcels within agricultural preserves and under Williamson Act contract. In one southern Ca. county, there are parcels still under contract which are less than three acres in size. In other areas, parcels in the 10 to 15-acre range are not uncommon. In many cases, these parcels are too small for commercial agricultural production and thus fail to meet the intent of the Act to conserve productive agricultural land."

(3). Pg. 24 contains the following statement: "However, some questioned why the state and local governments should continue to provide (Williamson Act contract) subsidies for small parcels which are no longer agricultural land and which no longer provide open space amenities for the public."

d. Pg. 25 contains the following paragraph: "...However, in another section of this report, there is an additional discussion and recommendation regarding the question of continued state (Williamson Act contract) subventions for small non-agricultural and non-open space parcels. The Task Force felt that the state should not pay (Williamson Act contract) subventions for parcels smaller than the threshold incorporated into the definitions. There has been no determination of how best to exclude non-producing ranchettes, while allowing for small agricultural parcels. If it becomes necessary to seek legislation to revise the Williamson Act to exclude ranchettes, it will be necessary to face the question of how to define the land to be kept in and the land to be excluded."

Additional information concerning this issue was provided in the oral comments of Mr. Michael Byrne during the DEIS/EIR public hearing in Newell, Ca. on 1/5/87.

Conclusion:

The MCKCPC contends that the prime, irrigated agricultural cropland in the Tulalake Basin, with its parcels that normally contain several

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YY hundred acres, is far more important and valuable for agricultural production than the substantial amount of non-prime, non-irrigated livestock grazing range land in other counties which is covered by Williamson Act contracts, and most or all of the small parcels in other counties which have for some reason have been allowed to be included in the Williamson Act Program despite the fact that many or most of them are probably not used for agricultural purposes, and some of them don't even provide open space amenities for the public.

ZZ Therefore, the statements contained in the DEIS/EIR which imply that Modoc County farmland is somehow less important and valuable than farmland in other counties simply because Modoc County does not participate in the Williamson Act Program are misleading and erroneous, and should be substantially revised and corrected in the FEIS/EIR.

6. Direct Conflict with Adopted Modoc Country Land Use Policy, and With a Specific Policy Included in the Land Use Element of the Draft General Plan for Modoc County, Which is Expected to be Adopted in Final Form Within the Near Future: A Significant Adverse Impact.

A1 Construction of the so-called Preferred Alternative would conflict to a major degree with Modoc Co. land use policy as reflected by the following:

B1 a. The oral testimony of Modoc Co. Supervisor John Coulson at the DEIS/EIR public hearing in Newell, Ca. on 1/5/87.

C1 b. Written correspondence dated 1/5/87, from the Modoc Co. Board of Supervisors to the COTP, which is included in Attachment A.

D1 c. Resolution No. 86-9, which was adopted by the Modoc Co. Board

ZZ See response to L-297 I.

A1 Comment noted. See responses to L-330 B1, L-330 C1, and L-330 D1.

B1 Responses to Mr. Coulson's comments can be read at T-31.

C1 Responses to the Modoc County Board of Supervisors' comments can be read at L-330 J9, L-330 K9, and L-330 L9.

D1 Comment noted. The lead agencies respect the action taken by the Board.

L-330 (continued)

D1 L of Supervisors on 1/21/86, and is included in Attachment A.

d. The following Goals, Policies and related information which is contained in the Land Use Element of the Draft Modoc Co. General

Plan:

Pg. 24: "Agricultural land is the cornerstone of the economic base of Modoc Co... Nearly 80% of the privately held land in the county is in agricultural use; 19% is in cropland, and 60% is used for grazing. This acreage represents approximately 27.5% of all land in the county."

"The protection of agricultural land is a significant issue in Modoc Co. The national economic decline in agriculture, coupled with high interest rates, heavy indebtedness and declining land values have led to a very serious economic condition for Modoc Co. agriculture. Some agricultural operations have disposed of lands as a means of relieving increasing economic pressure and the threat of foreclosures."

Pg. 25: "The major concern of both the Co. and the individual farmer is the maintenance of profitability so the farmer can stay in business."

Pg. 26: Goal: PROTECT AND SUPPORT THE AGRICULTURAL ECONOMY OF MODOC CO.

Exclusive Agriculture: This land use category is applied to the most valuable and significant agricultural lands in the county...Only uses compatible with intensive agricultural activities are compatible within this category."

Pg. 27: POLICIES:

1. Preserve and protect valuable agricultural lands in the county.

Pg. 28: (POLICIES Cont.)

"12. Power transmission line corridors should not be located in any productive agricultural area, including exclusive and general agricultural lands or near airports."

Pg. 30: "Over two-thirds of the lands in Modoc Co. are administered by public agencies..."

"Other public and quasi-public land uses represent occasional issues. For example, the location of power transmission lines can raise concerns regarding compatibility with surrounding land uses. Many public and quasi-public uses have the potential to conflict with sensitive uses. In these cases, project design changes should be analyzed toward reducing impacts..."

GOAL: INSURE COMPATIBILITY OF PUBLIC AND QUASI-PUBLIC LAND USES WITH OTHER LAND USES AND DEVELOPMENT

Pg. 31: POLICIES:

6. Power transmission line corridors should not be located in any productive agricultural area, including exclusive and general agricultural lands, or near airports."

Pg. 32: ACTION PROGRAM:

6. Provide Planning Commission review of transmission lines or other facilities which are undertaken by agencies exempt

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from Co. regulations in order to provide focus for Co. public input."

A representative of the Modoc Co. Planning Dept. has indicated that the Draft General Plan has been reviewed by the Planning Commission and Board of Supervisors, and that there has been no controversy regarding the above-noted goals, policies and related information. Therefore, the wording of these statements is not expected to be changed in the Final General Plan. (Townsend, 2-9 -87)

The above noted land use plan, goals and policies, with which the so-called Preferred Alternative would conflict, are based primarily upon a recognition by the Modoc Co. Board of Supervisors of the diversity and magnitude of severe problems and costs to farmers which inevitably result when high voltage powerline corridors are constructed across irrigated farmland.

Conclusion:

E1 Based upon the preceding information and Appendix G(a) of the State CEQA Guidelines, the MCKCPC contends that the so-called Preferred Alternative would have a significant adverse impact upon agricultural land use in the Tulelake Basin and upon existing and proposed land use goals and policies of Modoc Co. which are intended to protect such agricultural use. Appendix G(a) of the State CEQA Guidelines reads as follows: "A project will normally have a significant effect on the environment if it will: (a) Conflict with adopted environmental plans and goals of the community where it is located." In contrast, Cross's Alternative would totally avoid this impact.

7. Substantial Visual/Aesthetic Degradation From Farm Homes, Yards, Roads and Farmland; An Individually and Cumulatively Significant

E1 See responses to L-20, T31, L-316, and L-330 H.

L-330 (continued)

Adverse Impact.

F1 Although visual/aesthetic qualities typically involve a high degree of subjective personal opinion, it is likely that the overwhelming majority of public opinion concurs in the judgement that high voltage powerlines are ugly, degrading and visually undesirable regardless of their design or the type of environment in which they are located. Unfortunately, portions of the Tulelake Basin are already visually and aesthetically impacted by the presence of two high voltage powerlines. The towers and conductors of these powerlines are visible from farm homes, yards, roads and farmland. The magnitude of the adverse visual/aesthetic impact is substantially worsened by the fact that the Tulelake Basin farmland is predominantly flat and open with relatively few hills, structures and trees. The so-called Preferred Alternative would obviously further worsen the existing substantial adverse visual/aesthetic impacts upon Tulelake Basin farm families which are already caused by the existing high voltage powerlines.

Conclusion:

Based upon the preceding information and Appendix G(b) of the State CEQA Guidelines, the MCKCPC contends that the substantial visual intrusion, degradation and ugliness which would be associated with the visibility of the towers and conductors of the so-called Preferred Alternative from farm homes, yards, roads and farmland in the Tulelake Basin would constitute both an individually and cumulatively significant adverse impact. The individual significance is based in part upon Appendix G(b) of the State CEQA Guidelines, which reads as follows: "A project will normally have a significant effect on the

F1 The Draft EIS/EIR acknowledges that the alternative route segments in the Tulelake Basin near Newell and Copic Bay would be highly visible and would intrude on scenic views. The relative extent of these visual impacts would vary among the segments. The COTP routing studies and impact assessment have attempted to determine the visual impacts of the alternatives and to reduce those impacts to the lowest practical level consistent with the COTP objectives.

In addition, a study centerline of Alternative D, the Project preferred route in the northern section of the COTP, illustrates how there is the opportunity within the preferred route to minimize adverse effects on farmlands.

L-330 (continued)

F1 environment if it will: (b) Have a substantial, demonstrable negative aesthetic effect." The cumulative significance is based on the fact that on some of the farmland in the Tulelake Basin, the individually significant visual impact described above is already occurring due to the presence of two high voltage powerlines, and the so-called Preferred Alternative would further worsen and magnify those impacts. In contrast, Cross's Alternative does not traverse populated areas and would have no visual/aesthetic impact upon residents of the Tulelake Basin.

8. Health Hazard Impact Upon Humans: A Potentially Significant Adverse Impact

G1 Based upon the information contained in the DEIS/EIR and other reference materials which we have reviewed, the amount of conclusive (scientifically proven) information regarding potential health hazards (including long-term subtle adverse effects) to humans which may be caused by exposure to high voltage powerlines appears to be severely limited. This concern is magnified in the Tulelake Basin due to the fact that two high voltage powerlines already exist there, and a number of farm homes and cultivated fields exist in close proximity to those powerlines. Some farm workers, including elderly persons and young children, work on farmland directly beneath the powerlines.

H1 Among the low probability but potentially serious health hazard effects which have or could be caused by exposure to high voltage powerlines are the following:

I1 a. During the construction of one of the existing high voltage powerlines in the Tulelake Basin, a construction worker had one foot

G1, H1 See response to L-330 F3.

I1 We do not know the circumstances associated with the incident described with the worker on another project. All engineering design factors will comply with the National Electric Safety Code and California General Order No. 95 -- Rules for Overhead Electric Line Construction. These standards have been used for many decades, are frequently updated, and experience has shown that NESC and G.O. 95 requirements have provided an ample margin for public safety.

L-330 (continued)

I1 on the ground and one foot on a caterpillar tractor, and received a large enough shock that he had to be transported by ambulance to a hospital for medical care.

J1 b. Tulalake Basin farm workers (including elderly individuals and young children down to the age of 10 years old) who farm the land beneath and near the existing high voltage powerlines frequently receive shocks caused by the powerline. Many of these shocks are painful. Elderly individuals and young children are more susceptible to adverse health effects caused by induced currents and major shocks than are healthy middle-aged adults.

K1 c. In addition to the pain associated with shocks, potentially severe and even life threatening conditions could be caused by shocks, such as:

(1) Potential accidents which could occur if a shock causes a farm worker to lose his balance and fall off farm equipment.

(2) Potential accidents which could result if a farm worker receives a shock while working on or adjacent to moving parts of farm equipment.

(3) Potential accidents which could result if a farm worker receives a shock while handling sharp objects.

(4) Potential interference with cardiac pacemakers, on which some individuals depend to sustain life.

(5) Potential injuries which could result if a spark ignited fuel during equipment refueling beneath a high voltage powerline.

Examples of the large number of inconclusive (thereby questionable) statements contained in the DEIS/EIR regarding potential human health

J1 Induced voltage on objects near to the powerline will be reduced by grounding. Design codes provide for public safety and COTP will consider design approaches to reduce the possibility of induced voltage shocks.

K1 (1), (2), and (3): See responses to L-330 G3 and L-330 I1.
(4): See response to L-309 E2.
(5): See response to L-324 F.

L-330 (continued)

hazards are as follows (underling indicates emphasis added):

Vol. 2A, Pg. 3.10-2: "Several current studies on biological effects will attempt to resolve conflicting results of some of the past research projects. Much of the current research is conducted under laboratory conditions and will also need to be evaluated with respect to how any subtle effects on animals under these experimental conditions may be applicable to general human exposure."

Pg. 3.10-13: "Just as in the case of electric fields, it appears that, in general, the presence of typical transmission line magnetic fields would not introduce any new or unique environments... In summary, household appliances can produce fields that have a maximum value greater than the transmission line, but unlike the powerline, appliance fields attenuate very rapidly... Finally, without considering appliances, a large powerline close to a house will be the dominant source of magnetic fields in most rooms..."

Pg. 3.10-17 "Another issue relating to electric and magnetic fields is the possible effects on cardiac pacemakers and flammable materials. A study by the University of Rochester found that electromagnetic interference from high voltage transmission lines can induce alterations in pacemaker function... Another study indicated that the electric field or body current necessary to alter the normal operation of pacemakers is highly dependent on the type of pacemaker and location of the implanted pacer electrodes, and that only a few models were affected... Research shows that electric and magnetic fields could theoretically affect the operation of the pacemaker. Sensitivity to this interference depends on the type of pacemaker and how it is implanted in the body."

"A common concern is the possibility that a spark discharge could ignite a flammable mixture, such as gasoline vapor... It was found that chances for all these conditions to be met is slight... Results indicate that the possibility of electric field induced fuel ignition is extremely unlikely to occur. The experiments indicate that even if electric field sparks cause fuel ignition, this is not a catastrophic event and does not pose a safety hazard for practical situations."

Pg. 3.10-18: "There are no known cases of transmission line electric fields inducing spark ignition of gasoline in non-contrived situations. This should be expected, since calculations show the probability of such an event is extremely small..." A report prepared under contract to the U.S. Environmental Protection Agency concluded that it '...appears to be reasonably well established that the normal environment produced by such transmission lines does not produce any significant health or environmental risks. The National Research Council's Committee on Biospheric Effects of Extremely Low-Frequency Radiation found that electric and magnetic fields will not cause a significant and adverse biological disturbance, except in the event of electric shock... The AIBS Committee for this subject area, agreeing with the conclusions of the 1977 Academy report, still believe that it

L-330 (continued)

is unlikely that exposure of living systems to ELF electric and magnetic fields can lead to adverse public health effects...it is highly improbable that electric fields from transmission lines would have any significant biological effect on healthy individuals who encounter such fields in a normal way under ordinary conditions. Most studies and reviews indicate that further research is needed to understand the nature and extent of effects that could be harmful...the bulk of the scientific evidence indicates that typical exposure to electric fields as produced by BPA transmission lines poses no health hazard."

Pg. 3.10-19: "This subject remains controversial, however, because some studies have found effects with uncertain biological significance. It is not possible to conclude scientifically that there is zero risk associated with long-term electric field exposure."

Pg. 3.10-26: "Ongoing research seeks to verify some subtle effects on animals and relate those effects to people, particularly in the area of reproduction and development...Higher incidences of malformation occurred in litters of exposed sows, although the differences could not be confidently resolved...The experiments were repeated with rats resulting in contradictory results...Comparison of human exposure to the exposure of laboratory animals depends on the assumptions made about possible biological mechanisms."

Pg. 3.10-27: "Studies undertaken in Colorado and Sweden on magnetic effects indicated a slightly greater incidence of cancer patients in homes near highest current-carrying powerlines..."

L1 The project proponents (DEIS/EIR preparers) have recognized and admitted that many uncertainties exist regarding potential human health effects which may be caused by exposure to high voltage powerlines. We are extremely concerned about the potential health effects of the COTP on the farm families in the Tulalake Basin who live and work in close proximity to the alignment of the so-called Preferred Alternative. We believe that these potential health effects may be greater than indicated in the DEIS/EIR due to potential conflicts of interest which may have occurred. For example, objectivity may be compromised by:

a. Many of the studies which were used as reference material during preparation of the DEIS/EIR were prepared either by electric utilities industry staff or by individuals hired and paid by electric utility companies.

b. Since the project proponents are also the DEIS/EIR preparers (with some paid consulting assistance), they may have chosen to ignore some studies, reports, or other information, or

L1 See response to L-330 F3.

M1 See response to L-330 F3. Health effects research has been funded by a number of agencies, including EPRI - a non-profit institute funded by utilities. With respect to conflict of interest, no EPRI research is done by EPRI staff, but rather by the nation's universities, medical schools, and scientific institutes. This independence allows researchers to avoid an EPRI bias, and some EPRI research has uncovered potential problems.

L-330 (continued)

M1 inadequately reflect the potential severity or frequency of health problems as may be indicated in studies that are mentioned in the DEIS/EIR simply because the conclusions of those studies may have differed from the conclusions which the project proponents wish to portray.

N1 Additional information regarding potential health hazard effects is included in the oral comments of Ms. Heidi Tschirky, Mr. Colin McCaulliffe and Mr. Andrew Gigler during the DEIS/EIR public hearing in Newell, Ca. on 1/5/87.

O1 Also, the information contained in Attachment F Should be reviewed, considered and incorporated into the FEIS/EIR.

Conclusion:

P1 Based upon the preceding information, the MCKCPC contends that due to all of the unknown, uncertain and inconclusive information regarding potential health effects of high voltage powerlines on humans, the EIS/EIR must conclude that the so-called Preferred Alternative may cause potentially significant health hazard impacts upon humans. The DEIS/EIR fails to conclusively prove that human health which may be caused by the project would not be significant, and clearly the burden of proof must be the responsibility of the project proponents. We are appalled that, in total disregard of the potentially significant health hazard impacts upon humans, the so-called Preferred Alternative would locate the proposed high voltage powerline in extremely close proximity to homes, yards and fields where Tulelake Basin farm families live and work. Cross's Alternative would avoid this impact in the Tulelake Basin.

9. Possible Contamination of Certified Seed Crops and Other Crops by Weed Seeds, Bacteria, Viruses, Nematodes and Fungus Transmitted Onto the Farmland by Construction Equipment (Initially) or Maintenance Equipment (in Any Future Year): A Potentially Significant Individual

N1 See response to L-330 F3.

O1 COTP has reviewed the documents included in Attachment F to the letter. We are aware of the information provided in these articles from 1976, 1978, and 1979. Most of this information is related to early opposition to the first 765 kV lines in New York and Ohio and the public hearings that resulted. These documents have been considered in the preparation of the Final EIS/EIR.

P1 See response to L-330 F3.

L-330 (continued)

and Cumulative Adverse Impact

Q1 The subject impact is of extreme concern to Tulelake Basin farmers, in part because this impact has previously occurred in other areas of the U.S., Ca. and in the Tulelake Basin, and in part because the economic ramifications of such an occurrence can be severe and devastating to the impacted farmers. Additional information regarding this issue is included in the oral comments of Mr. Clinton Greenbank (the Modoc Co. Agricultural Commissioner) during the DEIS/EIR public hearing in Newell, Ca. on 1-5/-7, and in information which has been provided by the Ca. Dept. of Food and Agriculture. (Attachment G). We believe that this potential impact deserves far more consideration and analysis in the FEIS/EIR than it received in the DEIS/EIR.

Conclusion:

The MCKCPC contends that the subject impact is a potentially significant adverse individual and cumulative impact which would result from construction of the so-called Preferred Alternative. The individual significance is due to the fact that it could be caused by construction equipment during the initial construction of the project. The cumulative significance is due to the fact that it could be caused by maintenance equipment during any future year that maintenance operations occur. Cross's Alternative would totally avoid this impact in the Tulelake Basin.

10. Possible Large Number of Waterfowl Injuries and Deaths Due to Being Startled While Feeding on Fields in the Tulelake Basin, and Suddenly Flying Up and Colliding with Powerline Facilities: A Potentially Significant Adverse Impact

R1 The Tule Lake National Wildlife Refuge is a large major area of

Q1 The COTP shares your concern regarding protection of the fields from contamination. Please see mitigation measure VI.E.5 in Section 1.1.5 of the Final EIS/EIR. See also response to T-16 C.

R1 See responses to L-330 K2, L-330 B4, L-330 C4, and L-330 F6.

L-330 (continued)

R1 wetland habitat within the Pacific Flyway which supports several million wintering waterfowl and wading birds each year. It is located in the Tulelake Basin, in close proximity to cultivated farmland and the so-called Preferred Alternative. Flocks of waterfowl which utilize the Refuge often have a regular daily feeding pattern in the Tulelake Basin. They fly out of the south end of Tule Lake and circle the surrounding farmland in a counterclockwise pattern, stopping frequently to feed in the farm fields. The so-called Preferred Alternative would be located on some of these fields. If the feeding waterfowl are startled by a gunshot or other loud noise, they will fly up suddenly and could easily collide with any overhead structures (such as powerline facilities) which are above them.

S1 Figure 3.0-3 in the DEIS/EIR indicates several "areas of high waterfowl collision potential" along the Tulelake Basin portion of the so-called Preferred Alternative. The boundaries of these areas should be expanded in accordance with this information, the oral comments of Mr. Glen Arthur during the DEIS/EIR public hearing in Newell, Ca. on 1-5-87 and written correspondence from Glen and Josephine Arthur in Attachment A.

Conclusion:

T1 The MCKCPC contends that the subject impact is a potentially significant adverse impact which would result from construction of the so-called Preferred Alternative. Cross's Alternative would avoid this impact.

11. Interference With Radio and TV Reception in the Tulelake Basin:
A Potentially Significant Individual and Cumulative Adverse Nuisance Impact

S1 See responses to L-157 I, L-310 EE, L-330 K2, L-330 B4, L-330 C4, L-330 F6, and T-33 L.

T1 See responses L-330 K2, L-330 B4, L-330 C4, and L-330 F6.

L-330 (continued)

U1 Two High voltage powerlines currently exist on a portion of the Tulalake Basin farmland, and cause a substantial adverse nuisance effect upon nearby radio reception. In addition to interference with regular AM radios, high voltage powerlines also interfere with the use of CB radios, which are used during farm operations by a majority of the farmers in the Tulalake Basin. The so-called Preferred Alternative would not only worsen this problem, but would be located nearer to existing homes and therefore may adversely affect radio and tv reception within those homes. If reception interference occurs within homes as a result of construction of the so-called Preferred Alternative, the combined nuisance conditions resulting from all of the various communications interferences may be considered significantly adverse by the impacted farm families. Cross's Alternative would avoid worsening this existing impact.

12. The Snapping, Hissing, Crackling and Popping Noise Associated With Corona: A Potentially Significant Adverse Nuisance Impact:

V1 Volume 2A of the DEIS/EIR indicates that corona noise can be loud. Tulalake Basin farmers who cultivate fields beneath and near the existing two high voltage powerlines concur with that fact, and have indicated that the noise can sometimes be heard up to a quarter mile away. If the so-called Preferred Alternative is constructed across the Tulalake Basin, the residents of any nearby homes would probably consider the snapping, hissing, crackling and popping noise associated with corona to be a significant adverse nuisance impact. Cross's Alternative would avoid worsening this existing impact within the Tulalake Basin.

13. The Unclear and Uncertain Commitment of the Lead Agencies to Effective Implementation, Monitoring and Enforcement of the Mitigation

U1 We do not at this time know to what degree the existing power lines in the Tulalake Basin may or may not cause radio or TV interference. COTP will design its line to limit all interference by using bundled conductors and specially designed hardware. Mitigation measure X.N in Section 1.1.5 of Volume 1 of this Final EIS/EIR describes how radio and TV interference problems will be resolved. See also response to L-330 H3.

V1 We do not know what noise levels may or may not exist for power lines presently located in Tulalake Basin. COTP will design its 500 kV line to have very low audible noise levels that meet or exceed all applicable codes and standards.

L-330 (continued)

Measures That are Identified in the DEIS/EIR

- W1 The status of the Mitigation Measures identified in the DEIS/EIR needs to be clarified. While a higher degree of commitment is reflected in the Mitigation Measures section (5.0) of Vol. 1 than in references to mitigation contained in various other sections of the DEIS/EIR, the Lead Agencies' commitment toward incorporating mitigation measures into the project and assuring their prompt and effective implementation should be indicated as clearly as possible. Numerous statements concerning Mitigation Measures which are scattered throughout many sections of the DEIS/EIR reflect highly variable, inconsistent and uncertain degrees of commitment toward their approval and implementation. For example, Mitigation Measures are referred to in various sections of the DEIS/EIR in the following ways:
- X1

- ... could be considered
- ... may be considered
- ... might be considered
- ... should be considered
- ... would be considered
- ... will be considered
- ... shall be considered
- ... are considered
- ... are suggested
- ... are recommended
- ... are proposed
- ... may include
- ... might include
- ... should include
- ... may be approved
- ... might be approved
- ... has been approved
- ... may be adopted
- ... might be adopted
- ... should be adopted
- ... could be done
- ... may be done
- ... might be done
- ... should be done
- ... would be done
- ... will be done
- ... shall be done
- ... adopted mitigation measures, if fully implemented

- W1 The mitigation measures identified in Volume 1, Section 5.0 of the Draft EIS/EIR are those that were proposed by the COTP with input from the public and regulatory agencies. One of the purposes of distributing a Draft EIS/EIR for comment is to receive public and agency comments on these proposed mitigation measures. A complete list of mitigation measures committed to is included in Section 1.1.5 of this Final EIS/EIR. A compliance and monitoring plan is required by NEPA, Section 1505.2(C).

- X1 See response to L-330 W1. Mitigation measures proposed by the resource specialists in each discipline are discussed in Volume 2A, Section 3.0 of the Draft EIS/EIR under each resource discipline discussion. These mitigation measures were included in Volume 1, Section 5.0 of the Draft EIS/EIR, along with the original mitigation measures proposed by the COTP. The measures have been revised to be more specific and are presented in Section 1.1.5 of Volume 1 of this Final EIS/EIR.

L-330 (continued)

... etc.

Y1

Our concern re: this issue is substantially magnified by our recognition of the fact that the Lead Agencies are not only the project proponents, but are also the primary agencies responsible for the adoption, implementation, monitoring and enforcement of any Mitigation Measures that they may decide to impose upon themselves. We believe that this situation could easily result in the following scenario:

- a. Since Mitigation Measures would essentially represent conditions of approval that the Lead Agencies would be imposing on themselves, and/or their contractors, and since Mitigation Measures take time and cost money to implement, monitor and enforce, the Lead Agencies may be very reluctant to approve anything more than a minimal, token and inadequate list of measures.
- b. Mitigation Measures that are approved may be so weakly and ambiguously worded as to render them essentially meaningless and legally unenforceable.
- c. For some mitigation measures, if no implementation deadline date is specifically established the implementation could be deferred indefinitely for any number of reasons, effectively resulting in no or minimal mitigation.
- d. Any self-monitoring by the Lead Agencies of their own Mitigation Measures that may occur is likely to be minimal, since such monitoring would take time and cost money.

Z1

Sec. 15126 (c) of the State CEQA Guidelines reads: "The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures that are not included but could reasonably be expected to reduce adverse impacts if required as conditions of approving the project." Based upon that Sec., and in order to clarify the degree of commitment of the Lead Agencies to adopting and implementing effective Mitigation Measures, the MCKCPC strongly recommends that the FEIS/EIR contain:

- a. A clear and unambiguously worded list of Mitigation Measures which the Lead Agencies are definitely committed to incorporate into the proposed project, and to implement in a prompt and

Y1

The lead agencies have approved a substantial list of mitigation measures for the COTP which includes reasonable, clearly worded, enforceable measures. A compliance and monitoring plan will list all specific mitigation and the means for implementing and monitoring it. It is common for an agency to function as a project proponent and lead agency; to prepare the environmental documentation; and to implement/monitor the project. This scenario is true for the federal land management agencies and many state agencies.

Z1

Comment noted. This information is included in Section 1.1.5 of Volume 1 of this Final EIS/EIR except for the compliance monitoring plan, which will be developed after the location of the final centerline, access roads, and the completion of the detailed field studies.

L-330 (continued)

Z1

effective manner.

b. A proposed Compliance Monitoring Plan, as noted on pg. 5.1-1 of Vol. 1, in order to accomplish item a.

c. A list of additional Mitigation Measures which could further reduce adverse impacts of the project, but to which the Lead Agencies are unwilling to commit. A statement indicating why the Lead Agencies consider such measures to be inappropriate or infeasible should be included for each measure.

L-330 (continued)

SPECIFIC COMMENTS

VOLUME I

- A2** Pg.1: Since the Alternatives section (2.0) of the DEIS/EIR is inadequate and incomplete due to its failure to evaluate Cross's Alternative, the Summary discussion of Alternatives must also be considered inadequate and incomplete.
- B2** Pg. 2: Re: The 3rd sentence of the 2nd complete paragraph: Describing Alternative D as the "environmentally superior" route is erroneous unless Cross's Alternative is incorporated into Alternative D.
The 4th sentence of the 2nd complete paragraph is erroneous if applied to the so-called Preferred Alternative because it does not maximize route segments on public land. By incorporating Cross's Alternative into the project, the subject sentence not only becomes accurate, but you can even add "minimized impacts upon prime agricultural land" to the reasons for selection.
- C2** Pg. 5: The use of Williamson Act agricultural preserves for determining comparative degrees of impact is extremely misleading and inappropriate as indicated in item 5 under Summary of Major Issues of Concern.
- D2** The number of miles of irrigated cropland indicated as being impacted by Route D (the so-called Preferred Alternative) is underestimated.
- E2** The visual analysis criterion of "dwelling units in foreground (1.2 miles)" should include a footnote to indicate that powerlines are particularly visible when they are located on flat, open, largely treeless terrain such as farmland, where farm families live and work.
- A2** We disagree that this section is inadequate and incomplete. The COTP has analyzed an alternative that is substantially similar to the John Cross alternative, called the Copic Bay option. The Draft EIS/EIR also explains why this and similar options were not selected as part of the preferred route. See also responses to T-10 F and L-330 H.
- B2** We disagree with this statement that the environmentally superior route would have to include the John Cross alternative. The John Cross alternative was not included in the preferred route because the potential environmental impacts of the preferred route are acceptable. Furthermore, maximizing use of public lands as a goal in itself is not always appropriate. The relative quality and quantity of resources and the impacts to them must be considered regardless of land ownership. If all resources and impacts are the same on public and private lands, then a choice based on land ownership could be made. Even then, other factors such as engineering, costs, and reliability may tend to select against choosing one piece of land over the other. See also responses to L-295 D and T-10 F.
- C2** See response to L-297 I.
- D2** The Alternative D route segments (N-10A and N-10G) which affect cropland were remeasured, and found to be accurate. The measurements were taken from aerial photos on October 1985, and verified through field work.
- E2** See response to L-330 F1.

L-330 (continued)

- F2** Despite the fact that TABLE 1A indicates that short term agricultural losses would be 6.6 times or more greater for the so-called Preferred Alternative than for any other route, we contend that the economic analysis contained in the DEIS/EIR grossly underestimates this impact upon farm operations in the Tulelake Basin farmland, and that the economic impact upon farmers and farmland devaluation would be long term and far worse than implied, as indicated in item 2 under Summary of Major Issues of Concern.
- G2** Pg. 6: We likewise contend that long term agricultural losses caused by the so-called Preferred Alternative are grossly underestimated, as indicated in item 2 under Summary of Major Issues of Concern.
- H2** Pg. 9: Re: the 2nd paragraph: We have major concerns and reservations about the Lead Agencies' commitments to adequately and effectively implement and monitor whatever mitigation measures they may choose to impose upon themselves and/or their contractors.
- I2** Re: The 9th paragraph: We prefer and recommend that the recently identified 3rd alternative Malin Switching station site, located north of E2, be incorporated into the project.
- J2** Pg. 11: The 1st two sentences under Environmental Consequences are erroneous unless the so-called Preferred Alternative is modified to incorporate Cross's Alternative. Many of the impacts (including several which are individually and/or cumulatively significant) that would result from the so-called Preferred Alternative cannot be avoided or mitigated except by modifying the so-called Preferred Alternative to include Cross's Alternative.
- K2** Pg. 12: We concur with the conclusion of the DEIS/EIR preparers that the so-called Preferred Alternative would cause a significant adverse

- F2** Economic impacts to farmers would be minimized through the easement acquisition process and observance of the land use mitigation measures. Property owners will be compensated in the easement acquisition process for losses to their property. The easement acquisition process is intended to keep the property owner "whole" financially. See also response to L-325 N.
- G2** Comment noted. See responses to L-330 R through L-330 KK.
- H2** See responses to L-329 II, L-330 W1, and L-330 Y1.
- I2** This has been done. See response to L-330 C5.
- J2** See response to L-330 G and L-330 H.
- K2** A possibility exists for significant unmitigable impacts due to bird collisions in the Sacramento-San Joaquin Delta, but not in the Klamath Basin.

L-330 (continued)

K2 collision problem for birds - particularly waterfowl which become startled while feeding in their normal daily pattern on Tulalake Basin farmland. Modification of the so-called Preferred Alternative to include Cross's Alternative would substantially reduce the magnitude of this impact in the vicinity of the Tulalake Basin.

L2 We concur with the conclusion of the DEIS/EIR preparers that the so-called Preferred Alternative would cause a significant adverse impact upon prime farmland, even if all proposed mitigation measures are implemented. Modification of the so-called Preferred Alternative to include Cross's Alternative would avoid this impact in the vicinity of the Tulalake Basin.

M2 We concur with the conclusion of the DEIS/EIR preparers that the so-called Preferred Alternative would cause a significant adverse visual impact, even if all proposed mitigation measures are implemented. Modification of the so-called Preferred Alternative to include Cross's Alternative would reduce this impact to a negligible level in the vicinity of the Tulalake Basin.

N2 The socioeconomics paragraph should clearly state that the so-called Preferred Alternative would have a significant adverse economic impact on Tulalake Basin farmers, as indicated previously in these comments. Modification of the so-called Preferred Alternative to include Cross's Alternative would avoid this impact in the vicinity of the Tulalake Basin.

The following additional significant impacts must be noted in the text of the Summary, in accordance with Sec. 15133 of the State CEQA Guidelines:

O2 1. Incremental contribution to a cumulatively significant loss

L2 Comment noted. See response to L-330 G.

M2 See response to L-330 F1.

N2 Comment noted. See responses to L-330 G and L-330 H.

O2 See response to L-330 SS.

L-330 (continued)

- O2 of prime agricultural land.
- P2 2. Cumulatively significant safety hazard impact upon aerial applicators (see Vol. 1, Pg. 19 of the DEIS/EIR). Incorporating Cross's Alternative into the so-called Preferred Alternative would also avoid or substantially reduce these impacts in the vicinity of the Tulalake Basin.
- Q2 Pg. 17: Re: waterfowl collisions, refer to item 10 under Summary of Major Issues of Concern.
- R2 Pg. 19: Re: impacts on prime farmland, refer to item 2 under Summary of Major Issues of Concern. The mitigation measure which proposes to increase the visibility of transmission towers and lines in areas worked by aerial applicators is probably appropriate, but it should be noted that such action would further worsen the visual impact which the DEIS/EIR preparers have already concluded to be significantly adverse, and which is already a severe problem in a portion of the Tulalake Basin due to the existence to two other high voltage powerlines.
- S2 Re: the impact on Williamson Act agricultural preserves, refer to item 5 under Summary of Major Issues of Concern.
- T2 Pg. 20: Re: visual impact, refer to item 7 under Summary of Major Issues of Concern.
- U2 Pg. 21: Re: socioeconomic impacts, refer to item 2 under Summary of Major Issues of Concern.
- V2 Pg. 23: The listing of 4 issues of controversy remaining to be resolved is inadequate and far too general to be meaningful to the general public and decision makers. With regard to the portion of the so-called Preferred Alternative within the Tulalake Basin, there are a multitude of serious problems, conflicts and disagreements which
- P2 See responses to L-14 A, L-310 I, L-330 B, and L-330 MM.
- Q2 See responses to L-330 B4, L-330 C4, and L-330 F6.
- R2 Comment noted.
- S2 See responses to L-297 I and L-310 XX.
- T2 See response to L-330 F1.
- U2 Comment noted. See response to L-330 G.
- V2 See the Summary section of this Final EIS/EIR for a revised discussion of the major areas of controversy and issues to be resolved.

L-330 (continued)

V2 remain unresolved, and which can best be resolved by incorporating Cross's Alternative into the so-called Preferred Alternative. The following list of remaining unresolved questions, problems and conflicts should be added to the 4 which are listed:

- W2 1. Given the fact that the two Lead Agencies have almost total control of virtually every step of the planning process for this project-----including proposing and justifying the project, preparing the EIS/EIR, approving the project, imposing whatever mitigation measures they see fit to impose upon themselves, self-monitoring their own compliance with those mitigation measures, etc.--How and why should the general public have faith and confidence that the process and its ultimate decisions will reflect a fair, objective and impartial consideration of the merits of all relevant issues and concerns including those which differ from the opinions or positions of the Lead Agencies?
- X2 2. Will the COTP directly or indirectly result in increased costs for future electrical power in southern Ore. and northern Ca.?
- Y2 3. Which route is "environmentally superior" in the vicinity of the Tulalake Basin?
- Z2 4. Why have the DEIS/EIR preparers ignored Cross's Alternative?
- A3 5. The issue of the feasibility of Cross's Alternative, which can only be determined after subjecting it to the same degree of analysis and evaluation as has already been given to the other alternatives under consideration in the DEIS/EIR.
- B3 6. Which alternative Malin switching station site is "environmentally superior"?
- C3 7. Since the primary purpose of the COTP is to transport Pacific Northwest power to central and southern Ca., wouldn't it be far more fair and appropriate to locate it, to the maximum extent possible, on public multipurpose land rather than to impose its multitude of burdens and problems on privately owned prime irrigated farmland?
- D3 8. According to the Tulalake Basin farmers, the economic analysis contained in the DEIS/EIR is grossly inadequate, and its conclusions are tremendously underestimated.
- E3 9. The appropriateness of using Williamson Land Conservation Act status to reflect the importance and value of land and as a criterion on which to compare and evaluate land use impacts.
- F3 10. The opinions of scientists differ re: the potential magnitude and severity of adverse health effects upon humans resulting from chronic exposure to high voltage

W2 See response to L-330 D.

X2 The COTP is expected to help hold down the costs of electric power in Southern Oregon and Northern California. This question is discussed in the responses to L-3 T, L-329 A, and L-330 B.

Y2 Route segments North 1, and N-10 Alt.4 (modified Copic Bay alternative) were analyzed as the "John Cross Alternative" and compared to the preferred route. The John Cross Alternative was determined to be environmentally superior to the preferred route. There are more construction impacts associated with the John Cross Alternative because three lines would need to be built, compared to one line for the project preferred alternative. Section 1.2.2 of Volume 1 of this Final EIS/EIR provides a more detailed description of the evaluation of the environmentally superior route.

Z2 See response to L-330 H.

A3 See response to L-330 Q.

B3 Switching Station site E3 is the environmentally superior site.

C3 Approximately sixty-eight miles of the preferred route, from the Southern Oregon Switching Station site to the Olinda Substation cross public lands. This represents 53 percent of the total length of the alternative. For a contrasting view, see response to L-295 D.

D3 Comment noted. See responses to L-330 G and L-330 JJ.

E3 See response to L-297 I.

F3 The following information was released by the New York State Department of Health: The New York State Power Lines Project

L-330 (continued)

F3 powerlines. Absolute conclusions re: the severity of this impact
G3 are virtually impossible to prove.

11. We contend that the so-called Preferred Alternative could have severe, tragic and significant effects upon farm workers due to any of the following:

a. Reflex actions caused by major or minor shocks when individuals are standing up on farm equipment, handling sharp objects or are in close contact with the moving parts of farm equipment could cause falls and/or serious injuries.

b. The unlikely but possible occurrence of sparks igniting gasoline during refueling of farm equipment could cause serious injuries.

c. The high voltage powerline could cause mental anguish and the unlikely but possible occurrence of physical problems to farm workers who wear cardiac pacemakers.

H3 12. We consider the impact that would be caused by the so-called Preferred Alternative upon T.V. and radio reception (including CB radios which are frequently used during farm operations) in the Tulelake Basin to be a potentially significant nuisance impact.

I3 13. We consider the humming, snapping, hissing, crackling and popping noise impacts that would be caused by the so-called Preferred Alternative upon farm families in the Tulelake Basin to be a potentially significant nuisance impact.

J3 14. At virtually every scoping meeting and workshop for the COTP (See Pg. 7.1-3) and in numerous written correspondence which has been submitted to the Lead Agencies, the project proponents were asked to commit to providing substantial annual payments to impacted property owners, since the project would cause adverse economic effects on existing and all future owners of such property each and every year in perpetuity. We are not aware of any resolution of this issue.

K3 15. We consider the magnitude of potential crop contamination by nematodes, bacteria, viruses, fungus, etc. which may be transmitted onto farmland by COTP construction or maintenance equipment, and the possible ramifications of such problems upon Tulelake Basin farmers, to be a potentially significant impact. The mitigation measures identified in the DEIS/EIR should include the obtaining of liability insurance coverage by the project proponents in order to provide compensation to injured parties in the event that such a problem occurs.

F3
(cont.)

(Project), designed to investigate possible health impacts of high voltage transmission lines, has identified "several areas of potential concern for public health" requiring further study. Most research showed no health effects of concern. See also response to SL-51 A.

The Project's final report was submitted to its oversight board members: State Health Commissioner Dr. David Axelrod, State Power Authority Chairman Flynn and Public Service Commission Chairman Peter Bradford. The research project began in 1981, and was required by the PSC as part of its 1978 decision to approve construction of 765 kV transmission lines.

The Health Department and the Public Service Commission will review the study results and recommendations to determine whether any policy changes are warranted, particularly with regard to regulation of power transmission or distribution lines.

Studies conducted under the Project examined both electric and magnetic fields and their effect on biological systems. Specific studies funded were chosen from 164 pre-proposals reviewed by the Advisory Panel.

The Advisory Panel chairman is Dr. Michael Shelanski, Chairman of the Department of Pathology, at the Columbia University College of Physicians and Surgeons. The panel which consisted of nine independent scientists, summarized its work as follows:

In our industrialized society everyone is exposed to 60-Hz (50-Hz in Europe) electric and magnetic fields which originate from electrical wiring, appliances, and a variety of other conveniences of modern life. The New York State Power Lines Project was established to conduct research and to review the scientific literature to determine whether health hazards of these fields are possible. Particular attention was directed to the fields generated by 765 kV overhead transmission lines. The research program, supported by contributions assessed from all New York State electric utilities, provided support to 16 different research groups studying human, animal and isolated cell sensitivity to electric and magnetic fields. Most of the research studies reported no effects of concern. Of the few effects, some warrant further consideration.

No effects were found on reproduction, growth or development. Several studies showed no evidence of genetic or chromosomal damage that might lead to inherited effects or cause cancer. While most measurements of behavior and brain function did not demonstrate changes, some did show changes that were small but consistent. Some of these appear to result from changes in body rhythms and might interfere with normal sleep patterns. There were also changes in pain responses and in the ability of rats to learn.

F3
(cont.)

A more serious concern comes from a study of cancer in children suggesting that children with leukemia and brain cancer are more likely to live in homes where there are elevated 60-Hz magnetic field levels than are children who do not have cancer. Although much more research is needed before the question whether the magnetic fields actually cause or promote cancer can be resolved, the basis for such an hypothesis is now established. At this time no risk assessments can be made because only four studies of this question have been made and the two which report an association are from the same geographic region. More research on cancer as a function of magnetic fields is needed, both in homes and for on-the-job exposure.

The welfare and safety of the public are paramount in all aspects of the COTP route selection and design criteria. The final routing for the line is located almost entirely in rural and remote areas, and school sites and other sensitive land uses have been avoided. At this time the results of studies on biological effects from electromagnetic fields surrounding transmission lines and other electrical devices are inconclusive. The information is incomplete, but several research programs have now been established to address the subject. The Electric Power Research Institute, Department of Energy and other groups are funding further research on the subject. Based on the mixed results of previous studies and the lack of evidence for a causal biological mechanism that could explain the role of magnetic fields in the origin of cancer, the research programs could well continue for years at the cost of several million dollars before more definitive information is found. Results from past and ongoing studies are inconsistent and, at this time, there is no conclusive evidence that electric or magnetic fields produce long term adverse effects on human health.

The results of the New York State Power Lines Project are further addressed in Section 1.2.3 of Volume 1 of this Final EIS/EIR.

L-330 (continued)

- G3** A study conducted in North America for 500 kV and 765 kV lines indicated that secondary shock was not a problem near powerlines. This is not to say there will not be a need to ground some large objects to limit minor spark discharges. See also responses to L-309 E2 and L-324 F.
- H3** There is a significant amount of research and operating experience for engineers to use in design of the COTP. Calculated noise levels for radio and TV are very low and should not be a problem. CB and TV frequencies are higher than the frequency of interference that could be produced by a power line like the COTP. Preliminary calculations of noise levels indicate that COTP will have a good signal-to-noise ratio for reception. It is possible that loose fitting or damaged hardware could cause a local noise source. These can be located and repaired. COTP will investigate and take corrective action on frequency interference problems caused by the line. Any noise or interference with radio and TV signals that can be attributed to the COTP will be resolved. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.
- I3** The COTP will be designed to have very low levels of audible noise - lower than many existing 500 kV lines. See response to L-329 C1.
- J3** See responses to L-14 B, L-184 A, and T-82 C.
- K3** This type of risk (i.e. potential crop contamination) would normally be covered under the COTP's or the contractor's general liability insurance.

L-330 (continued)

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|----|--|----|---|
| L3 | 16. The mitigation measures identified in the DEIS/EIR should include obtaining liability insurance coverage by the project proponents in order to provide compensation to injured parties in the event of serious agricultural aircraft accidents involving the COTP. | L3 | COTP sponsors and contractors will be protected for liability associated with aircraft operations. |
| M3 | 17. The basic and paramount issue of the compliance of the subject EIS/EIR with Federal and State environmental laws, policies, regulations and guidelines is an unresolved and controversial issue. | M3 | The lead agencies are complying with the letter and the spirit of NEPA and CEQA, and believe the issue to be resolved. |
| N3 | Pg. 1.4-1: Re: the 1st sentence: If an intent of the proposed project is to construct the COTP in the most environmentally sound manner possible, the attainment of that intent would be substantially enhanced by incorporating Cross's Alternative into the so-called Preferred Alternative. | N3 | See responses to L-330 G and L-330 H. |
| O3 | The attainment of Objective #2 (Minimize Environmental Impacts) would be substantially enhanced by incorporating Cross's Alternative into the so-called Preferred Alternative. | O3 | See responses to L-330 G and L-330 H. |
| P3 | The attainment of the portion of Objective #6 concerning minimizing construction-related disruption to existing land uses would be substantially enhanced by incorporating Cross's Alternative into the so-called Preferred Alternative. | P3 | The study centerline within the preferred route would eliminate construction-related disruption to all except one parcel of agricultural land in the Tululake Basin. See response to L-330 G. |
| Q3 | Pg. 2.1-6: Re: the section entitled "Right-of-Way Acquisition": Note our previous concern about this issue as stated in item 14 under our Pg. 23 comments. | Q3 | See response to T-162 B. |
| R3 | Pg. 2.1-7: The Operation and Maintenance Practices section should indicate that portions of the project area such as the Tululake Basin periodically receive high velocity wind storms, and that during the growing season, high groundwater levels (within 3-6 ft. of the ground surface) exist in many irrigated fields. If these conditions occur concurrently, any high voltage powerline towers located in such areas may be at substantial risk of toppling. | R3 | Our meteorological information indicates that the Tululake Basin does indeed receive high velocity wind storms. Also, we concur with the assessment that the high water tables will result in special consideration for the design of foundations. These conditions are not uncommon in the design of transmission lines throughout the United States and do not present a major problem in accomplishing a reliable and safe design for the COTP. There have been no failures of the existing Interties in the Tululake area due to loads caused by weather. |

L-330 (continued)

- S3** The 4th paragraph indicates that the Lead Agencies would use various techniques to control or eliminate vegetation within the right-of-way. Does that mean that the Lead Agencies will commit to providing stringent, regular and effective removal of weeds which would grow under towers on farmland, in order that certified seed crops and other crops will not be contaminated by weed seeds, insects, rodents, bacteria, viruses, fungus etc. which often occur in those areas? And if so, will such weed removal be accomplished without damaging the surrounding crops? Would the project proponents obtain liability insurance to compensate the owners of surrounding farmland in the event that such contamination occurs?
- T3** Pg. 2.1-9: Re: the southern Ore. Switching Stations, refer to our 2nd comment for Pg. 9 and oral comments of Mr. Bill Graham at the DEIS/EIR public hearings in Klamath Falls, Ore. and Newell, Ca. on 1-5-87.
- U3** Figure 2.1-5A: The lower map should indicate the 3rd alternative Malin Switching Station site (which we prefer), located north of site E2.
- V3** Pg. 2.1-16: The 2nd complete sentence on this page is erroneous since at least the portion of Route D which would be located on prime irrigated farmland in the Tulalake Basin is totally unacceptable to all of the residents of that area from an environmental perspective.
- W3** We strongly disagree with the last sentence of the 2nd complete paragraph unless Route D and the so-called Preferred Alternative are modified to include Cross's Alternative.
- X3** The optional route sequence still under active consideration which are discussed in the 3rd complete paragraph must be expanded to include

S3 The study centerline within the preferred route does not indicate that tower bases will be placed in existing agricultural fields in the Newell area. Weed control around tower bases is therefore not as difficult a problem as envisaged in the comment. For the portions of the line south of Redding that cross agricultural lands, weed control is handled by the Western Area Power Administration (Western). Western, as a matter of policy, does not use herbicides for vegetative control along the right-of-way. See response to L-330 K3.

T3 See response to L-330 C5.

U3 See response to L-330 C5.

V3 See response to L-330 G.

W3 See responses to L-330 G, L-330 H, L-330 B2, and T-10 F.

X3 See responses to L-330 G, L-330 H, L-330 B2, and T-10 F.

L-330 (continued)

- X3** Cross's Alternative.
- Y3** The 1st sentence under "Project Preferred Route" is erroneous unless Route D and the so-called Preferred Alternative are modified to include Cross's Alternative.
- Z3** Our 2nd comment for Pg. 2 also applies to the first sentence of the 2nd paragraph under "Project Preferred Route."
- A4** Pg. 2.1-19: Figure 2.1-8 should include Cross's Alternative.
- B4** Figure 3.0-3: This figure should include Cross's Alternative. This Figure indicates that Cross's Alternative would have less impact on sensitive biological resources than the so-called Preferred Alternative.
- C4** Based upon the testimony of Mr. Glen Arthur at the DEIS/EIR public hearing in Newell, Ca. on 1-5-87, and on written comments from Glen and Josephine Arthur contained in Attachment A, the portion of the Tulalake Basin designated as "Area of High Waterfowl Collision Potential" should be expanded.
- D4** Pg. 3.1-9: The last sentence under "Climate" indicates that high winds occasionally occur in the Tulalake Basin area. Refer to our 1st comment for Pg. 2.1-7.
- E4** Pg. 3.1-27: The 1st sentence of the 4th full paragraph states that Alternative D is dominated in the north by sagebrush and juniper. It should be noted that the impact associated with Cross's Alternative would be almost exclusively limited to sagebrush and juniper areas while a substantial portion of the so-called Preferred Alternative would be located on prime irrigated farmland.
- F4** Pg. 3.1-43: Re: the Cultural Resources Section: Small cemeteries should be added to the list of cultural sites potentially impacted by

Y3 See responses to L-330 G and L-330 B2.

Z3 See response to L-330 G.

A4 Figure 2.1-8 includes the Copic Bay option which is similar to the John Cross Route. See responses to L-330 G, L-330 H, L-330 A2, and L-330 B2.

B4 The N-10 Alt.2 and N-10 Alt.3 options would pass closer to the Horse Mountain area than the preferred route and could have significant impacts on sensitive raptors that nest there. The relocation to N-10 Alt.4 would create new roads in important deer winter range. The Cross Alternative would reduce collision potential for impacts to bald eagles or waterfowl; however, these impacts were judged to be insignificant.

C4 The areas of high collision potential were inadvertently left off Figure 3.0-3 in Volume 1 of the Draft EIS/EIR. This area corresponds to the area shown as waterfowl use areas in Volume 4A, 4-3C. These were the criteria used in the Draft EIS/EIR for assessing impacts of the proposed line on waterfowl. The boundaries of high use areas were based upon examination of land uses, topography, and discussions with personnel from the Klamath NWR and CDFG. Some collision mortality by waterfowl will occur; however the expected magnitude of collisions is small. See Section 1.1.5 of this Final EIS/EIR.

D4 See response to L-330 R3.

E4 Comment noted. See response to L-330 G.

F4 As stated in the Historical Resources Study, this site has been designated a California State Historic Site. The Historical Resources Study correctly identifies the presence of a sensitive historical resource at the Bloody Point site. Available documentation does not indicate that a cemetery is present at this site. If, as must be deemed likely, field investigation demonstrates the existence of a small cemetery at Bloody Point, there will be additional reason for project managers to heed the sensi-

L-330 (continued)

- F4** the project since a small cemetery (and a variety of Modoc Indian artifacts) are located at Bloody Point along the route of the so-called Preferred Alternative.
- G4** Pg. 3.1-47: The evaluation of alternative E1 & E2 switching station sites (Malin area) should be expanded to include an analysis of the 3rd alternative site which has recently been identified north of E2.
- H4** Pg. 4.1-5: Table 4.1-4 should include Cross's Alternative.
- I4** Pg. 4.1-18: Our 1st comment for Pg. 2 is also applicable to the 1st sentence of the 1st full paragraph on this page.
- J4** Pg. 4.1-22: We disagree with the last sentence of the 1st full paragraph based on our previous comments for Pg. 2.5-9.
- K4** Pg. 4.1-24: The 1st paragraph mentions agricultural preserves. Refer to our 1st comment for Pg. 5.
- L4** Pg. 4.1-25: The first full paragraph states that 4 dwellings are located in the right-of-way of Alternative D and that 9 dwellings would be located within 1,000 ft. of the reference centerline. The EIS/EIR should identify the specific location of the reference centerline and the specific locations of the potentially impacted dwellings. Re: the 2nd full paragraph, as indicated in our 2nd comment for Pg. 5, the number of miles of irrigated cropland impacted by Alternative D is underestimated.
- M4**
- N4** The 2nd to last sentence of the 2nd full paragraph ignores the fact that even if high voltage powerline towers can be sited off irrigated cropland, the presence of towers and conductors in close proximity to the cropland would have several significantly adverse impacts the surrounding farm families and farming operations.

- F4 (cont.)** tivity of this site. So far as can be determined, the site has never been assessed for significance by National Register criteria. All cemeteries within the project impact area that can be identified by the available documentary and cartographic record have been included in the list of cultural resource sites that is presented in the Historical Resources Study.
- G4** See response to L-330 C5.
- H4** See responses to L-330 G, L-330 H, L-330 A2, and L-330 B2.
- I4** See response to L-330 Q3.
- J4** There are no comments for page 2.5-9. The referenced sentence refers to potential for bird collisions with the proposed line which is addressed in the responses to L-330 B4, L-330 C4, and T-33 L.
- K4** See response to L-297 I.
- L4** The specific location of the centerline of Alternative D is displayed on several maps in the Draft EIS/EIR, specifically, Figures 3.0-1 to 7 in Volume 1 and Attachment D and Figures 3.0-1 and 3.0-2 in Volume 2A. The locations of the houses are listed in Table 3.6-15, Volume 2A of the Draft EIS/EIR.
- M4** See response to L-330 D2.
- N4** The preferred route study centerline avoids almost all agricultural land in the Tulelake basin and comes close to only three parcels of cropland. Specific responses to comments on adverse impacts to farming operations and farm families close to the proposed transmission line are discussed in responses to other comments in this letter.

L-330 (continued)

- O4** The last sentence of the 2nd full paragraph erroneously implies that the impact of Alternative D on agricultural land is minimal simply because Modoc Co. does not participate in the Williamson Act Program. We strongly disagree with that implication. Refer to our 1st comment for Pg. 5. and item 5 under Summary of Major Issues of Concern.
- P4** 4.1-27: The list of sensitive viewpoints at the top of this pg. should be expanded to include farm homes, yards, farm roads (on which farm families travel on almost a daily basis) and farm land (on which farm families work on almost a daily basis).
- Q4** Pg. 4.1-28: The 2nd paragraph should indicate that high voltage powerlines cause significant adverse visual impacts upon farm families who have the major misfortune of living and working in close proximity to them. We concur with the last sentence of this paragraph which states that visual impacts would be significantly adverse, even after implementation of all proposed mitigation. Refer to item 7 under Summary of Major Issues of Concern.
- R4** Pg. 4.1-30: The 1st paragraph under "Socioeconomics" contains the following statements: "It (the COTP) may also create antagonism from home owners who feel a (high voltage) line near their residence will lower their quality of life. The perceived reduction in the quality of life..."The word "may" in the 1st sentence should be changed to "will" because the antagonism already exists. And the word "perceived" in the 2nd sentence is totally inappropriate, since it implies a high degree of personal subjective opinion rather than actual fact. The so-called Preferred Alternative would cause so many significant adverse impacts upon farm families and farm operations in the Tulalake Basin that it is absolute nonsense to describe the
- O4** See response to L-297 I.
- P4** Visual impacts in general are acknowledged in the fourth sentence of the first paragraph of Section 4.1.7.1 in Volume 1 in the Draft EIS/EIR. See response to L-330 F1.
- Q4** The referenced visual impacts are acknowledged in the fourth sentence of the first paragraph in Section 4.1.7.1 of the Draft EIS/EIR. See response to L-330 F1.
- R4** Comment noted. See response to L-330 G.

L-330 (continued)

R4 | quality of life impact upon these farm families as anything less than fact.

S4 | Pg. 4.1-32: The paragraph under "Alternative D" contains the statement that "No segments have significant social effects." We totally disagree with that statement as indicated in our preceding comment. We do agree with the sentence in that paragraph which states that Alternative D would cause a significantly adverse short-term effect upon agriculture. That paragraph should also state that the so-called Preferred Alternative would also cause a significantly adverse long term impact upon agriculture in the Tulelake Basin.

T4 | Pg. 4.1-35: Section 4.1.10 states that "The corona, field, and safety considerations do not vary by Alternative." We disagree with that statement since underlying and nearby land uses differ substantially with different alternatives, and the land uses determine the types and amounts of human activity which would occur beneath and in close proximity to the high voltage powerline. Thus, the amount of human exposure to corona, electric field, magnetic field and safety impacts is variable and requires analysis. For example, the so-called Preferred Alternative would expose far more people more frequently to these impacts than would Cross's Alternative.

U4 | Pg. 4.1-37: The partial paragraph at the top of this pg. should state that Alternative D passes through a substantial area of high waterfowl collision potential in the Tulelake Basin as indicated on Figure 3.0-3 and our previous comments re: that Figure.

V4 | We strongly object to the 1st two sentences under "Land Use." Both of these sentences ignore the substantial amount of prime irrigated agricultural land that would be impacted by Alternative D. The 1st of these sentences is erroneous unless Alternative D is modified to

S4 | Comment noted. See responses to L-330 G and L-330 JJ.

T4 | The levels of corona activity and fields are a function of transmission line operation and not land use. However, human activity can vary near the transmission line and result in different amounts of time spent in fields. See response to L-330 B5.

U4 | See responses to L-330 B4, L-330 C4, and L-330 F6.

V4 | We found that Alternative D would have a significant impact on irrigated cropland as noted in Table 3.6-10 in Volume 2A of the Draft EIS/EIR. The agricultural impacts of Alternative D are also discussed on page 4.1-25 in Volume 1 of the Draft EIS/EIR. The irrigated cropland factor is just one of the components among a number of land use items considered in the comparison of alternatives, as discussed on page 4.1-37 in Volume 1 of the Draft EIS/EIR. See also response to L-297 I.

L-330 (continued)

- V4** include Cross's Alternative. The 2nd sentence reflects a serious and inappropriate misrepresentation by implying that agricultural preserve land is somehow more important and valuable than prime irrigated agricultural land in other areas which don't participate in the Williamson Act Program. Refer also to our comment for pg. 5 and item 5 under the Summary of Major Issues of Concern.
- W4** The 1st paragraph under "Land Use" also indicates that 9 dwellings would be located within 1,000 ft. of Alternative D. Refer also to our first comment for Pg. 4.1-25.
- X4** The last 3 sentences under "Land Use" are erroneous and misleading for the same reasons as described in the 2nd comment for this page. The number of miles indicated as being impacted by Alternative D is underestimated. The final conclusion statement of that section is erroneous unless the so-called Preferred Alternative is modified to include Cross's Alternative.
- Y4** Pg. 4.1-38: We concur with the last sentence under "Socioeconomics" which states that Alternative D would have a significantly adverse short term agricultural impact. An additional sentence should be added to indicate that the long term agricultural impact of Alternative D on the Tulalake Basin would also be significantly adverse.
- Z4** Pg. 4.1-39: Re: Corona, Field and Safety Considerations: Refer to our comment for Pg. 4.1-35.
- A5** Pg. 4.1-41: Re: The Copic Bay Option: Refer to item 1 under Summary of Major Issues of Concern.
- B5** Pg. 4.1-43: Re: Corona, Field and Safety Considerations: Refer to our comment for Pg. 4.1-35.
- C5** Pg. 4.1-63: Sec. 4.1.12.3 should discuss the recently identified 3rd

W4 See response to L-330 L4.

X4 See responses to L-297 I and L-330 D2.

Y4 Comment noted. See responses to L-330 G and L-330 JJ.

Z4 See responses to L-330 T4 and L-330 B5.

A5 See responses to L-330 G, L-330 H, and L-330 I.

B5 Transmission lines of the voltage class of the COTP 500 kV line have been in service for almost 25 years. Similar, but lower voltage lines (345 kV) have been in service since the 1950's. This provides a substantial base of operating experience for use in the design and operation of new transmission lines like COTP.

The line will be designed to comply with the National Electrical Safety Code (NESC) and CPUC General Order 95. The purpose of the NESC rules is the practical safeguarding of persons during the

L-330 (continued)

- C5 alternative Malin switching station site (which we prefer) north of E2.
- D5 Pg. 4.4-1: The "Cumulative Impacts" section is inadequate because it fails to recognize the fact that several of the impacts upon the Tulalake Basin which would be caused by the so-called Preferred Alternative, when considered in combination with similar impacts already caused by the other 2 high voltage powerlines in the immediate area, would result in several cumulatively significant adverse impacts. Refer to the Summary of Major Issues of Concern section of these comments.
- E5 Pg. 4.5-1: The 2nd statement in the first paragraph is erroneous, unless Cross's Alternative is included in the so-called Preferred Alternative. The Lead Agencies' currently proposed Preferred Alternative would cause several severe and significant long term adverse impacts upon farm families, farm workers, agricultural-related operations and small rural towns which are largely dependent upon the local agricultural economy for their existence. Refer to item 1 under Summary of Major Issues Concern.
- F5 The 5th sentence of the last paragraph should acknowledge that the long term loss of cultivated cropland which would be caused by the so-called Preferred Alternative would be a cumulatively significant adverse impact.
- G5 The sentence which begins near the end of this page and ends on the following page states the proposed projects will stimulate local economies. The following sentence states that "The proposed use of land resources will therefore be beneficial and will offset the negative resources impacts." Both of these sentences are subjective

B5 (cont.) installation, operation, and maintenance of electric supply lines and their associated equipment. The NESC contains provisions considered necessary for the safety of the public and workers. The design of the line will be such that it is compatible with a wide variety of land uses. In fact, most land use does not affect line design safety standards, with the possible exception of buildings not being allowed on the right-of-way. Detailed final engineering design of COTP will, of course, consider any special local situations. But the calculated levels of electric field and magnetic field would change little because of design parameters, such as clearance, set by NESC.

Humans are not "exposed" to corona. Corona is a tiny electrical discharge that takes place near the surface of the transmission line conductors during foul weather. Humans involved in activity near the powerline that services their home or work, in use of appliances, or in proximity to the COTP will be exposed to electric and magnetic fields. See response to L-330 F3 for a discussion of health effects. Also, the operating and research experience make it possible to design transmission lines to safely operate in a wide variety of land use patterns. Finally, routing any project through less populated areas does not always assure that people will not continue to develop and use land near the powerline. There are many examples of a relatively dense population influx occurring near a transmission line within a decade or so after construction.

- C5 The comment addresses the suggested third location for the Southern Oregon Switching Station. The proposed location north of the E2 site (Site E3) was suggested as an optional location for the substation that was preferred by the local residents. This site (E3) is analyzed in the Supplement to the Draft EIS/EIR and has been adopted as the Project preferred site.
- D5 Section 1.1.4 of the Final EIS/EIR addresses impacts resulting from existing transmission lines. See also response to L-362 M.
- E5 Comment noted. See responses to L-330 G, L-330 H, and L-330 JJ.
- F5 This statement is correct. A sentence has been added to read "Long-term loss of cultivated cropland would be a cumulatively significant adverse impact." Please refer to Section 1.1.4 of this Final EIS/EIR for a complete discussion. See also response to L-330 G.
- G5 There will be some short- and long-term impacts to some farm families. However, those impacts will be mitigated through the negotiated easement acquisition process. The statement referred to is speaking about the local economy in general. Construction will generate some short-term employment. County expenditures of property tax revenues will also generate some long-term employment opportunities. See response to L-330 G.

L-330 (continued)

- G5** opinions of the DEIS/EIR preparers (i.e. the project proponents), and are at least partially erroneous. Our previous comments have indicated that the so-called Preferred Alternative would have a cumulatively significant adverse short and long term economic effect upon some farm families and farm operations in the Tulalake Basin, and Mr. Joe Cordonier (representing the Tulalake City Council) stated at the DEIS/EIR public hearing in Newell, Ca. on 1/5/87 that the economy of Tulalake is primarily dependent upon agriculture. (Refer to item 2 under Summary of Major Issues of Concern.) His comments may also be applicable to a number of other small agriculturally-oriented towns along the so-called Preferred Alternative route.
- H5** Pg. 4.5-2: The 1st sentence of the 1st complete paragraph should indicate that the visual impact, at least in the Tulalake Basin where 2 other high voltage powerlines already exist, would constitute a cumulatively significant adverse impact. Refer to item 7 under Summary of Major Issues of Concern.
- I5** The first sentence of the last paragraph is erroneous unless Cross's Alternative is included in the so-called Preferred Alternative.
- J5** Pg. 4.7-1: The 1st paragraph should indicate that although several significant adverse impacts which the so-called Preferred Alternative would impose upon residents of the Tulalake Basin cannot be mitigated to a less than significant level, all of these impacts can be totally avoided or reduced to a negligible level by including Cross's Alternative in the so-called Preferred Alternative.
- K5** The 1st sentence of the 2nd paragraph reflects a subjective opinion of the DEIS/EIR preparers who are also the project proponents. We disagree with that opinion unless Cross's Alternative is included in the so-called Preferred Alternative. The "COTP" paragraph should be
- H5** These visual impacts are discussed in the Draft EIS/EIR and tabulated by alternative route segment on pages 3.7-6 through 8 of the Data and Impact Analysis Report in Volume 2A of the Draft EIS/EIR.
- I5** See responses to L-330 G, L-330 H, and L-330 B2.
- J5** See responses to L-330 G, L-330 H, and L-330 B2.
- K5** Comment noted. See responses to L-330 G and L-330 H.

L-330 (continued)

- K5 revised in accordance with our 1st comment for this page.
- L5 Pg. 4.8-1: The 6th paragraph should indicate that the irreversible/irretrievable commitment of prime agricultural land, and all other significant adverse impacts which would be caused by the so-called Preferred Alternative can be totally avoided or reduced to a negligible level by including Cross's Alternative in the so-called Preferred Alternative.
- M5 Pg. 5.1-1: Refer to item 13 under Summary of Major Issues of Concern.
- N5 Section 6.0: This section, entitled "Compliance with Laws and Regulations" should indicate how the proposed project (particularly the Tulalake Basin portion of the so-called Preferred Alternative) will or will not comply with the purpose, intent and letter of the Federal Farmland Protection Policy Act (Public Law 97-98).
- O5 Pg. 7.1-2: Regarding the last 2 sentences under Sec. 7.1.2, refer to item 1 under Summary of Major Issues of Concern. The MCKCPC formally recommended Cross's Alternative to the Lead Agencies at a public meeting on 8-11-86 and we contend that the DEIS/EIR is inadequate and incomplete because it fails to consider and evaluate that alternative.

L5 Comment noted. See responses to L-330 G and L-330 B2.

M5 See responses to L-330 W1 and L-330 X1.

N5 The Federal Farmland Protection Policy Act (FFPPA) was not included in Section 6.0, "Compliance with Laws and Regulations," because it is not considered an authorizing action. The FFPPA requires that criteria be developed for identifying "the effects of federal programs on the conversion of farmland to nonagricultural uses," and that federal agencies consider alternative actions to lessen such adverse effects. The law does not require permits or authorization in order to cross identified candidate farmland.

O5 The COTP has included an analysis of the Copic Bay Option in the Draft EIS/EIR and believes the Copic Bay Option and the John Cross alternative to be functionally the same route option. See responses to L-330 G, L-330 H, and T-10 F.

L-330 (continued)

VOLUME 2A

- P5** Pg. 1.0-3: The "Land Use/Land Cover" paragraph indicates that certain crop lands are considered high sensitivity areas. The MCKCPC considers the prime irrigated highly productive farmland in the Tulalake Basin to be one of those high sensitivity areas and has identified and recommended Cross's Alternative in order to avoid the significant adverse impacts to it which would otherwise be caused by the so-called Preferred Alternative.
- Q5** Pg. 1.0-4: The "Visual Resources" paragraph should indicate that visual impacts of a high voltage powerline would be far greater in flat open farmland on which people live, play, travel and work than in a hilly area covered with rocks, sage brush and scattered juniper trees where nobody lives. Thus, the visual impact of the so-called Preferred Alternative would be for worse than Cross's Alternative.
- R5** Pg. 2.2-9: Re: The "Public Comment" paragraph, refer to our comment for Pg. 7.1-2 of Vol. 1 and item 1 under Summary of Major Issues of Concern.
- S5** Pg. 2.2-11: Re: the 1st sentence of the 1st paragraph, refer to our comment for Pg. 7.1-2 of Vol. 1 and item 1 under Summary of Major Issues of Concern.
- T5** Pg. 2.3-1: The 2nd sentence of the 2nd paragraph is inconsistent with a statement on Pg. 4.1-25 of Vol. 1 which indicates that 4 dwellings are located in the right-of-way of Alternative D, & 9 dwellings are located within 1,000 feet of the reference centerline.
- U5** The 2nd paragraph also states that "...following existing utility lines was consistent with the principle of concentrating (powerline)

P5 Comment noted. See response to L-330 G.

Q5 See response to L-330 F1.

R5 See response to L-330 O5.

S5 See response to L-330 O5.

T5 The statement referred to in Volume 2A of the Draft EIS/EIR has been revised. The revised statement reads: "During early routing studies, all apparent residences and buildings were avoided. In the subsequent adjustment of routes, some additional houses were identified. Selection of a 200-foot easement within the route will, in most cases, avoid these homes". Section 1.2.2 of this Final EIS/EIR contains the citation.

U5 Comment noted. The Federal Land Policy and Management Act of 1976 encourages the concentration of linear utilities, including transmission lines, into corridors. This may in some cases cause more concentrated impacts to landowners. See response to L-307 P.

L-330 (continued)

- U5 development to minimize impacts." Probably most people who live away from high voltage powerlines would agree with that statement, but for residents, property owners and workers who are already impacted by 2 high voltage powerlines (such as in the Tulelake Basin) the proposal for a 3rd high voltage powerline across their land and near their homes is an extremely unpopular unacceptable, and intolerable idea.
- V5 The "Newell Routes" section should discuss Cross's Alternative. Refer to our previous comment for Pg. 7.1-2 of Vol. 1 and item 1 under Summary of Major Issues of Concern.
- W5 Pg. 2.3-11: The 1st sentence of the 3rd paragraph under "Explanation" indicates that segment N-10D was positioned to stay a minimum of 1 mile from the Tulelake Airport. The MCKCPC contends that a distance of 1 mile is inadequate for aircraft safety based upon the oral comments of Mr. Nick Macy at the DEIS/EIR public hearing in Newell, Ca. on 1-5-87, and the information contained in Attachment E.
- X5 The 2nd sentence of the 3rd paragraph under "Explanation" states that it was not possible to totally avoid agricultural land. This statement is erroneous. Refer to our previous comment for Pg. 7.1-2 of Vol. 1 and item 1 under Summary of Major Issues of Concern.
- Y5 The 3rd sentence of the 3rd paragraph states that segment N-10D crosses some irrigated cropland near Bloody Point. The Bloody Point Ranch is an extremely sensitive area since it contains a small historically important cemetery and numerous Modoc Indian artifacts.
- Z5 Pg. 2.4-8: The MCKCPC disagrees with the 2nd sentence of the last paragraph. Cross's Alternative is BY FAR environmentally superior to the portion of the so-called Preferred Alternative which would cross over the Tulelake Basin.
- V5 See responses to L-330 G and L-330 H.
- W5 The N-10D route segment is not part of the preferred route (i.e., Alternative D). See also response to L-310 I.
- X5 See response to L-330 G.
- Y5 See response to L-330 F4.
- Z5 Comment noted. See responses to L-330 G, L-330 H, and T-10 F.

L-330 (continued)

- A6** Pg. 2.4-9: Paragraph 4.3 states that "Several additional routes have been suggested by agencies, the public, & COTP participant and contractor representatives." One of the additional suggested alternatives was Cross's Alternative which has essentially been ignored in the DEIS/EIR. Refer to our comment for Pg. 7.1-2 of Vol. 1 and item 1 under Summary of Major Issues of Concern.
- B6** Pg. 2.4-10: Re: potential impacts upon the Loveness Farms Airport, refer to the oral comments of Loren Loveness at the DEIS/EIR public hearings in Klamath Falls, Ore. and Newell Ca. on 1-5-87, and the written comments of Loren and Elsie Loveness which are included in Attachment A.
- C6** Pg. 2.4-12: This pg. identifies Option N-10 Alt 2+3+4, which is the most similar to Cross's Alternative of all alternatives considered in the DEIS/EIR. Nonetheless, there are substantial differences between this option and Cross's Alternative, as described in item 1 under Summary of Major Issues of Concern. The MCKCPC considers Cross's Alternative to be environmentally and economically superior to the N-10 Alt. 2+3+4 Option. Refer to item 1 under Summary of Major Issues of Concern.
- D6** Pg. 2.4-14: The list of environmentally superior segments is erroneous because it does not include Cross's Alternative.
- E6** Table A-10: The 2nd sentence of the 1st footnote is ambiguous. The 1st part of the sentence indicates that the N-10 route would cross over agricultural land, while the 2nd part of the sentence indicates that it would stay east of the cultivated areas. Which portion of the sentence is correct?
- F6** Pg. B-5: The "Minimize" column should include major feeding areas for high concentrations of waterfowl, such as the Tululake Basin,

A6 See response to L-330 H.

B6 See responses to L-310 I, T-4, and T-30.

C6 See response to L-330 I.

D6 See responses to L-330 I, L-330 K, and L-330 B2.

E6 The first part of the sentence is correct. The second part of the sentence should read "... by staying east of most of the cultivated areas." This correction can be found in Section 1.2.2 of Volume 1 of this Final EIS/EIR.

F6 Major feeding areas for high concentrations of waterfowl should have been included in the table. The identified routes were analyzed to determine the extent to which they avoided feeding areas where the possibility of numbers of collisions might occur.

L-330 (continued)

- F6** where high voltage powerlines create areas of high collision potential. Refer to item 10 under Summary of Major Issues of Concern.
- G6** Pg. B-7: The MCKCPC concurs with the Lead Agencies Routing Guidelines. Cross's Alternative is consistent with those Guidelines while the so-called Preferred Alternative is not.
- H6** Pg. B-9: The MCKCPC concurs with the Routing Guidelines re: airports and agricultural land. Cross's Alternative is consistent with those Guidelines while the so-called Preferred Alternative is not.
- I6** Pg. B10: Historically important cemeteries such as exists at Bloody Point Ranch should be included in the "Avoid" column.
- J6** Attachment D: The Route Map for Tululake should indicate Cross's Alternative, which should connect with the recently identified 3rd alternative Malin Switching Station site.
- K6** Attachment C & D: Is there any difference between the 2 sets of Attachments C & D? If not, one of them should be deleted.
- L6** Figure 3.0-1: This Figure should indicate Cross's Alternative, which should connect with the recently identified 3rd alternative Malin Switching Station site.
- M6** Pg. 3.2-3: A long term soil-related problem would exist in areas such as the Tululake Basin, where high winds periodically occur and high groundwater levels (within 3-6 feet of the soil surface) exist during the irrigation season. Such situations would create unstable soil conditions for high voltage powerline towers.
- N6** Pg. 3.3-10: The "Water Supply: Northern Section" paragraph states that "The only potentially significant impacts to water supply...would be... the disturbance of groundwater wells due to blasting for tower footings...No known groundwater wells currently operate...within
- G6** Alternative D was selected as the environmentally superior alternative and the preferred route based on principals contained in the COTP routing guidelines.
- H6** The MCKCPC's concurrence with the routing guidelines is noted. See response to L-330 G6.
- I6** The routing guidelines (Attachment B to Section 2.0, page B-10, Volume 2A of the Draft EIS/EIR) specify that sites of local historical importance be avoided. Bloody Point is listed as a California Historical Landmark, and so would be avoided. See also response to L-330 F4.
- J6** The maps in Attachment D are from Phase I studies and are working maps indicating the status of routes at that time. The maps would not, therefore, contain alternatives that were subsequently identified. The maps in Volume 1 of the Draft EIS/EIR show the Copic Bay Alternative, which is similar to the John Cross Alternative.
- K6** Two copies of Attachments C and D must have been mistakenly included in your copy of the report. There should only be one copy of each.
- L6** Figure 3.0-1 in Volume 2A of the Draft EIS/EIR shows the Copic Bay option that is similar to the John Cross Alternative.
- M6** See response to L-330 R3. Wind erosion is inversely related to the ability of soil to retain moisture. Tululake Basin soils typically become dry and revegetation has generally been unsuccessful. High winds could result in some soil erosion. If the Tululake Basin exhibits high ground water, loosely packed soil, and significant seismic activity, then liquefaction could occur. High groundwater may also cause differential settlement. The Project recognizes that all these impacts are possible and they will be accounted for during design. However, given local conditions of the Tululake Basin and Project-adopted mitigation measures, COTP does not consider them significant enough to merit mention in the discussion of short and long-term impacts on pages 3.2-2 and 3.2-3, Volume 1 of the Draft EIS/EIR.
- N6** Any necessary blasting for tower footings will be conducted in a manner which minimizes possible damage to groundwater wells (see Section 1.1.5 of this Final EIS/EIR).

L-330 (continued)

N6 proposed rights-of-way for this Section." Members of the MCKCPC have indicated that several groundwater wells do exist along the so-called Preferred Alternative route, and that the owners of those wells are highly concerned about potential effects caused by blasting for tower footings. Cross's Alternative would have no impact on existing groundwater wells.

O6 Pg. 3.4-2: The 1st paragraph on this pg. indicates that almost the entire area beneath towers will receive temporary clearing of vegetation. Additional information should be included in this paragraph to indicate that the disturbed areas beneath towers will be colonized by pioneer weed groundcover species, many of which are prolific seed producers and dispersers. Weed seeds, rodents, insects, bacteria, viruses, fungus, etc. from these areas may contaminate nearby certified seed crops and other crops and may cause severe economic hardships for any nearby farmers. Refer also to item 9 under Summary of Major Issues of Concern.

P6 Pg. 3.5-4: The 2nd sentence of the 2nd paragraph under "Flight Obstruction" states that "... (bird) collisions are very infrequent except near concentrated feeding... areas..." The MCKCPC concurs with that statement. As indicated in oral comments from Mr. Glen Arthur at the DEIS/EIR public hearing in Newell, Ca. on 1/5/87, in written comments from Glen and Josephine Arthur contained in Attachment A and in item 10 under Summary of Major Issues of Concern, the Tululake Basin is a major waterfowl feeding area. It should be noted that although the so-called Preferred Alternative may therefore cause potentially significant collision problems, Cross's Alternative would avoid this impact.

Q6 Pg. 3.5-14: Table 3.5-4 should indicate a high potential for bird

O6 See responses to L-330 G and L-20 B. Each landowner will have the opportunity to negotiate compensation for the additional expense that could occur if the area beneath the towers is to be manually sprayed for weed control. Nearby farmers would be able to continue their usual weed control practices.

P6 See responses to L-330 B4, L-330 C4, and L-330 F6.

Q6 See responses to L-330 B4, L-330 C4, and L-330 F6.

L-330 (continued)

- Q6** collisions in the Tulelake Basin due to the magnitude of waterfowl feeding which occurs in that area. Refer to item 10 under Summary of Major Issues of Concern.
- R6** Pg. 3.6-2: The magnitude of the impacts listed in the first paragraph under "Agriculture" should be indicated; i.e. are they considered significantly adverse?
- S6** Pg. 3.6-3: Re: "Potential Short-Term Impacts", the comment for Pg. 3.6-2 is also applicable. Also, the list of impacts includes "Modification of agricultural aircraft operations." The following phrase should be added to that impact "... and elimination of agricultural aircraft operations in some areas."
- T6** Pg. 3.6-3: Re: "Towers", the comment for Pg. 3.6-2 is also applicable.
- U6** Pg. 3.6-4: The last sentence of the 2nd paragraph states that "Towers placed on this type (plowed farmland) of land eliminate the plowing option in the vicinity of the tower, necessitating that spraying be conducted to control the weeds." Based upon oral comments from Mr. Nick Macy at the DEIS/EIR public hearing in Newell, Ca. on 1-5-87, item 3 under the Summary of Major Issues of Concern section of these comments and Attachment E, the MCKCPC contends that the obstructive safety hazard impact of the so-called Preferred Alternative on agricultural aircraft operations in the Tulelake Basin would be significantly adverse. Further, if the spraying is not done, a severe and significant economic hardship may be caused to the impacted farmers - particularly if they raise certified seed crops. The inclusion of Cross's Alternative in the so-called Preferred Alternative would avoid all of these problems.

- R6** Permanent removal from production of Prime Farmland, Farmland of Statewide Importance and/or irrigated land; and agricultural preserve land, were considered significant adverse environmental impacts. Also, please refer to significance of criteria on Page 3.6-28 in Volume 2A of the Draft EIS/EIR, which emphasizes irrigated cropland.
- S6** Potential short-term impacts resulting from the Project construction process were not considered significant. See also response to L-330 R6. The sentence has been corrected to read, "Modification of agricultural operations and possible elimination of agricultural aircraft operations in some areas."
- T6** See response to L-330 R6.
- U6** Comment noted. See responses to L-330 S, T-162 B, and T-175 H.

L-330 (continued)

V6	RE: "Conductors": The comment for Pg. 3.6-2 and the immediately preceding comment are also applicable.	V6	See responses to L-330 Q6 and L-330 R6.
W6	Re: "Irrigated Row and Field Crops": The comment for Pg. 3.6-2 is also applicable. The so-called Preferred Alternative would cause all of the identified impacts and other impacts indicated in item 2 under the <u>Summary of Major Issues and Concern</u> section of these comments upon farm operations in the Tulalake Basin. Cross's Alternative would avoid all of these impacts.	W6	See responses to L-330 G and L-330 H.
X6	RE: The information concerning impacts on agricultural aircraft operations, refer to our 1st comments for Pg. 3.6-4.	X6	See response to L-330 S6.
Y6	Pg. 3.6-7: Re: the 1st paragraph, refer to the discussions of visual impact and T.V./Radio reception impact contained in items 7 and 11 under the <u>Summary of Major Issues of Concern</u> section of these comments.	Y6	See responses to L-330 F1, L-330 U1, and L-330 H3.
Z6	The last sentence of the 1st paragraph under "Residences" indicates that potential visual impacts upon most residences along the proposed high voltage powerline would not occur due to screening by vegetation or topography. Such screening would not occur in flat, open, largely treeless areas such as the Tulalake Basin, making visual impacts far more severe. Our immediately preceding comment is also applicable. Although the so-called Preferred Alternative would cause this impact upon the Tulalake Basin, it could be avoided by including Cross's Alternative in the so-called Preferred Alternative.	Z6	See response to L-330 F1.
A7	The 2nd sentence under "Potential Short-Term Impacts reads "If blasting activity is necessary for construction, residential structures and associated facilities such as wells, septic tanks and water lines may be damaged." Such impacts within the Tulalake Basin are totally unnecessary since they can be avoided by including Cross's	A7	It is doubtful that all potential blasting impacts would be avoided with the Copic Bay option because construction would be required in the current right-of-way of the existing Intertie.

L-330 (continued)

- A7** Alternative in the so-called Preferred Alternative.
- B7** Pg. 3.6-8: The 3rd sentence under "Potential Short-Term Impacts" reads, "...airports could also be disrupted by construction activity..." Such impacts within the Tulalake Basin are totally unnecessary since they can be avoided by including Cross's Alternative in the so-called Preferred Alternative.
- C7** The 2nd sentence under "Potential Long-Term Impacts" reads "Airports and rural airstrips may also be adversely affected..." Refer to the 1st comment for Pg. 3.6-4. Such impacts within the Tulalake Basin are totally unnecessary since they can be avoided by including Cross's Alternative in the so-called Preferred Alternative.
- D7** The 3rd sentence of the 1st paragraph under "Planned Land Use" states "Transmission lines are permitted in each county's general/comprehensive plan designation, so there are no specific conflicts with local plans." With regard to Modoc Co., that statement is erroneous and should be clarified and corrected in accordance with the oral comments of Modoc Co. Supervisor John Coulson during the DEIS/EIR public hearing in Newell, Ca. on 1-5-87, written correspondence from the Modoc Co. Board of Supervisors which is included in Attachment A, Resolution No. 86-9 of the Modoc Co. Board of Supervisors which is included in Attachment A and item 6 under Summary of Major Issues of Concern.
- E7** Pg. 3.6-20: The 1st paragraph indicates that State/Federal soil classification maps were not available for Modoc Co. at the time of preparation of the DEIS/EIR. During the DEIS/EIR public hearing in Newell, Ca. on 1-5-87, Mr. Gene Kelly of the U.S. Soil Conservation Service indicated that he would provide the necessary soil
- B7** See responses to L-14 A, L-310 I, L-330 H, and L-330 MM.
- C7** See responses to L-14 A, L-310 I, L-330 H, and L-330 MM.
- D7** This information on Modoc County's recently adopted policy for transmission lines has been added to Table 3.6-18 in Volume 2A. See Section 1.2.3 of Volume 1 of this Final EIS/EIR.
- E7** The Project has been in contact with Mr. Kelly and Mr. Johnke of the USDA Soil Conservation Service in Red Bluff, and has obtained information concerning state and federal soil classifications for Modoc County. This information resulted in changes to Table 3.6-10 of Volume 2A of the Draft EIS/EIR. The revised table is provided in Section 1.2.3 of Volume 1 of this Final EIS/EIR.

L-330 (continued)

- E7 classification information to the COTP by the end of the DEIS/EIR review period. Therefore, this information will be available for use during preparation of the FEIS/EIR.
- F7 RE: the last paragraph, the estimated economic impact of the so-called Preferred Alternative on irrigated farmland in the Tulelake Basin is grossly underestimated because:
1. The number of miles of agricultural land crossed is underestimated in the DEIS/EIR.
 2. The estimate ignores various cost factors which are identified in item 2 under Summary of Major Issues of Concern, and ignores the fact that many or all of the costs would occur and would probably increase each and every year in perpetuity.
- G7 The MCKCPC contends that the so-called Preferred Alternative would have a cumulative significant adverse short and long term economic impact upon some farmers in the Tulelake Basin, while Cross's Alternative would totally avoid that impact.
- H7 Pg. 3.6-21 & 3.6-22: See preceding comment.
- I7 Pg. 3.6-25: This pg. briefly mentions the Federal Farmland Protection Policy Act. It should provide additional information regarding the purpose and intent of the law, and indicate whether and how the COTP will comply with that law.
- J7 MCKCPC has strong concerns and objections regarding the erroneous misrepresentations associated with Williamson Act agricultural preserve status which are contained in the DEIS/EIR. Refer to item 5 under Summary of Major Issues of Concern.
- K7 Pg. 3.6-28: The 1st sentence under "Agriculture" reads "If the route results in a new, permanent crossing of at least one-half mile of Prime Farmland or Farmland of Statewide Importance, the impact will be
- F7 See responses to L-204 E and L-330 D2.
- G7 See responses to L-330 G and L-330 H.
- H7 See responses to L-330 G and L-330 H.
- I7 The purpose of the law is to ensure that federal programs, to the extent practicable, be compatible with state, local, and private programs and policies to protect farmland. The Project does comply with the law in that productive agricultural lands were avoided whenever possible. However, in some locations, other factors such as engineering considerations and other environmental constraints were such that agricultural lands could not be totally avoided. See response to L-330 N5.
- J7 See response to L-297 I.
- K7 Comment noted. See responses to L-330 G, L-330 H, L0330 R6, and T-30 C.

L-330 (continued)

K7 considered significant." Since the length of prime farmland within the Tulalake Basin that would be impacted by the so-called Preferred Alternative would far exceed the half mile criterion, the impact would obviously be significantly adverse. Cross's Alternative would totally avoid this impact.

L7 Pg. 3.6-29: The criteria for determining a significant impact upon residences is arbitrary & inappropriate and we object to its use. For example, houses as close to the reference centerline as 751 feet would not be considered to be significantly impacted and if as many as 49 homes exist within 1,000 feet of the reference centerline, they would not be considered to be significantly impacted. Any time a proposed new high voltage powerline will encroach into the environs which surround homes (regardless of the specific number) where families have lived for decades or generations - - particularly if the surrounding terrain consists of flat, open, largely treeless land with normal views extending for many miles - - the highly intrusive impact upon those families must be considered significantly adverse.

M7 Re: "Commercial/Industrial Uses", a criterion should be added to state that if a proposed high voltage powerline route would increase the safety hazard potential to aircraft operators beyond that which is associated with the existing operation of airports & airfields, the impact is considered significant.

N7 Pg. 3.6-30: Re: the "Agriculture" paragraph, refer to our 2nd comment for Pg. 3.6-20.

O7 Table 3.6-10: Refer to our 2nd comment for Pg. 3.6-20.

P7 Table 3.6-11: Refer to our 2nd comment for Pg. 3.6-20.

Q7 Table 3.6-12: Refer to our 2nd comment for Pg. 3.6-20.

L7 The residential impact threshold is applicable in the Project study area. Please note that the same criteria were applied to all the route alternatives.

M7 Airports are listed under the avoidance category in our routing guidelines. Since the minimum FAA standards were not violated, there would be no significant impacts to airports (with the exception of Loveness Airstrip). However, a new route option has been analyzed that will avoid the impacts to the airstrip. This route is discussed as route North 1 in the Supplement to the Draft EIS/EIR, and has been adopted as the Project preferred route.

N7 See responses to L-204 E and L-330 D2.

O7 See responses L-204 E and L-330 D2.

P7 See responses L-204 E and L-330 D2.

Q7 See responses L-204 E and L-330 D2.

L-330 (continued)

R7 S7	Table 3.6-13: Refer to our 2nd comment for Pg. 3.6-20. Pg. 3.6-47: Re: Sec. 3.6.4.4, refer to our 1st comment for Pg. 3.6-29.	R7 S7	See responses L-204 E and L-330 D2. See response to L-330 L7.
T7 U7	Table 3.6-15: Refer to our 1st comment for Pg. 3.6-29. Table 3.6-16: Which 2 homes are within 200 feet of the reference centerline of segment N-10J?	T7 U7	See response to L-330 L7. The two homes are located north of the Highway 139-Alturas Highway intersection, on the east side of the Alturas Highway.
V7	Table 3.6-17: The 2 airports with which the MCKCPC is concerned are the Loveness Farms Airport and the Tulelake Airport. Refer to the oral comments of Mr. Loren Loveness during the DEIS/EIR public hearings in Klamath Falls, Ore. and Newell, Ca. on 1-5-87, the oral comments of Mr. Nick Macy during the DEIS/EIR public hearing in Newell, Ca. on 1-5-87, the written comments of Loren and Elsie Loveness included in Attachment A of the comments and the information from Mr. Nick Macy contained in Attachment E.	V7	Comment noted. See responses to L-310 I, L-330 G, and L-330 M7.
W7 X7 Y7	Pg. 3.6-58: Re: Modoc Co., refer to our 3rd comment for Pg. 3.6-8. Pg. 3.6-62: Refer to preceding comment. Table 3.6.22: Re: The Agricultural Preserve column, refer to our 2nd comment for Pg. 3.6-25.	W7 X7 Y7	See response to L-330 D7. See response to L-330 D7. See response to L-297 I.
Z7	Pg. 3.6-75: The 2nd sentence under "N-10 Routes" is highly misleading & implies erroneous conclusions about the importance and value of prime agricultural land in Modoc Co. Refer to our 2nd comment for Pg. 3.6-25.	Z7	See response to L-297 I.
A8	Pg. 3.7-2: Re: the 3rd sentence under "Viewer Response", it is suggested that "(including farm homes)" be added to the end of the sentence. Refer also to our 2nd comment for Pg. 3.6-7:	A8	See response to L-330 F1.
B8	Pg. 3.7-5: Re: the sentence which begins at the bottom of this pg. and ends on the top of Pg. 3.7-9, our 2nd comment for Pg. 2.3-1 is also applicable.	B8	See responses to L-330 F1 and L-330 U5.

L-330 (continued)

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| C8 | Table 3.7-1: The criteria used to quantify visual impact do not adequately consider the cumulative effects of multiple high voltage powerlines on flat, open, largely treeless land such as the Tulalake Basin where people live, play, drive and work. | C8 | Comment noted. See response to L-330 F1. |
| D8 | Pg. 3.7-10: Refer to our 2nd comment for Pg. 3.6-7. Apparently the "worst case" visual impact scenario would apply to the Tulalake Basin if the so-called Preferred Alternative is constructed. The visibility of the proposed high voltage powerline would be far greater in flat open areas such as the Tulalake Basin than it would be if located along other corridors or along Cross's Alternative. The other corridors and Cross's Alternative all have trees, ridges, hills and/or mountains that would provide substantial visual screening, while the Tulalake Basin does not. The significant adverse visual impact of the so-called Preferred Alternative upon the Tulalake Basin, due in large part to the almost total absence of screening, would be far worse than the visual impact which would occur if it were located in an area where substantial screening exists. | D8 | See response to L-330 F1. |
| E8 | Pg. 3.7-13: Re: the 1st paragraph under "Mitigation Measures", our 2nd comment for Pg. 2.3-1 is also applicable. | E8 | See response to L-330 U5. |
| F8 | Pg. 3.8-3: Re: the paragraph entitled "Short Term", refer to comment 14 for pg. 23 of Vol. 1. | F8 | Comment noted. See response to T-162 B. |
| G8 | Pg. 3.8-4: The first two sentences of the "Short Term" paragraph for Sec. 2.8.2.5 clearly apply to the residents of the Tulalake Basin. The primary reasons for their frustration are indicated in item 1 of the <u>Summary of Major Issues of Concern</u> section of these comments. | G8 | Comment noted. See responses to L-330 G and L-330 H. |
| H8 | Re: the "Long Term" paragraph under Sec. 3.8.2.5, The word "perceived" which appears 3 times in this paragraph, is inappropriate. | H8 | Comment noted. |

L-330 (continued)

I8 Refer to our comment for Pg. 4.1-30 of Vol. 1.

J8 The "Agricultural Effects" section is inadequate. Refer to item 2 under the Summary of Major Issues of Concern section of these comments.

K8 Pg. 3.8-15: The "Property Values" paragraph should include a discussion and quantification of the substantial farmland property devaluation (for resale purposes) which would result from the encroachment of a high voltage powerline onto prime irrigated farmland.

L8 Pg. 3.8-19: Table 3.8-6 substantially underestimates short term agricultural economic effects, at least for the Tulalake Basin segments. Refer to item 2 in the Summary of Major Issues of Concern section of these comments and the oral comments of Mr. Dan Byrne during the DEIS/EIR public hearing in Newell, Ca. on 1-5-87.

M8 Pg. 3.8-20: Table 3.8-7 substantially underestimates long/term agricultural economic effects. Refer to item 2 in the Summary of Major Issues of Concern section of these comments and the oral comments of Mr. Dan Byrne during the DEIS/EIR public hearing in Newell, Ca. on 1-5-87.

N8 Pg. 3.8-30: Re : the 1st partial paragraph, the stated criteria are arbitrary and inappropriate. Refer to our 1st comment for Pg. 3.6-29.

O8 Re: the "Agricultural Effects" paragraph, refer to item 2 in the Summary of Major Issues of Concern section of these comments.

Pg. 3.8-33: Re: The "Agricultural Effects" section: refer to item 2 in the Summary of Major Issues of Concern section of these comments. The so-called Preferred Alternative would cause significant adverse short and long term agricultural economic impacts on Tulalake Basin farmers. Cross's Alternative would avoid those impacts.

I8 Comment noted. See responses to L-330 R through L-330 KK.

J8 Comment noted. See response to L-325 N.

K8 Comment noted. See responses to L-330 G and L-330 JJ.

L8 Assumptions used to determine the short and long term agricultural effects are presented in Table 3.6-6 of Volume 2A of the Draft EIS/EIR. These assumptions are reasonable estimates, and provide a basis for comparison. Since the relative impacts to both short and long term agriculture were considered in determining the preferred route, it is likely that the resulting conclusion would not change. See also responses to L-330 G and T-36 A.

M8 The determination of significance levels is one of professional judgement. Since relative impacts were used to judge the significance of impacts from each alternative, the conclusions would not change. See response to L-330 L7.

N8 Comment noted. See response to L-330 L7.

O8 A comparison of the Copic Bay Option east of the preferred alternative (which is similar to the John Cross route) and the preferred route is included on pages 4.1-41 to 43 of the Draft EIS/EIR. See also responses to L-330 G, L-330 H, and T-10 F.

L-330 (continued)

- P8** [Pg. 3.8-35: The MCKCPC disagrees with the statement made under Sec. 3.8.6.5. The suggested mitigation measure will not reduce economic impacts on farmers to a less than significant level. Refer to our immediately preceding comment.
- Q8** [Pg. 3.9-12: Re: the 1st paragraph under "Historic", the Bloody Point site contains a small historically important cemetery and numerous Modoc Indian artifacts.
- R8** [Pg. 3.10-1: Re: the "Corona, Field & Safety Considerations" section, refer to the Summary of Major Issues of Concern section of these comments.

P8 Comment noted. See response to L-330 G.

Q8 See response to L-330 F4.

R8 See responses to L-330 G1 through L-330 P1, L-330 U1, and L-330 V1.

L-330 (continued)

Volume 3A.

S8 Appendix C is inadequate and incomplete because it does not include an analysis and evaluation of the 3rd alternative Malin Switching Station site, which has recently been identified by the B.P.A. The 3rd site is located approximately 2 miles north of E2, and appears to be environmentally superior to both E1 and E2. The MCKCPC has tentatively indicated its preference for the new 3rd alternative site (refer to oral comments of Mr. Bill Graham during the DEIS/EIR public hearings in Klamath Falls, Ore. and Newell, Ca. on 1-5-87). However, we strongly believe that it is important to the public and decision-makers, as well as being legally necessary, for the new 3rd Alternative Malin Switching Station site to be given the same degree of environmental analysis and evaluation as has been given to sites E1 and E2. Therefore, we recommend that the new site be illustrated and evaluated in the Supplemental DEIS/EIR which we have previously recommended for Cross's Alternative.

S8 This was done. See response to L-330 C5.

L-330 (continued)

Volume 4A

- T8 [The narrative text of this volume has been included in triplicate.
Two sets of the narrative text should be deleted from the FEIS/EIR.
- U8 [Comparable maps indicating Cross's Alternative should be included in
the recommended Supplemental DEIS/EIR.

T8 This was an error in the printing process.

U8 Maps of the Copic Bay option, which is similar to the John Cross Alternative, can be found in the Draft EIS/EIR.

L-330 (continued)

CONCLUSIONS, RECOMMENDATIONS AND REQUESTS

Based upon the information contained in the preceding comments, the MCKCPC hereby concludes, recommends and requests that:

- V8 1. Substantial corrections, revisions and additions are required in the EIS/EIR in order to eliminate misleading, ambiguous and erroneous statements and bring it into compliance with existing Federal, State and County laws, regulations, guidelines and policies.
- W8 2. The most substantial required change that we have identified is that Cross's Alternative must be indicated as an option on all applicable project maps, and must receive a similar and comparable level of narrative environmental analysis and evaluation as has already been given to many other alternatives and options in the DEIS/EIR. Such analysis must reflect an objective, factual, impartial and good faith effort at full disclosure.
- X8 3. The most fair and legally appropriate method for providing such comparable analysis and evaluation is by preparing a Supplemental DEIS/EIR to discuss Cross's Alternative. The recently identified 3rd alternative Malin Switching Station site, which also was not identified or discussed in the DEIS/EIR, should also be adequately evaluated in the Supplemental EIS/EIR. We do not consider simply adding information regarding Cross's Alternative and the 3rd Malin Switching Station site to the FEIS/EIR to be satisfactory, appropriate or legally sufficient since that approach would eliminate the opportunity for an extremely important phase of public review, written comments and public hearings on these 2 critical potential components of the COTP, which would be required for the Supplemental DEIS/EIR.
- Y8 In the event that a fair, objective and comprehensive evaluation of Cross's Alternative in the Supplemental DEIS/EIR reveals that Cross's Alternative is not feasible for legitimate, factual and documented reasons, then the burden must be on the project proponents to identify another similar alternative which would be feasible and which would keep the COTP totally off the prime, irrigated and highly productive farmland in the Tullake Basin.
- Z8 4. The portion of the so-called Preferred Alternative located within the Tullake Basin would cause several individually and cumulatively significant adverse impacts upon the residents of that area. However, all of these significant adverse impacts can be totally avoided or reduced to a negligible level by including Cross's Alternative in the so-called Preferred Alternative.
- A9 5. The erroneous allegation that the so-called Preferred Alternative is also the "Environmentally Superior Alternative" must be corrected. Cross's Alternative is BY FAR environmentally superior to the portion of the so-called Preferred Alternative that is located within the Tullake Basin. The indicated erroneous allegation can only be made accurate by revising the so-called Preferred Alternative to include
- V8 See Volume 1 of the Final EIS/EIR and responses to individual comments regarding corrections, revisions, and additions to the Draft EIS/EIR.
- W8 The analysis of the Copic Bay Alternative accomplishes this. See responses to L-330 H and T-10 F.
- X8 The lead agencies decided to prepare and circulate for public review a Supplement to the Draft EIS/EIR. The public review period was from July 2 to August 17, 1987. The new Malin Substation site was included in the Supplement, as was an alternative (North 1) that greatly reduced impacts to agriculture in the Tullake area. The Copic Bay Alternative, which is substantially similar to the John Cross Alternative, was included in the Draft EIS/EIR. The lead agencies do not feel that the supplemental EIS/EIR requested in the comment is necessary. See also response to L-330 H.
- Y8 See response to L-330 Q and L-330 G.
- Z8 Comment noted. See responses to L-330 G, L-330 H, L-330 K, L-330 Q, and L-330 B2.
- A9 See responses to L-330 G, L-330 K, L-330 Q, and L-330 B2.

L-330 (continued)

A9 Cross's Alternative and the recently identified 3rd alternative Malin Switching Station site.

B9 6. We hereby request that these written comments be included verbatim (unedited), and with all Attachments included, in the FEIS/EIR. Regarding Attachment A of these comments, some individuals and organizations that submitted written comments did so directly to the COTP with a copy to the MCKCPC. However, others submitted the original copy of their comments to the MCKCPC with the intent that it would be forwarded to the COTP as an attachment to the organization's comments. If the COTP has received a separate direct copy of any letter contained in Attachment A, there is obviously no need to respond twice to the same letter, but all of the Attachment A letters must be responded to in the FEIS/EIR.

C9 7. We hereby request that a copy of the FEIS/EIR, and a copy of the Supplemental DEIS/EIR, be distributed to each oral commentor from the DEIS/EIR public hearing in Newell, Ca. on 1/5/87 and each DEIS/EIR written commentor from or representing the Tulelake Basin area, including the individuals who submitted the correspondence contained in Attachment A of these comments. However, by carefully comparing the 2 lists of commentors and eliminating duplication, the number of report copies to be distributed can be substantially reduced.

D9 8. Due to the anticipated magnitude of comments on and revisions to the DEIS/EIR, we hereby request that the review period for the FEIS/EIR be at least 45 days, and that a public hearing on that document be held in Newell, Ca. Further, we request that public hearings on both the Supplemental DEIS/EIR and the Supplemental FEIS/EIR also be held in Newell, Ca.

E9 9. We hereby request that the Project Manager (TANC) provide advance notification of all future public hearings re: the COTP which are conducted by either Lead Agency, any Federal Cooperating Agency, or any State Responsible Agency to each cosigner of these comments, each individual who provided oral comments during the DEIS/EIR public hearing in Newell, Ca. on 1/5/87 and all written commentors from or representing the Tulelake Basin area, including the individuals who submitted the correspondence contained in Attachment A of these comments.

F9 10. We hereby request that the Project Manager (TANC) provide a copy of any future Notice of Determination and Record of Decision for the COTP with a clear and specific description and map of any approved project alignment, a list of all adopted Mitigation Measures and any adopted Findings of Overriding Consideration, as soon as they are completed and become public documents, to each of the cosigners of these comments.

Thank you for your consideration of these comments.

B9 Comment noted. We have complied with this request.

C9 When the Final EIS/EIR is available, notices will be mailed to everyone on the Project mailing list, including members of the Modoc County/Klamath County Powerline Committee, and will be published in local newspapers. Anyone requesting a copy of the Final EIS/EIR and related documents will be supplied with one. Copies will also be filed in the local libraries and other public locations and to all commentors whose names and addresses are complete.

D9 Western would not issue its Record of Decision prior to 30 days after the Federal Register notice of filing with EPA. In accordance with CEQ regulations, commentors will have at least 30 days to review the Final EIS/EIR.

There are no plans to hold public hearings on the Final EIS/EIR. A public hearing on the Supplement to the Draft EIS/EIR was held in Newell on August 5, 1987.

E9 Notices of all future public meetings on the COTP will be mailed to everyone on the Project's mailing list, including members of the Modoc County/Klamath County Powerline Committee, and will be published in local newspapers. Because not all commentors included their addresses, however, the Project cannot guarantee that all commentors will receive notices.

F9 Commentors who requested copies of the Record of Decision and the Notice of Determination will be furnished copies. The lead agencies will provide notice on the locations where a map of the approved COTP alignment may be reviewed.

L-330 (continued)

Sincerely,

Douglas G. Peterson

Douglas G. Peterson
Environmental Consultant
MCKCPC
5873 Muldrow Rd.
Sacramento, CA 95841

Michael C. Miller

Michael C. Miller
Attorney at Law
MCKCPC
601 Main Street, Suite 210
Klamath Falls, OR 97601/6007

Paul Tachirky

Paul Tachirky
MCKCPC
California Chairman
Route 1, Box 212
Tulelake, CA 96134

Bill J. Graham

Bill J. Graham
MCKCPC
Oregon Chairman
HC 62 Box 58 B
Malin, OR 97632

John Cross

John Cross
Chairman, Modoc Co. Planning Commission
c/o Newell Potato Cooperative, Inc.
P.O. Box 851
Tulelake, CA 96134

cc: Mr. Ronald Zumbrun, President, Pacific Legal Foundation

L-330 (continued)

ATTACHMENT A

L-330 (continued)

STATE CAPITOL ☐
SACRAMENTO 95814
(916) 445 7266



Assembly
California Legislature

STAN STATHAM
ASSEMBLYMAN FIRST DISTRICT

☐ 428 REDCLIFF DRIVE
SUITE 200
REDDING 96002
(916) 223-6300

January 27, 1987

Environmental Coordinator
California-Oregon Transmission Project
Post Office Box 660970
Sacramento, California 95866

Dear Coordinator:

H9

As you are aware, I have been following the California-Oregon Transmission Project's development with much interest. At this time I would like to stress my support of the John Cross alternative which lies east of the present two lines.

I believe this route provides the best balance between economic and environmental considerations.

Thank you.

Sincerely,

STAN STATHAM
Assemblyman

SS:msz

H9

See responses to L-330 G, L-330 H, and L-330 I.

L-330 (continued)

B. Z. BERNIE AGRONS
KLAMATH COUNTY
DISTRICT 53



HOUSE OF REPRESENTATIVES
SALEM, OREGON
97310-1347

REPLY TO ADDRESS INDICATED
☒ House of Representatives
Salem, Oregon 97310-1347
☐ 1401 Pine Grove Road
Klamath Falls, Oregon 97603
☐ P.O. Box 1933
Klamath Falls, Oregon 97601

February 4, 1987

Environmental Coordinator
California-Oregon Transmission Project
PO Box 660970
Sacramento CA 95866

Dear Sir:

19

I would like to add my voice to many that I am sure you are hearing regarding the location of transmission lines through the Klamath Basin.

I think you know by now that it is critical to public acceptance of the route through the Klamath Basin that it be moved east of its present proposals, off the irrigated farm land, and as much as possible across public land. The only one that will receive any measure of public support is the so-called John Cross Alternative.

The people in Malin and Tule Lake have already suffered too much as a result of their efforts to get a reasonable solution out of you people. I want you to know that my own efforts are dedicated in their behalf and I shall do everything possible at the Oregon state legislative level to support their efforts.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "B. Z. Agrons".

B. Z. Agrons
State Representative

cc: Paul Tschirky, Chairman
Modoc County Powerline Committee

19

See responses to L-330 G, L-330 H, and L-330 I.

L-330 (continued)

ARMY LARSEN
County Clerk
NATHAN ANDERSON
County Clerk
LESLIE CHASE
County Clerk
H. W. "Buck" JONES
County Clerk
JOHN L. COLLSON
County Clerk

MODOC COUNTY

Board of Supervisors

MARION MATHISON
County Clerk
and
Chairman of the
BOARD OF SUPERVISORS
Box 131
ALTURA, CALIFORNIA 96101
(916) 233-2216

January 5, 1987

James W. Beck, Chairman
Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

Dear Mr. Beck:

J9 The Board of Supervisors of the County of Modoc hereby proclaims its support of the position taken by the Modoc County-Klamath County Power Line Committee with regard to the routing of the proposed California-Oregon Transmission Project.

The Board also calls your attention to the "John Cross" alternative routing proposal which was submitted to your agency in August 1986 but not included in the Draft EIR/EIS released in November 1986. The Cross proposal should be studied as an alternative in that it meets the objectives of the area residents and the County and appears to mitigate impacts to agricultural lands.

K9 The importance of routing transmission lines away from the limited intensively farmed lands in Modoc County is indicated by the policy statement in the draft County General Plan: "Power transmission line corridors should not be located in any productive agricultural area, including exclusive and general agricultural lands or near airports." The plan proposes that Exclusive Agriculture areas require an 80 acre minimum parcel size and nonagricultural uses be severely restricted. The Exclusive Agriculture designated area is attached.

L9 The Draft EIR/EIS also fails to give adequate consideration to the value of the farmland in the Newell area, not only as an economic and environmental resource for the area but also its importance relative to the limited amount of valuable farmland in the rest of the County. Unfortunately, the Newell area has not been mapped by the Soil Conservation Service and is therefor

J9 The COTP respects the views of the Modoc County Board of Supervisors. See responses to L-330 G, L-330 H, L-330 I, and L-330 Q.

K9 See responses to L-14 A and L-330 MM.

L9 Several counties, including Modoc, lacked Soil Conservation Service information on the location of prime farmland. Therefore, irrigated cropland was considered the key agricultural resource, with the Newell region recognized as a substantial, productive irrigated row crop area. Since the release of the Draft EIS/EIR, the Soil Conservation Service has provided information on farmland productivity in this area, with the Newell region classified as Prime Farmland and Farmland of Statewide Importance. This additional data is presented in the revised Table 3.6-20 in Section 1.2.3 of Volume 1 of the Final EIS/EIR. See also responses to L-297 I and L-330 R6.

L-330 (continued)

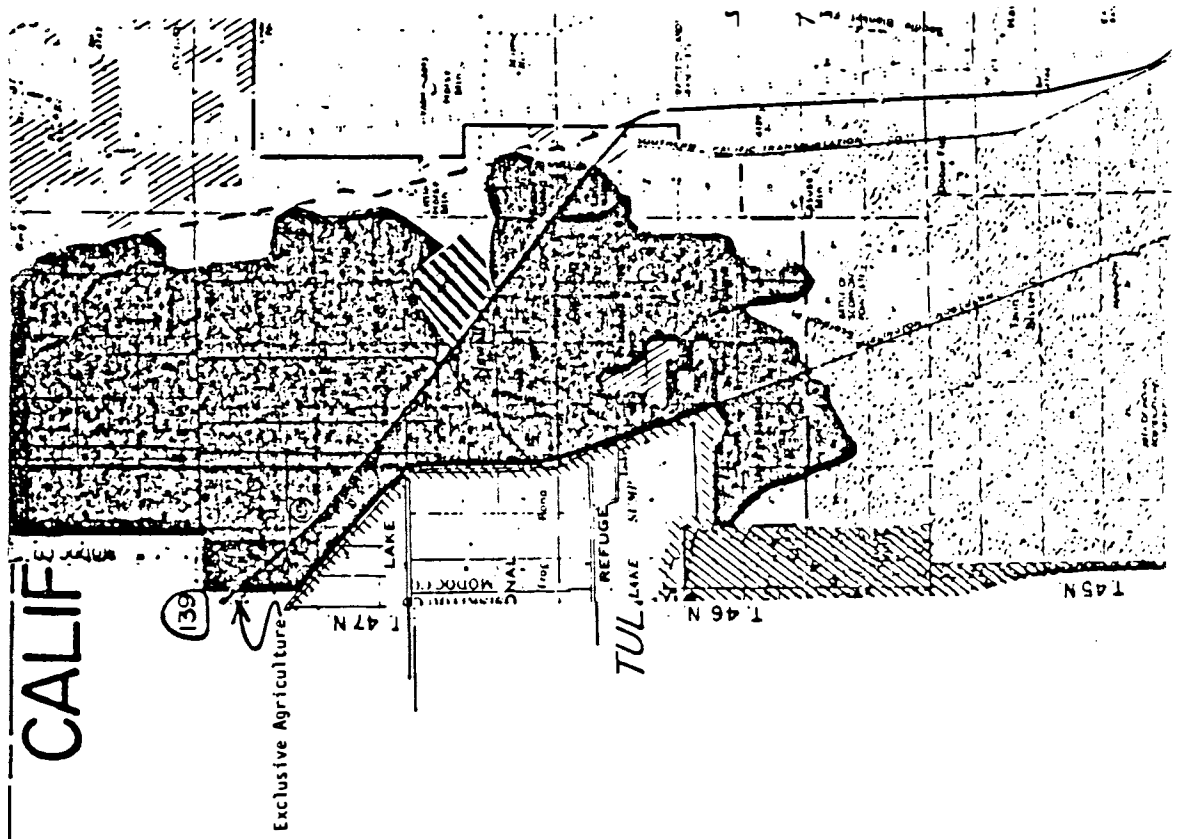
L9

not included in the Department of Conservation Farmland Mapping and Monitoring program. However, the County Agricultural Commissioner's Office indicates that the area would fall into the Prime and Statewide Importance categories. The County otherwise has a limited amount of land which falls within these categories. Projects which conflict with the preservation and viability of agricultural land should be especially scrutinized.

Sincerely,

Robert B. LePage
Chairman
Board of Supervisors of the
County of Modoc

L-330 (continued)



L-330 (continued)

RESOLUTION NO. 86-9

RESOLUTION OPPOSING EASTERN CORRIDOR ROUTE
OF CALIFORNIA-OREGON TRANSMISSION PROJECT

M9

WHEREAS the Board of Supervisors of the County of Modoc has examined the map entitled Preliminary Alternative Corridor Segments (northern section) showing several proposed routes for the California-Oregon Transmission Project, and

WHEREAS it appears to the Board that the eastern corridor on said map would be detrimental to the agricultural interests in the Tulelake-Newell Basin area, and

WHEREAS agriculture is a vital part of the economy of Modoc County and alternative routes are available which would not have a detrimental impact on agriculture,

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of the County of Modoc opposes the use of said eastern corridor by the California-Oregon Transmission Project and urges that one of the alternative routes be selected which does not have a substantial adverse effect on agriculture.

PASSED AND ADOPTED at a regular meeting of the Board of Supervisors of the County of Modoc held on the 21st day of January, 1986, by the following vote:

AYES: Supervisors Anderson, Chace, Jones, Coulson
and Laxague

NOES: None

ABSENT: None

BOARD OF SUPERVISORS OF THE COUNTY OF MODOC

By John B. Laxague
Chairman

ATTEST:

Marianne Madison
County Clerk and Ex-Officio Clerk
of the Board of Supervisors

M9

See responses to L-330 Q and L-330 G.



L-330 (continued)

MEMBER Dist. 1
Norma Price Dist. 2
George Thompson Dist. 3
Bill Jackson Dist. 4
George Thompson Dist. 5

Board of Supervisors
of

SISKIYOU COUNTY

P. O. Box 338

Yreka, California 96097

CLEAR
Norma Price
Phone 916-843-3331
Ext. 341

September 24, 1986

Mr. James Beck, Chairman
Transmission Agency of Northern California
P. O. Box 660970
Sacramento, California 95866

Mr. Arthur Pugh
Transmission Agency of Northern California
P. O. Box 660970
Sacramento, California 95866

Gentlemen:

N9 [The Board of Supervisors has reviewed the preferred alternate for the Third Intertie project through Siskiyou County. It appears that you have secured a route that substantially avoids many of the technical and environmental concerns the County has presented to you in the past.

O9 [It is unfortunate that the preferred route is substantially outside of the previous corridor and, therefore, has not been subject to close review by the County in this short time frame. It does appear you have succeeded in substantially avoiding critical wildlife habitat and agricultural lands. The position of the preferred route through the southernmost portion of the county continues to cross what is designated as extremely productive Site 1 and 2 timberland. We feel that while most of the issues raised by Siskiyou County have been addressed by this preferred alternate, timber preservation will remain to be a problem for further discussion at the Siskiyou-Shasta County line area and, further, we would encourage you to work diligently and successfully to locate an alternate route outside of agricultural

P9 [

N9 Comment noted.

O9 Comment noted. The Siskiyou County Board of Supervisors comments on the Draft EIS/EIR are included as L-128.

P9 See response to L-330 G.

L-330 (continued)

Messrs. Beck and Pugh--Page 2--September 24, 1986

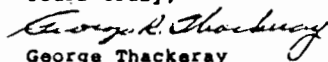
P9

lands in Modoc County as you have in Siskiyou County.

The Board and staff are most desirous to continue to work with you in resolving these problems and I am sure these issues will be fully addressed in the draft EIR/EIS.

Thank you for the opportunity to comment.

Yours truly,


George Thackeray
Chairman

L-330 (continued)

MODOC COUNTY
DEPARTMENT OF AGRICULTURE
202 West 4th Street
Atenas, CA 96101

CLINTON B. GREENBANK
AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS AND MEASURES
AIR POLLUTION CONTROL OFFICER
PREDATORIAL ANIMAL CONTROL OFFICER
PHONE (916) 233-3539 EXT. 401

MARY C. PFEIFFER
AGRICULTURAL INSPECTOR
P.O. BOX 222
TULARE, CA 96134
PHONE (816) 867-2713

February 9, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Sir,

Q9 I would like to reiterate my objections to routing of the transmission line through agricultural land in Modoc County.

In my opinion, the recognized danger to residents, workers, and agricultural aircraft should, in itself, override any considerations of building on farm land. Add to this the devaluation of property, the difficulty of farming under the lines, loss of productive acreage, visual impact, etc. and it is very difficult to imagine that a decision to site the line through farm land could be made.

R9 At the public hearing January 5, 1987 in Newell, CA, I testified as to the possibility of the spread of noxious weeds and nematodes by construction equipment. After the construction of the natural gas pipeline through Modoc County several years ago, we discovered on new infestation of nematode (*Meloidogyne sp.*) and one of a noxious weed (*Salvia aethiopis*). While there is no way to prove the pests were brought in by construction equipment, the fact they were discovered on the pipeline corridor was suspicious. Nematode pests have little or no effect on rangeland but are impossible to eradicate in farm land and render the land unacceptable for the planting of seed crops. Many noxious weeds can be controlled or eradicated on rangeland but those same weeds cannot be eradicated from farmland because the effective control measures are not registered for use on farmland.

I urge you to seriously consider these points when making your decision.

Sincerely,

Clinton B. Greenbank

Clinton B. Greenbank

CUC:vk

Q9 See responses to L-298, L-330 Q, L-330 F3, L-330 G, L-330 H, L-330 I, L-330 LL, L-330 MM, L-330 RR, L-184 A, and T-175 F.

R9 See responses to L-330 Q1 and L-20 B.

L-330 (continued)

Ms. Cheryl Shields

3-3-87

COTP

P.O. Box 660970

Sacramento, CA. 95866

SUBJECT : WRITTEN COMMENTS FROM THE MODOC CO./KLAMATH CO. POWERLINE
COMMITTEE RE: THE DEIS/EIR FOR THE COTP

Dear Ms. Shields :

I received a copy of the attached letter in the mail today, so it wasn't included in our comments which were hand-delivered to your office yesterday. Please add it to Attachment A of our comments, directly after the letter from the Calif. Farm Bureau Federation. Thank you very much.

Sincerely,

Doug Peterson

Doug Peterson

V9

V9

Comment noted. See response to L-298.

L-330 (continued)

Modoc County Farm Bureau

105 W. 2ND STREET
P.O. BOX 1692 TELEPHONE (916) 233-FARM
ALTURAS, CALIFORNIA 96101

February 24, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca. 95866

Subject: Draft EIS/EIR for the California-Oregon Transmission
project (DOE/EIS - 0128; SCH #85040914)

Dear Environmental Coordinator;

These comments on the Draft EIS/EIR for the California-Oregon Transmission Project are hereby submitted by the Modoc County Farm Bureau on behalf of all members of MCFB representing some 900 member families. Farm Bureau is local, county, state, national and international in it's scope and influence and is nonpartisan, nonsectarian and nonsecret in character. Farm Bureau is a voice of agricultural producers at all levels. California Farm Bureau Federation is the states largest general farm organization, representing more than 100,000 member families in 56 counties. American Farm Bureau Federation likewise is the nations largest general farm organization, representing a membership of 3,430,667 families. Farm Bureau believes America's unparalleled progress is based on freedom and dignity of the individual, sustained by basic moral and religious concepts. Property rights are among the human rights essential to the preservation of individual freedom. CFBB policy No. 86 - Transmission and Utility Line Corridors - "We should use all available means to protect land from transmission corridors where workable alternate routes not passing through agricultural land are available. We urge the use of existing lines to transport power. (Rev. 1986)"

W9

Our concern is over the inadequacies of alternatives contained in the DEIS/EIR. It is inadequate in that it ignores a workable option as prepared by the Modoc County/ Klamath County Powerline Committee (MCKCPC). This proposal, known as the John Cross Proposal, would eliminate the adverse impacts which would result from the construction of the "Preferred Route". MCFB is in support of MCKCPC and the John Cross Proposal. We believe in the preservation of agricultural land.

W9

See response to L-298 A.

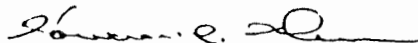
L-330 (continued)

Modoc County Farm Bureau

105 W. 2ND STREET
P.O. BOX 1692 TELEPHONE (916) 233-FARM
ALTURAS, CALIFORNIA 96101

- X9 The DEIS/EIR is inadequate in that it does not recognize the fact that 72% of Modoc County land is in public ownership. We believe that the power transmitted for public uses be transmitted on public lands. The "Preferred Route" has been concentrated on private lands. The "Cross Proposal" would put the transmission line on public lands, not over, prime irrigated and highly productive farmland.
- Y9 The DEIS/EIR is inadequate in that it ignores the lead agencies own Routing Guidelines. Their Routing Guidelines for the project as found on pgs. B-7 and B-9 of vol. 2A read as follows:
- Minimize (use of) highly productive agricultural lands.
 - Emphasize (use of) barren and low productivity land.
 - Minimize (use of) prime farmland.
 - Minimize (use of) other productive farmlands.
- Yet the "Preferred Route" contained in the DEIS/EIR would cross directly over prime, irrigated and highly productive farmland with no mention of emphasizing the barren land as would be found through the alternative route known as the Cross Alternative.
- Z9 The DEIS/EIR is inadequate in that the economic impact along the "Preferred Route" has not been addressed. Loss of county revenue would be experienced due to reduction of prime farmland. Increased production costs would be experienced by affected farmers in the form of irrigation costs, weed control, ground erosion, aerial seeding and spraying, not to mention the safety to pilots and irrigators.
- A10 We at MCFB strongly support and encourage the "Cross Proposal"; For the preservation of agricultural land, reducing the economic effect in an already highly depressed economy, and the use of Public land for Public benefit. The MCKCPC has put before you a working alternative. We strongly support that their concerns and recommendations be included in the final EIS/EIR, with a decision made to accept the Cross Proposal.

Sincerely,



Howard C. Klassen
Director MCFB

- X9 See response to L-298 B and L-330 Q.
- Y9 See responses to L-298 B, L-298 C, L-330 G and L-330 H.
- Z9 See responses to L-14 A, L-204 E, L-298 D, L-330 HH, and T-175 E.
- A10 Comment noted. See responses to L-298 E, L-330 G, and L-330 H.

L-330 (continued)



January 13, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Environmental Coordinator

C10 At our regular January meeting the Tullake Growers Association has once again unanimously placed itself on record in support of the "John Cross Alternative" as being the preferred route of the proposed 500 K.V. Line.

This alternative routing of the proposed system seems to us to be a viable, workable and common-sense answer to the difficulties and opposition the line will encounter if further attempts to place the line on the valley floor are being considered.

Again, the unanimty of our opposition to the proposed siting cannot be stressed too heavily. As all the well-documented reasons for this opposition are already in the record from the public hearings we feel that their just and fair review will sustain our position and result in the adoption of the "John Cross Alternative routing."

Sincerely,

TULELAKE GROWERS ASSOCIATION

Daniel J. Kelleher
President

jmc/DJK

C10 Comment noted. See responses to L-298, L-330 Q, and L-330 G.

L-330 (continued)

**Modoc
County
Cattleman's
Association**



EXECUTIVE COORDINATOR
COW
P.O. BOX 660970
SACRAMENTO, CA. 95866

202 WEST FOURTH STREET
ALTURAS, CALIFORNIA 96101
(916) 233 3939, ext. 400

February 12, 1987

MIKE BYRNE
PRESIDENT

BILL FLOURNOY
VICE PRESIDENT

COUNTY DIRECTORS

ED BERRYESSA, Cedarville

LARRY IMBACH, Alturas

KEN MCGARVA, Lickely

BUCKY HARRIS, Cedarville

STEVE BARGER, Alturas

JOHN CURTIS, Davis Creek

BOB BYRNE, Tulelake

WILLIE HAGGE, Alturas

STATE DIRECTORS

JOE HARRIS

RICH HAMEL

DEAR SIR:

H10

THE MODOC COUNTY CATTLEMEN'S ASSOCIATION is opposed to the placement of the new intertie on or in the proximity (close enough to preclude normal agricultural operations) of the farmland.

I10

Modoc county has 72% of its area in government control. Only 6% of the county is deemed to be exclusive agriculture. Since the amount of land used for intensive agriculture is very limited in this county we strongly urge you to make every effort to route this line away from these lands.

J10

The "John Cross" alternative is a very good alternative to the preferred route as it uses lower value government land for almost all of its route through the county.

K10

The "John Cross" alternative allows the new intertie to have some of the originally desired reliability because of the increased separation from the existing two lines. It appears that the original intent to have a more reliable north-south intertie has been compromised to an unacceptable extent in an effort to expedite the project.

L10

The draft EIR/EIS has many errors and omissions which should be corrected in the Final document. Many of the criteria used to evaluate the lands in the preferred route are not applicable to Modoc County. The use of agricultural preserves and TPZ's as evaluation criteria when there are no agricultural preserves in Modoc and no private timber land crossed by the preferred route causes significant doubt as to whether or not the

H10

Comment noted. See response to L-330 G.

I10

See responses to L-298 B and L-330 G.

J10

See response to L-298 B, L-330 G, and L-330 H.

K10

See response to L-340 C, L-330 G, L-330 H, and L-330 I.

L10

The key agricultural and forestry resources involved in the alternative route comparison process were irrigated cropland and prime timber. Alternative D, which is the preferred route, had less impact on prime timber than Alternatives A, B, and C, and less impact on irrigated cropland than Alternatives B and C. On an overall basis, it had the least impact on land use resources which also included residential and recreation areas. The Volume 1 discussion comparing each alternative's impact has been clarified with respect to the significance of agricultural preserves and TPZs.

L-330 (continued)

Modoc
County
Cattleman's
Association



202 WEST FOURTH STREET
ALTURAS, CALIFORNIA 96101
(916) 233-3939, ext. 400

MIKE BYRNE
PRESIDENT

WILL FLOURNOY
VICE PRESIDENT

COUNTY DIRECTORS

BO BERRYESSA, Cedarville

MARY IMBACH, Alturas

LEN McGARVA, Likely

JOCKY HARRIS, Cedarville

TEVE BARGER, Alturas

JOHN CURTIS, Davis Creek

BO BYRNE, Tulelake

WILLIE HAGGE, Alturas

STATE DIRECTORS

JOE HARRIS

CHAMMEL

L10

preferred route is in fact the most environmentally preferred route.

M10

Routing the existing lines to the east and putting the new line in the existing corridor is the most sensible solution to the problems which the current proposed preferred route have caused.

Sincerely,

Michael Byrne
Michael Byrne

M10 See responses to L-298 B, L-330 F, L-330 G, and L-330 H.

MEMBER OF THE AMERICAN NATIONAL CATTLEMEN'S ASSOCIATION

MEMBER OF THE NEVADA CATTLEMEN'S ASSOCIATION • MEMBER OF THE OREGON CATTLEMEN'S ASSOCIATION

L-330 (continued)

—CALIFORNIA'S NORTHERNMOST IRRIGATION DISTRICT—



TULELAKE IRRIGATION DISTRICT

P.O. BOX 787
Tulelake, California 96134
Phone 916-667-2249

EARL C. DANOSKY, Manager
GERALD D. PYLE, Asst. Mgr.
MURIEL W. BEAST, Office Mgr.
EDWARD J. BAILEY, President
JAMES E. MAYLINA, Vice President
EARL W. PARSONS, Director
RICHARD A. HEINRY, Director
JOHN F. CRANFORD, Director

March 18, 1986

California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

Dear Sirs:

O10

I am writing in reference to the proposed power line, in particular the two western lines in the east corridor. This is the route that crosses prime farm land, much of which lies within the Tulelake Irrigation District. This District is opposed to the line crossing District facilities and I am enclosing a copy of the Board of Directors' resolution stating this opposition.

P10

I am very concerned about the safety of District personnel working in the vicinity of the line. The most serious concern is when dredging of laterals and drains is performed. There are also diversion structures located throughout this area which require maintenance activities, sometimes involving the use of lifting cranes. There is also the possibility of lateral bank failure which would necessitate immediate repair using dragline equipment.

This District could only authorize the crossing of its facilities if it is agreed beforehand that the lines would be de-energized during maintenance or construction activities. It must also be agreed that an immediate shut down of the line would be made if a canal failure should occur in the area of the line.

Sincerely,

TULELAKE IRRIGATION DISTRICT

Earl C. Danosky
Earl C. Danosky, Manager

O10

It is intended that the selection of a 200-foot wide easement within the 1,500-foot wide route will allow further avoidance of environmental and property impacts. Suggestions by individual landowners will be carefully considered during the final design process and easement selection. See response to L-330 G.

P10

See response to T-175 F.

ECD:gp
Enclosure

L-330 (continued)

Resolution # 86-1

Board of Directors

Tulelake Irrigation District

California-Oregon Transmission Project

Q10

WHEREAS, CALIFORNIA-OREGON TRANSMISSION PROJECT proposes to build a 500 KV line from Oregon to Central California; and

WHEREAS, this proposed power line would pass over facilities operated by this District; and

WHEREAS, this proposed power line could endanger lives of employees working under this line; and

WHEREAS, less populated routes are available for this line,

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Tulelake Irrigation District, that it is opposed to any power line of this size crossing any District facilities.

Q10

Comment noted. See response to L-330 G and T-175F.

Adopted this 13th day of January 1986 by the following vote:

AYES: Baley, Havlina, Heiney, Klassen.

NAYS: None.

Abstain: None.

Absent: Crawford.

L-330 (continued)

Kiwanis Club



Of Tullake



TULELAKE, CALIFORNIA 95134

January 15, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O.Box 660970
Sacramento, CA. 95866

Dear Sir;

R10

We of the Tullake Kiwanis club oppose the positioning of the proposed powerline on farmland.

This causes not only great inconvenience to the farmer but also added expense due to added time going around the towers, the possibility of an added wheeline, etc.

R10

Comment noted. See responses to L-330 G and T-6 D.

Sincerely,

David Turnmire, President



L-330 (continued)

January 15, 1987

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, California 95866

Dear Sirs:

S10 [The Board of Directors of Tulelake Rotary would like to register their opposition to the proposed interstate power transmission line. If this line is built, we do not want ANY portion of it crossing cultivated agriculture land in the Tulelake Basin. If it must be built, the best alternative we've seen is the route proposed by John Cross.

Reasons for the Board's decision were:

T10 [1. There is no economic, cultural, recreational, visual, or taxable reason for the community of Tulelake to support the construction of a power transmission line across cultivated land.

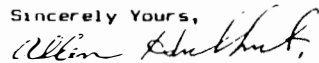
U10 [2. All of the cultivated land that this proposed line would cross is privately owned. The land would be devalued for agricultural purposes and ultimately for tax purposes.

V10 [3. General farming practices, sprinkler irrigation, and all airplane application of materials would have to be eliminated or seriously curtailed.

W10 [4. Prices below the cost of production for agricultural products have caused a severe economic situation in the Tulelake Basin. The construction of a power line across cultivated land will make this situation worse.

X10 [Thirty two percent of Modoc County is nontaxed public land. Public land is available for the construction of this power line. To ask the people of Tulelake to sacrifice our limited farm land for this power line when low value sagebrush public land is available and adjacent to the proposed route is ludicrous and does not belong in America.

Sincerely Yours,



Allen Hurlburt, President
Tulelake Rotary
Rt. 1, Box 258
Tulelake, California 96134

S10 Comment noted. See response to L-330 G and L-330 H.

T10 Comment noted. See response to L-330 G.

U10 Comment noted. See response to L-184 A and L-330 DD.

V10 Comment noted. See responses to T-6 D, T-175 A, T-175 B, T-175 H, L-330 LL, L-330 MM, and L-330 RR.

W10 Comment noted. See response to L-184 A.

X10 See responses to L-298 and L-330 G.

L-330 (continued)



Siskiyou Pomona #6

THE GRANGE

AMERICA'S FAMILY COMMUNITY FRATERNITY

Siskiyou Pomona Grange No 6
Tulelake, California 96134

January 15, 1997

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Calif. 95866

I am Mary Victorine, Master of Siskiyou Pomona Grange #6, representing 1120 Grangers in Siskiyou and Modoc counties, some of whom live near each of the routes through those counties listed in California-Oregon Transmission Project's plans for their proposed 500 KV line.

Z10 [In regular session Pomona #6 voted to support Modoc County Powerline Committee in their efforts to keep the proposed powerline off private irrigated farmland. We also support their suggested use of the John Cross Alternative which would place the line east of the two existing lines through the Malin, Oregon - Kewell, California area.

A11 [We have observed that in the draft EIR/EIS released by COTP in November of 1996, there was no study made of the suggested route mapped out by the farmers involved with the route chosen for the powerline. Other concerns voiced by the public were belittled, misrepresented or ignored in the draft. (ie: belittling the danger and inconvenience to workers and residents near the line; belittling the loss of land value, this is not for a harvest or two but forever; misrepresenting the loss of income from the land; misrepresenting the farmland as less than "prime" because it was not listed in Williamson Act or Land Preserve, when actually Modoc County as a whole did not subscribe to the Williamson Act; ignoring the expenses incurred by farmers who will have to farm around the towers forever.)

G11 [When these concerns have such an important bearing on the future and livelihood of the farmers and families involved, we feel the Calif.-Ore. Transmission Project cannot in conscience afford to treat them so lightly. We request that the proper study be given to the issues at question here and particularly that the John Cross Alternative be given an environmental study to fairly determine its viability.

We urge that you consider the future of the people along the route of your powerline and use the John Cross Alternative to keep the line off irrigated farmland.

Sincerely,

Mary Victorine
Mary Victorine
Rt. 1 Box 221
Tulelake, Calif. 96134
phone: 916-667-2794

Z10 Comment noted. See responses to L-330 G and L-330 H.

A11 See responses to L-298, L-330 G, L-330 H, and L-330 I.

B11 See responses to L-330 F3, L-330 B5, L-330 O15, L-330 M16, and T-175 F.

C11 We wish to apologize if you feel that your concerns were "belittled" in the Draft EIS/EIR. The loss of land value as a result of the transmission line was addressed in Volume 2A, Section 3.8. As stated therein, those farmers whose property will be crossed by the transmission line will be compensated for the value of the loss, based on land value, which is related to the future earning potential of that land. The amount received will be established by appraisal and negotiation so that farmers will be able to be compensated for extra costs that will be required in farming land around tower bases. The estimated short- and long-term agricultural losses presented in the Draft are likely to be different from those actually incurred by farmers. In making those estimates, conservative assumptions were used so that impacts would hopefully be overstated and actual losses would be lower than the estimated amounts. It should also be understood that these estimates were used only for comparison purposes, not for determining actual losses from specific parcels. A new route option has been analyzed that may avoid or minimize the impacts on farmland in the Supplement to the Draft EIS/EIR.

L-330 (continued)

- D11** We feel that our estimates of lost crop revenue as presented in Tables 3.6-11 and 3.6-12 in Volume 2A of the Draft EIS/EIR are reasonable. See also response to T-36 C for a sample calculation of estimated lost crop revenue.
- E11** See response to L-297 I.
- F11** Table 3.6-12 in Volume 2A of the Draft EIS/EIR presents estimated lost crop revenue over a 50-year period, which is assumed to be the project lifetime. Landowners will be given the opportunity during the easement acquisition process of negotiating reimbursement for the additional cost of working around towers. See also response to L-184 A.
- G11** Comments noted. See responses to L-298, L-330 G, and L-330 Q.

L-330 (continued)



COUNTY CHAMBER OF COMMERCE

125 NO 8TH STREET
KLAMATH FALLS, OREGON 97601
TELEPHONE: AREA CODE 503/884 5193

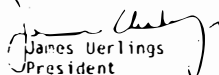
Environmental Coordinator
California Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

J11

The Klamath County Chamber of Commerce Board of Directors recommends that the proposed 500KV California Oregon transmission project be located to the East of the proposed route across farm land in Oregon and California.

This route should follow the route proposed by the Malin Powerline Committee and the Modoc County Powerline committee.

Sincerely,


James Uerlings
President

JU/cr

cc: The California-Oregon Transmission Project
Tulelake Growers Association
Western Area Power Transmission Agency
Transmission Agency of Northern California
California Public Utilities Commission

J11

Comment noted. See response to L-330 G and L-330 H.

L-330 (continued)

LAVA BEDS RESOURCE CONSERVATION DISTRICT
ROUTE 1, BOX 246AA
TULELAKE, CALIFORNIA 96134
FEBRUARY 12, 1987

ENVIRONMENTAL COORDINATOR
COPT
P.O. BOX 660970
SACRAMENTO, CA. 95866

Dear Environmental Coordinator:

The Lava Bed Resource Conservation District concurs with the Soil Conservation Service concept of the highest and best use of the land.

- K11** [The present preferred route conflicts with agricultural operations in Modoc County. The routing proposed comes so close to some of the intensively cropped land that certain agricultural procedures such as airplane application of chemicals would be too dangerous to continue.
- L11** [Modoc County does not have alot of highly productive land and to use a portion of what does exist for a 500 KV line is reproachable.
- [The "John Cross" alternative on the other hand uses lesser value land. This is the type of land which lends itself to the construction of a intertie when all concerns are considered.
- M11** [The "John Cross" alternative deserves to be studied seriously as it eliminates all of the concerns caused by the preferred alternative and actually enhances the reliability and separation criteria which appear to have been compromised.

Sincerely,

Michael Byrne
Michael Byrne
President

K11 See responses to L-298, L-330 G, L-330 H, L-330 LL, L-330 MM, and L-330 RR.

L11 See responses to L-298 B, L-330 G, and L-330 H.

M11 See responses to L-330 G, L-330 H, and L-330 I.

L-330 (continued)

Tulelake Senior Citizens
P.O. Box 485
Tulelake, Calif. 96134

Tulelake, Ca
Feb. 2, 87

Environmental Coordinator
Calif. Oregon Transmission Project
P. O. Box 660970
Sacramento, Ca. 95866

Dear Sirs;

N11 We the Senior Citizens-called the "Tulelake Senior Honkers" are composed of 92 member s from Modoc, Siskiyou and Klamath Counties, strongly oppose the placing of the 500 K. V. Pow erline on any irrigated farm ground.

O11 The limited income from Agriculture products today with the added expense of farming around towers in fields would place an extraordinary expense and hardship on some of these farmers effected.

P11 Therefor we the parents and Grandparents of some of these farmers would be victimized, as the possible extra expense, the elimination of raising seed crops for certification, plus the certain devaluation of the land would easily be the cause of driving some of them into Bankruptsy, thus causing extreme stress, worry and hardship on some of the

Q11 Senior Citizens. For the safety of farmers and people in general, we recommend that the Powerline be placed far enough to the east of the two existing lines, mostly on Public land thats being proposed by John Cross and the Modoc Powerline Committee. This would be a real safety factor, that the Calif. Oregon Transmission project person-

all desires.

Voted on in favor of this recommendation on Feb. 2, 87 by the membership.

Signed;

President

Ken Tulelake

N11 Comment noted. See responses to L-330 G, L-330 H, and L-330 Q.

O11 We agree that farming costs would increase from the presence of towers and conductors which cross cultivated agricultural areas. These costs were addressed in Volume 2A, Sections 3.6 and 3.8 of the Draft EIS/EIR. Each landowner will have the opportunity to negotiate compensation for increased costs during the easement acquisition process. See responses to T-175 A, L-14 B, and L-204 E.

P11 Each landowner will have the opportunity to discuss compensation for potential income losses during the easement negotiation process. See also response to L-20 B for a discussion of elimination of the spread of nematodes, L-305 I on aerial spraying, and T-9 A for a discussion of possible route adjustments in the Tulelake/Copie Bay region. See also response to L-330 Q1.

Q11 See responses to T-82 C and L-184 A regarding devaluation of land. Since property owners will be compensated for any loss of land resulting from the transmission line, they should not be driven into bankruptcy. Also, a new optional route has been analyzed which may avoid or minimize the impacts on farmland (see the Supplement to the Draft EIS/EIR.)

R11 See responses to L-330 B5, L-330 G and L-330 H.

L-330 (continued)

NEWELL POTATO COOPERATIVE, INC.



AUGUST 20, 1986

Siskiyou County
Republican Central Committee
P.O. Box 1435
Yreka, California 96097

Dear Gentlemen & Gentlewomen:

S11

Mr. Paul Tschirky, Chairman of the Modoc County Power Line Committee, has asked me to write this letter to you requesting your endorsement of the solution we have developed concerning the California-Oregon Power Transmission line preferred route through our prime farmland. This solution is simple, viable, and has even been suggested as an option by the powerline engineers.

Our proposal would require only an additional four miles of transmission line be built and would solve most of all the objections that the local people have against the project managers' preferred route. Neither the Modoc County Planning Commission or the Modoc County Supervisors object to the Power Transmission line going through Modoc County, but we both object vehemently to the placing of the line on prime farmland--whether it be in Modoc or Siskiyou County.

I am enclosing a brief summary of our proposal and a map to illustrate the solution. There is unlimited public and nonfarmed private ground east of the two existing 500 KV lines where the new line could be built. Laura R. Edlin, Public Affairs Director for the California-Oregon Transmission Project, said there is no problems concerning the other agencies involved in the other two lines and full cooperation would be expected.

We would appreciate any help you might give to this problem and if I personally can answer any questions, please do not hesitate to ask.

Sincerely,

John Cross
John Cross
Chairman, Modoc County
Planning Commission

S11

This is the original suggestion by Mr. Cross of his proposed alternative. See responses to L-298, L-330 G, L-330 H, and L-330 Q.

enc-2
Packers of Castle Rock brand potatoes

P.O. BOX 851 / TULELAKE CALIFORNIA 96134 / (916) 664-2881

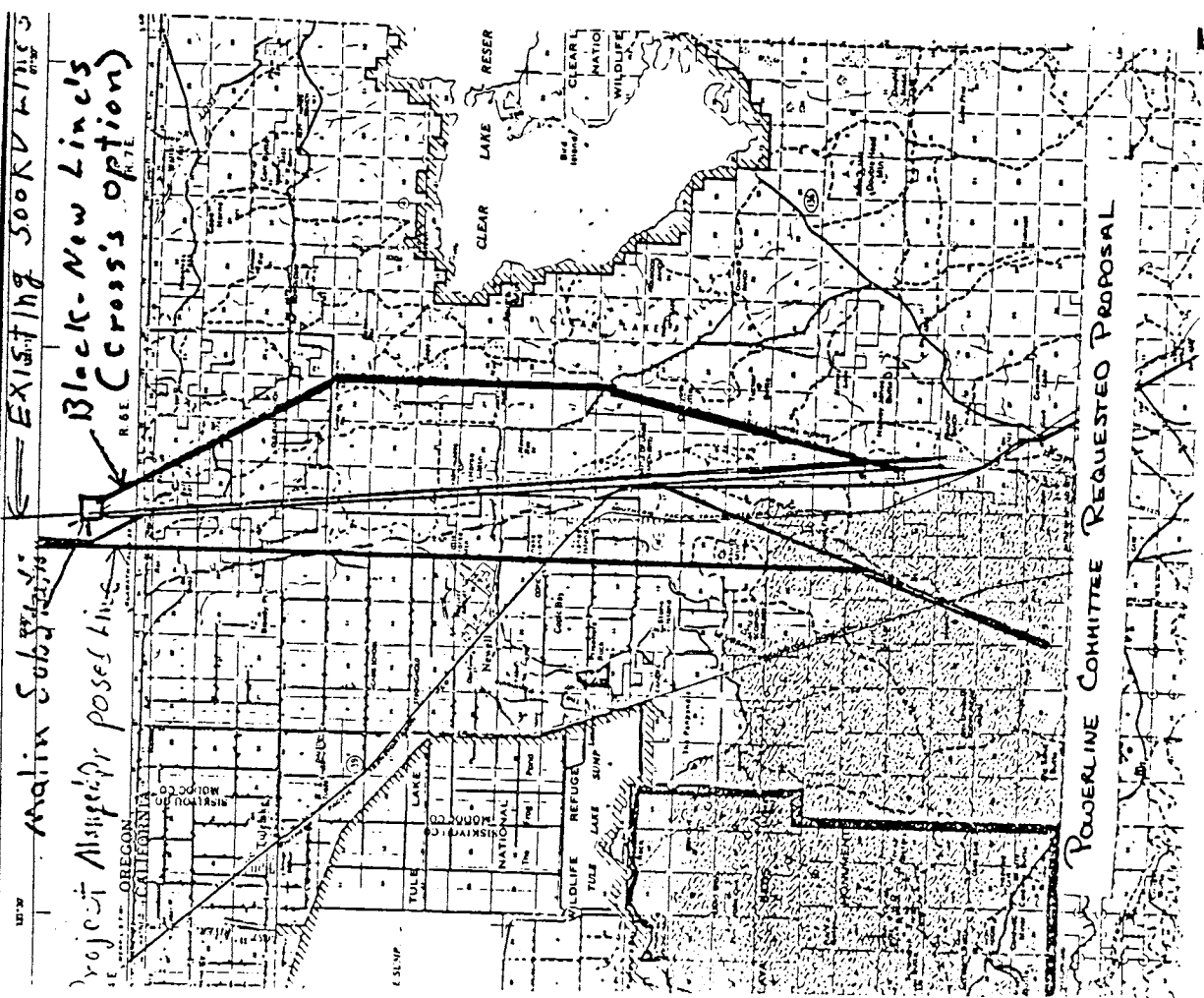
L-330 (continued)

CROSS'S PROPOSED VIABLE OPTION

WE PROPOSE A NEW LINE APPROXIMATELY 13 MILES LONG TO BE BUILT EAST OF THE EXISTING TWO 500 KV LINES. THIS NEW LINE WILL CARRY THE POWER CURRENTLY FLOWING IN THE EXISTING EAST LINE TO A POINT 1 MILE NORTH OF SADDLE BLANKET FLAT WHERE THE NEW LINE WILL CONNECT BACK INTO THE EXISTING EAST LINE.

THE POWER CURRENTLY FLOWING IN THE EXISTING WEST LINE WILL BE SWITCHED TO THE EXISTING EAST LINE AT THE MALIN SUB-STATION AND WILL FLOW TO A POINT APPROXIMATELY 2 MILES NORTH OF SADDLE BLANKET FLAT WHERE IT WILL BE CONNECTED BACK INTO THE EXISTING WEST LINE.

A NEW LINE FROM THE MERIDIAN LINE WILL BE BUILT WEST OF THE MALIN SUB-STATION AND WILL CONNECT INTO THE EXISTING WEST LINE APPROXIMATELY 1 MILE SOUTH OF THE MALIN SUB-STATION. THE NEW POWER WILL FLOW THROUGH THE EXISTING WEST LINE TO A POINT APPROXIMATELY 3 MILES NORTH OF SADDLE BLANKET FLAT WHERE A NEW LINE WILL START HEADING SOUTHWEST TRAVELING TO THE EAST OF CASUSE MOUNTAIN AND NORTH OF ACKLEY'S DRY LAKE RANCH.



EXISTING 500KV LINES

Black-New Lines
(Cross's option)

Project Alignment poses line
Madin Substation

POWERLINE COMMITTEE REQUESTED PROPOSAL

L-330 (continued)

WRITTEN COMMENT FORM
FOR THE DRAFT EIS/EIR
FOR THE
CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be mailed by February 3, 1987. Thank you.

Glenn D. Bergman
Robert J. ...
Robert J. ...
Robert J. ...
Robert J. ...
Robert J. ...
Robert J. ...
Robert J. ...
Robert J. ...
Robert J. ...

T11

Memberships is 100% in favor of the
John Cross. providing proposal to keep the
500 KV Powerline off of Farmland in
Madoc County Calif and within Oregon.
Robert J. ...
Robert J. ...

T11

Comment noted. See responses to L-330 G and L-330 H.

Hearing Date: *Jan 15 - 1987*
Location: *Yreka*
Name/Address: *American Legion Auxiliary*
Lakeview Chapter 164 - Dept 101
At 1 - Box 212
Mail to: *Lakeview, CA 96134*

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866
(916) 924-3995

L-330 (continued)

TELEPHONE (916) 667-2668

TULELAKE, CALIFORNIA 95134

Route 1 - Box 272

--Paul A. Tschirky

March 5, 1986

Lawrence T. Keim, Project Director
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Sir:

W11 This is a second letter to you, concerning the 500 KV power line. One of your proposed lines would possibly go through our Bloody Point Ranch. We will furnish you a map of said property showing the present power lines that furnish power to irrigation pumps, domestic wells and part time living quarters.

The property consists of 112.27 of approximately 20 acres lying west of the Old Alturas Highway, and the balance on the east side of this highway. We presently irrigate with wheel lines and pack lines. But on account of the big cost of labor, we will have to install a circle system on the east side and move the wheel lines that are presently on the east side to the 20 acres on the west side of the Old Alturas Highway.

There is presently a power line crossing on the north, one on the south and a partial one on the east, plus a line along the Old Alturas Highway. Also another line crosses the 20 acres of land on the west side about 2/3 of the way from the south crossing east to west. Needless to say it is rather difficult to spray by air on this land now, and would make it practically impossible to spray by air if a 500 KV power line would be placed on any location of this land. There is also the PG&E gas line that goes through the land west of the Old Alturas Highway.

X11 At different times of the year there are eagles on our ranch land often on or near by cliffs running on the south east of our ranch just outside our property line. Also there are Raptor in the area. We have considerable protection by a strip of Junipers we preserve for deer, quail, doves and other various wildlife.

Y11 The network of ordinary power lines plus a 500 KV line would make it impossible for geese and ducks to travel or live on any of this land.

Z11 We have used Lady Bugs for about 17 years on our alfalfa and only spray when absolutely necessary. I doubt whether Lady Bugs would work and or stay anywhere near a 500 KV line.

A12 It is inconceivable for the Calif.-Ore. project people to even consider the placing of the 500 KV power line on approximately 12 or 13 miles of prime farm land disregarding human and animal rights and farmers in general. The extreme difficulties with different irrigation systems such as circles, wheel lines,

B12 pack lines and solid sets. Plus the health hazards in working underneath or near 500 KV line makes it absolutely impossible to farm.

W11 Comments noted. See responses to L-330 G, L-330 H, L-330 Q, and L-330 F4.

X11 Although bald and golden eagles and many other raptors are likely to use the area proposed for the route, the transmission line will avoid significant impacts. See responses to L-157 I, L-310 EE, T-55 H, and T-56 B.

Y11 See response to L-157 I. By avoiding most cropland, the line avoids most waterfowl feeding areas.

Z11 No studies of animals or insects have indicated that ladybugs would be adversely affected by the COTP. A full-scale, long term ecological study by BPA at the Lyons, Oregon research facility found no indication of a negative impact or hazard. Also, the decades of operating experience for transmission lines of this type does not reveal any problem for ladybugs. See response to L-330 FF.

L-330 (continued)

- A12** Please refer to L-330 G for a discussion of possible route adjustments in the Tulnelake/Copic Bay region. It is correct that the presence of transmission lines and towers can make irrigation practices, such as the use of center pivot and wheel line sprinklers, more difficult. Section 3.6.22 in Volume 2A of the Draft EIS/EIR discusses these potential impacts. See also the letter from Bonneville Power Administration to the COTP (L-371) which discusses possible irrigation systems that may work around towers. The cost of such systems could be negotiated as part of the easement acquisition process. See responses to T-6 D and T-175 B.
- B12** See responses to T-175 F and L-330 F3.

L-330 (continued)

C12 [It is absolutely essential that the placement of a 500 KV tower in a field must make it mandatory that the Project buy the total parcel of land at a fair market price not at a depressed price.

D12 [In addition there are burial grounds here where our forefathers, the pioneers that opened up the west are buried. Also buried here are those who were killed by the Indians in the 1860's during the historically known Blood Point Massacre.

The upsetting of the living with the 500 KV line is bad enough but the public who have respect and regard for the dead would hardly stand for so disturbing such a sacred place.

E12 [It seems that the California-Oregon Transmission Project has no consideration whether they trample on the living or the dead by placing a line on flat agricultural land rather than out in the open spaces on what is mostly waste land. Monetary reasons are more important to them than people.

F12 [We never received an answer to our letter dated Dec. 19, 1985, so hope you will answer this letter or at least acknowledge the receipt thereof.

Sincerely,

Paul A. Tschirky
Paul A. Tschirky

C12 See responses to T-184 A, L-325 N, and L-330 U14.

D12 See response to L-330 F4.

E12 Comment noted. See responses to L-298 B and L-330 G.

F12 We have searched our files and find no record of a letter from you dated December 19, 1985. We apologize for any inconvenience.

L-330 (continued)

March 17, 1986

Cal-Oregon Transmission Project
Southern Oregon and Northern California

RE: Proposed Power Corridor

- G12** [We the undersigned wish to express our unalterable opposition to the location of a 500,000 volt power line in certain parts of the proposed power corridor extending south from Malin, Oregon into Northern California, through the Bloody point (an archaeological area) and on into the Coppic Bay area, then to the Lava Beeds near the Lava Beds National Monument.
- H12** [We further believe that a public utility that deals with the public should as much as possible restrict its proposed routes to public domain where it can easily gain access rather than abusing the privileges of eminent domain to force rightaways through areas known and set aside early in this century as agricultural areas, and now adequately served by power lines. It would cause irreparable damage to the agricultural industry and the people living there.
- I12** [We further believe, based on the attached point by point impact statement, that the only possible acceptable route, would be one with required distance separate east of the present power line corridor which would be less subject to storm damage and would have the minimal impact on wildlife.
- J12** [In conclusion, this power line may not be needed. No one seems to have answers as to whether this power will be needed or can be transported economically to the proposed use area. There seems to be a tremendous urge to build something whether needed or not. We all have read stories of the unneeded transmission lines and atomic power plants mistakes that the power company would like to have the public pay for.
- G12** Comment noted. See responses to L-330 G, L-330 H, L-330 F4, and L-3.
- H12** We concur with your comment in that we believe that public multiple use lands are appropriate to consider for routing a transmission line. Our routing guidelines emphasize the use of these public multiple use lands where impacts are the same for both private and public lands. See responses to L-330 G and L-330 B2.
- I12** Comment noted. See responses to L-330 H, L-330 R3, and L-330 B4.
- J12** Please refer to the economics and Purpose and Need discussions in the Draft EIS/EIR and Final EIS/EIR for the requested information.

Respectively submitted,

Josephine Lucille Roth Arthur

Josephine Lucille Roth Arthur
1145 Tamera Drive
Klamath Falls, Or 97603

Glen Arthur

Glen Arthur
1145 Tamera Drive
Klamath Falls, Or 97603

L-330 (continued)

CAL-OREGON TRANSMISSION PROJECT NORTHERN CALIFORNIA AREA IMPACT STATEMENT

I. ENGINEERING OF PROJECT

No Comment. Other parts of impact statement will influence the overall engineering.

II. GEOLOGY AS IT AFFECTS PROPOSED LINE

K12

Geology favors the Eastern most part of the corridor. From the mid-point of the corridor to the Western edge, the soil is very unstable, having a 4' to 6' pad on top of a mixture of water, muck and diatomaceous earth, with even the top most part being subject to flooding in extremely wet years. The line would exit the lake into the most inhospitable parts of the lava beds very near a National Monument.

K12

Comment noted. See response to L-3.

III. CIVIL ENGINEERING

Effects will be covered in other parts of this impact statement.

IV. STRUCTURAL ENGINEERING

L12

This is pretty well dictated by requirement as to voltages, currents, etc. One factor to consider would be that during intense storms, wind velocities reach 100 miles per hour in the open areas of Coppic Bay. The Eastern portion of the proposed power corridor would be subject to lesser velocity because of the upward diversion of the wind caused by deflecting cliffs and increasing elevation.

L12

See responses to L-330 R3 and L-53 B.

V. FLOOD HAZARDS

M12

The overall plans for flood control by USBR requires flooding of the Western half of the proposed corridor in an emergency. All of the farm ground is subject to flood irrigation which would make the towers unstable, especially during high winds that affect the more open Western part of the corridor. Also maintenance at such times would be difficult, if not impossible.

M12

See responses to L-117 B and L-330 R3.

VI. WATER QUALITY

N12

No comprehensive impact study has ever been completed.

N12

For the purposes of this study, water quality impacts included primarily sedimentation as a result of increased soil erosion from tower pads and access roads and stream contamination from the use and disposal of pesticides and other non-biodegradable substances. The potential for water quality impacts was analyzed by identifying the location of highly erodible soil conditions in relation to the location of seeps, springs, and streams. In order to quantify the impacts of the COTP on water supply, the number of potential stream crossings, the location of aquifer recharge areas in relation to transmission line corridors, and the locations of existing and planned wells in relation to transmission line corridors were identified.

L-330 (continued)

- O12** [VII. SOIL EROSION
- There would be more than normal soil erosion due to the construction of the line and the roads needed to maintain the line.
- P12** [VIII. BOTANICAL IMPACT
- New pest type of weeds would be introduced during construction and maintenance. Control of new and old obnoxious specimens would be difficult because of restrictions on chemical and cultural practices.
- Q12** [IX. WILDLIFE AND FISH IMPACT
- The affect on waterfowl would be dramatic because of feeding patterns. Waterfowl leave the lake each morning and evening and feed in an anti-clockwise pattern around the lake bottom. They feed in large numbers in the West half of the proposed power corridor and when disturbed, they raise in large numbers straight up into anything that is there, such as a powerline which they can see through resulting in unacceptable levels of casualties.
- R12** [X. VISUAL RESOURCES
- It goes without saying that all the homes that are located centrally in the power corridor, which represent about 85% of the homes, would have the views that they anticipated when they bought and built destroyed.
- S12** [XI. LAND USE
- Without question, agricultural practices would be affected and cost to produce would rise. (At a time when the U S government and everyone else is telling us we need to get cost down). Irrigation practice such as sprinkler would be more difficult and costly to operate. Chemical practices would be more difficult and in some cases impossible. Also planting and harvest operations would be adversely affected. A 200' right of way across a 80 acre ranch is unthinkable and impossible to put it mildly. In some cases it would split the property into two economic units, further reducing operating efficiency.
- T12** [XII. RECREATIONAL
- We are not talking about recreational land. The west half on this proposed corridor is agricultural production land. Any power line would interfere with production.

O12 See response to L-330 M6.

P12 See response to L-330 Q1.

Q12 See responses to L-157 I, L-310 EE, T-55 H, and T-56 B.

R12 See response to L-330 F1.

S12 See response to L-330 O11 regarding agricultural cost increases, and to L-330 G for a discussion of possible route adjustments in the Tulelake/Copie Bay region. It is correct that the presence of transmission lines and towers can make irrigation, cultivation, and chemical practices more difficult. Section 3.6.2.2 in Volume 2A of the Draft EIS/EIR discusses these potential impacts. Landowners will have the opportunity to negotiate for compensation for increased cost of working around the towers. See also response to T-175.

T12 See response to L-330 G.

L-330 (continued)

XIII. AIRPORTS & AIRSTRIPS

- U12 [No new ones would be built near the corridor and it would be a hazard of considerable magnitude to agricultural flying.

XIV. COMMUNICATION FACILITIES

- V12 [Even though the company offers to aid in overcoming the problems, we are all aware that at times TV, Telephone and radio communications are all but wiped out.

XV. SHOCK HAZARDS

- W12 [At times pipe can only be moved if continuously grounded and if someone accidentally upends a pipe it could very well be the end of the line for the unfortunate individual.

XVI. FIRE HAZARD

- X12 [There is always a possibility of a line break or increased lightning strikes during the dry harvest period. Maintenance during this time would pose a hazard.

XVII. AIR QUALITY

- Y12 [No doubt air quality is affected, especially in close proximity. We or anyone else are not prepared to say with authority how much.

XVIII. NOISE

- Z12 [At times, in close proximity, it is a real hazard causing reduced efficiency in workers creating hazards in machinery operation.

XIX. WASTE MANAGEMENT

- A13 [One of the accepted practices is to burn off waste, creating large quantities of smoke and intense heat, which would have a very adverse effect on the power line itself. If they exercised their power and banned such practices, then waste management would become difficult and costly or impossible.

- U12 The presence of a transmission line would preclude the siting of new airstrips if the new airstrips were sited within the FAA's maximum distance criteria on adjacent property. See also responses to L-14 A and L-330 MM. Also see Section 3.6.2.2 in Volume 2A of the Draft EIS/EIR for a discussion of aerial hazards.

- V12 See responses to L-330 U1 and L-330 H3.

- W12 See responses to L-330 G3, L-330 M16, L-330 O15, and T-175.

- X12 Comment noted. See also response to L-330 B5.

- Y12 Comment noted. Tables 3.1-3, 3.1-4, and 3.1-5 in Volume 1 of the Draft EIS/EIR summarize ambient air monitoring data by county for the northern, central, and southern study areas.

- Z12 Farms have been operated near powerlines for many years. Hazards in machinery operation may be more of a concern for the lower voltage distribution lines. The COTP will be designed in accordance with the National Electrical Safety Code. See response to L-330 B5.

- A13 See response to T-15 H.

L-330 (continued)

XX. HEALTH

B13

I doubt that the power company or anyone else has done a complete indepth study on the affect on air quality and health factors. Years ago, they told us that radiation from atomic testing and power generation was no problem and that using chemicals indiscriminately was okay. It would change to harmless substances and that industrial waste was no problem. We could just bury it and it would disappear. Now years later we are discovering those statements are only unsubstantiated guesses and in fact were totally erroneous after all only the victims will pay the price, are we expendable?

B13

A discussion of health effects is contained in the Draft EIS/EIR, Volume 2A, Section 3.10 and in Section 1.2.3 of Volume 1 of this Final EIS/EIR. See also responses to L-330 F3 and SL-51 A.

L-330 (continued)

THE CALIFORNIA-OREGON POWER TRANSMISSION AGENCY

The Eastern most power corridor engulfs a large area of our operation. The Western route in this corridor has the potential to seriously disrupt or permanently change the manner in which we make our living.

At the present time, the two 500 KV lines, the Canadian Gas pipeline, the 230 KV line to Alturas plus several smaller transmission lines cross our property.

We will attempt to illustrate the impact to our operation which would result from construction along the Western route in the Eastern Corridor.

- C13** [We own the property on the west side of road 114 (The Old Alturas Highway) south of road 104. We have in excess of 1 mile of aluminum irrigation mainline which parallels the proposed route. (Incidentally this pipe costs over five dollars per foot). The electrical field created by this type of line has been blamed recently for electrolysis of our mainlines. This phenomenon reduces irrigation pipe to scrap value by corroding it to the point it will not hold water pressure.
- D13** [This mainline feeds our wheel lines which would mean we would have to dismantle part of the line each time that a tower is encountered and reassemble the line after it has passed the tower, at significant cost and inconvenience.
- E13** [We have plans at this time to install a pivot irrigation system in the field. (Please see enclosure). A power line could make this installation economically impossible, because the largest amount of acreage is realized at the outside of the arc. If the length has to be lessened to accommodate towers, the cost per acre is increased as the numbers of acres is reduced.
- F13** [In our cattle business we feed cattle in this field everyday from November through April. To prevent disease and parasitic infection we must change feeding locations daily, thereby utilizing virtually all of the non-irrigated land. If the line were constructed we would be forced to feed under the line, thereby subjecting our livestock to the energy field which emanates from the line. The normal pattern is for cattle to spend most of the day in the area where they were fed, cleaning up the feed. One of the comments by your specialist at the Newell meeting of November 25, 1985 was that he would not recommend parking under the line for an extended ("several hours") period of time.
- G13** [At the south end of this property we have working corrals which we use many times yearly. Commonly cattle are held in these pens for many hours at a time. In addition, we ourselves, and our employees, work in these corrals and park our vehicles adjacent to them for full days at a time.
- H13** [We also raise certified seed potatoes on land along this proposed right of way. The main resource needed for this enterprise is clean,

- C13** See response to T-4 H.
- D13** See response to L-330 G and T-6 D. See also the letter from Bonneville Power Administration to the COTP (L-371) which discusses possible irrigation systems that will work around the towers. The cost of any required improvements or damages should be addressed during negotiation of the easement acquisition.
- E13** See response to L-325 N, T-6 D, and T-162 B.
- F13** Studies on cattle and other livestock have been conducted in Oregon (BPA), Ohio (Power Siting Commission), Indiana (Purdue University) and in other locations. None have shown harmful effects to any livestock (including grazing) due to powerlines - some larger than the COTP (i.e. 765 kV - 1200 kV). In addition, there have been a number of big game studies near 500 kV lines and no adverse effects on grazing or other activities was found.
- G13** Work near powerlines is a common activity. Electric power transmission lines have operated for many decades in the United States and the COTP will be designed to comply with the National Electrical Safety Code. See response to L-330 F3.
- H13** Your comment is addressed in Section 1.1.5 in Volume 1 of this Final EIS/EIR.

L-330 (continued)

- H13** uncontaminated ground. If this route was chosen we would have to insist that all equipment be sterilized each time it were about to enter the property. We sterilize our own equipment between our own fields to ensure that we do not spread infected soil from one field to the next. We can not allow equipment, including pickups, over which we have no control or knowledge of its' travels to enter our land without being thoroughly washed and then sterilized with an acceptable disinfectant. The California Department of Food and Agriculture, Nursery Seed Certification Division can be contacted to verify our operation, and the need for strict measures concerning the spread of detrimental soil borne agents.
- I13** The proposed route is also in close proximity to the Canadian Natural Gas pipeline which parallels the road within 100 feet through this area.
- J13** Moving further south, this route crosses our Little Horse Mountain property. We have contingent plans for homesites at the north end of this parcel, which would be eliminated should construction occur. The potential value of this highest and best use of our property would be lost, and replaced with impaired rangeland value.
- K13** Further south the route again dissects our prime irrigated farm ground. This property is sandwiched between the existing 500KV lines and the Municipal airport. These restrictions could force the route to sever as many as eight existing wheel lines. In addition, we currently have two pivot irrigation systems planned in this location. As well, we depend on the non-farmed portions of this property for cattle feed grounds.
- L13** All of our fields require the aerial application of agricultural chemicals on a timely basis. These large tower lines create a dangerous obstacle to aircraft and pilots, and seriously impair the precision aeronautics required to get the materials applied uniformly. There are already some fields in our area where agricultural applicators will not fly due to these dangers.
- M13** The added expenses of farming around, moving irrigation lines around, and harvesting around these lines only increase costs of production, while simultaneously lowering the value of the land to ourselves and potential buyers. In addition, right of ways are a documented source of the spread of noxious weeds and pests. Agriculture is experiencing a very stressful period and added expense and inconvenience is a problem that we do not need or want.
- N13** The occurrence of trespassing is also of serious concern. As mentioned above, we already have ample exposure to these lines and roads traversing our property, and know from experience that problems result. These routes invite 4-wheeling exploration. No matter how many locks we install, we consistently suffer a greater degree of trespass and vandalism along these rights of way. The problem would be doubly serious in the areas of seed production.
- O13** In summary the open public rangelands to the East, or other alternate routes which avoid irrigated farmlands and rural residential areas would be more acceptable. You must weigh heavily the negative impact this
- I13** The COTP will maintain clearances from the Canadian Natural Gas pipeline as is required by General Order No. 95.
- J13** See response to L-184 A.
- K13** See response to T-6 D.
- L13** See responses to T-4 G, L-14A, L-330 MM, and T-175.
- M13** We agree that cultivation, harvest, weed control, and irrigation practices can be more inconvenient and costly due to the presence of transmission lines and towers. These potential impacts are discussed in Section 3.6.2.2 of the Draft EIS/EIR. See also response to L-330 G regarding a study centerline and L-330 E15 regarding irrigation impacts. With respect to property value, the value of the encumbrance resulting from the transmission line easement will be established by appraisal and negotiations. Property owners will be compensated for the value of their losses. This process is intended by law to keep property owner financially "whole" (see the Draft EIS/EIR Volume 2A, Section 3.8.2.4). See also response to L-184 A.
- N13** COTP staff will work with the landowner to reduce the risk of trespassing by 4-wheel exploration. The security of the COTP's right-of-way is also a concern of the COTP Participants.
- O13** Comment noted.

L-330 (continued)

O13

project may have on land that is supporting people, when other viable alternatives are available.

Sincerely;

Byrne Bros. and Robert A. Byrne Co.

L-330 (continued)

Joe and Mary Victorine
Rt. 1 Box 221
Tulelake, Calif. 96134
January 15, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 66070
Sacramento, Calif. 95866

We have farmed in the Modoc County portion of the Tulelake Basin for nearly 40 years, developing and improving our farms as we raised our family. Although we would not come under the powerlines being proposed by the California-Oregon Transmission Project, we are most cognizant of the problems, inconvenience and dangers the line will cause those who have to farm under or near it. We can see the lines already crossing the rim of the Basin from our place, a daily reminder of the small value placed on the individual's rights when business is concerned.

Q13

Q13 See response to L-330 F1 and L-330 F3.

R13

R13 Comment noted. See response to L-295 D and L-330 B2.

We see claimed in the EIR/BIS how many people in the southern part of California will benefit from the power to be transported over these lines: how badly they need the power from the North. If this is so, it still should not mean that the individual farmer's home, livelihood and future should be sacrificed for the good of the many when there is sufficient public land available to route the powerline around the Basin and clear of the private irrigated farmland.

S13

S13 Comment noted. See responses to L-14 A, L-204 E, and T-175 E.

One of our neighbors in particular, has a fine field of recently opened ground (ideal for potatoes and certified seed crops) that was crossed by the first powerline put through this area. This has made his farming operation more costly than farm income can out balance, caused dangers and inconvenience to himself and his workers, and in general greatly reduced the value of his farm. Now COTP proposes to come across his farmland on the other (west) side, effectively enclosing his farm between the present line and the proposed one and for all practical purposes ruining the productivity of the land. To be certified seed potatoes and grains have to be free from weeds, pests and disease requiring a strict regime of controls applied by airplane. No spray plane operator would risk spraying between the lines and therefore the usual farming practices would be impossible greatly reducing the quality and quantity of the any crop planted.

T13

T13 See responses to L-14 A and T-175 H.

U13

We urge that COTP adhere to their own routing guidelines and avoid the crossing of farmland and use the John Cross Alternative in order to do this. The few miles of line it would take to skirt the Basin instead of crossing it would certainly not make that much difference when the people, homes, farms and economic future of the area are taken into consideration.

U13 Comments noted. The COTP did adhere to its routing guidelines. Agricultural land crossings were minimized. See responses to L-298 B, L-330 G, L-330 H, and L-330 I.

Sincerely,

Joe Victorine
Mary Victorine
Joe and Mary Victorine
phone: 667-2984

L-330 (continued)

Tullake, Calif.
January 9, 1987

Environmental Coordinator
California Oregon Transmission Project
P. O. Box 660970
Sacramento, Calif. 95866

Gentlemen:

By way of introduction I have farmed in this area for a number of years, and am also a former banker. I wish to address factors relating to the proposed construction of a 500 KV transmission line that so far as I can determine do not appear in the environmental impact report, which have an important bearing on the situation, and which should definitely be considered in the conclusions arrived at in the report.

V13

It is an indisputable fact that any farmland over which a power line is built is reduced in value as a result of the headaches, added expense, danger, and perpetual problems resulting from farming around this obstruction. Desirability and resale value of such property is reduced to the point where loan values could very well be reduced as much as 50% or more. In a short-season, crop restricted area such as we have here it is well within the realm of possibility that it might be difficult to sell property so obstructed at any suitable price.

W13

Reduced sale value of the land also reduces the taxable value. It has been pointed out in other presentations that only a small portion of Modoc County is privately owned. A reduction in the tax base of the county means less revenue. Modoc County is already in financial difficulties. Construction of the proposed power line over the so called 'preferred route' would

V13

Comments noted. Any farmland crossed by the transmission line and reduced in value will be compensated for through the easement acquisition process. See responses to L-14 A, L-184 A, L-204 E, and L-330 F3.

W13

See response to T-10 D. As stated therein, it is not likely that property taxes received by Modoc County would be reduced. In addition, the transmission line will generate additional property taxes which should result in a net benefit to the local economy as a result of the transmission line.

L-330 (continued)

W13 further exacerbate the problems of the county. This would not be a short term difficulty, but would continue into perpetuity.

X13 There are other economic impacts that must be considered. The proponents of this power line do not demonstrate any need for this extra power at California points. It is in the nature of things that the population of the west coast will increase in future years, both by natural increase and immigration. Increased population creates pressure for further development. In today's world this development will be in technological areas requiring energy. The normal and natural area for such development to take place is at or near the source of such energy; this means in the state of Oregon.

It is patently clear that if the proposed line is built the power generated in the state of Oregon will be syphoned off to central or southern California. This precludes such future development in Oregon. The construction of this line will be a permanent detriment to the state of Oregon. It will also be a detriment to this part of California. This locality is a semi-arid area. We have had dry years in the past, and will have them in the future. Dry seasons here mean greater dependence on power for irrigation coupled with a potentially reduced supply of energy. It is already known that we will not have access to any of the power transmitted over the proposed line, that available Bonneville power will be earmarked for California for a long period of time, and that in times of shortage this locality will be forced to import expensive coal generated power.

Y13 If this proposed transmission line is built in this area the only sensible route to follow is the Cross Alternative. However, if all aspects that impact in any way on this local area, the state of Oregon, or central and southern California are given fair consideration the conclusion must be that the basic purpose

Z13

X13 See responses to L-216 B, L-329 A, and L-219 A. Two federal statutes, Public Law 88-552 and Public Law 96-501 provide geographic preference to the Pacific Northwest for many categories of power. This preference is explained in Section 1.4.1.2 of the BPA IDU Draft EIS. For more detail, see Section 42, "Priority of Pacific Northwest Customers," of the General Contract Provisions which are a part of BPA contracts for sale of power.

Y13 Comment noted. See responses to L-298 B, L-330 G, L-330 H, and L-330 I.

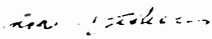
Z13 The benefits and the costs of the COTP have been evaluated extensively. Benefits from the COTP are expected to be shared widely with the electric ratepayers in California and the Pacific Northwest. See also response to L-3 T.

L-330 (continued)

Z13

for building the line is to insure that when predictable development arrives it will be at the location desired and to the profit of the proponents of this project. This will be at the expense and to the great detriment of those unfortunate farmers whose land and livelihood is damaged, to the Klamath Basin, and to the state of Oregon. The line should not be built!

Sincerely yours


Fred Fisher

Fred Fisher
Rt. 1, Box 262
Tulelake, Calif. 96134

L-330 (continued)

THE CALIFORNIA-OREGON
TRANSMISSION PROJECT
PO BOX 668970
SACRAMENTO, CALIF. 95866
To Whom It May Concern:

August 8, 1996

A14 I am writing this letter to express my concerns with a proposed route of the California-Oregon Transmission Project. I am totally against the route traveling through land my family and I own and farm.

My family lives on County Road 124 overlooking Coppock Bay near Howell, California. With my brother, Matt, we farm our father's land and two other homesteads which all lie in the proposed corridor through Coppock Bay.

B14 My foremost concern with this project is the adverse effect it would have on our farming operation.

To irrigate all the affected fields with wheelirrigators. All of these wheelirrigators run parallel with the proposed line, since that is how our systems have been set up. In order to irrigate on both sides of the line, we would be forced to purchase additional wheelirrigators (which definitely are not cheap to come by) or dismantle the wheelirrigators, move them past the towers, and hook them together again in order to finish irrigating the fields (additional labor cost should be very obvious to you). We could not afford either at this time. If farming were to ever do well, there are hopes of installing a cost-effective center pivot irrigation system to help cut down on the labor already needed for our operation. Your towers would force us to drop any thoughts of this ever happening.

C14 The once-farmable land under any towers would be a source of weed and harmful insect infestation. Control of these problems would have to be dealt with in a more expensive way than what we are currently using. Hand-held rigs would have to come in since aerial applications in and around the towers would be unheard of.

D14 Normal farming practices, such as these aerial applications of chemicals, field burning, flood irrigation, etc, would be made more hazardous, if not eliminated altogether.

E14 Another problem with the route through our land and one you need to be concerned with, is the lack of solid footing necessary to support the large towers of this project. Our soil is composed of old lakebed that is saturated. The normal water table in our fields ranges from 3 to 6 feet from the surface. This is already a problem for existing telephone and power poles in our area. This is made more critical by the fact that the proposed route would cross the

A14 Comments noted.

B14 See responses to T-6 D, T-27 B, and T-9 A. See also the letter from Bonneville Power Administration to the COTP (L-371) which discusses possible irrigation systems that will work around towers. Also, each landowner will have the opportunity to negotiate compensation for increased costs during the easement acquisition process.

C14 See responses to L-14 A, L-20 B, T-175 H, and L-330 S.

D14 We agree that the presence of transmission lines and towers can make normal farming practices more difficult, and in some cases more hazardous. Section 3.6.2.2 in Volume 2A of the Draft EIS/EIR discusses these potential impacts. However, the presence of transmission lines does not preclude the use of aerial spraying. Landowners will have an opportunity to negotiate compensation for such additional costs during the easement acquisition process. See responses to T-175 H and L-14 A.

E14 See response to L-117 B.

L-330 (continued)

- F14** Of environmental concern, our area is a natural feeding ground for both migratory waterfowl and resident hawks, owls, and eagles. A power line here would affect both flight patterns and feeding habits, as well as pose a physical hazard to these large birds. Most summer evenings, a herd of 30 antelope can be seen eating in a neighbor's pasture. They then cross the road to get into our more appealing alfalfa field. It is highly questionable if this would be seen anymore once your towers were brought in.
- G14**
- H14** On a more personal level, my wife and I put our home on a slight hill on my father's property and turned it so that the view of Mt. Shasta could be seen by us and our three children while sitting in our living room. Any visitor to our home always comments on what a beautiful view we have of the mountain and the surrounding farmland. We have even refused to plant any trees on that side of the lawn because we were afraid it might block the view. We did not move here to have a beautiful view of your towers running through our land in front of Mt. Shasta. It would be a constant reminder of infiltration on your part across our personal property.
- I14** My father has a very bad heart condition. Can you guarantee that your powerline would not affect him if and when a pacemaker would have to be installed? Can you guarantee us that there are no hazards to any of our health due to your lines? I'm sure, not.
- J14** Probably most important to our farming operation, would be the loss of value of our father's property if the power line were to be built across it. Current farming conditions force us to use the value of the land as security on loans for our operating capital. Any reduction of this value, especially in trying times like these, would be devastating to us and our families. Farmers are already hurt enough with the current low prices of our products and the high cost of raising them. With lower land values, thus lower security for our loans, we would be forced to give up the farming that we love. We cannot afford lower property values and higher costs of irrigation and spraying applications. Today there is so much talk of "saving the whales" and "saving our wildlife," and it is all valid. What about talk of saving our farmers. Your proposed route on prime farmland will probably be just what it would take to put many of the local farmers here in bankruptcy and out of the farming business altogether.
- K14** All of the above concerns would have a negative effect on my family and myself, without any benefits being realized by us from your proposed lines. I hope that the people responsible for selecting the final route will consider these problems and also consider the available alternatives to this route. Most of these problems would be avoided by putting the line further to the east. The public land east of the Tule Lake area would offer the fewest problems for the people who live
- L14**

F14 See responses to L-157 I, L-330 X11, and L-330 Y11.

G14 Big game and other wildlife species readily adjust to the presence of towers and lines in their habitat. No change in behavior or use is expected.

H14 See response to L-330 F1.

I14 Most pacemakers are not affected by the electric field strengths that would be created by the proposed line. Only in a rare situation is it theoretically possible that a few pacemakers could revert to a fixed-mode of pacing. This fixed-mode is a built-in feature of pacers to provide protection against all forms of interference. There has never been a pacemaker problem that was related to transmission lines and pacemaker manufacturers have told us that the real threat is everyday appliances and devices (e.g. auto ignitions, drills, store anti-theft devices). See also L-309 E2.

With respect to health hazards - scientists have not determined that exposure to powerline fields is harmful to humans. There is a substantial amount of experience with electric transmission lines and no obvious health hazards have been identified. Results of major scientific literature reviews by the World Health Organization, State of Florida Department of Energy Regulation, and American Institute of Biological Sciences, do not indicate an obvious health hazard. See response to L-330 F3.

We understand that there is concern about powerlines and we will take this into consideration. However, we must point out that people are routinely exposed to electric and magnetic fields from appliances, tools, wiring, and distribution lines that serve the house.

J14 As stated in the Draft EIS/EIR, Volume 2A, Section 3.8.2.4, the value of the encumbrance resulting from the transmission line easement will be established by appraisal and negotiation. Property owners will be compensated for the loss of value resulting from the transmission line, plus the additional cost of farming around the towers. See response to L-184 A.

K14 See responses to L-216 B, L-219 A, L-329 A, and L-184 A.

L-330 (continued)

L14

here. To me, there is no justification possible for locating this project on prime farmland. It would seem more appropriate to locate a public project on public, not private, land.

Thank you,

Otto C. Huffman

Otto C. Huffman
Rt. 2, Box 104
Tulelake, CA 96134

L14

Comment noted. See responses to L-298, L-330 G, and L-330 S.

L-330 (continued)

9 February 1987

U.S. Senator Alan Cranston
112 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Cranston,

Thank you for your letter regarding the California-Oregon Transmission Line. Yes, I have some very definite opinions regarding the project. I do not believe that the line ought to be built along the "preferred route." That route is described as preferred, but it is not so characterized by the residents.

I attended a hearing in Tulelake and visited the fields through which the line would travel. Regarding the hearing, there was a feeling in the room that the WAPA people were listening but not hearing. They talked instead in terms designed to confuse and detour, never acknowledging the very real concerns of those in the room.

Standing in those fields was an experience I will never forget. Not only does the present line take up a lot of space, but people have to work around those towers or leave the land out of production. Many operations are marginal and cannot afford to ignore sizeable pieces of land. I could still feel my hair standing on end and a tingle in my arms a half hour after leaving the area.

It seems to me that a reasonable alternative was offered that evening, but to my knowledge no notes were taken and the proposal never even considered - their minds were made up and the "preferred route" shown that evening was in fact published.

It also seems to me that a nation that can put a man on the moon can find a way to run power lines under the ground. Barring that, the transmission line ought to go over public lands, away from those agricultural fields. No amount of cash offered can possibly compensate ranchers for the ultimate, permanent loss of use of the land. I did hear some comments that perhaps the local ranchers ought to import some spotted owls - they would probably get more attention than the people in the area.

Sincerely,


Arlie E. Caudle
P.O. Box 158
Hayfork, CA...96041

M14 Comment noted. See response to L-330 G.

N14 Comment noted. As a result of the concerns expressed by the Modoc County Powerline Committee and others at the meeting, the Copic Bay option, a routing alternative very similar to the John Cross alternative, was analyzed and included in the Draft EIS/EIR. See response to L-330 H. In addition, a new substation site and new routing option were analyzed to be responsive to the concerns for agricultural impacts in the Malin, Oregon area. These were analyzed in a Supplement to the Draft EIS/EIR, which was distributed for public review and comment between July 2 and August 17, 1987. Both the new switching station site, E-3, and the new routing option, North 1, were adopted as the Project preferred options.

O14 This statement is erroneous. See response to L-330 Q1, L-330 G, L-330 H, and L-298.

P14 Comment noted. Underground transmission system technology is continually being developed, however no system has proven to be commercially feasible at this time for 500 kV installations. See responses to L-307 I and L-309 V1.

Q14 See responses to T-162 C and L-184 A.

L-330 (continued)

Tulelake, CA
August 8, 1986

California/Oregon Transmission Line
Sacramento, CA

S14 [We have written previously on general objections to your plans on construction of the transmission line through the Malin-Tulelake corridor. At this time we will protest your preferred alternative route, Malin-Tulelake, the east side of the basin through agriculture lands.

We know what you have said about how little land you use for towers; but you have no idea of the economic impact the towers and the overhead lines have on the agriculture properties through and over which they pass.

T14 [1. No one would buy a parcel containing a pad or two at the same price the rest of the land would command without the transmission line.

U14 [2. No one would buy a parcel of land containing only the lines for any reason if the landowner were to separate it from the main body of his property that was outside of the transmission line right-of-way. Therefore that portion of land under the line is thrown away as soon as one might come to the decision to sell his property.

V14 [3. No one will buy a parcel of agricultural, grazing or rural residential property that is immediately adjacent to or traversed by a 500 KV line if there is any other property available--anywhere.

W14 [4. When the land that has been planned to be passed down through one's future generations, as long as there would be one who wanted to farm, has been raped, disfigured and devaluated, the loss can be devastating.

This is only an expression of personal loss, permanent personal loss of those whose lands the lines cross; it is the area we feel you least understand. There are so many more ~~cost~~ effective reasons why you might choose another route to your preferred choice of corridors than simple but permanent destruction of private property, but those are areas in which others are better equipped to deal, so we will leave that to them.

WILLIAM E. & NATALIE MACY
Rt. 2, Box 184
Tulelake, CA 96134

S14 Comments noted. See response to L-330 G.

T14 See response to L-184 A.

U14 The United State Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. Section 4601 et seq.) Section 25.102(k) states: "If the acquisition of only a portion of a property would leave the owner with an uneconomic remnant, the Agency shall offer to acquire the uneconomic remnants along with the portion of the property needed for the project. An uneconomic remnant is a remaining part of the property in which the owner is left with an interest that the Agency determines has little or no utility or value to the owner."

V14 See response to L-184 A.

W14 Comment noted.

L-330 (continued)

THE CALI*, ORE. TRANS PROJECT
P. O. box 660970
Sacramento Ca, 95866

X14 [Sirs;
Concerning your 500 Kilowatt Transmission line, we
the land owner, tax payer, farmer, are appalled at the way
a power line co. or any other type interest, can in
America just decide to go across our land and build
a big ugly noisy dangerous power line, without our permission,
which you do not and will never have! our land, which we
Y14 [farm is near the mountain and is a part of the mountain.
We have deer and antelope drop their young on our place
every year and raise their young on our hill they come to
water by our house, we also have hawks hunting and nesting
very close, also the protected national bird the Bald Eagle
hunts and roost right here on our property I love to see these
wild creatures and photograph them often. I am fearful that this
line is going to deter these wild animals from our view and I
am greatly disturbed by this proposed line. We have the beautiful
Z14 [pelican comes from Clear Lake flys low over our mountain and
lands in the irrigation ditch in front of our house which I
have photographed, We are concerned to put it lightly about
the danger and the added expense of irrigation around these
horrible towers. We also have a gas line going through our
A15 [property and rightaway for another. We are also in the logging
business, and have radios in order to operate our business efficiently
and this line will certainly interfere with our radio communication
B15 [We know there is an alternate route for this line on public
land and that is where it must go. We use a computer which is vital
C15 [to our logging and our farming operations, as you know a computer
is very susceptible to static electricity and will probably
cause the loss of valuable information which could cost thousands
of dollars not to mention repairs to our computer and equipment.
D15 [I also hesitate, but must make you aware that I have a nervous condition
being treated by a doctor which will greatly increase I am sure,
if I lose the tranquility of this place, I could not bear the
constant noise and humming much less the sight of this line.

X14 Comments noted. See responses to L-330 F1 and L-330 F3.

Y14 See responses to L-157 I, L-330 X11, L-330 Y11, and L-330 G14.
Pelican movements between waterbodies typically occur at great
heights; few or no collisions with the proposed line are expected.

Z14 See responses to T-6 D, T-27 B, L-330 D14, L-330 M16, L-330 O15,
and T-175.

A15 See response to L-212 F.

B15 See responses to L-298 B and L-330 B2.

C15 See response to L-330 H3.

D15 See response to L-290 K, L-329 C1, and L-330 F1.

*George A &
Ann Moore
Land Owner*

L-330 (continued)

Tulelake, Ca. 96134
Aug. 11, 1986

The California-Oregon
Transmission Project
P.O. Box 640770
Sacramento, Ca. 95866

My name is Clyde F. Huffman, I reside at RT. 2 Box 105, Tulelake, Ca. 96134
I own and lease land in TWP 46N Range 6 East, Sections 5, 6, 7 & 8. Plus
other lands to the North and West.

This letter is in regards to a proposed transmission route from the Malin
Sub-station south through the Newell-Copic Bay area.

- E15 [Of the three proposals for this Copic Bay area, I wish to state that I am
unalterably opposed to the West and center routing in Copic Bay and
strongly suggest that the Eastern route on public land be the only one
considered as practical for this area.
- F15 [On the West proposal, I wish to state that (1) this Copic Bay land is mostly
prime farm land. (2) It is a lake bed with high water, 3' to 6'. (3) The
Sub-strata is composed of diatomaceous earth and silt and would provide a
very unstable footing for towers. (4) Towers would interfere with our
methods of irrigation and cultivation of crops and aerial spraying. (5) Area
involved is also flight and feeding area for Wildfowl. (6) Towers and wires
would spoil our view of Mt. Shasta and westward scenery. (7) At times it
becomes necessary to burn crop residues and smoke would effect high voltage
lines. (8) Channel 9, educational TV has a transmitter on Lard Island in
section 6. TV and Radio and our communications Radios reception and
transmission could be effected by proximity to power lines. (9) To the south
lines would pass through Lava Beds Wilderness area which is Antelope and
Mule Deer range.
- G15 [Another thing is that a large part of the effected land is under long
term mortgages and with falling land values, granting an easement for a power
line across prime farm land is out of the question.
- H15 [Personally I resent this "Cat and Mouse Game" that Pacific Power & Light is
playin'. First the criteria for site election was laid down then that
criteria is violated by proposing to run said power line through prime
farm land.
- I15 [In closing I wish to reiterate that the most Eastern route on public land
is the most practical route for this area, in as much as most or all of this
Southbound Power will be from the Bonneville Power Administration.

Not Very Respectfully Yours

Clyde F. Huffman
Clyde F. Huffman

- E15 Comment noted. See response to L-330 G.
- F15 See responses to your specific comments below:
(1) Comment noted. See also responses to T-9A and T-20B.
(2) Comment noted.
(3) See response to L-176A.
(4) See responses to T-175 A, T-175 B, T-175 H, T-6 D, T-6 F,
and T-15 J.
(5) See response to T-33 L.
(6) See responses to L-330 F1.
(7) See response to T-15 H.
(8) See response to L-330 H3.
(9) See response to T-15 L.
- G15 See response to T-162 B.
- H15 See response to L-330 G, L-330 H, and L-330 I.
- I15 Comment noted.

L-330 (continued)

6737 Kimberly Ct.
Klamath Falls, Ore. 97603
August 10, 1986

The California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca 95866

Gentlemen:

- J15 [As owners of farmland within one of the corridors for the proposed power line construction in northern California near Tulelake, we must again protest against routes which cross farmland.
- K15 [Most of the land farmed in this vicinity is irrigated by wheel line sprinklers. The cost, loss of time, and frustration of moving lines around power line structures will always be part of any farm in the path of the proposed line.
- L15 [Especially irksome is the knowledge that some of the power will be used for farms in direct competition with this area at lower rates for power than we must pay. Farmers outside the Klamath Irrigation District already suffer from a disparity between their pumping costs and those within the district, and most of the farmland within the corridors is outside the district.
- M15 [The threat to the lives of those who spray farmland can only be averted by their refusal to spray near the lines--and that also then becomes a never-ending burden on the farm operator, who cannot compete effectively in this area without spraying by air.

Sincerely yours,



Richard Halousek
Betty Halousek

- J15 Comment noted. See response to L-330 G.
- K15 See response to T-6 D.
- L15 See responses to L-216 B, L-219 A, and L-329 A.
- M15 See response to L-14 A, L-330 MM, T-4 G, and T-175.

L-330 (continued)

EDWIN J. STANTNY

HC 62 BOX 24
MALIN, OREGON 97632
(503) 723-4583

Calif.-Oreg Transmission Project

N15 *Answers:*
The contemplated construction of a
new 500 KV power line in this area
should be located in a corridor which
is not on farming land. Most of the
O15 farmers use sprinkler irrigation and
there in turn was an electrical hazard
of aluminum pipe which is a good
electrical conductor. It also deteriorates
P15 rapidly by electrolysis when near
power lines. It also creates major
Q15 problems for moving wheel lines
or installing circles. These problems
R15 are too much in addition to what
they face now. The smart thing to do
is use non-farming land and build
on public lands.

*Very truly yours,
Edwin Stantny*

N15 Comment noted. See response to L-330 G.

O15 There are guidelines available for use of non-stationary objects near powerlines. The National Electric Safety Code (NESC) provides safety clearances to protect the public. However, people can create situations for concern by positioning long metallic objects (antenna, irrigation pipe, etc.) directly under the wires of any electric powerline, including the distribution line that serves the property. In such situations, routine safety would indicate that long objects should not be raised in the vicinity of powerlines.

With respect to shock on irrigation equipment - see response to L-330 G3.

P15 See response to T-4 H.

Q15 See response to T-6 D.

R15 Comment noted. See responses to L-298, L-330 G, and L-330 B2.

L-330 (continued)

Dear Sir

I am writing to you concerning a transmission which is about to routed thru or near our property.

I am a farmer who has lived here on this place since 1949. I have worked toward building up a farm & a home which I surely expected my sons to take over when I retire. Finally my sons were able to buy a neighboring which would make a $\frac{1}{2}$ mile square

L-330 (continued)

S15 7 field which be very good
for 1/2 mile pivot sprinkler
in the future. If this trans-
mission line should go thru
that would ruin that. To
be made to form under &
around a transmission line
is very very undesirable.

T15 I consider this land ~~would~~
would be devalued by at
least 50% just having it
near here & more so if it
goes through the property.

U15 We realize the line is needed
but the very lame excuses
- which has been submitted

S15 See response to T-175 A.

T15 See responses to L-184 A and L-325 N.

U15 Comment noted. See responses to L-298 and L-330 G.

L-330 (continued)

U15

5/ for pushing it through our farm land is ridiculous

There is plenty of waste land to the East of us &

There is where it should go.

V15

V15 Comment noted.

"We are highly incensed over this line going through our near our property for many reasons not stated here & do not intend have this done without a long bitter fight.

"We hope this can be routed East of us peaceably

Sincerely

12/22/44

Harold R. Reed

August 9, 1986

California Oregon Transmission project

To whom it may concern;

If the KV line Towers are placed on our property it will affect us greatly. I will point out a few ways that it will do this:

W15 [Irrigation will be much more difficult. We depend on wheel and pack lines. The wheel lines will have to be disconnected and connected for each move. The pack lines will be dangerous to move because of the high electricity flowing through them.

X15 [This may cause shock and other damage to the person or persons moving them.

Y15 [Another problem will arise when we cannot use Aerial Spraying. We use aerial spraying to kill unwanted insects and bugs. We also use aerial

W15 Transmission lines and towers can make irrigation practices, such as the use of wheel and pack line sprinklers, more difficult and costly because of the extra time required to dismantle and move the wheel line and to cut off the power running through the pack line. Please see the letter from Bonneville Power Administration to the COTP (L-371) which discusses new irrigation systems which may make irrigation around towers possible without having to disassemble to move around towers. Each landowner will have the opportunity to negotiate compensation for the additional expense during the easement acquisition process. See also responses to L-330 G and L-330 B5.

X15 See responses to T-6 D and L-330 G3.

Y15 See responses to T-18 B and T-18 C. See also response L-330 G.

L-330 (continued)

Y15 | spraying to kill weeds that will
over run our crops, if they are not
destroyed. Going to ground spray will
be more expensive and will take more
valuable time.

Z15 | The KV line Towers will also decrease land
value and resale value. In an
area that is already extremely depressed.

Z15

See response to L-184 A. There is no evidence that transmission
lines "could cause far worse economic hardship."

A16 | The KV line Towers could cause far
worse economic hardship. Especially
when there is plenty of land with no
marketable value miles from this area.
We feel profitable land that produces
marketable commodities should not be
devalued when sage brush and rocky
land is available for KV line towers.

A16

See response to L-330 G.

Thankyou for taking time to read my
letter. I hope it explains my
position and how I feel about the
KV line Towers.

Sincerely,
Gordon M. Housick

L-330 (continued)

11 August 1986

I am opposed to the proposed powerline crossing any of the privately owned farm land for the following reasons:

- C16 [1) Increased cost of attempting farming around said powerlines.
- D16 [2) Decreased production yields and decreased variety of crops that are possible to raise. Primarily because of an inability to spray for disease, insects, and weeds near power lines.
- E16 [3) Decreased land values for resale.
- F16 [4) Any increase in farming costs on a already strained farmers cash flow could put many into bankruptcy positions.

Other comments:

- G16 [During our last meeting. The power company said that they were wishing to sell the excess power to lower Calif. They also said this excess power would not exist in about ten years. It seems foolish to build this line & have it only be utilized for such a short period. It is also negative to help the southern economy develop a dependence upon power that won't be there.
- H16 [It seems odd to me that if we have this excess power - why do our rates keep increasing.

Sincerely,
Patricia M. Walker
Patricia M. Walker
Madec County Farmer

C16 See responses to L-184 A and T-175 A.

D16 See responses to T-63 B and T-175 H.

E16 See response to L-184 A. The money received by the landowner from the easement acquisition should compensate the landowner for lower resale value, if it occurs.

F16 See responses to L-184 A, T-162 B, and T-175 A.

G16 See response to L-3 T.

H16 See response to T-126 A.

L-330 (continued)

Winton Power Line Committee Aug. 10, 1986

Dear Sirs:

I16 In regard to the controversial power line I16
I feel we who own farms are being treated
unfairly and I really object to the idea of
putting the line across this prime farm
land. J16

J16 We already have a gas line across the
place which greatly reduced production
for several years. As I see it the line
would completely ruin about 15 to 20 feet
wide across the place for raising any crops.

K16 Also we have bird owl, hawk and at
one time even a bald eagle which lived on
my place. What will happen to these birds?

L16 We often have cattle graze on the place.
That is another thing which is a complete
reason for the company to think about.

M16 My son and grandsons lives too would
be endangered when moving a sprinkler about. M16

Sincerely
Arthur Macken
P. O. Box 161
Malibu, Calif. 90263

Comment noted. See response to L-330 G.

See response to L-184 A.

See responses to T-55 H and T-56 B.

L16 The grazing of cattle will be permitted under the transmission
line. This is common practice along most rural transmission
rights-of-way.

M16 Farmers have safely operated a variety of irrigation equipment
for many decades near transmission lines. Induced voltages due
to handling irrigation pipe can be reduced by allowing one end of
the pipe to touch ground. There are booklets available for
farmers that outline safe work practices near high voltage
powerlines. See response to T-175.

L-330 (continued)

Calif. Univ. Transmission Project
Please Sir -

In regards to the 500RB line-
please, please don't go through
our fertile land, the farmers get
little enough for their crop,
not along giving them some-
more greens, & headaches.
I'm sure not in favor
of this construction.
One of the Tulelakees

Mrs. Rose M. Weistatman
R+1 Box 2
Tulelake, Cal. 96134

N16

N16

Comment noted.

L-330 (continued)

Due to space limitations, Attachments B, C, D, E, F, and G are not reproduced here. They have been reviewed by the lead agencies and are available for public review at the offices of the lead agencies.

- Attachment B contains newspaper articles.
- Attachment C contains minutes of the public meeting of the Modoc Powerline Committee, August 11, 1986.
- Attachment D contains correspondence from the COTP to Bill Graham.
- Attachment E contains correspondence from Macy's Flying Service, testimony of Clyde H. Tuomela for the Geothermal Public Power Line, testimony of Paul Richter for the Geothermal Public Power Line, correspondence from the Department of Food & Agriculture to Dan Byrne, testimony of Donald Peart for the Geothermal Public Power Line, testimony of Frank Martin for the Geothermal Public Power Line, and statements from Thayer Aviation and Charter Aviation to the California Energy Commission.
- Attachment F contains magazine articles.
- Attachment G contains correspondence from the Department of Food & Agriculture to Dan Byrne (a duplicate of the letter in Attachment E).

L-331

503 226 5679

(MON)03.02.'87 14:59

NO. 3 PAGE 2



Portland General Electric Company

R. E. Dyer Vice President

February 27, 1987

Environmental Coordinator
California-Oregon Transmission Project
PO Box 660970
Sacramento CA 95866

Dear Sirs:

Attached please find PGE's comments on the draft California-Oregon Transmission Project Environmental Impact Statement/Environmental Impact Report. PGE believes the Third AC will be beneficial to both California and Pacific Northwest participants and supports continued progress towards its construction. We thank you for the opportunity to comment.

Rather than take issue with many individual statements in the draft EIS/EIR, PGE has reduced its comments to several key issues. We believe that consideration of these comments in the final EIS/EIR will enhance the document and thus lend support to the project.

Sincerely,

A handwritten signature in dark ink, appearing to be 'R. E. Dyer', written over a horizontal line.

Attachment

A Comment noted.

PGE COMMENTS ON THE DRAFT COTP EIS/EIR

PGE's comments on the Draft EIS/EIR relate to four main concepts:

1. Sources of electric energy in the Northwest

The Intertie is a transmission system connecting the resources and energy systems of two separate regions. Just as the region south of the Oregon border is a composite of several diverse entities and electric utilities, the northern region has many components. The Draft EIS/EIR, written from the perspective of members from the southern region, focuses primarily on Bonneville Power Administration and does not fully recognize the many other entities of the northern region.

Bonneville Power Administration is the largest single owner of transmission facilities in the Northwest and a major supplier of energy. However, both PGE and Pacific Power & Light own shares of existing Intertie capacity and have significant energy resources. In addition, many other utilities in the Pacific Northwest, though not Intertie owners, sell power via BPA's Intertie access policy from time to time to California markets over Bonneville's Intertie. The Draft EIS/EIR does not acknowledge the above-mentioned Intertie ownership and does not account for the potential for economic exchange that exists between these companies and entities in California.

Volume 3A, Section 3.2 states that Bonneville Power Administration has rights to 85 percent of the existing Intertie capacity within Oregon. We do not understand the calculation of the 85 percent figure and believe it may be overstated, since PGE has rights to 25 percent of the existing AC Intertie.

The Draft EIS/EIR has pointed to the proposed BPA/SCE contract as an example which potential contracts might follow. We believe that the Draft EIS/EIR could also choose a model from those contracts which already exist with Pacific Northwest utilities. For example, a reasonable sample contract which has been executed is the long-term agreement between PGE and Southern California Edison, which provides for long-term exchange of both capacity and energy of significant amounts.

The Draft EIS/EIR discusses the potential for economic exchanges between the PNW and California. This includes both private and public utilities in the PNW.

The figure includes both the AC and DC transmission lines.

The contract mentioned in the comment is another example of the type of agreement available between California and the Pacific Northwest.

2. Economic Value

E As stated in the Draft EIS/EIR, PGE has performed an independent analysis of the economic benefits of the COTP Project. Our findings indicate that the benefits to California are greater than those shown in the Draft EIS/EIR. There are several points which further validate that claim.

First, both this Draft EIS/EIS and Bonneville's analysis of benefits of the COTP indicate that benefits are greatest when firm contracts with the Northwest allow California utilities to displace or defer construction of resources. However, Bonneville seems to be the only source considered. Long-term firm contracts at competitive prices are available not only from PGE but several other Northwest utilities. Bonneville's proposed Long-Term Intertie Access Policy allows such long-term contracts between Pacific Northwest and California utilities. Because of its focus solely on Bonneville, the Draft EIS/EIR has underestimated the amount of available energy as well as the reliability over time of both price and firm delivery.

F Second, in a period of resource balance in the Northwest, there will be benefits realized both in the Northwest and in California from sharing energy resources through seasonal exchanges. Seasonal diversity exchanges have been acknowledged, but the economic benefit to California has not been included in the cost-benefit ratio.

G Lastly, the economic value of the COTP to the Northwest has not been calculated. PGE recognizes that the decision to build will be made by California participants from the analysis of California benefits; however, we believe that the Northwest analysis also shows positive benefits. When added to the California benefits, cost-benefit ratios of the whole project will be more positive.

L 3. System Alternatives to the Proposed COTP Plan

In the latter half of 1986, the project elected to change its preferred route from the Central Corridor to the Eastern Corridor. Because of this change, it would appear that there are other line routings and termination alternatives on the Eastern Corridor that could be given further consideration.

E The economic analysis supporting the EIS/EIR focuses on sources of power supply from the Northwest as a whole. This includes assessment of the potential for firm contracts not only with BPA but with other utilities in the region as well. The analysis also considers extra-regional sources, including B.C. Hydro, eastern Montana, and Wyoming. For further discussion, see Section 8.3 "Availability of Firm Capacity from the Northwest," pages 85-88 of Appendix B of Volume 3A of the Draft EIS/EIR. See also responses to L-306.

F There would be a benefit from seasonal energy exchanges and these benefits have been reflected in the benefit/cost analysis for the COTP in Volume 1, Section 1.5 of the Draft EIS/EIR.

G The benefit to the Northwest has been evaluated in combination with the benefits to California in the BPA IDU EIS. Addition of net benefits to the Northwest to the benefit/cost analysis in the COTP Draft EIS/EIR is indeed likely to increase the benefit/cost ratios as indicated in this comment.

L The COTP never established a preferred route in the central corridor. There was a general preference by the power systems engineers for the central or western corridors, but when all environmental effects were taken into account, the eastern corridor was chosen as the preferred. However, this was acceptable only with the understanding that the COTP would not terminate at Malin and adequate separation was maintained from the existing Intertie.

H (a) Southern Oregon Termination

Southern Oregon Switching Station, which would be a new station, is listed as a requirement for the COTP. It is proposed to site this new station within five miles of the existing Malin Substation and tap the Malin-Meridian line. It appears that utilizing Malin Substation to terminate the COTP line may not have been given adequate consideration as an alternative to developing a new station.

The existing Intertie owners (ie, Portland General Electric, Pacific Power & Light, Pacific Gas and Electric, Bonneville Power Administration, and Western Area Power Administration) are presently engaged in a multiphase program to improve the reliability of the Intertie system. The estimated cost of the program is nearly \$40 million and is to be completed by 1990. Particular emphasis will be placed on the Malin-Round Mountain-Table Mountain sections. The improvements include, but are not limited to, the following:

- . Power circuit breaker additions;
- . New and redundant protective relaying;
- . New and redundant control equipment;
- . New and redundant microwave communication links;
- . Consolidation of California communication facilities (San Francisco);
- . Nonoverlapping and redundant remedial action schemes.

This work will increase the reliability of the Intertie system (including the Malin Substation) well above historical levels. With these reliability improvements, termination of the COTP line at Malin Substation may be a viable alternative to a new Southern Oregon Substation and should be considered in the Draft EIS/EIR.

I (b) Transmission Routing Alternative

If Malin substation can be considered a viable alternative for the northern termination of the COTP line, then the COTP line could be routed on the east side of the Intertie. At a suitable point north of Redding, a short (approximately one-half mile)

H

The COTP is aware of efforts underway to improve the reliability of present facilities over historic levels. These efforts would be acceptable only with the understanding that the COTP would not terminate at Malin and that adequate separation was maintained from the existing Intertie. The use of the existing AC facilities will also have been increased many fold, with the transmission capacity alone being increased 1.6 times from the time of construction (2,000 MW to 3,200 MW) by the time the COTP goes into operation. WSCC Reliability Criteria will be extensively stressed at the 3,200 MW level, and to press further upward to 4,800 MW without following NERC guidelines for new projects could result in the reduction of the rating of the COTP to such low operating limits as to not be beneficial economically. The new Southern Oregon substation will provide for further reliability improvement, in addition to the improvements being provided by existing Intertie owners.

See response to L-331 H.

It is not accurate that BPA has utilized 500 kV underground cable technology since the early 1970's. The Bureau of Reclamation has utilized 500 kV cables at the Grand Coulee Dam to provide for generator circuits, but a major fire occurred in the cable tunnel and the Bureau has re-routed the power to overhead transmission. BPA, in cooperation with EPRI, has been conducting a gas-insulated underground 500 kV field test at Ellensburg, Washington. The scientists conducting that experimental field test believe that such technology is not yet commercially available.

L-331 (continued)

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MO.3 PAGE 6

underground crossing of the Intertie could be made, which would connect the east side route to the upgraded WAPA 500-kV towers. This underground crossing would significantly reduce the possibility of sustaining multiple-line outages (involving the COTP line) versus crossing the Intertie with conventional overhead transmission. BPA has utilized this technology since the early 1970s, making this option technically feasible.

It is conceivable that routes east of the Intertie may be more reliable due to terrain characteristics and may contain fewer environmental impacts than routes west of the Intertie.

For these reasons, routing the COTP line on the east side of the existing Intertie north of Redding may be a viable alternative and should be considered in the Draft EIS/EIR.

4. Miscellaneous

Vol	Page, Section	Item	Comments
J	1	2.1-1 Transmission Lines	There is no mention of the 500-kV line section to be constructed from the California-Oregon border to Southern Oregon Substation.
K	1	1.1-3 Purpose	The "present 3,800-MW transfer limit" should be clearly defined. Where is this measured?

(cont.)

Recommendations on the Southern Oregon Termination and the transmission line routing have been received from the Power Systems Study Committee and its members. This committee has had representation from the Participants as well as the Northwest, including Portland General Electric.

See response to L-307 I.

J The short section of the transmission line in Oregon is included in the COTP description. This line section was analyzed in the Draft, as was the location of the new substation in Oregon.

K A transfer limit of 3800 MW between these two WSCC areas is mentioned several times in the WSCC 1986 Study Program Annual Report dated December 1986. Specific instances are as follows:

Page A-32 Under the "SRWG Comment" for the 1987 LSI case it states that "The flows from the Northwest to California and across the NE/SE boundary break points total 3950 MW, 150 MW over the 3800 MW South Island import limit."

Page A-41 Under discussion of the 1988 LS2C case the last sentence reads "The flows from the Northwest to Northern California and across the NE/SE boundary break points total 4241 MW, 441 MW over the 3800 MW South Island import limit."

Page A-51 Under discussion of the 1988 HS4A case the second sentence reads "The flow from the Northwest to Northern California was decreased to 2287 MW to keep flows near the 3800 MW South Island import limit."

L-331 (continued)

K
(cont.)

The present 3800 MW transfer limit is measured at the Northwest/Northern California interface and at the NE/SE boundary points. The Northwest/Northern California interface occurs at the Malin 500 kV bus (on the Round Mountain lines) and at the Delta 115 kV bus (on the 115 kV tie to PGandE).

The NE/SE boundary points vary from one WSCC case to another. In the 1987 LSI case they were as follows:

- Glen Canyon 230 kV bus (on the 230/345 kV transformers)
- Pinto 345 kV bus (on the Four Corners line)
- Shiprock 345 kV bus (on the San Juan line)
- Four Corners 345 kV bus (on the Shiprock line)
- San Juan 345 kV bus (on the Long Hollow line)
- Gallegos 115 kV bus (on the Farmington line)

The boundary points for the other cases referenced can be determined from a review of the Study Program Annual Report.

It is our understanding that the 3800 MW transfer limit may have been recently increased as a result of system changes in Arizona. The new limit varies depending on the level of Palo Verde generation and Central Arizona Project pumping.

L-332



United States Department of the Interior

OFFICE OF ENVIRONMENTAL PROJECT REVIEW
500 N.E. MULTNOMAH STREET, SUITE 1692
PORTLAND, OREGON 97232



ER 86/1423

March 11, 1987

Regional Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, California 95866

Dear Sir:

The Department of the Interior has reviewed the Draft Environmental Statement for the California-Oregon Transmission Project. The following comments are provided for your consideration when preparing the final document.

Fish and Wildlife Resources

A

The Fish and Wildlife Service's (Service) Endangered Species Office has advised us that the supporting documentation for the DEIS does not include a Biological Assessment prepared pursuant to the Endangered Species Act of 1973, as amended, for the California-Oregon Transmission Project. Yet, the DEIS clearly identifies impacts to Federally-listed species. Based on verbal communication with Western Area Power Administration (Western) staff, we understand that such an assessment will be prepared and consultation requested pursuant to Section 7(a) of the Endangered Species Act. Consultation can be requested with the U.S. Fish and Wildlife Service, Sacramento Endangered Species Office, 2800 Cottage Way, Room E-1823, Sacramento, California 95825.

B

A Biological Assessment for the Los Banos-Gates Project, prepared pursuant to the Endangered Species Act, does not provide adequate information on field methods used to survey the project area for Federally proposed, listed, and candidate species. The assessment should include a description of survey methods, including transect widths, spotlighting, live-trapping, time of year and day, temperature regimes, species for which inventories were conducted, and other pertinent information addressing field methods before the Service can adequately evaluate impacts. Discussions incorporating results of prior field work for other, adjacent projects and surveys should also be included. Based on the information provided, it appears that the project will affect listed species, including the endangered San Joaquin kit fox (*Vulpes macrotis mitis*). Thus, formal consultation pursuant to Section 7(a) of the Endangered Species Act is warranted.

The Department of the Interior has published the U.S. Fish and Wildlife Service Mitigation Policy (Federal Register Vol. 46, No. 15, January 23, 1981, p. 7655-7663) which establishes policy guidance for the Service in making recommendations to protect or conserve fish and wildlife resources.

A

Western has been in contact with the Endangered Species Office, and a biological assessment is being prepared in accordance with Section 7 of the Endangered Species Act.

B

For the Draft EIS/EIR, it was not our intention to provide the detailed biological assessment in accordance with Section 7 of the Endangered Species Act, but rather to look at biological impacts on a broader scale. While a biological assessment was prepared, the general nature of the studies were dictated by the size of the corridors. Rather than begin Section 7 consultation at this time, PGandE will conduct more detailed biological studies along the preferred route and, should the outcome of the studies indicate impacts, formal consultation under Section 7 will be initiated.

L-332 (continued)

Under the Mitigation Policy, resources are divided into four categories to assure that recommended compensation is consistent with the fish and wildlife values involved. These Resource Categories cover a range of habitat values from those considered to be unique and irreplaceable to those believed to be of low value to fish and wildlife resources. The Mitigation Policy does not apply to threatened or endangered species.

In general, wetland habitat, riparian habitat and anadromous fish habitat are classified under Resource Category 2 of the Mitigation Policy. The Service's mitigation goal for that category is to insure that there is no net loss of in-kind habitat value. The Service has generally classified other wildlife and aquatic habitat as Resource Category 3 of the Mitigation Policy, the mitigation goal for which is to insure no net loss of habitat value while minimizing loss of in-kind habitat value.

C The final EIS should discuss in detail all practicable means to avoid or minimize environmental harm from the alternative transmission routes. Detailed discussions should also cover proposed monitoring and enforcement plans. Such a discussion in the final document should then be followed up in the Record of Decision with a discussion on whether all practicable means have been adopted to avoid or minimize environmental harm from the selected alternatives. The Record of Decision should also discuss in detail (or summarize the discussion in the final document) what monitoring and enforcement programs will be adopted.

D Page 1.1-3. The DEIS indicates that the Projects can provide environmental benefits by allowing the construction of new power generation resources to be deferred, thus deferring or eliminating the impacts associated with that construction. The projects may reduce the justification for municipalities, such as the City of Redding, to pursue major hydroelectric projects on the Sacramento River that may have a significant adverse impact on anadromous fish habitat in California. On the other hand, the Projects may result in increased small hydro development that would divert significant amounts of streamflow from rivers during important fish life development stages. The final EIS should further discuss these concerns.

E Page 2.1-3. Transmission lines should be designed to prevent electrocution of perching birds, particularly hawks and eagles. Guidance for proper design of the transmission lines may be found in the following publication:

Ollendorff, R.R. Miller, A.D., and Lehman, R.N. 1981. Suggested Practices for Raptor Protection on Power Lines, State of the Art in 1981. Raptor Research Foundation, University of Minnesota. 111 pp.

F The DEIS indicates that two lightning protection shield wires will be used except for the Western upgrade towers that will have one shield wire. We are concerned regarding possible adverse impacts of these shield wires on waterfowl. Page 3.5-4 of Volume 2A states that the smaller diameter, overhead static wires cause more bird losses because they are less visible and birds may hit them when avoiding the large diameter conductor wires. The final EIS should address site specific mitigation measures to reduce this hazard to waterfowl and other birds.

C Comment noted. This information is included in Section 1.1.5 of this Final EIS/EIR, and will be included in the Record of Decision.

D Changes to resource construction and operation in the Northwest that would result from upgrades to the Pacific Northwest-Pacific Southwest Intertie are discussed in the BPA IDU Draft EIS, which is referenced in the Project Draft EIS/EIR. Hydroelectric developments by the City of Redding are not projected to change as a result of the Project. An increase in small hydro development, either in the Pacific Northwest or California, beyond what has already been planned, is not expected to result from the construction of the COTP.

E Transmission lines, especially 500 kV lines, are not expected to cause electrocution of perching birds. Electrocution usually occurs when the bird comes in contact with two phase conductors or one phase conductor and a grounded object simultaneously, as can occur when it lands or takes off from lower-voltage distribution lines with shorter separation distances. The COTP line phase separation would be much greater than the wingspan of the largest birds.

F Existing data is inconsistent concerning avian collision with transmission line static wires. Static wires are a valuable safety feature in transmission line design. Only in extreme instances where it is determined, through interdisciplinary review, that the safe and reliable operation of the transmission line will not be jeopardized should the static wire be removed. This would only be considered where the tower heights would be significantly higher than the conductor at its lowest point of sag, such as at a river crossing. Static wires can be marked with brightly colored balls to increase their visibility. It is not known if this measure is very effective. However, the COTP is willing to consider the use of marker balls in areas where it is determined, in consultation with the with the appropriate agencies, that they may be an effective mitigation measure.

L-332 (continued)

- G** Page 2.1.16. From the standpoint of fish and wildlife resources the choice of North B of the four northern alternatives would have the least impact.
- H** Page 2.1.21. We are concerned regarding the selection of Alternative B in the southern section as the preferred route. Page 4.1-23 and 4.1-57 indicate that, of the three alternatives, Alternative B has the highest potential for significant waterfowl collisions. We recommend that the final EIS discuss the magnitude of the waterfowl collision problem at the existing transmission lines and further evaluate Alternative A, which has the lowest potential for significant waterfowl collisions, as the preferred route.
- I** Page 2.2.5. The DEIS indicates that the west route is the preferred route. We are concerned because page F3-13 of Volume 3B states that much of the east route provides almost no wildlife habitat, yet the known or suspected presence of sensitive wildlife habitats was a factor in the route selection process according to page 4.2.1. Potential adverse impacts on wildlife habitat appear to be higher with the west route (Page 6-20 of Volume 2B). However, the potential occurrence of waterfowl collisions with the east route transmission lines must be considered (Page 4.3-9 of Volume 2B). The EIS should discuss the magnitude of the waterfowl collision problem at the existing transmission lines (east and west) and the possible adverse impacts to waterfowl with the addition of the new transmission lines. It should also discuss further the justification for selecting the west route over the east route and the site specific mitigation measures proposed to reduce or eliminate impacts on fish and wildlife resources.
- J** Page 3.1-22. When the final alternatives are selected, Western should conduct a detailed analysis of the river crossings, particularly those that cross anadromous fish streams. If the analysis indicates that work will be conducted in the river, then discussions should be initiated with the Service and California Department of Fish and Game regarding means to avoid adverse impacts to habitat for both anadromous and resident fish. Mitigation measures should be developed to compensate for impacts that cannot be avoided.
- K** Pages 3.1-24 and 3.1-25. When the final alternatives are selected, Western should conduct a detailed analysis of the transmission route, particularly areas designated for clearing, construction of access roads, foundation installation, etc. The analysis should determine ways to avoid impacts on unique and sensitive plant communities (e.g., riparian areas, wetlands, and vernal pools) and special-status wildlife species and important wildlife habitat. Mitigation measures should be developed to compensate for losses where adverse impacts cannot be avoided. The Service will provide guidance regarding surveys for candidate plants and wildlife species.
- L** Page 3.2-1. See our comments for page 3.1-22.
- M** Pages 3.2.1 and 3.2-2. See our comments for pages 3.1-24 and 3.1-25.
- N** Page 4.1-23. The DEIS indicates that no major waterfowl collision areas have been reported along the existing transmission line in the central section upgrade route. However, there is waterfowl habitat near the existing line. The final EIS should discuss the magnitude of the waterfowl collision problem at the existing transmission lines (this may require some

- G** Comment noted.
- H** See response to L-309 Q1. The potential impacts of Alternative B would be intermediate between those of Alternatives A and C. Alternative A has other resource conflicts that make it less preferable overall than Alternative B. According to California Department of Fish and Game personnel, no data exists to document the magnitude of waterfowl collisions at the existing transmission lines. It has never been identified as a problem in this area.
- I** In determining the preferred route, all human and natural resources were evaluated. Biological resources were one of many components. Agricultural impacts were the dominant concern raised by the public. In balancing resource values and public concerns, the west route is clearly the environmentally best alternative. While the west route may result in impacts to biological resources, we will work with the U. S. Fish and Wildlife Service and the California Department of Fish and Game to minimize these impacts.
- J** It is expected that work using boats will be conducted in public use navigable rivers to install conductor pulling lines. However, the transmission line conductors and shield wire will span the river when installed. Mitigation measures in Section 1.1.5 of the Final EIS/EIR have been added which address consultation with the Fish and Wildlife Service and California Department of Fish and Game regarding impacts to anadromous fish habitat.
- K** Detailed field surveys are currently being conducted on the preferred route for unique and sensitive plant species and special-status plant and wildlife species. As stated in Section 1.1.5 of the Final EIS/EIR, the appropriate agencies, including the Fish and Wildlife Service, will be consulted regarding unavoidable impacts to these areas. Important wildlife habitat impacts are discussed in Section 3.5 of Volume 2A of the Draft EIS/EIR.
- L** See response to L-332 J. Mitigation measure 5 on page 5.2-1 of the Draft EIS/EIR is the corresponding measure for the Los Banos-Gates Project.
- M** See response to L-332 K. Mitigation measures 4, 5, and 6 on page 5.2-1 of the Draft EIS/EIR are the corresponding measures for the Los Banos-Gates Project. Appendix F of Volume 3B of the Draft EIS/EIR describes wildlife field surveys that have been conducted.
- N** It is likely that some waterfowl collide with existing lines in the Sacramento Valley. The magnitude of collisions is unknown, and has not been reported to be significant in the past. The upgrading of the existing line should not significantly increase impacts over current conditions. Mitigation measures in Section

L-332 (continued)

N

field work) and the possible adverse impacts to waterfowl with the proposed upgrade. Our refuge biologists indicate waterfowl mortality from transmission line collisions may be greater than generally thought because of the lack of good quantification studies and the rapid removal of carcasses by predators and scavengers.

O

Page 4 1-34. The DEIS indicates the potential for adverse impacts on vegetation depends on whether new structures would be built and the extent of construction disturbance.

Pages 4 7-1 and 4 8-1. Prior to construction activities, discussions should be initiated with the Service regarding measures to mitigate for unavoidable adverse impacts and the irreversible and irretrievable commitment of resources.

Page 5 1-1. The Service will use the U.S. Fish and Wildlife Service Mitigation Policy when reviewing the mitigation measures and making recommendations to protect or conserve fish and wildlife resources. We recommend an enforcement program be adopted in addition to the compliance monitoring plan.

P

Page 5 1-13. We recommend that mitigation measure 4, where potential for collision by birds is high and impacts may be significant, include language that requires pre-construction surveys of existing transmission lines and post-construction surveys for determining avian mortality due to the Projects.

Q

Page 6 1-14. See our comments regarding Biological Assessment and Section 7(a) consultation under general comments.

R

Ground Water Resources

The draft statement discusses briefly the ground-water regime in the San Joaquin Valley. Extensive withdrawal of ground-water and hydrocompaction have both contributed to significant land subsidence in the San Joaquin Valley (Ireland, R.L., Poland, J.P., and Riley, P.S., 1984, Land Subsidence in the San Joaquin Valley, California; U.S. Geological Survey Professional Paper 437-1, p. 12, 13, 14 and table 6). Professional Paper 437-1 reports that subsidence increases during periods of drought when ground-water withdrawal increases. We suggest that the significance of potential subsidence effects on proposed transmission line routes be considered.

BUREAU OF RECLAMATION

S

Table 2 of the Summary Section would be more useful to the reader if it summarized the impacts of all project alternatives (California-Oregon and Los Banos-Gates).

T

The present 230kV line paralleling the Tehama-Colusa Canal, from north of Road 33 to a point south of Road 35 in Glenn County, has an induced voltage on the Bureau of Reclamation's parallel communication cable of 13-20 volts. It would appear that the project has the potential to increase induced voltage of the cable. The related effects should be addressed in the report.

N

(cont.)

1.1.5 of the Final EIS/EIR provide for further site-specific mitigation for bird collisions to be developed in consultation with the Fish and Wildlife Service and California Department of Fish and Game. This could include focused field bird collision studies.

O

Mitigation measure V.O has been added in Section 1.1.5 of the Final EIS/EIR and is summarized as follows: Prior to construction and after access roads and tower locations are known, discussions will be initiated with the U. S. Fish and Wildlife Service and state Fish and Game Departments regarding measures to mitigate for unavoidable adverse impacts and for irreversible/irretrievable commitment of resources for wetland, riparian, anadromous fish, and other wildlife habitats.

Mitigation measure V.M has been added to Section 1.1.5 of the Final EIS/EIR and is summarized as follows: Where the Project would result in significant losses of habitat, mitigation will be developed in accordance with the U. S. Fish and Wildlife Service Mitigation Policy. The need for such mitigation will be determined upon consultation with the State Fish and Game Departments, the U. S. Fish and Wildlife Service, and state and federal land management agencies. See response to L-321 W regarding enforcement of the mitigation.

P

See response to L-332 N.

Q

See responses to L-332 A and L-332 B.

R

The reports which are referenced in this comment indicate subsidence concerns in the San Joaquin Valley. To the extent that subsidence might occur along small isolated sections of the transmission line, foundation design will mitigate any adverse impacts.

S

Comment noted. A summary table for Los Banos-Gates is found in Table 2B of this Final EIS/EIR.

T

The increase in voltage from 230 kV to 500 kV on the COTP upgrade may produce an increased induced voltage on the Bureau of Reclamation's parallel communication cable. If increased induced voltages are deemed to be unacceptable by the Bureau of Reclamation, an agreement to correct the problem will be negotiated between the two agencies.

L-332 (continued)

- U** The S-1 corridor crosses the Tehama-Colusa Canal at several locations in Glenn and Colusa Counties. We would like to alert you to the fact that there is minimal clearance between the canal's operation and maintenance road grade and the existing 230kV line at several locations. For example, clearance at the first crossing south of County Road 69 in Glenn County is 31 feet.
- V** The final document should address impacts on the Bureau of Reclamation's Tracy Pumping Plant facilities. Of particular interest, is the potential need to relocate the Bureau's Tracy facilities and the impacts (arcing and corona) on the elevated water tower.
- The draft recognizes the need to obtain rights-of-way and easement permits from the Bureau. We request that you contact the Bureau's Real Estate Office in Sacramento for necessary information and assistance.
- Visual Resources
- W** Volume 1 (Page 4.1-26). Impacts occur along the entire route, not just at "key places" as noted. The discussion would indicate that the project is only concerned with these areas and not the area between. The analysis needs to include effects along the entire route.
- X** Volume 1 (Pages 5.1-16 and 17). Mitigation #1 versus #7 (design). It should not be assumed tubular structures in foreground situations are better than conventional structures. In some cases the lattice structures with the right vegetation and color can be more effective. The use of tubular structures in more developed areas may be more effective but that is not the case in wild land situations. The approach in item #7 is more agreeable and we suggest deleting #1 and incorporating it into #7.
- Y** Mitigation should also include an item on vegetation retention (feathering and clumping) and maintenance. One of the biggest impacts is created by removing or changing vegetation cover to create an edge. Retention of vegetation within and/or feathering along the corridor reduces the edge effect particularly in growth (mature) over 10 feet in height.
- Z** Volume 3B (Pages 3.7-5 and 6). Wilderness Study Areas are managed as a Class II regardless of the class rating until such time as Congress acts at which time a wilderness area would automatically be a Class I.
- Ethnological and Cultural Resources
- AA** The EIS should address how a determination will be made as to whether the concerns expressed are valid, i.e., "Is an area considered 'sacred' or traditional just by virtue of the fact that someone says so?" The specific basis for evaluating the quality of site data represented in the EIS and the credibility of the individuals providing these data should be included. The EIS should also address the relationship between "ethnographic sites" and other cultural values.

- U** (cont.) The proposed design clearances for the 500 kV upgrade conductor will meet or exceed the requirements of the state of California, Public Utilities Commission's "Rules for Overhead Electric Line Construction," General Order No. 95 and the National Electrical Safety Code for thoroughfares in rural districts or across areas capable of being traversed by vehicles or agricultural equipment. Many of the upgraded towers are being modified to raise the 500 kV conductor to meet the required clearances, including the tower in question.
- V** Western is currently negotiating an agreement with the Bureau of Reclamation which first involves identifying the impacts to the existing Tracy facilities. A decision on resolving the impacts on the Bureau of Reclamation's facilities (including the water tower) will be agreed upon between the two agencies prior to the construction of the COTP.
- W** See response to L-327 A.
- X** See response to L-327 B.
- Y** See response to L-327 C.
- Z** This comment will be incorporated into Volume 1 of the Final EIS/EIR in Section 1.6.
- AA** See response to L-327 J.

L-332 (continued)

- | | | | |
|-----------------------------------|---|----|---------------------------------------|
| BB | The compliance document is referred to as an MOU in Table 8.1-2. While possibly only an error in terminology this should be changed to MOA (Memorandum of Agreement). Where is the project specific Section 106 compliance document? | BB | See responses to L-327 K and L-327 L. |
| CC | It is also noted that determinations of eligibility will be submitted to the Secretary of the Interior. All such submissions should/can be handled between the agency and the SHPO under current procedures. | CC | See response to L-327 M. |
| DD | Volume 2A (Page 3.9-1). Mitigation on ethnographically significant resources cannot be accomplished unless such sites are <u>specifically</u> identified - no such specification is provided in the EIS/EIR or supplemental Appendices. Specific impacts and associated mitigation recommendations should be developed by the contractor for each area of such potential impact. This is particularly important for "impacts" which the contractor suggests may greatly exceed the applicant's project area, i.e., "aural and visual" impacts. The special allusion to effects upon "opportunity for solitude" sounds much like wilderness act values - please identify specific locations for which this is a significant consideration and site specific mitigation if appropriate. | DD | See responses to L-327 E and L-327 F. |
| EE | Volume 2A (page 3.9-8). The EIS should provide operational criteria for the identification of "ethnologically" significant areas. The rating of selective significance is not particularly useful in this context as it is apparent that everything is moderately or highly important to the Native Americans interested. This suggests that no matter where the project proponent needs to construct the project the Native Americans will have a problem with it. The EIS should seek to identify a means of avoiding adverse effects. | EE | See response to L-327 G. |
| FF | Volume 2A (Page 3.9-8). The "sensitivity model" is not as useful as a straight forward description of ethnographically significant sites and attendant impacts. The point here is to assure we consider the concerns of the Indian community, not what the preparer of the EIS thinks the community is concerned about. There is a need to provide basic information: specifically describe types of sites, directly associated types of effects, and the communities which have identified these concerns, not just data on presence or absence of "something" as in Table 3.9-3. | FF | See response to L-327 H. |
| GG | Volume 3A (Page 3.9-15). The "mitigation" measures for ethnographic concerns on page 3.9-15 amount to simple avoidance, i.e., "find out what people are concerned about, where it is and see if you can go around it." This is a good and straight forward approach. The majority of ethnographically significant values described in this report cannot be mitigated in the traditional sense if the specific sites will be destroyed by construction. | GG | See response to L-327 I. |
| <u>Lava Bed National Monument</u> | | | |
| HH | The computerized model used for assessing visual impact is insufficient in that it does not address the significant impacts to areas such as National Parks and Monuments where the project is in the "background". The increased visual expectations of a person visiting a National Park Service area are not adequately addressed by the model. The draft EIS should be modified to | HH | See response to L-3 B. |

L-332 (continued)

- HH** show all segments of routes N-10G, N10J, N-10K, N-10L, and N-10-M1 visible from Lava Beds National Monument to be of high or moderate impact as shown in Table 3.7-1, Volume 2A and be so noted in text. It is correctly noted in paragraph five, page 3.7-1, Volume 2A, that, "The receptivity of different viewers groups to the visual environment is not equal. This variability is termed viewer sensitivity and is strongly related to viewer activity and land use." The sensitivity of users utilizing wilderness and National Park areas is significantly greater than reflected by the computer model and should include moderate and high impacts from background areas.
- II** The EIS does not appear to state clearly which mitigation measures will be used on what segments of the proposed transmission line. Telephonic communications with Ms. Shields of the Transmission Agency of Northern California indicated that the impacts were assessed assuming all mitigation measures were used. However, page 3.17-13, Volume 2A, paragraph four states "A number of additional measures could be employed on a site-specific basis to mitigate the adverse visual impacts of particular alternative transmission segments." It does not appear possible to assess the potential impacts of the project on specific areas nor to indicate where these mitigation measures are to be used.
- JJ** No analysis could be found in the EIS that acceptable reliability will be obtained if the preferred alternative is picked resulting in the two existing 500kV lines being less than one mile from the proposed transmission line for 13 miles along its northern end. Page 1.1-2, Volume 1, indicates that on December 22, 1982, high winds blew down two adjoining 500kV lines and their towers. Placement of all three lines so close together would subject them all to the same high wind event resulting in possible failure. High winds are much more common than indicated on page 3.1-9, Volume 1. Winds over 40 mph were recorded 12 times in 1984, six times in 1985 and 25 times in 1986 at Lava Beds National Monument in a somewhat sheltered location.
- KK** The list of site-specific mitigation measures on page 3.7-14, Volume 2A and page 5.1-17, Volume 1, should be expanded to include darkened towers unless this measure is going to be implemented project wide.
- LL** Due to the possible effects of a volcanic eruption on the proposed transmission line, as well as the two existing 500kV lines in the preferred alternative, reliability should be more thoroughly addressed. The recent volcanic events in the Medicine Lake Highlands (12 events in last 2,000 years and 20 events in last 10,000 years [personal communication with Dr. Dan Miller, Cascade Volcanic Observatory, USGS, Vancouver, WA]) may indicate that such an event is probable enough to require consideration in determining overall reliability of the transmission system.
- MM** Volume 1, page 3.1-9, under Air Quality, the Class 1 air quality standards in effect in Lava Beds National Monument should be mentioned. Also, statements such as "Alternative D, the environmentally-superior route" on page 4.1-18, Volume 1, appear to be self-serving and should be deleted.
- NN** The draft EIS should include the option of moving the two existing 500kV lines to the east and placement of the proposed transmission line in one of the existing rights-of-way. Mitigation measures should still include using
- II** See response to L-3 B.
- JJ** The minimum acceptable separation in the Tulelake area has been determined by the COTP to be 2,000 feet in non-forested areas. See the routing guidelines as presented in the Phase II Report of Volume 2A of the Draft EIS/EIR. The separation between the existing AC Intertie lines in the area where the December 22, 1982 outage was initiated is only 150 feet where failure of one tower falling into the adjacent line and tower caused the simultaneous outage. The existing Intertie lines were rebuilt to withstand higher wind loads and the COTP line will be similarly designed.
- KK** A mitigation measure has been added to Section 1.1.5 of the Final EIS/EIR which states that darkened tower steel will be used where it can be expected to reduce visual impacts. See response to L-3 B.
- LL** A letter from Dr. Dan Miller at the David A. Johnston Cascades Volcano Observatory in Vancouver, Washington to Ms. Doris I. Omundson, Superintendent of Lava Beds National Monument, dated February 10, 1987, includes the following statement: "In summary, the proposed powerline route does pass through a volcanic area that is relatively active and has had more than a dozen eruptions within about the last 2,000 years, the most recent about 800 to 1,000 years ago. The location and timing of future eruptions cannot be forecast, but the annual probability of an eruption is between about 1 in 100 and 1 in 1,000. Future eruptions could damage a powerline, but temporary interruptions of power transmission are a more likely consequence due to the effects of ash fall."
- The consequences of a volcanic eruption have been considered during the planning of the COTP, and an attempt has been made to physically isolate the transmission line route from the center of volcanic activity. It has been determined that if an eruption would occur, there would be sufficient notice of impending damage due to lava flows to allow the safe unloading of the lines to prevent a simultaneous three-line outage.

L-332 (continued)

MM

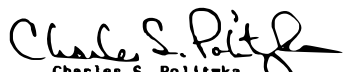
Comment noted. See Section 1.1.3 of Volume 1 of this Final EIS/EIR. The statements which identify the environmentally superior routes are appropriate and have not been deleted. The term you object to is from CEQA and is roughly equivalent to "environmentally preferred" from NEPA regulations. The routes are identified in accordance with the desire to fully disclose results of the analyses.

L-332 (continued)

NN
OO [nonspecular wire, opaque insulators, and darkened steel towers. If
additional analysis shows it would provide additional visual mitigation
tubular steel structures should be used where visible from the monument.

We appreciate the opportunity to comment on this document.

Sincerely,


Charles S. Polityka
Regional Environmental Officer

NN
OO

See responses to L-3 B and L-330 H.

See response to L-3 B.

L-332 (continued)

PP THIS INFORMATION WASNT RECEIVED BY ME UNTIL
TODAY (3-2-87). IT SHOULD SUPPORT THE COMMENTS
SENT TO YOU BY THE DEPARTMENT OF THE
INTERIOR - ENVIRONMENTAL COORDINATOR, PORTLAND, OR.

IF YOU HAVE ANY QUESTIONS PLEASE CALL ME:
DON REPLOGLE - NATIONAL PARK SERVICE (415) 556-5750

THANK YOU

Don Replogle

PP

See response to L-332 LL. Thank you for the information provided.

L-332 (continued)



United States Department of the Interior

GEOLOGICAL SURVEY

U.S. Geological Survey

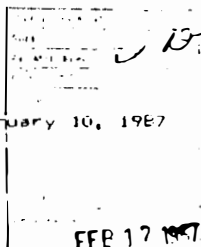
David A. Johnston, Cascades Volcano Observer

E. JO MacArthur Blvd.

Ms. Doris L. Orundson, Vancouver, WA 98661

Superintendent,
Lava Beds National Monument
National Park Service
Tulelake, CA 96134

February 10, 1987



Dear Ms. Orundson:

I am responding to your request for information regarding potential hazards from future eruptions in the Medicine Lake Highland and their possible effects on the proposed 500 KV California-Oregon transmission line. As shown on the maps accompanying your letter, the route of the transmission line passes over the south, east, and northeast flanks of the Medicine Lake shield volcano and within a few kilometers of the caldera at the summit of the shield. Please refer to the accompanying unpublished data on the eruptive history and volcanic hazards at Medicine Lake Volcano for details of the eruptive activities in the region during the last 10,000 years. These details are part of a volcanic-hazards document being prepared by the USGS Volcanic-Hazards Project for publication in the near future.

The route of the proposed transmission line passes over the flanks of a volcano that has erupted lava flows and cinders from at least eight different vents during the last 10,000 years. Most of these flows are thick, blocky flows ranging in length from a few km to about 45 km. The most recent of these eruptions occurred from vents on the north, west, and south flanks of the shield during the last couple of thousand years. Several of these eruptions also dispersed basaltic cinders over areas up to about 20 km from the vent. Future eruptions on the flanks of the shield are certain to occur again; however, the exact location and the timing are impossible to forecast. Lava flows from such events could destroy powerline towers if one was in the path of a flow. Ash and cinders from such an eruption could temporarily interrupt electrical transmission until they could be washed from lines and insulators by high pressure water jets. The annual risk of such an eruption occurring is probably between 1 in 100 and 1 in 1000. If such an eruption occurred, the risk of it actually destroying a powerline tower is probably less.

The proposed route of the powerline also passes within about 6 km of the center of the Medicine Lake caldera, which has been the focus of silicic (explosive) eruptions during the last few thousand years. The powerline route passes east of and downwind from several of these centers (Little Glass Mountain, Medicine Dike flow, and Glass Mountain). These vents typically have produced explosive eruptions of ash and coarser pumice that

L-332 (continued)

extended tens of km downwind. Coarse pumice from an eruption about 1000 years ago is more than 60 cm (25 in.) thick where the proposed powerline passes east of Glass Mountain. Such eruptions can also produce destructive pyroclastic flows (hot rock avalanches) that could travel up to ten or more km from a vent at high speeds. Products from future explosive eruptions similar to those of the recent past, from vents in or near the caldera, could damage or destroy transmission towers. The most likely consequence of such eruptions, however, would be the accumulation of thick (tens of inches) of pumice along the route of the powerline. Such an event would probably not seriously damage transmission lines or towers, but might temporarily interrupt power transmission until ash could be washed from insulators and lines with high pressure water jets. The annual risk of an explosive eruption occurring in the region is probably less than 1 in 1000. If such an event occurs, the annual risk of it actually destroying part of a transmission line is probably even less.

In addition to risk to the transmission line from future eruptions, there is also the possibility of damaging earthquakes and ground deformation in the region. The Medicine Lake Highland is a region that is undergoing extension in an east-west direction. Many eruptions appear to have occurred along north-trending faults and fissures and were probably associated with tectonic earthquakes along deep-seated faults. Engineering considerations can probably mitigate these potential hazards.

In summary, the proposed powerline route does pass through a volcanic area that is relatively active and has had more than a dozen eruptions within about the last 2000 years, the most recent about 800 to 1000 years ago. The location and timing of future eruptions can not be forecast, but the annual probability of an eruption probably is between about 1 in 100 and 1 in 1000. Future eruptions could damage a powerline, but temporary interruptions of power transmission are a more likely consequence due to the effects of ash fall.

I hope that this brief discussion will be of some assistance to you in your consideration of siting the proposed power transmission facilities. Please feel free to contact me if you wish to discuss any of these considerations in more detail.

Sincerely,



C. Dan Miller, Ph. D.
Geologist

L-332 (continued)

MEDICINE LAKE VOLCANO

Eruptive history

Medicine Lake volcano (Fig. 4-48) is a 35 km (E-W) by 45-50 km (N-S) (Julie-Donnelly-Nolan, written commun., 1986) Pleistocene and Holocene shield volcano in northeastern California about 50 km northeast of Mount Shasta. The volcano is located in a zone of east-west crustal extension east of the main axis of the Cascade Range. The 1-km-thick shield covers more than 2000 km² (Julie Donnelly-Nolan, written commun., 1986), is composed primarily of basalt and basaltic andesite lava flows, and has a 7 x 12 km caldera at the center (Anderson, 1941; Heiken, 1978). During Holocene time eruptive activity has included numerous rhyolite and dacite flows erupted at high elevations inside and outside the caldera (Eichelberger, 1975), and cinder cones and associated floods of basalt and basaltic andesite erupted from vents on the flanks of the shield (Appendix A). Most volcanic vents are aligned along zones of crustal weakness that trend in NNE to NNW directions.

Basalt or basaltic andesite erupted from at least eight different vents on the flanks of the Medicine Lake volcano about 10,000 years ago (Julie Donnelly-Nolan and Duane Champion, written commun., 1986). These eruptions produced accumulations of cinders near, and downwind from vents and lava flows that varied in length from a few km to about 45 km (Figs. 4-49, 4-50). Eruptions several thousand years ago produced several explosion craters near the southeast caldera rim and erupted scoriaceous andesitic tephra

L-332 (continued)

with a volume of about 0.01 km^3 that is mostly deposited within a few km of the vents (Julie Donnelly-Holan, written commun., 1986).

L-332 (continued)

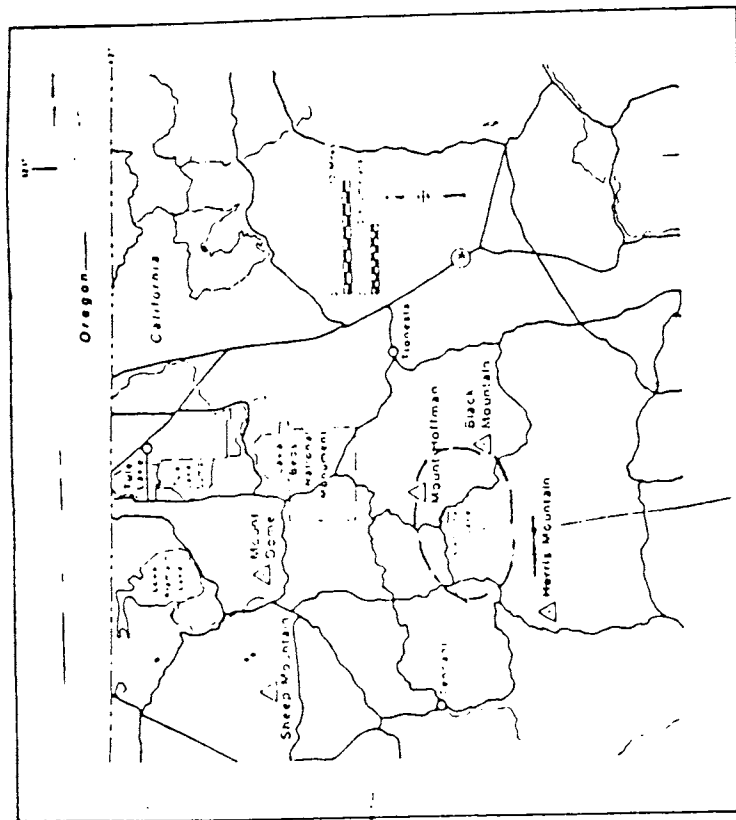


Figure 4-48. Location map of Medicine Lake volcano, California.

The dashed line outlines the caldera.

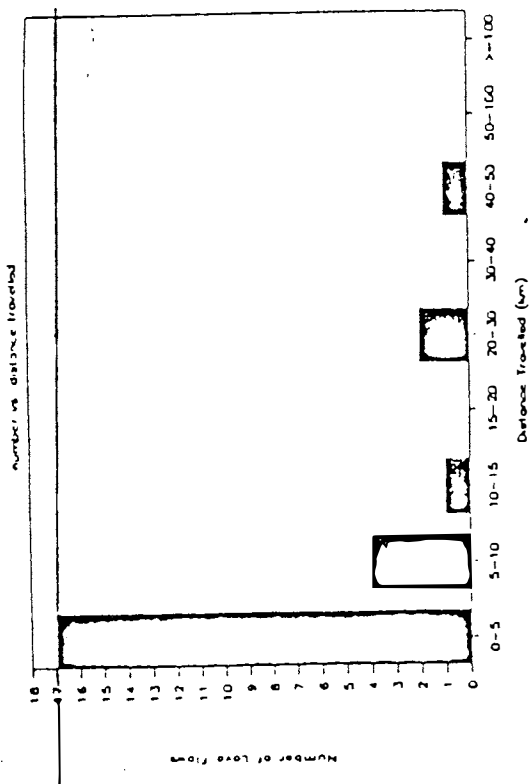
L-332 (continued)

Figure 4-49. Histogram showing number versus minimum distance travelled for postglacial lava flows at Medicine Lake volcano, California (data in Appendix A).

Figure 4-50. Plot showing cumulative number versus minimum distance travelled for postglacial lava flows at Medicine Lake volcano, California (data in Appendix A). Numbers above the data points are percentages of lava flows whose minimum distances travelled equal to or exceed the indicated value.

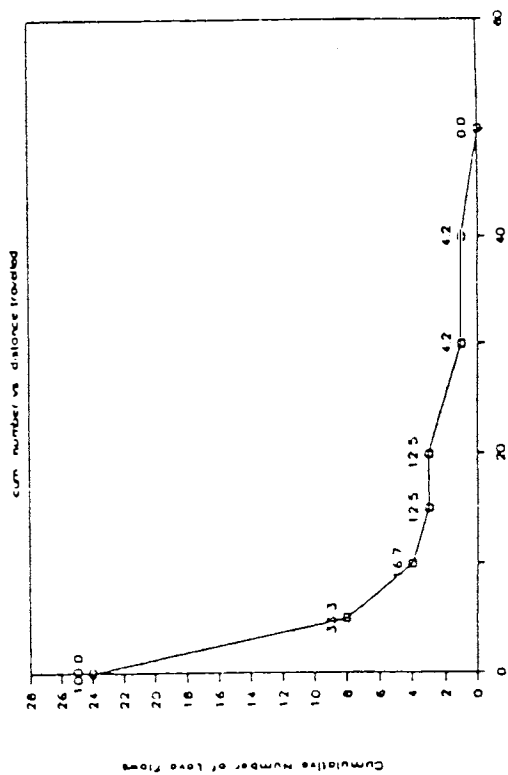
L-332 (continued)

Medicine Lake Lava Flows



4-49

Medicine Lake Lava Flows



L-332 (continued)

—Within about the past 2000 years, mafic or silicic eruptions have occurred at more than a dozen main vents on Medicine Lake volcano. Basalt to basaltic andesite tephra and lava flows erupted at three main centers on the north, west, and south flanks. Lava flows erupted during these episodes range in length from a few hundred meters to about 7 km (Figs. 4-49, 4-50; Julie Donnelly-Nolan, written commun., 1986). In addition, four main eruptive centers, two with many individual vents, erupted dacite, rhyolite, or mixed magmas. Most of the silicic eruptions began explosively and produced pumiceous tephra with volumes of less than 0.1 km³, some of which extend downwind for several tens of km (Heiken, 1978). During later stages of the activity at each vent, silicic lava flows and/or domes formed. Stratigraphic evidence indicates that mafic and silicic eruptions occurred in rapid succession about 1100 to 900 years ago (Julie Donnelly-Nolan and Duane Champion, written commun., 1986; Miller, unpublished data). Most active vents during this period are aligned along north-northwest to north-northeast trending faults or zones of extension and were fed by subsurface dikes (Fink and Follard, 1987). No pyroclastic flows have yet been found associated with Holocene activity in the Medicine Lake region, although eruptions of similar composition and volume at volcanoes in the Three Sisters and Inyo Craters areas of Oregon and California, respectively, produced small pyroclastic flows that traveled several kilometers from their vents (Miller, 1984; Scott, in press).

L-332 (continued)

~~-Volcanic hazards assessment~~

Eruptions of the past 10,000 years form a reasonable basis for assessing hazards from future eruptions. Future eruptions of silicic magma are likely to occur from vents within and just outside of the summit caldera, which is thought to be underlain by a silicic magma chamber (Heiken, 1978; Eichelberger, 1981). If they are like eruptions of Holocene time, they are likely to produce air-fall tephra that could affect areas up to several hundred km downwind and mostly east of the volcano (Christiansen, 1982). Such eruptions may also result in formation of pyroclastic flows that could endanger areas within about 10 km of an active vent. Silicic eruptions are likely to culminate with eruption of dacite to rhyolite lava flows or domes that could extend up to several km from their vents.

Eruptions of even larger volume are considered possible, including a caldera-forming eruption (Christiansen, 1982), because of the likely existence of a moderately large silicic intrusion beneath the Medicine Lake volcano, (Heiken, 1978; Christiansen, 1982), part of which could still be molten. At least two such eruptions, both with volumes of at least several km³, have occurred during the last 1 million yr (Julie Donnelly-Nolan, unpublished data, 1982, cited in Christiansen, 1982). A rhyolitic-dacitic tuff exposed to the north of the volcano is thought to be older than about 700,000 yr (D. Champion, unpublished data, 1982, cited in Christiansen, 1982). An

L-332 (continued)

~~andesitic tuff thought to be about 150,000 or 60,000 to 70,000-yr --~~
old (Donnelly-Nolan and Nolan, 1986) is exposed mostly on the
flanks of the shield as far as 25 km from the presumed source
within the caldera (Julie Donnelly-Nolan, written commun., 1986).
Future eruptions of this type could deposit thick accumulations of
tephra over wide regions and produce pyroclastic flows that could
affect areas more than 50 km from the vent.

Eruptions of basalt to basaltic andesite lava may also occur
from vents on the flanks of the Medicine Lake volcano
(Christiansen, 1982). These may begin by formation of cinder
cones and dispersion of mafic tephra over a wide region up to 15
km or possibly 20 km from an active vent (Miller, unpublished
data) and culminate with the production of lava flows that may
extend for tens of km downslope from a vent (Figs. 4-49, 4-50).

Eruptions of both mafic and silicic magma may be the result
of tectonic events and/or rapid crustal extension and thus may be
dike fed. As a consequence, eruptions of basalt and rhyolite may
occur simultaneously, or closely spaced in time from multiple, and
probably aligned vents.

Owing to the limited relief of the Medicine Lake volcano,
large-volume debris avalanches and laterally directed blasts are
not known to have occurred in the past and are not considered
likely in the future. Due to the absence of permanent snow and
ice, future eruptions are not likely to generate large lahars and
floods, even if eruptions occur when snow covers the ground.

L-333

State of California

The Resources Agency

Memorandum

To : 1. Projects Coordinator
Resources Agency
2. Rick A. Lind
Transmission Agency of Northern California
P.O. Box 660970
Sacramento, CA 95866

Date : March 2 1987

From : Department of Fish and Game

Subject: Draft EIS/EIR, California-Oregon Transmission Project and the Los Banos-Gates Transmission Project, SCH 85040914

The California-Oregon Transmission Project is a proposed 500 kv AC transmission line beginning at a new substation in southern Oregon and ending at Tesla Substation. Several alternative substation locations are being studied in southern Oregon and the Redding, California areas. The Draft EIS/EIR (DEIS/EIR) discusses four route alternatives between southern Oregon and a new substation near Redding, the upgrading of a 230 kv line from Redding to the Sacramento River, and three route alternatives from the river to the Tracy Substation and the Tesla Substation. The length of the preferred alternative is approximately 346 miles.

The Los Banos-Gates Transmission Project is a proposed 500 kv AC transmission line between Los Banos Substation and Gates Substation. The DEIS/EIR discusses two alternative corridors and 12 alternative route segments within the corridors. The length of the preferred alternative is approximately 84 miles.

Department biologists from our Redding, Rancho Cordova, and Fresno offices familiar with the proposed siting of both projects have reviewed the DEIS/DEIR and have developed the following comments.

- A [We believe that the DEIS/EIR for the California-Oregon Transmission Project requires a more complete discussion of project related impacts associated with bald eagle nesting areas, bald eagle winter roost sites, deer winter range, antelope winter range, antelope kidding grounds, and key turkey habitat.
- B [We believe the document should discuss the bald eagle nesting territory near Iron Canyon Reservoir along the Grizzly Peak to Redding Route, the bald eagle winter roost site along Jenny Creek, Siskiyou County along Alternative A, near Copco, and the suspected bald eagle nesting territory immediately south of the Oregon stateline above Dorris along Alternative C.
- C [We suggest that the report discuss project related impacts caused by powerlines crossing deer and antelope winter ranges for the preferred alternative or alternatives A, B, or C. This documentation is limited to TABLE 4.1-1 on page 4.1-2. The effects of loss of habitat on deer winter range or antelope winter range and the adverse impacts associated with the powerline access roads and maintenance roads should be discussed. The document
- D [

A See responses to your specific comments below.

B The Iron Canyon bald eagle nest is 2 miles west of route N-7 Alt.1. The birds forage part of the time at the reservoir, which is within .75 mile of N-7 Alt.1. The eagles here are thought to feed part of the time in the Pit River and its reservoirs (Jackman pers. comm.). It is believed they commute between these areas by traveling south from Iron Gate Reservoir. Collision potential is highest while birds are foraging along the Pit River; potential for collision impacts are not considered significant here, based on analysis of the frequency of use of the river sections near crossings and heights of the transmission lines. This analysis is described in detail in the Biological Assessment prepared for USFWS.

L-333 (continued)

B
(cont.)

The Jenny Creek area has been used as a winter roost area by as many as seven bald eagles (Detrich pers. comm.). This area was studied during two field visits in February and April 1986. No concentrated use by bald eagles was observed during the survey period, but we cannot rule out earlier use. COTP biologists discovered a previously unconfirmed bald eagle nest in the Jenny Creek canyon. The nest was attended by two adults during both visits, but no incubation was observed during this or the subsequent visit. Alternative A, which passed through the Klamath River/Copco Reservoir area was considered to have significant impacts on eagles that could not be easily mitigated to less-than-significant levels. This contributed to the rejection of this alternative.

We received no information on the possible existence of a bald eagle nesting territory near Dorris during numerous discussions with USFS and DFG personnel. Because eagles nesting in this area would be very close to Alternative C, impacts could be significant. This could make the alternative less desirable than described in the Draft EIS/EIR. Nonetheless, the alternative was not selected as the preferred route.

C

These impacts are discussed for all northern alternatives in the Draft EIS/EIR, Volume 1, pages 4.1-20 through 4.1-22. Additional information is provided in Volume 2A, pages 3.5-6 through 3.5-8 and 3.5-17 through 3.5-24.

D

See response to L-333 C. The list of adopted mitigation in Volume 1 of this Final EIS/EIR, Section 1.1.5 includes the mitigation measure stating that new road construction will be minimized in important game winter range. This measure was adopted to ensure that roads needed for access are to be constructed to avoid areas of key winter range whenever possible. Also, existing roads will be used wherever possible and access roads will be constructed to meet the minimum requirements necessary for vehicle access. Mitigation measure E.9 (page 5.1-13 in the Draft EIS/EIR) has been deleted, and measure E.10 in the Draft EIS/EIR has been modified to reflect your concerns.

Complete avoidance of the areas listed in mitigation measure 11 will not always be feasible. The intent meant here is to avoid these areas wherever possible. Many such areas were avoided during the initial route identification process.

We agree that these mitigation measures are not 100 percent effective. However, many private lands already restrict public access and will continue to do so after construction of the COTP. Road closures have been successful on certain federal lands, as evidenced by other cooperative USFS and CDFG closure plans, and we believe they may be feasible locally as mitigation measures.

L-333 (continued)

-2-

D states that the impacts associated with the access and maintenance roads can be adequately mitigated by the mitigation measures under E. Wildlife, numbers 8, 9, 10 and 11 (page 5.1-13). Number 8 states that the project will minimize construction of new roads in important game winter range. This measure may not be feasible since all the alternatives cross deer winter ranges. We do not believe Number 9 (building roads on public or private land and subsequently eliminating unauthorized use) is feasible, nor do we believe Number 10 can be implemented along the preferred alternative north of the Pit River near Pit 7. Numerous private timber companies have tried this approach and have failed. Number 11 appears to be in conflict with the preferred alternative route and the other alternatives A, B, and C because powerline construction will require road construction. Thus, we believe the proposed mitigation measures of avoiding key habitats are infeasible because all alternative routes will pass through key habitats.

E We recommend that the Western Area Power Administration consult with the U.S. Fish and Wildlife Service (USFWS) under Section 7 Consultation Opinion procedures for the project impacts related to the Grizzly Peak to Redding route because of the bald eagle impacts at the Iron Canyon nesting territory. Furthermore, we believe consultation should be explored for the project impacts on Swainson's hawk nesting areas because they are candidate species for Federal listing.

F We recommend that the new powerline should be built adjacent to the existing 500 kv powerline from Malin, Oregon to Round Mountain, California. The right-of-way has already been acquired and no new access roads would be required, which would significantly reduce the adverse secondary impacts of road construction on deer winter ranges, antelope winter ranges and antelope kidding grounds. Furthermore, all the disturbed area and major changes to land use would be concentrated in one area.

G We conclude that Alternative D (the preferred alternative) is the least environmentally damaging alternative. Alternatives A, B, and C would cause far greater adverse environmental impacts and should be eliminated from further consideration. We also support the Roaring Creek Option (N-8 Alternative 3) because it eliminates two crossings of the Pit River where bald eagles nest and forage, thereby avoiding potential eagle collisions. We also support the line corridor that would follow the existing 230 kv line in the Millville Plains area in Shasta County to reduce the amount of roads needed and to reduce the habitat alteration required from a new alignment.

We have reviewed the Generic Mitigation measures listed on pages 5.1-1 through 5.1-7, under A. "Construction Activity Access and Location" and offer the following changes:

D We emphasize that the analysis was general, but also conservative, in that it analyzed effects of road density but not actual disturbance. Traffic volume and subsequent human disturbance, not road density, are what may impact deer. Many key deer winter areas along the preferred alternative have very low levels of human use, and hence disturbance, despite the presence of numerous roads (Ross, pers. comm.).

The COTP is committed to working closely with CDFG and other resource agencies during and following the design phase to: (1) minimize the impacts of the proposed transmission line and access roads, (2) assess the magnitude of impacts that cannot be adequately mitigated through careful design, and (3) develop additional site-specific mitigation where this is necessary (see Section 1.1.5 of Volume 1 of this Final EIS/EIR).

E Western will submit a Biological Assessment to evaluate impacts of the COTP on federally listed threatened and endangered species, as required under Section 7 of the Endangered Species Act. This assessment will address the bald eagle issue at Iron Canyon Reservoir. The Swainson's hawk nesting areas are addressed in the Draft EIS/EIR.

F See response to L-177 A. No right-of-way has been acquired next to the existing Intertie lines for a third line.

G Your preference for Alternative D is noted. With modifications, it remains the preferred route.

H Your preference for N-8 Alt. 3 is noted. This routing option is not preferred by the COTP because it would impact an area of extensive cultural resource sites and because of significant soils impacts. Potential impacts to bald eagles from the Pit River crossings are addressed in detail in the biological assessment, which will be submitted to the U. S. Fish and Wildlife Service.

I Your preference for route segments N-9J, N-9N, and N-9O in the Millville Plains area is noted. This is the preferred route.

L-333 (continued)

-3-

- J [2. The boundaries of construction activities will normally be predetermined with activity confined within those limits. We believe the word "normally" should be deleted so that the statement is more positive.
- K [3. Where blasting is required for access roads or tower footings, debris will be recovered and removed where practical. We believe that a statement concerning blasting restrictions to protect wildlife should be added, such as: No blasting will occur within one mile of a nesting bald eagle, golden eagle, prairie falcon, goshawk, Swainson's hawk, spotted owl, or sandhill crane during their nesting seasons.
- L [We support the rest of the mitigation measures under this section listed on pages 5.1-1 and 5.1-2. We also believe that these measures should, along with our recommended changes, be adopted as conditions of project approval.
- M [We support mitigation measures 1, 4, and 5 under subheading B "Public Safety" (page 5.1-2). Number 1 deals with construction, waste disposal, and vegetative debris disposal. Number 4 deals with California-Oregon Transmission Project participants involved with construction, operation, and maintenance activities that will avoid or minimize depredation of air, land, and water quality. In addition, no toxic material will be released in any lake or water drainage. Number 5 discusses installation of sanitation facilities at personnel and material staging areas.
- N [The first mitigation measure under D. "Landowners and Property" (page 5.1-4) states that livestock or wildlife watering facilities will be repaired or replaced if they are damaged or destroyed by construction activities. We support this mitigation measure.
- O [We support all 9 mitigation measures listed under E. "Physical and Biological Environment" (page 5.1-5) and recommend that they be required as conditions for project approval.
- We believe that many of the Site Specific Mitigation Measures on pages 5.1-7 through 5.1-18 should be modified to be effective mitigation measures for impacts on fish and wildlife.
- A. "Climate and Air Quality"
- P [1. Standard dust control measures (e.g., water spraying) should be implemented as needed during transmission line construction. We have no objections to this mitigation measure. However, in the drier climates available water is limited during drier months and many available water sources are all that the local wildlife populations have. Therefore, water supplies for dust abatement must be covered under a Streambed Alteration Agreement with the Department of Fish and Game as per Section 1603 of the Fish and Game Code.

- J Your change has been incorporated. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.
- K We agree that blasting during nesting season is not desirable. Unexpected blasts would startle the birds, causing them to flush from the nests and possibly injure their eggs or young. Appropriate protection measures will be developed upon consultation with the State Fish and Game Departments and USFWS. Protection distances around nests will be determined on a site specific basis. Factors that will be considered in identifying protection zones include the blast and background noise levels, screening by topography and vegetation, and individual bird's sensitivity to disturbances.
- L Your support for these measures is noted. These measures are adopted as listed in Section 1.1.5 of Volume 1 of this Final EIS/EIR.
- M Your comment is noted. These measures are listed in Section 1.1.5 of Volume 1 of this Final EIS/EIR.
- N Comment noted. This measure is listed in Section 1.1.5 of Volume 1 of this Final EIS/EIR.
- O Comment noted. All of these measures have been adopted and are listed in Section 1.1.5 of Volume 1 of this Final EIS/EIR. Many of the site-specific mitigation measures have been modified and/or will be developed further when detailed design and access road locations are known.
- P A mitigation measure has been added and is summarized as follows: Where applicable, water supplies for dust abatement will be covered under a Streambed Alteration Agreement with the California Department of Fish and Game as per Section 1603 of the State Fish and Game Code when it is necessary to obtain water from nearby streams or water bodies.

L-333 (continued)

-4-

B. Earth Resources

Geologic Hazards

Q [1. We question the feasibility of satisfactorily minimizing cut and fill operations in active slide areas. In order to reduce erosion into streams we recommend that cut and fill operations in active slide areas not be allowed. These types of operations in the past have caused significant erosion and triggered massive land slides.

Mineral Resources

R [1. We believe a statement should be made that these activities may adversely impact fish and wildlife resources.

Soils

S [3. We suggest this addition: Disturbed areas on slopes will be revegetated as soon as possible after construction is completed, and no later than October 15, or as required by land management agencies.

C. Water Resources

T [1. This mitigation measure should be expanded to include a statement that a Streambed Alteration Agreement will be required for all stream and lake crossings whether they are permanent or temporary as per Section 1603 of State Fish and Game Code.

U [We strongly support mitigation measures 2 through 7 under Water Resources and believe they should be required as conditions of project approval to reduce erosion and sedimentation.

D. Vegetation

V [The 4 mitigation measures listed under this section should be required as conditions for project approval to protect and preserve vegetation.

E. Wildlife

W [We support the 13 mitigation measures listed under this section with reservations about number 9 and 10 which promote road closures as workable mitigation measures. Our experience is that they are not feasible. We believe that number 12 should be expanded to include time restrictions to avoid construction activities during the critical breeding seasons for:

X [

Q The COTP is aware of the potential that cut and fill operations have for inducing landslides. However, since it is considered impractical to eliminate all cut and fill operations, they will be minimized in unstable areas to the maximum extent possible by avoiding undercutting slopes, unnecessary vegetation clearing and loading of unstable slopes with fill material, and by using helicopter construction when necessary (see Section 1.1.5 of Volume 1 of this Final EIS/EIR).

R We agree that mining and mineral extraction activities may adversely impact fish and wildlife resources. However, the COTP is not enabling these activities, and impacts from them should be addressed in their respective environmental documents.

S Although October 15 is applicable for a fairly large portion of the COTP area as a date past which revegetation should not be attempted, local variations in climate and topography render this date unsuitable for all areas. In some areas, "dormant" seeding may be preferred or an acceptable alternative. Therefore, the COTP will work closely with land management agencies to establish a specific time line for construction revegetation activities on a site-by-site basis. In many cases, these agencies will establish specific dates or conditions to be met as a condition of permit approval. The mitigation measure referred to has been reworded to reflect this. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.

T A mitigation measure has been added in this Final EIS/EIR and is summarized as follows: A Streambed Alteration Agreement will be obtained where required for all stream and lake crossings on non-federal lands, as per Section 1603 of the California State Fish and Game Code.

It is our understanding that federal lands are not addressed by Section 1603 of the Code because there is a Memorandum of Understanding between the Department and federal agencies which covers activities on federal lands. We will coordinate with the appropriate land management agencies on federal lands.

U We concur with your comment. These are listed in Section 1.1.5 of Volume 1 of this Final EIS/EIR.

V The COTP has adopted these mitigation measures with the intention that they were to be implemented. Unless specifically noted otherwise in the respective decision documents (NOD and ROD) by the lead agencies, the mitigation measures will be implemented. They are listed in Section 1.1.5 of Volume 1 of this Final EIS/EIR.

W Your reservations regarding the effectiveness of road closures as mitigation are noted. See response to L-333 D.

L-333 (continued)

-5-

- X** [Deer fawning June 1-August 1
Antelope kidding May 20-July 1
Bald eagle January 15-August 15
Golden eagle February 1-August 15
Swainson's hawk March 15-August 15
Sandhill cranes March 15-August 15
Deer winter range November 15-April 15
Antelope winter range November 1-April 15
- Y** [In the counties of Glenn, Colusa, Yolo, Solano, and Sacramento, the project would be limited to upgrading existing transmission lines from 230 kv to 500 kv. However, approximately 20 miles of the southernmost portion of the upgraded transmission line will be relocated onto a new and separate right-of-way (Figure 2.1-9). The report's map of the "Affected Environment" (Figure 3.0-7) correctly shows the area of high waterfowl collision potential. Therefore, we recommend Alternative Route A be selected as it avoids most of the potential waterfowl problems.
- Z** [The Los Banos-Gates Transmission Project portion of the DEIS/EIR sufficiently describes existing biological resources and expected project impacts.
- We prefer the East Route alternative since it avoids most habitat for listed and sensitive species. Because this route is primarily within agricultural lands, it would cause only minor biological impacts and little mitigation would be required.
- AA** [If any of the West Route alternatives were selected, significant impacts could occur to wildlife species and their habitats. In addition, the proposed mitigation measures for the West Route alternatives are insufficient to protect fish and wildlife resources. Three main issues are of concern to us.
- BB** [Firstly, in many instances the development of mitigation plans would be delayed until the completion of additional field studies, which would be after the project had already received its necessary permits (Section 8.1, Paragraph 5). At that point in time it would be difficult to incorporate mitigation measures into project construction plans, terms, or conditions.
- CC** [Secondly, most of the mitigation measures contain modifiers such as "if practical", "minimize", "appropriate", and "should", which leave the requirement for and degree of mitigation open to interpretation. The suggested wording below would eliminate this problem.
- DD** [Thirdly, no agency or authority appears to be appointed to review and approve the implementation of the mitigation measures. This responsibility should be delegated in the Final EIS/EIR and should not be delegated solely to the utility responsible for the construction and maintenance of the transmission line.

- X** See Section 1.1.5 of Volume 1 of this Final EIS/EIR. Since the key timeframes may differ between the Central Valley and northern California, and since the Forest Service and California Department of Fish and Game suggested timeframes differ, we will consult with the appropriate agency to determine the limitations on a site-specific basis.
- Y** Your preference for Alternative A south of the Sacramento River crossing in the southern part of the study area is noted. The lead agencies agree that Alternative A would have the least impact to waterfowl; however, it would not totally eliminate the impact and there are other impacts which the lead agencies must also consider, such as impacts to land uses and visual impacts.
- The Draft EIS/EIR, Volume 1, Figure 3.0-7 correctly shows waterfowl collision potential as noted by CDFG. However, the Draft EIS/EIR text is incorrect in the reported mileage of significant collision potential. The correct figures for miles of significant waterfowl collision potential for the southern alternatives are: Alternative A = 10 miles; Alternative B = 17 miles; and Alternative C = 20 miles. These values replace the values in Volume 1, pages 4.1-23 and 4.1-57. The relative magnitude of impacts for alternatives are similar to those in the Draft EIS/EIR and conclusions concerning ranking of alternatives remain the same.
- Z** Comment noted. Both the east and west routes were evaluated for potential environmental impacts. We acknowledge that the west route has some environmental impact; however, when all factors are taken into consideration, it is considered to be the most environmentally preferable for the transmission line route. See the Draft EIS/EIR, Volume 3B, Appendix A for a description of the route selection process. We will be coordinating with CDFG to minimize any potential biological impact.
- AA** Comment noted. See responses to your specific comments below.
- BB** It is necessary to define the impacts of the alignment before site-specific mitigation can be proposed for the COTP impacts. Detailed mitigation for the alignment is premature at this time and we expect the resource agencies would require detailed mitigation be developed in consultation with them and implemented as a condition of permit approval.
- CC** These mitigation measures are proposed by the COTP proponents. As part of the decision on the EIS/EIR, the lead agencies will require these mitigation measures as conditions of COTP approval. Additional mitigation maybe required by the CPUC in conjunction with their issuance of a Certificate of Public Convenience and Necessity (CPCN) for the COTP.
- DD** The responsibility rests with the lead agencies and the CPUC.

L-333 (continued)

-6-

We suggest that the following mitigation measures, with our modifications underlined, be incorporated into the Final EIS/EIR. These measures apply to all alternatives.

- EE [Page 8-1, paragraph 3 - Conduct site specific scoping sessions with the USFWS and DFG as required under State and Federal endangered species acts. Consultation is needed to focus field studies, impact analyses and mitigation assessments.
- FF [Page 8-1, paragraph 5, line 12 - Biologists and archaeologists will accompany crews during the site selection . . .
- GG [Page 8-2, paragraph 1, line 4 - . . . conditions that will be avoided.
- HH [Page 8-3, paragraph 2 - Tower placement will avoid areas where riparian vegetation or other vegetation communities of value occur.
- II [Page 8-6, paragraph 8, line 1 - Avoid construction activities and land surface disturbance . . .
- JJ [Page 8-7, paragraph 5 - Schedule activities to eliminate construction in the specific vicinity of golden eagle nests . . .
- KK [Page 8-7, paragraph 6, line 7 - . . . nesting platforms would be determined in consultation with DFG.
- LL [Page 8-7, paragraph 10 - Whenever possible, shift construction areas (such as conductor pulling and splicing areas and construction yards) to non-wildlife lands.

In conclusion we believe the Final EIS/EIR for the California-Oregon Transmission Project, and the Los Banos-Gates Transmission Project should include additional discussions of project impacts upon and mitigation measures for fish and wildlife resources as we have described. We recommend consultation with USFWS under the Federal Endangered Species Act in which the Department of Fish and Game will cooperate and assist under the State's revised Endangered Species Act.

Thank you for involving us in the early planning of this project and the review of the document. We would be pleased to discuss our suggestions with you further. If you have questions, please contact Mr. A. E. Naylor, Regional Manager, Region 1, 601 Locust Street, Redding, CA 96001 (916) 225-2363; Jim Messersmith, Regional Manager, Region 2, 1701 Nimbus Road, CA 95670, (916) 355-0922; George Nokes, Regional Manager, Region 4, 245 W. Shaw Avenue, Fresno, CA 93710; or Don Lollock, Chief, Environmental Services Division, 1416 Ninth Street, Sacramento, CA 95814, (916) 445-1383.


Jack C. Parnell
Director

cc: Gail Kobetich-USFWS
Dick May-California Trout

- EE See Section 1.1.5 of Volume 1 of this Final EIS/EIR for the COTP's commitment to consult with these agencies. Also see Section 1.3 for your requested change.
- FF While biologists and archaeologists should accompany crews during site selection in sensitive areas, it may not be necessary in all areas (i.e., agricultural land). We suggest the wording is appropriate as it stands.
- GG Avoidance of sensitive areas is our preferred mitigation option. However, we are still in the process of obtaining specific information on the location and condition of these sites. If any biologically sensitive areas will be affected by COTP activities, we will develop site-specific mitigation for the impacts through consultation with the appropriate agencies.
- HH The line will span riparian areas and will not affect any known vegetation communities of value. However, site-specific studies may identify additional sensitive areas we are not aware of at this time. If any valuable vegetation communities would be affected by COTP activities, we will evaluate them on a case-by-case basis, and propose mitigation for any unavoidable impacts after consulting with appropriate agencies.
- II Depending upon the size of the unique plant communities and habitat features, it may not always be possible to avoid construction activities and land surface disturbance in the immediate vicinity. We suggest the wording is appropriate as it stands.
- JJ Wherever possible, we will schedule construction activities (in the vicinity of San Joaquin kit fox dens and golden eagle nests) to avoid disturbance during the breeding seasons. If this is not possible, alternative mitigation plans will be developed in consultation with appropriate agencies. We suggest the wording is appropriate as it stands.
- KK We concur; this comment will be incorporated. See Section 1.3 of Volume 1 of this Final EIS/EIR.
- LL We concur with the intent of this comment, but find the meaning of the term "non-wildlife lands" unclear. We will add "areas of low wildlife value" to the end of this statement. See Section 1.3 of Volume 1 of this Final EIS/EIR.

L-334

ROSEBURG

RESOURCES CO.



ANDERSON DIVISION

March 2, 1987

Environmental Coordinator
California-Oregon Transmission Project
1010 Hurley Way
Sacramento, Ca. 95825

RE: Comment on Draft EIS/EIR

To Whom It May Concern:

Review of the draft document shows some glaring deficiencies in several areas.

A The largest deficiency is the omission from consideration of a far eastern route alternative. A route in the "dry" country, preferably in Nevada, but at least east of the existing 500 kv lines, should have been considered. A route located in this area would impact far less productive timber and agricultural lands. Lands in this area tend to have fewer environmental concerns to be addressed and mitigated. Currently there exists a cleared gasline right-of-way east of the existing 500 kv lines. This route could be utilized with minimal additional impacts to the surrounding lands. Without this consideration the environmental document is inadequate.

B Another major deficiency is the failure of the document to meet the requirements of the Federal Land Policy and Management Act of 1976 (FLPMA). This Act covers use of public domain and national forest land for right-of-way purposes. This act requires that rights-of-way shall be used in common to the extent possible. This is designed to avoid adverse environmental impacts and the proliferation of separate rights-of-way. FLPMA provides that no rights-of-way for power transmission purposes shall be granted on public domain or national forest lands except under and subject to the provisions, limitations and conditions of the act. Until the assessment called for in the act has been made, the Secretary of Agriculture or Interior may not issue a right-of-way. The assessment and conditions are subject to public review and comment also. No such assessment was made in the draft EIS/EIR as required, therefore the document is inadequate.

C NEPA requires that reasonable alternatives be identified, evaluated and compared so adverse environmental impacts can be minimized. In the draft document there are portions of the area between Oregon and the projects' terminus at Tesla, where only one route alternative was considered, N-8C is an example. The DEIS is deficient in its consideration of reasonable, viable, alternative routes.

D The DEIS fails in its adequacy test, because there is no discussion of cumulative effects on watersheds and on the timberland resource base. The California Forest

A See response to T-69 F.

B See response to L-307 P.

C Many route alternatives were analyzed prior to the issuance of the Draft EIS/EIR. The Draft EIS/EIR presented the most feasible routes which "survived" our rigorous analyses. It was not necessary to have more than one alternative in the vicinity of N-8C as the topography and vegetation are relatively uniform. The route was located along section lines to avoid unnecessarily subdividing parcels of land.

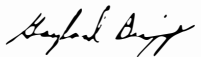
L-334 (continued)

Environmental Coordinator
California-Oregon Transmission Project
Page 2

- D** Practices Act requires that in the preparation of timber harvesting plans, that possible cumulative impacts resulting from proposed activities must be considered. These cumulative impacts include, but are not limited to; surface soil erosion; mass soil movement; soil compaction; chemical or biological properties of soils; water quality; water temperature; suspended sediments; fish and wildlife and their habitats; recreation; aesthetics; archeological resources and rare, threatened or endangered species of plants or animals and their habitats. There is no discussion of cumulative effects to timberlands or timber resources or any other landscape or vegetative type in the DEIS, therefore the document is inadequate.
- E** There are some significant resource mapping errors in the DEIS. These errors were pointed out to TANC at previous public hearings. If these types of substantial errors were used to select a preferred route, the process becomes suspect when the information upon which selections were made is faulty. It is of double concern, if faulty information was the basis for rejecting possible alternative routes.
- F** The DEIS is inadequate and misleading in its economic analysis. There is a pervasive trend to consistently understate project costs and overstate project benefits.
- The analysis does not consider the real cost of compensation for right-of-way acquisition, particularly in timberland, therefore the costs have been underestimated and the benefits overstated.
- G** The DEIS contains data about the amount of firm capacity that is available for sale in the Northwest that is inconsistent with testimony by BPA. In fact BPA testimony states, by the mid 1990's, when this project is due to go on line, there may be little or no uncommitted capacity. The prices for Northwest power have been unrealistically understated to justify the project. BPA is on record stating in its most recent rate case that it will charge 75% of the decremental cost of the lowest California utility. The economic justification and discussion in the DEIS are very weak. The project must be paid for by the difference in price between energy and capacity that might be acquired from the Pacific Northwest and the cost of providing or purchasing energy from this region. In the economic analysis the DEIS has systematically and pervasively overstated the project benefits and understated project costs to the point where the projections are not realistic or believable.
- H**
- D** The issues referenced in the comment are addressed in the Draft EIS/EIR in Volume 1, Section 4, and in Volume 2A, Phase III Data and Impact Analysis Report. Also, see the revised Section 1.1.4 of Volume 1 of this Final EIS/EIR. It should be noted that the cumulative impacts section for a project of this scope would not address the cumulative timber-related impacts to the same level as that of an environmental document for a specific timber harvesting project. See also response to L-309 MM.
- E** The commentor does not provide sufficient information to resolve or address the concern raised. Mr. Brigg's testimony at the Redding public hearing (see T-109) was reviewed but revealed no information on mapping errors. See also response to T-81 B.
- F** See responses to L-309 W part 11 and L-309 MM.
- G** See response to L-3 T.
- H** The comment contains mixed statements on capacity and energy and arrives at the incorrect conclusion that the Draft EIS/EIR has misstated costs and benefits. See Appendix B of Volume 3A of the Draft EIS/EIR for an explanation of the distinct benefits of capacity and energy purchases from the Northwest for delivery over the COTP. See also response to L-309 W.

For the above reasons the DEIS is inadequate and does not conform or meet the intent or requirements of NEPA or CEQA.

Celerity yours,


Gaylord Briggs
Chief Forester - California

L-335

G.H. BOWERS ENGINEERING
Consultations on Power System Planning

1930 North 122nd Street • Seattle, Washington 98133

Telephone: (206) 361-0461

February 26, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 560970
Sacramento, CA 95866

Re: Comments on Draft EIS/EIR

Dear Sir:

- A** Your report offers no financial justification for why the tie must be expanded from 6300 MW to 7900 MW in order to transmit a prospective capacity sale of a mere 3150 MW. This, however, is to be expected since there is no justification for this whopper of an assumption. There will be no substantial gain or loss to the PNW or PSW if the 6300 MW tie is used for potential capacity sales rather than a larger tie. The inclusion of capacity benefits in the project's economic analysis is totally unwarranted, and grossly misleads the reader by inflating reported benefit-cost ratios by up to 476 percent. Readers of the report should not be lured into inferring that this is a nebulous issue; it isn't. None of the alleged capacity benefits from the COTP have any merit.
- B** Monthly and hourly analyses of the potential energy benefits due to the COTP are essential to the project's economics and should have been made clear. For example, studies done by Bonneville Power Administration on streamflows in the Northwest clearly show that virtually no nonfirm energy will be available for sale over an enlarged tie during the August 1 to December 31 period. In one out of every three years, on average, the COTP will result in virtually no additional energy deliveries whatsoever. Of all the potential nonfirm energy from the COTP, less than 20 percent of it will be delivered to California in the summer. Generally, when surplus from the Northwest is available, it will be available in such huge quantities that it will require night delivery, if the bulk of it is to be delivered. During daily peak hours, the Northwest will often not have 7900 MW of capacity with which to generate nonfirm energy for the COTP, even when the energy is available. Studies by Bonneville also show that, at most, the average energy delivered due to an enlarged tie line would be 140 MW. The energy deliveries shown on Table 7-2 of the EIS erroneously report that twice this much energy will be delivered due to the COTP.
- C** It should also be noted that the Northwest's alternative to selling nonfirm energy is, most often, the reduction of output from costly coal-fired generating plants. In some cases the Northwest will be able to shut down its nuclear plants for extended periods. Rarely or never will the lack of the COTP cause spilled water in the Northwest.
- D** Due to its high production costs, transmission costs, and transmission losses, energy from the COTP will be economically beneficial to California only to the extent that costly oil or gas units are displaceable. Unfortunately, the large majority of potential energy from the COTP will be available in off-peak months and/or off-peak hours, making most of the meager amount of energy available from the COTP of no use to California.

A See response to L-3 T.

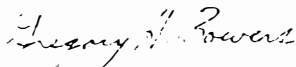
B The economic analysis supporting the EIS/EIR accounts for seasonal variation in both Northwest energy availability and in the ability of the California market to absorb such energy. The model used in the analysis thus recognizes that some of the periods when California's needs for nonfirm energy are the greatest coincide with periods during which Northwest energy availability is relatively low. The model also recognizes that market restrictions exist at various periods requiring rejection of available Northwest surpluses. Despite these considerations, the economic analysis shows that sufficient absorption of Northwest surpluses that the net present value of the benefits to the COTP exceed net present costs. Regarding the comment that the COTP economic analysis shows greater Northwest energy availability than does the BPA analysis, please see response to L-306 R1.

C The source of the generation in the Northwest would not affect the benefit/cost ratios of the COTP, as the sales price is determined based on the value of avoided gas fired generation in California, which will be higher than the cost to the Pacific Northwest utilities to generate such energy. See response to L-3 T.

L-335 (continued)

- D** The COTP EIS over states potential energy deliveries, apparently fails to fully consider the hourly and monthly shape of the potential deliveries, and assumes a new emphasis on oil/gas generating resources in future utility planning. These practices lead the COTP EIS to calculate energy benefits which are up to triple those calculated by Bonneville, and which are, overall, several hundred percent overstated.
- E** Though the EIS doesn't analyze or include financial benefits from sources other than firm capacity and energy, it does state on page 1, paragraph 1, of the summary that "These projects would provide... greater resource diversity, and enhance transmission reliability." These allegations do not apply to the COTP. Receiving 8000 MW of nonfirm energy from the Northwest instead of 6000 MW is not diversification, but rather an increase in reliance on one large point source. This does not increase reliability. Also, since often when one AC line is loaded the other AC lines will also be loaded, the installation of a new power corridor often doubles the chance of sudden power losses due to failure along a corridor.
- F** If the COTP was expanding the Intertie from 4000 MW to 5600 MW (as the Government Accounting Office recommended), the potential deliveries over COTP would be about two and one-half times greater and the value of resources displaced in the SW would also be of significantly higher value. However, with the tie already undergoing expansion to its optimum, the proposal causes only large financial losses as well as environmental damage.
- G** Since the ratepayers should not have to bear the needless expenditure of 0.7 billion dollars, I urge DOE and TANC to immediately stop their efforts to advance this project.

Sincerely,



Gregory H. Bowers, P.E.

D See response to L-335 B.

E The greater resource diversity is provided because the new line will bring, as one example, more Columbia River hydroelectric resources to several COTP Participants that have, heretofore, been limited in their ability to tap these resources. To do this reliably requires a new transmission line that meets the criteria of the Western Systems Coordinating Council. The Northwest, with its large number of utilities, is not considered a point source. There are four 500 kV lines into the Malin-Southern Oregon area, and, with the COTP, will be three out to the South. The COTP is being designed to increase the reliability of the overall western U. S. power system by, as one means, locating a route some distance from the two lines of the existing AC Intertie.

F The COTP is indeed expanding the AC Intertie capability by the stated 1600 MW (5600 - 4000 = 1600). The analysis has concluded that the DC Intertie expansion as well as the COTP are economically justified. The comment presents several figures without giving the backup data or the method of calculation. There is no basis for the statement that the tie is already being expanded to its optimum.

G Comment noted. See response to L-335 B.

L-336

WRITTEN COMMENT FORM
FOR THE DRAFT EIS/EIR
FOR THE
CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be mailed by February 3, 1987. Thank you.

1/6/87

Dear Sir:

- A [I would like to voice my opposition
to the N-9P the Alternatives Section.
- B [The action proposed by the project
at a place where wild ducks & geese
are nesting. There is a pond
in the Delmarish Lake, which
incorporates some 45 acres of protected
ponds. This would create a tragic
disaster in bad weather, when the fly in.
- C [This is some of the best
and most beautiful agricultural land
in the north state and it would
be tragic to lose it.

A Your opposition to route segment N-9P is noted. This is not part of the preferred route.

B Comment noted. Route N-9P is not part of the preferred route.

C Comment noted. See response to L-27 D.

Hearing Date: _____

Location: _____

Name/Address: _____

Phil Schuler
7739 Buena Vista Dr.
Cottonwood Calif. 96022

Mail to: _____

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866
(916) 924-3995

916-365-8404

L-337

COUNTY OF SHASTA
PLANNING DEPARTMENT

JOE E. HUNTER, DIRECTOR
1855 PLACER ST.
REDDING, CA 96001
PHONE 916 245 5532

February 27, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95836

Subject: DOE/EIS-0128

Dear Sir:

Shasta County has reviewed the draft Environmental Impact Report for the California-Oregon Transmission Project; in particular, areas that are within Shasta County, proposed for construction of new 500kv transmission lines.

A Our comments are that the EIR document is inadequate because it fails to assess the transmission route alternative recommended by the Shasta County Planning Department in a letter to Ms. Laura Edlin, Public Affairs Director, dated November 7, 1985. This would place the line near the location of the existing PG&E gas line route, and would follow the hills along the west side of the Fall River Valley. The dominant vegetation for much of this area is sage brush and junipers. Timber production in this area is not considered prime because of the presence of lava formations in the area. It appears that the overall impacts from locating the line to the east would lessen the impacts listed in the draft EIR for the currently proposed route. Impacts such as loss of prime timberland, short term construction impacts on steep slopes, remote access areas requiring new roads, valuable wildlife habitat associated with the Pit River Canyon and impacts to the most sensitive area of Shasta County concerning cultural resources, would be avoided or lessened.

Technical comments concerning the proposed route in the Big Bend area are as follows:

- B
1. Soil and Geology - This area is dominated by steep slope terrain with Aiken Series soils, hazard of erosion is moderate to high on slopes greater than 15%. It is recommended that construction activities such as road building be limited to May 1 through October 31 season and that all disturbed areas are stabilize utilizing standard erosion control methods.
- C
2. Natural Resource - The dominate resource for this is timber production. Registered Professional Foresters should monitor or supervise the construction activities in timbered areas to minimize long term impacts to the timber resource.

A The route suggested by the Shasta County Planning Department is addressed in the Draft EIS/EIR, Volume 2A, page 2.4-9. The route would require a crossing of the existing AC Intertie, a non-feasible condition as described in the Draft EIS/EIR, Volume 2A, page 2.4-4.

B Comment noted. The commentor's concern is addressed in Section 1.1.5 of Volume 1 of this Final EIS/EIR. The intent of this mitigation measure is to identify specific problem areas, and work with agencies to develop effective site-specific mitigation measures. Much of this area with steep slopes is Forest Service land where the Best Management Practices regarding road building of the Forest Service will be followed.

C We concur that it is important that construction inspectors have knowledge of construction practices in forested areas. It is not our intention to require that construction inspectors also be registered professional foresters. We would prefer to specify in the construction contract that inspectors have certain levels of experience.

L-337 (continued)

D [3. Fire Safety - This area of Shasta County is in the extreme fire hazard area. Fire safety regulation from the California Division of Forestry/Shasta County Fire Department should be adhered to during phases of construction.

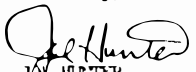
E [4. Cultural Resources - This region of Shasta County is one of the most sensitive cultural resource areas. A professional archaeologist should be present during ground disturbing construction activities as well as a Native American observer. Archaeologist should be authorized to stop work if cultural resources are encountered until construction alternatives can be analyzed.

Comments concerning the Cottonwood area proposed route and environmental impact are as follows:

F [The Cottonwood area is the most urbanized area the transmission route will impact in Shasta County. Urban services such as public water and sewer currently exist in the Cottonwood area. Alternative routes proposed for the Cottonwood area have been studied by Shasta County Planning staff with environmental impacts considered. The conclusion reached by staff is that route N-90 that parallels the existing 230kv lines is the preferred alternative from an environmental standpoint. With this route, the crossing of the Sacramento River and disruption of residential and agricultural land use patterns is expanded to include a larger area. This route is considered more desirable than introducing a transmission line into areas void of such structures and associated impacts.

Please contact Bill Ramsdell at (916) 225-5540 if questions or comments arise concerning these comments on the environmental document.

Sincerely,


J. W. HUNTER
Planning Director

WR/lcc

cc: Bob Bosworth, Supervisor District 2
Abe Hathaway, Supervisor District 4
Pete Peters, Supervisor District 5

D The Project will comply with all applicable federal, state, and local laws, rules, and regulations pertaining to fire safety. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.

E Section 1.1.5 in Volume 1 of this Final EIS/EIR discusses measures the Project proposes for protection of cultural resources. These include notification of appropriate officials if cultural resources are discovered during construction. The Western Area Power Administration, the Transmission Agency of Northern California, the California and Oregon State Historic Preservation officers, and the Advisory Council on Historic Preservation have signed a Memorandum of Agreement stipulating that construction work will halt at a specific location if previously undiscovered archaeological sites are encountered during construction at that location.

F Route N-90 is part of the preferred route.

WRITTEN COMMENT FORM
FOR THE DRAFT EIS/EIR
FOR THE
CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-CAYO TRANSMISSION PROJECT

If you have comments on the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be mailed by ~~February 22, 1988~~ 3-3-87. Thank you.

A This is in protest of the proposed electrical transmission lines N-9D*. I was
B present at the 1-7-87 meeting where the Staff were neither helpful or
C interested in answering questions by the public - it appeared that they were
D merely "showing up" as required, but that a decision had already been made to
E proceed where they had already intended to go. Somewhat autocratic, and
F definitely not in the interest of private landowners who will be subjected to
G damage to their property. I was able to finally obtain a copy of the proposal
H to scan in 1-87. The proposal inadequately takes into consideration the
I fragile ecology of this area - there is a thin layer of soil that is highly
J susceptible to erosion in this area. The question of health hazards of high
electrical lines at full load was not explored for either livestock or humans
that have to reside under and near the lines. Needless to say, if the lines
and towers are placed along the preferred route there will be a clear cut of
50-100 year old oak trees that will not be replaced. Additionally, it has
been evident that no reseeding has occurred under the existing lines to the
east of the proposed line, so I should expect that there will be no reseeding
in the area. The proposed line N-9D* will not only be an eyesore from my
property and property adjoining mine, but will definitely devalue the land
price forever. On 1-28-87 the California Energy Commission in Sacramento
made a public statement that there was not a demonstrated need for additional
power lines in California, now or in the future, with the exception of in the
San Diego area. It does not make sense to build a costly, ecologically
disaster connection Venture (that taxpayers are going to pay for in the end)
when there is no need for it. Further the Shasta Co. Board of Supervisors
has voted that the proposed route is unsatisfactory and suggested a route to
the eastern portion of Shasta Co. Further, there is significant data to
indicate that there will not be sufficient power from the Oregon/Washington
areas to continue to supply the line. That's all we need are dead lines that
will not be removed to complete a picture of EIS/EIR mismanagement.

I would suggest that the N-9G* route be utilized if this project is approved.

Hearing Date: 1-7-87

Location: Round Mountain, Calif.

Name/Address: H.A. Hoopingarner, 14610 Oak Run Road
Oak Run, California 96069

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866
(916) 924-3995

A Your opposition to the N-9D route is noted. The January 7, 1987
meeting referred to was a formal public hearing during which
comments on the Draft EIS/EIR were recorded (see Volume 3 of the
this Final EIS/EIR for testimony). Questions were answered
informally by the COTP staff after the hearing. The decision on
the location of the line is not final until the state lead agency
(TANC) issues a Notice of Determination and the federal lead
agency (Western) issues a Record of Decision.

B The Draft EIS/EIR recognizes that arid land soils are much slower
to form and much more difficult to replace than are soils where
humus and decomposable matter is abundant. These soils also
retain scars and the evidence of man's activities much longer
than soils which are relatively quick (geologically speaking) to
recover. For this reason, mitigation has been adopted which
requires excavation, storage, and reuse of top soil to minimize
burial and erosion, and to facilitate revegetation.

Many of the mitigation measures discussed in Section 1.1.5 of
Volume 1 of this Final EIS/EIR are specifically proposed to
minimize erosion problems.

C Studies on livestock have been conducted in Oregon (BPA), Ohio
(Power Siting Commission), Indiana (Purdue University), and in
many laboratory studies. None have shown harmful effects to any
livestock from power lines, some of which have a higher operating
voltage (765 - 1,200 kV) than the COTP.

For a discussion of human health effects, see response to
L-330 F3 and Section 1.2.3 in Volume 1 of this Final EIS/EIR.

D The Project has adopted a right-of-way vegetation management
program which would result in the selective removal of individual
trees based on the need for conductor clearance. A clear cut
will not be created. See Section 1.1.5 of Volume 1 of this Final
EIS/EIR.

E A mitigation measure in Section 1.1.5 of the Final EIS/EIR
addresses this concern through the rehabilitation, replacement of
top soil, and reseeding of disturbed areas.

L-339 (continued)

- F** The comment does not present sufficient detail to allow an examination of its accuracy. It appears that the comment is referring to the CEC's report ER-6. In ER-6, the CEC did not say that there was not a need for additional power lines. Instead, the CEC said that they did not see an immediate need for additional power plants. See response to L-278 C for additional discussion of the CEC report.
- G** See response to L-278 C.
- H** See response to L-337 A.
- I** See response to L-3 T.
- J** Your support for route segment N-9G is noted. This is part of the preferred route.

L-340

February 26, 1987

To Whom It May Concern:

- A It has become increasingly apparent as this routing process continues that in an effort to expedite the construction of the new intertie many decisions have been made which compromise the original intent of the program.

It is commonly known, i.e. the sixth electricity report from the California Energy Commission (Charles Imbrecht), Senate bill 1970 passed by both houses and signed by Governor Deukmejian in 1986, that California has a sufficient supply of power for the present and into the future with the possible exception of the San Diego area.

- B The Presidential Commission which recommended the formation of regional coordinating councils, such as the Western Systems Coordinating Council, would no doubt desire the placement of the new intertie to have more separation than the proposed preferred alternative.

- C The John Cross Proposal which realigns the existing two lines to the East and uses the existing corridor for the new line would give much more reliability and safety for the entire power grid.

- D The John Cross Proposal also fulfills the requirements of Article 2 section 1240.030 of the Standard California Codes which states under "ACQUISITION FOR PROPOSED PROJECT." "The power of eminent domain may be exercised to acquire property for a proposed project only if all of the following are established:

- (a) The public interest and necessity require the project.
- (b) THE PROJECT IS PLANNED OR LOCATED IN THE MANNER THAT WILL BE MOST COMPATIBLE WITH THE GREATEST PUBLIC GOOD AND THE LEAST PRIVATE INJURY.
- (c) The property sought to be acquired is necessary for the project."

The public good and the separation and reliability criteria will best be fulfilled by routing the line along the John Cross Proposal.

Michael Byrne
Rt. 1, Box 246 AA
Tulelake, Calif. 96134

- A As noted in response to L-278 C, the (1986) California Energy Commission Electricity Report does not conclude that there is a lack of need for additional resources in California. The CEC report acknowledges the value of new resources, specifically including additional purchases from the Northwest. The COTP is proposed to provide a means by which to deliver more purchases from the Northwest.

- B The establishment of regional coordination councils, although precipitated by the New York City blackout in the early 1960's, was done as a voluntary electric utility industry answer to a nation-wide problem. Reliability concerns are addressed by coordinated planning and operation of the country's electric power systems. Separation from the existing AC Intertie is a concern of the COTP.

- C The John Cross Alternative (Copic Bay Option) would provide additional separation for the transmission lines in the Newell area and would provide some degree of additional reliability. The studies completed by the Project indicate sufficient additional reliability for the specific Tulelake area in question is obtained when the lines are separated by 2,000 feet. This separation is maintained with the preferred route discussed in the Draft EIS/EIR. See response to L-330 H.

- D Comment noted.



Santa Fe Pacific Timber Company

February 27, 1987

COMMENTS ON CALIFORNIA-OREGON TRANSMISSION PROJECT

- A** 1) The proposed project will have a devastating effect on the forest resources of Northern California. The preferred route described by the Transmission Agency of Northern California traverses approximately 50 miles of very high quality forest land. The right-of-way, when cleared, will remove 24 acres of land from production for each mile that the line traverses. The irreplaceability of this resource has not been given adequate treatment in the environmental documents.
- B** 2) The effect of clearing 24 acres per mile of line has the same impact as a clearcut or new road construction of that same acreage. This will result in an effect on the adjoining forest lands in that the owner will be encumbered by the limiting impact on his ability to harvest his land, based on the cumulative watershed effects. This effect has not been treated in the environmental documents.
- C** 3) The economic justification of the project is very deficient. One premise that the proponents have used is that there is a surplus of power in the Bonneville Power Administration. However, the Bonneville Power Administration has issued a report which indicates that the surplus will disappear by the mid 1990's, or about the time that the subject project is due to come on line. Further, BPA rates will be going up steadily, in fact, since the COTP was proposed the Bonneville rates have gone up some 240%.
- D** 4) Another flaw in the concept of the California-Oregon Transmission Project is that prediction that the price of oil will be over double the current price, making COTP an attractive alternative to oil-fired power plants. In fact, proven experts are forecasting drastically lower increases in the price of oil than the prices used in the economic justification for the power line.

- A** The Draft EIS/EIR noted that the impacts to prime forest lands would be significant even after application of mitigation measures.

In addition, Section 4.d in Volume 1 of the Draft EIS/EIR noted that 2,070 acres of prime and non-prime forest land would be subject to an irreversible commitment of resources.

- B** See response to SL-100 S.

- C** See response to L-3 T.

- D** The forecasts in the Draft EIS/EIR are based on the forecasts of a number of nationally recognized economics firms. The broad range of oil and gas price forecasts used, by definition will include forecasts which could be considered "too high" as well as forecasts which could be considered "too low." The purpose of the forecast range is to test the impact of fuel prices on COTP economics. See also the responses to L-309 BB, L-306 C), and L-307 Y.

L-341 (continued)

E 5) Perhaps the most serious flaw in the entire proposal is the failure of TANC to identify the most logical and environmentally sound alternative route, which is the one to the east of the existing 500,000 volt intertie line, following in a southerly direction from the California-Oregon border to near Julia Glover Flat. At that point the new line would divert over to the existing gas line that traverses from Canada to the San Francisco Bay Area. The proposed project would follow along the gas line right-of-way until it reaches a point easterly of Cottonwood, where it would swing west and tie into the necessary switching facility at Olinda.

This latter alternative has been previously suggested by others, most notably, Harold Walt, Chairman of the California Board of Forestry.

In conclusion, the proposed California-Oregon Transmission Project will have serious environmental effects, which have been either not addressed, or inadequately mitigated in the environmental documents. The economics of project are highly suspect and the proponents failed to identify the most feasible alternative route.

J. B. Nile
J. B. Nile

E See response to L-337 A. A similar route was also suggested by the Shasta County Planning Department.



February 28, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Re: Draft EIS/EIR COT Project

Dear Coordinator:

Save Our Streams has urged that the COT Project be assessed as an alternative to the proliferation of run-of-river (ROR) hydro projects in California. Despite the size of the Draft, I find that it does not meet objective standards for decision makers or reviewers.

Henry Kissinger has remarked that when the bureaucracy wishes to manipulate foreign policy decision makers, it presents three choices: (1) nuclear war; (2) unconditional surrender; and (3) what the bureaucracy wants. This Draft is precisely that range of choices. This fallacy of limited choices is compounded by the composition of the California lead agency as a single-purpose agency to build the COT Project. As Carl Rogers remarked, "If the only tool you have is a hammer, you see every problem as a nail."

The alternative of parallel routing would clearly produce less impacts, yet this is dismissed by the bogeyman of "risk", the hysteric phobia of electrical engineers. Systems are built to reliability standards of one day in ten years, while individual customers get disrupted far more frequently than that by such mishaps as storms and vehicle collisions with electrical facilities. One major outage of the Intertie with which I am familiar (the multiple tower blowdown) resulted in rolling brownouts for about four hours, perhaps due to Edison's skill in responding to the circumstance. This is hardly the catastrophe with which the Draft threatens its readers. Under CEQA, an environmentally preferred alternative may not be dismissed on the ground that it will not attain all the goals of a project. The parallel siting risks should be assessed in a scientific probabilistic manner so that the reviewer may assess these risks against the preparer's preferred choice. One can agree that

It is not clear what additional "choices" are desired by the commentor. The Draft EIS/EIR considers alternatives to the Project in Volume 1, Section 2.5. For a discussion of economics of the alternatives see Section 10, Appendix B, Volume 3A of the Draft EIS/EIR. Also see the responses to the balance of this letter for discussions of specific aspects of those alternatives.

A simultaneous three-line outage of the northern part of the intertie would result in a catastrophic outage as is documented in the Power System Studies Committee's "Comparison of Northern Corridors" and "Corridor Separation" reports. The reliability of the intertie system is not only a concern of the technical planners but also of many public leaders (Corridor Separation Report, Attachment 2a). Paralleling the AC Intertie is not the environmentally preferred alternative because it is not considered as a feasible alternative meeting a fundamental objective of the COTP, that of increasing the reliability of the Western U. S. power system. It is acknowledged that such a route adjacent to the AC Intertie would have environmental benefits.

A technical evaluation of the risk of a three-line outage of the intertie is contained in the Power System Studies Committee's "Comparison of Northern Corridors" and "Corridor Separation" reports and Sargent & Lundy's "Centerline Separation Reliability Analysis 500-kV Transmission Lines."

L-342 (continued)

C SOS' Comments on COT Project Page 2

systemwide prolonged blackouts should be prevented, without being driven by paranoia into the bureaucratic preference, especially one with increased potential for environmental impacts.

D Economic costs and benefits of parallel siting should be assessed in detail, including cost of reliability reduction.

E Project economics are particularly misleading. Full credit is assigned for capacity vs. combustion turbines, when in fact Northern California has no capacity needs over the next decade. The fact that municipal utilities consider CTs an alternative to high demand charges does not indicate a need for capacity; it does indicate that a review of demand charges may be appropriate.

F Fossil plant heat rates used in the economic analysis are obsolete. State of the art combined cycle plants use 7500 Btu/kwh and current CTs carry specs of 9000 Btu/kwh at sea level and 76 F. This poisons the entire economic

G analysis. Similarly, dismissing the refurbishment alternative as "more expensive" is an example of what Nigel Calder calls the "schizoid neurotic etcetera syndrome." The numeric data should be furnished to support any such conclusion. Predictions of California demand and energy should be updated to comply with Electricity Report VI. Figures based on utility submittals are misleading.

I Projections of natural gas escalation are markedly higher than those of the Energy Information Administration, in particular the so-called "weak OPEC" scenario, which could lead to flat fossil prices in constant dollars for a number of years. I suggest that CEC figures be adopted, in the absence of a clear showing that they are erroneous. In the end, no one can predict the future; the more distant the prediction, the greater becomes the unreliability of the

J prediction. The size of this project will create an irreversible huge flow of human resources, energy, capital and labor, which will preclude their availability for alternate use. Energy inputs to the Project should be quantified, including energy content of materials. Energy payback may be assessed as a mitigation. A delay alternative to avoid this commitment must be soundly assessed. The Appendix B, Section 6.6, "Demand Charges for Northwest Capacity" is gobbledygook, in plain English, and further poisons the integrity of the economic analysis.

K
L
M The alleged environmental benefit of reduced fossil dispatch in California (App. B, Sec. 7.1) should be quantified and balanced by an assessment of the extent to

D The alternative of parallel siting of a third AC line is discussed at pages 2.5-7 through 2.5-9 of Volume 1 of the Draft EIS/EIR. This qualitative analysis is sufficient for this alternative because a preliminary review of the alternative shows it to be infeasible. There is no realistic prospect that additional analyses would reverse that conclusion.

The comment correctly notes that under some circumstances the reliability of the system with a third parallel AC line is less than the existing system. It is for this reason the line is proposed to be separated from the existing AC intertie lines to the extent practical and necessary.

E The life of the Project extends well beyond the next decade. Construction of the Project on schedule provides benefits by taking advantage of Northwest surplus firm energy in early years and displacing capacity resource construction and operation to differing degrees throughout the Project life. See response to L-3 T. For a discussion of California capacity needs versus needs of Northern California municipal utilities see the response to L-306 02. For a discussion of projected needs for additional oil and gas generation see responses to L-306 11, L-306 12, and L-306 N2.

F The model used in the COTP economic analysis is not very sensitive to incremental heat rates and tends to understate use of combustion turbine capacity. Therefore, the value of displaced capacity attributable to the Project is expected to be greater than indicated in the status presented in Volume 3A, Appendix B of the Draft EIS/EIR. See the response to L-306 R3.

G The Draft EIS/EIR economic analysis assumes over 5,200 MW of refurbishments between 1992 and 2002. This exceeds the amount the Energy Commission deems likely to be available.

H The analysis in the Draft EIS/EIR incorporated and updated the CFM-V filings. The results are similar to the ER-6 report. For more details see the responses to L-306 12, L-306 K2, and L-306 L2.

I For a comparison of the Energy Commission fossil fuel prices to those in the Draft EIS/EIR analyses see the responses to L-306 C3 and L-307 Y.

J Construction of any capital improvement will create a flow of resources that are precluded from use on another project at the same time. The irreversible/irretrievable commitments of resources for the projects are assessed in Section 4.8, Volume 1 of the Draft EIS/EIR. The COTP will not result in a "huge" flow of such resources. Projected peak workload requirements are for about 350 workers (192 workers from southern Oregon to Redding

L-342 (continued)

J
(cont.)

and 157 workers from Redding to the southern terminus). We have assumed, due to the fairly specialized nature of this work, that about 10 percent of the workers in the northern area (i.e. 19 workers) and 20 percent of the workers in the Southern area (i.e. 31 workers) would be local. In 1985, Siskiyou, Shasta and Modoc Counties had unemployment rates of 15.0, 13.0 and 10.6 percent, respectively; with construction labor forces of 425, 2,400, and 75 workers, respectively. Although Siskiyou and Modoc Counties have a small construction work force the number of workers required for this project is not "huge".

The capital for a project of this nature might be classified as a "huge" amount. However, the costs will be dispersed among a large group of rate payers. Whether the cost is justified in relation to the benefit received from the project is addressed in the Volume 3A, Appendix B of the Draft EIS/EIR.

K

It is not clear what "commitment" would be avoided by a "delay alternative." Delaying the Project would delay but not avoid the required "flow of human resources, energy, capital and labor. A delay would also cause loss of economic benefits in early years. The comment does not suggest any increased benefits or decreased costs to be analyzed.

L

The comment does not provide sufficient information to allow clarification about what S.O.S. does not understand. More information is available in responses to L-306 OI, L-306 U3, L-306 X3, and L-309 KK.

M

The comparative operation and installation of thermal power projects (and other resources including conservation) is addressed in the BPA IDU EIS. For a summary of this issue see the discussions labeled Generation Mix and New Resource Development at pages S-4 and S-5 of the IDU EIS. This summary states, in part, "[b]oth existing hydro and coal plants [in the Northwest] would show only slight increases in operating levels . . ." The environmental effects of such slight increases are discussed in other sections of that EIS.

L-342 (continued)

NOS' Comments on COT Project Page 3

M which imported electricity would be derived from coal plants in the PNW. My understanding of the BPA Access Policy is that it will greatly increase private utility marginal dispatch of thermal plants, primarily coal. This would violate California policy against "exporting pollution".

N The Draft significantly understates the opportunity for fuel switching in California, particularly residential space heating, water heaters, clothes dryers, and stoves. Our studies of fuel switching under utility-subsidized programs indicate vast opportunities within California. From the standpoint of the Second Law of Thermodynamics, these are incredibly wasteful and inefficient uses of electricity. Electricity is an extremely high quality source of energy; using it for low quality end uses such as space heating is like cutting butter with a chain saw, to borrow from Amory Lovins. Commitment of utility resources to the COT project would preclude application of these resources to subsidized fuel switching programs. Our CEC BR-V submittal found that fuel switching was not sufficiently cost effective from the consumer standpoint that it would occur without subsidy. However, from both the utility standpoint and the societal standpoint, full cost subsidies for switching from electricity to either natural gas or propane represented an extremely favorable cost-benefit ratio. Failure of this Draft's economics to be specific precludes my detailed comparison.

O App. B, Table 6-3 assigns 3030 MW in capacity benefits to the COT Project. This is misleading, as it assumes contractual capacity which does not exist. Further, it claims credit for the DC upgrade. Capacity benefits of the COT project could be 1600 MW, if contractual capacity can be obtained. While the FORA model is theoretically correct, it does not reflect actual dispatch. QFs with Standard Offer (SO) 4 receive preferential (non-economic) dispatch at all times except to avoid hydro spills by the California utilities. PG&E's geothermal steam contracts require it to purchase steam unless Diablo Canyon is shut down. Thus, PG&E and SCE may be precluded not only from purchasing PNW power by this QF preference; PG&E may actually have to follow load with Diablo Canyon. I suggest you use CEC ELFIN simulations to compute dispatch, as these are adjusted for contracts.

P The amount of incremental PNW energy available for export via the COT Project does not appear in the Draft. We strongly suspect that the Draft is computing energy benefits from the DC upgrade, rather than incremental benefits of the COT Project. BPA Draft EIS Intertie Development and Use, Table 4.2.3 shows 213 AMW sales attributable to COT Project in 1992; however, after subtracting the DC upgrade (161 AMW)

Q

N Commitment of utility resources to cost-effective projects such as the one proposed do not preclude commitment of other resources of participating utilities to subsidy programs if those programs are cost-effective. Completion of the Project is not expected to avoid all new resource construction in California and therefore some higher cost resources will still exist against which to make decisions on potential subsidy programs for fuel switching.

To the extent fuel switching has been determined to be a cost-effective program for utilities, it is included in the resource plans of the participating utilities. It is not included in the economic analysis because any such subsidy programs which are planned are anticipated to be unaffected by completion of the Project.

O The 3030 MW referenced in this comment as capacity benefit of the Project is presumably the difference between the amount shown in line 12 of Table 6-3 in Appendix B of Volume 3A of the Draft EIS/EIR for all years other than 1985 and the amount shown in that line for 1985. The increase in intertie capacity is identified in footnote 3 to that table as including the DC upgrade and the AC upgrade. That is, the difference is not attributable solely to the Project. Footnote 3 also points out that the number in line 12 does not represent the quantity of firm purchases on the intertie and directs the reader to footnote 5. Footnote 5 explains the amount of capacity purchases actually assumed for each year. The increase in firm capacity purchased assumed from 1985 to 1991 and later is 1582 MW (3650 MW - 2068 MW). This amount relates to all increases in line capacity including the Project, the DC upgrade and the AC upgrade. The purpose of Table 6-3 is to compare total firm resources available to California with the peak demand in the medium load forecast. Accordingly, neither the amount in line 12 nor the amount included as firm capacity purchase from the Northwest is specific to the benefits of the Project. The specific amounts of capacity benefits assumed for the Project under alternative scenarios are shown in footnotes 3, 4, and 5 to Table 9-1 of Appendix B. The actual assumptions range from 600 MW to 1490 MW and never exceed the 1600 MW suggested in the comment.

The FORA model is adequate for the analyses in the Draft EIS/EIR. Even if the relative dispatch order of some QFs and geothermal is too high with respect to Diablo Canyon, there would

L-342 (continued)

O
(cont.)

be no effect on Northwest purchases because all three of these resources are dispatched ahead of Northwest purchases. Changing this dispatch order would not affect the ability of California to economically import energy from the Northwest. Net Project benefits would be unaffected.

P

The amount of energy projected to be available from the Northwest under average hydro conditions is shown in Table 6-11 of Appendix B to the Draft EIS/EIR. The amount of energy assumed to be incrementally purchased by California as a result of the Project under one set of assumptions is shown on Table 7-2. Benefits do not include energy benefits of the DC upgrade or the AC uprate.

Q

The BPA IDU Draft EIS shows 117 average MW or 1025 GWH of incremental secondary energy sales to California as a result of the Project. For a discussion of differences in assumptions between the IDU Draft EIS and the Draft EIS/EIR see the response to L-306 R1. The differences between Table 7-2 of Appendix B to the Draft EIS/EIR and Table 4.2.3 in the BPA IDU Draft EIS result from different assumptions, not from inclusion of the benefits of the DC upgrade in Table 7-2.

L-342 (continued)

SOS' Comments on COT Project Page 4

Q from the maximum 278 aMW, 117 aMW results, translating to 1025 GWh. Taking a thumbnail PNW differential of 10 mills/kwh, this would save \$10.25 million. The figures used in App. B, Table 7.2 wildly inflate this benefit by including the DC upgrade energy. Since I was unable to locate a detailed reference to the preparer's methodology in computing net present value, I "thumbnailed" it with a zero discount rate and divided the NPV figures on Table 9.3, App. B, by 10. The result of \$77.5 million means that the PNW differential would have to approximate 76 mills/kwh to attain this benefit. (Since discounted distant future benefits contribute little to NPV, either the preparers are living in a different universe or my math is wildly wrong.) I suspect that the benefits incorrectly attribute the energy benefits of the DC upgrade as an incremental benefit of the COT Project.

S It may be possible to increase the amount of PNW surplus energy by encouraging PNW conservation, a "bid-away" strategy advocated by the Natural Resources Defense Council, among others. It is not reasonable to ignore the cost of "bid-away" in the economics of the COT project. It may be also possible to increase the PNW surplus by encouraging Third Party Producers in that region. For example, the lumber and paper industries of the PNW have a large potential for biomass fired cogeneration. The development of such potential could contribute to cleaner burning than present "teepee burner" disposal of waste, and would additionally increase regional fuel diversity, as well as contributing to the mills' ability to compete with Canadian mills. However, one BPA access scenario indicated 700 MW in small hydro could occur. To the extent that this is retrofit hydro, this could be desirable. However, if this is run-of-river hydro on virgin streams, we view this as analogous to exporting pollution. Save Our Streams does not want these projects in California, and we don't want them in the PNW. They are contrary to fuel diversity and have a huge potential for cumulative impacts. A preferable scenario would be coupling existing PNW hydro with wind, particularly in Wyoming. Diversifying wind siting is the only way to enhance the reliability of this resource. Wind farms are ugly and should not be sited in scenic areas nor in areas with high wildlife value.

V The next indirect impact on which we seek your response is the 186 unconstructed California run-of-river hydro projects presently holding signed contracts, which are our organization's primary focus. If the COT project proceeds as an alternative to development of these projects, it could provide capacity benefits which these projects would not. If the ROR projects are built, about one-half their annual

R Because the Net Present Value of Energy Benefits in Table 9.3 is unrelated to the 1025 GWh in the comment, there is no foundation for the suggestion that a benefit of 76 mills/kwh must be assumed to approximate the result in the Draft EIS/EIR.

The benefits of incremental energy imported by California over the COTP were calculated using an extensive probabilistic analysis of fuel prices, load growth, and hydro conditions. This analysis is explained in pages 55 through 66, page 77 through 80, and page 108 through 114 of Appendix B to the Draft EIS/EIR. The discount rates applied in the analyses are explained in Section 9.7, Sensitivity to Discount Rates, page 94 (facing page to Table 9-3) of Appendix B to the Draft EIS/EIR.

S Whether it is possible to have additional cost effective programs such as those suggested in the comment is not a subject of the Draft EIS/EIR. If, after appropriate environmental review, such programs were adopted they might improve Project economics. The cost of the "bid-away" would be part of the cost-benefit analysis associated with developing the conservation or other program, not part of the Project cost.

T Your opposition to new small hydro development is noted.

U Comment noted.

V The analyses in the Draft EIS/EIR assumes that the Project will not displace QF development in California. As noted in the response to comment L-342 O, QFs are dispatched ahead of purchases, so no displacement of their operation is assumed after construction.

In regard to the snowmelt issue, the economic analysis of the Project included power production cost modeling of the California utilities combined systems. Analyses were performed using

L-342 (continued)

SOS' Comments on COT Project Page 5

- V** output will occur in the 6-week snowmelt period, which is when the PNW surplus also peaks. Please assess overlap of snowmelt peaks between the regions and assess the priority of the ROR projects as reducing the ability of California to utilize PNW surplus energy as a result. Assess the buy-out options for PG&E and SCE to increase their benefits of participating in the COT project. These ROR projects comprise approximately 900 MW of nonfirm capacity, and are generally scaled to operate at about 27% capacity factor.
- W** The next hydro issue on which we seek a response is PG&E's transmission constraint area of 1150 MW in northern California. Of the previous 900 MW, approximately 300 MW does not have priority to the grid, and we are not assessing it as LTBA. Would the COT project increase access to the grid for these projects by relieving this constraint?
- X** A major socioeconomic issue ignored in the Draft is the relation between the municipal utilities and the investor-owned utilities (IOUs). Apparently, the COT alliance is something of a dance of the scorpions whereby the owners of the existing Intertie have been forced to cooperate with some of their resale customers. What would impacts be on customers' rates within the resale areas of the COT Project? Would this tend to increase rates within the residual IOUs? Please assess as an alternative modification of demand charges by the IOUs to the resale customers.
- Y** Please assess the economic ideology of municipal utilities as socialism and the compatibility of this with our general preference toward free enterprise. Assess any preferences that the municipal utilities may have in access to PNW power over IOUs, and whether this is fair to customers of the IOUs as well as taxpayers who contributed toward the BPA. Assess conservation plans of all utilities and whether the COT project is compatible with further conservation. A number of the municipal utilities have declining block rates, which are contrary to PURPA. The IOUs have a discounted lifeline rate for electric space heating, which discourages fuel switching to gas. Please assess this. Please assess municipal utilities exemption from taxation as contributing to lower rates, which reduces incentives to conserve, and increase consumption. Some of the members of TANC have the highest per capita electrical usage in California. Will their participation in the COT Project increase their customers' propensity to consume by holding down rates?
- EE** In spite of the size of the Draft, it is an "action-forcing" advocacy document to convince the reader that the only real choice is the preparers' preferred option. Economic benefits are inflated to a gross extent. The Final EIS/EIR should be edited by skilled writers of plain English

- V (cont.)** average, adverse and heavy water year hydrologic conditions in California and the Pacific Northwest. Therefore the amount of energy estimated to be delivered over the COTP takes into consideration the "overlap" of snowmelt seasons. The energy generation by the existing and anticipated California Qualifying Facility run-of-the-river hydroelectric projects is included in this production model and is assumed to be dispatched before purchases from the Pacific Northwest. Substantial delivery of PNW region power is still anticipated after dispatching the Qualifying Facility power as shown in the analysis in Volume 3A of the Draft EIS/EIR.
- W** The purpose of the COTP is to expand the bi-directional capability of the Pacific Northwest-Pacific Southwest Intertie transmission system and the need to maintain and increase the reliability of the existing system. The additional transmission capability between the Pacific Northwest and California will therefore provide for additional delivery of power between the two regions. The COTP is not expected to influence transmission constraints which exist on PGandE's transmission facilities at 230 kV voltage levels and below. The COTP is anticipated to be used to deliver capacity and energy at costs lower than the cost of oil/gas fired capacity and energy in California. It is unlikely that the Qualifying Facility projects to which this comment refers will produce power at a cost competitive with that from the Northwest, therefore the COTP is not likely to provide additional transmission access for projects presently encountering transmission constraints.
- X** See response to L-306 N2, L-306 O2, L-306 T2, L-307 A, L-307 Z, and L-307 BB part 6, which address this issue.
- Y** Discussion of the "economic ideology" of Project participants is not relevant to the Draft EIS/EIR.
- Z** Whether the municipal utilities have a preference in access to PNW power is not a subject for the Draft EIS/EIR. The Draft EIS/EIR economic analysis addresses statewide benefits and not relative benefits among participants.
- AA** See response to L-3 S.
- BB** The specific rate practices of individual participants are not relevant to the Draft EIS/EIR. To the extent that charges in these practices may increase or decrease future energy or capacity loads, that impact is incorporated in the analyses by use of high, medium, and low load growth scenarios for California loads.
- CC** See response to L-307 III.
- DD** See response to L-342 BB.
- EE** Comment noted.

L-342 (continued)

SOS' Comments on COT Project Page 6

EE] to avoid the bureaucratic prose of this Draft. (These comments are not exemplary. This writer has reviewed so many such documents that my English is hopelessly infected with similar flaws.)

FF] We do not need more electricity. We can be energy sufficient with much less electricity. We are not bound to any one scenario for an electrical future. Preparers of energy assessments should always bear in mind the First Law of Ecology, "Everything is connected to everything else," and Hardin's Corollary, "You can't do just one thing."

GG] As an alternative to ROR hydro, the COT project makes some sense. ROR hydro will reduce the potential for California benefits from the COT project. To the extent that the COT project may promote PNW ROR hydro, including the Peace River C project, we shall seriously oppose it. If those potential impacts can be avoided, contractually or as a condition of project approval, we shall anxiously await receipt of the Final EIS/EIR. Thank you for the opportunity to comment.

Very truly yours,

J.V. Henry
Agency Affairs Coordinator

FF] Comment noted. See responses to L-306 G2 through L-306 L2 for a discussion of utility resource plans.

GG] Comment noted.

L-343



February 28, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca. 95866

Dear Sir:

The California Licensed Foresters Association is an organization of 420 professional foresters, licensed by the State of California to practice forestry on non-federal lands throughout the State. As professionals, we are naturally concerned about any project which impacts the productivity of California's forests. As such, we would like to submit to you the following comments concerning the Draft Environmental Impact Statement/Environmental Impact Report for the California-Oregon Transmission Project:

- A** [1) The proposed project will have a devastating effect on the forest resources of Northern California. The preferred route described by the Transmission Agency of Northern California traverses approximately 50 miles of very high quality forest land. The right-of-way, when cleared, will remove 24 acres of land from production for each mile that the line traverses. The irreplaceability of this resource has not been given adequate treatment in the environmental documents.
- B** [2) The effect of clearing 24 acres per mile of line has the same impact as a clearcut or new road construction of that same acreage. This will result in an effect on the adjoining forest lands, in that the owner's ability to harvest his land may be reduced, based on the potential cumulative watershed effects, as well as the general limitations on harvesting adjacent to this right-of-way. This effect has not been treated in the environmental documents.
- C** [3) The economic justification of the project is very deficient. One premise that the proponents have used is that there is a surplus of power in the Bonneville Power Administration. However, the Bonneville Power Administration has issued a report which indicates that the surplus will disappear by the mid 1990's, or about the time that the subject project is due to come on line. Further, BPA rates will be going up steadily, in fact, since the COTP was proposed the Bonneville rates have gone up some 240%.

A See response to L-341 A.

B See response to SL-100 S.

C See response to L-3 T.

P.O. Box 1516, Pioneer, California 95666 (209) 293-7323

L-343 (continued)

Environmental Coordinator
California-Oregon Transmission Project
February 28, 1987
Page 2.

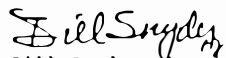
- D [4) Another flaw in the concept of the California-Oregon Transmission Project is the prediction that the price of oil will be over double the current price, making COTP an attractive alternative to oil-fired power plants. In fact, proven experts are forecasting drastically lower increases in the price of oil than the prices used in the economic justification for the power line.
- E [5) Perhaps the most serious flaw in the entire proposal is the failure of TANC to identify the most logical and environmentally sound alternative route, which is the one to the east of the existing 500,000 volt intertie line, following in a southerly direction from the California-Oregon border to near Julia Glover Flat. At that point the new line would divert over to the existing gas line that traverses from Canada to the San Francisco Bay Area. The proposed project would follow along the gas line right-of-way until it reaches a point easterly of Cottonwood, where it would swing west and tie into the necessary switching facility at Olinda.

This latter alternative has been previously suggested by others, most notably, Harold Walt, Chairman of the California Board of Forestry.

In conclusion, the proposed California-Oregon Transmission Project will have serious environmental effects which have been either ignored or inadequately mitigated in the environmental documents. The economics of the project are highly suspect, and the Agency has failed to identify the most feasible alternative route.

Thank you for the opportunity to comment on this environmental document.

Sincerely yours,



Bill Snyder, President
California Licensed Foresters Association
RPF #1760

D See response to L-341 D.

E See response to L-341 E.

L-344

STATE OF CALIFORNIA THE PUBLIC UTILITIES COMMISSION

OFFICE OF THE ATTORNEY GENERAL

CALIFORNIA ENERGY COMMISSION

CHARLES R. IMPRECHT
Chairman



(916) 324-3326

March 2, 1987

Mr. James W. Beck, Chairman
Transmission Agency of Northern California
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

RE: COMMENTS ON THE CALIFORNIA-OREGON TRANSMISSION PROJECT
DRAFT EIS/EIR

Dear Chairman Beck: Jim

Thank you for the opportunity to comment on the DEIS/EIR for the California Oregon Transmission Project. As you well know, the CEC has had an active on-going interest in the development of this project. The Governor and the CEC understand the serious importance of the project, given the large potential for benefits to both Pacific Northwest and California ratepayers and utilities from increased inter-regional electricity transactions. I am, however, concerned with the adequacy of the draft report in properly evaluating the costs and benefits of the transmission project. Fundamentally, the credibility of our joint three and one-half year effort in this regard must be jealously protected which is the reason for the following comments.

A [The scope of my concerns pertains to the lack of adequate information that is needed to evaluate the conclusions presented in the report. The purpose of the DEIS/EIR is to provide a fully disclosed document of the facts, assumptions and analysis used in the environmental assessment of the project. Disclosure in an environmental report is necessary to provide the public with the opportunity to make thorough evaluations of the content and final conclusions of the environmental analysis. At this time, it appears that many of the facts, assumptions and analysis methods have not been made available in the draft report.

B [From our initial review of the conclusions in the DEIS/EIR, the report appears to present an unrealistic characterization of California's electricity market. By using inappropriate assumptions for the analysis presented in the report, the actual merits

A [In response to the comment on availability of data and assumptions, the data used in the Draft EIS/EIR economic analysis are shown in the report in Appendix B of Volume 3A. The only information not included is the detail of the resource plans used in the high, medium, and low load scenarios. The base case plans were developed from CFM-6 load and resource plan submittals prepared by the state's investor-owned and public utilities. The high and low case plans incorporate additional capacity or defer construction of new resources as required to meet each utility's target reserve margin. The operating characteristics of individual existing and future generating units as well as the data files used are available for review at the Project Manager's office. See also the response to L-309 II.

B [The economic analysis used the FORA model to determine future energy production by resource categories as well as the amount of energy that would be absorbed from the Northwest. These categories are shown on Page 23 of the Appendix where the model is described. The output for each scenario shown in the Draft

L-344 (continued)

Mr. James W. Beck
March 2, 1987
Page 2

B of the project may be over or understated at the expense of California ratepayers and utilities. However, without the detailed documentation of the technical inputs to the analysis in the report, it is impossible for the CEC to make an informed evaluation of the DEIS/EIR findings. Given the size and importance of the transmission line, it is essential that any decision on the proposal be deferred until an environmental document is developed that accurately and fairly assesses the impacts of the project and its alternatives.

The following discussion provides additional detail addressing our concerns:

C o The CEC requests that all input assumptions and the models' inputs as well as modeling techniques used in the report be provided for public review and comment.

Many of the conclusions regarding environmental impacts and economic benefits set forth in the DEIS/EIR are based on computer modeling. All of the models are driven by assumptions embedded in the programs as well as assumptions provided as specific inputs to the programs, which in turn drive the conclusions that emerge from the models. Accordingly, it is not possible to consider the accuracy of the conclusions set forth in the DEIS/EIR without access to the assumptions of the programs. Nevertheless, the report does not fully disclose these assumptions. Thus, it is not possible for the CEC to comment upon the accuracy of the data inputs or internal consistency of the models. In order to achieve that end, the methods must be fully described and the associated studies and data used in reaching those conclusions must be disclosed.

D o The report presents an unrealistic characterization of the California electricity market in the modeling assumptions which consequently will affect the benefits of the COTP.

The report does not provide detailed analysis of the numerous unresolved issues which have a direct bearing on the use and economics of surplus energy from the Pacific Northwest (PNW), and thereby the final need of the COTP. In addition, the report may contain overly optimistic assumptions for evaluating the benefits of the project to California. Several of these issues include:

E

- the impact of BPA's Intertie Access;
- price uncertainty for PNW sites under BPA's rate structure;

B
(cont.) EIS/EIR is available for review at the office of the Project Manager's consultant. FORA is a proprietary model of Energy Management Associates designed originally for estimating oil inventory requirements under uncertainty about load, resources, and fuel availability. The manual and program code are available for review at EMA offices in Santa Clara to any party who signs EMA's standard confidentiality agreement. We understand that CEC staff has signed this agreement in the past in connection with other simulation models, although no requests to review the model assumptions and work papers has been received from the CEC staff to date in regard to the COTP analysis.

The energy outputs were combined with the analysis of capacity benefits using numerous worksheets developed on an IBM PC. These work papers show the step-by-step development of the costs and credits applied to the COTP. Pertinent sections of these detailed work papers have been and continue to be available for review at the office of the Project Manager's consultant.

C See response to L-344 B.

D In regard to the comment on characterization of the California electricity market, the Southern California Edison resource model and the FORA model are a well suited means of evaluating economic dispatch, final price, and energy transactions for the broad range of scenarios evaluated. As explained in the response to comment L-306 UU, the prices for Pacific Northwest energy prices to California compares well to the CEC forecast of such prices in the CEC 1986 Electricity Report (ER86). The range of load forecasts for the state bracket the CEC's load forecasts in ER86. See the responses to comments L-306 UU, 306 VV, 306 XX and 306 ZZ for further clarification of the relationship between price and availability of Pacific Northwest power.

E With regard to the suggestion of disaggregating analyses of the COTP for the investor owned utility (IOU) and municipal utility costs and benefits, the analysis was purposely aggregated on a statewide basis to enable the analysis of the benefits on a cumulative basis. Furthermore, this approach releases the potential problem of needing to reconcile the individual

L-344 (continued)

Mr. James W. Beck
March 2, 1987
Page 3

- E
- need to disaggregate analysis of the project for investor owned utility (IOU) and municipal utility costs and benefits;
 - surplus generation and competition from the Southwest;
 - use of load and resource forecasts which are inconsistent with the CEC's assessment of the future electricity market;
 - inaccurate characterization of the California resources in competition with PNW surplus energy.

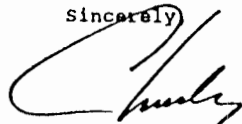
F

The CEC is mandated by State law to determine the future energy resource needs of California and to license new electric generation facilities to meet that need. CEC planning activities and coordinated planning with California electric utilities forms the basis for resource development in the state. It is important that the analysis of environmental and economic impacts of the COTP reflect these planning perspectives.

I want to emphasize that both the CEC and the Administration are strongly committed to the success of the COTP as we have been from the outset. To ensure success, we believe that the issues addressed above must be consistent with adopted state regulatory policy in order to minimize the changes of collateral attack in regulatory or judicial forums.

I recognize the tremendous amount of effort that has gone into the development of the COTP and the preparation of the DEIS/EIR. I believe, however, that some additional disclosure and analysis of the assessment of environmental and economic impacts must be conducted to ensure ratepayer interests are adequately considered. I commend your diligence in preparing the DEIS/EIR and encourage you to take that extra step. My staff is prepared to work with you in addressing the issues we have outlined above.

Sincerely,



CHARLES R. IMBRECHT
Chairman

cc: David G. Coleman, Area Manager
Western Area Power Administration

E (cont.)

utilities' planning assumptions and methods which would be needed if the individual utilities' systems were disaggregated. The approach was undertaken based on procedures, methods, and assumptions encouraged by the California Public Utilities Commission (CPUC) in the scoping phase of preparation of the Draft EIS/EIR. Specific analysis of the IOUs' use of the COTP will be allowed on a disaggregated basis when the CPUC considers the IOUs' application for Certification of Public Convenience and Necessity for participation in the COTP.

Generation and competition from the Southwest is specifically considered in the model used in the Draft EIS/EIR to evaluate the COTP. Transmission capability between the Southwest and California were specifically evaluated and considered in the model.

The load and resource forecasts used in the Draft EIS/EIR evaluation of the COTP used a range of load and resource forecasts as explained in detail in Appendix B to Volume 3A of the Draft EIS/EIR. The load forecasts used in the Draft EIS/EIR bracket the CEC 1986 Electricity Report as shown in Figures 1.1.1-2 and 1.1.1-3 showing comparative demand and energy forecasts, respectively, are presented in Section 1.1.1 of Volume 1 of this Final EIS/EIR. As Figure 1.1.1-2 indicates, the medium case peak demand used in the Draft EIS/EIR is nearly identical to the CEC forecast through 1997 and only approximately 4 percent higher than the CEC forecast by the year 2000. The Draft EIS/EIR California energy forecast range is not inconsistent with the CEC's ER-6 energy forecasts.

F

See also responses to your specific comments in L-344 A through L-344 E.

L-345

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca. 95866

February 28, 1987

The following is a synopsis of impacts the N10H/5 route and the N10H route will have on National Forest lands on the McCloud District. Also included are general comments on your written EIS/EIR. I am sorry to see the N10H/5 alternative selected as your preferred alternative. N10H/5 has significant negative impacts on the archeological, visual, recreational, and geological features of the Giant Crater Lava Tube System (GCLTS). The access roads created across this unroaded area will have negative impacts on the black bear and mule deer population in the GCLTS. In addition, N10H/5 removes critical old growth habitat for three pairs of spotted owls and one pair of goshawks, as well as the old growth habitat required to meet Forest Service Minimum Management Requirements along Deadhorse Ridge.

A GIANT CRATER LAVA TUBE SYSTEM

The Giant Crater Lava Tube System (GCLTS) is recommended for classification as a Geologic Area in the Medicine Lake Unit Plan. The Shasta-Trinity Draft LMP includes the 18 mile GCLTS in the Porcupine Butte Management Area. Management goals are to "Protect, maintain, and interpret the unique geologic features of this area." Supplemental management direction includes the GCLTS as "classified special interest areas pursuant to Title 36, Code of Federal Regulations, Section 294.1 (a) and vested in the Regional Forester by the Chief, Forest Service, upon approval of the Shasta-Trinity National Forests' Plan."

N10H/5:

Impacts five miles of the most scenic and geologically significant portion of the GCLTS. Crosses over three known lava cave networks including water caves, one of the three most important networks. A road constructed adjacent to the power line will destroy the geologic features of this area. This area of the GCLTS also has a high density of prehistoric archeological sites.

N10H:

Impacts two miles of the least significant portion of the GCLTS. Intersects one known lava cave network which is not highly significant.

B POWDER HILL ROAD

The Powder Hill road is designated in the Medicine Lake Unit Plan as a Level 1 road (Forest visitors have a major concern for scenic quality of all areas seen from the primary travel route) with visual quality objectives of retention (...provides for management activities which are not visually evident to the Forest viewer...[or] must appear to be part of the natural landscape). The Draft Shasta-Trinity LMP designates the road as retention and partial retention (...permits management activities which are visually evident, but remain subordinate in the characteristic landscape.)

N10H/5:

This route crosses the Powder Hill road twice. The north crossing is through one of the most scenic view areas on the district. The transmission line would be highly visible and dominate the landscape

A Comment noted. This information has been incorporated into the Final EIS/EIR, Section 1.2.3.

B Comment noted. See response to L-295 O. This information was considered during the analysis of the environmentally superior alternative.

L-345 (continued)

B in the GCLTS which is viewed from this road. Both crossings would also have long sight distances from the Powder Hill road due to the flat topography.

NOTE:

This route does not cross any National Forest roads with visual quality objectives. Both routes cross Highway 89.

C TIMBER
Timber comparisons were determined for National Forest Lands impacted on the McCloud Ranger District. Site 1 and 2 standing inventory is estimated at 32 MBF/acre. Site 3, 4, and 5 standing inventory is estimated at 8 MBF/acre.

NOTE 1/5:

Impacts 26.25 miles (636 acres) total. 15 miles (364 acres) are site 1 and 2. 7.25 miles (176 acres) are site 3-5. 4 miles (97 acres) are on unsuitable land.

NOTE 2:

Impacts 9.75 miles (236 acres) total. 4.9 miles (119 acres) are site 1 and 2. 2.75 miles (67 acres) are site 3-5. 2.1 miles (51 acres) are unsuitable land.

SENSITIVE PLANTS AND ANIMALS

NOTE 1/5:

Deadhorse Ridge, T. 40 N., R. 2 E., supports one nesting pair of Spotted Owls (not in a designated territory), one designated Goshawk Territory, several populations of Trillium ovatum spp. oettingeri (a sensitive plant), and all old growth designated to be left for diversity under the Cub Timber Sale Environmental Assessment. This route will remove the best of the remaining old growth, including the area where the Spotted Owls and the Goshawks nest. The sensitive plants would have to be avoided when the line is located on the ground.

F There should be no effect on the Algoma Spotted Owl Territory (MC-9) if the line remains below the south half of section 9, T. 39 N., R. 1 E.

G This route will intersect the headwaters of Deer Creek where a pair of spotted owls have been sighted regularly. This area is immediately adjacent to the Butcherknife Spotted Owl Territory (MC-6) and will probably be included in any management plan for that territory.

H The Mica Spotted Owl Territory (MC-2) will be dissected by this route. This territory has only 880 acres of old growth habitat remaining and can not afford any further reductions.

NOTE:

A sensitive plant, Calochortus longebarbatus, exists in the Sand Flat Well compartment (T. 40 N., R. 2-3 E.) and would have to be avoided when the line is located on the ground. There are pronghorn antelope and elk sightings along the existing transmission line within the Sand Flat compartment. An adjacent transmission line corridor, without a road along it, may increase the habitat available to both of these harvest species, thus helping to establish populations of these species on the McCloud Ranger District.

C Comment noted. This information was considered during the analysis and selection of the environmentally superior alternative.

D If the spotted owl territory is not designated as a network territory by USFS, it will presumably be harvested during future timber management operations. Thus, impacts to the spotted owl caused by the COTP cannot be considered significant.

USFS direction calls for protection of 50-100 acres of old growth habitat for network goshawk territories. The selected alternative consists of a 1,500-foot wide corridor. The route will be a 200-foot wide right-of-way within this corridor. Because the corridor centerline runs along the boundary of National Forest and private land, the selected route could be placed totally on private land. This would presumably avoid impacts to the goshawk on USFS land (unless part of the essential habitat is on private land). Even if the route must cross USFS land, the 50-100 Ac. Goshawk area can be avoided by careful route location.

No designated old growth stands were shown in this area on the original map given to us by personnel at the McCloud Ranger District. We have subsequently received this information and considered it in the evaluation of routing options discussed in the Supplement to the Draft EIS/EIR. We believe that impacts to the old growth, the goshawk, and possibly the spotted owl can be resolved during the Project design phase. Necessary protection measures will be included in the USFS special use permit.

E All sensitive (i.e., special-status) plants will be avoided during siting, based on detailed field surveys during spring 1987 and 1988.

F Comment noted.

G See response to L-295 MM.

L-345 (continued)

- H Old growth habitat removal within this territory is identified as a potentially significant impact. As stated within the Draft EIS/EIR, the Project is committed to routing the line within the territory to avoid impacts.
- I See response to L-345 E.
- J Comment noted regarding the potential benefits of clearing in providing foraging habitat. An access road would not prevent establishment of pronghorn or elk from otherwise suitable habitat.

L-345 (continued)

K [This route should not impact the Summit Spotted Owl Territory (HC-10)
as long as the route remains south of the National Forest Lands in
sections 30 and 31, T. 22 N., R. 2 E. Alternative route N7H2 would
L [avoid both pairs of spotted owls in the Deer Creek and Little Meadows
area.



Kathleen Toner
534 Adams Drive
Mt. Shasta, Ca. 96067

K Comment noted.

L Comment noted.

L-345 (continued)

COMMENTS ON THE DRAFT EIS/EIR FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT
by Kathleen Toner
534 Adams Drive
Mt. Shasta, Ca. 96067

	<u>PAGE LOCATION</u>	<u>COMMENT</u>
M	1.1-2, 2.5-7-8	Speaks of the need for separation yet McCloud RD is the only area where separation five miles or greater occurs.
N	Fig. 3.0-1	11-4G shows endangered aquatic species area. If this is for Redband trout then Tate, Raccoon and Bull Creeks should also show up. Two goshawk territories are missing - may be overshadowed by spotted owl territories.
P	Fig. 3.0-2	There are no USFS designated spotted owl territories on Dead Horse Ridge or Summit. These are locations of breeding non-matrix spotted owls and locations of goshawk territories (which don't show up). If Redband Trout are included as endangered fish then the designation should show up on Raccoon, Bull, Trout, Tate, Sheepheaven and Swamp Creeks. The Butcherknife Spotted Owl Territory, 11C-6, is not shown.
Q	Fig. 3.0-3	The Dead Horse Ridge and Summit spotted owl territories are not designated matrix territories. They are locations of breeding spotted owls and are designated goshawk territories. Two other goshawk territories are not shown which are north of Dead Horse Ridge.
R	3.1-22	Alternatives A,B, and C affect Redband Trout in Edson Creek and Tate Creek and possibly Trout Creek. Alternative D affects Redband Trout in Raccoon, Bull and Tate Creek.
S	Table 3.5-2 & 3	Vol. 2A Doesn't include spotted owl or goshawk.
T	3.1-27 4th C	The route corridor also supports breeding non-matrix spotted owls.
U	3.1-27 5th C	The Grizzly Peak to Redding Route impacts an area of many spotted owl sightings in Deer Creek which may be included in the Butcherknife Territory management plan. The route also impacts prime bear habitat.
V	4.1-16 2nd C	There are three streams crossed which contain Redband Trout (Raccoon, Bull and Tate Creeks).
W	4.1-19-22	Mitigation measures need to be strong enough to insure sensitive plant, sensitive animal and old growth locations are avoided.
X	4.1-28	Visual impacts along the Powder Hill road in the Giant Crater Lava Flow area could be mitigated by routing the line south a few miles through

M	See response to L-177 A. Other forested areas, such as the Flat Woods, have other terrain restraints that prevent further separation while remaining economic.
N	See response L-295 II.
O	See response to L-295 JJ.
P	Inadvertently, all spotted owl territory locations were shown in Figure 3.0-1 as network territories. However, we recognized this difference during evaluating the significance of impacts. See responses to L-345 D and L-295 KK.
Q	See response to L-295 LL.
R	See response to L-295 MM.
S	See responses to L-295 KK and L-345 P.
T	See responses to L-345 D and L-295 OO.
U	See response to L-295 II, L-295 LL, and L-295 TT.
V	In the Draft EIS/EIR only federally or state listed threatened or endangered species or federal candidates for listing were defined as special-status species. USFS Sensitive and CDFG species of special concern were designated as sensitive species.
W	Non-network spotted owl territories on National Forests were not given extensive treatment because they will probably be eliminated by USFS management in the near future.
X	See response to L-295 MM.
Y	See response to L-295 WW.
Z	See response to L-295 II.
AA	Mitigation measures D.2, E.1, and E.7 (Draft EIS/EIR, Volume 1, Section 5.0, pages 5.1-12 and 13) address avoidance of sensitive plant, animal, and old growth habitats.
BB	Comment noted. The North 2 new routing option addressed in the Supplement to the Draft EIS/EIR addresses your concern.

L-345 (continued)

- BB** [the Porcupine Butte and Harbome area. This was suggested by the McCloud Ranger District but no evaluation occurs in the EIS/EIR.
- CC** [4.1-39 Why does the McCloud RD alternatives not show up as an option? Alternative N7H2 would have a lot less impact on spotted owls, old growth and prime timber land than N-7 Alt.1.
- DD** [4.1-44 N7H2 does not impact HC-2, N7 Alt.1 impacts HC-2 and the Deer Creek area which supports spotted owls and may be included in the Butcherknife management plan.
- EE** [5.1-11 #2 Can herbicides be used on National Forest lands?
- FF** [5.1-13 #8 Minimize road construction and use road closures in areas important to bear i.e. lava flows and steeper country. Close all roads possible in summer or winter range.
- GG** [7.1- 14-26 No mention of McCloud RD in agency contact list.
- HH** [I never make any assessment of the alternative route the McCloud District proposed that is between N10 Alt. 5 and N10H-2. Or a route 2,000 feet from the existing line.
- II** [3.5-20 Vol. 2A Segment N-7 Alt. 1 is an important bear area as is N-7H2.
- JJ** [3.5-27 Vol. 2A N10 Alt. 5 also goes through two goshawk territories.

- CC** A variation of N-7H2, called N-7H2(A), along with North JA and North JK was discussed in the Supplement to the Draft EIS/EIR. Impacts to vegetation, wildlife, and land use can be found on Page 3.3-16.
- DD** Comment noted. This information has been incorporated into this Final EIS/EIR, Volume 1, Section 1.1.4.
- EE** At present, there are Forest Service and Bureau of Land Management policies prohibiting the use of herbicides on federal lands arising from a court injunction. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.
- FF** The COTP has committed to minimizing road construction and closing roads in critical wildlife areas. Specific closures on National Forest lands will be determined through the special use permit process. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.
- GG** The COTP did directly contact the McCloud Ranger District (RD) including Jim Russum, the District resources supervisor and resources specialist. In addition, Project staff and the Environmental Consultants were in close contact with Mr. Dennis Poehlmann, the U. S. Forest Service representative responsible for coordinating with, and obtaining information for them from U. S. Forest Service offices. Mr. Poehlmann, who is based out of the Mt. Shasta Ranger District, discussed the concerns of the McCloud RD with appropriate personnel and then relayed them to Project staff.
- HH** See the response to L-313 C. A separation of 2,000 feet is insufficient in forested areas to maintain the reliability of the interconnected transmission system. Routes suggested by the USFS are addressed in Section 1.2.2 of Volume 1 of this Final EIS/EIR.
- II** See response to L-345 FF.
- JJ** See response to L-345 D for a discussion on general treatment of goshawks and the territory on Dead Horse Ridge. The other goshawk territory near N-10Alt.5 (near Mayfield Road and the McCloud River) is 0.4 mile from the route centerline, based on the location given by McCloud Ranger District personnel. Habitat in this area should be avoidable.

L-346

January 29, 1987

ENVIRONMENTAL COORDINATOR
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Mr. Beck,

I have received the copies of the EIS/EIR and find them of great interest and a very good job of research on the project. It took me some time to digest all eight volumes, but was well worth it.

A

I am relieved to see that a decision has been made to exercise the Eastern route and do hope that the commission can find a way to keep the towers out of the farmlands around Tulelake and Malin.

If any further research is needed on the project, I would appreciate receiving a copy of same. Thanks,

Sincerely,


Norman E. Flock
P.O. Box 7
Montague, CA. 96064

A

Comment noted. See response to L-330 G.

L-347

CARR, KENNEDY, PETERSON & FROST

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DANIEL S. FROST
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FRANCIS CARR, 1878-1944
LAURENCE J. KENNEDY, 1883-1978
LAURENCE J. KENNEDY, JR. 1918-1988
LAURENCE W. CARR, RETIRED

February 27, 1987

CERTIFIED RETURN-RECEIPT

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, California 95866

Re: California-Oregon Transmission Project
Los Banos-Gates Transmission Project.

Gentlemen:

Our firm represents Richard Moseman. Mr. Moseman is the owner of an approximate 7,200 acre Hereford cattle ranch located near Millville, Shasta County, California. It is our understanding that the Transmission Agency of Northern California and the Western Area Power Administration are proposing to construct a 500 kv transmission line through Shasta County. It is also our understanding that the proposed location for the transmission line will traverse across more than two miles of Mr. Moseman's cattle ranch. Mr. Moseman wants to go on record as strenuously objecting to the proposed location of the transmission line across his cattle ranch. The proposed transmission line would seriously affect the value and utility of Mr. Moseman's property. Therefore, any attempt to locate the proposed transmission line across Mr. Moseman's property will be met with vigorous opposition.

A 230 kv transmission line owned by P.G.&E. presently traverses Mr. Moseman's property. P.G.&E.'s transmission line is located approximately 800 feet west of Mr. Moseman's \$500,000.00 personal residence. It is our understanding that the proposed 500 kv transmission line is to be located west of P.G.&E.'s existing 230 kv line. In light of the immediate proximity of his personal residence, Mr. Moseman is understandably extremely concerned that the proposed 500 kv transmission line not be located on the east side of P.G.&E.'s existing 230 kv transmission line. If our understanding of the proposed location for the 500 kv transmission line is incorrect, please advise the undersigned immediately.

A Mr. Moseman's objection to the siting of the proposed line across his property near Millville is noted. See response to L-184 A.

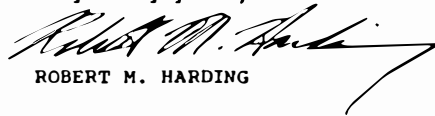
B The preferred route is on the west side of PG&E's existing 230 kv lines. A response was sent to Mr. Harding on March 20, 1987.

L-347 (continued)

February 27, 1987
Page Two

For your information, I have enclosed a copy of the legal description of Mr. Moseman's property. Mr. Moseman's residence is located in Section 5, Township 31 North, Range 2 West, east of Whitmore Road and west of P.G.&E.'s existing 230 kv transmission line.

Very truly yours,



Handwritten signature of Robert M. Harding in cursive script.

ROBERT M. HARDING

RMH/lk
Enclosure

cc: Richard Moseman

L-347 (continued)

TABLE A

All that certain real property situate in the County of Shasta, State of California, described as follows:

PARCEL 1: The Southeast one-quarter of Section 30, Township 32 North, Range 2 West, M.D.B. & M.

PARCEL 2: The East one-half and the Southeast one-quarter of the Northwest one-quarter of Section 31, Township 32 North, Range 2 West, M.D.B. & M.

PARCEL 3: The West one-half of the West one-half; the Southeast one-quarter of the Southwest one-quarter; the Southwest one-quarter of the Southeast one-quarter; and that portion of the Northeast one-quarter of the Southwest one-quarter and the Northwest one-quarter of the Southeast one-quarter of Section 32, Township 32 North, Range 2 West, M.D.B. & M., lying Southwesterly of a line drawn from the Northwest corner of said Northeast one-quarter of the Southwest one-quarter, Southeasterly to the Southeast corner of said Northwest one-quarter of the Southeast one-quarter.

PARCEL 4: The Northwest one-quarter; the West one-half of the Northeast one-quarter; and the North one-half of the Southwest one-quarter of Section 5, Township 31 North, Range 2 West, M.D.B. & M. EXCEPTING THEREFROM that portion of the Northwest one-quarter of the Northwest one-quarter of said Section 5, described in the deed to Clement R. Hereford, recorded in the office of the County Recorder January 12, 1869 in Book 3 of Deeds at page 155, Shasta County Records.

ALSO EXCEPTING THEREFROM that portion of the West one-half of the Northeast one-quarter and the North one-half of the Southwest one-quarter of said Section 5 lying within the parcels described in the deed to John Madison Heryford, recorded in the office of the County Recorder February 24, 1886 in Book 15 of Deeds at page 496, Shasta County Records.

ALSO EXCEPTING THEREFROM that portion of the North one-half of the Southwest one-quarter of said Section 5, described in the deed to John H. Crowe, et ux, recorded in the office of the County Recorder December 5, 1966 in Book 901 of Official Records at page 630, Shasta County Records.

PARCEL 5: The East one-half of the Northeast one-quarter of Section 6, Township 31 North, Range 2 West, M.D.B. & M.

PARCEL 6: All that portion of the Southwest one-quarter of the Southwest one-quarter of Section 5, Township 31 North, Range 2 West, M.D.B. & M., described as follows:

BEGINNING at the Northwest corner of said Southwest one-quarter of the Southwest one-quarter; thence along the North line of said Southwest one-quarter of the Southwest one-quarter, Easterly 891.80 feet; thence South 73°14' West, 936.40 feet to the West line of said Southwest one-quarter of the Southwest one-quarter; thence along said West line, North 01°01' East, 270.17 feet to the point of beginning.

PARCEL 7: The North one-half and the North one-half of the South one-half of Section 2; Section 3; the East one-half of the East one-half of Section 4; the Northeast one-quarter of the Northeast one-quarter of Section 5 and the Northwest one-quarter of the Northwest one-quarter of Section 10, Township 31 North, Range 2 West, M.D.B. & M., according to the official plat thereof.

PARCEL 8: The South one-half of the Southeast one-quarter and the West one-half of Section 26; the South one-half, the South one-half of the Northeast one-quarter and the Northeast one-quarter of the Northeast one-quarter of Section 27; the Southwest one-quarter and the West one-half of the Southeast

L-347 (continued)

Exhibit A
Page Two

one-quarter of Section 29; the East one-half of the Northwest one-quarter, West one-half of the Northeast one-quarter and the East one-half of the Southeast one-quarter of Section 32; the South one-half of the North one-half and the South one-half of Section 33; Section 34 and Section 35, Township 32 North, Range 2 West, M.D.B. & M., according to the official plat thereof.

EXCEPTING THEREFROM the East 40.00 feet of the South one-half of the Southeast one-quarter of said Section 26.

ALSO EXCEPTING THEREFROM the parcel described in the Deed to John M. Heryford recorded November 6, 1886 in Book 16 of Deeds at page 488, Shasta County Records.

ALSO EXCEPTING THEREFROM 40 feet square in the Northeast corner of said Section 35.

ALSO EXCEPTING THEREFROM the parcel described in the deed to the County of Shasta recorded October 31, 1960 in Book 649 of Official Records at page 131, Shasta County records.

PARCEL 9: All that portion of the East one-half of the Northeast one-quarter of Section 32, Township 32 North, Range 2 West, M.D.B. & M., according to the official plat thereof described as follows:

BEGINNING at the East one-quarter corner of said Section 32; thence along the East line of said Section 32, Northerly, 4.50 chains; thence North 50°30' West, 27.00 chains to the West line of said East one-half; thence along said West line Southerly, 21.00 chains to the Southwest corner of said East one-half; thence along the South line of said East one-half, Easterly 20.00 chains to the point of beginning.

PARCEL 10: All that portion of the South one-half of Section 32, Township 32 North, Range 2 West, M.D.B. & M., according to the official plat thereof, described as follows:

BEGINNING at the Northeast corner of the Southwest one-quarter of said Section 32; thence along the North line of said South one-half, Westerly 20.00 chains to the Northwest corner of the Northeast one-quarter of the Southwest one-quarter of said Section 32; thence South 63°30' East, 44.72 chains to the Southeast corner of the Northwest one-quarter of the Southeast one-quarter of said Section 32; thence along the East line of the Northwest one-quarter of the Southeast one-quarter of said Section 32, Northerly, 20.00 chains to the Northeast corner of the Northwest one-quarter of the Southeast one-quarter of said Section 32; thence along the North line of said South one-half, Westerly to the point of beginning.

PARCEL 11: The West one-half of the East one-half and the West one-half of Section 4; the Southeast one-quarter of the Northeast one-quarter, the Southeast one-quarter, the South one-half of the Southwest one-quarter of Section 5; the Northwest one-quarter of Section 8; the North one-half and the Southwest one-quarter of Section 9, Township 31 North, Range 2 West, M.D.B. & M., according to the official plat thereof.

EXCEPTING THEREFROM the parcel described in the deed to Lillie E. Hufford recorded December 5, 1966 in Book 901 of Official Records at page 611, Shasta County Records.

L-347 (continued)

EXHIBIT A
Page Three

PARCEL 12: All that portion of the Southwest one-quarter of Section 5, Township 31 North, Range 2 West, M.D.B. & M., according to the official plat thereof described as follows:

BEGINNING at the Northeast corner of the Southeast one-quarter of the Southwest one-quarter of said Section 5; thence along the South line of said Southeast one-quarter, Westerly, 12.00 chains; thence along the county road, North 35°13' East, 20.80 chains to the East line of said Southwest one-quarter; thence along said East line, Southerly, 17.00 chains to the point of beginning.

PARCEL 13: All that portion of the Northeast one-quarter of Section 5, Township 31 North, Range 2 West, M.D.B. & M., according to the official plat thereof described as follows:

BEGINNING at the Southeast corner of the Southwest one-quarter of the Northeast one-quarter of said Section 5; thence along the South line of said Northeast one-quarter, South 87°30' West, 16.66 chains; thence, North 34° East, 5.80 chains; thence, North 61°45' East, 9.69 chains; thence, North 56° East, 6.07 chains to the East line of the Southwest one-quarter of the Northeast one-quarter of said Section 5; thence along said East line, Southerly, 12.01 chains to the point of beginning.

PARCEL 14: BEGINNING at a point on the North line of the Southwest one-quarter of the Southwest one-quarter of Section 5, Township 31 North, Range 2 West, M.D.B. & M., from whence the Southwest corner of said Section 5 bears South 44°41'41" West, a distance of 1817.20 feet, and running thence North 73°14' East, a distance of 182.53 feet; thence along a curve to the left with a radius of 2050 feet through an angle of 19°29'30", a distance of 697.40 feet; thence North 53°44'30" East, a distance of 159.56 feet; thence South 33°13' West, a distance of 559.18 feet to a point on the North line of the South one-half of the Southwest one-quarter

of said Section 5; thence West on and along the North line of the South one-half of the Southwest one-quarter of said Section 5, a distance of 602.02 feet to the point of beginning.

March 1, 1987

Dear Sirs,

A This letter is to continue my opposition to The Power Project going in the Butte Valley Area.

B There are some business that have concerns of property owners. Mr. Edgar of the Cal-Ore. Telephone Co. went to great expense to run underground lines under the road to save trees in our neighborhood. If you really care for people, wildlife, and nature in general you will locate it in an undeveloped area.

Sincerely
Mary B. Johnson

P.O. Box 701
Davis, Ca. 96023

A Your opposition to siting the proposed COTP transmission line in Butte Valley is noted. The preferred route does not cross Butte Valley.

B The COTP will be located to the extent possible in undeveloped areas. Alternative routes avoid developed areas where possible.

L-349

Department of
ENVIRONMENTAL MANAGEMENT

ROBERT J. PENDOLEY
DIRECTOR

DAVID HUBBELL
DEPUTY DIRECTOR



801 TEXAS STREET
FAIRFIELD, CALIFORNIA 94533
PHONE (707) 420-8881

February 20, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca. 95866

SUBJECT: Draft EIS/EIR for California-Oregon Transmission
Project

The Solano County Planning Commission has reviewed the draft
EIS/EIR for the California-Oregon Transmission Project and has
the following comments:

- A [1. Since the preferred alternative route across the County involves an upgrading of an existing 230 Kv line, and since the County's General Plan states that new utility alignments shall use existing right-of-way, the Planning Commission finds that the preferred alternative will have the least adverse effects on the resources and residents of the County.
- B [2. Mitigating measures for Jepson's Prairie Preserve, owned by the Nature Conservancy, appear adequate if carried out thoroughly and consistently during construction activity. The Commission suggests that the survey of sensitive habitats in the preserve be identified with the assistance of Nature Conservancy personnel.
- C [3. On some illustrations, the proposed 500 Kv upgrade tower design has a cross brace at the base of the tower. This brace precludes any movement of agricultural equipment through the tower area. The Planning Commission requests that this brace not be used so that existing agricultural practices may continue undisturbed.
- D [4. Related to the above comment, construction activity would least interfere with agricultural practices and products during the winter months. The Planning Commission asks that construction activity for Section 1A* take place during the six month period of October 15 - April 15.
- E [5. Preferred Alternative 8B is the half mile route in Solano County that crosses the Sacramento River. As delineated in Volume 1, Figure 3.0-7, this is an area with a high potential

A Comment noted.

B Comment noted. Nature Conservancy personnel have been and will continue to be consulted regarding all mitigation and surveys on the Jepson Prairie Preserve.

C Approximately 10% of the structures on the upgraded portion of the line would require foundation modifications to accommodate the increased loadings of the new conductor and the additional height. On those towers requiring foundation modifications, the addition of two to four footings and/or the use of additional fill material will be required. In these few cases, it is likely that mechanical control of weeds may be more difficult; however, for the remaining 90% of the line, existing agricultural practices can be continued.

D While limiting construction to the winter months may lessen interference with crops, it would increase other impacts to agricultural land such as soil compaction due to heavy equipment having to cross fields during the wet season. Landowners will be compensated for crop damage that occurs as a result of construction and/or maintenance of the line.

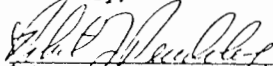
L-349 (continued)

California-Oregon Transmission Project
February 20, 1987
Page Two

- E [for waterfowl collisions. The Planning Commission requests that mitigating measures E. 4,5,6 on page 5.1-12 and 5.1-13, Vol. 1 be given high priority when siting and designing this section of the transmission line (wildlife measures).
- F [6. Alternative S8B* involves the construction of a new 500 Kv transmission line. The Planning Commission is concerned that tower placement will interfere with existing property and requests that the COTP consult with the County when siting towers.
- G [7. Preferred Alternative 8B would require the acquisition of rights-of-way. Solano County zoning regulations, state that "public utility transmission and distribution lines shall be permitted in any district without the necessity of first obtaining a use permit; provided, that 1) maps showing proposed route of such transmissions lines and 2) a written statement of approximate structure heights and right-of-way widths, shall be submitted to the Planning Commission. Routes acceptable to both the Planning Commission and utility agencies shall be determined in writing (Mutual Agreements) prior to the acquisition of any rights-of-way".

The Planning Commission thanks you for the opportunity to review and comment on this project. If further information is needed, please contact the Department of Environmental Management.

Sincerely,


Robert J. Pendoley, Director
Environmental Management

RJP/CC/bf

PPEISEIR

- E It is planned that the existing Western 230 kv transmission line crossing will be used at the Sacramento River.
- F The Solano County Planning Commission will be consulted to ensure that conflicts with existing properties are minimized.
- G Comment noted. The COTP will comply with all applicable local and county permit requirements and regulations.

L-351



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
211 MAIN STREET
SAN FRANCISCO, CALIFORNIA 94105 - 1903

Regulatory Branch
No. 16837N94

Environmental Coordinator
California-Oregon Transmission
Project
P.O. Box 660970
Sacramento, California 95866

Gentlemen:

We have reviewed Volumes 1, 2A, 2C, 3A and 4A of the Draft EIS/EIR for the California-Oregon Transmission Project. Our comments address only those route segments which fall within the San Francisco District boundaries in Siskiyou and Modoc Counties, California. These are identified on Table 2.1-1 Volume 1 of the Draft EIS/EIR as Northern Section Study Alternatives Segments North A: N-1B, N-1E, N-1H, N-1I, N-1K, N-1L, N-4A; North B: N-6B1, N-6Z, N-6P, N-6Y, N-6U2; North C: N-6E, N-6F, N-6H, N-6N; North D: N-10E, N-10G, N-10J, N-10K, N-10L and N-10M1.

All proposed discharges of dredged or fill material into "waters of the United States" require Corps of Engineers authorization under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). "Waters of the United States" include, but are not limited to, coastal and inland waters, lakes, rivers and streams that are navigable waters of the United States, including adjacent wetlands; tributaries to "navigable waters of the United States," including adjacent wetlands; interstate waters and their tributaries, including adjacent wetlands; and all other waters of the United States.

It appears that your proposed activity may be within our jurisdiction. Table E-1, Volume 3A of the Draft EIS/EIR identifies five wetland areas within our District (Segments N-10G, N-10J, N-10K) that could potentially be intersected by the preferred transmission route alternative. Spanning these areas with the transmission line would not require a Corps permit. However, placement of fill for construction activities, permanent structures or roads may require a Corps permit. Selection of an alternative other than the Preferred Alternative may also require a Corps permit.

A Application for Corps authorization should be made to this office using the application form in the enclosed pamphlet. The application must include plans showing the location, extent and character of the proposed work and/or structure, prepared in accordance with the requirements contained in this pamphlet. You should note, in planning your work, that upon receipt of a properly completed application and plans, we are required to advertise the proposed work by issuing a public notice for a period of 30 days.

A Comment noted. The lead agencies and Project Participants will comply with all necessary permit requirements.

L-351 (continued)

-2-

A

Please note that based on revisions to the Corps of Engineers regulations (33 CFR 320.4(a)(1)), it will be necessary for you to demonstrate to the Corps that your proposed fill is necessary because there are no practicable alternatives, as outlined in the U.S. Environmental Protection Agency's Section 404(b)(1) Guidelines. A copy is enclosed to aid you in preparation of this alternative analysis. Be aware that failure to satisfy the 404(b)(1) Guidelines will require denial of your application for a Corps permit.

Other Route Segments may require authorization from the Corps Sacramento District. If you have not done so already, we suggest you inform Art Champ, Chief, Regulatory Section, U.S. Army Corps of Engineers, 650 Capitol Mall, Sacramento, California 95814, of your proposed project.

If you have any questions, please call Joelle Buffa of our Regulatory Branch (telephone 415-974-0418). Please address correspondence to the District Engineer, Attention: Regulatory Branch, and refer to the file number at the head of this letter.

Sincerely,



Jack E. Farless
Chief, Construction-Operations
Division

Enclosure

cc: Art Champ, Sacramento, CA

L-353

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

A [We would like to commend the California-Oregon Transmission Project for NOT selecting the Shasta Valley route as the prime route alternative. However we wish to bring some omissions in your DEIS/EIR to your attention.

B [The biological section is lacking information given to COTP at public meetings and in our June 9, 1986 correspondence as well as available at the California Department of Fish and Game's Region I Office in Redding. The information missing includes, but is not limited to:

Bald eagle winter roost area along the Little Shasta River;
Bald eagle summer/nesting use area in sec.s 10, 14, 15
T42N,R2W;
Waterfowl migratory routes along T42N, R2W;
Butte Creek Valley
Spotted owl territory T42N, R2W sec. 2, 11.

Please review the Fish and Game Region I information as well as our public hearing testimony.

C [We could find no mention of the California Department of Fish and Game's correspondence concerning the "jeopardy opinion" for the Shasta Valley and Butte Valley. Although this opinion may not have a direct effect on TANC, this opinion should have weighed heavily in your decision process.

D [We were unable to find any references to Southern California Edison's recent work with migrating bird strikes on transmission lines. Since this line has the potential to cause a great deal of damage to migrating waterfowl, we believe that it was extremely remiss for the COTP not to utilize the extensive studies conducted by a project participant. This information is as current and much more objective than the studies cited in this draft.

E [Farming practices in dryland hilly areas such as the Shasta Valley would be more impacted by a transmission line than irrigated farm practices and yet the DEIS/EIR does not reflect this fact.

We hope that COTP will amend the DEIR/EIS to include the above information which should have been used during the decision making process.

Sincerely,



A Comment noted.

B See response to L-325 I.

C TANC is a joint powers agency and its members are all local agencies. TANC is, therefore, a local agency under CEQA. A lead agency under CEQA is the public state or local agency having principal responsibility for carrying out or approving a project. Chapter 3 of CEQA applies only to state agencies and Chapter 4 only to local agencies. The California Endangered Species Act was amended to require a jeopardy opinion on projects where a state agency was a lead agency. Chapter 3 of CEQA was amended to require state lead agencies to consult with the Department of Fish and Game concerning threatened and endangered species. Therefore, as defined by both the California Endangered Species Act and CEQA, TANC, as a local agency, is not required to obtain a jeopardy opinion from the Department of Fish and Game. However, we continue to coordinate with that department to assure that possible impacts to state-listed rare and endangered species and other wildlife resources are accurately assessed and that proper steps are taken to minimize such impacts.

D See response to L-325 P.

E An expanded discussion of the potential long-term impacts on non-irrigated farming (see page 3.6-5 in Volume 2A of the Draft EIS/EIR) is included in Volume 1 of this Final EIS/EIR in Section 1.2.

L-355

STATE OF CALIFORNIA-BUSINESS AND TRANSPORTATION AGENCY

GEORGE DEUKMEJIAN, Governor

DEPARTMENT OF TRANSPORTATION
P.O. Box 2048 (1976 E. Charter Way)
STOCKTON, CA 95201
(209) 948-3687

January 22, 1987

10-Mer,Sta,SJ-Var
Transmission Agency of
Northern California
California Oregon
Transmission Project
Draft EIR SCH# 85040914

Ms. Norma Wood
State Clearing House
1400 Tenth Street
Sacramento, CA 95814

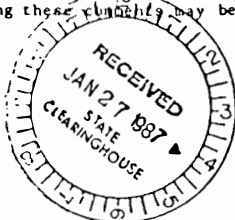
Dear Ms. Wood:

We have reviewed the Draft EIR for the California Oregon Transmission Project and offer the following comments:

A [Caltrans' primary concern with this project is its proximity to certain State highways. All highway crossings will require encroachment permits from Caltrans and must comply with high and low risk requirements.

B [The impacts along Interstate 5 and 580 should be addressed in terms of scenic highway values. It is the responsibility of the County involved to provide this protection.

* We appreciate the opportunity to comment on this Draft EIR. Any questions regarding these comments may be directed to Al Johnson, telephone 209 948-7838.



Very truly yours,

TERRY BARRIE
IGR Coordinator

cc: R Lind, Transmission Agency
D Dodd, Sta COG
P Verdoorn, SJ COG
C Clark, Mer COG

A Comment noted. The COTP will comply with all applicable permit requirements.

B Comment noted. Visual impacts on state highways designated as scenic highways or eligible for such designation were considered in the Draft EIS/EIR. See also response to L-317 B.

L-356

Memorandum

To : Norma Wood
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

Date : December 17, 1986

File No.: CC004-General
SCH #85040914
CC004109

From : DEPARTMENT OF TRANSPORTATION --4

Subject: DEIR - California-Oregon Transmission Project/Los Banos-Gates
Transmission Project
Lead Agency - Transmission Agency of Northern California

Caltrans has reviewed the above-referenced document and forwards the following comment:

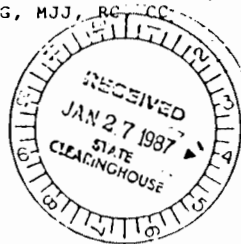
- A [1. Preferred Alternative B crosses Rte 04-Ala-580. An encroachment permit will be needed for the crossings.

Should you have any questions regarding this comment, please contact Charlotte Cosulich of my staff at (415) 557-9431.

ED BOYLE
District CEQA Coordinator

CC:em

cc: F. D. HUSUM (DOTP),
GG, MJJ, RC, CC



A Comment noted. The COTP will comply with all applicable permit requirements.

L-357

State of California

Business, Transportation & Housing Agency

MEMORANDUM

To: State Clearinghouse
Office of Planning and Research
Attention Norma Wood
1400 Tenth Street
Sacramento, CA 95814

Date: January 15, 1987

File: 03-Gle, Col, Yolo-Var
California-Oregon
Transmission Project
SQI No. 85040914

From: DEPARTMENT OF TRANSPORTATION - Telephone ATSS 457-4498
District 3, P. O. Box 911, Marysville, CA 95901

Subject: Review Draft EIR/EIS for California-Oregon Transmission Project

Caltrans, District 3, has reviewed the draft EIR/EIS for the California-Oregon Transmission Project. This is a proposal to construct or upgrade about 340 miles of transmission lines and other support facilities between the Oregon border and just east of the San Francisco Bay area.

Within District 3's jurisdiction, the project includes upgrading an existing double circuit 230 kv AC line to a single circuit 500 kv AC line and constructing a new series compensation station near Maxwell in Colusa County. The upgrade section would cross the following State highways in District 3:

Highway 162 in Glenn County
Highway 20 in Colusa County
Highway 16 in Yolo County
Interstate 505 in Yolo County

These crossings would be subject to Caltrans' encroachment permit authority, as described in Table 6.1-2 of Volume I.

None of the above State routes are officially designated State scenic highways in District 3. Page 4.1-29 of Volume I discusses the visual impacts of transmission line upgrading. Specific mitigation measures for State highway crossings will be determined during the encroachment permit review process.

A Comment noted. The COTP will comply with all applicable permit requirements.

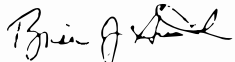
B Comment noted.



L-357 (continued)

State Clearinghouse
Attention Norma Wood
Page 2
January 15, 1987

- C** [The Central Section description on Page 4.1-29 mentions crossing Highway 133. There is no State Highway 133 in northern California. This may be an incorrect reference to Highway 113 in Solano County.
- D** [We have no comments on the Los Banos-Gates Transmission Project. If there are any questions on the above comments, please contact Mrs. Jearnie Baker, telephone (916) 741-4498.



Brian J. Smith
Chief, Environmental Branch

- C** The comment is correct. The route number is Highway 113 and is corrected in Section 1.1.4 of Volume 1 of this Final EIS/EIR.
- D** We note that you have no comments on the Los Banos-Gates portion of the Draft EIS/EIR.

L-358

State of California

Business, Transportation and Housing Agency

Memorandum

To: State Clearinghouse
Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

Date: February 2, 1987

File:

Attention Norma Wood

From: DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS

Subject: The Transmission Agency of Northern California's DEIR for the California-Oregon Transmission Project/Los Banos-Gates Transmission Project; SCH# 85040914

The Department of Transportation, Division of Aeronautics, has reviewed the above-referenced document with respect to the project's potential impact on airport operations as well as the issue of compatible land uses in the vicinity of an airport.

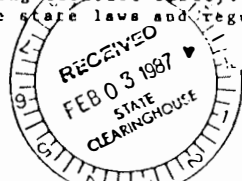
A [As addressed in the DEIR, there are numerous public and private use airports located near the transmission line routes. These airports are part of the state airport system and, as such, safe access to and from the airports must be maintained. As stated in the Public Utilities Code (PUC), Aeronautics Law, Section 21403 (c), "The right of flight in aircraft includes the right of safe access to public airports which includes the right of flight within the zone of approach of any public airport without restriction or hazard." Consideration should be given to local land use plans especially for public use airports.

As stated in the PUC, Section 21658, "No public utility shall construct any pole line, distribution or transmission tower, or tower line, or substation structure in the vicinity of the exterior boundary of an aircraft landing area of any airport open to public use, in a location with respect to the airport and at a height so as to constitute an obstruction to air navigation, as an obstruction is defined in accordance with Part 77 of the Federal Aviation Regulations, Federal Aviation Administration, or any corresponding rules or regulations of the Federal Aviation Administration, unless the Federal Aviation Administration has determined that the ... structure does not constitute a hazard to air navigation."

B [Based on the above, the Division concurs with mitigation measure B. 2. on page 5.1-3 of Volume 1, which states, "The transmission line will be constructed so that it will conform with all applicable federal regulations regarding aircraft safety." We assume this will apply to all applicable state laws and regulations as well.

A Comment noted. Land use plans and public use airports were addressed in the Draft EIS/EIR, Volume 2A, Section 3.6.

B Comment noted. The COTP will comply with all applicable permit requirements.



L-358 (continued)

State Clearinghouse
Page 2
February 2, 1987

For information concerning FAR Part 77 and the requirements for filing the Notice of Proposed Construction or Alteration (Form 7460-1), the applicant should be advised to contact:

Federal Aviation Administration
Western Regional Office
P.O. Box 92007
World Way Postal Center
Los Angeles, CA 90009

C [Thank you for the opportunity to review and comment on this proposal. We were pleased to see the amount of consideration given in this report to all general aviation airports along the routes and the investigation into aviation safety matters involved with transmission lines.

Sincerely,

JACK D. KEMMERLY, Chief
Division of Aeronautics


Sand Mesnard
Environmental Planner

cc: FAA, Western Regional Office

C Comment noted.

L-359

State of California

The Resources Agency

Memorandum

To : 1. A-38
Gordon F. Snow
Assistant Secretary for Resources
The Resources Agency
2. Rick A. Lind
Transmission Agency of
Northern California
P. O. Box 661030
Sacramento, CA 95825
From : THE RECLAMATION BOARD
Department of Water Resources

Date : JAN 14 1987

File No.:

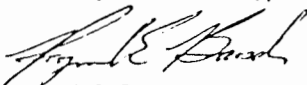
Subject: California-
Oregon Transmission
Project/Los Banos-
Gates Transmission
Project EIS/EIR
(SCH 85040914)

Staff for The Reclamation Board has reviewed the Environmental Impact Statement and Environmental Impact Report for the subject project and has the following comments.

A The proposed new 500-kv transmission line will cross the Sacramento River twice: once in the Sacramento River Designated Floodway south of Redding, and once over the Sacramento River Flood Control Project levees and floodway bordering Sherman Island. These areas are under the Board's jurisdiction and a permit from the Board will be required before the start of construction of each overcrossing. In addition, because a failure of the north levee along the San Joaquin River can cause flooding that may damage the Sacramento River Flood Control Project on the Sacramento River to the north, the Board exercises encroachment control over the San Joaquin River levee. Therefore, the project proponent should also apply for a permit for the crossing of the San Joaquin River.

For more information, the project proponent should contact Ted Allen, Encroachment Control Section, 1416 Ninth Street, Room 455-8, Sacramento, California, 95814, telephone (916) 445-9225.

Thank you for the opportunity to comment.



RAYMOND E. BARSCH
General Manager
(916) 445-9454

A Comment noted. The COTP will comply with all applicable permit requirements. The existing river crossings will be used at the Sacramento River crossing on Sherman Island and the San Joaquin River crossing.

L-360

State of California

The Resources Agency

Memorandum

Date : January 20, 1987

To : 1. Gordon F. Snow, Ph.D.
Assistant Secretary for Resources
2. Rick A. Lind
Transmission Agency of Northern California
P. O. Box 660170
Sacramento, CA 95866

From : Department of Water Resources

Subject: Draft EIS/EIR on California-Oregon Transmission Project and Los Banos-Gates Transmission Project (SCH #85040914; DOE/EIS #0128)

The California Department of Water Resources (CDWR), a participant in the California-Oregon Transmission Project (COTP), has reviewed the subject report and supporting reports. The Department's comments are listed below:

Permit for California Aqueduct Crossing

A Table 6.1-2 "Potential State Authorizing Actions, COTP" lists Agencies/Departments from which permits or authorization would be required for project construction. The California Department of Water Resources should be added to the table, since the transmission line would cross the California Aqueduct between the Tracy and Tesla Substations.

B Five sets of construction plans should be submitted for review to:

California Department of Water Resources
Division of Land and Right of Way
1416 Ninth Street, Room 431
Sacramento, CA 95814.

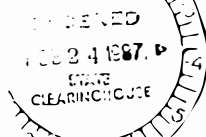
Tower Siting for Los Banos-Gates Transmission Project

C Some of the identified routes for the Los Banos-Gates Transmission Project have the potential to physically conflict with the existing facilities at Little Panoche Reservoir or to conflict with the proposed Los Banos Grandes Dam and Pump-Generating Facilities. The draft EIS/EIR recognizes this potential conflict and states on page 5.2-1 of Volume 1 that "PGandE will work with CDWR to site towers compatible with the existing facilities at Little Panoche Reservoir (West-5) or the proposed facilities at Los Banos Grandes Offstream Storage Project (West-3 and East)". We suggest that appropriate contacts be named in each agency (PGandE and CDWR) to facilitate coordination.

A Comment noted. The COTP will comply with all applicable permit requirements.

B The California Department of Water Resources is a Project Participant and will be furnished construction plans as requested.

C PGandE acknowledges this request to coordinate with CDWR and confirms its desire to do so. The agency was contacted during the route review process and we will continue to work with CDWR.



L-360 (continued)

Gordon F. Snow, et al.
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January 20, 1987

D The Lead Agencies should contact the following person with regard to the existing facilities at Little Panoche Reservoir:

Cliff Lucas
California Department of Water Resources
Division of Operations and Maintenance
1416 Ninth Street, Room 718-A
P. O. Box 942836
Sacramento, CA 94236-0001
(916) 445-2222

Regarding the Los Banos Grandes proposed project, please contact:

Ron Shimizu
California Department
of Water Resources
Energy Division
1801 Sixth Street
P. O. Box 942836
Sacramento, CA 94236-0001
(916) 323-0105

John McClurg
California Department
of Water Resources
Division of Operations and Maintenance
1416 Ninth Street, Room 252-9
P. O. Box 942836
Sacramento, CA 94236-0001
(916) 445-9655

Tower Siting for COTP near Clifton Court Forebay

E The preferred route for the Southern Section of the COTP would pass immediately east of the State Water Project's Clifton Court Forebay. The Department's Central District is in the preliminary stages of planning for facilities to mitigate water level and circulation problems in the South Delta. Alternatives to be considered include dredging existing channels, adding a new intake channel, and enlarging Clifton Court Forebay. This situation also requires close coordination with CDWR in siting towers with appropriate contacts named. The Lead Agencies appropriate contact persons are Ron Shimizu (listed above) and:

Karl Winkler
California Department of Water Resources
Central District
3201 "S" Street, Sacramento, CA 95816
(916) 445-5955

D Comment noted. The following individual from PGandE should be contacted with regard to the Los Banos-Gates Transmission Line:

* William D. Chilson
Supervisor, Environmental Planning
PGandE Land Department
77 Beale Street, Room H-2010
San Francisco, CA 94106

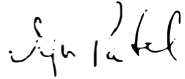
E COTP personnel have been discussing this situation with Mr. Karl Winkler and Mr. Ron Shimizu and will coordinate location of the line with the California Department of Water Resources and other interested agencies. A discussion of the routing options in this vicinity are presented in Section 4.1.11.3 of Volume 1 and Section 4.3.10 of Phase II of Volume 2A in the Draft EIS/EIR. See response to SL-76 D. See also responses L-203 I through L-203 O and SL-76 for a discussion of routing concerns in the Coney Island vicinity.

L-360 (continued)

Gordon F. Snow, et al.
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If you have any questions regarding these comments, please contact me at
(916) 445-6687.

Sincerely,

A handwritten signature in cursive script, appearing to read "Viju Patel".

Viju Patel, Chief
Energy Division
ATSS 485-6687

cc: Nancy H. Weintraub
Western Area Power Administration
1825 Bell Street
Sacramento, CA 95825

L-361

State of California

The Resources Agency of California

Memorandum

Date : January 21, 1987

To : Gordon F. Snow, Ph.D.
Project Coordinator
Resources Agency

From : Department of Parks and Recreation - Richard G. Rayburn

Subject: California-Oregon Transmission Project/
Los Banos-Gates Transmission Project
Draft EIR, SCH# B5040914

The Department of Parks and Recreation has reviewed the subject document and has the following comments on the proposed transmission projects:

- A [1. California-Oregon Transmission Project. The proposed project apparently will not significantly affect our property. The DEIR acknowledges that an alternative route for the transmission line crosses the California Aqueduct Bicycle Trail in Alameda County, and that Frank's Tract State Recreation Area is within three miles of another transmission route alternative. The statement that "a new state park is proposed...on the north shore of Bethel Island...." [Volume 1, page 3.1-31] is in error.
- B [
- C [2. Los Banos-Gates Transmission Project. It appears that this project will affect Los Banos Creek Reservoir, a part of San Luis Reservoir State Recreation Area. The project's preferred Alternative West-2, and to a lesser extent Alternative West-3, would affect the recreation experience of visitors to the upper end of Los Banos Creek Reservoir. This area has valuable historic, scenic, and natural resources. Rangers lead visitors on guided tours to this end of the reservoir, using pontoon boats to the mouth of Los Banos Creek and then hiking up the creek to where Spanish explorers camped before they entered the San Joaquin Valley.
- D [We prefer the East Alternative, a route parallel to the existing 230 kv powerline. No powerline should be built over the reservoir, as this would present a hazard to helicopter rescue operations. The East Alternative to Gates would be preferable to Alternative West-7 in that it would not traverse portions of the proposed Martin Ranch State Vehicular Recreation Area acquisition project.

E [Thank you for the opportunity to review the draft EIR. Please

A Comment noted.

B We have deleted the reference to a proposed state park on Bethel Island and replaced it with a reference to an area with potential for a future park on Jersey Island in Section 1.1.3 of Volume 1 of this Final EIS/EIR. Also, note the change to Table 3.6-14 in Section 1.2.3.

C The proposed transmission line preferred route will cross the Los Banos Creek approximately 2,000 feet west of the existing 500 kV transmission line. Although we acknowledge the scenic, historic, and natural values of this area, we do not perceive the long-term effect of this line to significantly change the existing recreation experience at Los Banos Creek Reservoir. Please refer to the visual resource analysis (Draft EIS/EIR, Volume 3B, Appendix J, Section 3.2.3) for a detailed analysis of the impact from various parts of the recreation area.

D We appreciate your concerns. The east route along the 230 kV line was evaluated as an alternative. Through the route selection study, it was determined that the combined impacts associated with siting the line in the east route versus siting in the west route were much greater. Refer to the Draft EIS/EIR, Volume 3B, Appendix A for descriptions of the corridor evaluation process, environmental data factors, and route selection criteria.

L-361 (continued)

Gordon F. Snow, Ph.D.
January 21, 1987
Page 2

E | Keep us apprised of the progress of the projects. Our contact is
Mr. James M. Dovie, Supervisor, Environmental Review Section,
P. O. Box 942896, Sacramento, CA 94296-0001, telephone (916)
324-6421.

E Comment noted.


Richard G. Rayburn, Chief
Resource Protection Division

L-362

State of California

The Resources Agency

Memorandum

To : Ms. Nadell Gayou
Projects Coordinator
Resources Agency
1416 Ninth Street, Rm. 215-4
Sacramento

Date : January 21, 1987

R 5

Telephone: ATSS (916) 322-0128

From : Department of Forestry

Subject : California-Oregon Transmission
Project EIS/EIR
S.C.H. #65040914

Attached are comments from our Shasta-Trinity Ranger Unit on the California-Oregon Transmission Project EIS/EIR. We support the unit's comments and wish to add additional remarks. Our areas of concern are: 1) route selection, 2) identified impacts, 3) mitigations specified, 4) compliance with laws and regulations, and 5) economic evaluation.

1. Route Selection

A [We are concerned that alternatives which would lessen impacts on timberland were not fully discussed. Volume 2A, Chapter 2, Phase III, Routing Investigation Report, describes and explains the route segments considered.

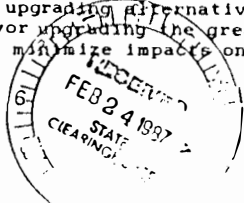
B [The alternatives which were proposed farther east than the preferred route were discarded due to the use of crossovers. There was insufficient discussion of possible transmission alternatives which would avoid the use of crossovers. An example would be the rerouting of power destinations leaving the Malin substation.

C [A second concern in this area is the minimal discussion of upgrading the Northern section of the proposed project. Volume 1, Section 2.5.1.1 argues that upgrading is not feasible on the basis of outage, physical, and reliability problems. On the other hand, Volume 2A, Section 3.11 argues that upgrading the segment between Redding and the Sacramento River is preferred and environmentally superior. This appears inconsistent. Upgrading is dismissed with minimal discussion and does not leave the impression that all upgrading alternatives were considered. Our Department would favor upgrading the greatest amount of line possible, since it would minimize impacts on timberland and related resources.

D [

A See responses to L-362 B, L-362 C, and L-362 D below.

B To route the COTP to the east of the existing Intertie without crossovers, it would be necessary to interconnect with the PNW transmission system at the Malin Substation. This is not a feasible alternative for the COTP, since it would bring together all three lines of the Intertie (the two existing and the COTP) in a similar manner as would a crossover. DOE (1984), following the December 22, 1982 major outage of the western U. S. transmission system, addressed concerns about the concentration of transmission lines at major substations, specifically including the Tesla Substation. For this reason, the COTP does not directly interconnect with the Tesla Substation but rather with the Tesla-Los Banos 500 kV transmission line near the substation. In a similar manner, the COTP will not directly interconnect with the Malin Substation, but rather with the Malin-Meridian 500 kV transmission line that runs to the west from Malin. Connecting with this line makes it impossible to route to the east of the existing AC Intertie without crossovers of the 500 kV transmission lines that leave the Malin Substation to the north and south.



L-362 (continued)

C See response to L-321 C. The "upgrading" in the Northern Section would involve modification to part of the existing 500 kV transmission system, which is shown not to be feasible. The upgrade section of the COTP is the reconstruction of an existing line from 230 kV to 500 kV, adding to the 500 kV system. The COTP has significantly reduced the environmental impacts because it makes use of two existing Western 230 kV lines which will be upgraded to 500 kV. Thus, in the Northern Section, new construction is only required from the southern Oregon border area to the Redding area, a distance of approximately 146 miles, whereas without the upgrade, new construction would be required for approximately 330 miles to reach Central California. One attractive feature of the COTP is that it utilizes already established facilities, thus minimizing new construction to the benefit of many retail users and environmental resources.

Power system studies have shown that the existing Western 230 kV system can be removed from service for uprating because the existing parallel system can be used at a higher load level for the majority of the uprating time period. However, there will be times where curtailments of generation may be required when the hydro system is at peak at the same time the Northwest has surplus available for delivery to California.

This impact can be handled at minimum expense, whereas if the 500 kV system were taken out for uprating, there is no parallel system and, therefore, there would be substantial curtailments and loss of Northwest power to California for the entire uprating period.

D See response to L-362 C.

L-362 (continued)

Ms. Nadell Gayou

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January 21, 1987

E [The timing of the project is also left hanging in the EIS/EIR. We are aware that other transmission lines are to be constructed in the foreseeable future. At the same time, the document states there are no currently known energy-related obstacles to population or industrial growth in California. This raises the question of whether the maximum possible benefit to California would be realized by implementing the project at this time. Would we benefit by delaying the project and assuring maximum coordination with other proposed transmission line projects? Certainly, this would reduce the impacts to timberland and associated resources. The reduction in impacts would also reduce both social and economic resource costs to California.

2. Impacts Identified and Adverse Environmental Effects

F [We are concerned that not all reasonably expected impacts are addressed in the EIS/EIR. To a great extent, this seems to result from an overall general approach to impacts. The document proposes to identify specific impacts during field surveys. The surveys will be conducted during the construction phase of the project. This process for developing mitigations will be used for several resources (cultural, streams, geologic hazards, and others). This is inappropriate. Impacts and mitigations should be identified and developed prior to commencement of construction. This should be done in consultation with responsible agencies. The attached ranger unit comments itemize several impacts not considered. In addition, we believe the following areas need improved discussion in the EIS/EIR.

- I [a) The amount of private timberland impacted cannot be clearly determined (Volume 1, Table 4.1.5).
- J [b) In both Volume 1 and Volume 2A the Universal Soil Loss Equation was used to quantify impacts on the soil resource. This is a very general approach. A site-specific evaluation would provide a more realistic evaluation of impacts.
- K [c) Potential impacts from forest insects or disease which may result from the project are not considered.
- L [d) The impacts on non-game wildlife species are not addressed, nor is the impacts on wild turkey and their habitat considered.
- M [e) Volume 1, 4.4, Cumulative Impacts, is not a full disclosure of the project effects on timberland when combined with the impacts of other existing and proposed transmission lines. A limitation of an area within three miles of the proposed

E See responses to L-3 T and L-321 E.

F See responses to L-306 D, L-306 F, L-306 U, and L-306 W.

G This is precisely the methodology employed for this Project.

H See response to L-362 I through L-362 N.

I Figures 4-2B, 4-2D, and 4-2E in Volume 4A of the Draft EIS/EIR show public and private lands crossed by this route.

J The Universal Soil Loss Equation is general in its approach insofar as its use on the COTP attempts to quantify the "worst case" soil erodability, rainfall, slope and cover conditions of large land areas. However, the values used to represent each of these factors were selected in consultation with representatives of local, state, and federal land management agencies who are familiar with site-specific conditions and the USLE. It is anticipated that the characterization of site-specific impacts and mitigation will be better refined prior to construction as the COTP continues to work closely with these agencies. See response to L-295 K1.

K The COTP staff will consult with the California Department of Forestry and the U. S. Forest Service pest and disease control specialists on the appropriate treatment of timber harvest slash and tree stumps and the appropriate timing of the timber harvest.

This mitigation has been added to the mitigation measures provided in Section 1.1.5 of Volume 1 of the Final EIS/EIR.

L See responses to L-321 O and L-321 JJ.

L-362 (continued)

Ms. Nadell Gayou

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January 21, 1987

- M project is considered for transmission projects. However, there is no discussion of the total acres of timberland effected by the combined projects. There is no discussion of the combined direct or indirect economic costs of lost income from timberland or related resource incomes such as recreation.
- N f) The document is not clear as to whether there will be a growth inducing impact (Vol. 1, 4.6.1). The section acknowledges the project goal of lower cost power is likely to stimulate growth. The same section states there will not be a growth inducing impact since there are no existing energy related obstacles to growth in California. This is at best a contradiction and at worst challenges the need for the project.
3. Mitigations Identified
- O We are concerned that not all feasible mitigations available to minimize impacts on timberland and related resources were considered. The mitigations follow the pattern for addressing impacts, in that they are too general in nature. Again, the attached comments from our ranger unit describe specific mitigations we believe should be addressed in the EIS/EIR. We also believe the following should be considered in developing mitigations for the final document:
- P
- Q a) Volume 1, Section 5.1 states that environmental impacts were assessed under the assumption that mitigations would be implemented. It is stated that the project will hire inspectors to verify that mitigations are implemented and that they may request redirection of construction efforts. This is a weak assurance. An inspector should function independently of the project and should have authority to stop operations if there is a sincere intent to fully implement mitigations.
- R b) Appropriate mitigations for construction operations conducted during the winter period were not included. While timber is being harvested the project activities will have to comply with the Forest Practice rules for winter operations but the rules will not apply after harvesting is completed. Construction activities will continue past this point. The document needs to include mitigations to prevent excessive erosion during winter construction activities after the timber harvesting is completed.
- S c) Mitigations for impacts on timberland are very sparse and off-site mitigations were not included. An off-site

- M The revised Section 4.4 presented in Section 1.1.4 of Volume 1 of this Final EIS/EIR addresses impacts of corridors with existing transmission line projects. The timber and socioeconomic effects are addressed in the Draft EIS/EIR in Volume 1, Section 4.6 and 4.8, and in Volume 2A, Phase III Data and Impact Analysis Report, Sections 3.6 and 4.8. It would not be possible to detail the timber and socioeconomic impacts of all transmission projects because, at best, it would be speculative. There are no data on the affected environment of proposed projects nor are there accurate data available for projects constructed prior to implementation of CEQA and NEPA.
- N See revised Section 1.1.4 in Volume 1 of this Final EIS/EIR.
- O See revised Section 1.1.5 in Volume 1 of this Final EIS/EIR.
- P See responses to L-362 Q through L-362 W and L-362 Z through L-362 RR.
- Q COTP inspectors will verify that mitigation measures are implemented and they will have the authority to redirect efforts of the construction contractor to the extent necessary to meet mitigation requirements included in the construction specifications. Construction inspectors function independently to the extent that they are not employed by the construction contractor. The main purpose of the construction inspector is to assure that the COTP is constructed in accordance with the plans and specifications, including environmental mitigation requirements.
- R Winter operations on forestlands were not specifically addressed in the mitigation measures identified in the Draft EIS/EIR. Forest Service Best Management Practices do not specifically address winter operations although many BMP's can be applied to winter operations. Section 943.6 of Title 14 Division 1.5 of the California Administrative Code does specifically address wintertime operations on forestlands. However, it is not clear at this time that a timber harvest plan is required. If a timber harvest plan is required, a winter operation plan will be submitted in accordance with the regulations. If a timber harvest plan is not required, the use of equipment will be prohibited when they cannot operate under their own power as described in Section 943.6 of Title 14, Division 1.5 of the California Administrative Code. The California Department of Forestry will be involved in determining appropriate winter operating guidelines.

L-362 (continued)

Ms. Nadell Gayou

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January 21, 1987

S
T
U
mitigation for timberland would be reforestation of acres capable of growing timber in amounts equivalent to those removed from production by the project. Similar off-site mitigations could be developed for wildlife impacts. An example would be establishing oaks in sufficient number to replace those removed by the project.

- d) The document states that surveys will be conducted by project biologists to develop mitigations for wildlife, fisheries, and stream protection. This is to be done after project approval and before the construction commences in an area. This is not a proper mitigation since protective measures will be developed by the project with only guidance by responsible agencies. At a minimum, consultation and agreement upon appropriate mitigations should be mandated with the responsible agencies.

4. Compliance with Laws and Regulations

V
The attached ranger unit comments specify errors regarding the Forest Practice Act and rules.

5. Economic Evaluation

We have two questions regarding the economic evaluation of the project.

W
First, does the economic assessment provide a true picture of the project's net social value? In reading the economic assessment, we do not see any consideration of the values lost in associated resources such as timber, recreation, or agriculture. It appears to only address the economics of the delivered energy cost. If this is correct, a true net value cannot be determined by the economic analysis.

X
The second item we question is the energy and cost forecasts used in the analysis. It is our understanding that the California Energy Commission is required to provide annual forecasts of energy supplies and cost information which could be used in the environmental analysis of power projects. In our reading of Volume 3A it appears the cost effectiveness analysis was based on forecasts and information developed by project consultants. We question if the cost effectiveness of the project would decrease when using information developed by the California Energy Commission.

S
See response to L-321 EE.

T
See the last paragraph of the response to L-333 D. The COTP will consider planting oak trees off site if it is determined that oak removal due to the COTP causes significant impact. Such specific measures are best handled through coordination with agencies and landowners during the design and construction phase.

U
Many of the mitigation measures have been revised to reflect both the need for greater specificity and the need for increased consultation with regulatory agencies. See Section 1.1.5 of this Final EIS/EIR.

V
Comment noted.

W
The cost estimate for the COTP includes the cost of right-of-way and damages through private timberlands. The gross economic value to society of those lands taken as represented by their market value is compensated through the easement acquisition process. See response to L-196 I.

X
The 1986 Electricity Report was not available at the time the analysis was prepared. Rather than use the outdated 1985 report, the Draft EIS/EIR was based on the most recent information submitted by utilities to the Energy Commission. This information was subsequently used to develop the 1986 Electricity Report. The forecasts of the Energy Commission in its 1986 Electricity Report are within the range of fuel prices used in the economic analysis presented in the COTP Draft EIS/EIR.

L-362 (continued)

Ms. Nadell Gayou

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January 21, 1987

If you have any questions, or need additional information on our comments, please contact Doug Wickizer, Environmental Coordinator, at 322-0128.



Kenneth L. Delfino
Deputy Director for
Resource Management

MS

cc: Dean Cromwell

Attachments

L-362 (continued)

COMMENTS ON DRAFT EIS
FOR CALIFORNIA - OREGON TRANSMISSION PROJECT
SCH# 85040914

Y The California Department of Forestry and Fire Protection coordinates several programs and enforces the Forest Practice Act, which could all be potentially impacted by this project. In summary these programs are:

1. Wildland fire control.
2. Vegetation Management Program.
3. Range Improvement Program
4. California Forest Improvement Program
5. Forest Practice Inspections
6. Fire Prevention Inspections under Public Resources Code Section 4293.
7. General Timber Resources

In order to facilitate comment, these programs will be discussed in the order listed above.

1. WILDLAND FIRE CONTROL

Z The potential impact of the project on the Department's wildland fire control efforts are two-pronged. The first is the implication to air operations safety on fires that may occur near the route. Transmission lines are usually far enough above the ground to be hazardous for helicopters and air tankers delivering retardant and water to assist in the control of wildfires. Some mitigation, such as beacons or some such should be included to allow for increased visibility during the typically smokey conditions prevalent during a wildfire.

AA The second impact is to the safety of ground forces suppressing fires adjacent to the proposed route. The extremely high voltage conductors will arc in the presence of smoke, and can actually arc to the ground. In order to protect the lines and the ground attack forces from this, some mitigation, such as well maintained fuelbreaks should be provided as mitigation.

2. VEGETATION MANAGEMENT PROGRAM

The preferred alternative route from the Round Mountain Substation to the Cottonwood Substation transects an area that has been very active in the Vegetative Management Program. This program allows the Department to assist private landowners in the use of prescribed fire to reduce fuel loading on their property, and to improve the browse quality of the brush species.

Y See responses to L-362 Z through L-362 RR.

Z We do not plan on marking each tower with beacons. We recognize the concern for air operations safety in the event of a forest fire. The transmission towers will normally be 125 feet tall. It is our understanding that air tankers do not usually fly this low as this is the approximate height of the surrounding timber. However, helicopters do fly this low. They are more maneuverable and their movement in the vicinity of the transmission line would require coordination with ground forces via radios to avoid the transmission line.

AA It is a known fact that the presence of smoke and fire will cause a flashover on high-voltage transmission lines. It is crucial to the location of the transmission line to provide sufficient separation to allow fire fighting forces sufficient time to contain fires to prevent outages to the transmission line caused by the presence of smoke. For this reason, as a matter of reliability, sufficient separation has been incorporated into the COTF's location and design. In addition, we will coordinate with the California Department of Forestry and the USDA Forest Service to develop a coordinated fuels management plan.

L-362 (continued)

BB These areas require maintenance from time to time, which usually means repeating the burns. Our experience in the past has been that the utility companies aren't willing to shut down the major transmission lines for the 1-2 day duration of a prescribed fire. If this were to be the case with the proposed route, nearly 2500 acres of land under this program would be eliminated by the line bisecting the area under management.

CC Proposed mitigation for this might be that the enrolled utilities provide for mechanical treatment of the brush under the power lines on a scheduled basis to improve browse, and to serve as an additional reduction in fuel loading, as well as off site treatment in the areas removed from treatment to mitigate the acres removed from the Vegetation Management Program. The financial impact of removing this land is considerable to the individuals involved. The average cost of these burns is \$38.00 per acre. Up to 75% of this is borne by the state, by the use of State dozers, engines, and personnel. Lands treated with prescribed fire under the Vegetation Management and Range Management Program are more productive for domestic livestock and wildlife. If no mitigation for this impact is undertaken, the land will revert to the heavy, decadent brush that existed before the programs began. The fire potential will increase to pre-prescribed burning conditions while forage available for livestock and wildlife will decline.

3. RANGE IMPROVEMENT PROGRAM

EE The Range Improvement Program is similar to the Vegetative Management Program with many of the same impacts caused by plan implementation. Accordingly, mitigation should include mechanical treatment of the acreage directly under the lines, and off site treatment to mitigate the acreage taken out of management.

4. CALIFORNIA FOREST IMPROVEMENT PROGRAM

FF The California Forest Improvement Program would be most highly impacted by the route between Hillcrest and Big Bend. This program encourages small landowners to use good resource management techniques on their property by allowing the state to cost share some of the work needed on the property. This work can include site preparation, planting, precommercial thinning, and brush management. Some of these small land holdings will be taken out of production by the transmission line, through the right-of way acquisition, others will have the ability to burn the brush piles and slash piles curtailed by proximity to the lines. Some consideration of this should be included in the E.I.S.

5. FOREST PRACTICE ACT

GG Whereas the impacts of implementation will not effect the Forest Practice Act, several points of incorrect information within the EIS should be corrected, and some additional information included.

Under Section 6.0 "Compliance with Laws and Regulations",

BB The COTP is being planned to have a capacity of 1,600 MW. Interrupting the transfer of this much capacity along with its associated energy is extremely costly. However, it will be possible to schedule outages of some duration as a function of load and availability. Prescribed burns are typically not conducted during periods of extreme fire danger which also coincides with periods of high energy loads. Spring and fall are the typical times when it is feasible to burn and it coincides with lower loads and demands on the interties. It may be possible to coordinate transmission line reductions in load and prescribed burns to reduce the concern for loss of this technique for managing the land.

CC See responses to L-362 AA and L-362 BB.

DD See responses to L-362 AA and L-362 BB.

EE See response to L-362 AA and L-362 BB.

FF The California Forest Improvement Program, administered by the California Department of Forestry (CDF), is designed to assist landowners in converting unproductive forestland into productive forestland by encouraging landowners to engage in reforestation, precommercial thinning, and other forest improvement practices. The CDF will reimburse the landowner up to 75 percent of the costs of the improvements.

Land along the transmission line will not qualify under the program because it will be cleared of tall vegetation. Even though the landowners would be prevented from improving this portion of their land under the CDF program, they will still receive compensation for the use of their land in the form of an easement payment.

GG The corrections for Section 6.0 appear in Section 1.1.6 of this Final EIS/EIR.

L-362 (continued)

- GG** The EIS states that Timberland Conversion Permits will be applied for as required. Section 1104.1, Title 14 Division 1.5 of the California Administrative Code specifically exempts utility right-of-way's from the conversion permit requirement. However, because a substantial portion of the route is on privately owned, as opposed to federally owned timberland, an approved Timber Harvesting Plan will be required before the project can be begun on any timberland in the state. No mention of this is made in Table 6.1-2.
- HH** Depending on discussions with the Department of Forestry, a Timber Harvest Plan may or may not be required. If a Timber Harvest Plan is required, all required mitigations will be implemented in accordance with the regulations.
- II** Page 5.1-9 refers to waterbars, cross ditches, diversion ditches, berms, straw bales, and energy dissipators will be used, as required. This section is covered in detail in 14 CAC 934.6, and will be required.
- JJ** Item #8, page 5.1-10, says that winter operations and other wet periods will be avoided to the extent practical. If winter operations are required on timberland, Section 943.6 of Title 14 California Administrative Code prohibits the use of equipment when they cannot operate under their own power (i.e. muddy roads). If this proves necessary, mitigation such as rocking of access roads may be required as the situation dictates, and a winter operation plan will have to be submitted with the Timber Harvesting Plan.
- JJ** See response to L-362 R.
- KK** Item #2 under "Water Resources" page 5.1-11, states that a 100 foot buffer of undisturbed vegetation will be maintained along all lakes and streams. 14 CAC Section 936.5 specifies the procedure for classifying watercourses and designating their required protection zones. These zones are based on the side slope adjacent to the watercourse. Many of these zones are less than the 100 foot zone stated in the DEIS, but, in many cases the required zone is substantially more than this 100 foot buffer. The EIS should state that the protection zones will comply with laws and regulations and in no case will be less than 100 feet.
- KK** See response to L-295 H2.
- 6. FIRE PREVENTION INSPECTIONS UNDER PUBLIC RESOURCES CODE SECTION 4293.**
- LL** Due to the large amount of equipment and manpower that will be required to complete this project, and the remote location of the line, the Department would propose the inclusion of two other mitigations under Section 5.1 (J), page 5.1-18. This project will require that two Fire Captain Specialists be assigned to the project throughout the construction phase to assure compliance with not only 4293, for the charged line, but Public Resources code Section 4428, and 4429 at all active sites. This cost should be borne by the enrolled utilities. In addition, any inspectors for the project hired by the proponents for the purpose of inspecting the work in progress should be delegated "shutdown" authority for violations of law or regulation until such violation is corrected.
- LL** Comment noted. This proposal of the Department of Forestry will be reviewed by the COTP, though at this time we believe that our compliance with all applicable state, federal, and local regulations will suffice to protect adequately against fire such that special assignments of the Department of Forestry may not be necessary.
- MM** See response to L-362 Q.
- 7. GENERAL TIMBER RESOURCES**
- NN** An additional impact that is inadequately spoken to is the removal of 946 acres of Timber Preserve Zone land and prime
- NN** See response to L-362 00.

L-362 (continued)

NN
OO — timber land from production. The EIS states that this would have the effect of eliminating 1.4 jobs from the timber industry. Even if a conservative estimate of 15 thousand board feet per acre was to be harvested from this ground, the total volume removed from this ground would be 14,190 MBF(thousand board feet). The removal of this volume would be a substantial portion of the annual production from many saw mills. This is not adequately addressed in the EIS. The reverse of this effect is the time frame for construction will be very short. The flush of nearly 14 MMBF into the market will have the effect of artificially pushing the value of sawlogs down for the short run. Although short-lived, many loggers are currently finding it financially difficult based on the amount paid by the mills for their sawlogs, without any additional reduction in value through a surplus of supply. This effect is entirely overlooked in the Socioeconomic analysis of the project.

PP —

RECOMMENDATIONS

QQ [The EIS should not be approved without considering the eastern location and the impacts on the timber resource of the preferred route. Many of the impacts addressed in these reports could be alleviated by utilizing an eastern route, possibly along an existing corridor near Nevada.

RR [

OO The comment assumes that the impact will be felt every year. Once the timber is harvested, a period of time must pass to allow the timber to grow to sufficient size. Therefore, the loss of forest land must be amortized over the period of regrowth. For this reason, the annualized net present value approach was used. See Section 3.6.3.2 and Table 3.6-5 of Volume 2A of the Draft EIS/EIR.

PP The workforce projections (see Section 3.8.2.1, Volume 2A of the Draft EIS/EIR) assumed that 10 percent of the construction workforce in the northern segments would be local. This estimate was based on forest clearing being accomplished by local loggers. Thus, clearing of forestland for the COTP should result in a shifting of production areas during the construction period. Clearing of the transmission line corridor will create a temporary glut of timber. The potential for this impact will be added to Section 1.2.3 of the Final EIS/EIR.

QQ See responses to T-69 F, L-159 F, and L-362 B.

RR See responses to T-69 F, L-159 F, and L-362 B.

L-364



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street

San Francisco, Ca. 94105

04 MAR 1987

Nancy H. Weintraub
Western Area Power
Administration
1825 Bell Street
Sacramento, CA 95825

Dear Ms. Weintraub:

In accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act, the Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) titled CALIFORNIA-OREGON TRANSMISSION PROJECT AND LOS BANOS-GATES TRANSMISSION PROJECT, SOUTHERN OREGON, NORTHERN AND CENTRAL CALIFORNIA. We have the enclosed comments regarding this DEIS.

A We have classified this DEIS as Category EC-2, Environmental Concerns - Insufficient Information (see attached "Summary of Rating Definitions and Follow-Up Action"). This DEIS is rated EC-2 for several reasons. First, the DEIS eliminated from further analysis certain alternative transmission line segments that appear to significantly reduce adverse water quality and wetlands impacts. According to the DEIS, these segments were eliminated because they would jeopardize transmission system reliability due to their proximity to existing transmission lines. While we recognize that system reliability is an important factor for the proposed project, the DEIS and supporting documents did not adequately analyze and discuss the basis for transmission line separation and alternative means to maintain system reliability. EPA believes that these issues should be thoroughly addressed before less environmentally damaging routes can be eliminated.

B Second, the DEIS provided little information on pesticide/herbicide use and on ways to minimize harm to water bodies and sensitive habitats from chemical contamination and sedimentation effects. EPA is concerned about potential adverse impacts to water quality from construction and operation of the transmission projects. Maintenance and protection of beneficial uses (e.g., fisheries) was not adequately addressed in the DEIS.

A Detailed analysis of the reliability issue is contained in the Power System Studies Committee's "Comparison of Northern Corridors" and "Corridor Separation" reports. See also responses T-69 F and L-362 B.

B See responses to L-364 K through L-364 X.

L-364 (continued)

-2-

C

Finally, EPA is concerned about the adequacy of the proposed mitigation measures (DEIS, Section 5) and implementation mechanisms. The DEIS maintains that specific mitigation will be developed after more detailed studies are made on the selected transmission line route. The Final Environmental Impact Statement (FEIS) should present more specific information on mitigation measures and more fully discuss compliance mechanisms.

A summary of EPA's comments will be published in the Federal Register in accordance with our public disclosure responsibilities under Section 309 of the Clean Air Act.

We appreciate the opportunity to review this DEIS. Please send five copies of the FEIS to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions, please contact Enrique Manzanilla, Federal Activities Branch, at (415) 974-0948 or PTS 454-0948.

Sincerely,


Charles W. Murray, Jr.
Assistant Regional Administrator
for Policy and Management

Enclosure (6 pages)

cc: Transmission Agency of Northern California (Att. Rick Lind)
U.S. Forest Service (Att. Debbie Stephan)
U.S. Fish and Wildlife Service (Att. Roger Guinee)
U.S. Corps of Engineers (Att. Art Champ)

C

Section 1.1.5 of the Final EIS/EIR presents the mitigation measures adopted by the lead agencies. A discussion of compliance mechanisms has been added to this section. Many of the mitigation measures are revised to reflect the need for more specificity. See also responses to L-364 K through L-364 X.

Alternatives Comments

- D** 1. EPA is concerned that less-damaging, environmentally preferable transmission line segments may have been prematurely eliminated without an adequate analysis and discussion. We believe that a more thorough analysis is necessary in order to be fully consistent with NEPA and Section 404 of the Clean Water Act (CWA). We have identified at least two transmission line segments (N-10M2 and S-8F) that, when compared to corresponding segments under the DEIS's preferred alternative, appear to significantly reduce potential adverse impacts to water quality and wetland areas by decreasing the number of streams crossed by the transmission project and by greatly reducing the number of structures in wetland/floodplain areas. Consequently, the potential for adverse sedimentation and contamination impacts also decreases. Section S-8F, in particular, appears to cause significantly less environmental damage by utilizing an existing corridor. Whereas the preferred alignment would place approximately 75 new structures in wetland/floodplain areas, section S-8F would place only three new structures in wetland/floodplain areas.
- E** Although they are less damaging, these routes were eliminated from further analysis because of concerns over system reliability (Vol. 2A, p. 2.4-546). The DEIS states that alignments in or near existing corridors have less environmental impacts than the proposed actions but may jeopardize the reliability of the bulk power system of the western United States. EPA agrees that transmission system reliability is an important factor in selecting the project configuration. However, given that these routes are less-damaging alignments, it is essential that the FEIS analyze these alternatives and thoroughly discuss ways to maintain system reliability other than by transmission line separation. The following issues should be addressed in the FEIS:
- F** o The basis for transmission line separation should be thoroughly discussed. Pertinent supporting information from the "Centerline Separation Reliability Analysis for 500 KV Transmission Lines" report should be presented.
- G** o For the Delta routes, the FEIS should clarify whether the minimum line separation is 1200 feet (Vol. 2A, p. 2.4-6) or 2000 feet (Vol. 1, p. 10). There seems to be a discrepancy in the DEIS and supporting documents.
- H** o The likelihood of potential causes of system failure (forest fires, airplane collision, etc.) should also be thoroughly discussed.
- I** o The FEIS should thoroughly assess remedial action schemes and any other measures that could maintain system reliability.
- D** The numbers of structures cited would be placed in floodplains on route segments through the Sacramento - San Joaquin Delta. Islands protected by levees are below sea-level and are thus technically considered as floodplains. Segment S-8F would be an upgrade of the Western 230 kV line with the placement of transmission conductors on existing structures, thus resulting in only a few new additional structures in floodplains. Heavy construction work would still be required for the entire length of S-8F, however, which drastically diminishes its apparent environmental advantage over the preferred route regarding floodplains impacts. It appears that all wetlands along the preferred route in the Southern Section can be spanned.
- Segment S-8F was eliminated from consideration for reliability reasons as discussed in the Draft EIS/EIR, Volume 2A, page 2.4-6. Part of route segment N-10M2 is being reconsidered as a routing option to the preferred route, that was presented and analyzed in the Supplement to the Draft EIS/EIR under the North 2 options. It has been adopted as the Project preferred route. See also Section 1.2.2 (Beebe Relocation) and response to SL-125 L for a discussion of an additional route analyzed in the Southern Routing Section.
- E** See response to L-364 A.
- F** See response to L-309 YY.
- G** See response to L-309 YY.
- H** The likelihood of potential causes of outages is contained in the "Centerline Separation Reliability Analysis for 500 kV Transmission Lines" report. See responses to L-309 YY and L-364 I.

bility (e.g., alternative fire management techniques, overflight safety precautions, design modifications). The significant improvements to the present remedial action schemes that are currently being undertaken by the Pacific AC Intertie owners (DEIS, p. 1.1-3) should also be described.

2. The FEIS should give the "no-action" alternative the same level of detailed analysis as other project alternatives. This is necessary to provide a benchmark, enabling decision-makers to compare the magnitude of environmental effects of the action alternatives. Since the DEIS states that the no-action alternative may lead to other means of meeting power requirements, it is necessary that the environmental consequences of these actions be discussed as thoroughly as possible in the FEIS.

Pesticide Comments

1. Use of herbicides on U.S. Forest Service (USFS) lands in California has been voluntarily curtailed pending the Record of Decision (ROD) on the USFS Supplemental Vegetation Management for Reforestation EIS. While EPA supports the project proponents' decision not to use herbicides to maintain the right-of-way on public lands (Vol. 1, p. 5.1-4, #11), it is possible that substantial use of pesticides on public lands could legally take place if the Vegetation Management EIS is approved in its present form. In addition, it is our understanding that the USFS is currently preparing an environmental analysis of the use of herbicides on rights-of-way. Therefore, we believe the FEIS should include a list of herbicides that may be used on public and private lands, along with information on site criteria, quantities and potential acreage.

2. Simply "direct(ing) construction contractors to comply with applicable federal and state laws and regulations concerning the use of pesticides in all activities and operation" (Vol. 1, p. 5.1-3, #7) is not sufficient. The FEIS should describe and commit to site-specific application criteria and monitoring and compliance mechanisms. In addition, the FEIS should address the following issues/questions regarding both construction and operation phases:

- o Will herbicides be used in fire prevention programs?
- o Will wood preservatives be used during construction?
- o Will herbicides be used around/along roads, utility poles and rights-of-way (See comment #1)?
- o The FEIS should discuss provisions for storage, mixing,

Assessment of remedial action schemes is contained in the Power Systems Study Committee's "Corridor Separation" report. Alternative fire management techniques have been evaluated and will be incorporated into the COTP planning, construction, operation, and maintenance.

It is not possible at this time to specifically identify the precise alternative or alternatives that would be employed by utilities if the Project is not constructed. The Draft EIS/EIR examines a range of alternatives at a level of detail consistent with the ability to reasonably compare the environmental aspects of those that are relevant.

Additionally, to a large extent the Draft EIS/EIR relates COTP environmental impacts to those impacts that are probable without the COTP. For examples of analyses comparing incremental effects/benefits of the Project, see the development of decision packages on pages 2-10 through 2-18 in the BPA IDU EIS. See also the several sections of that analysis that contrasts environmental consequences with and without the COTP. Examples are the BPA IDU Draft EIS Sections 2.1.4, 2.1.5, 4.2.3.1.2, 4.2.3.2.1 through 4.2.3.2.4, 4.2.3.3.1, 4.3.2.2.1, and several more which discuss and compare environmental consequences with and without the COTP. In addition to the sections specific to the comparisons of cases with and without the COTP, several other sections make such comparisons in tables or text.

For a summary of the environmental impacts (benefits) of the COTP versus the alternatives studied, see Section F of the Summary of the BPA IDU Draft EIS at pages S-4 and S-5. See also responses to L-295 BB and L-295 DD.

We do not know which specific sites would require the use of herbicides at this time. However, we have established some general conditions under which herbicides would be used. In addition, refer to Section 1.1.5 of Volume 1 of this Final EIS/EIR, mitigation measures X.G, W, X, and Y.

- 1. There will be no aerial application of herbicides. Herbicides will be used to hand treat those stumps of deciduous tree or brush species within the right of way that could potentially resprout and interfere with the conductors.
- 2. Periodic maintenance of the right-of-way with herbicides is expected to occur at intervals of from 4 to 6 years.

L-364 (continued)

K
(cont.)

3. Limited use of herbicides will be made to control unwanted growth within substation areas.
4. Herbicides will not be used until permission is obtained from the landowners or land managing agencies.
5. All regulations governing the use of herbicides (EPA, California State Department of Food and Agriculture, and County Agricultural Commissions) will be strictly adhered to including 1) the use of licensed and/or registered herbicide applicators as required; 2) use of herbicides in agricultural or urban areas as specified through the permit system administered by the county agricultural commissioners; 3) proper storage requirements; 4) proper use of registered or classified herbicides in accordance with the most current label.
6. All herbicide applicator contractors are required to report herbicide use to the County Agricultural Commissions as per the permit system administered by the county agricultural commissioners.

L

See response to L-364 K.

M

See response to L-364 K and L-364 O.

N

The transmission towers will be made of steel. Certain wood products used as tools or equipment during the construction period (e.g. timber cribbing) may be treated with wood preservatives before arriving at the jobsite.

O

Yes. See response to L-364 K. There are also certain instances under the California Public Resources Code Sections 4292 and 4293 where we are required to maintain certain vegetative clearances during operation of the line in order to keep flammable material away from the conductors. We would apply herbicides to the stumps of trees and/or tall brush to stop any sprouting that may occur. This would not be required during the construction phase.

P

Fish kills and habitat changes are identified as potential impacts. The implementation of the mitigation measures described in Section 1.1.5, Volume 1 of the Final EIS/EIR would prevent these impacts from occurring. It is anticipated that only Class 4 herbicides would be used. All herbicide storage will be in accordance with the appropriate state, federal, and local standards. Spill Prevention Contingency Plans (SPCPs) will be developed if necessary.

L-364 (continued)

-3-

- P [loading, disposal, safety of applicators and spill prevention contingency plans (SPCP).
- Q [o The FEIS should discuss measures to be taken to avoid drift and/or direct application to surface waters and wetlands.
- R [o The FEIS should thoroughly consider the use of notification programs.
- S [o Prior to pesticide selection, the current status of the product must be ascertained and the most current label adhered to.
- T [o The FEIS should consider options to pesticide applications such as mechanical, biological and Integrated Pest Management programs.

Water Quality Comments

- U [1. The FEIS should provide more details on herbicide use and potential impacts on water quality and beneficial uses of water bodies in the project area (see Pesticides Comments). For example, the FEIS should identify what herbicides will be used and discuss their bio-degradability. The DEIS (Vol. 2A) states that the use of herbicides will result in several long-term impacts to fisheries, particularly mass fish kills and changes in fish habitat. Fisheries is a listed beneficial use for several of the documented rivers and streams. The FEIS should thoroughly describe potential adverse impacts (e.g., how will fish habitat change) and propose specific mitigation measures to protect habitat and assure that no fish kills occur.
- V [2. The DEIS states that increased sediment loading will occur during project operation and construction. The FEIS should state what specific mitigation measure(s) will be implemented to protect fisheries habitat, particularly spawning grounds.
- W [3. The FEIS should document consultation with all appropriate California State Regional Water Quality Control Boards and assure compliance with any applicable water quality standards and maintenance of any beneficial uses for water bodies in the project area.
- X [4. The DEIS states that a biological resources field survey will be conducted prior to construction. This field survey will identify any site specific impacts and will be used to develop mitigation measures to preserve water quality and fisheries in the project locale. The FEIS should describe potential mitigation measures in more detail.

Q See response to L-364 K. The limitation to hand application methods would prevent this.

R Private landowners, with whom we have negotiated permission to use herbicides, will be notified prior to their use.

S We concur. The current status of the product will be ascertained and the most current label adhered to.

T We anticipate that vegetative management practices that encourage existing low growing natural vegetation will minimize the need for herbicides. Selective thinning will be used to reduce the danger of fire and the need for herbicides for that purpose. See response to L-364 O.

U The use of herbicides may be required during the operation and maintenance phase of the Project. Specific mitigation measures have been developed to reduce any impacts on fisheries from herbicide use to less-than-significant levels. These include vegetative buffer zones and herbicide use restrictions. As a result of the mitigation measures, long term impacts to fisheries are not anticipated. Specific identification of herbicides to be used on private lands is not possible at this time, since the herbicide used would depend on the type of vegetation, location, and other environmental considerations and upon the particular herbicides approved for use by federal, state and local authorities. It is anticipated that only Class 4 herbicides would be used.

V See Section 1.1.5 of Volume 1 of this Final EIS/EIR, mitigation measures - II.A.6, 7, 9 through 12, 14, 15, 18, 19; II.B.1; and III.A, B, C, D. These specific mitigation measures will be implemented to protect fisheries habitat from increased sediment loading. These measures cover use of specific construction methods, stream crossing limits, vegetative buffer zones, and implementation of Forest Service Best Management practices on USFS lands.

We will work closely with biologists at the USDA Forest Service, the BLM, U.S. Fish and Wildlife Service, and State Fish and Game Departments and private landowners to develop site specific mitigation requirements once the access road requirements have been defined.

W We contacted the Regional Water Quality Control Board in Redding in March 1987. We are working with Bob Lewis of that office to incorporate the Board's concerns into the final COTP location and design.

L-364 (continued)

X

Detailed, site-specific mitigation measures for fisheries are listed in this Final EIS/EIR Volume 1, Section 1.1.5. Additional measures to be developed in consultation with the appropriate agencies will include measures such as locations of towers and access roads, timing of construction, and possible helicopter construction in certain areas subject to very high erosion potential where impacts cannot otherwise be mitigated.

Section 404 Comments

Y

1. The FEIS should contain more detailed information on the potential impacts to wetlands, particularly those along the Delta routes. For example, wetland areas along Alternatives A and C in the Southern section of the COTP should be identified and described in the same way that they were identified for the preferred alternative (i.e., Appendix E). The Sacramento District of the U.S. Army Corps of Engineers should perform a wetlands determination after the route is selected to more precisely delineate wetland areas and assure consistency with Section 404 of the CWA.

Z

2. If a 404 permit is required, EPA will review the project for compliance with Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA.
 - a. EPA's evaluation will focus on the maintenance of water quality; the protection of fisheries and wildlife resources, threatened or endangered species, and special aquatic sites, including wetlands.
 - b. These regulations require that no discharge shall be permitted which will result in unacceptable adverse impacts on the aquatic ecosystem.
 - c. If applicable, the results of further studies should indicate the amount of dredging required, potential disposal sites, types of fill material to be utilized, quantities to be discharged into waters, and special aquatic sites that fall under Section 404 jurisdiction.
 - d. Under the Section 404(b)(1) guidelines, wetlands are considered "special aquatic sites" (40 CFR 230.3 [q-1] and 230.40). The regulations require that, when the project associated with the discharge is not water dependent, the discharge of dredged or fill material into the special aquatic site shall not be permitted unless the applicant can demonstrate that there are no practicable alternatives to the proposed discharge. The term "water dependent" applies to a project that requires access, proximity to or siting within the special aquatic site in order to fulfill its basic purpose. The purpose of the proposed project must be defined objectively in detail. Examination of practicable alternatives should include but not be limited to consideration of the following points:
 - 1) Sites other than the proposed project site,

Y

The preliminary floodplain/wetland assessment (Appendix E of the Draft EIS/EIR) was prepared for the preferred route in accordance with Executive Order 11990. The order applies only to a proposed action and not to alternatives. A detailed, site-specific floodplain/wetland assessment will be prepared for the preferred route once detailed tower and access road locations are known. The alternative routes do not differ substantially with respect to wetland impacts.

Mr. Greg Rayner of the Sacramento District of the U.S. Army Corps of Engineers has been consulted concerning Section 404 requirements. The Corps was requested to perform a wetlands determination in March 1987 for the preferred route. We are continuing to consult with the Corps concerning Section 404 requirements.

Z

We have contacted the Sacramento District of the U. S. Army Corps of Engineers for information concerning Section 404 permit requirements. We are working closely with the Corps and the State Water Resources Control Board to review potential impacts to wetlands in light of Section 404 requirements.

L-364 (continued)

-5-

- Z
- 2) Rearrangement of the project within the proposed site,
 - 3) Downscaling of the project to avoid or minimize impacts to special aquatic sites.

AA 3. Mitigation measures for impacts to wetlands and other sensitive habitats should be described in more detail. The FEIS should also address the following concerns:

BB

- o Monitoring of construction activities should be explained in more detail (e.g., reporting mechanisms, nature of the inspection program, coordination mechanisms with responsible federal and state agencies)

CC

- o The DEIS (p. 5.1-1) states that "the inspectors could (emphasis added) request redirection of construction activities if the contract specifications were not followed." EPA believes that more specific information on enforcement mechanisms should be included in the FEIS. The FEIS should describe in detail what enforcement mechanisms will be used to assure compliance with adopted mitigation measures and who will be responsible for assuring compliance throughout the project area. These mechanisms are necessary to avoid actions during the construction and operation phase of the project that would conflict with previous decisions on mitigation.

DD

- o DEIS, p. 5.1-12: Mitigation #D-4 should include the use of helicopter construction as an alternative means to minimize impacts to sensitive habitats.

EE

- o The FEIS should outline what measures will be taken to offset unavoidable adverse impacts to wetland areas.

FF

- o EPA is concerned about potential adverse impacts to wetlands in the Central Section Upgrade Route. The DEIS (p. 4.1-18) states that the level of impact would depend on whether new structures would be built along this route. The FEIS should fully discuss potential impacts to wetlands and other sensitive habitats due to possible construction activities along this route.

AA Mitigation measure IV.J indicates that wetlands and other sensitive habitats will be avoided to the maximum extent possible so few impacts to these habitats would be expected. Site-specific measures will be developed upon consultation with the U. S. Army Corps of Engineers, the State Fish and Game Departments and the U.S. Fish and Wildlife Service after detailed design and access road locations are known.

BB Construction contract inspectors will have the responsibility to assure that construction work complies with the mitigation measures. Mitigation measures will be a part of the construction contract specifications. See revised discussion of compliance and monitoring mechanisms in Section 1.1.5 of Volume 1 of this Final EIS/EIR.

CC See response to L-364 BB.

DD Helicopters can be used to minimize impacts to sensitive habitats such as where there are substantial erosion impacts that cannot otherwise be mitigated. However, we believe that other mitigation measures that we have proposed and adopted are sufficient to minimize impacts in almost all cases.

EE Where there are unavoidable adverse impacts to wetland areas, mitigation will be developed in accordance with the U.S. Fish and Wildlife Service mitigation policy which is included in the appendix for reference.

FF A small percentage of the existing tower bases may have to be moved or modified on the Central Section (upgrade route). Very few of the existing towers are located in wetlands. Detailed design data will be reviewed to assess possible impacts to wetlands; any unavoidable impacts to wetlands will result in an application for a Section 404 permit from the U. S. Army Corps or Engineers.

L-364 (continued)

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION*

Environmental Impact of the Action

10—Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

1C—Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

1D—Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

1U—Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CBJ.

Adequacy of the Impact Statement

Category 1—Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CBJ.

L-366

THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY
SAINTS

INVESTMENT PROPERTIES DIVISION
60 East South Temple Street
Suite 780
Salt Lake City, Utah 84111
Phone (801) 531 5867

February 25, 1987

Environmental Coordinator
California/Oregon Transmission Report
P.O. Box 660970
Sacramento, CA

Re: California/Oregon
Transmission Report

Gentlemen:

A This letter is to express the detrimental effects that would occur to 3,500 acres of Church property if the southern section of the above referenced 500 kilovolt transmission line were constructed along the westerly Alternative (A) alignment through the Discovery Bay area west of the Old San Joaquin River. The Church property is bordered by the Old River on the east and extends from Discovery Bay and State Highway 4 on the north to the Clifton Court Forebay on the south. The property's southwest boundary fronts on the Byron Highway.

The Church's concerns about the 500 KV transmission line on Alternative (A) are:

- B**
1. Inasmuch as it is the Church's intent to eventually sell large portions of its 3,500 acres for the continued urbanization of the Discovery Bay Community (now containing over 1,500 homes) public safety and liability issues become of greater concern.
 - a) Downed power lines could spawn damage and liability problems to eventual development.
 - b) Due to high density residential and industrial development that will occur near the transmission line along with the high traffic volume, an unnecessarily large number of people
- C**

A Alternative A, which crosses the Church property, is not the Project preferred route.

B The COTP is designing the transmission line with the safety of the public as a paramount concern. Transmission lines are protected by automatic relays which will open within fractions of a second should a grounding of the line occur. The line is immediately de-energized when the grounding is detected. The lines are designed and located within the right-of-way so that the immediate effects of the type you have described are usually limited to the right-of-way, which must be kept clear of buildings and similar development.

C See responses to L-330 F3, SL-51 A, and L-309 E2.

L-366 (continued)

Environmental Coordinator
Feb. 25, 1987
Page 2

C | would be exposed to the negative effects of low frequency electromagnetic power field generated from 500 KV transmission lines. It is my understanding the scientific evidence of the biomedical effects to human cells and cardiac pacemakers is sufficient to make the issue at least a concern.

D | 2. The Church property and the Discovery Bay area represents lands with significant commercial and residential development potential. Alternative (A) may result in a costly condemnation procedure compared with the route through Victoria Island.

We appreciate your consideration of the above.

Sincerely,

INVESTMENT PROPERTIES DIVISION

Elliott F. Christensen

Elliott F. Christensen
Manager, Investment Properties

EFC/krp

cc: Albert T. Shaw

D See responses to L-14 B and L-184 A. Every effort is made to acquire the necessary easements through successful negotiations with the landowner. Easements can be acquired through eminent domain (condemnation) proceedings, if negotiation should fail. Federal and state laws enable public utilities to acquire, through the courts if necessary, property rights for facilities to be built in the public interest. Under eminent domain proceedings, the court determines the value of the easement.

L-368



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS ELECTRONIC SYSTEMS DIVISION (AFSC)
HANSCOM AIR FORCE BASE, MASSACHUSETTS 01731-5000

REPLY TO
ATTN OF

SCO-2

SUBJECT

Review of California-Oregon Transmission Project and Los Banos-Gates Transmission Project Draft
EIS/EIR

TO

Environmental Coordinator
California-Oregon Transmission Project
P O Box 660970
Sacramento, CA 95866

- A [1 We have reviewed the subject EIS/EIR for its effects upon the OTH-B West Coast Radar System and have concluded that your project will not impact us as long as you maintain separation distance between the two projects to ensure minimum interference.
- B [a After examining the alternative routings of the proposed 500 kVA power line, we anticipate that the line will be at least 8.5 miles from the receive site in the Modoc National Forest. At this distance, the line will have no adverse effect on the operation of the OTH-B system. To ensure no interference or adverse effect upon the OTH-B project, the minimum separation distance required between the two projects is five miles.
- C [b The DEIS/EIR indicates that 10-15 new microwave communication facilities may be required for the operation of the COTP. After studying the figures in the DEIS/EIR, we estimate that the location of the proposed microwave facility (P-2) closest to the OTH-B site is in the vicinity of Newell, CA and is at least 8 miles away. Since a 60 foot tower would have to be within one mile of the site to impact the OTH-B system, we conclude this tower will have no effect.
- 2 Should you have any questions on this matter, please contact me at 617-271-5386

A Comment noted.

B Comment noted.

C Comment noted.


DAVID A. KLOC, Major, USAF
Program Manager, WCRS
Over-the-Horizon Radar Systems Directorate
Deputy Commander for Strategic Systems

L-371



Department of Energy
Bonneville Power Administration
PO. Box 3621
Portland, Oregon 97208-3621

March 6, 1987

Re: EVRC

Mr. Rick Lind
Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Mr. Lind:

Enclosed please find our comments on the California-Oregon Transmission Project draft Environmental Statement/Environmental Report. This is a "hard copy" follow-up to our facsimile transmittal to Nancy Weintraub, on Monday, March 2.

In this review, we focused upon corrections to technical inaccuracies, and additions of pertinent information to make this a better, more accurate document. We have also included some new information for mitigating potential conflicts between powerline structures and wheel-line sprinkler irrigation, which may be of benefit to you.

We appreciate the opportunity to comment on the draft, and trust that our comments will be of value to you. Please let us know if you have questions or need clarification on any of our comments.

Sincerely yours,

A handwritten signature in dark ink, appearing to read 'Timothy J. Murray', is written over a circular stamp.

Timothy J. Murray
Chief, Environmental Resources Branch

Enclosures

cc: Paul Higgins, Pacific Power & Light Company
Gary Bauer, Portland General Electric
John Savage, Oregon Department of Energy

L-371 (continued)

Comments on the California Oregon Transmission Project Draft EIS

VOLUME 1:

Forward:

- A** Page iv, first full paragraph: This description of the functions of the COTP and IDU EISs is unclear, as is the description of the decision responsibilities of the various entities. There needs to be more explanation of the underlying reasons for what is being stated. A suggested revision of this language follows:
- "Upgrading the AC Intertie system between the Pacific Northwest (PNW) and California will require decisions by several organizations. COTP participants, including Western, must decide whether or not to construct the COTP. Bonneville Power Administration's (BPA) Administrator must decide whether to allow interconnection of the COTP to the existing Intertie system, and to upgrade the existing PNW Intertie system in order to support the additional capacity of the COTP. BPA has contractual rights and responsibilities with Pacific Power & Light (PPL) to construct and own the interconnection between the COTP and PNW systems, although responsibilities for interconnection still must be negotiated between the COTP participants and PNW entities.
- Because of its role, BPA is a cooperating agency under NEPA in the preparation of the COTP EIS. BPA will consider impacts addressed in the COTP EIS/EIR as well as in BPA's Intertie Development and Use EIS in arriving at its decisions about interconnection and reinforcement of the PNW AC Intertie system. BPA has also provided to Western the necessary environmental documentation concerning the PNW Reinforcement Project. That documentation is included in the COTP EIS/EIR."
- B** Pages iv and v, under State and Local Agency Decisions on Projects: It seems appropriate to include the Oregon Review Committee under this section. You have spent much time and effort working with this Oregon Governor's committee in assisting their technical and socioeconomic evaluation of the project.
- C** Page v, paragraph 6, second sentence: Recommend adding the underlined wording and deleting that placed in brackets: "With the [construction] completion of BPA's [proposed] DC Terminal Expansion Project, currently under construction, Intertie capacity [would] will be . . .".
- D** Page vi, last paragraph, next to last sentence: Change issue date for IDU Final EIS from May 1987 to summer 1987.
- SUMMARY:**
- E** Page 3, Table 1A: Despite the fact that several of the indicators for Route D (length, new right-of-way, new access roads, soil loss, forest land cleared, miles of deer range crossed, short-term agricultural losses,
- A** This section has been revised. See the Foreword Section in Volume 1 of the Final EIS/EIR.
- B** A statement describing the role and participation of the Oregon Review Committee has been added to Section 1.1.7 of Volume 1 of the Final EIS/EIR.
- C** See revised language in the Foreword to Volume 1 of this Final EIS/EIR.
- D** Subsequent discussions with BPA indicate that the completion date for the IDU Final EIS has been revised to April 1988. The Foreword of this Final EIS/EIR reflects a revised date.
- E** On September 12, 1986, the lead agencies and the Environmental Contractor met to evaluate the environmentally preferred alternative in the north and in the south. The purpose of the meeting was to arrive at a consensus among resource specialists regarding an environmental evaluation of the alternative routes. Four alternatives in the north (A, B, C, and D) and three in the south (A, B, and C) were compared and a preferred alternative was identified.

L-371 (continued)

E Native American sites) are higher than for the other routes, it is identified as the environmentally preferred route. A careful explanation of the methodology used to arrive at this designation would alleviate any potential misunderstanding concerning its appropriateness.

F Page 9, COTP substation and other supporting facilities, etc.: Revise first bullet paragraph to reflect wording agreed to by Western and BPA for public meeting description. Should read: "Construction of a new switching station in the Southern Oregon area near either Pinehurst, Keno, or Malin, along the existing Malin-Meridian 500-kV AC Transmission line." The paragraph currently states that the interconnection point will be at the southern Oregon switching station. This has not been agreed upon. Interconnection negotiations between COTP, Western, and the Pacific Northwest entities will determine where the interconnection point between the COTP and the PNW facilities will be. (This wording should be consistently reflected in all other references to construction of the southern Oregon switching station.)

PURPOSE AND NEED:

G Section 1.2, pg. 1.2-1, para. 4, fourth sentence: The figures of 8,000 GWH of energy and California savings of \$320 million are misleading. To clarify, please add after that sentence: "However, a portion of the spill occurring during 1982 and 1983 was planned spill needed to assist fish passage. An additional amount was spilled because of turbine capacity limits. A portion could have been made available to California if additional Intertie capacity had been constructed at that time."

H Section 1.5.1, pg. 1.5-2, top of page: The referenced study by Portland General Electric should be summarized in an appendix in order to allow consideration of its methodology and assumptions. There is no way the reader can evaluate whether or not the assumptions of the study are consistent with those used to evaluate the benefits of the COTP in California.

ALTERNATIVES:

I Section 2.1.1, pg. 2.1-7, para. 3: The assumptions used to determine the time required to reduce loadings on the existing two-line system, and the proposed three-line system, need to be clarified. What is meant by "safe level" and what load level does it represent? Does the time required to reschedule to a "safe level" include rescheduling of spinning reserve in addition to reducing the loading on the Intertie lines? These assumptions need to be defined in order to determine whether rescheduling times indicated are reasonable.

J Section 2.1.1, pg. 2.1-9, para. 3: The southern Oregon switching station is described with a minimum of three breakers. This should be revised to reflect the one-line diagram in Figure A-1, Volume 3, which shows eight breakers.

K You also need to include a third site, E3, which is north of the PP&L-Malin-Meridian 500-kV line and within the substation siting area map. This site is the one discussed by COTP, BPA and the Oregon Review Committee. The site should also be identified on Figure 2.1-5A.

E The procedure for each comparison of alternatives was as follows:
(cont.)

1. Each discipline specialist was asked to give a letter grade to each alternative based on the definitions below. It was anticipated that more than one alternative in a comparison could receive the same letter grade.

A = High acceptability; no major impact; no extensive mitigation

B = Moderate acceptability; some potentially major impact but mitigable, or minor impacts with mitigation

C = Low acceptability; major impacts difficult to mitigate

D = Very low acceptability; major impacts, mitigation may be impractical

2. Each discipline specialist was also asked to rank the alternatives, with number 1 being the most preferred. These rankings take into account only the discipline which was represented by that specialist (e.g., the discipline specialist for biology ranked the alternatives based solely on biological criteria).

3. Each discipline specialist then provided a verbal report indicating the letter grade, the rankings, and the rationale or issues which led to these grades and rankings. Discussion/questions of these reports was encouraged. The letter grades and rankings was summarized on a flip chart and discipline specialists submitted completed Discipline Evaluation Forms for each comparison.

4. After hearing the reports from all discipline specialists, participants were asked to give overall rankings for the segments, taking into account all disciplines. These scores were summarized on a flip chart. The scores were discussed, and a group decision made as to which segment was preferable. This decision (and in the case of close votes, the rationale for the decision) was summarized on the flip chart.

The following tables show the results of the comparison of Northern Section alternatives. The first table presents the grades and ranking given to each alternative according to discipline. The second table shows the results of overall rankings given to the alternatives which take into account the views of all disciplines, not just those of the individual specialist. The last table presents a brief description of particular issues which were important to the decision-making process for each discipline.

L-371 (continued)

E
(cont.)

TABLE 1
SUMMARY OF DISCIPLINE REPORTS

	NORTH							
	ALT A		ALT B		ALT C		ALT D	
	LETTER GRADE	RANK	LETTER GRADE	RANK	LETTER GRADE	RANK	LETTER GRADE	RANK
General	--	--	--	--	--	--	--	--
Water	B	4	B	2	B	3	B	1
Visual	C	3	C	2	C	1	D	4
Vegetation/Wildlife	D	3	D	4	C	2	C	1
Socioeconomics	B	3	B	1	B	4	B	2
Land Use	C	4	C	2	C	3	C	1
Cultural Resources	A	1	B	3	B	2	C	4
Soils/Geology	C	4	B	1	C	2	C	3
Public Involvement	D	4	C	3	B	2	B	1

TABLE 2
GROUP SCORES

	NORTH			
	ALT A	ALT B	ALT C	ALT D
Participant A	4	3	2	1
Participant B	4	3	2	1
Participant C	4	3	1	2
Participant D	4	3	2	1
Participant E	4	3	2	1
Participant F	4	3	2	1
Participant G	3	4	1	2
Participant H	4	3	1	2
Participant I	4	3	2	1

E
(cont.)

TABLE 3
RATIONALE/ISSUES

1. GENERAL: From the prospective of quantified, environmental impacts across all disciplines, the eastern corridor has fewer impacts, and the central has more than the eastern but less than the western. The western corridor has a greater number of impacts to most resources.
2. WATER: Each alternative crosses streams, with at least one stream containing a candidate endangered fish species. Alternative D has no streams paralleling it and only one endangered fish crossing.
3. VISUAL: Alternative C is visible from fewer residences and other sensitive land uses, and it is located in more compatible landscapes.
4. VEGETATION/WILDLIFE: There will be no bald eagle or other endangered species collisions on Alternative D. Old growth is avoided on Alternative D with minor adjustments. Swainson hawk nest can be avoided by construction during off-season.
5. SOCIOECONOMICS: Alternative B has the least overall impacts. This would improve by avoiding the community of Macdoel.
6. LAND USE: Alt D affects less prime timber and agricultural preserves than the other three alternatives.
7. CULTURAL RESOURCES: Alternative A has lowest sensitivity to prehistoric resources.
8. SOILS/GEOLOGY: Alternative B has the least amount of impacts. The alternative may exceed soil loss tolerances over only 44 percent of the route.
9. PUBLIC INVOLVEMENT: Alternative D is acceptable to the public if it avoids agricultural land.

F

This revision has been made. See the Summary Section of Volume 1 of this Final EIS/EIR.

L-371 (continued)

- G** This revision has been made. See Section 1.1.1, Purpose and Need, of Volume 1 in this Final EIS/EIR.
- H** The Portland General Electric (PGE) study referenced in a letter to Mr. Hussein Hassoun, Administrator, Planning Program, Oregon Department of Energy, dated June 11, 1986, is based on a model developed and operated by PGE called the Western States Dispatch Model (WSDM). A summary and copy of the study should be requested from the author. The study is cited as corroboration that analysis other than those contained in the Draft EIS/EIR and the BPA IDU EIS have concluded that positive benefits to the Northwest are likely.
- I** In the event of a predictable situation, such as a forest fire, which may cause the simultaneous loss of the intertie lines, a reduction of Intertie loading to a safe level will be required. A safe loading level is considered the level at which the simultaneous loss of the intertie lines could be accommodated by the system. For 4,800 MW of loading on the intertie, a safe level would be in the order of 800 to 2,400 MW, with the exact number yet to be determined. A deep reduction such as indicated by this range may require cold standby steam units to transfer to hot standby and this could take a number of hours, with eight hours the estimate being used in the Draft EIS/EIR. Should there be enough ready reserve at the load centers, either synchronous, such as spinning reserve, or nonsynchronous, such as off-line gas turbines, reduction would take a minimum of two hours.
- J** The exact number of breakers at the Southern Oregon Switching Station will be determined in the Pacific Northwest Plan of Service. The station presently includes seven breakers to terminate four lines, as is shown on the revised single line diagram.
- K** This site was analyzed in the Supplement to the Draft EIS/EIR and has been adopted as the Project preferred site.

L-371 (continued)

- L** Section 2.1.3, Figure 2.1-6A: Map does not show BPA's Buck Butte Radio station, which is about two miles from the Southern Oregon Substation site. This should be added to the map.
- M** Section 2.3, Eugene Medford Project, pg. 2.3-4, second bullet: Delete sentences following "...not alternatives to each other." (last five lines). Replace with: "BPA holds an option from PP&L to acquire capacity in the Eugene-Medford line. If BPA exercises that option, a portion of the Eugene-Medford line's capacity, together with other improvements in the Northwest, will be used to support the Northwest system reinforcements."
- N** Section 2.4, pg 2.4-2, para. 1, line 6: Delete "absorbed in." Replace with "transmitted to California..." The ability to absorb energy is a separate issue.
- O** Section 2.5.1.1, pg. 2.5-4, para. 1: The reason given to eliminate the option of upgrading the two present AC Intertie lines to 4800 MW, i.e., loss of one line loaded to 2400 MW, would not meet the WSCC Reliability Criteria, is not true. The correct reasons to eliminate this option are twofold:
1. Loss of two parallel Intertie lines loaded to 4800 MW would violate the WSCC Reliability Criteria because underfrequency firm load shedding would occur in the Arizona/New Mexico/Nevada areas. This is demonstrated by the present import limit into the southern island (California/Nevada/Arizona/New Mexico areas) of 3800-4000 MW to prevent firm underfrequency load shedding. This assumes remedial action would be limited to what is presently performed for loss of two parallel AC Intertie lines, i.e., NE-SE Islanding Scheme operation.
 2. Loss of two parallel AC Intertie lines loaded to 4800 MW would require substantial reduction of Arizona-California power transfers which is not economically or institutionally acceptable. This again assumes that operation of the NE-SE Islanding Scheme would be required and therefore requires operation within a nomogram, as is presently done.
- Also, operation within a nomogram would not substantially increase the import capability into the California area. An increase in AC Intertie transfer of 1600 MW would require at least a like reduction in Arizona-California import capability.
- Addition of a third AC Intertie line solves both of these problems by eliminating the need for NE-SE Islanding Scheme operation, i.e., loss of three AC Intertie lines is not considered credible due to placement of the third line on a separate right-of-way.

AFFECTED ENVIRONMENT:

- P** Section 3.1.10, pg. 3.1-46: after "domestic environment," we would suggest adding the sentence "Health effects of long-term exposure to electric and magnetic fields are still under study."

- L** This map will not be reprinted for this Final EIS/EIR, but a notation of the Buck Butte Radio Station is made in Section 1.1.2 of Volume 1 of this Final EIS/EIR.
- M** This section has been revised. See Section 1.1.2 of Volume 1 in this Final EIS/EIR.
- N** This revision has been made. See Section 1.1.2 of Volume 1 in this Final EIS/EIR.
- O** Comment noted. In addition to your comments, upgrading the two existing lines would require them to be removed from service for an extended period of time, which would result in unacceptable costs to the existing users, as well as increased overall Project costs.
- P** We agree with stating that health effects of long-term exposure to electric and magnetic fields are still under study. See responses to L-330 F3 and SL-51 A.

L-371 (continued)

Q Section 3.1.11, pg. 3.1.47, (Malin Area): The discussion is focused on alternate sites within the study area. Need to emphasize that: "The sites are preliminary and the substation may be located anywhere within the siting area in response to environmental evaluation and public review." Site E3 should also be identified and evaluated in this section.

R Section 4.1.8, pg. 4.1-30, Socioeconomics: The impacts of construction workers are characterized as entirely positive. Impacts on local services should also be discussed, since this would be an expense to the counties. In this connection, suggest adding "Construction impacts on counties may be lessened by payments from BPA to qualifying counties under the Impact Aid Program, if BPA constructs the facilities in Oregon." (Note to COTP: These payments are not in lieu of taxes, should BPA build the facilities, but are designed to mitigate impacts on county services, etc., by construction of facilities. Therefore, the above statement should appear in the first section under Socioeconomics, and not in connection with the tax issue.)

S Section 4.1.8, pg. 4.1-31, first full paragraph: Suggest adding after the first sentence: "No property taxes will be paid on the facilities if they are constructed by BPA."

MITIGATION MEASURES:

T Section 5.1, D. Landowners and Property, pg. 5.1-4: One of the COTP line routes proposed for northern California will pass through an area heavily involved in irrigated farming. Concern may be expressed about (1) acreage being removed from farm service by tower footings, (2) nuisance shocks to workers moving irrigation pipe, and (3) water spray ranges being reduced by the presence of the line.

For your consideration in mitigating the above-mentioned impacts, we have enclosed a commercial brochure describing a technologically advanced center pivot irrigation system capable of watering irregularly shaped acreage. The end of the pipe is equipped with a detector which enables the system to track a wire buried in the soil. Such a system could minimize the impact of the tower footings on the arable acreage and greatly reduce the need to handle pipe. Low-pressure, down-directed spray could also be incorporated into this scheme.

VOLUME 2C:

SUMMARY:

U Environmental Consequences, para. 3: Should be revised to reflect updated information. Should read: Review of cultural resources literature and consultation with the Oregon State Historical Preservation Officer have shown that in all areas, except for Marcola Substation site and the Grizzly-Malin loop-in, intensive research recorded no important sites, and none are likely to be found. No sites have been recorded at Marcola

Q Comment noted. Switching station site E3 was analyzed in the Supplement to the Draft EIS/EIR and was selected as the preferred site. See Section 1.1.2 of Volume 1 of this Final EIS/EIR.

R Construction workers may have some impacts upon local governments which must fund services. These amounts were not calculated. Generally, property tax payments over the life of the facility (i.e., 50 years) more than adequately compensate the county for services that are provided during the relatively short (6 to 18 months) construction term. As stated in your comment, the Impact Aid Program is also available to compensate counties in Oregon which suffer impacts greater than \$1,000. Your suggested sentence will be added to Volume 1, Section 1.1.4 of this Final EIS/EIR.

S No property taxes will be paid on the facilities constructed by BPA. However, since BPA has jurisdiction only on the Oregon portion of the transmission line, property taxes will still be paid on the California portion of the line. This clarification has been added to Volume 1, Section 1.1.4 of this Final EIS/EIR.

T Comment noted. The system described may help mitigate irrigation problems where a tower must be placed in a field. See response to L-330 G. The brochure you provided is included below.

U This revision has been made. See Section 1.4 of Volume 1 of this Final EIS/EIR.

L-371 (continued)

U [substation area and the Grizzly-Malin loop-in. However, it is highly possible that significant sites may be present. Therefore, BPA will conduct cultural resource investigations of these areas before construction begins."

V [VOLUME 3A:
Appendix A, pg. A-15, para. 1 and 2: Information in this appendix should be consistent with that shown in Volume 1, Section 2.1.1.

V Comment noted.

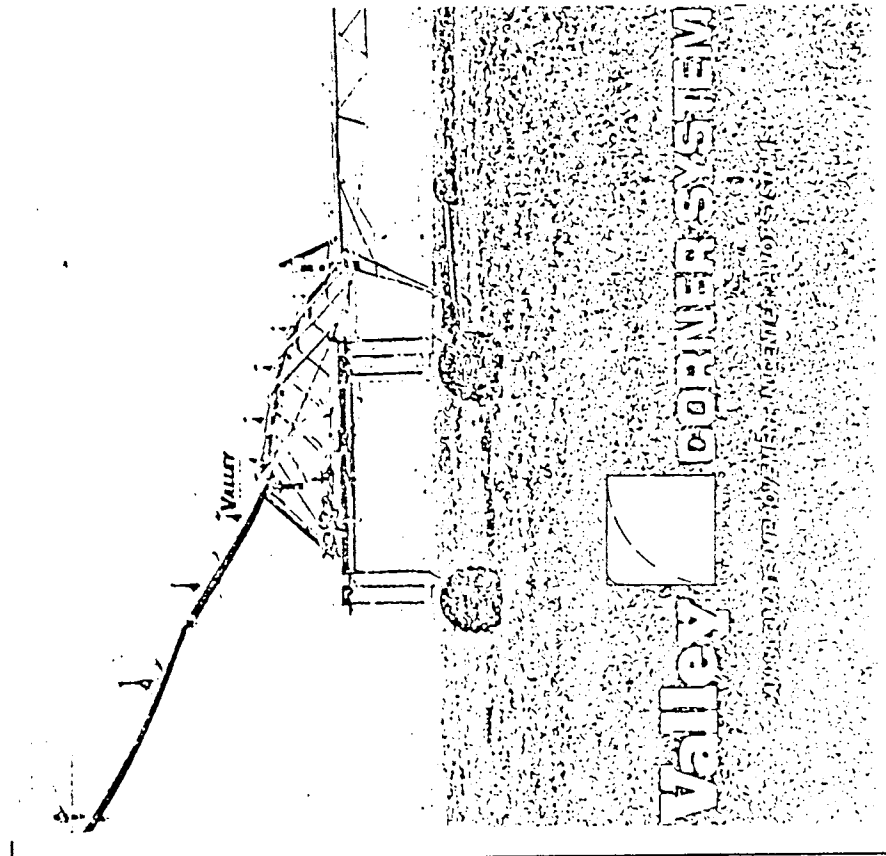
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L-371 (continued)

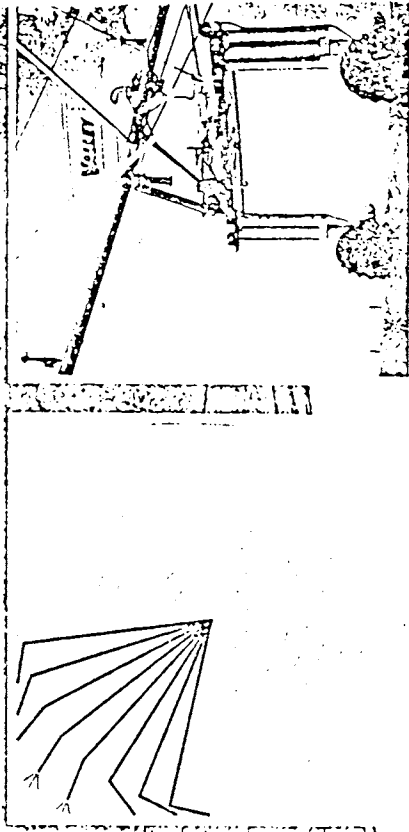
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W

The COTP appreciates the information provided by BPA.



The new dimension in center-pivot



Standard Electrical Components. Even though the new Corner System is a highly sophisticated mechanism that programs drive wheel direction, system size, changes, and sprinkler sequences, it remains a simple device using many standard components.

Simple in Principle. The system travels with the corner arm in a normally retracted position. As the system approaches the corner, the arm begins to extend. When the arm reaches full extension, the end gun comes on. As it leaves the corner, the arm retracts and a new sprinkler sequence starts just as the right sprinklers at the right moment until the arm is again retracted.

L-371 (continued)

W

ANSWERS TO IMPORTANT QUESTIONS

Will my current water system, including power unit and pump, be capable of handling the additional acres?

Yes, the requirements of the corner system easily fall within the capability of your installed pumping system. The corner system is designed to operate so that it adjusts to your present water supply rather than the other way around. The system automatically maintains a uniform water requirement and this allows use of your existing pump and power units.

How much extra land does it irrigate?

The extra acres covered depends on the size of the field and the length of the system. On most systems, this is approximately 13%. As an example, a normal 160 acre field will have close to 150 irrigated acres compared to 132 irrigated acres with a standard center pivot.

Will it fit my existing "Valley"?

Presently, it is available with new electric Valley equipment, Models 2071 and 4071. Currently, tests on proposed designs for adaptation to other Valmont models, older installed Valley systems and competitive systems are underway. We anticipate that at a future date, the corner system will be available for installation on most popular Valley models, as well as other makes of center pivot systems.

Do you finance this one too?

Valmont has many broad finance plans to assist the irrigator in securing equipment he needs to upgrade his operation. The corner system can be included in any of these plans as well as financing programs offered by other funding sources.

How long is it?

Approximately 255 feet.

Can I miss one corner?

You can miss as many corners as you like. The unique controls of the unit allow this system to be adapted to a large variety of field shapes. Not only can you miss a corner, but you can leave it extended for maximum coverage in rectangular shaped fields and other similar conditions. It is the answer to the problem of adapting the center pivot to millions of acres now under flood irrigation.

Are the parts "standard" Valley parts?

Many of the parts are standard parts used at other places on the system. As an example, the pipeline, trusses, sprinklers, gears, drives, and motors are the same as those used on many Valley systems.

How close does it come to a fence?

As close as your current system. We do suggest at least 20 feet of clearance to allow passage of large farm equipment. The controls are quite precise.

How rough can the land be and still have the system operate effectively?

The system has been thoroughly tested on extreme slopes. However, we suggest grades of less than 15%.

Where can I get service?

Valmont is the largest manufacturer of center pivot systems in the world. We have been making center pivots for many years—at least three times longer than any competitor. As a result, we have the largest and most professional dealer-service network of any irrigation equipment manufacturer. When service problems occur, a local dealer can provide skilled service with trained personnel. Current Valmont Service Schools include full service training on the corner system.

What safety devices does it have?

The system is equipped with two safety systems. If one fails to function, the second takes over. This back-up safety system has proven most satisfactory. All Valleys incorporate this dual safety system. Although this is an extra expense, it is the standard approach for all Valleys.

When can I get one?

Valmont is currently constructing additional facilities to meet the demand for this system. A substantial number will be available for use in 1974. Check your dealer for availability.

How uniform is the water pattern?

All Valmont center pivot systems have computer calculated sprinkler packages. The corner system reflects this extra care in design by achieving an extremely high coefficient of uniformity consistently exceeding 90% and frequently higher. This is far superior to volume guns and stationary sprinkler type systems. Large volume end guns typically perform in the 60% range for the majority of their coverage and much less at the far reach of their pattern. The water pattern of large volume guns is easily distorted by winds. On most soils the high impact of the water causes erosion and other undesirable results. By contrast, the water application pattern of the corner system is engineered to complement the rest of your system. No other irrigation technique is as precise as center pivot, especially in high winds.

Is it patented?

Patents are pending and Valmont holds the exclusive manufacturing and sales rights to the design. No other manufacturer will be making a system like this in the near future.

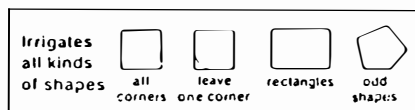
L-371 (continued)

W

Now

Irrigate 150 acres rather than 132

The New Valley Corner System is an ultimate improvement in center pivot. It will irrigate the corners as easily as pushing a button. In a typical quarter section, you can now get yields from 150 acres instead of 132. That's just a start. The corner arm can be programmed to operate in such a way as to cover maximum number of acres. This means that in a rectangular-shaped field you can cover as much as 161 acres with a standard quarter section size corner system. It can also be programmed to achieve maximum coverage of odd-shaped fields.



Precision Irrigation

The Valley Corner System is engineered for precision water distribution—characteristic of a standard Valley. Unlike an end gun, it is not subject to great distortion of the water caused by wind and the characteristic tendency of such devices to pile water in one part of the field.

Now Center Pivot for all irrigation

This great flexibility switches the center pivot from a system largely limited to circular patterns into one for all irrigation. Flood irrigators, for example,



The Drain. A precision electrical control system, operating from the pivot, directs all function of the system, speed, extension and sprinkler sequencing. It is also the safety that shuts the system down when it senses any malfunction.

can now have all of the extra advantages of center pivot—dramatic water savings, automatic irrigation the moment you need it, and precise fertilizer application resulting in higher yields.

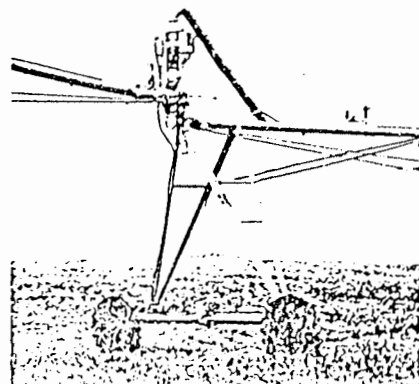
Pays for itself with high yields from unproductive acres

The total cost of a Valley Corner System including system, well, pump, engine, and lead-in line is about \$2000 more per irrigated acre than a conventional center pivot.

Total cost per acre for a Valley Corner System, including well, pump, engine, and lead-in line will range from \$200-\$290 per acre, while standard Valley systems cost from \$180-\$270 per acre for everything. On an apples versus apples basis, the difference is \$20.00 more per irrigated acre for a Corner System. On the basis of a 15-year life, the extra cost is slightly more than \$1.30 per acre per year.

On any measurement comparing price/yields versus corn production costs, the new Corner System is made to easily pay for itself in extra yields from the added 18-20 acres and put money in your pocket at the same time.

Don't neglect this fact. You are adding value to your farm enterprise. As nonproductive farmland, the present unirrigated acres take on added value when they're irrigated. It is not unreasonable to expect an increase in value of as much as \$500 per acre for that newly irrigated land.



Highly Flexible Connection. A unique connection between the last drive unit and the corner arm solves the problem of water flow. It has a high degree of flexibility for rough ground operations.

L-372

March 5th, 1987

Environmental Coordinator
California-Oregon Transmission Project
P O Box 660970
Sacramento, California 95866

Dear COTP staff —

I'd like to submit some additional Final comments and reactions to the 500-kV project Draft EIS/EIS to you for your study and consideration.

As I have done with my other input, I will try to divide the comments into appropriate groupings for sake of convenience and organization.

Overall Reaction -

A

1. After scanning some 19 pounds of materials in the four-volume set (actually 8 volumes, if you count each sub-volume!), I am still very impressed with the depth of information presented. Concerns and problems seem well studied and pursued, and the material collected is presented openly. My hat's off to your staff!

My interest in your project also led to the acquisition of some of the materials referenced in the documentation: Western's "Completing the Intertie," Bonneville Power Administration's "Intertie Development and Use" Draft EIS, and "Electrical and Biological Effects of Transmission Lines: A Review," and the Final EIS on the Eugene — Medford 500-kV Transmission Line. Additionally, I am included on the mailing list for information on the SMUD — Sierra Intertie proposal.

A

Comment noted.

B

2. The concept of "sharing" the benefits of the PNW and the California Utilities electrical operating systems' advantages and seasonal differences is still intriguing. And I am supportive of this effort to minimize the construction of new large and usually controversial generation facilities in our state by utilizing the "surplus" capacity of already existing facilities. (The growth of smaller plants will, I assume, continue to expand in our state — wind-powered facilities, cogeneration opportunities, etc — as would the improvement and replacement of older generating units be expected to go on.)

I hope the added electrical needs of our area can be handled well by the PNW generating facilities without adverse environmental affect on the rivers' fisheries, as outlined and presented in Bonneville's "Intertie Development and Access" DEIS. I cannot support the simple

B

Comment noted.

L-372 (continued)

- B transfer to them of any harmful effects of our electric power consumption, I would rather see a problem solved and eliminated than moved to a different location.

On the EIS/EIR -

- C 1. One useful graphic presented in the Eugene — Medford 500-kV FEIS were the "typical corridor" illustrations, figures 1-4 through 1-22. Such graphics might be useful in relating the visual impacts of the proposed line in some of the "busier" transmission line corridors where it is planned Tulelake/Copie Bay vicinity; Round Mountain to Cottonwood, Cottonwood to Onelda; along the "SIA" Upgrade, Tracy to Tesla (single or double circuit)?
- D 2. In Western's "Completing the Intertie" document, figures 5.5 through 5.12 illustrate the overall system power flow possibilities of the various alternatives presented in that study in all its complexity. While not as extensive as the impact of the DC Intertie proposal, perhaps a similar series of graphics could be created to illustrate the potential power flows in the region affected by the proposed line.
- E 3. Recently I found an article discussing the concern over the potential ELF radiation from high-current electrical wiring, including household 120/240V circuitry. While the details of the study are broader than the COTP area of concern, would any comments relating to it be considered for inclusion in the Final EIS/EIR?
- F 4. The Final EIS for the Eugene-Medford 500-kV line illustrated to what extent existing transmission lines can be "jockeyed around" to accommodate the proposed line. Some of my specific routing comments, below, concern the possible application of similar options with respect to COTP.
- G 5. Another issue raised by that same document concerned the possible future growth and impact(s) in that study area — the southern Oregon to northern California region serviced by PP&L. A conflict was presented between PP&L's forecast and Bonneville's for this region. Will the future growth and power demands have any affect on the future operation of the COTP line, specifically, and on the three-line AC Intertie, in general? If a second 500-kV AC line is constructed parallel to the Eugene-Medford line, currently under construction I believe, will this potential additional capacity flowing into the region by have an effect on the Oregon-California AC Intertie capacity?

Other Issues -

- H 1. It would be my hope that the available electrical capacity

- C As noted in the comment, the type of cross-section sketch used in the Eugene-Medford FEIS is particularly useful for illustrating land requirements in complex utility corridors, particularly where reconstruction of existing facilities is contemplated. Because a separation distance of 2000 feet or more is planned between the COTP and existing Intertie lines of the alternative route segments, such sketches would not generally be useful for this Final EIS/EIR. Moreover, both this Final EIS/EIR and the Eugene-Medford FEIS utilize photo-simulations of project appearance from representative viewpoints to illustrate and assess visual impacts.

- D The suggested graphics are included in the results of studies performed by the Project, and we do not believe it necessary to include the graphics depicting power flow in the area in the document.

- E Concern about household wiring is related to COTP since low-level, long-term exposure is the issue. This would be case for existing or future residences near the line. See responses to L-309 E2, L-330 F3, and SL-51 A.

- F See responses to L-372 K through L-372 U.

- G The COTP is being designed with the Pacific Northwest system reinforcements modeled and the AC Intertie is presently proposed to be operated as a three line system. The schedules on the lines will be dependent on the transactions made by the utilities involved. The future growth of power demands is independent of the operation of the line. We are not aware of any planning for a second Eugene-Medford line.

- H Comment noted.

L-372 (continued)

H might offset the need for some proposed facilities within central California

- the SMUS-Sierra 345-kV Intertie. I would very much like to see the avoidance of this line across the middle-northern Sierra Nevada. Any comments I have with respect to it, however, will be reserved for input on its Draft EIR

I like to see their participation in COTP, through TANC, remove their projected need for the capacity and potential power sales from this project

J 2. On the Shasta-Trinity and Modoc National Forest lands crossed by the Project, is the timber expected to be cleared for construction of the line being included in their projected timber harvests, or is it being considered as an extra little "goodie" above and beyond these projections?

Routing Issues -

There are still a few points I have some concern with, in regards to the routing of the proposed line, and they are as follows:

K 1. The Pit River segment, "N-8" --
• The photocopy of the USGS Montgomery Creek 15' map covering this area, presented in Volume 2A, was not very clear, as can be very possible with "topo's," due to the confusion of features, especially along the Pit River canyon and in the lower lefthand area (SW) of the map.

L • While I am not personally with this site, I would like to see the geothermal hot springs area along the river, presumably the "Big Bend Hot Springs," avoided, if possible. I am not sure of the cohabitability of the line's construction effects with a relaxing soak (Jayson Loam's "Hot Springs and Hot Pools of the Southwest" discusses the Pit River springs).

M • I do not like section "N-8alt2." I don't feel two river crossings in approximately 4 miles, and three overall within a dozen-mile distance are really necessary. The line and river are essentially playing leap-frog through here! The N-8E segment, following existing PG&E 230-kV transmission lines seems a more reasonable alternative. If the 230-kV lines are on single circuit "flat" towers, perhaps they could be restrung on double-circuit "stacked" towers to minimize the right-of-way addition of the 500-kV line.

O 2. Section "N-9," Round Mountain to Cottonwood --
• Perhaps I am wrong, but it seems that the Round Mountain-Vaca Dixon 500-kV Intertie line essentially parallels PG&E's 230-kV Pit-Vaca Dixon #1 and 2 lines, electrically. If this is, in reality,

I The decisions to approve and construct the two projects (the COTP and the Clavey River Project) must be made independently. The District is prudent to continue investigations of all sources of power for its existing and future needs. The District believes that the Draft EIS/EIR is not the place to hold a forum on the Clavey River Project. Hearings and Environmental Reviews are being held and will continue to be held as the Clavey Project proceeds.

J Timber harvested from the Shasta-Trinity and Modoc National Forests for construction of the COTP is not at this time included in the projected timber harvest plans of these forests. It may, however, affect their plans should the COTP be approved for construction. Evaluations show that the long term sustained yield of timber for the National Forests would be impacted by less than one-half of one percent. See Section 1.1.4 of Volume 1 of this Final EIS/EIR for further discussion.

K The clarity of the photocopied USGS Montgomery Creek 15-minute topo quad unfortunately was not very good. These maps were reduced from 17 x 22 inches to 8 1/2 x 11 inches, and with the large number of contour lines on the map, fine details were difficult to read.

L The preferred alternative route between Grizzly Peak and Redding is located approximately one mile west of the hot springs near Big Bend.

M Geotechnical review indicated that soils in the vicinity of segment N-8E were unstable and not suitable for construction. See Section 4.3.9 of Volume 2A of the Draft EIS/EIR. See response to L-333 H. There were numerous problems with routing in this constrained area.

N The N-8E segment was not considered further due to erosion concerns and a history of movement of the existing 230 kV towers.

O No capacity is available on the existing Intertie lines to permit them to carry the additional power off of the Cottonwood-Vaca Dixon 230 kV lines.

L-372 (continued)

O true, would it possible to transfer the power carried by the 230-kV lines to the 500-kV Intertie, allowing for the replacement and upgrade of the Round Mountain-Cottonwood line to carry the 500-kV "Project?"

P * OR, if the Cross-tie is still being considered at Round Mountain, couldn't at least one of the Round Mountain-Cottonwood 230-kV lines be replaced and upgraded for the new 500-kV Intertie?

Q 3 Section "S-8" segments —

* There is discussion of increasing the size and storage capacity of Clifton Court Forebay, feeding the two water projects. How will this affect the routing of the proposed line past or around it? And, since I do not, at this time, know in which direction expansion is being considered for it, will this also affect the existing Western Hurley-Tracy, Elverta-Tracy 230-kV lines?

R * Segment "S-8E 1," the preferred alternate route directly south of the San Joaquin River crossing at its crossing of the bend of Taylor Slough along the east side of Jersey Island, to avoid the over-the-water span and minimize any riparian impact from the line (tree removal, etc.) could it be moved to the west? Using the Jersey Island 7.5' quadrangle copy in Vol.2A as a guide, perhaps the southsoutheastly running line from the San Joaquin River crossing could be continued to a point alongside the slough, at approximately the location of the road (dirt?), then angled back to the "S-8E 1" location, or paralleling the existing transmission lines (to the west) to a point where the S-8E1 line is interested.

S * Segment "S-8J," east of Tracy Substation: to minimize the corridor width along where the 500-kV line will parallel the existing Western Hurley-Tracy, Elverta-Tracy 230-kV transmission lines, could these lines be replaced with double-circuit "stacked" towers, allowing the 500-kV to occupy the second right-of-way (plus any additional width required)? The crossing of the 500-kV line with the two 230-kV lines could occur southeast of Clifton Court Forebay, where it is proposed to occur, or immediately north of the "T-1" proposed substation site at Tracy

T * Segment "S-9," Tracy to Tesla single-circuit lines (two) or the double-circuit stacked towers: does the "S-9D" immediately south of the Tracy substation (north of "S-9F" and "S-9G" separation) parallel or replace and upgrade the existing double-circuit Tesla-Tracy 230-kV lines?

U * Segment "S-9H" immediately south of Tesla substation: the Engineering Routing Guidelines would have you try to avoid areas of close proximity to the existing Interties, right? Where the "S-9H" intersects the existing Tesla-Los Banos lines, all three are in close proximity. With there appearing to be no real reason to place this intersection right next to the Tesla substation, why can't it occur further to the southsoutheast along the Tesla-Los Banos lines, thereby allowing for separation of the "Tesla-Tracy-Los Banos" loop from the Tesla-Metcalf-Moss Landing 500-kV line.

P The COTP is no longer considering the crosstie.

Q The Forebay expansion is noted in Volume 1, Section 3, page 3.1-34, of the Draft EIS/EIR. The California Department of Water Resources has been consulted regarding their plans; they will not conflict with either the preferred route or the existing Western lines.

R We appreciate your suggestions. Tower siting during final design within the 1,500-foot corridor will be used to eliminate the over-the-water span.

S The rebuilding of the Elverta/Tracy 230 kV line would not prove economically feasible.

T Segment S-9D parallels the Tracy to Tesla 230 kV lines.

U A new routing option, South 2, has been selected as the final preferred route in this area. South 2 provides additional separation from the Tesla Substation where the 500 kV lines converge. See the Supplement to the Draft EIS/EIR Section 4.2.

L-372 (continued)

I would like to once again thank-you for the opportunity to view the information assembled for the Project's Draft EIS/EIR documents, and to be able to submit comment and question input to the staff. The participation and involvement has been interesting. I've enjoyed the opportunity to learn more about the process, as well.

I will thank-you for your time, and your attention to my letters and submissions. Good luck with the review process of all the input material from all of us, out here!

Sincerely,

Richard D. Beebe
1280 Coolidge Ave.
Tracy, California 95376
209/836-9262

SECTION 3.0
CORRESPONDENCE AND RESPONSES
ON THE SUPPLEMENT TO THE DRAFT EIS/EIR

The first part of the paper discusses the importance of the study and the objectives of the research. It highlights the need for a comprehensive understanding of the subject matter and the role of the researcher in this process. The second part of the paper presents the methodology used in the study, including the data collection methods and the analysis techniques. The third part of the paper discusses the results of the study and the conclusions drawn from the findings. The final part of the paper provides a summary of the key points and offers suggestions for further research.

The study was conducted in a systematic and rigorous manner, following the principles of scientific research. The data was collected from a representative sample of the population, and the analysis was performed using advanced statistical techniques. The results of the study are presented in a clear and concise manner, allowing for a thorough understanding of the findings. The conclusions drawn from the study are based on the evidence presented and are supported by the data.

The study has several limitations, which are discussed in the paper. These limitations include the sample size, the time period of the study, and the potential for bias. Despite these limitations, the study provides valuable insights into the subject matter and contributes to the existing body of knowledge. The findings of the study are discussed in the context of the current research and are compared with the results of other studies.

The study has several implications for practice and policy. The findings suggest that there is a need for further research in this area, and the results can be used to inform decision-making. The study also highlights the importance of the role of the researcher in this process and the need for a comprehensive understanding of the subject matter.

In conclusion, the study provides a comprehensive understanding of the subject matter and contributes to the existing body of knowledge. The findings are based on the evidence presented and are supported by the data. The study has several limitations, which are discussed in the paper, and the results can be used to inform decision-making. The study also highlights the importance of the role of the researcher in this process and the need for a comprehensive understanding of the subject matter.

3.0 Correspondence and Responses on the Supplement to the Draft EIS/EIR

Letters SL-1 through SL-134 containing specific comments on the Supplement to the Draft EIS/EIR are reproduced on the following pages. Responses to the specific comments are identified or referenced and appear across from the comment they address.

See Section 1.0, Index to Correspondence, of Volume 2A of this Final EIS/EIR for a list of the comments presented in this Volume.

SL-1

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [Bethel Island is the most heavily
populated island in the Delta - why
not run it over Jersey Island rather
than Bethel Island? P?

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Scott Mazzearella
1278 20th Ave.
San Francisco, CA 94122

A

The Project preferred route (COTP) is shown crossing Jersey Island in both the Draft EIS/EIR and Section 1 of this Final EIS/EIR. The route crossing Bethel Island is an optional route that has not been selected as the preferred route.

SL-2

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

- A [AGAINST POWER LINES. ISLAND IS SINKING
B [ANYWAY. DONT NEED TO SPEED IT UP.
C [THIS IS A RECREATION AREA.

I would like my name removed from the mailing list _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Rose M. Slingerland
4448 Stone Road
Bethel Island, CA 94511

A Comment noted.

B The "sinking" of Bethel Island (technically referred to as subsidence) is a natural process which is closely tied to the type and saturation of the Island's soils and the water levels beneath the ground surface. Subsidence can be accelerated when water and/or oil which is supporting the upper layers of soil is pumped out. Since the COTP does not intend to conduct any extensive pumping during either construction or operation, subsidence will not be accelerated by the Project.

Where unstable ground is encountered along the route, proper engineering design of tower footings will be used with special construction techniques to mitigate the hazard.

C The transmission line routing process attempted to minimize the Project impact on recreation areas such as Bethel Island, and designated recreation areas such as parks. The preferred route does not cross Bethel Island because it was recognized as a residential and recreation area. Engineering considerations and/or other environmental resource constraints were such that the Delta region's extensive dispersed recreation resources such as boating, fishing, and hunting areas could not be totally avoided.

SL-3

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

- A [I STRONGLY PROTEST ANY TOWERS OVER
BETHEL ISLAND, FRANK'S TRACT. PUT THEM ALONG
B [THE FREEWAYS - IT'S MUCH CHEAPER

I would like my name removed from the mailing list. NO, KEEP ME INFORMED

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995

Clip this page, fold it in thirds, and return it to us. Thank you.

Michael Shaw
Route 2, Box 319
Oakley, CA 94561

A Your opposition to routing the proposed COTP over Bethel Island and Frank's Tract is noted. See response to SL-2 C.

B An alternative route was considered but rejected that would parallel the Interstate 5 freeway. See Section 1.2 of Volume 1 of this Final EIS/EIR.

SL-4

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

- A [Your map is so small, I can't tell whether the
alternate route bypasses Bethel Island or not.
- B [I don't think the lines should run where there
are likely to be large concentrations of people
if it is at all possible.

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Carlos Ruling
917 Edinburgh Street
San Francisco, CA 94112

- A A larger scale map showing the locations of the preferred and alternative routes in the Bethel Island area are presented in Section 3.1 of the Draft EIS/EIR and Section 1.1.3 of Volume 1 of this Final EIS/EIR. These maps show that the preferred route bypasses Bethel Island, while an alternative route crosses Bethel Island.

- B Comment noted. Residential areas and other urban areas were avoided whenever possible, as were isolated houses.

SL-5

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [I WOULD THINK THE ALTERNATE ROUTE
B [WOULD BE THE BETTER ROUTE OVER BETHEL
ISLAND. WOULD NOT INTERFERE WITH SO MANY
HOUSES

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Phyllis Starr
20103 Lake Chabot Road
Castro Valley, CA 94546

A Comment noted. The preferred route does not cross Bethel Island.

B Comment noted.

SL-6

CALIFORNIA AVIATION COUNCIL

P O Box 331
Los Altos, California 94023-0331
(N) 415-594 9300 (S) 714-772-9508

P.O. Box 331, Los Altos, CA 94023-0331
(415) 594-9300



July 6, 1987

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

Re: EIS/EIR - Aviation Element

Dear Sir/Madam:

A By letter to you dated January 20, 1987 (copy enclosed) I pointed out that the November 1986 Draft EIS/EIR did not contain an aviation element, and recommended that an aviation supplement be prepared.

I have just reviewed a June 1987 Supplement to the Draft EIS/EIR and am disappointed in noting that it likewise contains no reference to aviation.

Since the Project could affect part of California's 200 public-use airports, I urge you to give this appropriate consideration.

Please contact me if I can be of assistance in this important matter.

Very truly yours,

Jay C. White, President

JCW/wj

CC: Mr. Jack Kemmerly, CALTRANS, Division of Aeronautics
Betty Ackerman, CAC Executive V. P.

Enc.

A The lead agencies do not believe that an aviation supplement is warranted. The Draft EIS/EIR addresses potential impacts to aviation as they are encountered along the route alternatives. The Supplement to the Draft EIS/EIR contains a route option (Loveness-Graham) that was in part designed to lessen potential impacts to a privately owned airstrip near Malin, Oregon. See response to L-14 A.

JAY WHITE
President

BETTY ACKERMAN
Executive Vice President

JACK LINDLEY
Secretary

ANNE SILVERMAN
Treasurer

SL-6 (continued)

CALIFORNIA AVIATION COUNCIL

P.O. Box 331
Los Altos, California 94023-0331
(N) 415-594-9300 (S) 714-772-9508



P.O. Box 331, Los Altos, CA 94023-0331
(415) 594-9300

(Reprint)

January 20, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Re: EIS/EIR- Aviation Element

Dear Sir/Madam:

In reviewing the Index and Tables of Contents of all volumes of the EIS/EIR, I was unable to locate any reference to an aviation element. Although reference is made in Volume 2B to Impacts on Aerial Applications, no reference is made to airports.

Our Council is concerned with preservation of California's public use airports. We view each such airport as a part of the overall transportation system. We are concerned with any potential encroachment or interference which might adversely affect the utility of an airport.

We would be concerned with any portion of the COTP which would encroach on a public use airport, or, which would present a flight hazard for aircraft using an airport.

I have received information informally that portions of COTP might affect certain of California's airports. For this reason, I recommend that an aviation supplement to the EIS/EIR be prepared.

Very truly yours,

Jay C. White, President

JCW/wj

JAY WHITE
President

BETTY ACKERMAN
Executive Vice President

JACK LINDLEY
Secretary

ANNE SILVERMAN
Treasurer

SL-7

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

A ☐ I would like to make the following comments
WE DONT WANT IT!

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

FLETCHER
11231 SUNSET CT
MONTAGUE CA
96064

A Comment noted.

SL-8

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [I Live on Bethel Island and do not want
to live ~~under~~ under your Transmissions
Project (MOVE IT.)

I would like my name removed from the mailing list. ~~Edlin~~

For more information call: Laura Edlin, Public Affairs Director at (916) 924-3995

Clip this page, fold it, and mail it to us. Thank you

Ferry Duvall
6320 Bethel Island Road
Bethel Island, CA 94511

A

Your opposition to routing the COTP across Bethel Island, and more specifically near your property, is noted. The preferred route does not cross Bethel Island.

SL-9

July 6, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Sirs:

- A** In assessing the recent supplement to the Draft EIS/EIR, I would like to comment on the following proposed route changes. I am pleased to see a new route proposed for the Malin area as it will place the lines back far enough to sustain agriculture and will not interfere with migration flights of the geese and ducks. I also noticed with pleasure, a large reduction in clearing acreage as well.
- B** The N-10M option seems to be the best route and will set the lines away from the Medicine Lake Highlands.
- C** After reading the water resources and Fisheries paragraph and having hunted in that area, my decision would be to choose the South Bear route.
- D** In all, the draft supplement has done a thorough job of covering all the areas involved.

Sincerely,

Norman E. Fiock
Norman E. Fiock

P.O. Box 7

Montague, CA 96064

- A** Your observations regarding the reduced impacts associated with the Loveness-Graham option in the Malin area are noted. This route option has been adopted as the Project preferred route.
- B** Your preference for the N-10M option is noted. It has been incorporated into the Project preferred route.
- C** Your support for the South of Bear Mountain route option is noted. This route option has not been incorporated into the Project preferred route. See Section 1.2.3 of Volume 1 of the Final EIS/EIR for a discussion.
- D** Comment noted.

SL-12

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [WE DO NOT WANT ANY POWER
B [LINEs ON Bethel Island. USE
EXISTING TOWERS NOW ON Jersey
ISLAND

I would like my name removed from the mailing list _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Leon and Ann Rice
P.O. Box 82
Bethel Island, CA 94511

A Your opposition to routing the COTP across Bethel Island is noted. The preferred route does not cross Bethel Island.

B The possibility of upgrading the existing Western Area Power Administration 230 kV lines in place in this area was evaluated and found to be infeasible as discussed in the Draft EIS/EIR, Volume 2A, page 2.4-6.

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A

you call this progress, you are
making our beautiful California ugly.
but you don't care, do you?

I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return to us. Thank you.

Perry Marie Service
P.O. Box 704
Bethel Is. Ca
94511

A

See the Draft EIS/EIR, Section 2.5, for a discussion of the alternatives to the COTP. The AC transmission line and its preferred route is considered to best satisfy the purposes of the Project when considering both environmental and economic information.

The COTP is concerned about the visual impacts that the proposed transmission line would have. An assessment of visual impacts was done for all route segments. Several mitigation measures are being adopted to reduce these impacts. Refer to Section 1.1.5, in Volume 1 of the Final EIS/EIR where these mitigation measures can be found under VII.

SL-15

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [RESIDENTS OF Bethel Island DO
NOT WANT POWER LINES GOING ACROSS
OUR ISLAND.]

I would like my name removed from the mailing list _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

P.O. BOX 6
Bethel Island
CA 94511

A

Comment noted. The preferred route does not cross Bethel Island.

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

- A** TO MANY POWER LINES IN DISCOVERY BAY AREA - NEW LINES
WILL DESTROY PROPERTY VALUES & ECONOMIC GROWTH &
B CREATE POSSIBLE HEALTH HAZARDS - WHY DON'T YOU CONSIDER
THE ALTAMONT PASS AREA & WIND-MILL FARMS. WE DON'T
I WOULD LIKE MY NAME REMOVED FROM THE MAILING LIST
WANT YOUR POWER LINES HERE.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Barbara and Eugene Matthias
 1719 Dune Point Way
 Byron, CA 94514

A The primary property value issue is the effect of a transmission line on residential properties close to but not within the right-of-way. This question has been the subject of academic, real estate, and utility research for more than two decades; but, as stated in the Draft EIS/EIR, Volume 2A, Section 3.8.2.4, the results of the research over time performed remain inconclusive. Most studies have concluded that, over time, property values off the right-of-way were not appreciably affected by the presence of a transmission line (U.S. Department of Energy, Bonneville Power Administration. 1977. The role of the Bonneville Power Administration in the Pacific Northwest power supply system. Appendix B: BPA power transmission. Portland, Oregon).

Mountain West Research prepared a report for BPA on a comprehensive literature review on property value effects of transmission lines. Their research found that 5 of 27 studies concluded that there was an adverse effect, 5 concluded no effect on property values, 7 concluded no significant adverse effect, and 10 were inconclusive or internally contradictory (Mountain West Research, Incorporated. 1982. Electric transmission line effects on land values: A critical review of the literature. Preliminary draft, prepared for the Bonneville Power Administration. Billings, Montana).

Please see the response to L-330 F3 for a discussion of the effects due to electric and magnetic fields.

B Routes to the west of the existing Intertie lines near the foothills and passing the Altamont Pass area and windmill farms were considered. Section 4.0 of the Routing Report within Volume 2A of the Draft EIS/EIR describes the reasons that these routes were eliminated from further consideration.

SL-17

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [The Time Bus below. California
Future depends upon low cost, available,
electric power. Green light
(SBI)

I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Steven Delledera
5750 Singing Hills Ave.
Livermore, CA 94550

A

Comment noted.

July 7 1987
STEWART LEBARON
BOX 113
MONT CK CA 96065



CETP:

I HAVE JUST REVIEWED THE 6/23

- A EIR DRAFT. I WANT YOU TO KNOW I AM TOTALLY AGAINST THE PROJECT.
- B IT SEEMS TO ME ENVIRONMENTALLY DESTRUCTIVE AND THE POWER IS UNNEEDED IN CALIFORNIA.
- C IF I WERE TO GIVE THE PROJECT THE SLIGHTEST NOB OF APPROVAL IT WOULD GO FAR EAST OF THE PROPOSED ROUTE, EAST OF 122° 30', THROUGH THE BARREN AREA OF EAST SHASTA COUNTY. AS ROUTED
- D PRESENTLY, IT WOULD DESTROY MANY ACRES OF ENVIRONMENTALLY VALUABLE TIMBERLAND.

A Comment noted.

B For a discussion of why the additional power is beneficial to California, see Section 1.2 of the Draft EIS/EIR. Specific aspects of the need for the power are addressed in more detail in the responses to T-109 B, L-3 T and L-306 II.

C Comment noted. See response to T-69 F.

D The routing guidelines for land use stipulated that the crossing of highly productive prime timber areas would be minimized, and these guidelines were adhered to whenever possible. However, in some locations such as the Pit River area, other factors such as engineering considerations and/or other environmental resource constraints were such that prime timber lands (e.g., Flat Woods/Montgomery Creek area) could not be totally avoided. There are no plans to clearcut the right-of-way, but rather to selectively clear tall timber that would come into contact with the conductors.

SL-18 (continued)

- D AND IN PARTICULAR, IT WOULD FURTHER MUTILATE THE ONE INCREDIBLY FRUITFUL FLAT WOODS AREA THAT PG&E IS ALREADY TRYING TO RUIN THROUGH CLEAR CUTTING.
- E WHATEVER MY FEELINGS, YOU HAVE PUT ME INTO A POSITION OF CHOOSING BETWEEN POISONS. YOUR FIRST DRAFT WAS TOTALLY UNACCEPTABLE TO ME, AS IT WENT DIRECTLY THROUGH OUR 160 ACRE, 6 RESIDENT COMMUNITY. YOUR NORTH 4 McCUSKEY OPTION, UNDER THE CONDITIONS ABOVE, IS THEN MY CHOICE. HOWEVER, YOU SHOULD KNOW YOU WILL DESECRATE THE TENUOUS ENVIRONMENT SLOPING BETWEEN OUR COMMUNITY AND THE PIT RIVER, THE LAST OUTPOST FOR MANY ANIMALS ON THE RUN FROM EARTH'S MOST VORACIOUS PREDATOR AND DESTROYER OF GOD'S GREEN EARTH - YOU AND ME.



E Comment noted. Your preference for the North 4 route option over the preferred route is noted. North 4 has been adopted as part of the preferred route.

F The Draft EIS/EIR and the Supplement identify this area as important to endangered species and assesses Project impacts.

SL-18 (continued)

SO I PROTECT MY FIVE
LITTLE ACRES AND HANDMADE
HOME BY CHOOSING THE
MCCLESKEY OPTION; BUT I
WANT IT ON RECORD I DO SO
LIKE THE OTHER ANIMALS OUT IN
THESE WOODS - ON THE RUN.



G Comment noted.

Quint Liban

SL-19

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [I am in favor of the Preferred Route. If an
alternate route has to be used, I prefer the
Westernmost Route.

I would like my name removed from the mailing list _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Earl W. Jones
640 North D Street, Apt. 40
Lompoc, CA 93436

A Your support, first for the preferred route, and second, for the western alternative to the preferred route, is noted.

SL-20

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [*Sounds like your decisions are A-O-K with us. Wish we could sell our 2 acres. Please note address change also am receiving 2 copies of everything*

I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

A

Comment noted.

new address

12177 BATES ROAD RT11

old address credit

THOMSON, WILLIAM L. & PATRICIA A.
~~RT 11 BOX 42 AIRPORT ROAD~~
BILLOXI, MS 39512

SL-23



NURSERY DIVISION 1916 527 1603 22003 BEND FERRY ROAD RED BLUFF CALIFORNIA 96080

July 6, 1987



Environmental Coordinator
California - Oregon Transmission Project
P. O. Box 660970
Sacramento, California 95866

Dear Sir,

- A** I have just received Newsletter Issue 9 which shows that "new routing options" are proposed for the Transmission Project. Would you please send me a map of these options in Shasta County? I would also like to know how possible these new options are over the preferred route. This new option would exactly bisect our strawberry nursery, which straddles the meridian north of Big Bend, CA. Please see the enclosed letter of January 20, 1986 concerning this property.
- B**
- C**

Thank you very much for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Don S. Roberts".

Don S. Roberts
Nursery Manager
Driscoll Strawberry Associates, Inc.

- A** A Supplement to the Draft EIS/EIR was sent to the commentor on July 13, 1987.

- B** We have reviewed Shasta County Assessor's parcel maps for the Hearst option to which you referred. There is no record of an owner such as Driscoll Strawberry Associates along this route option. Several attempts were made to contact Mr. Roberts to ascertain the specific property location in relation to the route. The contacts were made in July and August of 1987. We were unable to reach Mr. Roberts. Efforts will be made to avoid land uses such as the nursery through the selection of a 200-foot wide easement within the 1,500-foot wide route option.

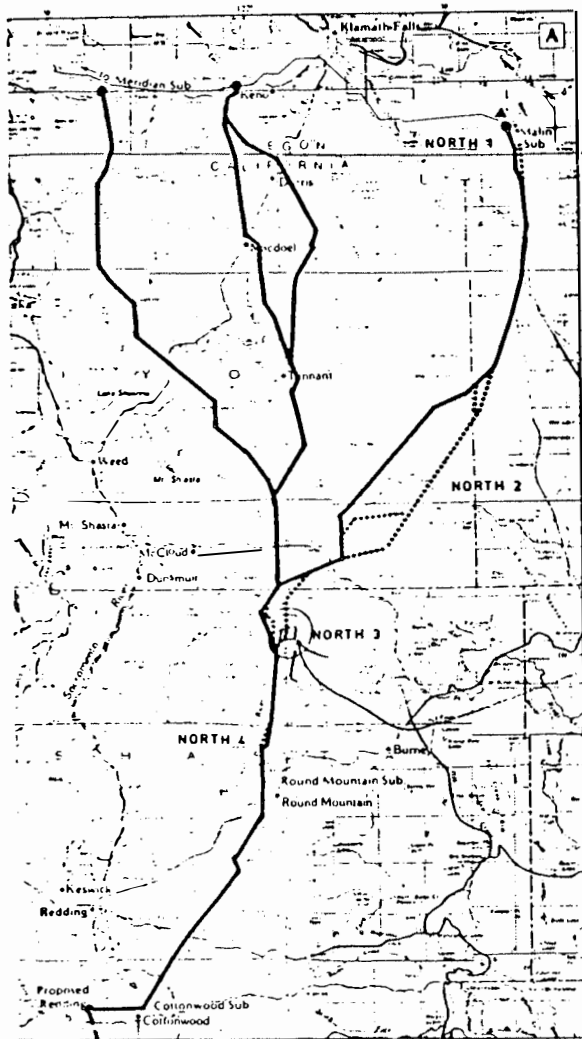
- C** See response to SL-23 B.

Enclosure

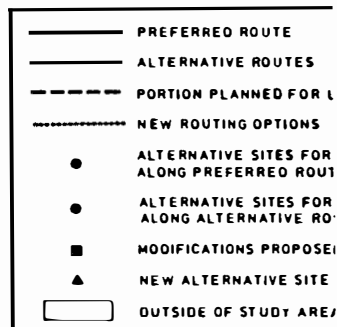
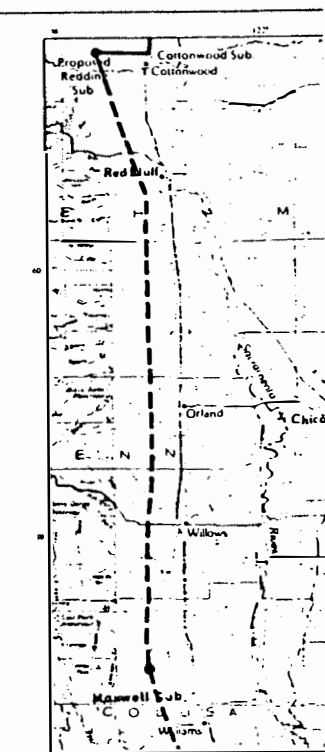
Copy: Ken Morena
Carl Kinner

DSR:p1u

SL-23 (continued)
**CALIFORNIA-OREGON
 TRANSMISSION PROJECT**



Describe



FOR INFORMATION

LAURA EDLIN
 015 024 1005

SL-23 (continued)

DRISCOLL

STRAWBERRY ASSOCIATES, INC.

NURSERY DIVISION (916) 527-1600 22000 BEND FERRY ROAD RED BLUFF, CALIFORNIA 96080

Ms. Cheryl Shields
California Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

January 20, 1986



Dear Ms. Shields,

Thank you for your prompt reply to my last letter (a copy of which is enclosed). I have reviewed the maps and am concerned about the proposed route which would cross our property in Shasta County (map).

Our concern is more than that which any property owner would have if a huge power line were to cross his property. Driscoll Strawberry Associates, Inc. has had an isolated strawberry seedling nursery at this location for over thirty years. The functions of this farm are unique in the world and therefore, this would not be just another farming operation which would need to be relocated. It is probably not possible to find another location with the proper combination of weather, altitude, soil type and especially isolation for disease control anywhere else in California.

I would appreciate any information you could give me about what steps I need to take in order to be involved in the process of determining the final route.

Thank you very much for your assistance.

Sincerely,

Don S. Roberts
Nursery Manager

Enclosures

CC: Ken Morena

Carl Kinner

DSR:eln

SL-24

TO: Transmission Agency of Northern California
P.O. Box 661030 Sacramento, CA. 95866

FROM: Robert F. King, A.I.C.P. *RFK*
Director of Planning and Development
City of Coalinga

DATE: July 6, 1987

RE: Draft EIS/EIR

A [The City of Coalinga has reviewed the supplement to the Draft
EIS/EIR for the California - Oregon Transmission Project and the
Los Banos-Bates Project (Sch #:5040914).

At this time, the City of Coalinga has no comment.

Thank you for the opportunity to review this document.

A Comment noted.

SL-26

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [We prefer that you use the preferred route]

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Lloyd and Dorothy Nelson
5525 15th Street, S.W.
Edmonds, Wa 98020

A

Your support for the preferred route is noted.

SL-27

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

WE ABHOR THE PROPOSED ROUTE DUE TO
THE THOUSANDS OF ACRES OF SCENIC AND
AG LAND THAT IS LOST FOR GENERATIONS.
WE LIVE IN THE BLIGHT YOU ARE CREATING.

I would like my name removed from the mailing list.

For more information, please contact Joyce Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds and mail it to us. Thank you.

A

Your opposition to the preferred route is noted.

NOREY, GARY M. & ELLEN M.
PO BOX 345
ANDERSON, CA 96007

SL-28

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [Agree with Preferred route

2

I would like my name removed from the mailing list _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995

Clip this page, fold it in thirds, and return it to us. Thank you.

GARCIA, AUSEN^CDIO & DOROTHY
695 DRD LOMA ROAD
CARSON CITY, NV 89701

A Your concurrence with the preferred route is noted.

SL-29

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments.

A [THEY SHOULD RE-ROUTE TO AN UNPOPULATED AREA
AND NOT THROUGH BETHEL ISLAND WHERE IT
WILL RUIN A HIGHLY POPULATED RESORT (ISLAND.

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Nadine Gardner and Dorothy D. Fox
2208 Taylor Ave.
Bethel Island, CA 94511

A

The preferred route passes to the west of Bethel Island. See also responses to L-115 B and L-289 B.

SL-30

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.



Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

A

I would like to make the following comments: *This line is treason to the AMERICAN WORKING MAN, at all wages of life. Your essential strategy is to give billions of dollars of work to Canada to build electric power under the control of a foreign country at a time when our country desperately needs jobs & a lower deficit.*

I would like my name removed from the mailing list _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995

Clip this page, fold it in thirds, and return it to us. Thank you.

*1404 First St
Hawman WI 54216*

Carla Kincaid
P.O. Box 1188
Bethel Island, CA 94511

A

Our analysis of the economics of the COTP and the benefits to California is presented in Section 1.5 of Volume 1 and Appendix B of Volume 3A of the Draft EIS/EIR. Additional information can be found in the responses to L-306 and L-3 T.

SL-31

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [WOULD LIKE FOR THE ROUTE TO ~~NOT~~ GO
AROUND BETHEL ISLAND, CA & MISS
IT COMPLETELY.

I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995

Clip this page, fold it in thirds, and return it to us. Thank you.

109 Patton Pl
Chesapeake Va 23320

W. W. and Alyce J. Newton
P.O. Box 108
4400 Stone Road
Bethel Island, CA 94511

A

The preferred route passes to the west of Bethel Island. See also responses to L-115 B and L-289 B.

SL-32

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

CALIFORNIA-OREGON
TRANSMISSION PROJECT

A

B

*I own property on Cove and Big
Bear Calif. This is a community.
Not only does this make the value
of the property drop to nothing, it is a community
of families & not just
I feel its wrong to build these lg. towers. Although
I strongly oppose this move*

I would like my name removed from the mailing list

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

A

See responses to L-184 A and T-82 C.

B

Your opposition to the proposed Project is noted.

JAFFE, DIANE
1030 DOMINION
OJAI, CA 93023

SL-36

7-8-87

Environmental Coordinator
Calif.-Ore. Trans. Project
Sacramento, CA 95866

Dear Sir:

Please send us a copy of
the Supplement to the Draft
EIS/EIR. Thank you.

Our sub-division approx. (15)
parcels is located in the
S.W. 1/4 of Sect. 22, Township
33 North, Range 1 West. (OAK RUN)

nine families have homes
here and most have here all
year round.

We would like to know
the proximity of the Trans-
mission lines to our property
and if they will cross our
private road. of course, no

SL-36 (continued)

(2)
A [One wants them, for obvious reasons, as well as resale value.

Please advise what options, if any, we have, as our parcels are mostly in 5 and 10 acre increments on the west side of Clara Creek.

The July 1987 newsletter (Issue 9) was our first notice of the project.

B [Please advise the current status and map of our area. Sincerely,

Mr & Mrs William D. Leight
(LEIGHT)
216 ZAG LANE
P.O. Box 30
OAK RUN, CA 96069

(916) 472-3702

A

Comment noted. Also see response to T-82 C and L-184 A.

B

A letter and quadrangle map of the Whitmore area with Project information was sent to the commentor on July 16, 1987.

SL-38

LAW OFFICES
GERMINO, LAYNE, BRODIE, RUNTE & MAGUIRE
A PROFESSIONAL LAW CORPORATION

D. OLIVER GERMINO (1803) (972)
DONALD M. LAYNE
C. WILLIAM BRODIE
JOHN O. GERMINO
JOHN A. RUNTE
DAVID B. MAGUIRE
DONALD G. GERMINO
EDWARD M. AMARAL
J. SCOTT JORDAN
BRYAN R. F. SOLOWSON
GLENN C. CARPENTER
STEPHEN G. OPPENHALL
MARSHALL C. ROSS
THOMAS A. BLANCY, JR.
CERTIFIED SPECIALIST, FAMILY LAW

2800 EL CAMINO REAL
P. O. BOX 80810
PALO ALTO, CALIFORNIA 94308-0810
TELEPHONE (415) 987-9211
1241 EAST PACHECO BOULEVARD
POST OFFICE BOX 591
LOS BANOS, CALIFORNIA 93838
TELEPHONE (209) 826-8014

JOHN M. HALL, JR.
OF COUNSEL

PLEASE REPLY TO
PALO ALTO

July 14, 1987

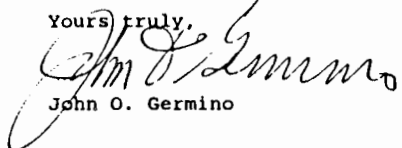
Ms. Laura Edlin
Public Affairs Director
California Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Re: Moore/California-Oregon Transmission Project

Dear Ms. Edlin:

Thank you for your letter of July 9, 1987. I am sure you and the Agencies understand that the "suggestions" in my letter of January 16, 1987 to which you refer in your letter are not only "suggestions", but are specific requests on behalf of my client that if the Agencies decide to proceed with this project, that the route of the COTP should not go across my clients' property, especially when less costly and less damaging alternatives are available. Naturally, we do expect our requests to be honored. Please address me if there is any additional information we can furnish you in order to assist you and the Agencies to make the proper decision with regard to my clients' property.

Yours truly,


John O. Germino

JOG:lt
cc: Client (w/enclosure)

A Our responses to your January 16, 1987 letter are presented in Volume 2A of this Final EIS/EIR. See response to L-193 of that volume.

SL-39

July 9, 1987

Environmental Coordinator
California-Eregon Transmission Project
P.O. Box 660970
Sacramento, California 95866

A [Could you please tell me whether
transmission line, N-9H or N-9J
will be used in the Millville area in
Shasta County?

There are already two of your lines
which cross my property near the corner
of sections 11, 12, 13/14 in Shasta County
near Millville. A third line in this
immediate area would destroy my access
and of course ruin my property.

B [My property is in section 14, and I
object strenuously to their crossing any more.

C [It would seem that putting three
wires underground would be by
far the best solution.

Sincerely, Jack R. Kifer

22619 PAUL REVERE
WOODLAND HILLS CA

818 999 3628

91364

A

A letter and quadrangle map of the Millville area with Project information was sent to the commentor on July 24, 1987. Route N-9H is the preferred route in that area.

B

Your objection to routing the COTP across your property is noted. See responses to T-82 C and T-162 B.

C

See response to L-307 I.

SL-41

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

A [I would like to make the following comments: ALTHOUGH WE APPRECIATE THE
B [BENEFITS OF ELECTRICITY, ONE OF THE MAIN REASONS WE
BOUGHT PROPERTY IN ROUND MOUNTAIN WAS FOR THE AESTHETIC
VALUE. WE WILL LOSE THE AESTHETIC VALUE AND THE
MARKET VALUE OF THIS PROPERTY, AS THE INSTALLATION
OF THESE LINES WILL BE IN OUR VIEW.

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

PLUMMER, F.F. & R.A. AND PLUMMER, F.M. & S.
BOX 188
ROUND MTN., CA 96084

A Volume 1 of the Draft EIS/EIR (page 4.1-28) includes a discussion of the visual impacts of the Grizzly Peak to Redding route that is located in the northern section of the Project. This discussion acknowledges that this portion of the Project would impose adverse visual impacts on views from some of the residences near Round Mountain and also refers to mitigation measures that could reduce these impacts. See responses to L-244 A and L-184 A.

B See responses to L-115 A, L-184 A, and T-82 C.

SL-44

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A

I understand the need to transmit power across country but why not try with existing routes and not mess up other areas ???

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995

Clip this page, fold it in thirds, and return it to us. Thank you.

Don Rhyne
P.O. Box 681
Bethel Island, CA 94511

A

See response to L-177 A. When possible, the Project has used existing routes. This is particularly evident between the Olinda and Tracy Substations where we are upgrading Western's double circuit 230 kV line. However, as explained in the response referenced above, there are situations in which this was not possible.

SL-45

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

CALIFORNIA-OREGON
TRANSMISSION PROJECT

A [*Two of your power lines already cross my*
property in Milbrett near the corner of sections 11, 12, 13, 14.
Shasta Co. another line in this immediate vicinity would destroy
the access to my property. Please put it somewhere else or
best yet, underground.
B [*I would like my name removed from the mailing list.*

A

See response to SL-39 B.

B

See response to L-307 I.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995

Clip this page, fold it in thirds, and return it to us. Thank you.

KIFER, JACK R. & ALTHEA K.
22619 PAUL REVERE DR.
WOODLAND HILLS, CA 91364

SL-46

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [PLEASE DON'T SPEND MORE ON THIS PROJECT THAN WHAT
CAN BE RECOVERED IN TEN YEARS OR SO. SET A FIRM
"NOT TO EXCEED" LIMIT. WE HAVE MORE THAN ENOUGH
WITH WPPSS'; 5 WHITE ELEPHANT, ALL \$15 BILLION OF
I would like my name removed from the mailing list. 18

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Fred Walter
35985 Row River Road
Cottage Grove, OR 97424

A

For a discussion of how Project benefits will be recovered in rates, see the response to T-126 A. For a discussion of the benefits to the Pacific Northwest, see the response to L-329 A.

SL-47

A

B

C

*Please send copy of Supplement
THE BIRTH DEATH
STATEMENTS LATELY
MUST HAVE SOME BEARING
IN THE FUTURE?
ALSO!!*
CALIFORNIA-OREGON
TRANSMISSION PROJECT

*SPN is padding
price stabilization
finally - and better
PERSONAL MANAGEMENT -
CLUBBACKS (LIKE EVERYONE
ELSE!)*

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

*WITH OIL PRICES RAISING AGAIN THE TRANSMISSION LINES SEEM REAL
NECESSARY. OIL PRICES DOWN - THE CALIF. SEGMENT USES DOWN
RESOURCES AND NW POWER SURPLUSES, CERTAIN GUARANTEES SEEM
ABSOLUTELY NECESSARY AND PERMANENT TO STABILIZE PRICES.*

I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

A

B

C

A Supplement to the Draft EIS/EIR was sent to the commentor on July 16, 1987.

This comment is unclear.

The Draft EIS/EIR analyses indicate that net benefits are available to the Northwest from energy sales to California over a broad range of oil prices. The market for power is, by nature, subject to uncertainty. This uncertainty is the reason a broad range of oil prices and power availability cases were evaluated in Volume 3A of the Draft EIS/EIR. Additional benefits are available from capacity sales, capacity for energy exchanges, and reduced construction of resources in the Northwest. These last two benefits are enhanced by low oil prices.

For a discussion of Pacific Northwest benefits, see the response to L-329 A. For a discussion of energy pricing as it relates to oil prices, see the response to L-306 UU.

Gerald L. Dobbins
N 5605 Madison
Spokane, WA 99205

SL-48

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

- A *I continue to question the validity of this*
B *project. As a home owner in the N-8A17E & 2, I am*
totally against the preferred route, & after a review
of the statistics between this & the alternate
route, I am convinced that the alternate
route should be preferred without
question.
Mary Jane Vinzant

I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

VINZANT, MARYJANE
P.O. BOX 80
BIG BEND, CA 96011

- A The Draft EIS/EIR, Volume 3A, addresses the Project benefits and concludes that benefits exceed costs.
- B Your support for route option North 4 is noted. North 4 has been adopted as the preferred route in this area.

SL-50

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

~~See enclosed note~~***
S

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

William Barringer
3612 Summit Drive
Mt. Shasta, CA 95847

SL-50 (continued)

July 13, 1987

Dear Sir:

A I would like to state my support, in writing, for the preferred route shown on your map. If this project has to happen, then it makes sense to try and use and existing causeway.

From the meeting held here in Mt. Shasta last year, I realize this is probably not the most favorable route for the parties concerned; but since Siskiyou County gains nothing (or relatively very little) from this project, why should the people--many of who moved up here because of the beautiful country-side--have to suffer the most.

My understanding is that the power is needed for a growing northern Calif. population. And that there exists a surplus of electricity in areas north of us. If this be the case, then it should be the consumer who should have to pay the cost for taking a less direct route with the power lines. I am talking of the Round Mountain route.

I realize my information is incomplete and dated; and that a project like this is complicated and full of politics. I thank you for the opportunity to express my views, even if I haven't explained them in great detail.

Sincerely,

Bill Barringer
Bill Barringer
P.O. Box 199
Mt. Shasta, CA
96067

A Your support for the preferred route is noted.

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [*Please use enclosed article. It is a very important reason. None of these things he said.*
I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Joseph Otey
P.O. Box 564
Dorris, CA 96023

A

We are aware of the New York State Project you refer to in the newspaper story that you sent to us (A. Ahlbom, E.N. Albert, et al. July 1987. Biological Effects of Power Line Fields. New York State Power Lines Project). See also response to L-330 F3.

The most recent contributions to the scientific literature are the results of several studies funded by the New York State Power Lines Project. The \$5 million research project was funded by the electric utilities that serve New York State and was administered by the Health Department using a scientific review panel. A total of 16 research projects were completed, plus two extension projects.

Most of the New York funded research studies reported "no effects of concern" to the scientific panel. No effects were found on reproduction, growth, or development. Several of the studies showed no evidence of genetic or chromosomal damage that might lead to inherited effects or cause cancer.

The New York project included funding of two epidemiological investigations, one each for childhood cancer (Denver) and adult cancer (Seattle). In general, epidemiology looks at the incidence of some disease in different groups of people. Researchers then compare the exposures of these groups to various factors that are to be studied. The Denver study evaluated the incidence of cancer near certain "high current configuration" distribution lines. A special visual inspection "wiring code" was used to estimate where locations would tend to have higher magnetic fields. Also, the fields were measured in the house. The outcome of the two epidemiology studies have caused the most concern.

The findings of the Denver cancer study were interpreted by the New York scientific panel to show a positive relationship between children with cancer and the proximity of their homes to high current configuration power lines. However, the panel noted that some "internal inconsistencies" were troubling. One problem was that the statistical correlation was weak (or non-existent) for measured magnetic fields, but stronger if the wire coding system was used to estimate fields. If the magnetic fields are the cause of the cancer, a stronger correlation would be expected with the actual field measurements than with the wiring codes.

A
(cont.)

The discrepancy may suggest that some other factors are involved. Leonard Sagan, manager of the Electric Power Research Institute's field effects research suggests that a higher density of power lines and current flow is likely to be associated with more crowded, urbanized neighborhoods where there is more traffic, noise, air pollution, and exposure to hazardous chemicals.

One factor in trying to understand any epidemiologic study is to see if the results are supported by basic laboratory research. This is why the New York scientific panel cautions that "It is important to bear in mind, however, that research in basic sciences has not revealed any mechanisms that could explain the role of magnetic fields in the origin of cancer."

The other epidemiological study funded by New York State involved adult leukemia and was done in the Seattle area. The design of this study shared many features of the Denver study. Exposure to magnetic fields was assessed by field measurements as well as by the same wire codes as the Denver study. For the Seattle study, the panel reported that "...regardless of how exposure was characterized, no relationship with leukemia incidence was disclosed."

After evaluating the results of the cancer studies, the panel stated "For several reasons, including the fact that a causal relationship between weak magnetic fields and cancer has not been established and that methodological uncertainties associated with quantifying magnetic field exposure levels exist, we cannot offer a recommendation based on the epidemiological studies", and "At this time no risk assessments can be made because only four studies of this question have been made in the two which report an association are from the same geographic region. More research on cancer as a function of magnetic fields is needed, both in homes and for on-the-job exposure."

The welfare and safety of the public are paramount in all aspects of the COTP route selection and design criteria. The final routing for the line is located almost entirely in rural and remote areas, and school sites and other sensitive land uses have been avoided. At this time the results of studies on biological effects from electromagnetic fields surrounding transmission lines and other electrical devices are inconclusive. The Electric Power Research Institute, Department of Energy, and other groups are funding further research on the subject. Based on the mixed results of previous studies and the lack of causal evidence for a biological mechanism that could explain the role of magnetic fields in the origin of cancer, the research programs could well continue for years at the cost of several million dollars before more definitive information is found. Results from past and ongoing studies are inconsistent and, at this time, there is no conclusive evidence that electric or magnetic fields produce long term adverse effects on human health.

The results of the New York State Power Lines Project are further addressed in Section 1.2.3 of Volume 1 of this Final EIS/EIR.

Common residential power line could cause childhood cancers

By PETER PANYCH

ALBANY, N.Y. (UPI) — An overhead power line common in residential neighborhoods could cause up to 15 percent of all childhood cancers, a \$5 million study shows, but researchers cannot explain the link.

The study recommended the National Institutes of Health continue research to determine if the link between child cancer cases and electromagnetic fields generated by high-voltage overhead power lines is conclusive.

The study, initiated by the state's health department five years ago, was released Wednesday. It established for the first time that electromagnetic fields in neighborhoods could endanger human health, project administrator David Carpenter, dean of the State University at Albany's School of Public Health, said.

The report admitted that researchers cannot explain how the electromagnetic fields induce cancer.

And the report found that laboratory test cells exposed to electromagnetic fields did not mutate into cancer cells and

cancer cells did not grow faster in the fields.

"The study is significant and applicable to everybody because everybody is exposed to electromagnetic fields; this is an electrical society," Carpenter said.

"I personally will not change my lifestyle as a result of this," he said. "It's low risk, but I do understand people being concerned."

The study, funded by eight New York utilities and the U.S. Department of Energy, stemmed from questions about the health effects of a state-approved high-voltage line from the Canadian border to central New York.

Farmers who live near the 765-kilovolt line have blamed its magnetic field for sickness and defects in their dairy herds and their own families.

One family moved after their 14-year-old developed a serious thyroid condition, milk production from their dairy cows dropped and their chickens died.

Cancer experts from Memorial Sloan-Kettering Hospital in New York City and the National Cancer Institute in Bethesda,

Md., would not comment on the report until they review the findings.

The study was conducted among Denver, N.Y.-area homes by a team led by David Savitz, an epidemiologist at the University of North Carolina.

Researchers studied all cancer cases in Denver involving children ages 3 to 14 diagnosed between 1978 and 1983. A control group of children was randomly selected.

The study found the cancer risk for children who lived near the power lines to be 1.7 times higher than for those who did not. The risk of getting leukemia was 2.1 times higher for children living near high-current wires.

The risk of childhood cancer is generally figured at one in 10,000.

The panel's calculation that 10 to 15 percent of childhood cancers are caused by the overhead power lines is based on the total childhood cancer cases in the United States, and assumes the proportion of homes with high electromagnetic fields is the same around the country as in the Denver area.

SL-55

YOUR COMMENT _____ NT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [AS A TAX PAYER AND A LAND OWNER, I DO NOT
WANT THIS PROJECT ON THE EAST SIDE
OF BETHEL ISLAND. BETER YET, NOT ON BETHEL ISLAND

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Rodger Terry
P.O. Box 233
Bethel Island, CA 94511

A Your opposition to routing the proposed Project on Bethel Island is noted. The preferred route does not cross Bethel Island, but is located to the west of Bethel Island.

SL-56

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [CALIFORNIA-OREGON
TRANSMISSION PROJECT

*It would be really natural if the easement
could be lined by tallest trees that
conceal towers from casual view*

I would like my name removed from the mailing list _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.



MILLER, CHARLES E.
10610 COMMERCE AVE.
TUJUNGA, CA 91042

Trees along the easement will be left in place unless they pose a threat to the safety of the line. The edges of the right-of-way through dense vegetation will be feathered to emulate natural clearings with irregular edges. Planting of trees along the proposed easement would generally prove impractical. See mitigation measures in Volume 1, Section 1.1.5 of the Final EIS/EIR.

SL-57

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [I don't think our comments count at all. We have expressed our views about protecting our farmland many times over but are you listening?

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Cip this page, fold it in thirds, and return it to us. Thank you.

George and Sue Moore
Route 1 Box 243
Tulelake, CA 96134

A

Our responses to your and other comments presented in this Final EIS/EIR provide the lead agencies with a means of considering the views expressed by the general public and public agencies. There have been several routing changes made in response to comments from the public.

SL-58



Executive Department

155 COTTAGE STREET NE, SALEM, OREGON 97310

July 21, 1987

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

Subject: California Transmission Project and the
Los Banos-Gates Transmission Project
PNRS# ORB70626-053-4

Thank you for submitting your draft Environmental Impact
Statement/Environmental Impact Report (EIS/EIR) for State of
Oregon Review and Comment.

Your draft was referred to the appropriate state agencies for
review. The consensus among reviewing agencies was that the draft
adequately described the environmental impact of your proposal.

We will expect to receive copies of the final statement as
required by Council of Environmental Quality Guidelines.

Sincerely,

INTERGOVERNMENTAL RELATIONS DIVISION

Dolores Streeter

Dolores Streeter
Clearinghouse Coordinator

DS:ch

A Comment noted.

B Copies of the Final EIS/EIR will be transmitted to the State
Clearinghouse.

SL-59

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

- A Should the project run through Macdonald where we
B find his - where property degrades in value?
We would appreciate all information concerning this project.

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

HUGHES, JAMES J. & HELEN L.
15000 CACTUS
HESPERIA, CA 92345

A The preferred route does not pass near Macdoel. See responses to L-184 A and T-82 C.

B A letter was sent to these commentators on July 28, 1987. The letter asked the commentators to respond if they would be interested in receiving past issues of the COTP newsletter, the Draft EIS/EIR, and/or the Supplement to the Draft EIS/EIR.

SL-60

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [*My home is the first house south of the Bethel Island bridge - 60 Sunset Dr. and I would object to any power structure being that close*

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

L. Amstein
60 Sunset Drive
Bethel Island, CA 94511

*228 St. Seymour
Napa Ca 94559*

A Your objection to routing the COTP in the area immediately south of the Bethel Island bridge is noted. The preferred route centerline is approximately one quarter mile southwest of the Bethel Island bridge.

SL-61

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A

I go along with route north 4.
Definitely not N-8ALT1 preferred route.

I would like my name removed from the mailing list. No.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

HANSON, LYLE AND TIM
P.O. BOX 94
MONTGOMERY CREEK, CA 96065

A

Your support for route option North 4 and opposition to N-8Alt.1 is noted. North 4 has been incorporated into the Project preferred route.

SL-64

COPY

19 July 1987

Nancy H. Weintraub
Western Area Power Administration
825 Bell Street
Sacramento, CA 95825

Dear Ms. Weintraub:

Thank you for sending me the copy (No. 363) of the Supplement to the Draft EIS/EIR for the California-Oregon Transmission Project (should it not be Oregon-California?).

I'm not sure where to direct my question, so I am sending this to you with a copy to Rick A. Lind, among others.

I note that on page 2.1-7 it says, "Recent studies have shown that exposure to such fields is comparable to the levels experienced in household situations."

A How may I obtain a copy of the "Recent Studies", and who did them?

B The quoted statement strains my credulity, for the following reasons:

1. The peak voltages on the proposed line are about 707,000 volts. Assuming 70 feet from a conductor to ground, gives a voltage gradient of about 10,000 volts per foot, every 1/120th second -- 50 to 60,000 volts from your hair to your toes, when standing, on the ground, under the line;
2. Peak voltages in the home are about 340 volts at a distance of 4 to 8 feet (85 to 43 volts/ft); but most peak voltages are more like 170 volts (43 to 22 volts/ft);
3. Maximum voltage gradients, in the home, occur under an electric blanket where the gradient, depending on the thickness and construction of the blanket, and assuming the unlikely situation that the sleeper is at ground potential, may reach over 16,000 volts per foot when the blanket wiring is 1/8 inch from the sleeper.

Much more likely, the sleeper is simply between the nominal 120 volts (170 volts

A See references to "recent studies" in SL-51 A.

B The electric field under a transmission line cannot be evaluated with simple linear approaches, such as dividing voltage by distance. The 500 kV (500,000 volt) classification is the root mean square voltage between any two of the three sets of phases (wires bundled together). The actual voltage between any phase and the ground is $500 \text{ kV} / \sqrt{3} = 289 \text{ kV}$. Also, since the electrical phases do not reach their respective peak voltages at the same time (nor with the same polarity) their contributions tend to cancel near the maximum locations, e.g., under or near the wires on the right-of-way. The earth has a static electric field (depending on season, etc.) of about 150 volts/m. This means that a 275 volt potential exists across the body of a six foot tall person due to the earth. AC electric fields in the home are generally much less than directly under a 500 kV line (except for the very close region to electric blanket wires). However, the reverse is true for magnetic fields. Many appliances have fields much higher than transmission line fields. Regarding the Wall Street Journal article, see SL-51 and L-330 F3.

SL-64 (continued)

B

peak), in the blanket, and a ground (on the ground floor 4-5 feet away).

I enclose a copy of a recent *Wall Street Journal* story that may be apposite.

the enclosed Brief Bio will give you some idea of where I'm at.

Thank you for your consideration of my interests.

Sincerely,

ORIGINAL SIGNED BY
BEARDSLEY GRAHAM

Beardsley Graham
P.O. Box 5153
Bend, Oregon 97708

503/382-0043

encs.

cc: Teresa Giacomini
Friends Of The Greensprings
16399 Highway 66
Ashland, Oregon 97520

Rick A. Lind 
Transmission Agency of Northern California
P. O. Box 660970
Sacramento, CA 95866

Edward Sheets
Northwest Power Planning Council
850 S.W. Broadway Suite 1100
Portland, Oregon 97205

BG:bma

SL-65

Environmental Co-ordinator
COTP
P.O. Box 6609070
Sacramento Ca 95866
Gilbert/Commonwealth
P.O. Box 2355
Redding , Ca 96099

Michael J. Donovan
Nancy Rapalus
331 Courtland Dr.
San Bruno, Ca 94066
July 22 1987

Dear Sirs,

We had not heard from the COPT in quite a while about the status of the project and whether our property was still involved in the "preferred alternative route". After talking to Laura Edlin , she sent us a plot map with the 1500 ft proposed line drawn on it. It seems that the 1500 ft line pretty much covers the whole of our 1300 ft length of property. So no matter where in that line you put the transmission lines we are going to be severely affected.

We had that twenty acre parcel subdivided in 1982 for the purpose of building a home for ourselves on the ten acre parcel in the back, (see #72 on your map or A.P.#97-210-25). We paid for a road and surveying and engineering and the county costs. We had to refinance our home from 8 percent to 18 percent and over double our monthly out-put for that property. It has cost us a lot and that is not "unimproved property". The fact that we had to move from the area for economic reasons does not change our plans for the property, but just delays them. The plans for the transmission lines ruins the property's value as residential rural. The property is not useful for anything else. It is not farm land and ten acres can hardly be considered range land for grazing stock. It does have a road, utilities, and water. And on that property, any where you cross the property, the lines will be visible. And where you drew the most likely placing of the line, it goes right through the middle. It follows the path of a seasonal creek which would be destroyed and ruin drainage of the property, also ruin a meadow which is the "preferred alternative" for our house. And the 200 ft easement would take up one third of the property, severely restricting use and building in the future.

A

See responses to L-184 A and T-82 C regarding property values. The route shown on the map which was sent to you is 1,500 feet wide. Within that 1,500-foot wide route, a 200-foot wide right of way can be located along the western property line. Project engineers are currently investigating this centerline.

SL-65 (continued)

B We are very concerned about being taken advantage of by the "Project". Our first choice would be that you use another route like N-9J instead of crossing over with N-9G. What was your logic in choosing this route? Our second choice would be that you move the transmission line in alternative N-9J back so that it runs on the back line of, or better still, behind the back property line. Although the lines would still be visible at least it wouldn't be right in the middle, or affect the creek or the meadow. Our third choice would be that you purchase the property from us, if you can not accommodate us with our first two choices. We have no desire to retain possession of the property and pay property taxes for land that is useless to us. If you say sell it, we say, you sell it after you have built your transmission lines. Why should the effort be ours. If you had not placed the lines there we would not be selling it. This all assumes that some one will buy it with the lines on it. The fourth choice is

E totally unacceptable to us. That is you put the lines where you want, pay us only for easement rights, and we are stuck with the property. We have consulted a lawyer and his advice was that if you have eminent domain, all we can argue in court is value of the property, not if you build over our property. I think in this case you are severely affecting the use and value of our ten acre parcels, and our improvements that we have paid for.

This letter addresses our personal concerns for the building of the COTP and how we would be affected. I feel there are many environmental factors also. They were of concern when we were

F sub-dividing the property. The property is in wild turkey preserve.

G The planning department voiced concerns and limited us to one single family dwelling. But now it is O K to clear a two hundred foot path right through the middle for the right-of-way. Although the soil is clay, there is precious little top soil and we don't appreciate the likelihood of soil erosion, and loss of the few pine trees on the property. The most likely placement for the line was drawn for us by Mr. Gray from Gilbert/ Commonwealth. It goes right over the

B Route segment N-9G avoided the Round Mountain Substation area that has many existing transmission lines as well as eliminated the need for a crossover of the existing 500 kV Intertie. However, the proposed line is still able to parallel much of the existing 230 kV PG&E lines.

C Comment noted. This location for a centerline is appropriate and is currently under review by Project engineers. This centerline location is being investigated because of your suggestion and that of your neighbor, Mr. Tim Peterson. We do not wish to bisect a property where it is not necessary to do so.

D We do not wish to bisect a property into unusable remnants without a clear reason to do so. In your case, we do have the flexibility to locate the centerline along the western property line. In the unlikely event your property was divided into unusable remnants by the transmission line easement, damages to the entire property would be paid. See response to L-330 V14.

E See the responses to L-14 B, L-184 A, T-82 C and L-330 U14.

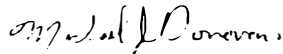
F We are unaware of any official designation of the area as a wild turkey preserve. The project has been aware that this area supports wild turkeys. The construction of the power line and access roads would remove only a small amount of habitat and should not significantly impact turkey populations. Subdivision and residential development are also threats to local wildlife.

G The Project is concerned about any soil erosion which may result from COTP construction and/or operation. Thin soils are especially susceptible to this type of damage. If underlain by clay, these soils will take many years to reform because the quality of this "parent material" is insufficient to provide the nutrients necessary for plant growth. See mitigation measures in Section II and IV in Section 1.1.5 of Volume 1 of the Final EIS/EIR.

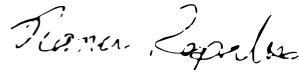
SL-65 (continued)

H Seasonal creek and spring. This will further increase the soil damage and also ruin the most easily developed water source for the parcel. It will ruin the most enjoyable, senic, and usable parts of the parcel.

I We have many concerns regarding the transmission line placement. We do realize that power lines do have to go somewhere, and we are glad that the law provides for a responsible approach by the power companies. We hope that you do your best not to run over us small guys in your attempt to provide service and make a profit. Don't profit off our loss.



Michael J Donovan



Nancy Rapalus

H Soils mitigation measure II.A.4 and water resources mitigation measures III.A, B, E, and G are specifically designed to protect existing and potential sources of potable water which may be otherwise damaged as the result of project-induced sedimentation.

I Comment noted. See response to SL-65 E.

SL-66

Wm. E. (Bill) Kennert

Geologist
Petroleum & Water Resources
Geologic Hazards

July 21, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca. 95866

Gentlemen;

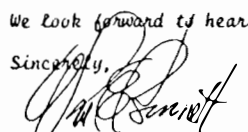
A Mr. I. E. Johanson, owner of approximately 820 acres on Gas Point Road where California-Oregon Transmission plans to install a new facility, has asked me to inquire about the current status of plans regarding the Redding Substation (Olinda). In Volume 1 and 3A (November, 1986) we note that Site GP-4, located on Mr. Johanson's property, is the preferred site. In the Supplement to the Draft IES/EIR of June, 1987, we note that "the structure and relocations of the Olinda Substation will be minor". Yet we have heard nothing regarding which of the four Olinda sites will be chosen.

B I have had at least two phone conversations with Mr. Jose Vigil (916) 978-4420 of Western Area Power regarding the Olinda site. I mentioned that with the new Happy Valley High School nearby on the west and the encroachment of residential environment on the east, the Johanson property is becoming more valuable with the passing of time. I mentioned that I was not receptive to placing the GP-4 site just 500' from Gas Point Road, because this is the most valuable part of the property. I suggested to Mr. Vigil that if GP-4 is the final site for the Olinda Substation that it be placed approximately one-half mile south of Gas Point Road and that its western border coincide with or overlap the western border of the Johanson property and further, that it be as close to the existing Western Area Power line as practical--the intent being to damage as little of the Johanson property as possible with unsightly transmission facilities.

C Frankly, we would rather not have the substation on the Johanson property--but we are willing to cooperate with the power agency provided we receive some cooperation in return. Mr. Johanson is well along in age and desires to make plans for his Gas Point property in the near future. With this potential cloud, as the stated preferred site, hanging over his head, it is difficult to plan ahead. In fairness to Mr. Johanson, and to the agency, I urge the agency to promptly decide on the site for the Olinda substation and to formalize that decision with a contract.

We look forward to hearing from you.

Sincerely,


CC: Mr. J. E. Johanson
1768 West Street
Redding, California 96001

A Site GP-4 is the preferred site. The exact size and location of the substation within that site is being coordinated with the landowners and COTP engineers.

B Jose Vigil of the Western Area Power Administration met with Mr. Iver Johanson on August 25, 1987 and discussed the status of the Olinda Substation site. Mr. Vigil met with Mr. Johanson's attorney the following date. The two discussions focused on: the setting of the substation should the COTP be approved, the need for drainage relocation outside the substation site, the need for additional access along the existing access road, and the need to relocate the existing 230 kV lines.

The proposed location for the Olinda Substation (GP-4 site) is approximately 1,300 feet south of Gas Point Road and overlaps into the property to the west of Mr. Johanson. Placing the substation further south will require extensive grading, earthmoving, removal of more oak trees.

C Your preference not to site the Olinda Substation on the Johanson property is noted. We appreciate your willingness to cooperate with the Project proponents. The Western Area Power Administration has and will continue to coordinate with you and Mr. Johanson with respect to the design and construction of the substation.

SL-68

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

- A [WHAT IS THE EFFECT ON MY PROPERTY (LAND USE
B [FOR RESIDENTIAL & FARMING? WHAT IS THE SOCIO-
ECONOMIC & ENVIRONMENTAL IMPACT & ADJUSTMENTS
TO ME AS AN EASEMENT PROPERTY OWNER

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

CAUGHEY, DAVID M
6960 OAK ST
ANDERSON CA 96007-9222

A Land uses that do not interfere with the safe operation and maintenance of the facility and that do not present dangers to humans are permissible both on the easement and adjacent to the transmission line. Certain land uses such as pumping houses, metal buildings, or swimming pools are not allowed.

B See responses to T-82 C and L-184 A.

SL-69

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [You have yet to convince me of the need for this project, and I certainly do not approve of the route it is going to take.

I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it

us. Thank you.

Madeline L. Wetmore
P.O. Box 112
Bethel Island, CA 94511

A

Your opposition to the proposed routes is noted. A discussion on need for the Project is presented in Volume 1 of the Draft EIS/EIR, Section 1.0.

SL-72

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

A [*Thank you for changing the preferred route to the Malin Substation. We appreciate being heard! Butte Valley will be much improved without it.*

not
I would like my name removed from the mailing list. *Thank you very much.*

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

Pat & Peggy Jacoby
F. O. Box 239
Macdoel, CA 96058

A

Your preference for routing the COTP in the eastern corridor is noted. The preferred switching station site E3 is located approximately 7 miles northwest of the Malin Substation.

SL-76

State of California

The Resource Agency

Memorandum

Date : August 6, 1987

To : 1. Gordon F. Snow, Ph.D.
Assistant Secretary for Resources
2. Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

From : Department of Water Resources

Subject: Supplement to the Draft EIS/EIR on California-Oregon
Transmission Project and Los Banos-Gates Transmission Project
(SCH 885040914; DOE/EIS 80128)

The California Department of Water Resources (DWR) has reviewed the Supplement in conjunction with the Draft EIS/EIR that was issued in November 1986. Our comments on the Draft EIS/EIR pertained to the need for:

- A • a permit for California Aqueduct crossing by the California-Oregon Transmission Project (COTP);
- B • coordination on tower siting for the Los Banos-Gates Transmission Project; and
- C • coordination on tower siting for COTP near Clifton Court Forebay.
- D More recently, representatives of Western Area Power Administration (WAPA) and DWR have discussed a proposed location of the COTP on DWR's property adjacent to Clifton Court Forebay. By letter dated May 11, 1987 (copy attached), we stated that the property in question must be reserved for DWR purposes. Since that time, our studies have expanded to include investigation of Coney Island, Victoria Island, Union Island, and Clifton Court Tract as areas for potential forebay enlargement.
- E Section 4.2 of the Supplement discusses options that would cross the California Aqueduct south of Bethany Reservoir. From a right-of-way viewpoint, nearly any crossing would be feasible. The controlling factor would be the crossing's effect on DWR's operational requirements for the Aqueduct. Any proposed construction would have to be reviewed by DWR in detail prior to construction. The use of an easement versus a standard encroachment permit for the proposed transmission line will have to be a part of negotiations between DWR and WAPA.
- F

A See responses to L-360 A and L-360 B.

B See responses to L-360 A and L-360 B.

C See responses to L-360 E.

D We understand from the comment and meetings with DWR that Clifton Court Forebay land is reserved for DWR purposes, and that other land around the Forebay is being considered for expansion of the Forebay. Route segment S-8K will be the preferred alignment through Coney Island. The design of the transmission line in this and other surrounding locations will be available to DWR, and a coordinated effort will be made to minimize potential future conflicts of facilities should DWR adopt use of land for Forebay expansion upon which the COTP is located.

E The Department of Water Resources will be furnished construction plans for review.

F Comment noted. The COTP participant responsible for right-of-way acquisition in the area of each crossing will negotiate with the Department of Water and Resources.

SURNAME

DWR 188 (Rev. 2/86)

M. Marks 8/6 G. F. Snow

Shumway

Holmes for
P. 8-6-1

SL-76 (continued)

1. Gordon F. Snow, Ph.D., et al.
Page 2
August 6, 1987

G [Figure 4.1-1 of the Supplement shows routing options that would cross Indian Slough, Woodward Canal, and Old River. As discussed in the attached letter, DWR's planning for South Delta water management is considering possible new gates and channel improvements in this area. We therefore request continued coordination on the routing of the COTP at this location.

Mr. Ron Shimizu of my staff will continue in the role of contact person. His telephone number is (916) 323-0105.

Sincerely,

Original signed by

Dan Hendon

for *Vijay* Patel, Chief
Energy Division
ATSS 485-6687

Attachment ✓

bcc: Robert E. Whiting -- 1115-2
Hank Struckmeyer -- 335-22
Ron Shimizu -- 335-22
Pete Rabbon -- Central District
James Schindler -- 431-4

NHeader:1fa:NM-SNOW:2

G We will continue to coordinate detailed routing plans with the Department of Resources.

SL-76 (continued)

May 11, 1987

Mr. James Feider
Department of Energy
Western Area Power Administration
Sacramento Area Office
1825 Bell Street, Suite 105
Sacramento, CA 95825

Dear Mr. Feider:

This is in response to your letter of March 27, 1987, concerning Western Area Power Administration's (Western) proposed location of transmission lines and towers on the Department of Water Resources' (Department) property adjacent to the Clifton Court Forebay. This was discussed at a meeting held on April 28, 1987, with representatives of Western and the Department.

At this meeting, we indicated that there are two items of concern with the proposed transmission alignment: (1) it would conflict with the operations and maintenance of Clifton Court Forebay, and (2) it would conflict with future development plans in the Clifton Court Forebay and the South Delta area. These items are further discussed below.

Regarding the first, the Department is planning to dredge the Clifton Court Forebay and utilize the alignment area for dewatering of dredged material. The dredging and handling of material would require the use of a crane and other heavy equipment. The location of the transmission line towers and line clearances would be critical since it may pose potential safety problems.

Regarding the second item, the Department has been coordinating current Delta planning work with the U. S. Bureau of Reclamation (Bureau) for South Delta water management. The work plan dated January 1987 is attached. This planning activity was initiated under the October 1986 Agreement among the Bureau, Department, and South Delta Water Agency (SDWA) and all three parties are committed to work together to develop mutually acceptable, long-term solutions to the water supply problems within SDWA. This Agreement is also suspending litigation against the Department. Current alternatives being considered include new gates, channel improvements and flow improvement structures all near the proposed alignment. It is our understanding that

SL-76 (continued)

Mr. James Feider

Page 2

May 11, 1987

Western's transmission lines and towers will require a 125 foot-wide easement and that no permanent facilities can be built within the easement. Therefore, the proposed alignment along the west side of West Canal would restrict any future use of the land and levees between Clifton Court Forebay and West Canal. Allowing the use of this alignment would eliminate some of our current project alternatives, would seriously restrict any future alternatives, and may be interpreted as a breach of our Agreement with SDWA.

We therefore believe that the property in question must be reserved for Department purposes.

If you have further questions, please contact Mr. Ron Shimizu of my staff at (916) 323-0105.

Sincerely,

Original signed >>

Viju Patel, Chief
Energy Division

Attachment

bcc: Robert E. Whiting - 1115-2
Bob James/Steve Cohen - 1118-20
Hank Struckmeyer - 1801 Sixth Street
Dan Herdocia - 1801 Sixth Street
Cliff Lucas - 718-A
Don Owen/Jim Schindler - 417-2
Karl Winkler/Pete Rabbon - Central District, Room E-6

RShimizu:lfa:rs-feider:2

P.O. Box 1

McCloud, California 96057

August 3, 1987

Environmental Coordinator
California - Oregon Transmission Project
P.O. Box 660970
Sacramento, CA - 95866

کے

Receipt of notice of the new routing option in the Bear Mt. area of Siskiyou County finds we at my ranch in Nevada without services of a typewriter or other services, so this somewhat informal letter will have to do.

SL-78 (continued)

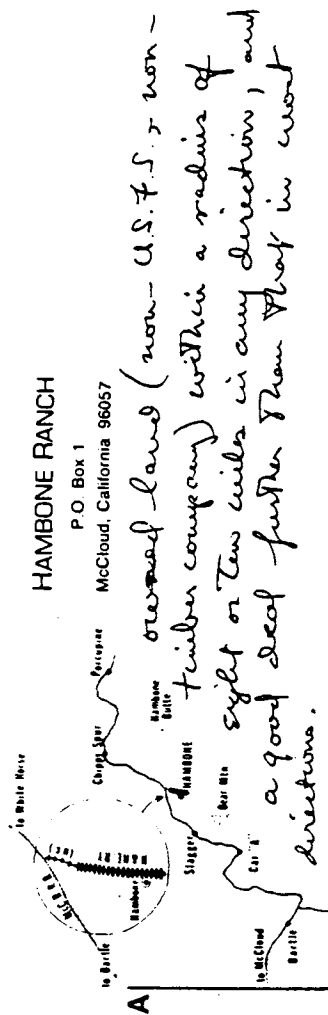
A² I do ~~not~~ want to be a thorn in the side of the transmission project - I'm all for it if it can be built in proper fashion and is economically feasible, but I was shocked and extremely unhappy to find the new North-of-Bear option (North 2B - reference Figure 3.2-2 in the Supplement to the Draft EIS/EIR) passing within a scant $\frac{1}{3}$ to $\frac{1}{2}$ mile from the southern boundary of my property at Hambone in Section 2, T40N, R2E.

The preferred route lies a comfortable 3-4 miles to the west of me and that is perfectly acceptable, as is the South-of-Bear option (North 2C), but I cannot quietly accept the north option passing that close to the only privately

A Your support for the South of Bear route option or the N-10 Alt.5 alternative is noted. Your concerns regarding the closeness of the North of Bear option to the Hambone Ranch is also noted. The North of Bear option has, however, been included in the Project preferred route. See Section 1.2.3 of the Final EIS/EIR for a discussion.

SL-78 (continued)

M



I have just acquired all of the privately held land at Hawbore, (in fact the Excise has not quite closed on one piece as yet), at considerable expense and am just now having a house built on part of that land.

With considerable controversy as to the advisability

SL-78 (continued)

B⁴. of living in close proximity to these lines, I cannot quietly resign myself to the prospect of having the line quite that close to me.

C I have long experience and detailed knowledge of that area — some of the land I have owned for a good many years, some, as stated, just recently acquired — and I just don't believe that it is necessary to construct a transmission line so close to the only private holding and residence for so far in any direction.

As I said at the beginning, I definitely do not want to join the already quite sufficient number of vocal protestors of the project, but please do try to see my point.

C Concerns regarding the routing of the COTP in the immediate proximity of the only private land holding in the area is noted. The timber company land referred to is also privately owned.

SL-78 (continued)

5



HAMBONE RANCH
P.O. Box 1
McCloud, California 96057

After a good many years effort I have finally succeeded in obtaining a piece of land that has some historical interest and has great personal meaning to me. I have learned to live with the forest services' clear-cutting all around me, but the transmission line so close on top of that really is a bit much.

I would rather not have written this letter at all, but under the circumstances I felt that I must do so, just get it that satisfactory

SL-78 (continued)

6.. Three or four miles away from me, and you will hear no more - leave it where that one option is, and you'll probably hear a great deal more from me.

Very sincerely,

H.W. Trapnell.

H.W. TRAPNELL
P.O. Box 57
Austin, Nevada 89310

I will be returning to California August 21, and can be reached at Humboldt at the McCloud P.O. box address after that date. I shall be at

D [The Nevada address above until then. I would appreciate acknowledgment of the receipt of this letter.

D The commentor was sent a written acknowledgment of receipt of his comments on August 24, 1987.

SL-80

August 5, 1987

Robert A. Olson
Project Managing Director
California/Oregon
Transmission Project
P.O. Box 660970
Sacramento, California 95866

Dear Mr. Olson:

Enclosed is a copy of the Presentation our small community made at the Public Hearing on August 4, 1987 at Burney, California.

While we remain fundamentally opposed to the Project as presently planned, we appreciate the courtesy and cooperation of you and your staff. Jay Abbot, John Forman and your consultant, Robert Grey, have been forthright, patient, and friendly in support of the Project.

A [We do hope that the Project route will be replanned and relocated to a less sensitive area. However, in the meantime, we will continue to cooperate with you and your staff.

There is an increasing local sense of suspicion and distrust primarily because of the trespassing of your survey company on the John Hammond property. Advance coordination of you and your employees' intentions would help smooth things.

Sincerely yours,

Dale L. McCleskey

Dale L. McCleskey
P.O. Box 324
Big Bend, California 96011
(916) 337-6920

Enclosure

A Your desire that the Project route be replanned and relocated to a less sensitive area is noted. See response to ST-1 for responses to the enclosed copy of the presentation.

SL-80 (continued)

PRESENTATION TO COTP

BURNEY, CALIFORNIA -- AUGUST 4, 1987

My name is Dale McCleskey; address is P.O. Box 324, Big Bend, California 96011; telephone (916) 337-6920. I'm one of twelve landowners directly threatened by N-8 ALT-1 and -2. The preferred routes N-8 ALT-1 and -2 rip through the center of our small community on the rim of the Pit River Canyon. The new option, North-4, outlined in the recently issued Supplement to the California/Oregon Transmission Project (COTP) Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) is the result of cooperation between the staff of the COTP and our community. The COTP personnel have been gracious and cooperative in this effort. Of the choices available to us, our community strongly endorses the North-4 route option over the preferred N-8 ALT-1 and -2.

However, I remain totally opposed to the entire transmission line Project, and I would like to outline my objections:

- The Power Question
- Political Responsibility and the Public Interest
- Route Planning.

THE POWER QUESTION

First, I believe that COTP's argument that this Project will enrich the State with cheap hydroelectric power from the Bonneville Power Administration (BPA) is erroneous. The COTP Draft EIS/EIR indicates that surplus power will vary by time of day and time of year. The California Energy Commission in its Draft Final 1986 Electricity Report, Docket 85-ER-6, expands this argument by pointing out that very little dependable power will be available unless the BPA changes its conservative operating procedures. As these procedures exist to protect the Bonneville Dam area power users and not the Transmission Agency of Northern California (TANC), it seems unlikely that the BPA will make changes to the detriment of their existing legal customers. In fact, the artificial constraints on other Pacific Northwest power producers imposed by BPA's Intertie Access Policy and the lack of any indication that the Federal Energy Regulatory Commission will restrain BPA's natural desire to recover maximum revenues from California indicate that California will subsidize the BPA. The BPA will then be able to continue to provide cheaper power rates to its local users.

The California Energy Commission also stated in their study that California was glutted in new energy sources such as; small hydroelectric plants, hydrothermal facilities, and co-generation

B See response to ST-1 A.

C See response to ST-1 B.

D See response to ST-1 C.

¹ California Energy Commission, Electricity Report Six, *The Draft 1986 Electricity Report, Docket 85-ER-6*, December 5, 1986, P. 5-43.

SL-80 (continued)

Presentation to COTP
Burney, California
August 4, 1987
Page 2

D industries. Additionally, new coal-fired and nuclear generating plants are planned in several of the Southwest states. Many of California's utilities are participants. The Commission felt that no new energy sources would be required until well into the future because of modest demand and the current ability to generate far more power than required.² In the meantime, a greater effort at energy conservation could delay even further future requirements. The sporadic power that COTP might furnish would not reduce electric rates and, in fact, would probably raise them. This argument is borne out by recent PG&E proposed rate increases in our local area.³ PG&E is arguing with the Public Utilities Commission ~~(a member of TANC)~~ that because all of the many new small energy producers are sporadic and unpredictable, PG&E must maintain its basic power producing capability while paying the new producers; hence, our rates must be increased.⁴ If rate increases are already planned to pay for power that cannot be consumed, how much more will we pay if COTP completes the transmission line?

E POLITICAL RESPONSIBILITY AND THE PUBLIC INTEREST

Second, I strongly object to the organization of TANC, and the apparent mandate granted to TANC by the State Legislature. In my earlier efforts to bring the problems of our small community to the attention of the proper political authorities, I found that there weren't any. Instead, I found that TANC, a consortium of private and public utility companies with several State agencies as members, was blessed with the authority to approve the EIR of their operational entity, COTP. This is equally true of the Federal side of the Project. In this case the Western Area Power Administration (Western), TANC's partner in the Project, has the authority to approve the Federal side of the Project. Thus, the two major proponents of the Project have the authority to approve the EIS/EIR. My concern is primarily with the State side of the equation. I do not believe that it is in the public interest for a group of utility companies and bureaucrats to approve the EIR for a Project of this scope. Approval of the EIR is tantamount to approving the Project, because this approval allows COTP to go forward through the State and Federal permit process assuring everyone that the environmental concerns have been solved or "mitigated".

F ROUTE PLANNING

Lastly, the environmental damage that this Project will cause is disproportionate to any supposed value. Nothing can justify a

E See response to ST-1 D.

F See response to ST-1 E.

² Ibid., p. 3-1.

³ Pacific Gas and Electric Company (PG&E), Application No. 87-04-035, April 21, 1987, with the California Public Utilities Commission.

⁴ PG&E Progress, "Federal Law May Mean Higher Electric Bills", June 1987.

SL-80 (continued)

Presentation to COTP
Burney, California
August 4, 1987
Page 3

- F** 200 foot clear-cut from the Oregon border to Redding through some of the State's finest timber producing areas. The Flatwoods area of the Big Bend/Montgomery Creek region is legendary for its tree growth and historical timber industry. The Flatwoods area has several major transmission lines that have already permanently removed valuable and irreplaceable timber lands from production.
- G** COTP proposes to cross the Pit River Canyon three times. The Pit River Canyon is an unique and sensitive area. Because of its ruggedness and remoteness, it is home to many varieties of animals and plants, some of which are endangered. The environmental damage and loss of habitat that this line would inflict is unacceptable and cannot be "mitigated". Equally detrimental is the immeasurable
- H** damage from opening the Pit River Canyon and other areas to further human intrusion that would result from the transmission line clear-cut and the attendant service roads. Also disturbing is the
- I** loss of topsoil and erosion that will result from removing the ground cover on the many steep slopes. Our immediate area already has many horrible examples of erosion damage from irresponsible logging and existing transmission lines on similar steep slopes.

SUMMARY

- J** In summary, this Project ignores the real interests of the citizens of California, to protect its renewable natural resources, and proposes to bring into the State a sporadic and unreliable energy while inflicting tremendous and unacceptable damage to the environment. The planned transmission route appears to have been selected to meet COTP's budget and schedule constraints.
- If power demands in California exceed its capacity to produce, and
 - If reasonably priced power could be guaranteed from the Pacific Northwest,
 - Then a transmission route should be replanned that puts a greater emphasis on conserving renewable resources and preventing environmental damage.

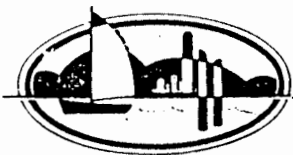
G See response to ST-1 F.

H See response to ST-1 G.

I See response to ST-1 H.

J See response to ST-1 I.

SL-81



ANTIOCH CA 94509
(415) 778-3491

CITY HALL THIRD AND H PO 130

August 7, 1987

Richard A. Olsen
Environmental Coordinator
California-Oregon Transmission Project
P. U. Box 660970
Sacramento CA 95866

Dear Mr. Olsen:

A [Enclosed please find a resolution of the City Council expressing concern over the EIR/EIS prepared for the California-Oregon Transmission Project and a request to reconsider the need for this project. In any case, the City strongly objects to any further analysis being done on alternate routes that may go through the Antioch planning area.

Thank you for your cooperation.

Sincerely,

RAYMOND VIGNOLA
Assistant City Manager/
Director

RV/in
Enclosure

cc: Constance Brady, PROPP
P.O. Box 339
Bethel Island CA 94511

A The City Council's objection to further analysis for routing the COTP through the Antioch planning area is noted.

SL-81 (continued)

RESOLUTION NO. 87/111

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ANTIOCH
OPPOSING ANY ROUTING OF THE CALIFORNIA/OREGON
TRANSMISSION PROJECT THROUGH THE ANTIOCH AREA

WHEREAS, a 500KV transmission line is proposed as part of the California/Oregon Transmission project to be passed through the Delta area, easterly of Brentwood; and

WHEREAS, the Federal Government has previously dismissed the routing of said lines through the Antioch area due to the incompatibility of such a line from a health and aesthetic point of view with the residential character that is presently being developed in that area; and

WHEREAS, the PRUPP organization has presented expert information questioning the demonstrated need for this power line project.

B NOW THEREFORE BE IT RESOLVED that the City Council of the of Antioch strongly supports the original decision not to consider the Antioch routes as acceptable for this power line and strongly opposes any attempt to reconsider those routes.

C BE IT FURTHER RESOLVED that based on the information provided by PROPP, the City would urge careful reconsideration of the project as it relates to the overall public need.

* * * * *

B The City Council's strong support for the lead agency's original decision to not consider the Antioch routes as acceptable is noted.

C For a discussion of need for the Project in the context of comments made by PROPP, see responses to comments L-309 A through L-309 L3, especially L-309 W through L-309 NN.

SL-81 (continued)

I HEREBY CERTIFY that the foregoing resolution was passed and adopted by the City Council of the City of Antioch at a regular meeting thereof held on the 9th day of June, 1987 by the following vote:

AYES: Council Members Price, Stone, Rocha, Freitas and Mayor Keller.

NUES: None.

ABSENT: None.


CITY CLERK OF THE CITY OF ANTIOCH

SL-82

Mr. and Mrs. Kenneth E. Woolley
Menakee, Route 2, Box 60
Post Office Box 60
Montgomery Creek, CA 96065-0060

August 10, 1987

Environmental Coordinator
California-Oregon Transmission Project
Post Office Box 660970
Sacramento, California 95866

Dear Sir:

We would like to make a few comments on the California-Oregon Transmission Project, particularly on its passage through the area of the Pit River Canyon. If routed as presently planned, it would pass closely through an area in which we have real estate interests.

- A — One objection is the cutting of a 200' wide swath through
B — some of the best timber producing land in the north state. Also, the
C — right-of-way would cross through or over several small, privately
D — held properties, owners of which live on those parcels.
E — Actually, we can't see that another transmission line through
this area is even necessary. Is there that great a demand for additional
power? If this project must be pursued, we feel the North-4 Option
is the way to go—avoiding encroachment on the small landowner. In fact,
why not go the eastern route where timber and habitation would be dis-
turbed to a much lesser degree.

Yours very truly,

Kenneth Woolley

A See response to SL-18 D.

B The routing guidelines for land use stipulated that the crossing of residential areas would be minimized and these guidelines were adhered to whenever possible. However, in some locations, such as the Pit River/Montgomery Creek area, other factors such as engineering and environmental resource constraints were such that residential parcels could not be totally avoided. Each landowner will have the opportunity to negotiate compensation for any losses resulting from the presence of transmission lines.

C For a discussion of the need for the Project, see responses to L-309 A through L-309 L3.

D Your support for the North 4 route option is noted. It has been incorporated into the Project preferred route.

E See responses to L-307 G and T-69 F.

SL-83

Rt 2 Box 56
Montgomery Creek
Calif 92065
August 10, 1987

Environmental Coordinator
Calif-Oregon Transmission Project
P.O. Box 660970
Sacramento, Calif 95866

A I am opposed to the transmission project
that is scheduled to come through the rim of
the Pit River Canyon
B The clear cutting of timber in this area
would have irreparable damage to the
soil, the many forms of wildlife, the area's
residents' health. It would also be an in-
C creased of more traffic on newly construct-
ed roads for service to these lines in an
area that is still enjoyed as remote and
private to its land owners.
D If this must go through the more
suitable approach would be the
North 4.

Sincerely,
Arlene L. Bodovich

A Your opposition to the routing of the COTP through the Pit River Canyon is noted.

B The potential impacts to soil resources, wildlife, and the area residents' health as a result of clearing activities are addressed in Section 4.1 of Volume 1 of the Draft EIS/EIR.

C Part of the socioeconomic analysis of the effects from the COTP is to examine the Project's impact upon the quality of life. Such an impact cannot be easily measured. However, one assumption was that the quality of life would be affected if the Project passed within 1.2 miles of a house and that the quality of life would also be affected from the increased number of access roads which could allow vehicle access to previously remote areas. Concern for increased traffic resulting from the Project was therefore considered as a part of the environmental analysis (see Table A-9).

D Your preference for the North 4 option is noted. It has been incorporated into the Project preferred route.

SL-84

MEMBERS
Norma Frey
Philip Matton
Roger Zwenziger
Patricia Jackson
George Thackeray

Dist. 1
Dist. 2
Dist. 3
Dist. 4
Dist. 5

Board of Supervisors
of

SISKIYOU COUNTY

P. O. Box 338

Yreka, California 96097

CLERK

Norma Price
Phone 915/842 2531
Ext. 244

August 11, 1987

Transmission Agency of Northern California
P. O. Box 661030
Sacramento, California 95866

Attention: Environmental Coordinator

Gentlemen:

The Siskiyou County Board of Supervisors has reviewed the proposed new routing options for portions of the preferred route of the California Oregon Transmission Project (COTP).

- A Our Board continues to have concerns of the impact of the Third Intertie upon timber resources within the county.
- B Again, let us further reiterate our ongoing desire for placing the routing alignment into areas with minimum impacts on agricultural lands both within our county and adjacent to our county.

Thank you for the opportunity to comment on this revision.

Yours truly,

Norma Frey
Norma Frey, Chairwoman
Siskiyou County Board of Supervisors

cc: James W. Beck, Chairman

- A The routing guidelines for land use stipulated that the crossing of highly productive, prime timber areas would be minimized and these guidelines were adhered to whenever possible. However, in some locations other factors such as engineering and/or other environmental resource constraints were such that prime timber lands could not be totally avoided. This is particularly true given the extent of the Modoc and Shasta-Trinity National Forests and private timber holdings in Shasta, Siskiyou, and Modoc Counties.

- B The preferred route in the Tulelake/Copic Bay region contains the opportunity to avoid almost all irrigated agricultural land with the careful selection of a 200-foot wide easement.

SL-85

ROGER BEERS
ATTORNEY AT LAW
380 HAYES STREET, SUITE ONE
CIVIC CENTER
SAN FRANCISCO, CALIFORNIA 94102
(415) 861-1401

August 12, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Re: Shasta Valley C.A.T.L.E.

Dear Environmental Coordinator:

On behalf of Shasta Valley C.A.T.L.E. ("C.A.T.L.E."), I wish to submit these comments on the supplement to the draft EIS/EIR for the California-Oregon Transmission Project. While the supplement is devoted solely to new routing options and switching station sites that do not affect the Shasta Valley, C.A.T.L.E. wishes to reaffirm its opposition to any route through the Shasta Valley, as detailed in our comments on the Draft EIS/EIR dated February 27, 1987.

Shasta Valley C.A.T.L.E. was organized specifically to oppose the siting of this transmission line through the Shasta Valley. "C.A.T.L.E." is an acronym for "Citizens Against Transmission Line Easement." It has broad support from a variety of interests and groups in the Shasta Valley.

It opposes any siting of this transmission line through the Shasta Valley because of the significant impacts it would have on:

- agricultural activities, ranch lands and timber lands;
- the rural character and communities in the Shasta Valley;
- wildlife; and
- the unique visual setting of the area.

C.A.T.L.E. also opposes any siting through the Shasta Valley because there are better alternatives -- in conjunction with existing lines, and other alternative facilities. C.A.T.L.E.

A Your affirmation of opposition to any route through the Shasta Valley is noted.

B Comment noted.

C Comment noted.

SL-85 (continued)

Environmental Coordinator
August 12, 1987
Page 2

C | has participated vigorously in the siting process at every stage.

The DEIS has selected the eastern route as the project preferred and environmentally superior route, and the supplement does not alter those preferences. C.A.T.L.E. thus submits these comments to affirm its support for a choice that doesn't traverse Shasta and Butte Valleys.

Sincerely,

Roger Beers
Roger Beers

RB:jm

cc: Susan Hart

SL-86

WRITTEN COMMENT FORM
FOR THE SUPPLEMENT TO THE DRAFT EIS/EIR
FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be received by August 17, 1987. Thank you.

A How disappointing to come to the realization that you are not listening. My husband said, "The Powerline people will put the line where they want." I believed you would really listen as you stated in the beginning but your failure to study the Cisco alternate route was a real disappointment.

B The public wants the power, therefore the lines to supply the power should go across public land to serve the public!

Hearing Date: August 5, 1987
Location: Merrill School
Name/Address: Virginia King
Rt 2 Box 101
Tulelake, CA. 96134

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95865
(916) 924-3995

A See response to L-330 H.

B In general, the "public" that will receive the benefits from the COTP are the ratepayers served by the public and private utility participants. Routing studies for the COTP took into consideration resource as well as non-resource information, including land ownership. For those instances where routes are relatively similar, and one route is on public land while the other is on private land, then the route on public was viewed as preferable. In most cases, however, other environmental, engineering, or economic considerations were the deciding factors on which route is preferred.

SL-88

WRITTEN COMMENT FORMS
FOR THE DRAFT EIS/EIR
FOR THE
CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be mailed by February 3, 1987. Thank you.

A

I am not in favor of the proposed route
they are now planning it would cross over land
it takes too much out of the environment
and timber land.

I would be in favor of ~~the~~ about down
the east side of Shasta County

It also seems to be ~~what~~ the timber company
is going to.

It surprises me to me you would consider
it

B

I ~~don't~~ understand if you don't know know
the other big line.
While all this engineering goes down it don't
seem to me there would be any problem.

I am a native of Big Bend. Yours truly,
Dennis J. J. J.

P.O. Box 6 Big Bend
Calif.

Bearing Date: _____

Location: _____

Name/Address: _____

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866
(916) 924-3995

A

See responses to L-307 G and T-69 F.

B

See responses to L-307 E and L-307 G.

SL-89

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

✓ To sagebrush Area

Move the line to the East - don't go through
Prime timberland / wildlife area. From Round Mountain -
North the proposed routes are an outrage. M. Hansen

I would like my name removed from the mailing list. _____

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3895.

Clip this page, fold it in thirds, and return it to us. Thank you.

L. RAUSIA, MARK S. & TERRY A.
PO BOX 237
MONTGOMERY CREEK, CA 96065

A

See responses to L-307 E and L-307 G.

SL-90

AUG. 8, 1987

DEAR SIR:

A

IT HAS COME TO OUR ATTENTION THAT COTP, CALIFORNIA-OREGON TRANSMISSION PROJECT ARE PLANNING ON RUNNING THEIR HIGH POWER LINES THROUGH THE PIT RIVER CANYON AREA. WE HAVE INTEREST IN LAND IN THIS AREA AND OPPOSE SUCH A ROUTE. WE DO NOT WANT NOR NEED ANY MORE HIGH POWER LINES IN THIS AREA. ALREADY WE HAVE MUCH PRIME TIMBER CUT FOR POWER LINES. GONE FOREVER. THERE ARE MANY HOMES IN THIS AREA AND WE FEEL THE MANY PROBLEMS THIS NEW HIGH POWER LINE WOULD BRING DESERVE MUCH THOUGHT AND ATTENTION. THERE ARE INDIAN BURIAL GROUNDS TO BE CONSIDERED. THERE WOULD BE POTENTIAL HEALTH PROBLEMS FOR THE COMMUNITY CLOSE TO THESE LINES FROM THE HIGH VOLTAGE. THERE WOULD BE EROSION PROBLEMS AND OTHER ENVIRONMENTAL DAMAGE SUCH AS THE ANIMALS AND PLANTS SUFFERING FROM SUCH CONSTRUCTION. LESSER REASONS MIGHT INCLUDE NOISE FROM THESE LINES, UNCONTROLLABLE TRESPASSING, VANDALISM, AND SCENIC ENCRoACHMENT. IF THIS PROJECT MUST RUN THROUGH THE PIT RIVER CANYON, I STRONGLY URGE YOU TO USE THE NORTH-4-OPTION.

B

A

Comment noted. An analysis of the potential impacts to resources identified in the comment can be found in Section 4.1 of the Draft EIS/EIR.

B

Your support for the North 4 route option is noted. It has been incorporated into the Project preferred route.

Sincerely,
Mrs. Mrs. William Smucker
Rt. 2, Box 60-A
Montgomery Creek, Cal.
96065

SL-91

A DEAR SIR,

AUG. 8, 1987

IT HAS COME TO OUR ATTENTION THAT COTP, CALIFORNIA-OREGON TRANSMISSION PROJECT ARE PLANNING ON RUNNING THEIR HIGH POWER LINES THROUGH THE PIT RIVER CANYON AREA. WE HAVE INTEREST IN LAND IN THIS AREA AND OPPOSE SUCH A ROUTE. WE DO NOT WANT NOR NEED ANY MORE HIGH POWER LINES IN THIS AREA. ALREADY WE HAVE MUCH PRIME TIMBER CUT FOR POWER LINES. GONE FOREVER. THERE ARE MANY HOMES IN THIS AREA AND WE FEEL THE MANY PROBLEMS THIS NEW HIGH POWER LINE WOULD BRING DESERVE MUCH THOUGHT AND ATTENTION. THERE ARE INDIAN BURIAL GROUNDS TO BE CONSIDERED. THERE WOULD BE POTENTIAL HEALTH PROBLEMS FOR THE COMMUNITY CLOSE TO THESE LINES FROM THE HIGH VOLTAGE. THERE WOULD BE EROSION PROBLEMS AND OTHER ENVIRONMENTAL DAMAGE SUCH AS THE ANIMALS AND PLANTS SUFFERING FROM SUCH CONSTRUCTION. LESSER REASONS MIGHT INCLUDE NOISE FROM THESE LINES, UNCONTROLLABLE TRESPASSING, VANDALISM, AND SCENIC ENCROACHMENT. IF THIS PROJECT MUST RUN THROUGH THE PIT RIVER CANYON, I STRONGLY URGE YOU TO USE THE NORTH-4-OPTION.

A See response to SL-90 A.

B See response to SL-90 B.

Jeff Smerkes
2600 Abernathy Way
Redding, Calif. 96002

SL-92

WRITTEN COMMENT FORM
FOR THE SUPPLEMENT TO THE DRAFT EIS/EIR
FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be received by August 17, 1987. Thank you.

- A I strongly oppose the California
Canyon Transmission Project. The needs
stated are unconvincing.
- B The stated environmental concerns for
the environment where big industry
profit is involved (i.e. companies for office)
is evident once again.

A For a discussion of need for the Project, see responses to comments L-309 A through L-309 L3, especially L-309 W through L-309 NN.

B The decision on the ultimate routing of the COTP has been based on environmental, engineering, and economic considerations. We believe that we have adequately addressed the significant environmental considerations as required by the applicable regulations.

Hearing Date: _____

Location: _____

Name/Address: _____

Constance C. Easton
Big Bend Ranch
Montgomery Ave, CA 96065

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 6600
Sacramento, CA 95866
(916) 924-3991

SL-93

AUGUST 8, 1987

DEAR SIR:

A IT HAS COME TO OUR ATTENTION THAT COTP, CALIFORNIA-OREGON TRANSMISSION PROJECT IS PLANNING ON RUNNING THEIR HIGH POWER LINE THROUGH THE PIT RIVER CANYON AREA. WE HAVE INTEREST IN LAND IN THIS AREA AND OPPOSE SUCH A ROUTE. WE DO NOT WANT NOR NEED ANY MORE HIGH POWER LINES IN THIS AREA. ALREADY WE HAVE MUCH PRIME TIMBER CUT FOR POWER LINES. GONE FOREVER. THERE ARE MANY HOMES IN THIS AREA AND WE FEEL THE MANY PROBLEMS THIS NEW HIGH POWER LINE WOULD BRING DESERVE MUCH THOUGHT AND ATTENTION. THERE ARE INDIAN BURIAL GROUNDS TO BE CONSIDERED. THERE WOULD BE POTENTIAL HEALTH PROBLEMS FOR THE COMMUNITY CLOSE TO THESE LINES FROM THE HIGH VOLTAGE. THERE WOULD BE EROSION PROBLEMS AND OTHER ENVIRONMENTAL DAMAGE SUCH AS THE ANIMALS AND PLANTS SUFFERING FROM SUCH CONSTRUCTION. LESSEER REASONS MIGHT INCLUDE NOISE FROM THESE LINES, UNCONTROLLABLE TRESPASSING, VANDALISM, AND SCENIC ENCROACHMENT. IF THIS PROJECT MUST RUN THROUGH THE PIT RIVER CANYON, I STRONGLY URGE YOU TO USE THE NORTH-4-OPTION.

B

A See response to SL-90 A.

B See response to SL-90 B.

SINCERELY,

*Mr & Mrs. Charles Nelson
2600 Cherruthy Way
Redding, Cal. 96002*

Aug. 8-87

Dear Sirs,

A I strongly oppose the COTP project that is going through the Pit River Canyon Area. I have interest in property right next to this area & I can tell you it is a big problem none of our community wants - nor needs. Our quality of life will be altered if this is allowed to happen. The unique environment we enjoy will be forever altered. Potential health problems from exposure to high voltage lines is another great possibility.

B

C If in fact it will go through the Pit River Canyon, I urge you to choose the North-4 option.

Jeff P. Amerher
2600 Abernathy Way
Redding, Cal. 96002

A

Your opposition to routing the COTP through the Pit River Canyon area is noted.

B

To date, no scientific reviews of health research by various government or health agencies have concluded that exposure to transmission line electric or magnetic fields (or appliances) pose a real health hazard. The COTP will comply with all safety and other standards in the design, operation, and maintenance of this project. See L-330 F3 and SL-51 A.

C

Your qualified preference for the North 4 route option is noted. Your opposition to the COTP through the Pit River Canyon area along N-8Alt.1 and N-8Alt.2 is noted. North 4 has been incorporated into the Project preferred route.

SL-95

WRITTEN COMMENT FORMS
FOR THE SUPPLEMENT TO THE DRAFT EIS/EIR
FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be received by August 17, 1987. Thank you.

- A First I am opposed to Oregon acting as a corridor for exporting power. BPA is now concerned about water shortages at their plant. If the line is built then you need to listen to the farmers regarding keeping lines off farming land. This can be done by more consideration of the John Cross proposal which preserves the environment, preserves and bypasses the farm lands. About a one line assessment of the Cross proposal was the only mention in the EIS study, certainly not warranted, need more consideration than that. The John Cross proposal would be acceptable to and supported by a huge majority of the opposition people. Your faithful consideration & study of the proposal is recommended.

Hearing Date: Aug 5, 1987

Location: Milweld School

Name/Address: EDWIN STASTNY
HC 62 Box 24
MALIN, OR 97632

- C The corridor is near my properties in Oregon
Mail to: Please send copy of hearing

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95865
(916) 924-3995

- A Due to lower than average precipitation this year, the Columbia River and its tributaries have less water available for power generation than is available on the average. This concerns BPA because it means that there is less surplus nonfirm energy available for sale and, therefore, less opportunity for BPA to derive revenue from nonfirm energy sales. However, the Pacific Northwest power supply system is planned on the basis of being able to meet Pacific Northwest firm electric power needs even in the event of extremely low river flows. Consequently, there is firm power generating capability surplus to Pacific Northwest needs even under the current low water conditions. Export of this surplus power from Pacific Northwest resources is very economically advantageous to the region and helps hold down rates for electric power in the Pacific Northwest.

- B See response to L-330 H.

- C A written response referring the commentor to Capitol Reporters for a copy of the hearing transcripts was sent on August 26, 1987.

Aug. 7-1987

Sirs,

A I want to raise my strong
 opposition of the construction
 of the high power lines construction
 by Cal-Ore-transmission (Cotp) project
 through the Pit River Canyon route,
 N-8-ALT-1 & N-ALT-2. In order to
 avoid considerable damage to
 our environment in the Pit
 River Canyon, also, which include
 many residential dwellings, all
 of our community voice strongly
 that if it must go through
 then at least the North 4 route
 be taken!

Zola Smerber

JO ANN SHERBER
 PO BOX 804
 YREKA, CAL. 96097

A

Your opposition to the N-8Alt.1 and N-8Alt.2 alternatives is noted. North 4 has been selected as the preferred route through this area.

SL-97

WRITTEN COMMENT FORM
FOR THE SUPPLEMENT TO THE DRAFT EIS/EIR
FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be received by August 17, 1987. Thank you.

- A is a nearby property and home owner to the proposed
COTP I would like to comment that I am
opposed to the proposed route (The North 4) and in opposition
to the preferred Routes N-8 Alt 1 and N-8 Alt 2.
The latter route comes closer to my home and over
the property and homes of nearby neighbors. The McCleskey
Option would be an alternative that is, still not acceptable
but, these better of 2 poor choices.
- B after reading the Draft EIS-EIR I am adamantly
opposed to the proposed route. I feel
that the prime farmland, the riparian, the
resources and the environment would suffer damage that is
too great to justify the construction of the line.
It should be moved further to the east into Sagebrush,
grassland type country. Or else abandoned altogether.

Hearing Date: Aug. 4th 1987
Location: Burney (A. Vets Hall)
Name/Address: Terri Krauska
Box 237
Montgomery Creek, CA 94065

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95865
(916) 324-3995

A Your support for the North 4 route option and opposition to the N-8Alt.1 and N-8Alt.2 routes is noted. The North 4 option (McCleskey option) is the preferred route in this area.

B See responses to T-69 F and L-159 F.

SL-98

WRITTEN COMMENT FORM
FOR THE SUPPLEMENT TO THE DRAFT EIS/EIR
FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be received by August 17, 1987. Thank you.

Aug. 7, 1987

To Whom It Concerns:

As landowners in the Big Bend area, to be directly affected by the N-8 Alt 1+2, we would like it to be known that we are opposed to that route, and do endorse the McClellan North 4 route option.

The environmental impact through our community would be a permanent detriment to many of our natural resources, & the promise of a great homeland retreat.

Please consider our concerns

Sincerely,

Arthur M. Hammond

John Hammond

Hearing Date: _____

Location: _____

Name/Address: Mr & Mrs John B Hammond
1480 Ridge Dr
Redding, Ca 96001

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95865
(916) 924-3995

A

Your support for the North 4 route option and opposition to N-8Alt.1 and N-8Alt.2 routes is noted. The North 4 option has been incorporated into the Project preferred route.

SL-99



UNITED STATES
DEPARTMENT OF
AGRICULTURE

FOREST
SERVICE

PACIFIC
SOUTHWEST
REGION

REGIONAL OFFICE
630 SANSOME STREET
SAN FRANCISCO, CA 94111

REPLY TO: 1950

DATE: AUG 13 1987

Jay Abbott, COTP Coordinator
R. M. I.
1010 Hurley Way, Suite 500
Sacramento, CA 95825

Dear Mr. Abbott:

Enclosed are our comments on the Supplement to the Draft EIS for the California-Oregon Transmission Project.

We find the supplement deficient in several key areas. In summary, these include:

- A** 1. Failure to correct the extensive analysis deficiencies which we have previously identified in our comments on the Draft EIS and again in our enclosed comments on the supplement.
- B** 2. Failure to disclose analysis of a feasible alternative option which was submitted by the Modoc National Forest prior to the release of the Draft EIS. This option parallels and is closer than other alternative options to the existing intertie in the north and would involve an eastern relocation of existing lines further south.
- C** 3. Failure to clearly identify the preferred alternative given the route options considered and presented in the supplement.
- D** Based on the analyses completed to date and our on-the-ground knowledge of the resources impacted by the alternative proposals, we believe that an alternative segment from the California/Oregon border to the Redding area comprised of the option proposed by the Modoc National Forest in the north and the Shasta-Trinity National Forests in the south would least impact the human environment and still meet the line reliability concerns. We have previously submitted two reports to the project proponenta that support our conclusion that locating the line closer to the two existing lines would not sacrifice fire-related line reliability concerns.
- E** We believe that the N-10M option in the north combined with the Shasta-Trinity National Forests proposal routes in the south would next best meet environmental concerns while still meeting reliability concerns. In addition,

- A** Several meetings have been held between USFS and COTP representatives since receipt of USFS comments on the Draft EIS/EIR. TANC and Western believe that the alleged deficiencies have been satisfactorily addressed in these discussions and that a coordinated effort between the lead agencies and the U. S. Forest Service will lead to the resolution of differences. The purpose of the Supplement was not to address all concerns on the Draft EIS/EIR, but to afford public reviews of additional routing options. See responses to L-295.
- B** A discussion of the feasibility of an alternative option as suggested by the Modoc National Forest involving the relocation of a segment of the existing Intertie is discussed in Section 1.2.2 of Volume 1 in this Final EIS/EIR. See also the response to SL-99 00.
- C** The Council on Environmental Quality's Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, Section 1502.14(e), clearly states that the preferred alternative need be noted in the Draft EIS only if the preferred alternative is known at the time that the Draft EIS is released for public review. The preferred route identified in the Draft EIS/EIR was clearly labeled in the Supplement. The lead agencies wished to acquire public review of new routing options to the preferred route before any revisions were made.
- D** Comment noted. The two reports submitted by the USFS are presented as comments L-295 U2 and L-295 V2.



SL-99 (continued)



Jay Abbott, COPT Coordinator

2

E

N-10M could be modified to avoid high site plantations and timber lands to further lessen the environmental impacts. As cooperators, we urge you to work closely with us in your efforts to complete further analysis and towards completion of the Final EIS.

Sincerely,

PAUL F. BARKER
Regional Forester

Enclosure

cc:
Jim Feider, WAPA

E

The USFS preference for the N-10 option in the north combined with the Shasta-Trinity National Forest proposed routes in the south is noted. As provided for through interagency agreements with the lead agencies, and as reaffirmed through meetings between USFS and COTP representatives, COTP planners will continue to work closely with the USFS through site-specific design and mitigation efforts.



SL-99 (continued)

1



FOREST SERVICE COMMENTS ON SUPPLEMENT TO DEIS, COTP

- F** 1.2-1. We are not sure what the last sentence on this page means. A routing option on the Modoc National Forest has been presented (the intertie relocation option) that avoids high site timber lands and other high valued resources. It is evident that the project proponents are willing to spend additional millions of dollars to avoid TPZ lands, but not similar valued public lands.
- G** 1.2-2. It is a clear breach of the NEPA process to defer identification of the preferred route, significant adverse impacts, and mitigation measures until the final document. This leaves both the public and involved agencies no opportunity to comment on these highly important aspects of this project.
- H** Table 3.2-1. Table indicates approximately six miles of National Forest System Lands (NFSL) crossed, yet only 2.8 miles of prime and non-prime timber lands identified. All NFSL crossed are commercial forest lands, either prime or non-prime. Also N-10M2(A1) shows no prime or non-prime when all lands crossed are productive forest lands.
- I** 3.2-1. The use of the words "potentially significant impact" are confusing. Project specialist should be familiar enough with the study area to determine what are or are not significant impacts.
- J** 3.2-1. Is crossing 2.38 miles of prime timber land a significant impact?
- K** 3.2-4. Our concerns with the mitigation measures presented in the Draft Environmental Impact Statement are herein restated.
- L** 3.2-4. There should be a discussion of existing fire detection and suppression activities in the area. There should also be a discussion of existing fuel types and management programs that could modify these types to reduce the threat of wildland fires. Also, it is not our position that a fuels management program is necessary along the entire length of the N-10M route. A major portion of this route is located in fuel types that pose no threat to the transmission lines.
- M**
- N** 3.2-5. There is no juniper woodland on either route.
- O** 3.2-5. Under Land Use and Status, we feel N-10M is the superior route because it crosses less prime timber lands.
- P** 3.2-5. Under Water Resources, the streams should be classified as ephemeral and there is no significant difference between the routes for this resource.
- Q** 3.2-5. Under Wildlife, there may be significant differences in the route because of the old-growth identified under the Vegetation section above.
- R** 3.2-5. Under Visual, there needs to be a discussion of the view of this area from Highway 139.

F This routing option presented by the Modoc National Forest requires the relocation of a portion of the existing Intertie as is indicated. See response to SL-99 00. Two routing options were proposed, one on private land and one on public land, that were believed to have similar timber values.

G There was no breach of the NEPA process. The purpose of the Supplement to the Draft EIS/EIR was to notify the public of the new routing options to the preferred route that were being considered and to seek input. The lead agencies had not determined a new preferred route prior to issuance of the Supplement. This should have been obvious to the Forest Service as they participated in the routing review meetings on August 21 and 25, 1987. Section 1502.14(e) of the Council on Environmental Quality (CEQ) Regulations, 40 CFR Parts 1500-1508 indicate that the agency's preferred alternative shall be identified in the Draft EIS "...if one or more exists", otherwise the Final EIS is the appropriate document for the identification of the preferred alternative. Any doubt on this subject was resolved in 1981 with the publication of the CEQ's "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 19,086 (March 23, 1981). Question 4b asked whether the preferred alternative must be identified in both the Draft EIS and the Final EIS, or just in the Final EIS. In response, the CEQ stated: "Section 1502.14(e) requires the section of the EIS on alternatives to 'identify the agency's preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement . . .'. This means that, if the agency has a preferred alternative at the Draft EIS stage, that alternative must be labeled or identified as such in the Draft EIS. If the responsible federal official in fact has no preferred alternative at the Draft EIS stage, a preferred alternative need not be identified there. By the time the Final EIS is filed, Section 1502.14(e) presumes the existence of a preferred alternative and requires its identification in the Final EIS 'unless another law prohibits the expression of such a preference'." 46 Fed. Reg. 19,027. In accordance with CEQ regulations, the preferred alternative is identified in the Final EIS/EIR.

Significant adverse impacts were discussed for each of the new route options in Sections 3.0 and 4.0 of the Supplement to the Draft EIS/EIR. As stated on page 1.2-2 of the Supplement, the mitigation measures proposed in Volume 1, Section 5.0 of the Draft EIS/EIR were considered in the analysis. Revisions to the mitigation measures based on comments received from the public and agencies on the Draft EIS/EIR are included in this Final EIS/EIR, along with the identification of the preferred route.

The lead agencies have conducted an extensive public and agency involvement process to include the public and agencies and solicit their input from the inception of the Project. Section 1.1.7 of Volume 1 of this document outlines this process.



SL-99 (continued)

- H** Table 3.2-1 has been revised (see Section 2.3 of Volume 1 of this document) to reflect the presence of USFS timber plantation, most of which has been counted as prime timber. Approximately .40 mile of this option crosses grassland areas with potential for timber production. These grassland areas were excluded from prime/non-prime accounting since timber is not being produced there now. Therefore, 4.80 miles of the North 2 route (total length 5.2 miles) is shown as prime timber.
- Table 3.2-1 has also been revised to reflect the presence of 1.2 miles of prime and non-prime timber in the USFS portion of the N-10M2 (A1) route.
- I** "Potentially significant impact" is a commonly used term in state and federal environmental documents. The significance of the impact can only be estimated before Project construction; the ultimate significance of the impact is largely dependent upon site-specific mitigation measures.
- J** A crossing of 2.38 miles of prime timber is considered a significant impact. Paragraph 6 on page 3.2-1 has been clarified (see Section 2.3 of Volume 1 of this document) with regard to significant timber impacts, and revised to reflect the change discussed in the response to SL-99 H.
- K** The mitigation measures have been substantially revised to reflect the need for more specificity. Many of the revised mitigation measures are the result of the USFS' previous comments on the Draft EIS/EIR (L-295). Please refer to Section 1.1.5 of Volume 1 of the Final EIS/EIR.
- L** This information has been incorporated into Section 2.3 of this Final EIS/EIR.
- M** We recognize that it may not be necessary to provide a fuels management program along the entire length of the N-10M route. The Forest Service has the necessary information concerning existing fuel loads and expected fire spread rates and is best qualified to assess where fuel modification would be required along the N-10M route. The fuels management program will be developed in conjunction with the Forest Service and will specifically address the type of fuels and the areas along the preferred route that require fuel management to provide the necessary reliability for the operation of the AC Intertie system.
- N** The reference to juniper woodland on page 3.2-5 has been deleted.
- O** Comment noted. Our analysis showed that from a land use perspective this option crosses less prime timberland. As discussed in Sections 1.1.2 and 1.2.2 of Volume 1 of this Final EIS/EIR, a considerable portion of this route segment has been identified as the environmentally superior and Project preferred route.
- P** Your comment that the streams are all ephemeral rather than intermittent is noted. The N-10M option is slightly preferred over the County Line option due to the fact that it crosses no creeks with slopes greater than 15 percent.
- Q** A significant impact to protected old growth forest habitat would occur if the route right-of-way was located on National Forest land on the northeast side of Border Mountain (section 1). The old growth habitat could be avoided by placing the right-of-way on private lands east of the Modoc-Siskiyou county line.

SL-99 (continued)

R

The Black Mountain area, where the N-10M and County Line options are located, is over a dozen miles from Highway 139. At this distance, the visibility of transmission facilities would be very low even if sight lines were unobstructed by forest vegetation along the highway, which is likely to be the case for all of the options.

SL-99 (continued)



FOREST SERVICE COMMENTS ON SUPPLEMENT TO DEIS, COTF

2.

- S** 3.2-6. The Cultural Resources discussion is highly subjective considering no reconnaissance of the area has been done. Also, most sites could be mitigated or avoided.
- T** 3.2-7. There is a candidate research natural area (Mayfield) on the Lassen National Forest on both the N & S Bear Options. Impacts to this area should be discussed.
- U** 3.2-7. We do not agree that line separation alone provides a more reliable system.
- V** 3.2-10. Atkins Meadow is not a sensitive ecological community.
- W** 3.2-11. It does not seem possible that the North Bear Option would have less vegetation clearing when it is 2.2 miles longer than the South Bear Option.
- X** 3.2-11. There is no discussion of the old growth forest type found along Deadhorse Ridge.
- Y** 3.2-11. Under Land Use and Status, the South Bear Option should be preferred because it crosses less prime timber lands (routing criteria). There is no routing criteria that indicates TPZ lands are to be avoided.
- Z** 3.2-12. The discussion of the terrain and road access needs is not consistent with the previous discussion under earth resources which would lead one to believe that the North Bear Option has more rugged terrain. Both options have numerous existing roads that will make for ease of access.
- AA** 3.2-12. Under Socioeconomics, was the Forest Service Return to Counties even considered?
- BB** 3.2-13. The view of either option from the Bear Mountain Lookout is comparable. The South Bear Option is much closer to the California Department of Forestry Fire Station at Pondosa and would be visible from the lookout at Soldier Mountain.
- CC** 3.2-16. The North 2 Option does not "avoid the most productive timber region on the Modoc National Forest." It does impact less than the preferred route.
- DD** 3.2-17. The preferred route will have a significant impact on the Giant Crater Lava Tube System.
- EE** 3.3-1. The North 3J Option as presented by the Forest Service went east of Little Meadows and then south to Stump Creek Butte. This is not presented as such on the maps nor in the analysis.
- FF** 3.3-16. The statement that "the Grizzly Peak option crosses no deer habitat" is incorrect.

S The cultural resources route assessments are based on an extensive search of the archaeological, ethnographic, and historical literature, and on ethnographic field work to identify Native American heritage sites. The research underpinning the ratings of each route's archaeological sensitivity involved an in-depth examination of the ethnographic and archaeological literature on Native American settlement patterns, and an examination of data from previous surveys that have been done near each of the proposed corridors. Potential historical sites were identified by examination of historical maps.

The Project preferred alternative will be surveyed for archaeological sites, and adjustments in tower and access road placement will be made, as necessary, to avoid sites identified. Potential impacts to unavoidable sites will be mitigated by controlled recovery of scientific data or other means. Though site avoidance and data recovery are adequate mitigation measures, data recovery is expensive and subsequent site destruction does result in a net loss of cultural resources, since recovery of all potential data and material within a site is impossible. Cultural resources site sensitivity is therefore an important consideration in choosing an environmentally preferred route.

T According to the draft Lassen National Forest Land and Resource Management Plan, the proposed Mayfield Research National Area is 0.75 miles from the proposed route centerline and thus 1,500 feet away from the nearest edge of the route corridor. No impacts should occur.

U We agree that line separation, in combination with the fuels management program, would provide a more reliable system than line separation alone. However, we do not agree that additional line separation would not improve reliability. A Fuels Management Plan must be prepared in conjunction with line separation to provide the necessary reliability for the AC Intertie.

V Atkins Meadow supports a large population of Calochortus longebarbatus, a USFS sensitive species. It also supports a high diversity of other meadow plants and receives low use by livestock (Joherst pers. comm.). It has potential to support sensitive wildlife species including goshawk, spotted owl and great gray owl (Toner pers. comm.). Impacts to vegetation could be avoided by avoiding tower placement in the meadow.

W An assessment of the tabular data for the amount of tall-growing vegetation removed indicates that the North of Bear Option has more acres to be cleared than the South of Bear Option: 192.53 compared to 140.08. However, a field reconnaissance was conducted with Forest Service personnel for the purpose of determining probable centerlines that may be chosen to mitigate this apparent impact. Indications are that a specific centerline could be selected on the North of Bear Option that crosses many previously logged areas. This would result in a significant decrease in the number of actual acres cleared. Similar opportunities are not as predominant on the South of Bear Option.



SL-99 (continued)

- X** This old growth forest stand was not identified by the USFS during previous contacts. The proposed North of Bear option would cross approximately 0.75 miles within a designated old growth retention area. The right-of-way could be routed to avoid impacts to the goshawk territory within this stand, but some old growth would be removed. This would be a significant impact that would be difficult to mitigate.
- Y** Paragraph 3 on page 3.2-11 has been revised. The South of Bear option affects less prime timber. References to TPZ lands have been reduced in the discussion of potential impacts because although they were a minor factor, their inclusion drew attention away from the major factor in impact analysis, prime timber lands.
- Z** Although the North of Bear option crosses more slopes in excess of 30% compared to the South of Bear option, the South of Bear option traverses more undulations in grade than does the North of Bear option of the magnitudes that have been historically more difficult in the construction of transmission lines. The rougher terrain in the North of Bear option is encountered only near the eastern end, whereas the undulating terrain associated with the South of Bear option is encountered throughout its length. We agree that the South of Bear option should not be categorized as somewhat rougher than the North of Bear option, but point out that the 30% slope criteria for soil loss does not necessarily define the degree of slope and the frequency of slope changes, which are our concern from a design and construction standpoint.
- We agree that both options offer existing roads that will provide access. However, roads in the North of Bear option area generally parallel the proposed route, while roads in the South of Bear option area tend to be perpendicular. Our review indicates that fewer miles of new access roads would be needed along the North of Bear option.
- AA** The Forest Service Return to Counties was considered as a part of the analysis. The Summary tables of each comparison do not mention it due to a lack of space. Since all of the pertinent socioeconomic information could not be included in the Summary tables, this data was placed in the Appendix. The Forest Service Return to Counties can be found in Table A-7. However, as shown in that table and in Table A-8, in all cases the loss of Forest Service income is substantially less than the property tax revenue received by the counties from the COTP. For example, the route segment N-10Alt.(A) + N-10Alt.5(A1) shows the highest losses of revenue to counties with a total estimated loss of \$11,566. That same route will generate approximately \$137,100 per year in property taxes.
- BB** Comment noted.
- CC** We agree that the North 2 option also affects the Modoc Forests' most productive region. The paragraph on page 3.2-16 has been revised and is presented in Section 2.3 of Volume 1 of this Final EIS/EIR.

SL-99 (continued)

- DD** Geologic hazards mitigation measure 3 indicates that centerline adjustments will be made to avoid areas where there is potential for lava tube collapse. It is expected that this will minimize impacts to lava tubes for all COTP routes which skirt the giant crater lava tube area. Routes which pass through the center of this area are not preferred by earth resources specialists.
- EE** The North 3J option was developed between COTP engineering staff and USFS district representatives. Refinements of the route occurred between initial and final routing of the North 3J option.
- FF** The wording should have said "the Grizzly Peak option crosses no key deer habitats." Key habitats refer to areas that receive particularly high use by deer. The Grizzly Peak route does cross deer summer range. A correction is shown in Section 2.3 of Volume 1 of this Final EIS/EIR.

SL-99 (continued)

3



FOREST SERVICE COMMENTS ON SUPPLEMENT TO DEIS, COTP

GG

3.3-18. In areas of steep terrain where there are no or few existing roads, helicopter construction will probably be required.

General Comments:

HH

The document lacks discussion of fuel types and of present and planned future types of fuel management that could be used to reduce the risk of wildland fires, where they may threaten the transmission line.

II

There is no discussion of existing detection and suppression forces in the study area that would offer protection to the transmission line.

JJ

There is no discussion of effects on timber productivity on either National Forest or private lands.

KK

We do not agree with the implied criteria of avoiding Timber Production Zone Lands when there are greater impacts to public timber lands (by avoiding TPZ land).

LL

There needs to be an expanded discussion of the consequences of crossing 1.5 miles of deer fawning areas or .7 miles of bear concentration areas (just two examples). What are the effects to the resource, i.e., the deer, the bear, the goshawk, etc. This is the same comment we present in our review of the DEIS and also applies to other resources.

MM

A new project preferred alternative was not discussed. The supplement should clearly identify if the DEIS preferred alternative remains as such or if some of the route options considered are now part of the preferred.

NN

There are a lot of highly subjective comparisons of route segments. We are not totally in agreement with some of these comparisons. Also, alternative impacts should be compared with the current situation and not against the preferred route identified in the DEIS.

OO

We fully expect to see an analysis of the Modoc Option to relocate the existing interties to the east and use the existing rights-of-way for the COTP. We believe this option has significantly less resource impacts. As the land managing agency for National Forest System Lands affected by this project, we believe the County Line Option has less resource impact than the project preferred, the N-10M option has less resource impacts than the County Line option, and that an option to relocate the existing interties to the east would have less resource impacts than the N-10M option. This statement is based on information provided in the document and our personal knowledge of the local area.

GG

Mitigation measures II.A.12 of Section 1.1.5 of Volume 1 of this document states that helicopter construction will be used where there would be significant soil erosion or related impacts that cannot be otherwise mitigated. Helicopters are frequently used in construction. However, if helicopter construction is to be used in areas of few or no existing roads, it is important to have a sufficient means of access during severe weather conditions for line maintenance or repair. Helicopter maintenance or repair of transmission lines is possible only if the area in question is not subject to long periods of bad weather when the helicopter cannot fly. Outages can occur due to bad weather conditions and maintenance equipment is too large to be carried by line maintenance or repair crews on foot.

HH

A Fuels Management Plan will be developed jointly by the Forest Service and the Project Manager. It is also anticipated that this plan will address the types of fuel management that should be used to reduce the risk of wildland fires in areas that may threaten the transmission line. See response to L-295 A. A summary discussion has been included in Section 2.3 of Volume 1 of the Final EIS/EIR.

II

This aspect will be addressed in detail in the Fuels Management Plan.

JJ

Section 1.1.4 of Volume 1 of this document includes a discussion of effects on timber productivity. See also responses to L-372 J and SL-100 S.

KK

Comment noted. See response to T-38 D.

LL

The actual impacts of a transmission line route on game populations are very site-specific and depend on many factors. Impacts depend upon: 1) whether species populations are limited by the type of habitat crossed; 2) local and regional availability of various habitats; 3) habitat productivity; 4) existing road density and proposed road construction; 5) levels, types, and seasons of human use that may occur on roads, and 6) reaction of individual species to road densities and human use levels. We could not analyze the detailed local impact of all of these factors on each of the thousands of miles of big game habitat crossed by hundreds of route segments.

Our approach was to determine the potential for impacts on route segments by evaluating direct habitat losses and effects of increased road density on key habitat areas crossed by routes. We used a modeling approach that conservatively represents the potential for impacts on route segments. Potentially significant impacts were defined as substantial reductions in habitat quality that would reduce current levels of big game use in the local area. The methodology used is described in the Draft EIS/EIR. Briefly, it consisted of evaluating the number of existing and proposed roads on each mile of proposed route and determining if new construction would cause road densities to exceed thresholds for human disturbance. We then reported the number of miles of key habitat crossed and the number expected to be impacted sig-



SL-99 (continued)

LL
(cont.)

nificantly (i.e., amount that exceeded threshold due to Project construction).

We believe that this level of analysis was appropriate to evaluate and compare big game impacts of routes. Mitigation measures were identified to reduce identified impacts. Following the final selection of a preferred route, details regarding the application of mitigation measures will be incorporated into the specific design of the route and access roads. Once designs are completed, impacts may be more precisely evaluated, and additional appropriate mitigation measures identified and applied, if necessary.

MM

The lead agencies believe it was beneficial to obtain public and agency input on the new route options before identifying any modifications to the preferred route shown in the Draft EIS/EIR. See also responses to SL-99 C and SL-99 G.

NN

Comment noted. It is unclear what alternative impacts and what "current situation" is being referenced. The lead agency representatives believe that the proper approach to comparing the route options would be to first determine the best of the new route options for a given area, and make that comparison against the preferred route as shown in the Draft EIS/EIR. This two-step evaluation process helped to assure that the route with fewer overall impacts would be identified.

OO

An assessment of the Modoc option is included in the update to the Routing Investigations Report in Section 1.2.2 of Volume 1 of this Final EIS/EIR. Your preferences for routes in that area are noted.

SL-99 (continued)

4



FOREST SERVICE COMMENTS ON SUPPLEMENT TO DEIS, COTP

PP

Forest Service Best Management Practices are not discussed. As indicated in our comments on the DEIS, these guidelines must be incorporated into the documents relating to mitigations on National Forest System Lands.

PP

See response to L-295 02.



SL-100
STATE OF CALIFORNIA

GEORGE DEUKMEJIAN, Governor

BOARD OF FORESTRY

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August 14, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Sir:

The California State Board of Forestry has completed its review of the supplement to the draft California-Oregon Transmission Project EIS/EIR. Several areas of concern were identified during this review. These areas are very similar to those submitted on the original draft since there is little real difference between the draft and the supplement options in the area of impacts or mitigations. It does not appear that comments offered by the Board on the draft were considered in preparation of the supplement. Since there is a strong similarity in the two documents I request the Board's original comments be incorporated as part of this response. The Board believes that the lead agencies should not accept a final EIS/EIR until these concerns are properly addressed.

By law, the Board is charged with protecting the State's interest in forest resources on private land, and developing and maintaining adequate statewide forest policy. The Board is further charged with representing the State's interest in federal land matters pertaining to forestry.

The Board has reviewed this supplement in a manner consistent with its Maintenance of Timber Supply policy. It is the Board's policy to oppose land use diversions which preclude timber growing on, and the harvesting of, privately owned prime timberland and TPZ lands, except where the public values to be achieved by diversion exceed the public values to be derived from timber growing.

The areas of concern identified by the Board are as follows for each of the routing options proposed:

North 2 Routing Option

The reduction in acres of TPZ and prime timberland affected by the North 2A option is preferable. However, there is still a concern that the project has not fully considered all options available to

- A The comments offered by the Board on the Draft EIS/EIR were considered in preparing the Final EIS/EIR. See responses to L-321.
- B Comment noted.
- C Responses to the Board's concerns are presented at L-321.
- D The Board's policy to oppose land use diversions as stated in the comment is noted.
- E The preference for the North 2A option is noted.
- F See response to L-177 A.

SL-100 (continued)

Environmental Coordinator

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F avoid the removal of timberland from production. The options of exchanging parallel powerline destinations to avoid crossovers is still not addressed in the supplement. The question of upgrading only portions of existing powerlines has not been fully discussed in either the draft or the supplement. Your staff has verbally explained that there are significant economic effects on the project with these options and that engineering difficulties arise, but these reasonings are not put forth adequately in the public documents. They were addressed in a conclusionary manner in the draft and no further discussion was provided in the supplement.

I The supplement states that impacts identified and mitigations provided in the draft are incorporated in the supplement. Since the powerline is to be sited within a 1500 foot wide corridor it is impossible to describe the specific impacts which will result from the project. Therefore, it is just as difficult to provide specific mitigations. The project must develop a more precise means of insuring that site specific impacts are identified, addressed and carried out during project implementation. This should take the form of a process where responsible agencies are insured the ability to specify mitigations before construction begins in a segment of the line. There must also be some assurance that mitigations developed will be implemented. Anything less than this will not reduce significant impacts to the feasible level.

K The Board is concerned with the removal of all timberland from production, but is especially concerned with removal of TPZ lands. The North 2 route option crosses less total prime timberland but removes 4.8 more miles of TPZ lands from production. The U.S.F.S. land management requirements often result in prime timberlands not being used for timber production due to higher priorities being placed on other resources. TPZ lands are retained for production of forest products at the highest level while still protecting the other resources through application of the Forest Practice Act and the forest practice rules. It is the Board's belief that the impacts on TPZ lands should be minimized due to the greater possibility that those lands will be a larger provider of forest products in the long term.

North 3 Routing Option

M The reduction of TPZ and prime timberland crossed by the Hearst option is preferable. However, The previously stated concerns on the overall selection of routing options still exists.

G Upgrading of a portion of the existing Intertie has the same system impact as upgrading all of the existing Intertie. See response to T-70 B.

H The results of an outage of both the existing Intertie and the proposed Third AC Intertie are indicated in Section 2.1 of Volume 1 and Appendix A of Volume 3A in the Draft EIS/EIR. An outage of the existing Intertie after being upgraded to handle an additional 1600 MW would have the same results. See also response to T-70 B.

I Impacts were calculated based on a "reference" 200-foot-wide right-of-way (ROW) located in the center of a 1500-foot-wide corridor. While it is true that it is impossible to know the exact impacts of the line until it is actually sited, the impact of the 200-foot ROW was considered as representative of the 1500-foot wide corridor. Site-specific engineering, sensitive plant species studies, and archaeological investigations will help refine the exact location of the line within the 1500-foot wide corridor.

For the purpose of selecting the environmentally superior route, the use of the "reference" centerline location provided a consistent basis with which to quantitatively compare different routes.

J This concern is addressed in Volume 1 of this Final EIS/EIR, Section 1.1.5, mitigation measure VI.A.14. See also responses to L-321 W and L-321 BB.

K The Board's particular concern with the removal of TPZ lands is noted.

L Comment noted.

M The preference for the Hearst option due to the reduction of impacts on TPZ and prime timberland is noted.

SL-100 (continued)

Environmental Coordinator

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N The concerns on the broad nature of the discussion of impacts and mitigations also apply to this option. There must be a process incorporated to insure that site specific impacts are identified and an assurance that the best feasible mitigations are applied. Examples of this are the facts that tower sites are not known, access road locations are not known, impacts on rare and endangered species such as the bald eagle are not clearly identifiable, specific measures for activities on unstable areas are not included, and impacts by winter construction activities are not discussed. The Hearst option clearly states that activities on unstable areas must be analyzed for proper design and construction of access roads. The locations and mitigations necessary should be more clearly defined in the environmental analysis.

The Board also has some comments of a general nature which apply to the options in the supplement as well as those presented in the draft. They are as follows:

S 1. There is still not an adequate discussion of cumulative impacts. The supplement states this will be done in the final EIR/EIS. The Board has substantive concerns on the project's cumulative impact on timberlands. As stated in the comments already submitted, the total direct removal of timberland from production by powerlines is not addressed. This loss is effectively permanent, not just for the cited project life span. I am not aware of any major powerlines being removed and previous land uses being restored. California Department of Forestry and Fire Protection records show that 42,967 acres of timberland have been converted to nontimber producing uses since 1969. This does not include powerline right of ways. The COTP project is removing approximately 2500 additional acres of timberland from production. This is approximately six percent of the total timberland removed from production over the last 13 years. That is a significant addition to lost productivity. This effect must be fully considered in the net benefit of the project and must be adequately discussed in the final document. It should also be made clear how this affects the overall feasibility of the route selection process and overall project feasibility.

T
U
V There is another aspect of the cumulative effects of this project which was not adequately discussed in the draft or supplement. Again, the supplement states that long-term and

N See response to SL-100 J.

O Site-specific impacts will be minimized through the implementation of site-specific measures as determined in cooperation with the appropriate land management agencies.

P No impacts to threatened or endangered species would occur on any of these routes. Bald eagles nest at Iron Canyon Reservoir, two miles from route North 3J. Eagles would be expected to fly infrequently in the vicinity of the new route segments because most foraging is done on Iron Canyon Reservoir and the Pit River to the south. Thus, no impacts to eagles would be expected from either disturbance or collisions.

Q These concerns are addressed in Volume 1 of this Final EIS/EIR, Section 1.1.5, mitigation measures II.A.15 and II.B.1.

R This concern is addressed in Volume 1 of this Final EIS/EIR, Section 1.1.5, mitigation measures II.A.1 - II.A.7 and II.A.17.

S The timber impacts for all corridors were addressed in the Draft EIS/EIR. Specifically, Table 3.6-9 in Volume 2A of the Draft EIS/EIR presents details on thirteen different variables related to forest resources, including impacts on prime, non-prime, and woodland timber types. Thus, information has been compiled on both private and public timberlands, although all of this information has not been displayed on the Summary of Routing Alternatives table in Volume 1 of the Draft EIS/EIR (Table 1A) nor on the routing comparison tables in the Supplement to the Draft EIS/EIR. A specific discussion on cumulative forestry impacts has been included in Section 1.1.4 of Volume 1 of the Final EIS/EIR.

T The lead agencies are considering the impacts to all resources (including the removal of timberland from production) in its determination regarding whether to approve the COTP and where it should be located.

U NEPA and CEQA provide that a lead agency's decision on the overall feasibility of a route shall include consideration of economic and engineering as well as environmental factors. Impacts to timberland removed as a result of the COTP has been considered in the lead agencies' decision on whether to approve the COTP and where it should be located.

V The relationship between more economical energy and overall economic growth within the State of California is far too uncertain and unquantifiable to support a more detailed presentation of the cumulative impacts in this area. As a result, no meaningful inquiry into the nature or extent of the impacts resulting from general economic development within California can be made within the context of the EIS/EIR for this Project.

SL-100 (continued)

Environmental Coordinator

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- V growth inducing impacts will be discussed further in the final document. This is not appropriate to provide the public adequate time and opportunity to consider the basis' for conclusions reached. The current discussion states that the project will induce growth in local areas. However,
- W there is no discussion of additional losses of timberland or agricultural land to residential and commercial development made suddenly feasible by lower cost power. We believe that these growth inducing impacts may lead to the removal of significant amounts of timberland.
- X The Board urges you to offer another supplement on the cumulative effects of the project on the affected environment so that the public has adequate time and opportunity to consider the basis of your conclusions of overall feasibility.
- Y 2. The Board is still concerned about the possible contradiction in the draft, which state that there are no existing energy related obstacles to growth in California. This seems just opposite to the previous discussion. The recently released "California Energy Outlook" by the California Energy Commission state there are sufficient electricity resources available to meet California's needs for the next twelve years. It continues on to say that the circumstances require the state to be more selective by adding new resources to the system based on an economic preference as well as physical and environmental needs. We believe that the COTP project is being proposed too early in time. The potential for delaying project implementation for a number of years should be discussed in the final document. The feasibility for selection of a route which would reduce the total effect on the state's resources may decrease rapidly over the next few years. Technological advances may increase the engineering options available, and certainly the economic considerations will change.
- Z
- AA
- BB
- CC 3. Neither the supplement nor the draft addresses the project impacts on the fire protection efforts of the California Department of Forestry and Fire Protection (CDF). The powerlines may create an air operations safety problem for aircraft used in fighting fires near the powerline. Mitigations for increased visibility need to be provided.

- W Comment noted. The comment refers to potential growth-inducing impacts. Section 4.6 of the Draft EIS/EIR noted that the availability of more reliable, lower cost power is likely to stimulate growth in California and the Pacific Northwest. The Final EIS/EIR has been revised to reflect the potential for specific impacts to timberland and agricultural land as a result of increased demand. However, because of their speculative nature, it is not possible to accurately quantify or predict the extent of these types of impacts. Increased demand should result in increased value of the land and the timber resource.
- X This comment recommends distribution of a Supplement to the Supplement to the Draft EIS/EIR dealing with "affected environment." A Supplement to an EIR need be prepared only when (1) subsequent changes to a project are proposed involving significant new environmental impacts, (2) substantial changed circumstances occur involving significant new environmental impacts, or (3) new information of substantial environmental importance becomes available. The federal requirement is similar. None of these bases for triggering the requirement to distribute a Supplement to an EIS/EIR appear to be implicated here, with respect to either economic impacts specifically or "overall feasibility" of the Project. See also response to SL-100 V.
- Y The absence of energy-related obstacles to growth does not preclude the ability to benefit economically from alternative power sources which reduce total cost. The Draft EIS/EIR discusses alternative sources of power available to California. Project benefits are based on cost savings as compared to alternatives, not removal of growth impediments or avoidance of near-term energy shortages.
- Z The Project will produce net benefits if constructed on the current schedule as analyzed in the Draft EIS/EIR. Benefits obtainable in the early years of the Project would be lost by delay. Earlier construction of the Project adds to the benefits of the Project, as compared to a delayed schedule which would lose near-term benefits. No evidence is presented that Project costs are reduced by delay. Historical evidence would indicate that inflation may cause the cost of a delayed Project to exceed the cost of continuing on the current schedule.
- Benefits that might be foregone by delaying the Project include energy cost savings by purchasing energy during the current surplus in the Pacific Northwest, benefits from negotiating prices with Pacific Northwest during a period of surplus, energy that will be consumed in the Northwest as a result of incentives provided in the Northwest to increase load during the surplus whose effects do not end with the surplus, and costs of alternatives pursued by Participants because the Project is delayed. Because there are definite lost benefits as a result of delay, no apparent cost reductions, and Project benefits exceed costs on the current schedule, no additional analysis of a delayed schedule is warranted.

SL-100 (continued)

AA The comment is unclear.

BB See responses to SL-106 H, L-307 I, and L-309 VI.

CC We agree that transmission lines and towers may create hazards for aircraft used in fighting fires near the lines. This potential impact has been added to Section 3.6.2.1 of Volume 2A of the Draft EIS/EIR as errata and is presented in Sections 1.1.4 and 1.2.3 Volume 1 of this Final EIS/EIR.

SL-100 (continued)

Environmental Coordinator

Page 5

August 14, 1987

CC

DD

EE

There is also a potential danger created for ground attack forces operating in the vicinity of the powerlines. High voltage lines will arc in the presence of heavy smoke. Fuels management mentioned in the forest service ownership should also be addressed on other land holdings. The extent and intensity of construction activities for building this project in remote locations creates fire prevention problems. CDF will be responsible for conducting adequate inspections to insure compliance with powerline clearances, spark arrestor requirements, equipment availability requirements and other fire prevention laws. Examples of these requirements are contained in Sections 4293, 4428, and 4429 of the Public Resources Code. Mitigations providing for adequate compliance must be included in the final EIS/EIS.

Thank you for the opportunity to comment on the draft COTP EIS/EIR supplement. Please contact Mr. Dean Cromwell, Executive Officer, at phone (916) 445-2921 if you have any questions on our comments.

Sincerely yours,

Harold R. Walt

Harold R. Walt
Chairman

cc: Gordon Van Vleck
Jerry Partain

DD

Fuels management on private lands will be discussed with the landowners and negotiated during the easement acquisition process. We believe that close coordination with the California Department of Forestry will be key to preparing and implementing a workable Fuels Management Plan on private and state-managed lands.

EE

Please refer to mitigation measure X.R in Section 1.1.5, Volume 1, of this Final EIS/EIR.

SL-101



PACIFIC POWER 920 SW Sixth Avenue • Portland, Oregon 97204 • (503) 243-1122

August 13, 1987

Mr. Rick Lind
Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95866

Dear Mr. Lind:

Pacific Power & Light Company appreciates the opportunity to comment on the Supplement to the Draft EIS/EIR for the California-Oregon Transmission Project and the Los Banos-Gates Transmission Project.

A Due to the importance of the Pacific Intertie to the security of the Western States System, we are concerned about new COTP routing options which appear to increase the likelihood of a catastrophic two or three line outage (COTP plus one or two Intertie lines). PP&L has previously expressed concern with the choice of the Eastern Corridor over the Central as the Project-preferred. We are now expressing concern over route N-10M2, proposed by the Forest Service, which reduces the separation of lines within the Eastern Corridor.

B We do not agree with the Forest Service recommendation that separation of powerline rights-of-way should be avoided. Experience has shown that separation of rights-of-way, especially if large, can reduce common-mode outages due to weather, fire (smoke), and sabotage. We do concur with the use of fuels management to increase the security of the Intertie. However, we are concerned that a long-term fuels management plan has not yet been worked out by the Project and the Forest Service. Without knowledge of specific details of such a plan, we cannot assess the reliability of the proposed route within the Eastern Corridor.

D Increased separation, together with an effective fuels management program and a fire reporting procedure will ensure that system operators will have adequate time to reduce Intertie flows to maintain system stability. This will assure that the Project achieves its full design rating.

A Comment noted.

B We agree with your comment that separation will reduce common-mode outages. See response to L-177 A.

C A long-term Fuels Management Plan is being jointly prepared by the lead agencies and the Forest Service. The specifics of this plan are not yet available. The plan will consider the use of fuel breaks adjacent to the transmission line to reduce the risk of an outage due to forest fires. The width of each fuel break will depend upon topography, timberland density, existing fuel loads, vegetation types, and visual concerns. Other fuels management methods under consideration include the use of prescribed fire timberstand improvement operations such as thinning, wildlife browse improvement, adjacent timber sales, and upgrading the fire detection and suppression efforts in the area of the Intertie.

D A fuels management program would possibly be advisable for the Project whether or not the N-10M2 alternate is used.

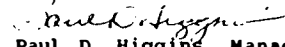
SL-101 (continued)

Rick Lind
August 13, 1987
Page 2

E [Route North 1 is also of concern. Although it is unclear from the document what the separation is from the existing Intertie, it appears that it is being reduced. We believe this would increase the likelihood of a common-mode outage.

F [We continue to support the earliest practical completion of the COTP in a manner that will enhance the reliability of the interconnected electrical system in the Western United States.

Sincerely,


Paul D. Higgins, Manager
Environmental Planning

PDH/cr
COTPSEIS

E The separation from the North 1 route and the existing Intertie below Malin Substation is approximately one-half mile. Comment noted.

F Comment noted.

SL-102



United States Department of the Interior

OFFICE OF ENVIRONMENTAL PROJECT REVIEW
500 NE MULTNOMAH STREET, SUITE 1692
PORTLAND, OREGON 97232



August 10, 1987

EP S7/R35

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Sir:

The Department of Interior has reviewed the supplement to the draft environmental impact statement for the California-Oregon Transmission Project and the Los Banos-Gates Transmission Project, California and Oregon. We offer the following comments for consideration in the Final EIS.

A [We understand the new routing options proposed for portions of the preferred route of the California-Oregon Transmission Project were developed after consideration of public comment and discussions with the U.S. Forest Service on the alternatives proposed in the draft.

B [The Council of Environmental Quality regulations for implementing the National Environmental Policy Act define mitigation to include: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact over time; and (5) compensating for impacts. The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. Accordingly, we maintain that the best way to mitigate for adverse biological impacts is to avoid them whenever possible.

C [It is recommended, therefore, that the project be designed to avoid adverse impacts to migratory waterfowl. We remain concerned about the high potential for waterfowl collisions with the proposed transmission lines in the southern section study area and the placement of structures in floodplains or wetlands.

D [Page 4.1-1. The supplement indicates the 9.35-mile south 1 routing option would locate 41 structures in floodplains, and cross potential habitat for 24 special-status plant species and 6.75 miles of high potential bird collision areas. Thus, the bird collision potential impacts would remain significant.

A Your statement is correct; however, some of the route options shown in the Supplement to the Draft EIS/EIR are the result of public input and some resulted from consultation with the U. S. Forest Service.

B We concur. This concern is addressed in Volume 1 of this Final EIS/EIR, Section 1.1.5, mitigation measures IV.A - IV.M and V.A - V.Q.

C Complete avoidance of waterfowl collisions is not possible in the Delta area. The Project has attempted to minimize impacts within other constraints. We have been unable to get estimates of the magnitude of expected collisions from agencies. The significance of waterfowl mortality is uncertain given the high rate of legal harvest of most species that might also be affected by collisions. See also response to L-117 C.

No structures would be placed in wetland areas in the Delta; these areas can all be spanned. Floodplains in this area consist of diked agricultural field. Thus, placement of structures in these areas would not cause impacts to wetland values.

D This is correct; bird collision impacts are considered significant. See response to SL-102 C.

SL-102 (continued)

E Page 4.1-4. Both the south 1 option and the preferred route require siting of structures in floodplains and are subject to high waterfowl collision potential.

F Page 3.5-29 of Volume 2A of the draft states that the existing transmission line has high collision potential, but upgrading the existing line (segment S-8F, S-8 Alternative 1) would cause much less impact than any other proposed alternative. We again recommend that the final environmental impact statement discuss the magnitude of the waterfowl collision problem at the existing transmission line and further evaluate Alternative A (particularly segment S-8F, S-8 Alternative 1), which has the lowest potential for significant waterfowl collisions, as the preferred route.

Summary Comments

G The final environmental impact statement should discuss in detail all practicable means to avoid or minimize environmental harm from the alternative transmission routes. Detailed discussions should also cover proposed monitoring and enforcement plans. Such a discussion in the final document should then be followed up in the Record of Decision with a discussion on whether all practicable means have been adopted to avoid or minimize environmental harm from the selected alternatives. The Record of Decision should also discuss in detail (or summarize the discussion in the final document) what monitoring and enforcement programs will be adopted.

H

I In addition, because the modifications are in such close proximity to the preferred route, we would like to reiterate a previous comment on the first draft that upon selection of a final alternative, a detailed analysis should be prepared to address the transmission route, particularly areas designated for clearing, construction of access roads, foundation installation, etc. The analysis should determine ways to avoid impacts on unique and sensitive plan communities (e.g., riparian areas, wetlands, and vernal pools), threatened and endangered species, important wildlife habitat, and cultural resource values. In addition, mitigation measures should be developed to avoid environmental disturbances or compensate for losses where adverse impacts cannot be mitigated.

E See responses to L-117 C and SL-102 C.

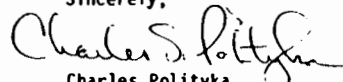
F See response to L-332 H.

G This concern is addressed in Volume 1 of this Final EIS/EIR, Section 1.1.5. A Compliance and Monitoring Plan will be prepared as stated in Section 1.1.5, mitigation measure VI.A.14. See also responses to L-321 W and L-321 BB.

H This information will be included in Western Area Power Administration's Record of Decision.

I These concerns are addressed in Volume 1 of this Final EIS/EIR, Section 1.1.5, mitigation measures II.C, IV.A - IV.M, V.A - V.Q, and VI.A.2, 3, and 5.

Sincerely,



Charles Polityka
Regional Environmental Officer

SL-103



Department of Energy

625 MARION ST. NE, SALEM, OREGON 97310 PHONE 378-4040 TOLL FREE 1-800-221-8035

August 12, 1987

Cheryl Shields
Environmental Coordinator
California-Oregon Transmission Project
PO Box 660970
Sacramento, CA 95866

Dear Cheryl:

Here are the Oregon Review Committee comments on the Supplement to the Draft EIS/EIR. Please call me if you have any questions.

Sincerely,

Charles Grist, Energy Analyst

2432K
CG:cg

SL-103 (continued)



Department of Energy

625 MARION ST. NE, SALEM, OREGON 97310 PHONE 378-4040 TOLL FREE 1-800-221-8035

Oregon Review Committee Comments on the Supplement to the Draft EIS/EIR

- A** 1. Deer and antelope habitat removal.
The Supplement reports two different acreages for wintering deer or pronghorn antelope habitat removed by the E3 substation site. Table 2.1-1 states that 46 acres will be removed from production. Paragraph two on page 2.1-1 states that only 10 acres will be removed. The two should be reconciled.
- B** Cumulative effects of habitat removal need to be addressed in the final (page 2.1-6).
The statement "... removal of less than 10 acres of habitat would not have significant adverse impacts on wintering deer and pronghorn." suggests that mitigation would not be necessary. This is not true. Cumulative impacts of new and existing power lines and land use changes in the area are significant. They should be addressed.
- Also, the supplement should address how the removal of an additional 36 acres for the taplines A and B affect deer and antelope habitat.
- C** 2. Noise impacts of the E3 substation site and the North 1 lines.
Allowable noise limit standards should be properly addressed. The correct reference is the Oregon DEQ allowable noise limits (OAR 340-35-035). Allowable noise is measured against existing ambient noise, not a suburban neighborhood as suggested in paragraph 3, page 2.1-8. In some cases only a 10dBA increase is allowable. In cases involving narrow band noise emissions, like substations, allowable octave band noise limits will apply. If noise levels will be greater than allowable, specific mitigation should be addressed.
- D** 3. Land use (page 3.1-5).
The final should mention that the North 1 route is further from the Loveness airstrip. This would reduce the land use impacts of North 1 compared to the Preferred alternative.
- E** 4. Removal of vegetation and impacts on wildlife (pages 3.1-4 & 3.1-5).
The Supplement states that 4 of 9.7 miles along North 1, and 2 of 11 miles on the Preferred route may have significant impacts on habitat and deer winter range. These figures are conservative. The data should be checked for the final.

A Forty-six acres of deer habitat would be removed. This loss could be considered significant and would be mitigated. See mitigation measure V.M in Section 1.1.5 of the Final EIS/EIR.

B See response to SL-103 A.

C Substations will be designed to applicable noise standards. See also response to L-329 C1.

D We agree that the North 1 route is further from the Loveness airstrip, which reduces the land use impacts of North 1 compared to the preferred alternative. This has been added to the discussion of North 1 in the Supplement and appears in the Final EIS/EIR.

E See response to SL-99 LL. The significance of impacts were based on expected disturbance impacts from road construction. Areas that currently have low road densities would not be significantly impacted by low levels of new road construction, with implementation of adopted mitigation measures.

SL-103 (continued)

ORC Comments page 2

- F** 5. Mitigation for vegetation changes and road construction are not adequately addressed.
The final should discuss full mitigation of impacts, using present techniques and knowledge. The option of full mitigation is lacking in the Supplement as well as the Draft.
- G** 6. Corona, field, and safety considerations (page 3.1-6).
Corona, field, and safety considerations vary by option. The further the lines and substation are from people, the less impact they have. The North 1 route is further from residences and agricultural land, and would have less impact from corona noise and be more safe than the preferred alternative.
- H** In regard to field effects, new research continues to suggest that there may be negative human health impacts from very weak magnetic fields. If these effects prove true, North 1 would have less impact than the preferred route.
- I** 7. Clerical error in section 2.1.1, first paragraph.
The proposed switching station sites are located in T40S, R12E, not in R11E as stated.

F This concern is addressed in Volume 1 of this Final EIS/EIR, Section 1.1.5, mitigation measures IV.A - IV.M.

G See responses to L-330 F3 and SL-51 A.

H Comment noted. See responses to L-330 F3 and SL-51 A.

I This correction has been added to the errata of Section 2.0 of Volume 1 of this Final EIS/EIR.

SL-104

NORMAN D. SHUMWAY
11th DISTRICT, CALIFORNIA

COMMITTEES
BANKING, FINANCE AND
URBAN AFFAIRS
MERCHANT MARINE AND
FISHERIES
SELECT COMMITTEE ON AGING

Congress of the United States
House of Representatives
Washington, DC 20515
August 10, 1987

Mr. Robert A. Olson
California Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Dear Bob:

I have recently been contacted by Mr. Paul Tschirky, Chairman of the Modoc Klamath County Powerline Committee (MKCPC) regarding the preferred route addressed in the June 1987, supplement to the draft EIS/EIR for the California-Oregon Transmission Project.

A As you know, the MKCPC is concerned about the preferred route as currently being considered in Modoc County. The MKCPC supports the Loveness-Graham Option which affects primarily Klamath County. However, the MKCPC would like that option to put the powerline to the east of the preferred route carrying it further south.

B The main reason for the MKCPC objection to the current plan is the number of acres of farmland which will be adversely affected by the proposal. The MKCPC would like the route to remain off rich agricultural land as much as possible. Therefore, it advocates the placement of the line using the John Cross proposal.

C Prior to the August 11, 1986, meeting held in Tulalake, my district staff had a chance to view first hand many of the problems created by the location of the powerline over agricultural land. As you know, those problems include: 1) finding crop duster pilots willing to fly under powerlines; 2) irrigating pipes wearing out four times more quickly than pipes not in the vicinity of the powerlines; 3) extra time involved in plowing and irrigating because of obstructions; and 4) safety hazards during thunder storms because the powerlines attract lightning.

F The MKCPC does not understand why agricultural land must be used when public land is available just a few miles east of their fields.

H In view of the number of logical arguments to abandon the preferred route in favor of the John Cross proposal, I would appreciate your consideration of using the John Cross proposal.

1903 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-2611

CHRISTOPHER C. SIEGEL
ADMINISTRATIVE ASSISTANT

1150 W. KERNWOOD DRIVE
SUITE 1A
STOCKTON, CA 95207
(209) 957-3773
TOLL FREE NUMBER
(800) 631-2178

LOS ANGELES
DISTRICT COORDINATOR

11000 EDGEMOOR RD., SUITE B
ALBUQUERQUE, NM 87105
(505) 265-3727

A Your support for the North 1 routing option (Loveness-Graham route) is noted. For a discussion of routing the line to the east of the preferred route, see response to T-69 F.

B Your support for the John Cross proposal is noted.

C See response to L-14 A, L-330 Z, and T-175 H.

D See response to T-4 H.

E See response to L-41 C.

F The concept of power lines "attracting" lightning is misleading. The number of lightning strikes for a given area is dependent upon the isokeraunic level in the area and not the location of HVAC lines. HVAC power lines are designed with ground wires located above the conductors to act as a shield from lightning strikes. These ground wires are designed to withstand lightning strikes as predicted by the isokeraunic level in the area and, in fact, throw a protective shadow on the earth beneath them for an area of approximately four times the height of the tower.

G See responses to T-69 F and L-177 A.

H Comment noted. See responses to L-330 G, L-330 H, and L-330 I.

SL-104 (continued)

Mr. Robert A. Olson
August 10, 1987
Page Two

Please do not hesitate to contact me if you have any further questions regarding this most important matter.

With best regards,

Sincerely,


NORMAN D. SHUMWAY
Member of Congress

NDS/jas

SL-105

Mr. & Mrs. Wayne Russak
3611 Pioneer Ln.
Redding, Ca. 96001

Aug. 12, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca. 95866

Gentlemen:

My letter is in regards to the proposed California-Oregon Transmission Project which personally involves my family and I due to its tentative routing on or very near my father's property on Fenders Ferry Road in Round Mountain. This is the land I enjoyed growing up on and also enjoy taking my children to because of its very natural, relatively untouched beauty. Deer, bear, cougar, fox, bald eagle, quail, and California Condor are among the many wildlife forms inhabiting the area and there has even been a Bigfoot/Sasquatch sighting on my father's property with more than five miles of footprints (Record Searchlight, winter '72-'73).

My position is shared by many other property owners, agencies, and concerned citizens who, like myself, agree that our forest lands must be maintained in as natural a state as possible. Please pay heed to our concerns. If a few miles of the project were to cross our areas, type of environment little damage would be done but hundreds of miles creates yet another lack of consideration for our nature lands.

I'm sure a route could be found that would not bother anyone. There is much undesirable land which could never support much life that should be utilized for projects of this magnitude. The argument that someone must be affected by a project of this scope is invalid to me because the value of the whole is made up by its minorities. If one person loses his home unwillingly or suffers from visual scars on the land then we have all lost a little more respect for each other.

I am a firm believer in progress and look forward to the day when photo-electric power will end all this undue stress we are putting each other through. Until a time when something like this will solve all our problems I feel that we should not let the wrong thing be done just to make our lives a little easier for today.

Please count me as another in opposition to the Round Mountain route and as one in favor of the eastern route where life and vegetation will be far less disturbed. I am sure our current technology can solve the line crossing problems that seem to be eliminating this route from consideration. The very same problems will be encountered with the lines coming from Pit 7 Dam.

A

The commentor is correct that a route is sought that would minimize impact to private residences located in the Round Mountain area. COTP staff met with the commentor at his residence in the Round Mountain area to discuss the location of line segment N-9A and its proximity to his and other private properties. The commentor pointed out route possibilities located further to the west which were possibly outside of the residential area in question, consisting of summer homes and permanent residences. The commentor also pointed out the location of a spring-fed meadow adjacent to the Little Round Mountain overlook access road to the north of Fender Ferry Road that may be impacted by the present route segment N-9A. This new information will be considered and evaluated, which may result in a possible reconfiguration of the alignment of route segment N-9A in an effort to reduce impacts.

B

Comment noted.

C

Comment noted.

SL-105 (continued)

D I am also quite uneasy with the thought of an agency that has the power to approve its own environmental studies, plans and specifications, and final routing options without any apparent authoritative interaction. I believe that this is a detriment to the freedom of the choice of the people.

I will close by saying that I hope we can all live together, man and machine, in a harmonious and artful manner. If we continue to disregard these endeavors then I'm afraid the loss will outweigh the gain.

Respectfully,



Wayne A. Russak
Joy M. Russak

D See responses to L-159 C, L-330 D, and ST-1 D.

SL-106

August 12, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Gentlemen:

A [As you can see from the enclosed sheets, I am not alone in my community when I express opposition to the COTP 500 kV transmission line; however, I have succumbed to the fact that you are going ahead with the project despite public opinion.

I would therefore like the following comments entered in the record:

- B [
- C [
- D [
- E [
- F [
- G [
1. The Supplement to the draft EIS/EIR is a feeble attempt to appease the concerns brought forward to the initial EIS/EIR. It did not even explore alternative routes, but merely made slight deviances from the already preferred option. No study was made of the Eastern route nor an easily accessible I-5 option.
 2. The Supplement made no mention of researching the health hazards presented to humans living close to the power lines. Medical facts support the theory that power lines emit hazardous dangers to human health.
 3. It would seem to be a highly unethical if not illegal conflict of interest for TANC to be both the fact finding agency and the decision-making body on the proposed project.
 4. As I have indicated in my many previous letters, the main reason I am opposed to the chosen route is due to the resultant loss of scenic and highly productive timberlands, wildlife habitat (our particular area is a bear haven, deer breeding and fawning grounds and home to the endangered spotted owl), subject to massive soil erosion, inaccessible, steep terrain and even contains Indian ceremonial grounds.

A Your opposition to the proposed COTP is noted.

B The route options presented in the Supplement to the Draft EIS/EIR are the result of alternatives suggested by the public in their comments on the Draft EIS/EIR and consultation with the U. S. Forest Service.

C See response to T-69 F and L-159 F.

D See responses to L-118 B, L-309 U, and L-309 T1.

E A discussion of the health hazards presented to humans as a result of the proposed COTP is discussed in Section 4.10 of Volume 1 of the Draft EIS/EIR and Section 1.2.3 of Volume 1 of this document. See also responses to L-330 F3 and SL-51 A.

F See responses to L-159 C, L-330 D, and ST-1 D.

G The potential impacts to the scenic, timberland, wildlife, earth, and cultural resources are discussed in Section 4.1 of the Draft EIS/EIR. The reasons for your opposition to the route option in this area are noted.

SL-106 (continued)

Environmental Coordinator

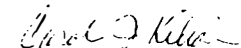
August 12, 1987

Page 2

H [5. With the advances in electronics progressing so
I [rapidly, by the time the project is completed in 1990, the
J [large power lines will most likely be obsolete; and with the
increase of smaller hydroelectric sources, the lines already
appear to be unnecessary.

It is my hope that TANC will seriously consider the alternative
of NO transmission lines at this time.

Sincerely,


Carol J. Kilian
P.O. Box 144
Big Bend, CA 96011

Enclosures

cjk

cc: Wally Herger
Congress of the U.S.

Alan Cranston
U.S. Senate

Stan Statham
State Assembly

Jim Nielson
State Senate

H It is true that advances in electronics are progressing rapidly;
however, we see nothing on the planning horizon that would
replace the need for this Project.

I The Draft EIS/EIR took into account installation of large amounts
of small hydroelectric projects in addition to the anticipated
development of cogeneration, geothermal plants, wind energy
generation, biomass fueled plants, and other renewable energy
resources. See the response to L-309 LL for further information.

J The no action alternative has been considered. Please refer to
Section 2.4, Volume 1 of the Draft EIS/EIR.

SL-106 (continued) Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA 95866

We, the undersigned registered voters of Big Bend and its surrounding community, are totally opposed to the construction of a 500-kilovolt transmission line through some of the prime timber, wildlife, historical, and scenic land in the entire state of California, for the purpose of transmitting surplus energy:

Name	Address
1. <u>Carol J. Kilian</u>	<u>Box 144 Big Bend, CA 96011</u>
2. <u>Georgia L. Atkins</u>	<u>Box 202 Big Bend, Ca. 96011</u>
3. <u>Juella L. Cooper</u>	<u>42 Box 73 MC 96065</u>
4. <u>Jared L. Newell</u>	<u>Box 312 Big Bend, CA 96011</u>
5. <u>Sean Apalategui</u>	<u>Box 243 Big Bend, Ca. 96011</u>
6. <u>Jeanette J. Newell</u>	<u>Box 312 Big Bend, Ca. 96011</u>
7. <u>Mildred Newell</u>	<u>Box 193 Big Bend, CA 96011</u>
8. <u>James T. Hill</u>	<u>Box 117 Big Bend, Ca. 96011</u>
9. <u>Jeffrey Bone</u>	<u>Box 221 Big Bend, Ca. 96011</u>
10. <u>Brian M. Adams</u>	<u>Box 222 Big Bend, Ca. 96011</u>
11. <u>Mar. E. Connely</u>	<u>P.O. Box 11- Big Bend, Ca. 96011</u>
12. <u>Don R. Connely</u>	<u>Box 11- Big Bend, Ca. 96011</u>
13. <u>James R. McKinney</u>	<u>Box 281 Big Bend, CA 96011</u>
14. <u>Stephenie MacMillan</u>	<u>Box 116 Big Bend, Ca. 96011</u>
15. <u>Bill & Em Agup</u>	<u>Box 251 Big Bend, Ca. 96011</u>
16. <u>Larry Peckard</u>	<u>Box 303 Big Bend, Ca. 96011</u>
17. <u>Rod Hansen</u>	<u>42 Box 69 B Monticore, CA 96011</u>
18. <u>Judene Halpern</u>	<u>P.O. Box 147 Big Bend, Ca. 96011</u>
19. <u>Neal Chavira</u>	<u>P.O. 84 Big Bend 96011</u>
20. <u>Carla Truitt</u>	<u>P.O. 84 Big Bend 96011</u>
21. <u>Jeff Engle</u>	<u>P.O. Box 244 Big Bend 96011</u>

SL-106 (continued) Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660978
Sacramento, CA 95866

We, the undersigned registered voters of Big Bend and its surrounding community, are totally opposed to the construction of a 500-kilovolt transmission line through some of the prime timber, wildlife, historical, and scenic land in the entire state of California, for the purpose of transmitting surplus energy:

Name	Address
1. Fred Adams	P.O. Box 224 Big Bend, CA 9601
2. Walter H. Hickey	P.O. Box 324, Big Bend, CA, 9601
3. Thelma Brand	P.O. Box 162 Big Bend, CA 9601
4. Karen Hamesley	P.O. Box 371 Big Bend, CA 9601
5. Billy H. Hickey	P.O. Box 321 Big Bend, CA 9601
6. Paul H. Hickey	2 mi up rd. 37 N 02 Big Bend, CA 9601
7. Gerald C. Bines	Cabin #29 ACROSS FROM STORE
8. David B. Bines	P.O. Box 93 Big Bend, CA 9601
9. Gary H. Hickey	P.O. Box 143 Big Bend, CA 9601
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	

SL-107

Julie Rechten
Lava Beds NM
Box 865
Tulelake, Ca. 96134
August 12, 1987

Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, Ca. 95866

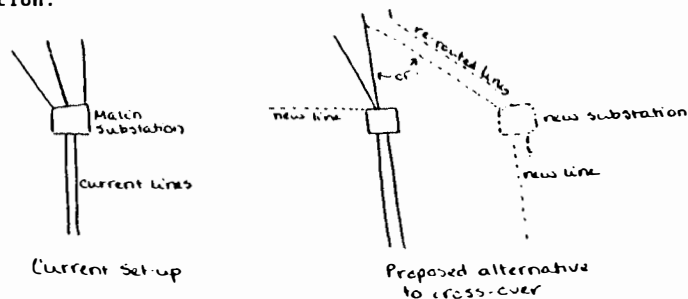
Dear staff:

In response to your supplement to the draft EIS for the COTP, I'd like to reiterate a few points I made at the hearings in Newell on Aug. 5, and add a few more.

I am glad you are considering some more options. I am particularly glad that North 2 alternative appears superior in your analysis to the old preferred N-10Alt5. I don't especially like the North 2 alternative either, for its own reasons, but the route through the Highlands is terrible.

I had hoped you would use the opportunity of a supplement to address a real conservation alternative, one in which the cost of the new lines would be applied to conservation measures, not just figuring the amount of conservation likely to occur under the present price structure.

I had also hoped to see an eastern route analyzed--one which would run east of the present lines for the entire route. I now understand the Backscatter would get in the way if the new line were to run 4 or 5 miles east of current lines in the Rimrock vicinity. Therefore a route completely east of Clear Lake ought to be analyzed. It would cross 139 somewhere south of Timber Mt. and run through the Whitehorse area, possibly intersecting with the 230 kV lines at the Pit River. A crossover would probably be required at Round Mt. However, it might be possible, per my discussion with Rick Lind after the hearings, to modify the substation in the Malin area to avoid a crossover there. Below is a sketch of the option.



A Comment noted.

B The comment provides no basis for assuming that additional cost effective conservation beyond that included in the Draft EIS/EIR is available. The Draft EIS/EIR analysis of future demand included the anticipated impact of aggressive conservation practices by the California utilities as adopted by the California Energy Commission. See responses to L-3 S, L-159 A, and L-322 B.

C See responses L-3 Z, T-69 F, and L-177 A.

SL-107 (continued)

C This route would have the benefits of avoiding the Tulalake Basin, Lava Beds, and the Highlands. As was obvious at the Newell hearings, you have not yet selected a route past Tulalake which is acceptable. You once again failed to print photos which adequately show the visual effect on the entirety of Lava Beds, especially on a clear afternoon. And your North 2 option has quite a few problems as well.

D It wasn't easy to analyze the North 2 route because not enough information was given. In the original draft EIS, an area between the park access road and county road 97 was mapped as juniper. I commented then that much of that area is in plantations. It is difficult to tell from your analysis whether that mistake has been corrected, as the segments analyzed are not the same as in the draft.

E It is also hard to tell which deer range figures you used. On your draft map, all of North 2A, N-10Alt5(Alt), and N-10M2(Alt) are shown in big game habitat zone, but this is not reflected in your deer range numbers in the supplement.

F There are a number of cumulative impacts which are not addressed in the new analysis. Both the Shasta-Trinity and Modoc are planning increased clearcutting (and harvesting in general) in the area of the planned and present transmission lines. I'm not sure how that will mesh with your plans to clear another swath through the forest. In particular, you have to have adequate average snags per acre, intending to top trees in the area if necessary. I'm not sure the Forest Service will have any to spare after they harvest. The impacts of cut units will also be greater if they adjoin the lines. Unit boundaries and harvesting methods will have to be changed. I also don't believe the cumulative effects of two right-of-ways on the deer migration around the east Highlands have been adequately addressed.

G I also would like to know more about the fuels reduction envisioned between the existing and planned lines. I want to know what it will entail, what the current and projected fuel loads will be, who will pay for it, and who will perform and administer the program. I want an accounting of the environmental effects, especially on sensitive plants and the deer reproduction/concentration area between the lines. I consider this an impact of the transmission project, not a separate item to be dealt with in a special use permit.

H With respect to the various subroutes, North 2A, the county line option may be preferable to private landowners, but it will be visually very obtrusive.

I As for reliability, as I mentioned, conservation and

D A preliminary alignment within the 1,500-foot wide route through the Tulalake area has been developed by COTP representatives and was displayed at the Newell hearing on August 5, 1987. This preliminary alignment shows significantly reduced impacts to farmland over impacts quantified through the analysis of the route through this area. An explanation of this preliminary alignment is presented in response to L-330 G and in Section 1.2.2 of Volume 1 of this document.

E See responses to L-3 C and L-3 F.

F See response to ST-25 B.

G The total lengths of these three route segments are within deer habitat areas, although none are in key range areas (i.e., concentration and reproduction areas). The route evaluations would not differ despite this correction.

H The requirements for maintenance of snags were identified by the USFS. Recruitment of snags to offset impacts of transmission line clearing will be coordinated with the USFS. Vegetation will not be completely cleared within the right-of-way; rather, only tall vegetation that does not meet conductor clearance requirements will be removed. Topped trees can be retained in the right-of-way.

No major cumulative impacts will result from placement of harvest units near the route; impacts will be additive.

No major impacts on deer migration are expected from the addition of the powerline corridor. Deer readily cross utility corridors, and they are less sensitive to disturbance during migration than during fawning and wintering periods.

I See response to SL-101 C. The details concerning the proposed fuels management plan will be jointly worked out with the Forest Service and will consider the environmental effects. The Forest Service has indicated there may be some positive environmental benefits to fuels management, such as habitat diversity.

J Comment noted. Potential impacts to visual resources as a result of this option are described in Section 3.2 of the Supplement to the Draft EIS/EIR.

K See responses to L-3 S and L-3 T.

SL-107 (continued)

K — generating facilities in California would both be more
L — reliable than running a line clear from the Columbia.
You have set mileage limits for reliability according to fire
M — spread, but as the recent Quaking Fire shows, fires in our
area can take off and run 3 miles in an hour quite easily.
The logistics of defending two sets of powerlines could
easily overtax the staffing of the Forest Service. We didn't
even have the manpower to deal with the west side of the
Quaking Fire, and the south end wasn't adequately staffed.
Many of the fires out there really are put out by the
weather, with a bit of assistance from the air tankers. We
just secure the lines once they are established. And
N — fighting fire under those powerlines when you refuse to turn
them off is not fun. (I've done it.) It might actually be
easier to defend 3 lines together, but you haven't analyzed
O — that option at all.

In summary, I am disappointed in your squandering of the
opportunities presented by publishing a supplement. You
didn't address options which would have appropriately been
detailed. The options presented weren't adequately analyzed.
After this, I'm not sure what to expect from the Final. I'm
only hoping the Forest Service, the Tulelake Basin farmers,
the forest products companies, and the state of Oregon all
have more sense and thoroughness in their reviews of your
plans, and can force you into a more sensible route or into
abandoning the project all together.

Sincerely,

Julie Rechten

Julie Rechten

L Comment noted.

M See response to SL-101 C. The fuels management plan will address
the need for fire detection and suppression forces in the area of
the Intertie and the COTP.

N Your opinion is noted. The analysis conducted for three lines
together must consider more elements than forest fires. Other
contingencies such as storms and airplane strikes must also be
included. To provide the necessary reliability for all three
lines, separation is required.

O Comment noted.

NANCY BROWN
12670 DIANNE DRIVE
LOS ALTOS HILLS, CALIFORNIA 94022

Margas: COTP

A As a part owner of a 183 acre parcel of land directly north and west of the meeting of Bethel Island Road and Cypress Road in South Delta of proposed COTP. I am strenuously opposed to additional transmission lines on my property.

Two 500 KV lines, as well as a third line are quite enough to impose on one property and any more. If not certain would be judged as being unjust.

B I believe the foregoing reasoning holds for the entire Bethel Island area. COTP should be sited far enough away not to compound the visual pollution already created by the existing transmission lines.

Sincerely,
— Nancy Brown

A The preferred route for the COTP 500 kV transmission line is about 2,000 feet east of the intersection of Cypress Road and Bethel Island Road. Therefore, the 500 kV line will not be located on the Nancy Brown and James L. Martin property.

B The preferred route passes to the west of Bethel Island. See response to L-15 E regarding visual impacts in the Delta.

C

*Also make a record
worthless for people
who are already
suffering
depression. Will you
again take this power
line & put it elsewhere.*

CALIFORNIA-OREGON
TRANSMISSION PROJECT

YOUR COMMENTS COUNT

Your views are important. Please return the form below if you have comments or questions about the proposed COTP.

Newsletters are issued periodically. We welcome additional names for the mailing list. If you want us to remove your name from the mailing list, please indicate below.

I would like to make the following comments:

*A Have you heard the new information
linking percentage of cancer in
child to these power lines. Not to
B mention the effects on wildlife.*

I would like my name removed from the mailing list.

For more information, please contact Laura Edlin, Public Affairs Director at (916) 924-3995.

Clip this page, fold it in thirds, and return it to us. Thank you.

MICHAEL P. KILLEEN
BOX 30
DORAUS, CA 94623

See responses to L-330 F3 and SL-51 A.

Impacts to wildlife are discussed in the Draft EIS/EIR and Supplement. Section 3.5 of Volume 2A of the Draft EIS/EIR describes the potential impacts to wildlife in the central corridor. Various mitigation measures will reduce these impacts. See Section 1.1.5 of Volume 1 of the Final EIS/EIR.

Comment noted. As stated in Volume 2A of the Draft EIR, Section 3.8.2.4, the value of the encumbrance resulting from the transmission line easement will be established by appraisal and negotiation. Property owners will be compensated for the value of their losses. This process is intended by law to make the property owner "whole."

SL-111

Mark L. Bottimora
4492 Sheepberry Court
Concord, California 94521

August 12, 1987

Environmental Coordinator
California-Oregon Transmission Project
Post Office Box 660970
Sacramento, California 95866

Dear Sir:

I have owned property in the Pit River Canyon area and have learned that you proposed to run a high power transmission line down from Oregon.

I spent all my vacations in that beautiful area of Shasta County from the time I was twelve years old, and I am now past forty.

A [There seem to be enough transmission lines going through that part of the county already, and I would like to see the present beauty of the area maintained.

B [If another transmission line must be built, why not go the eastern route where the only thing you'd disturb is an occasional jack rabbit.

A Comment noted.

B See response to T-69 F.

Very truly yours,



Mr. and Mrs. Eldon W. Woolley
709 Preston Drive North
Calxico, California 92231

August 12, 1987

SL-112

Environmental Coordinator
California-Oregon Transmission Project
Post Office Box 660970
Sacramento, California 95866

Dear Sir:

We've learned that the California-Oregon Transmission Project is tentatively planning to run a high-power transmission line through the Pit River Canyon area.

A [We have a twenty-acre parcel of land in that area and would
B [like to see the whole area remain as unspoiled as when we bought the
property nearly twenty years ago. I've talked to my brother who lives
in the Pit River Canyon area, and we are not convinced this line is
needed. There are already enough power lines coming down from up
north. We are totally against this project, unless someone could
convince us that the power is truly needed somewhere.

We implore you, please do not desecrate that beautiful
area.

Eldon W. Woolley
Yours sincerely,

and Oprian Woolley
Co-owner

A Comment noted.

B For a discussion of need for the Project, see responses to L-309
W through L-309 NN.

SL-113

August 13, 1987
P.O. Box 188
Montgomery Creek, CA 96065

Environmental Coordinator
COTP
P.O. Box 660970
Sacramento, CA 95866

Gentlemen:

This letter is with regard to the proposed route of the California/Oregon power transmission line as proposed through Big Bend--Montgomery Creek flatwoods area.

A I beg you to use the proposed McCleskey Alternate Route N-4 rather than the originally proposed "preferred" route.

If the original route were to be selected, it will cause untold permanent damage to our Pit River Rim Community. This route will cut my property in half and take parts of my neighbors' properties.

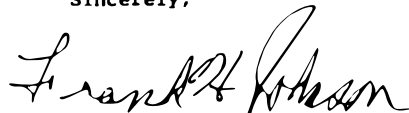
I have worked all my life for this place, and my son and my grandson have looked forward to retirement here. This is not commercial property which can be valued in cold dollars. It means much more than can be evaluated in money.

My neighbors are all in much the same situation. The damage which would be caused is greater than a tornado or a company of Russian tanks in that it would be permanent and never be restorable.

The alternate route is completely feasible and will present untold hardship and heartbreak by this group of worthy citizens.

Please use the alternate route and save our community and my home.

Sincerely,


Frank M. Johnson

A Your preference for the North 4 route option over the N-8Alt.1 and N-8Alt.2 option is noted. The relative impacts of the N-8Alt.1 and N-8Alt.2 option to the route option North 4 are described in the Supplement to the Draft EIS/EIR. North 4 has been incorporated into the Project preferred route.

WRITTEN COMMENT FORM
FOR THE SUPPLEMENT TO THE DRAFT EIS/EIR
FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be received by August 17, 1987. Thank you.

Aug 8, 1987
A *To any interested Persons of this Project*
am writing as one of the Property Owners of Pitt River River Community
first i would like to say I oppose this project
in its entirety.
I feel its just another blase on the people
of Oregon + California

Comment noted.

B *BPA has caused several large companies to move*
from the Portland area because of high cost power
and even shut down our Aluminum plant
because of "they say" shortage of power. This has
caused hundreds of lost jobs to our area.
Calif. has been lead to believe it will get low
cost electric. How long do you think the people
of the North West will tolerate present BPA administration
when our local electric cost is anything But cheap?

BPA recently proposed for comment "The Bonneville Partnership," a set of programs designed to enhance and stabilize BPA's revenues by encouraging and stabilizing the power loads of residential, commercial, and industrial consumers in the Pacific Northwest. These programs could be implemented as early as the fall of 1987. Most of the programs are targeted to businesses.

BPA knows of no companies in the Portland area that have ceased production due solely or even in part to power rates. BPA serves certain industries directly (at wholesale), but most companies in the region are served by utilities at retail. The power rates of these industries thus include the distribution and administrative cost of the retail utility as well as the cost of the power sold (which may or may not be purchased from BPA).

The Pacific Northwest aluminum smelters that curtailed production a few years ago did so because of the low market price of aluminum--their production costs made aluminum smelting uneconomical. To assist this major customer group (the Direct Service Industries or "DSIs"), in 1986, BPA established the Variable Industrial Power rate, which varies with the price of aluminum within certain parameters. BPA's goal in establishing the variable rate was to maintain BPA's loads and revenues: BPA's first priority, by law, always must be to recover its costs and to repay the U.S. Treasury for its investment in the power system of the Northwest. In recent months the market price of aluminum has risen substantially and regional smelters are bringing potlines back into production.

BPA has had a surplus of power for several years and expects the surplus to continue for the next 20 years at least. BPA estimates its available power on a critical water basis, which means that firm loads will be served even in the event of the occurrence of the lowest water conditions on record. Therefore, power supply for firm contract customers such as the DSIs is not a problem for now or the future.

Hearing Date: *Aug 4, 1987*
Location: *Bohrium, Ct*
Name/Address: *John Williams*
Pt 1 Box 291-A
Carmelus Ore 97113

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95865
(916) 924-3995

SL-114 (continued)

B
(cont.)

BPA markets much of its surplus power to California. Sales of surplus power help keep BPA's other rates down. Unfortunately, the last few years surplus power sales have been made at prices that do not recover the full cost of producing the power. Sales of surplus power at any rate will recover at least part of the cost of the power, however. Recovering as much of the cost as possible enhances BPA's ability to repay the U.S. Treasury and to keep rates to its other customers as low as possible.

SL-115

AUGUST 8, 1987

ENVIRONMENTAL COORDINATOR

re: CALIFORNIA-OREGON TRANSMISSION PROJECT

DEAR SIR:

A I OPPOSE THE CONSTRUCTION OF ANOTHER HIGH VOLTAGE LINE THROUGH OUR AREA. WE ALREADY HAVE TWO SUCH HIGH VOLTAGE LINES PASSING THROUGH OUR AREA IN CLOSE PROXIMITY.

I AM ALSO ADVERSE TO THE LEGAL MANDATE GIVEN TO A GROUP OF UTILITY COMPANIES BY THE STATE OF CALIFORNIA AND THE FEDERAL GOVERNMENT. IT MIGHT GIVE ONE THE IMPRESSION OF SUBTERFUGE.

B THE LACK OF CONSIDERATION GIVEN TO THE ENVIRONMENTAL IMPACT TO THIS AREA IS ANOTHER CONCERN.

- * FLORA AND FAUNA
- * ARCHEOLOGICAL AREAS
- * HISTORICAL SITES
- * INDIAN BURIAL SITES

C THIS PROJECT SEEMINGLY IGNORES THE REAL INTERESTS OF THE PROPERTY OWNERS AND RESIDENCES IN THIS AREA.

D ANOTHER CONCERN IS THE RECOMMENDED ROUTE FOR THIS HIGH VOLTAGE LINE.

IF THIS PROJECT IS TO PROCEED, THEN THE "NORTH-4-ROUTING OPTION" SHOULD BE THE PREFERRED ROUTE.

SINCERELY,

James F. Carrara

A Comment noted. See responses to L-159 C, L-330 D, and ST-1 D.

B Impacts to biological and cultural resources were analyzed in Volumes 1 and 2A of the Draft EIS/EIR.

C There are many instances on this Project where citizen input has effected a change on the location of a route or has resulted in a new route being analyzed. We believe this Project has been responsive to the interests and concerns of landowners and interested citizens. The North 4 routing option that you refer to is the direct result of a collaborative work effort between Mr. McCleskey, a resident in your area, and Project Manager staff.

D Your conditional support for the North 4 routing option is noted. It has been incorporated into the Project preferred route.

SL-116

AUGUST 8, 1987

ENVIRONMENTAL COORDINATOR

RE: CALIFORNIA-OREGON TRANSMISSION PROJECT

DEAR SIR:

A I OPPOSE THE CONSTRUCTION OF ANOTHER HIGH VOLTAGE LINE THROUGH OUR AREA. WE ALREADY HAVE TWO SUCH HIGH VOLTAGE LINES PASSING THROUGH OUR AREA IN CLOSE PROXIMITY.

B I AM ALSO ADVERSE TO THE LEGAL MANDATE GIVEN TO A GROUP OF UTILITY COMPANIES BY THE STATE OF CALIFORNIA AND THE FEDERAL GOVERNMENT. IT MIGHT GIVE ONE THE IMPRESSION OF SUBTERFUGE.

THE LACK OF CONSIDERATION GIVEN TO THE ENVIRONMENTAL IMPACT TO THIS AREA IS ANOTHER CONCERN.

- * FLORA AND FAUNA
- * ARCHEOLOGICAL AREAS
- * HISTORICAL SITES
- * INDIAN BURIAL SITES

C THIS PROJECT SEEMINGLY IGNORES THE REAL INTERESTS OF THE PROPERTY OWNERS AND RESIDENCES IN THIS AREA.

D ANOTHER CONCERN IS THE RECOMMENDED ROUTE FOR THIS HIGH VOLTAGE LINE.

IF THIS PROJECT IS TO PROCEED, THEN THE "NORTH-4-ROUTING OPTION" SHOULD BE THE PREFERRED ROUTE.

SINCERELY,

Mary F. Deffebach

A Comment noted. See responses to L-159 C, L-330 D, and ST-1 D.

B See response to SL-115 B.

C See response to L-115 C.

D Your support for the North 4 routing option is noted. It has been incorporated into the Project preferred route.

SL-117

John E. Russak
Box 126
Round Mountain, CA 96084

August 8, 1987

The California-Oregon
Transmission Project
P.O. Box 660970
Sacramento, CA 95866

Gentlemen:

A

What I am going to ask you to do is not difficult. It will take you just a few minutes and cost you nothing. I would ask you to put yourselves in our place.

Imagine that you are a couple nearing retirement age. You have spent a lifetime working hard, have raised your children, got them through college, married and settled in their own home. Now - finally - you can concentrate on what you'd like to do with the rest of your life. You take a good look at where you've spent these years and decide that it could use a facelift and some yard work - all the things you couldn't do before. You can't really afford to hire these things done so you do them yourselves on weekends and evenings. You dig and scrape, haul dirt and rocks until your fingers bleed and your back aches. You plant fruit trees, rose bushes and other flowers and plants. You paint and scrub and clean. You have a nice house and 15 acres of beautiful forest land which you plan on leaving to your children and grandchildren. This land was purchased by a Pearl Harbor survivor who also fought all through WW II at places like Guadalcanal, Saipan, Tinian, the Philippines, Lingayan Gulf, Leyte, and Iwo Jima to say nothing of serving in the Naval Reserve during the Korean War.

Now imagine a huge organization with no regard for this couple's hopes and dreams for the future decide to place a huge transmission line across their property. The cleared area under it would bring clouds of dust. The loss of the beautiful trees would mean the loss of shade in the summer and protection from storms in the winter. Is this the kind of treatment a man who has fought for his country, was wounded at Pearl Harbor, deserves?

What would you gentlemen do if you were in this couple's place? How would you like to be faced with leaving a place where all your memories are, a place where the voices of your children and grandchildren echo through the rooms, a place that you love?

I said at the beginning of this letter that to imagine these things would cost you nothing but if you place this transmission line here it will cost us everything. Is money so important to you that you would destroy the hopes and dreams of people like us, good Americans, who pay our taxes and believe in life, liberty and the pursuit of happiness as outlined in our Constitution. The pursuit

A

We acknowledge your concerns for the construction of the proposed COTP through your area. COTP staff reviewed routing issues with you at the August 4, 1987 public hearing in Burney, California. COTP representatives believe that potential impacts to your land and the resources of your area can be minimized through site-specific alignment. COTP representatives will work with you to reduce impacts should the COTP be constructed along the route option in your vicinity.

SL-117 (continued)

page 2-

A

of happiness for us is having our home where we planned to spend the rest of our lives. There is plenty of unpopulated land this line could cross without disturbing anyone. Please leave us our dreams and not just sad memories.

B

We are getting a copy of an environmental report which was done on the area behind us a few years back which shows that all kinds of animals and other species, some of them endangered, use this area. Even Big Foot has been spotted in this area. We will send this to you as soon as we obtain it. We would also like you to know that some of your surveyors entered our property without getting permission from us.

C

D

I think this letter should make it clear to you that we do not wish to have your transmission line across our property or anywhere near it. There is plenty of open country it could go through without ruining people's property. Perhaps at a little more cost to you but I'm sure you would be able to make it up in the long run on fees and charges which we will probably also have to absorb.

E

F

We want you to know that there are real, live people living along your proposed route who would like to continue living here in freedom as our Constitution promises. Why is it that big organizations can, in the name of progress, take a person's land? What rights do the taxpayers have any more? Is this America or Amerika? We have worked hard for this land and do not intend to give it up easily. We are freedom fighters.

G

We also discovered at one of your meetings that your maps are incorrect and misleading as to the direct route you will be taking. Was this an honest mistake or an attempt to mislead some of us until it was too late to do anything about it.

H

Just think of all the beautiful forest land that will be destroyed by clearing for your lines? Roseburg's spokesman was right in saying that all this clearing will destroy the environment of Northern California. We don't want your big silver lines. We prefer our trees. We do not wish our area to look like San Francisco or Los Angeles. I believe the people of Northern California should have a voice in this matter and that it should be brought to a vote of the people in this area as to whether they want this huge scar across this part of our state.

This letter will be sent to newspapers, congressman and other public representatives. If everyone who reads it will stop and think that taking property away from a few of us opens up the field. YOU MAY BE NEXT! It's time we took a stand against those who would run over us for monetary gain. Write your congressmen and protest. This will not mean cheaper rates for you. In the long run, it will cost us more - THE RIGHT TO LIVE WHERE WE CHOOSE. DO YOU WANT TO LOSE THIS RIGHT?

Sincerely,

John E. Russak

John E. Russak
Mildred G. Russak

B

Comment noted. An analysis of wildlife in the Project area was conducted in the biological resources sections of the Draft EIS/EIR.

C

Comment noted. We spoke with the commentor about the alleged trespass. No employees of Towill Incorporated (surveyors) or Gilbert/Commonwealth (land services agent) have been on the property in question. In a follow-up conversation with the commentor, the alleged trespasser was identified as a female. At the time the surveyors were working on other properties in the area, there were no females working out of Towill's field office. We realize that because of the prominence of the COTP, many such incidents will be attributed to this project or its employees. However, we are unable to verify the commentor's claim.

D

Your opposition to siting the line on or near your property is noted.

E

The comment is correct that additional costs would be passed on to beneficiaries of the Project in the form of reduced benefits if costs of the Project are increased through route changes. The relative costs and benefits of the alternative routes were considered extensively in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR to arrive at the preferred corridor.

F

The COTP would not reduce your liberties as an American citizen. Every effort will be made to avoid displacement of structures or the creation of conflicts with land use activities. The right of eminent domain by public organizations is to provide for the construction of facilities and projects that, overall, are deemed in the public interest.

G

COTP representatives indicated to you that the map to which you are referring did mistakenly exclude one of the route alternatives in your vicinity that would have less potential impact to your property. However, neither that route nor the route option that was shown in your vicinity were the preferred route at the time of the meeting. As COTP representatives discussed with you, the preferred route at the time of the meeting was further to the west on an adjacent map.

H

Comment noted. COTP representatives have actively solicited comments beginning early in the COTP planning process. The approval to construct the COTP along a particular route will be made by the lead state (TANC) and federal (Western) agencies.

I

Comment noted.

SL-118

LAW OFFICES OF
GREGORY D. THATCH
1730 I STREET, SUITE 220
SACRAMENTO, CALIFORNIA 95814

GREGORY D. THATCH
LARRY C. LARSEN

August 13, 1987

Environmental Coordinator
California-Oregon Transmission
Project
Post Office Box 660970
Sacramento, CA 95866

HAND DELIVERED

Dear Sir/Madam:

Please be advised that this firm represents the Trust under the Will of Evelyn Dierssen Ross. This letter constitutes the comments of the Trust to the Supplemental Draft Environmental Impact Statement/Environmental Impact Report for the California-Oregon Transmission Project.

- A In a letter dated March 2, 1987, this firm submitted comments on behalf of the Trust to the Draft Environmental Impact Statement/Environmental Impact Report. A copy of that letter is attached hereto. The basic concern addressed in our prior comments was with the proposed location of the transmission line and placement of towers within the boundaries of the Trust Property. The Trust Property consists of prime agricultural land on Sherman Island. Placement of towers on this land will not only disrupt current farming operations but, more importantly, will result in the loss of valuable farm land.

- B We have had the opportunity to review the Supplemental Draft Environmental Report and were greatly dismayed and concerned to discover that the transmission line and towers remain as proposed in the Draft Environmental Impact Statement/Environmental Impact Report. Given our prior comments and the information we were given in a meeting with Project Staff, we anticipated that the placement of towers would have been changed in the Supplemental Report. The importance of changing the location of the proposed line and towers is very critical and cannot be more greatly emphasized. As a result, we re-emphasize our concerns with the proposed location of the transmission line and towers over the Trust Property. Our previous comments are thus resubmitted and enclosed herein for your review and prompt consideration.

Very truly yours,

Gregory D. Thatch

GDT:clm
Enclosure
cc: Mr. George E. Dierssen, III
C059.LTR

- A See responses to L-305.

- B We agree that the presence of transmission line towers can disrupt farming operations, and farming is precluded in the area occupied by the tower. Each landowner will have the opportunity to negotiate compensation for losses resulting from the presence of transmission line towers.

- C Exact tower locations have not been addressed in the EIS/EIR. The document addresses 1,500-foot-wide study routes, within which site-specific centerline adjustments can be made.

The angle point previously on the Evelyn Dierssen Ross property will be moved in a northwest direction so that towers can be spotted as close to the field boundaries as possible, thereby minimizing adverse impacts on farming operations.

- D See responses to L-305.

SL-119

WRITTEN COMMENT FORM
FOR THE SUPPLEMENT TO THE DRAFT EIS/EIR
FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT
AND THE
LOS BANOS-GATES TRANSMISSION PROJECT

If you have comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report that you would like to have considered by the lead agencies, you can use this form to write them down. This form can be handed in to the court reporter at the meeting, or mailed to the Environmental Coordinator at the address below. Your comments must be received by August 17, 1987. Thank you.

- A Is landowners near this proposed clear cut
area, we are dismayed by the lack of
thought given to environmental impact
as a result of this poorly drafted
plan. We doubt sincerely that public
review is welcomed and in fact feel
that most 'reviews' go to the waste bin
directly.
- B Having read extensive evidence of increased
cancer incidence (particularly leukemia) amongst
those living in proximity to high voltage
lines, we perceive this particular insensitivity
abominable to the public health issue, and we
plan to file objections with the State Federal
Health agencies among others).

Hearing Date: _____

Location: _____

Name/Address: Mr. & Mrs. Forest Caldwell
Rt. 2 Box 52
Montgomery Creek Ca 94065
(916) 337-6578

Mail to:

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, CA 95865
(916) 924-3995

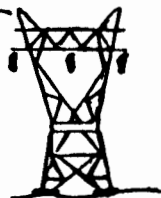
A The public agencies have actively sought and encouraged public input regarding the siting and potential impacts of the proposed projects. Approximately 400 comment letters have been reviewed and responded to as displayed in this Final EIS/EIR in addition to the testimony received.

B See responses to L-330 P3 and SL-51 A.

SL-120



August 15, 1987



Environmental Coordinator
California-Oregon Transmission Project
P.O. Box 660970
Sacramento, CA. 95866

MCKCPC

Paul Techirsky
MCKCPC Chairman
667-2668

Bill Graham
MCKCPC Chairman

Andy Chapman
Sec. - Treas.
667-5214

DIKOFUNKS

John Cross
Ike Byrne
Joie Victorino
Arac Lovenshoe
Joie McCalliffe

SUBJECT: SUPPLEMENT TO THE DRAFT EIS/EIR FOR THE
CALIFORNIA-OREGON TRANSMISSION PROJECT (COTF) (DOE/EIS-0128;
SCH# 25040914)

Dear Environmental Coordinator:

INTRODUCTION

The following comments on the Supplement to the DEIS/EIR for the COTF are hereby submitted on behalf of the Modoc County/Klamath County Powerline Committee (MCKCPC), which is a coalition of more than 100 residents and property owners in the intensively farmed and highly productive Tululake Basin agricultural area located between Malin, Oregon on the north and approximately 10 miles south of Newell, California on the south. In addition, a broad spectrum of local government and community, civic, agricultural and environmental organizations have strongly supported the MCKCPC. The major objectives, policy positions and recommendations of the MCKCPC represent an almost totally unanimous consensus of agreement among local government agencies, organizations, residents and property owners in the entire Tululake Basin, with substantial concurrence from surrounding counties and communities. These comments will supplement the MCKCPC's previously submitted written comments (dated February 27, 1987) on the original DEIS/EIR.

TOTALLY INADEQUATE CONSIDERATION OF CROSS'S ALTERNATIVE --
DESPITE THE FACT THAT THIS SAME MAJOR SERIOUS EFFECT WAS
PREVIOUSLY POINTED OUT IN (1) OUR WRITTEN COMMENTS ON THE
ORIGINAL DEIS/EIR AND (2) ORAL TESTIMONY OF NUMEROUS SPEAKERS
DURING THE DEIS/EIR PUBLIC HEARING IN NEWELL, CALIFORNIA ON
1-5-87.

Our written comments on the DEIS/EIR identified and discussed a number of serious omissions, errors, inadequacies and other

A

Comment noted.

B

The John Cross Alternative was addressed in the Draft EIS/EIR issued in November 1986. See responses to L-330 H and ST-11 C.

SL-120 (continued)

B types of deficiencies in that document. One of the most important of these deficiencies was the failure of the DEIS/EIR to adequately describe, illustrate, evaluate and consider Cross's Alternative. Pages 6-17 of our written comments on the DEIS/EIR and oral testimony of numerous speakers during the DEIS/EIR public hearing in Newell, California have previously addressed this issue, and that information is hereby also incorporated into these comments by reference. Further, items 2, and 3 of the "CONCLUSIONS, RECOMMENDATIONS AND REQUESTS" section (page 82) of our written comments on the DEIS/EIR read as follows:

C See responses to L-330 W8, L-330 X8, L-330 Q, and L-330 G.

"2. The most substantial required change that we have identified is that Cross's Alternative must be indicated as an option on all applicable project maps, and must receive a similar and comparable level of narrative environmental analysis and evaluation as has already been given to many other alternatives and options in the DEIS/EIR. Such analysis must reflect an objective, factual, impartial and good faith effort at full disclosure.

3. The most fair and legally appropriate method for providing such comparable analysis and evaluation is by preparing a Supplemental DEIS/EIR to discuss Cross's Alternative. The recently identified 3rd alternative Malin Switching Station site, which also was not identified or discussed in the DEIS/EIR should also be adequately evaluated in the Supplemental EIS/EIR. We do not consider simply adding information regarding Cross's Alternative and the 3rd Malin Switching Station site to the DEIS/EIR to be satisfactory, appropriate or legally sufficient since that approach would eliminate the opportunity for an extremely important phase of public review, written comments and public hearings on these 2 critical potential components of the COTP, which would be required for the Supplemental DEIS/EIR.

In the event that a fair, objective and comprehensive evaluation of Cross's Alternative in the Supplemental DEIS/EIR reveals that Cross's Alternative is not feasible for legitimate, factual and documented reasons, then the burden must be on the project proponents to identify another similar alternative which would be feasible and which would keep the COTP totally off the prime, irrigated and highly productive farmland in the Tulare Basin."

SL-120 (continued)

In spite of our extensive written and oral comments on the DEIS/EIR regarding Cross's Alternative, the Supplement to the DEIS/EIR, like the original DEIS/EIR, continues to almost totally ignore and disregard it. The only mention of Cross's Alternative in the entire Supplement is a statement on page 1.2-1 which reads as follows:

"An additional number of comments on previously identified routes are being considered including comments on the John Cross Alternative . . ."

D The MCKCPC believes that Cross's Alternative is reasonable and feasible, has seen no written evidence whatsoever to indicate otherwise, and contends that the facts regarding it which are contained in the project record legally compel the Lead Agencies to accurately and adequately describe, illustrate, evaluate and consider it. Even if the facts contained in such evaluation ultimately lead the EIS/EIR preparers to conclude that Cross's Alternative is infeasible, then such analysis and facts must be in writing and contained in either the DEIS/EIR or a Supplement to it. Only in this way can Cross's Alternative be given a fair, equal and comparable level of evaluation and consideration as has been given to all of the other alternatives and options which are discussed in the original DEIS/EIR and the Supplement. The grossly inadequate discussion of Cross's Alternative, in light of the facts contained in the project record, is clearly improper and unacceptable.

E The MCKCPC strongly objects to the erroneous implication on page 1.2-1 that Cross's Alternative which is recommended by the MCKCPC is equivalent to the Copic Bay Option which has been identified by the EIS/EIR preparers. These two options are not alike. There are major economic and environmental differences between them, as indicated in our written comments on the original DEIS/EIR. Cross's Alternative is clearly environmentally and economically superior to the Copic Bay Option, and is vastly environmentally superior to the so-called Preferred Alternative.

F Based upon the facts in the project record regarding Cross's Alternative, and the Lead Agencies' continued arrogant failure to fairly and objectively discuss it in the Supplement to the DEIS/EIR, the MCKCPC contends that:

1. The Supplement to the DEIS/EIR is not responsive to the numerous formal written and oral requests by the MCKCPC (as

D See response to L-330 H and ST-11 C. See also the discussion of the John Cross Alternative in Sections 1.2.2 and 1.2.3 of the Final EIS/EIR.

E See response to L-330 H and ST-11 C.

F This comment challenges the legal adequacy of the discussion of "Cross' Alternative" contained in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. The alternative routes in this area represent a range of reasonable alternatives to the COTP that can feasibly attain the basic objectives of the Project and provide sufficient information to evaluate the comparative merits of the alternatives. Cross' Alternative is sufficiently similar to the Copic Bay option that the lead agencies determined it had been identified and evaluated in the Draft EIS/EIR, Volume 1, at pages 4.1-41 through 4.1-43. As an informational document, the Draft EIS/EIR is not considered deficient either in its discussion of the range of alternatives or in its evaluation of the specific Cross' Alternative/Copic Bay option.

SL-120 (continued)

F

well as state and local elected officials from both California and Oregon, agricultural and community organizations, environmental groups and individual citizens) for a fair, objective and equivalent level of evaluation and consideration as has been given to many other alternatives and options in the DEIS/EIR and the Supplement. The unequal, inadequate and unfair treatment of Cross's Alternative in comparison to the many other alternatives and options reflects an inappropriate bias and prejudice in those reports.

2. In the absence of a fair, objective and equivalent level of evaluation and consideration of Cross's Alternative, the DEIS/EIR as amended by the Supplement is still legally inadequate.

3. In the absence of a fair, objective and equivalent level of evaluation and consideration of Cross's Alternative, which would require a second Supplemental DEIS/EIR, a legally adequate FEIS/EIR cannot be prepared.

4. Unless the FEIS/EIR complies with the certification requirements contained in adopted NEPA and CEQA guidelines, the COTP cannot be approved.

SOUTHERN OREGON SWITCHING STATION SITE E3

G The Supplement to the DEIS/EIR clearly indicates that Site E3 is environmentally superior to Sites E1 and E2, which were discussed in the original DEIS/EIR. The MCKCPC therefore endorses Site E3 and recommends that it--as well as the Loveness-Graham Option in Oregon and Cross's Alternative in California--be incorporated into the COTP.

G

Your support for Site E3 and the North 1 route option is noted. Both have been incorporated into the Project preferred alternative.

NORTH 1 ROUTING OPTION

The portion of the North 1 Routing Option which is located within Oregon (i.e. the Loveness-Graham Option) has been proposed by Loren Loveness, Bill Graham and the Oregon Review Committee, who/which are members of the MCKCPC. The Loveness-Graham Option has been purposely and intentionally planned to connect to Cross's Alternative in California. We

SL-120 (continued)

G therefore strongly support the Loveness-Graham Option, and recommend that it--as well as the Southern Oregon Switching Station Site E3 and Cross's Alternative in California--be incorporated into the COTP.

H However, we strongly oppose and object to the portion of the North 1 Routing Option which is located in California, since it would cause significant adverse impacts upon Tulelake Basin farm families. The Loveness-Graham Option in Oregon should be connected to Cross's Alternative in California as has been planned and intended by the MCKCPC. Cross's Alternative would eliminate all significant adverse impacts upon Tulelake Basin farm families, and is environmentally superior to all other alternatives and options which are under consideration in the California portion of the Tulelake Basin.

J CLEAR EVIDENCE THAT THE SO-CALLED PREFERRED ALTERNATIVE ROUTE WITHIN THE TULELAKE BASIN AREA, AS DESCRIBED IN THE ORIGINAL DEIS/EIR, IS NOT THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The original DEIS/EIR stated that the so-called Preferred Alternative was also the Environmentally Superior Alternative. The MCKCPC strongly disagrees with such statements and disavows them in our previous written comments. Our contention has been partially verified by information contained in the Supplement, which clearly indicates that the Loveness-Graham Option is environmentally superior to the so-called Preferred Alternative in that area. Therefore, the portion of the so-called Preferred Alternative in that area will only be coincident with the Environmentally Superior Alternative if it is modified to include the Loveness-Graham Option.

K Further, we are confident that when the Lead Agencies finally get around to seriously evaluating and considering Cross's Alternative, they will find that it is also by far environmentally superior to the portion of the so-called Preferred Alternative in that area.

L APPLICABILITY OF OUR PREVIOUS COMMENTS ON THE ORIGINAL DEIS/EIR TO THE SUPPLEMENTAL DEIS/EIR

Some of our previous written comments on the DEIS/EIR regarding significance criteria, potential health hazards, clarity of

H The North 1 routing option avoids irrigated cropland in both Modoc and Klamath Counties. Although some rangeland will be affected by this route, the impacts are not considered significant since grazing will not be precluded. Each landowner will have the opportunity to negotiate compensation for losses resulting from the presence of the towers. Overall, we feel that the North 1 routing option will not have a significant impact on agricultural lands.

I The Loveness-Graham option (North 1) and N-10 Alt.4 were combined in evaluating the John Cross Alternative (J.C.A.); the two existing Interties would be relocated to a 350-foot wide right-of-way along N-10 Alt.4. The J.C.A. and the Project preferred route were compared and are discussed in Section 1.2.2 of Volume 1 of the Final EIS/EIR. See also the response to L-330 H.

J See response to SL-120 I.

K See response to SL-120 I.

L Comment noted. See responses to L-330.

SL-120 (continued)

L mitigation commitments and other issues also apply to the Supplement. To the extent that such previous comments apply to the Supplement, they are hereby incorporated by reference.

M Also, we have recently obtained an additional health hazard article (Attachment 1), which we wish to include in the project record.

N

CONCLUSIONS, RECOMMENDATIONS AND REQUESTS

Due to the failure of the Supplemental DEIS/EIR to adequately describe, illustrate, evaluate and consider Cross's Alternative, the "CONCLUSIONS, RECOMMENDATIONS AND REQUESTS" section (pages 82 - 83) of our previous written comments on the DEIS/EIR still remain unsatisfied and are therefore also applicable to the Supplemental DEIS/EIR. That section is included as Attachment 2.

Attachment 3 is a newspaper article from the 8-6-87 edition of the Klamath Falls Herald and News regarding the public hearing on the Supplemental DEIS/EIR which was held in Newell, California on 8-5-87.

M Comment noted. See responses to L-330 F3 and SL-51 A, and Section 1.2.3 of Volume 1 of this document.

N Responses to your "conclusions, recommendations, and requests" section of your comments on the Draft EIS/EIR can be found at L-330 V8 through L-330 F9.

SL-120 (continued)

Sincerely,

Douglas Peterson

Douglas G. Peterson
Environmental Consultant
MCI/CFC
5873 Muldrow Road
Sacramento, CA 95841

Michael C. Miller

Michael C. Miller
Attorney at Law
MCI/CFC
501 Main Street, Suite 210
Klamath Falls, OR 97601/6007

Paul Tschirky

Paul Tschirky
California Chairman
MCI/CFC
Route 1, Box 212
Tulelake, CA 96134

Bill J. Graham

Bill J. Graham
Oregon Chairman
MCI/CFC
HC 62 Box 58 B
Malin, OR 97632

John Cross

John Cross
Chairman, Modoc Co. Planning Commission
c/o Newell Potato Cooperative, Inc.
P.O. Box 851
Tulelake, CA 96134

cc: Mr. Ronald Zumbrun, President, Pacific Legal Foundation

Attachment 1

all but a handful of the aliens men would be released today Fulgham.

HERALD NEWS July 9-1987 Thursday Common residential power line could cause childhood cancers

By PETER PANYCH

ALBANY, N.Y. (UPI) — An overhead power line common in residential neighborhoods could cause up to 15 percent of all childhood cancers, a \$5 million study shows, but researchers cannot explain the link.

The study recommended the National Institutes of Health continue research to determine if the link between child cancer cases and electromagnetic fields generated by high-voltage overhead power lines is conclusive.

The study, initiated by the state's health department five years ago, was released Wednesday. It established for the first time that electromagnetic fields in neighborhoods could endanger human health, project administrator David Carpenter, dean of the State University at Albany's School of Public Health, said.

The report admitted that researchers cannot explain how the electromagnetic fields induce cancer.

And the report found that laboratory test cells exposed to electromagnetic fields did not mutate into cancer cells and

cancer cells did not grow faster in the fields.

"The study is significant and applicable to everybody because everybody is exposed to electromagnetic fields; this is an electrical society," Carpenter said.

"I personally will not change my lifestyle as a result of this," he said. "It's low risk, but I do understand people being concerned."

The study, funded by eight New York utilities and the U.S. Department of Energy, stemmed from questions about the health effects of a state-approved high-voltage line from the Canadian border to central New York.

Farmers who live near the 765-kilovolt line have blamed its magnetic field for sickness and defects in their dairy herds and their own families.

One family moved after their 14-year-old developed a serious thyroid condition, milk production from their dairy cows dropped and their chickens died.

Cancer experts from Memorial Sloan-Kettering Hospital in New York City and the National Cancer Institute in Bethesda,

Md., would not comment on the report until they review the findings.

The study was conducted among Denver, N.Y.-area homes by a team led by David Savitz, an epidemiologist at the University of North Carolina.

Researchers studied all cancer cases in Denver involving children ages 3 to 14 diagnosed between 1978 and 1983. A control group of children was randomly selected.

The study found the cancer risk for children who lived near the power lines to be 1.7 times higher than for those who did not. The risk of getting leukemia was 2.1 times higher for children living near high-current wires.

The risk of childhood cancer is generally figured at one in 10,000.

The panel's calculation that 10 to 15 percent of childhood cancers are caused by the overhead power lines is based on the total childhood cancer cases in the United States, and assumes the proportion of homes with high electromagnetic fields is the same around the country as in the Denver area.

SL-120 (continued)

CONCLUSIONS, RECOMMENDATIONS AND REQUESTS

Based upon the information contained in the preceding comments, the MCKCPC hereby concludes, recommends and requests that:

1. Substantial corrections, revisions and additions are required in the EIS/EIR in order to eliminate misleading, ambiguous and erroneous statements and bring it into compliance with existing Federal, State and County laws, regulations, guidelines and policies.
2. The most substantial required change that we have identified is that Cross's Alternative must be indicated as an option on all applicable project maps, and must receive a similar and comparable level of narrative environmental analysis and evaluation as has already been given to many other alternatives and options in the DEIS/EIR. Such analysis must reflect an objective, factual, impartial and good faith effort at full disclosure.
3. The most fair and legally appropriate method for providing such comparable analysis and evaluation is by preparing a Supplemental DEIS/EIR to discuss Cross's Alternative. The recently identified 3rd alternative Malin Switching Station site, which also was not identified or discussed in the DEIS/EIR, should also be adequately evaluated in the Supplemental EIS/EIR. We do not consider simply adding information regarding Cross's Alternative and the 3rd Malin Switching Station site to the FEIS/EIR to be satisfactory, appropriate or legally sufficient since that approach would eliminate the opportunity for an extremely important phase of public review, written comments and public hearings on these 2 critical potential components of the COTP, which would be required for the Supplemental DEIS/EIR.

In the event that a fair, objective and comprehensive evaluation of Cross's Alternative in the Supplemental DEIS/EIR reveals that Cross's Alternative is not feasible for legitimate, factual and documented reasons, then the burden must be on the project proponents to identify another similar alternative which would be feasible and which would keep the COTP totally off the prime, irrigated and highly productive farmland in the Tulalake Basin.

4. The portion of the so-called Preferred Alternative located within the Tulalake Basin would cause several individually and cumulatively significant adverse impacts upon the residents of that area. However, all of these significant adverse impacts can be totally avoided or reduced to a negligible level by including Cross's Alternative in the so-called Preferred Alternative.

5. The erroneous allegation that the so-called Preferred Alternative is also the "Environmentally Superior Alternative" must be corrected. Cross's Alternative is BY FAR environmentally superior to the portion of the so-called Preferred Alternative that is located within the Tulalake Basin. The indicated erroneous allegation can only be made accurate by revising the so-called Preferred Alternative to include

SL-120 (continued)

Cross's Alternative and the recently identified 3rd alternative Malin Switching Station site.

6. We hereby request that these written comments be included verbatim (unedited), and with all Attachments included, in the FEIS/EIR. Regarding Attachment A of these comments, some individuals and organizations that submitted written comments did so directly to the COTP with a copy to the MCKCPC. However, others submitted the original copy of their comments to the MCKCPC with the intent that it would be forwarded to the COTP as an attachment to the organization's comments. If the COTP has received a separate direct copy of any letter contained in Attachment A, there is obviously no need to respond twice to the same letter, but all of the Attachment A letters must be responded to in the FEIS/EIR.

7. We hereby request that a copy of the FEIS/EIR, and a copy of the Supplemental DEIS/EIR, be distributed to each oral commentator from the DEIS/EIR public hearing in Newell, Ca. on 1/5/87 and each DEIS/EIR written commentator from or representing the Tulalake Basin area, including the individuals who submitted the correspondence contained in Attachment A of these comments. However, by carefully comparing the 2 lists of commentators and eliminating duplication, the number of report copies to be distributed can be substantially reduced.

8. Due to the anticipated magnitude of comments on and revisions to the DEIS/EIR, we hereby request that the review period for the FEIS/EIR be at least 45 days, and that a public hearing on that document be held in Newell, Ca. Further, we request that public hearings on both the Supplemental DEIS/EIR and the Supplemental FEIS/EIR also be held in Newell, Ca.

9. We hereby request that the Project Manager (TANC) provide advance notification of all future public hearings re: the COTP which are conducted by either Lead Agency, any Federal Cooperating Agency, or any State Responsible Agency to each cosigner of these comments, each individual who provided oral comments during the DEIS/EIR public hearing in Newell, Ca. on 1/5/87 and all written commentators from or representing the Tulalake Basin area, including the individuals who submitted the correspondence contained in Attachment A of these comments.

10. We hereby request that the Project Manager (TANC) provide a copy of any future Notice of Determination and Record of Decision for the COTP with a clear and specific description and map of any approved project alignment, a list of all adopted Mitigation Measures and any adopted Findings of Overriding Consideration, as soon as they are completed and become public documents, to each of the cosigners of these comments.

Thank you for your consideration of these comments.

SL-120 (continued)

Powerline study said inadequate

By DAVE CHRISTY
H&N Resources Editor

NEWELL — An additional environmental study on a proposed 500-kiloVolt powerline still isn't adequate, speakers said at a Wednesday public meeting in Newell.

The supplement to the draft environmental impact statement/report for the California-Oregon Transmission Project almost completely ignores the "John Cross Alternative" proposed by local residents, people testified, suggesting a new document will have to be issued.

However, they said a new substation site near Malin and the Graham-Lovness route to the Oregon-California border would be acceptable.

Cross compared the situation to a friend of his who's getting deaf. "For the last three years, he's been looking at me with a silly grin and nodding his head up and down. I think I've acquired two new friends (the project lead agencies)," he said.

The supplement contains a new alternative that goes along the east rim of the Basin, but

PAGE 2—HERALD AND NEWS, Klamath Falls, Oregon Thursday, August 6, 1987

Cross said it is "absolutely, totally inadequate. It violates everything west and for."

The Cross alternative was urged at earlier meetings and must be analyzed. "Unless you consider it, you're not going to build this powerline unless you take us to court, and if you take us to court you're going to lose," he warned. "Any federal judge in five minutes would say go back to the drawing board."

The Cross alternative would cut east at about the Oregon-California line for about 2½ miles, run south the length of the Basin, then cut back to the preferred alternative route.

The line is proposed to deliver surplus Northwest power to California, increase reliability of the western power system and allow seasonal power exchanges.

Speakers repeated Cross's message to do an analysis of his alternative.

"Cross's alternative has still been ignored in the supplement," said environmental analyst Doug Peterson. "We still believe it is reasonable and

feasible, and have seen no written evidence to show otherwise."

Area farmer Bill Dalton said agencies repeatedly stressed the importance of public comments, but then ignored them. "If public opinion is different than what they want, then public opinion cango to hell," he said.

Under the new alternative, lines would block spray planes in some valleys he farms and he probably would have to quit farming them, he added.

Glen Arthur, another farmer, said people need to keep in mind who's pushing the line. "You're dealing with a group of businessmen that are out to make a fast buck," he said. "They don't care how many broke farmers they leave behind or anything else."

Environmental studies have gaps in addition to the Cross alternative, said area resident Julie Rehtin.

An east route was proposed for the length of the line, not just around Newell. "East routes have been given even less attention than the John Cross proposal," she said.

A new alternative south of Newell moves the proposed line east out of the Medicine Lake Highlands, instead running parallel to existing lines and just southeast of Burnt Lava Flow.

That route puts the lines too close together due to the danger of a brush fire. "I don't believe the Forest Service would like to fight fire under three lines at once," she said. "I don't believe running the third line anywhere in the vicinity is going to be reliable."

Conservation or building generating facilities in California also need to be looked at, Rehtin suggested. "Conservation in California would prove a lot more reliable than running another line clear down" from Oregon, she said.

More information also is needed on the effects on deer migration and wintering range, fire fuels reduction and cost, and sensitive plants.

"I am pleased you've taken the route out of the highlands, but I'm not pleased you're building the line at all," she said.

Attachment 3

SL-121
Henwood Energy Services, Inc.

August 17, 1987

Environmental Coordinator
California Oregon Transmission Project
1010 Hurley Way
Sacramento, CA 95825

Re: Supplemental Draft EIS/EIR

Dear Sir:

Enclosed please find Comments on the Supplemental Draft EIS/EIR for the California-Oregon Transmission Project filed by the Forest Landowners of Shasta and Siskiyou Counties (FLSSC). The Forest Landowners manage approximately 3/4 million acres of forest land in Shasta and Siskiyou Counties, and the group is comprised of five members including Roseburg Forest Products Company, Santa Fe Pacific Timber Company, Hearst Corporation, Champion International Corporation, and Sierra Pacific Industries.

These comments were prepared by Henwood Energy Services, Inc. with the assistance of various FLSSC members. Please contact me if you have any questions concerning this submittal.

Thank you for your assistance.

Sincerely,



Kenneth Henwood, Ph.D.

enclosure

cc: FLSSC members
Hon. Victor Fazio
Hon. George Miller
Hon. Norman Shumway
Hon. Wally Herger

KH/cv
F1-387-5

SL-121 (continued)

**COMMENTS ON THE SUPPLEMENT
TO THE DRAFT EIR/EIS
FOR THE PROPOSED
CALIFORNIA OREGON TRANSMISSION PROJECT**

Prepared for:

**The Forest Landowners of
Shasta and Siskiyou Counties**

Prepared by:

**Henwood Energy Services, Inc.
2555 Third Street, Suite 110
Sacramento, CA 95818**

Date: August 17, 1987

SL-121 (continued)

I. Introduction

The members of the group comprising the Forest Landowners of Shasta and Siskiyou Counties (FLSSC) own and intensively manage approximately 750,000 acres of land for timber production in the two counties. Lands of the group members are already extensively impacted by numerous transmission corridors and other public rights of way. The FLSSC are concerned about the continued erosion of the timber land base available to support the Northern California lumbering industry and the further direct and indirect negative effects the preferred routing alternative has on that base.

These comments on the Supplement to the Draft EIS/EIR were prepared at the request of the FLSSC by Henwood Energy Services, Inc. of Sacramento, California in response to the concerns of the Forest Landowners about the overall comprehensiveness of the Draft EIS/EIR as supplemented, particularly with respect to the discussion and development of alternative routes and analysis of forest land impacts.

II. Background

The FLSSC filed extensive comments on the initial Draft EIS/EIR on March 2, 1987 in which problems and inadequacies with alternative route development, forest land impact assessment, resource mapping, compliance with the Federal

A

The routing guidelines for land use stipulated that the crossing of highly productive timberlands would be minimized, and these guidelines were adhered to wherever possible. However, in some locations other factors such as engineering considerations and/or other environmental resource constraints were such that productive timberlands could not be avoided. The preferred alternative was chosen in part because it had far less impact than other alternatives on prime timber resources. A number of the route options contained in the Supplement to the Draft EIS/EIR were designed to further minimize timber impacts. We agree that the preferred alternative and/or its route options will result in a significant impact on timber resources.

B

Comment noted.

SL-121 (continued)

Land Policy and Management Act, and the project economic analysis were identified. Since that time members of the FLSSC and Henwood Energy Services personnel have presented information to the City Council of Redding about the project at which TANC staff also spoke, as well as providing verbal comments on the Supplement at the public hearing in Burney on August 4. Since filing comments on the Draft we have also continued to monitor the progress of the project in anticipation of providing comments on any supplements to the DEIS/EIR and testimony in the CPUC hearings on participation in the project by the in-State Investor Owned Utilities.

C In monitoring the project, when news of a Supplement came out we were hopeful that such a document would be based on comments received on the Draft (which identified serious inadequacies in the route selection procedure) and embody the approach suggested by the Chairman of the State Board of Forestry in his letter of February 28, 1986 to the COTP Project Director. In that letter Harold Walt stated:

"The Board suggests that you approach the selection of the final route from a different perspective than now seems in use. Instead of beginning with the most direct routes and attempting to mitigate any impacts observed, it would appear more logical to search for areas that would be affected the least by the Project and

C Comment noted. This was, in fact, the approach taken. The COTP environmental studies began with a large study area. Over 1,200 miles of alternative routes were studied. The environmental process for the COTP was conducted in an open and responsive manner consistent with the intent of NEPA and CEQA.

SL-121 (continued)

then attempt to locate a route utilizing those areas."

Unfortunately with the Supplement TANC has forfeited a tremendous opportunity to take legitimate environmental input and look seriously at the conceptual and legal flaws in the process by which the preferred routing was arrived at. The Supplement provides only cosmetic changes to the original preferred routing while using the same flawed analytical procedures to view their impacts. In so doing it again systematically understates the local and societal costs of the preferred routing while refusing to adequately analyze the technical possibilities and alternatives for crossing the existing intertie to allow analysis of routes that are significantly less sensitive environmentally.

III. Technical Analysis of the Supplemented Preferred Alternative Routing

In our comments on the Draft EIS/EIR we identified the various assumptions and technical documents that TANC Staff used to support selection of the preferred alternative. The Supplement again uses the same methodology without any effort to review the validity of the assumptions, or to reanalyze the conclusion that crossing the existing intertie is not feasible in spite of numerous comments by FLSSC and others on this matter. Again the following studies, conclusions and assumptions were used in the analysis of the

D The route segments shown in the Supplement to the Draft EIS/EIR were produced in response to public and agency concerns. Most of these segments were suggested by citizens and agency representatives. For example, the portion of North 1 in Oregon was proposed by Loren Loveness, Bill Graham, and the Oregon Review Committee to avoid agricultural land and the Loveness airstrip that would potentially be affected by the preferred route. Other routes were proposed by the USFS and private landowners.

E The Project has considered possibilities for crossing the existing lines. See responses to L-177 A, L-307 I, L-330 H, T-69 F, T-70 B, and SL-121 P.

F This list of assumptions and conclusions was made by the commentor and are not necessarily those of the Project. His assumptions/conclusions Nos. 1-3 are essentially correct, while Nos. 4-6 are essentially incorrect. See responses to L-307 E and I.

SL-121 (continued)

F

minor route alterations contained in the Supplement:

1) Power System Studies Committee - Comparison of North Corridors - April 1986. This report recommended that project routing use new substations, and not involve any crossings of the existing intertie. Its conclusions were synthesized from several other documents which included:

- A) The COTP - Preliminary Plan of Service and Power Systems Studies - October, 1985.
- B) Corridor Separation for the COTP - October, 1985.
- C) 500 kV Transmission Line Crossing - December, 1985.
- D) Comparison of Northern Corridors Report - April, 1986.
- E) Centerline Separation Reliability Analysis - August, 1986.

2) The conclusion that the Northern substation must be located between the Meridian and Malin substations on the 500 kV line owned by PP&L.

3) The assumption that the route must or should join existing corridors immediately South of the Round Mountain substation and North of Redding.

4) The assumption that the existing intertie could not be crossed near Malin due to the effect of a new 500 KV line on the proposed location of a backscatter radar facility east

F

(cont.) Assumption number 4 is essentially incorrect in that restrictions to a crossing specifically due to the backscatter radar only applied to routes located with "several miles" of separation to the east.

Assumption number 5 is incorrect since it implies that the Project assumed that all crossings would have to be in forested areas. A more accurate interpretation is that underground crossings in forested areas would be very expensive.

Assumption number 6 is essentially incorrect since it implies that no underground technology can be employed without 20 years of testing or experience. This is not the Project's position. Twenty years of operations experience could be considered appropriate to establish an accurate record of reliability for underground 500 kV service.

SL-121 (continued)

F of the existing intertie.

5) The assumption that all underground crossings of the existing line would be in forested areas and therefore prohibitively expensive.

6) The assumption that 20 years of operations experience are required before any underground transmission technology can be employed.

A. FLSSC/Technical Analysis of the Preferred Alternative Routing as Supplemented

FLSSC developed technical comments on the DEIS after review of the above listed documents and meeting with TANC personnel on February 24, 1987. At the meeting, issues which were unclear in the DEIS were discussed and that information was incorporated in the comments.

G The Supplement answers none of the serious inadequacy or conflicts between the reasons for rejection of routes east of the existing intertie and the TANC technical consultant reports. In fact with the exception of an off hand statement (on page 1.2-1) about continuing consideration of comments on eastern routes, underground crossings, etc. no effort to incorporate FLSSC technical comments appears in the Supplement. FLSSC technical comments on the alternative route selection criteria

G Responses to FLSSC technical comments are presented in response to L-307.

SL-121 (continued)

include:

H

1) The study committee decision not to use the existing Malin substation appears supported by WSCC criteria as does a substation located on the Malin-Meridian PPL 500 KV line especially in light of the planned reinforcement of the Western Oregon transmission system. We can also agree with the superiority of a design approach to simplify operating criteria.

H

Comment noted. See response to L-340 B.

I

2) No data were presented on the possibility of interconnecting with lines running north from Malin to Grizzly particularly the line that is interconnected with Grizzly but loops east to Midpoint, Idaho at the Summer Lake substation. Reliability on that line could have benefits equal to the preferred alternative of interconnection with the Meridian - Malin, PPL line. This alternative should be discussed with respect to locating the project substation northeast of Malin on this line thus avoiding the need for a north end crossover to use a route east of the intertie.

I

See response to L-307 C.

J

3) The conclusion in the April 1986 Comparison of Northern Corridors System Study Committee Report that the new line must not cross the existing intertie is not supported by the consultant's report (Sargent and Lundy, December, 1985) especially in light of two facts that arose in the February 24 meeting with TANC personnel. The stated reasons for

J

See responses to L-222 A and L-307 E.

SL-121 (continued)

J

rejecting an east side Eastern Corridor were based on excessive costs for the preferred underground type of crossing. For a 5 mile underground crossing required to maintain separation in forested areas, costs were estimated at \$41 million by the project's consulting engineers and with two, required, expense was assumed to be prohibitive. However, the consultant estimated costs at only \$7 million for the much shorter 2000 foot underground crossing required in unforested areas.

At the February 24 meeting with TANC, FLSSC learned first that the backscatter radar facility (which had forced a north end crossing well south of Malin into forested areas) was no longer a factor, and a crossing could be made in the immediate vicinity of the California-Oregon border where a 2000 foot crossing is possible in agricultural or sagebrush areas. Further, on questioning TANC personnel indicated that with the abandonment of an interconnection with the Round Mountain Substation a route well east of the intertie could achieve the project objective of interconnection with the Cottonwood (Olinda) Substation. This route would cross the existing intertie in the Whitmore - Midway - Black Butte foothills, again out of forested areas.

K

L

This exact routing has been suggested on several occasions by FLSSC members (see Attachment 1 to the FLSSC comments on the Draft EIR/EIS) and the County of Shasta, and apparently rejected

K

See response to L-307 E.

L

See response to L-307 G.

SL-121 (continued)

L for economic reasons which are not valid as seen above. It would appear that the east side Eastern Corridor option was rejected early in the evaluation process for reasons that have since become invalid. In our opinion, this option is now a very viable alternative as it may have always been if suitable short crossing sites had been diligently explored.

To be adequate, FLSSC continues to believe the DEIS must fully evaluate a routing that generally follows the main N-S PGandE 36 inch gas pipeline alignment south from the Mayfield area direct to Olinda. Central to this analysis must be a complete evaluation of the comparative savings in right of way cost (clearing and otherwise) in moving east onto significantly less productive lands and sharing right of way with the existing gas pipeline which is already cleared (100') with six (6) feet of soil cover over the pipe. This evaluation is also required by FLPMA as has been pointed out to TANC by FLSSC members in the past (see Attachment 2 to the FLSSC comments on the Draft EIR/EIS).

N With respect to reliability concerns expressed by TANC personnel regarding an underground crossing, their consultants, Sargent and Lundy, addressed these concerns by planning an extra phase at each crossing. To have twenty years of operation experience prior to implementing new environmentally superior technology as suggested by COTP personnel at the February 24, 1987 meeting is patently

M

See response to L-307 P.

SL-121 (continued)

N ridiculous. This argument is heard repeatedly in opposition to Best Available Control Technology air pollution regulation, Best Management Practice in forestry and water pollution control, etc., and if persuasive would have prevented implementation of most of the environmental safeguards in use today.

Additionally, the reliability of underground crossing points only effects the single (new) line, and existing design considerations for all corridors provide for a single line outage without compromise of WSCC reliability criteria. Consequently, underground reliability should not be an issue regarding the feasibility of an eastern route.

O In addition to the above listed comments there are at least two additional line and/or crossing configurations that must be analyzed in conjunction with their right-of-way savings and reliability implications to adequately assess an eastern routing. These technical configurations include:

1) Simply trading lines as shown in Figure 1 at the north end of the project just south of Malin, thus reducing the crossings of the existing line intertie to one in scrubland northeast of Anderson. This configuration could have significant reliability benefits providing the Round Mountain substation with two sources of supply and taking one circuit from Malin straight to Cottonwood. This configuration must receive a reliability analysis similar to

N See responses to L-307 H and L-307 I.

O The Power Systems Study Committee (PSSC) has investigated this condition. It has concluded that the system cannot withstand the simultaneous loss of the COTP and one of the existing Intertie lines. The configuration suggested by the commentor would place the COTP and the WAPA line together, which makes a simultaneous loss of both lines a credible event.

SL-121 (continued)

O

COTP LINE ARRANGEMENT FOR
AN EASTERN ROUTING
WITHOUT A NORTH
INTERTIE CROSSING

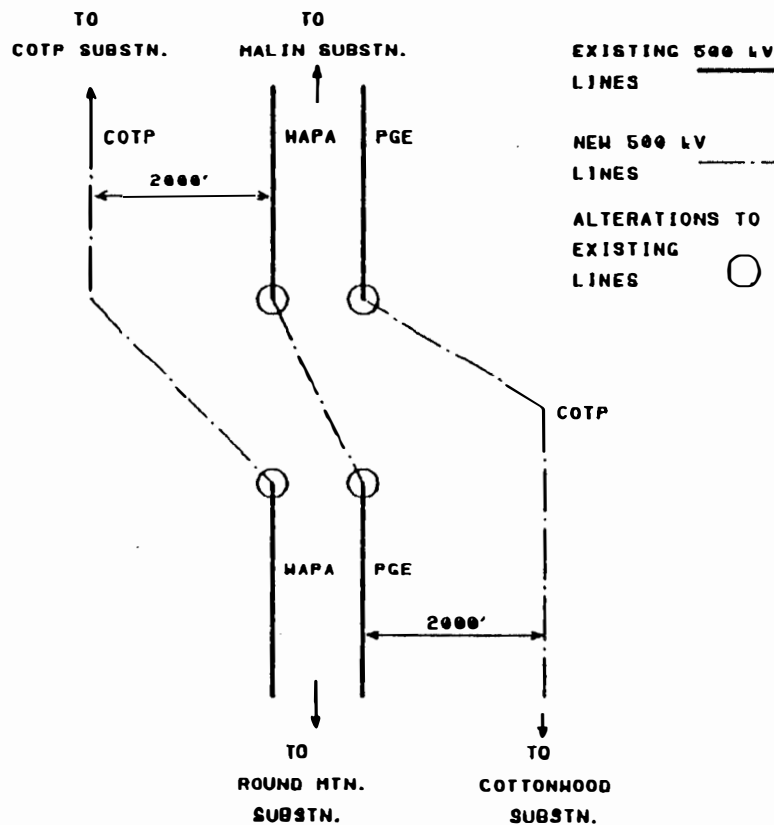


FIGURE 1

SL-121 (continued)

O those performed in the October 1985 report of the Power Systems Study Committee on Corridor Separation.

P 2) Two short underground crossings of the existing intertie in brush land near Malin and Whitmore as described above without the use of any relatively new transmission technology. Instead simply place the line on standard substation buss work and post insulators in either a trench just underground, a building above ground, or a combination of both. By configuration of the trench/building to provide necessary ground separation (about 15 feet) a proven, low technology crossing is possible using common substation, pipeline excavation, and/or warehouse construction technology. At the ends of the crossing the new line would rise from the buss to dead end towers identical to those planned for substation entry or exit. Again if reliability of standard buss technology is of concern an extra phase could be included.

Q A key factor in the inadequacy of the Draft as Supplemented is the total lack of consideration of an economic and environmental comparison of a lower land and environmental value route east of the existing intertie for comparison with those including the preferred alternative to the east. The wide disparity in land and resource values must be presented to properly evaluate the perceived difficulty or expense of crossing or reconfiguring the existing intertie.

P The comment suggests the construction of a crossing of the existing 500 kV intertie in one or two locations, such as near Newell and south of Round Mountain, utilizing a structure or tunnel to enclose or otherwise protect a 500 kV bus erected on supports. The structure would be designed to withstand the failure of the overhead 500 kV intertie above. In response to the suggestion, the following engineering analysis was undertaken.

A building was considered that would be approximately 3,000 to 4,000 feet long, 100 feet wide, and 75 feet high. Fifteen feet of the building's height would be located below the existing grade to provide clearance, requiring excavation. The earth materials removed could be incorporated in the development of a fenced site, isolating the structure from public access. Any remaining materials would have to be disposed of in an environmentally acceptable manner. The terminal structures on either side of the entrance to the building would require the installation of 500 kV bushings constructed of porcelain at a cost of approximately \$500,000 for the bushings and a spare set. If the building were enclosed, approximately 20 million cubic feet of enclosed air would require significant air conditioning services to reduce air temperature increases associated with the operation of 500 kV transmission facility. This may result in undue limitations on thermal capacity. With an enclosed building, a braced roof would be necessary to prevent an outage if the conductors of a crossing line were to fall onto the structure in the area in the immediate vicinity of the crossing. A roof will also be necessary to prevent an outage if a shield wire were to be severed and dragged across the building. Such instances of shield wire failures have been historically documented in California. A conceptual design of such a structure has been developed to consider the suggestion and evaluate its merit. The structure, if enclosed, would require - in addition to air conditioning - power for lighting, sewer, and station security.

A structure of this magnitude would create additional visual impacts for a number of miles around the location. The site requirements are closely related to those of switchyards and stations, for which visual impacts are considered of primary importance. When considering an enclosed structure, a very real concern is the susceptibility to gunshot vandalism of the extremely fragile 500 kV porcelain bushings. It is expected that they will be an inviting target, especially considering the rural nature of this location. These bushings are not as easily replaced as transmission line insulators. Additional measures would have to be taken to protect the 500 kV bushings from such abuse. Approximately 400 bus support insulators within the structure would require regular maintenance and cleaning. In order to accomplish this safely, it may be necessary to take this section of the transmission line out of service periodically.

The Project Architect/Engineer has reviewed the concept of such a structure and reported that it is conceivable that it could be constructed, however, at great cost. A structure requiring a fifteen-foot deep trench would be required if a crossing point

SL-121 (continued)

P
(cont.)

outside the tipover range of an existing structure is available that provides 60 feet of clearance. If such a crossing point is not available, the existing lines would require modification. It is estimated that for one particular design such a structure, 4,000 feet in length, would cost \$14,475,000 assuming that only one such structure in non-forested areas would be required and that modifications to the existing lines would not be necessary. In order to cross the line twice, two such structures would be required. Erecting an enclosed building is considered impractical for the reasons cited above.

In order to eliminate the requirement for air conditioning and the installation of the expensive and fragile 500 kV bushings, it is conceivable that a structure could be erected that is not enclosed, but merely roofed. Such a structure, located in a trench of the dimensions previously described, would be expected to attract roosting birds and other wildlife in the area. In addition, the effects of weather would have to be carefully considered. This includes providing proper drainage and removal of snow. Such a structure would also require a fenced-in area to protect the public. Such a fenced area may serve to preclude the entrance of wildlife into the structure, but would not prevent the problems anticipated with birds nesting within the structure.

Many crossing concepts have been suggested since the conceptual stages of the COTP routing process. Suggestions very similar to the commentors' were made by the engineering staffs of the Participants early in the process. The public also provided many suggestions regarding such a crossing including both underground and overhead concepts. Although it may be feasible to construct such a crossing suggested by the commentor, its actual use must be considered as part of the overall system. A reliability analysis of the commentor's crossing concept may prove acceptable on its own merits, however, from the perspective of the overall system, the use of any crossing of all three 500 kV transmission lines at one location would result in a significant reduction in overall system reliability.

Representatives of all the major utilities in the western United States have participated in one form or another in conducting studies specifically designed to determine the impact upon the electrical transmission system in the event that all three 500 kV transmission lines fail simultaneously. A simultaneous failure has been determined to be one that occurs within one-half hour of the initial event. The study results clearly reveal that such an outage could cause a catastrophic failure of the electric system of the western United States, with the potential of resulting in widespread blackouts. A concept such as the one suggested reduces the level of reliability which must approach unity when one considers simultaneous failure of all three lines. The construction of such a suggested facility represents a very substantial increase in cost that would result in a decrease in reliability.

The commentor further suggested that, in order to eliminate the need for a second crossing, the COTP line be connected to the existing Western Area Power Administration line (the western-most of the two Intertie lines) between Malin and Round Mountain.

SL-121 (continued)

P
(cont.)

This suggestion has been studied by the Power System Studies Committee of the COTP. The conclusions of those studies indicate that the existing Western Area Power Administration line would be of insufficient capacity to serve as the COTP line. Further considerations were given to reconstructing the Western Area Power Administration line to increase its capacity. However, studies of this alternative revealed that, due to the proximity of the PP&L/PGandE 500 kV line, a failure of the COTP and the PP&L/PGandE line would cause an overload of the remaining line, again resulting in the simultaneous failure of all three lines.

The review of this alternative suggestion has resulted in it not being adopted as part of the preferred route since it does not meet the needs of the COTP.

Q

See response to L-307 E.

SL-121 (continued)

B. Environmental Comments

R Since the Supplement employs the same methodology to analyze the proposed minor route adjustments it continues to embody the major methodological inaccuracies identified by the FLSSC in our comments on the Draft EIS/EIR. At the public hearing in Burney on August 4 the FLSSC also provided detailed verbal comments on the inaccuracy of the methodology used to assess resource and economic impacts to forest lands. The magnitude of this error is obvious since to clear the right-of-way the Project will be legally required to file a Timber Harvest Plan and perform exactly the watershed analysis that is not presented in the DEIS.

Since the analytical methods have not been corrected or expanded in the Supplement comments made on the Draft are still current. Those comments included:

T 1) The discussion of cumulative effects on the timberland resource base that supports the entire lumber economy in Shasta and Siskiyou counties is deficient in at least two areas. First, on a macroscopic scale for a project of this size the DEIS does not adequately assess the existing timberland base and its rate of shrinkage. The DEIS simplistically assumes direct physical disruption is the prime mechanism by which these lands are lost and the cumulative impacts and productivity sections (4.4 and 4.5)

R Comment noted.

S The Draft EIS/EIR does not analyze a proposed centerline within a 1,500-foot wide route, nor does it identify the access roads to each individual tower site since a final centerline is yet to be selected. The methodology employed is appropriate for analyses of environmental impacts consistent with NEPA and CEQA for projects still under consideration.

It is not clear that TANC or Western, as a public agencies are required to prepare a timber harvest plan. Please refer to Section 4628 of the Z'berg-Nejedly Forest Practice Act of 1973. If a timber harvest plan is required, TANC intends to comply with the letter and intent of the implementing regulations. A watershed analysis is required in a timber harvest plan. However, in order to adequately prepare a timber harvest plan, there must be a definable centerline based on a proposed 200-foot wide easement within the 1,500-foot wide route. Access roads must be known as well. It is therefore inappropriate to perform the detailed watershed analysis as part of the Draft EIS/EIR. Additional watershed analyses have been added to Section 1.1.4 of Volume 1 of this Final EIS/EIR. Once a specific centerline is located and towers are spotted and access roads are located, we will comply with all applicable federal, state, and local regulations and permit requirements. See Section 1.1.4 of this Final EIS/EIR for a discussion of cumulative forestry impacts.

T The California Board of Forestry estimated that 42,967 acres of timberland have been converted to nontimber-producing uses since 1969. The COTP will remove 1,869 acres of commercial timberland from production (907 acres prime timberland and 962 acres nonprime timberland). This represents 4.34 percent of the total acreage removed from timber production over the last 18 years.

The COTP Participants and lead agencies have no control over the governmental actions responsible for reducing the timber resource base. The lead agencies recognize that while some of the laws cited by the commentor may reduce the total acreage available for timber harvest, these laws and regulations have also served to promote sound resource management and conservation practices. The lead agencies are also bound by these laws and regulations and, as a result, impacts on timber resources by the COTP are also minimized. The preferred route minimizes direct impacts to timber resources as much as possible considering engineering design and reliability constraints. The discussion of cumulative impacts to timber resources has been revised and is presented in Section 1.1.4 of Volume 1 of this Final EIS/EIR.

SL-121 (continued)

T deal only with other transmission projects.

A most cursory analysis shows that governmental actions have had much greater significance in the last 15 years in reducing the resource base than direct losses. These actions must be included in the analysis of evolving impacts on the existing forest resource environment prior to assessment of the project's effect on that environment.

Examples of governmental actions effecting these resources are the Clean Water Act, the California Forest Practice Act, the National Forest Management Act, the Endangered Species Act, and the California Wilderness Act. These actions have resulted in alterations, reductions or outright bans on resource management and/or harvest due to, for example, spotted owl, eagle, etc. habitat reservations, wilderness withdrawals, watershed management requirements, habitat diversity requirements, etc.

U — Second, on a microscopic scale the DEIS proposes to analyze and compensate for lost timberland values on the basis of acres directly effected (Section 3.6, Volume 2A). This method demonstrates a remarkable lack of sophistication in the real world factors that effect timber resource management. The California Forest Practice Act requires timber harvest plans (THP) prior to harvest. In a recent court case, E.P.I.C. versus Johnson, et al. cumulative

U See response to SL-121 S.

SL-121 (continued)

U assessment of watershed effects was required prior to timber harvest plan approval by the California Department of Forestry (see Attachment 5 to the FLSSC comments on the Draft). The USFS has been implementing a similar procedure for several years as a result of a Management Agency Agreement with the SWRCB to develop a methodology for evaluation and control of cumulative off-site watershed effects (see Attachment 6 to the FLSSC comments on the Draft EIR/EIS).

The USFS also has diversity criteria that effect harvest and which are applied on a management area basis. These criteria are described in the Timber Sale Preparation Handbook and represent goals for helping to maintain habitat diversity over time. The criteria place restrictions on the size, spacing, and timing of management practices and clearcuts in particular.

V In these types of evaluation and management procedures a cleared forest land right-of-way (such as is produced by a transmission corridor that is not allowed to revegetate with trees) must be treated for management and abatement proposes as permanent clear cut or roaded area, producing more restrictive management requirements on the remainder of the watershed or management area. To be adequate in assessment of local environmental effects the DEIS must on a watershed by watershed(and management area basis for USFS diversity

V

See response to SL-121 S. Also, Section 1.1.4 has been revised to include additional data on the impact of the COTP to long-term timber yields by national forest management area.

SL-121 (continued)

V criteria) basis assess each route segment for its cumulative effect on forest management by the other landowners in the drainage or the USPS in the case of diversity criteria.

Such analyses will produce a land disturbance multiplier effect in each drainage and management area that must then be used to assess macroscopic cumulative effects as well as the adequate and fair compensation of on and off-site forest landowners. To do otherwise will have an inverse condemnation effect on these landowners.

W

C. Economic Comments

X As stated in our previous comments on the Draft EIS/EIR the economic analysis is inadequate and in error. Again the Supplement makes no effort to correct any of the deficiencies identified in the Draft by the FLSSC. This is surprising since several of these same economic issues were also cited by the California Public Utilities Commission in the May 8, 1987 rejection of the filings by the COTP project I.O.U. participants for Certificates of Public Convenience and Necessity needed to participate in the project. It would appear counter productive for TANC to produce and approve a state CEQA document that does not meet the needs of the primary state regulatory agency changed with approving the participation of Companies holding a forty percent share of the project.

Y

W

See responses to SL-121 S and L-184 A.

X

These and other comments are addressed in this Final EIS/EIR. The prior comments have been considered at length; see responses to L-307 A through L-307 UU. Similarly, the comments of the CPUC have been considered at length; see responses to L-306 A through L-306 Y3.

Y

CPUC is a responsible agency under CEQA for the COTP and has provided information for the Los Banos-Gates environmental analysis. Responses to their comments can be found at L-306 A through L-306 Y3. See also the response to L-306 V.

SL-121 (continued)

At a minimum the micro-economic analysis must be expanded to:

- Z** [1) assess the cumulative effects to the economy of Shasta and Siskiyou Counties of further productive forest land losses, and
- AA** [2) embody the same analytical procedure as legally required of timber producers to determine local timber harvest effects of the establishment of a permanent clear-cut in each timber producing watershed crossed by the project.

VI. Conclusions

BB [To provide decision makers and the public with adequate information on which to evaluate the selection of a preferred alternative in the Northern Section of the project the DEIS must:

- CC** [1) Reanalyze at a minimum the preferred alternative bringing into the analysis the cumulative effects of forest land losses and the effects on adjacent lands of the cumulative watershed analysis required by California law on timber harvest planning.
- 2) Analyze in equivalent detail on a resource and economic basis a route east of the existing intertie in low

Z The socioeconomic analysis does consider the effects upon the economies of Shasta and Siskiyou Counties by examining factors such as the loss of Forest Service Return to Counties, the amount of tax funds received by the counties (both property tax and sales taxes received during the construction phase), loss of timber jobs and total jobs (which are based upon a multiplier effect). The cumulative effects of the Project were addressed in the cumulative impact section of the Draft EIS/EIR.

AA See response to SL-121 S.

BB See response to SL-121 S.

CC See responses to L-307 E and L-307 G.

SL-121 (continued)

CC productivity forest and brush land utilizing existing rights-of-way wherever possible.

DD 3) Re-examine and cost estimate from a civil and reliability engineering point of view the options for line crossings or exchanges expanded to include the above mentioned technologically simple air insulated busses protected underground or in a tunnel like building.

EE 4) Provide a comparison of the alternatives on a resource, economic, and reliability basis to allow informed decision making as envisioned in both NEPA and CEQA.

FF As stated in our previous comments on the Draft EIS/EIR it appears an environmentally and economically preferable route was initially rejected due to reasons which later became invalid. Then, rather than include the route for analysis as urged by many parties, COTP consultants used the initial reasons for rejection to continue to justify rejection even though they were no longer valid. As a result, at this late date the DEIS cannot be considered complete until the apparently most logical and least environmentally costly east side Eastern corridor has been adequately evaluated.

GG With respect to reliability we submit that the project designers appear to have become obsessed with achieving significantly higher reliability with the proposed project

DD See response to SL-121 P.

EE A comparison of the alternatives on a resource, economic, and reliability basis was presented in the Draft and Supplement to the Draft EIS/EIR.

FF See response to L-307 G and T-69 F.

GG See responses to L-306 KK and L-335 E.

SL-121 (continued)

GG than is currently existing. Project documentation and discussion with TANC personnel (John Forman) indicate that reliability criteria demand the design of a third intertie provide for a single (new) line outage without compromise of system reliability. The design is also reputed to provide sufficient capacity so the single new line can handle an outage of both old lines and maintain system reliability. No where do we find data to indicate the reliability of the proposed project must be 100 percent and thus automatically eliminate all innovative intertie undercrossing configurations and an environmentally superior eastern route from consideration.

HH

We again point out that the reliability of any scheme for crossing under the existing intertie in a protected enclosure, tunnel, or conduit only effects the single (new) line, and existing design considerations for all corridors provide for a single line outage without compromise of WSCC reliability criteria. Consequently, underground reliability should not be an issue regarding the feasibility of an eastern route.

HH

See response to SL-121 P.

SL-122



Department of Energy
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

August 5, 1987

By registered mail EVR

Mr. Jim Feider
Deputy Area Manager
Sacramento Area Office
Western Area Power Administration
1825 Bell Street
Sacramento, CA 95825

Dear Jim:

We have reviewed the Supplement to the Draft Environmental Impact Statement for the California-Oregon Transmission Project and have a few comments, which are enclosed.

A [Overall, the document looked very satisfactory. The evaluations for the Southern Oregon Substation site alternative and the re-routing locations for the Loveness Airstrip were thorough.

If you have questions about our comments, or need clarification, please call me at FTS 429-4611.

Sincerely,

Timothy J. Murray, Chief
Environmental Resources Branch

Enclosure

cc:
Paul Higgins, PP&L
Gary Bauer, PGE
Gary Frey, WAPA, Colorado

A Your comment on the adequacy of the evaluations is noted.



SL-122 (continued)

1

Comments on the Supplement to the Draft COTP EIS

B Section 2.1.1, first paragraph: Change 1/4 mile north to read 1/2 mile north.

C Table 3.1-1: The comparison of the totals between A. and B., under Estimated Construction Cost, seems to be too far apart. You may want to tabulate these figures again. We feel they should be closer together.

D Wording in reference to the Eugene-Medford Project: We would like to reaffirm our recommendation that the language regarding the Eugene-Medford Project in the FEIS reflect the longer version of the relationship to the PNW Reinforcement Project as stated in our letter of May 21, 1987. In that letter we suggested the following language:

Volume 1, COTP:

Under Section 2.3, page 2.3-4, delete all that is there now and replace with: "The Eugene-Medford Project is a 500-kV transmission line planned by PP&L, to be built from Alvey Substation near Eugene, Oregon, to Meridian Substation near Medford, Oregon, to serve PP&L customer loads in southern Oregon and northern California. This 500-kV line will run 135 miles, replacing 133 miles of an existing 230-kV line, except for 11 miles of new alignment between Dixonville and Ramsey Canyon and short segments of parallel construction in the Medford area.

PP&L has obtained a site certificate from the Oregon Energy Facility Siting Council, and preconstruction work on the line has begun. The environmental impacts were discussed in the EIS prepared for the project by the Bureau of Land Management, BPA, and the State of Oregon in 1983 (FES83-23). The Bureau of Land Management, in a Record of Decision dated December 14, 1984, decided to grant rights-of-way for use of public lands. BPA, in a Record of Decision dated October 28, 1985, decided to build the 2-mile, 500-kV segment from Alvey Substation to Spencer, both near Eugene.

As initially proposed, the Eugene-Medford Project and the COTP were independently justified, and served different needs. The Eugene-Medford Project focused on supplying southern Oregon and northern California loads. The COTP, Los Banos-Gates Project, and PNW Reinforcement Project would allow two-way transfers of power between the Pacific Northwest and the Southwest.

In the summer of 1986, BPA and PP&L signed an agreement that provides for the present and future planning and joint use of PP&L's and BPA's high-voltage transmission facilities to serve PP&L's loads in southern Oregon, and for Intertie transactions to California. The agreement gives BPA the right to develop the Plan-of-Service for any upgrades of the AC Intertie to 4800 MW, if such upgrade occurs, including connection to the California-Oregon Transmission Project proposed by California entities. The agreement also grants BPA an option to acquire up to a 50 percent interest in the incremental capacity of PP&L's planned Eugene-Medford 500-kV line.

B Comment noted. This change is noted in Section 2.2 of Volume 1 of this Final EIS/EIR.

C The estimated construction of North 1 and N-10A, N-10E has been recalculated. The estimated construction cost for North 1 is \$3,545,000. The estimated construction cost of N-10A, N-10E is \$5,018,000.

D The change has been made in Section 1.1.2 of Volume 1 of this document.

SL-122 (continued)

2

D | In developing the preliminary Plan-of-Service for the PNW Reinforcement Project, planners recognized potential economic and environmental advantages of also using the Eugene-Medford Project to support the California-Oregon Transmission Project at 1600 MW capacity. Because the Eugene-Medford line has already been sited and scheduled for construction, any alternative line would cost more and have greater environmental impact. If BPA exercises its option under the agreement with PP&L, a portion of the Eugene-Medford line's capacity would become a part of the Pacific Northwest Reinforcement Project.

SL-123

POSITIVE RESOLUTION OF POWERLINE PROBLEMS

COMMENTS ON THE
SUPPLEMENT TO THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/
ENVIRONMENTAL IMPACT REPORT

for the

CALIFORNIA-OREGON TRANSMISSION PROJECT

and the

LOS BANOS-GATES TRANSMISSION PROJECT

August 17, 1987

SL-123 (continued)

Positive Resolution
of Powerline Problems **PROPP**

PO BOX 339 · BETHEL ISLAND, CALIFORNIA 94511 · 415-884-3382/884-2110

Our organization, PROPP -- Positive Resolution of Powerline Problems -- appreciates this opportunity to comment on the Supplement to the Draft EIS/EIR for the California-Oregon Transmission Project.

PROPP's steering committee represents a diversity of interests and municipalities located in what the Draft EIS/EIR refers to as the "Southern Section." The committee is comprised of representatives from:

Reclamation District 799 - Bob Gromm
Reclamation District 2065 - John Mass, Jr.
Bethel Island Municipal Improvement District - Jasper Sipes
City of Brentwood - Art Gonzales
Byron School District - Mary Beth Wolford
Discovery Bay Builders and DB Design and Environmental
Review Committee - Roberta Fuss
Byron Chamber of Commerce - Ann Templeton
Bethel Island Chamber of Commerce - Ardith Wallace
Bethel Island Golf Course - Coreen Hornbeak
Byron Sanitary District - Earl Wetzel
Bethel Island Area Association - Daniel C. Miller
Knightsen Community Council - Christine Jenneiahn
Calliente Isle Yacht Club - Charles Cline
Jersey Island Company - Cynthia Hummel
Large Landowners & Ranchers - Bob Dal Porto, Ted & Helen
Halsey, Sheldon G. Moore, Barbara deFremery,
Leo Mantelli
Small Ranchers & Farmers - Roger Cottle, Aaron B. Carpoiff

Our area is a unique recreational and agricultural community. It is considered the gateway to the California Sacramento-San Joaquin Delta where visitors from all over the state come to enjoy water skiing, house boating, power boating, fishing, windsurfing, and hunting in the Delta's 1200 miles of waterways. The California Environmental Quality Act has designated the Sacramento-San Joaquin Delta as an area of "critical environmental sensitivity" in Section 15206 where it speaks of projects of statewide, regional, or areawide significance.

The new route -- SOUTH 1 -- proposed in supplement is not any better, in fact is worse in many ways, than the "preferred route" discussed in the Draft EIR/EIS.

A

Comment noted.

B

South 1 has been recommended as environmentally superior because it affects slightly less irrigated land and avoids two houses. A centerline is being developed for the South 1 option that will optimize the best portions of the two routes. Western is continuing to consult with landowners regarding the best possible siting for the line.

SL-123 (continued)

C (1) The first and most important objection we have to this and any other transmission line in our area is that the COT Project overall is not cost effective.

Our energy expert's analysis of COTP's faulty economic basis was presented in our comments on the Draft EIS/EIR. We want to continue to go on record with our opposition to the project's economics and the lack of need for additional transmission lines. We are not alone in our stand.

The Public Staff Division of the California Public Utilities Commission also noted the project's faulty cost basis in their recent comments (July 31, 1987) on "Excess Electrical Generating Capacity. The PSD report stated on page 2:

"Utilities have added a great deal of expensive capacity in recent years and are proposing to add more. For example, they are proposing new transmission lines that will be used to purchase power at a fraction below their avoided costs. The savings from this small discount will not even cover the cost of the lines. Moreover, the lines are not needed to keep the lights on because we are in an excess supply situation."

D The City of Antioch also joined us in objecting to the costs involved and the overall public need for the COTP. The city council unanimously passed a resolution on June 9, 1987 calling for "careful reconsideration of the project as it relates to the overall public need."

E (2) The Supplement is contradictory within itself. In the section on the SOUTH 1 option it states on page 4.1-6 that the option is "slightly longer in length than the preferred route." While only two pages earlier it stated, "SOUTH 1 is shorter." You can't have it both ways. It looks longer on the map, but this sort of error does not give the public much confidence in the project's engineering expertise.

F (3) The Supplement did not respond to routing problems brought forth in PROPP'S comments in the Draft EIS/EIR. Despite the fact that CEQA designates the Delta as an area of special environmental concern and of significant importance to the state, the supplement did not take into account the detrimental effects of the transmission lines on this Delta recreation area of statewide importance.

G The only criteria for locations of recreational importance in the Supplement were "scenic highways" and "wild rivers." These are not found in our area and therefore

C These questions are addressed in responses presented in the Final EIS/EIR. The commentor's prior comments on the economics of the Project have been considered at length; see responses to L-309 A through L-309 L3; especially L-309 W through L-309 NN.

Similarly, the comments provided by the CPUC have been considered at length; see responses to L-306 A through L-306 Y3. The quote from the CPUC PSD comments in another forum is inconsistent with the detailed analysis in the Draft EIS/EIR, and may or may not be directed at the Project. Lengthy consideration of CPUC comments on the economics of the Project has not changed the prior conclusion that Project benefits exceed costs.

D Comment noted. The City of Antioch's letter is included as SL-81.

E The statement on page 4.1-6 of the Supplement to the Draft EIS/EIR is incorrect. South 1 is approximately .25 of a mile shorter than the preferred route.

F The transmission line routing process attempted to minimize the COTP impact on designated recreation areas such as parks, and dispersed recreation areas such as the Delta. However, engineering considerations and other environmental resource constraints were such that the Delta's extensive dispersed recreation resources such as boating, fishing, and hunting areas could not be totally avoided.

G The resources you refer to, in addition to National Trails, were used to compare routes for a number of crossings of recreation travel routes. No routes in the Southern Section contain these Federally designated resources, just as none contain prime timber or Forest Service lands or other resources that are appropriate for comparisons of northern routes, but not those in the Delta area. Recreational travel routes are not the only resources with a visual component. Reference to Tables 4.1-1 and 4.2-1 and the discussions of visual impacts on Pages 4.1-5 and 4.2-5 of the Supplement to the Draft EIS/EIR indicates that they were

SL-123 (continued)

G the supplement ignored the harmful visual impacts in this sensitive area. We urge you to read again our comments on the Draft EIS/EIR and reconsider the project in light of the Delta's importance as recreational resource for the entire state of California.

The proposed SOUTH 1 option would cause more visual harm to the Delta area because it requires three more taller angle towers.

H Further harm to the recreational environment would be caused by the SOUTH 1 option as it crosses over Veal Farms, an established pheasant hunting club.

I (4) The SOUTH 1 route proposed in the supplement does not offer any solution to a major problem in Reclamation District 799. In our comments on the Draft EIS/EIR and in oral testimony given at public hearings by a district director, the matter of the reclamation district's pump station was raised as a serious concern. Both the "preferred route" and SOUTH 1 run directly over the pump station. The station cannot be located under a transmission line, according to COTP's own engineering guidelines. If the pump station has to be moved out from under the lines, the entire drainage system for Reclamation District 799 will have to be rerouted. The cost of condemning residential property and rebuilding the pump station, as well as revamping the entire drainage canal system of the tract will be very expensive.

J (5) We would also like to go on record opposing the proposed transmission lines as a potential health hazard. A recent article in the Wall Street Journal (July 16, 1987) shed new light on the suspected links between electromagnetism and cancer. The Wall Street Journal is not a sensation-mongering newspaper and its editorial bias is very pro business and utilities. The newspaper's article pointed out that even the utility-funded research group, Electric Power Research Institute, is beginning to worry about the implications of potential health hazards. The institute is planning a \$2.5 million research program now, after reputable scientists have sounded a warning.

Residents and visitors in our communities have stated publicly that they do not want to be guinea pigs for a health hazards research project. Utilities in Florida and in Texas are facing lawsuits from school districts fearful of potential harmful health effects from proposed power lines.

K (6) The new proposed SOUTH 1 route does not provide better physical separation from the existing transmission lines in our area. It does not provide a significant improvement for

G (cont.) considered in the analysis of routes in the Delta. The discussion on Page 4.2-5 recognizes potential impacts along travel routes such as Interstate 580 and the California Aqueduct Bikeway as well as in residential area.

H See response to L-309 L1.

I See response to L-267 A.

J See response to SL-51 A.

K Part of this comment, referring to an Antioch alternative route, is responded to in Section 1.2.2. Although the South 1 Alternative is in some places closer to the existing Intertie than the preferred route, it still meets the 2,000-foot separation criteria. An explanation of the 2,000-foot separation criteria is given in Sargent & Lundy's "Centerline Separation Reliability Analysis Report" as is referenced in the Draft EIS/EIR.

SL-123 (continued)

K system reliability, in fact it places the lines closer together at some points. If the project engineers are truly concerned about system reliability provided by wide separations of transmission lines, then the route to the west through Antioch is one feasible alternative. Distances of 2,000 feet or less will not protect the power corridor from hazards such as earthquakes, violent storms, and/or saboteurs. This leaves only the one reliability hazard of aircraft impact. What is the demonstrable incidence of aircraft impacts with 500 kv transmission lines?

M Because adequate physical separation does not seem to be a primary concern of the project's proponents in our area (if it were other would have been more vigorously pursued), then PROPP suggests consideration of a route next to or in the existing corridor. The existing towers and lines are already a blight our area, but a new line cutting through this flat landscape will do irreparable harm to the visual environment. Upgrading the existing towers would be preferable to a new corridor and less visually intrusive in this recreation and farming area. Using the existing corridor would also eliminate the problem of moving the pump station in Reclamation District 799, avoid cutting across parcels of land which have development plans, and avoid cutting across existing hunting clubs.

N (7) We urge you to reread our comments submitted on the Draft EIS/EIR and prepare another supplement which will fully explore the valid concerns raised by PROPP. Moving the proposed lines a few feet in one direction or another is not an adequate solution.

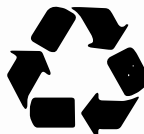
L See response to SL-123 K. Sargent & Lundy's "Centerline Separation Reliability Analysis" report states that the Vaca-Dixon-Table Mountain and the Table Mountain-Tesla 500 kv lines have experienced five aircraft incidents over the past 11 years.

M See responses to L-14 D, L-15 E, L-267 A, and L-309 YY.

N PROPP's concerns are addressed in the responses to L-309. See also the response to L-203 B.



Environmental Advocates



Second and Cherry Streets, Chico, CA 95928
(916) 895-4354

August 14, 1987

California-Oregon Transmission Project
Environmental Coordinator
P.O. Box 660970
Sacramento, CA 95866

To Whom It May Concern:

Environmental Advocates has serious concerns regarding the C.O.T.P. which are not dealt with adequately in the Draft E.I.S./E.I.R.

- A** The project under consideration will cause serious and significant environmental damages. Those impacts as addressed in the routing options include soil erosion, water quality degradation impact on habitat of numerous special status plant species as well as vernal pools, sensitive meadow communities, and prospective archeological sites. Important deer and elk ranges and deer fawning habitat will be adversely effected as well as bear habitat, a spotted owl management unit, and bald eagle nesting and foraging areas. The visual impacts of proposed new transmission lines is unacceptable. Transmission towers and lines are incompatible with existing landscapes as well as those areas where residences are present.
- B** In addition Environmental Advocates feel that the documents fail to adequately address several important issues including:
- 1) Potential human casualties during construction running life and maintenance.
 - 2) Effects of herbicide use on plant and animal communities.
 - 3) Type and number of birds injured or killed as a result of impact with towers and lines.
 - 4) Type and number of animals killed during construction, running life, and maintenance.
 - 5) Impact on fisheries.
 - 6) Environmental impacts of unauthorized use of access roads.
- C** The documents fail to adequately substantiate the financial considerations as overriding.
- D** In addition a worse case analysis for system reliability has not been included as required by law.
- E** In the event that an overriding concern is found justifying the C.O.T.P. We feel the only option should be the upgrading of existing transmission corridors. As pointed out in the Draft E.I.R. (2.5-7) this would be the least expensive both financially and environmentally.

- A** Comment noted. These impacts are addressed in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR.
- B**
- 1) Safety is a major concern of the COTP sponsors and contractors. Experience has led to many measures that reduce the potential of human casualties during the construction and maintenance of the proposed line.
 - 2) The effects of herbicide use on plant and animal communities was discussed in the Draft EIS/EIR. The Project has adopted mitigation measures which would minimize herbicide use. See Section 1.1.5 of Volume 1 of this Final EIS/EIR.
 - 3) The types of birds affected by the proposed line are discussed in the wildlife resource section of Volumes 1 and 2A of the Draft EIS/EIR.
 - 4) The impact on wildlife from transmission line construction and maintenance is discussed in the wildlife resource section of Volumes 1 and 2A of the Draft EIS/EIR.
 - 5) Impacts to fisheries is discussed in the water resource/fisheries section of Volumes 1 and 2A of the Draft EIS/EIR.

SL-124 (continued)

B
(cont.)

- 6) COTP Participants or other entities responsible for the operation and maintenance of the transmission line will cooperate with landowners to limit public use of private access roads and rights of way on private land when so requested. Gates will be constructed in existing fences when requested by individual landowners. Gates will not be removed on public lands unless specifically requested by the managing agency. Access road entrances will be located so as to discourage vehicles from driving around gates or large earthen barriers. Further, all access roads not required for regular maintenance activities will be closed using the most effective and least environmentally damaging methods.

C

Whether the comment is referring to specific transmission line route decisions or to the decision to construct a transmission line, no legal requirement exists that an EIS/EIR proves "financial considerations" to be overriding. However, economic factors are appropriately considered when making a determination that a project or project location is "feasible" or "infeasible."

D

The commentor refers to a statement in CEQ Regulations for implementing NEPA (40 CFR 1502.22 (b)(2)) that was in effect until changed (51 FR 15618). There is no longer a requirement for a worst case analysis. Project engineers have evaluated the credibility of a three-line outage and its impacts upon the WSCC system.

E

See response to T-70 B.

SL-124 (continued)

California-Oregon Transmission Project
August 14, 1987
Page 2

F In conclusion we feel that the environmental damages caused will outweigh the as yet unsubstantiated need for a project such as this.

G We would appreciate you informing us of any future action on this project.
Sincerely,

David M. Howard
Paralegal Intern
Environmental Advocates

dv

F Comment noted. The need for the COTP is described under Section 1.0 of Volume 1 of the Draft EIS/EIR and further discussed under Section 1.1 of Volume 1 of this Final EIS/EIR.

G The commentor is on the COTP mailing list and will be kept informed of any future action on the Project.

SL-125

COTP letter, 8/17/87
page #1

August 17th, 1987

Environmental Coordinator
California-Oregon Transmission Project
P. O. Box 660970
Sacramento, California 95866

RE: Submission of comments

COTP Staff —

INTRODUCTION AND GENERAL COMMENTS:

Once again, I would like to convey a "thank-you" for an opportunity to express my comments and questions on the COTP.

My comments at this time are in response to the June 23, 1987 Supplement, in part, and to the public hearing in Tracy, California August 6, 1987. It was a pleasure to be able to meet some of the staff personnel, and to be able to connect smiles and faces to voices on the telephone, and to names on response letters to questions.

A I am still surprised and impressed by the overall process which is involved with such a project, and by your levels of patience, interest and concern with regard to the public's input and comments. I must also express an appreciation of the education I have been able to gain in the past year or so with respect to high-voltage electrical transmission. My thanks to you for the opportunity to have a number of pounds of written information to study.

IMPRESSIONS OF THE TRACY PUBLIC HEARING, 8/6/87:

B It would seem that there is still a fair amount of "homework" left to be done on the proposed line in this area. Moving the route a little to solve a few problems has introduced a number of others. Either someone on your staff didn't see all of what was happening — or going to happen — in the Brentwood-Discovery Bay vicinity, or somebody out there has changed their minds about what to do with their property.

Also, someone might explain the "process" to some of the people present — that the participants proposing any major project are the

A Comment noted. The lead agencies have made considerable effort to work with the public since the beginning of the COTP planning process.

B Site-specific alignment within the 1,500-foot wide route will be determined based upon detailed engineering design and discussions with landowners. Your observation that the COTP will be built only if it is deemed in the public interest is accurate.

- B ones expected to prepare EIR/EIS documentation on it, themselves... And explore the possible alternatives and options, themselves... And come to the final decisions for a plan of action (or "no action," as is sometimes the case), also by themselves, after the input is collected from as many sides and viewpoints and concerns as possible. Independent views are collected along the way, which influence the final choice of options and action. If enough input is obtained which proves a project ineffective, inappropriate, and/or not cost-effective, then it will not be implemented.

SPECIFIC COMMENTS OR QUESTIONS:

- C 1. Section 3.10 (of vol. 2A) outlined the field effects of the COTP. How do the characteristics designed into the Project compare with the already existing two 500-kV transmission lines? How has the knowledge and understanding of the effects of HV lines gained in the past twenty years (since the existing lines were designed and constructed) benefitted this proposal?
- D 2. The environmental concerns, long-term and short, relating to the construction of the COTP have been extensively outlined for impact and mitigation. With respect to the existing Western 230-kV line south of the San Joaquin River crossing, assuming it is slated for removal with the completion of the new line, are similar efforts going to be considered in the dismantling of this line when the new 500-kV line is constructed away from this existing easement — minimizing ground disturbances, restoring tower sites, etc?
- Also, does Western plan on holding on to the existing 230-kV easement rights?
- E 3. One of the concerns I expressed in a past letter, the routing of the proposed line in the Round Mountain-Pit River vicinity causing multiple river crossings in rugged terrain and the impact on the riparian wildlife, was finally answered at the Tracy meeting on several levels by several COTP staffmembers (John Forman, Cheryl Shields). In the final EIR/EIS, is it possible to include crossing profiles of the major river-crossings illustrating the minimized wildlife (and possible bird impacts) by the elevation of the wires over the water?
- F Also, what techniques are involved with making the wires "more visible" to the birds, without causing enhanced visibility to humans, as well?
- C Calculations of levels of electromagnetic fields using the proposed tower/conductor configurations indicate levels below those associated with the existing 500 kV transmission lines in the area. During the past 20 years, significant progress has been made in hardware/conductor design to reduce field magnitudes.
- D Future use of the existing 230 kV Western transmission lines south of the Sacramento and San Joaquin River crossings is undetermined at this time. Western will study other transmission needs in the area to determine if the remaining 230 kV lines can be used in lieu of new lines before making a decision to remove the towers and foundations or to give up the existing easement rights. If the line were to be removed, similar mitigation would be employed as suggested.
- E Specific profiles are not included in the Final EIS/EIR as they are dependent on centerline selection. The centerline location will depend on coordination with other agencies who have concerns with various resources. Mitigation for some impacts involves cooperation among agencies in centerline selection.
- F Enhancing visibility for birds will unavoidably make wires more visible to humans. Techniques that could be used to mark wires include placement of brightly colored aircraft marker balls, hanging of flags or streamers, increasing wire diameter, placing colored sheaths over lines, or coloring wires themselves. The engineering feasibility of these methods must be determined on a site-specific basis.

G As a side-note on the impact of 500-kV transmission lines on birds, the possible inclusion of the photograph on page 22 of BPA's "Electrical and Biological Effects of Transmission Lines: A Review" might be of interest.

H 4. What relationship will exist between the COTP and the SMUD-SIERRA proposed trans-Sierra 345-kV intertie line? (I realize they are two separate and unrelated projects, as pointed-out in the draft EIR/EIS. My question deals with the proximity of the two projects, and with SMUD as a participant in both projects. This can be answered as personal communications, as opposed to inclusion in the final EIR/EIS.)

I 5. Relating to the 500-kV substations at Tracy and Oneida, how will the impact of the July 8, 1987 North Palm Springs M5.9 earthquake on the Devers substation (as discussed in the November 1986 "California Geology") affect the design and installation of electrical components at the two substations?

J 6. Relating to the PNW Reinforcement Project, how might BPA's purchase of the incremental capacity of the now-under-construction Eugene-Medford 500-kV line to support the Interite system affect the anticipated need for a second Eugene-Medford 500-kV line (as noted in the Final EIS for that project, page I-41)?

K 7. COTP crossing of San Joaquin River: Is there any intention of moving the proposed river-crossing further to the east, to allow for a 2,000-foot separation from the existing 500-kV Intertie lines? The existing 230-kV towers are in close-proximity to the existing lines, at present.)

L 8. With respect to the landowners' complaints and criticisms of the routing plans in the Brentwood-Discovery Bay vicinity, are there any considerations to relocate one of the existing Intertie lines to the west at least 2,000 feet, and simply upgrade the existing Western 230-kV double-circuit line to the new 500-kV Tracy substation? (Similar to the concept of relocating the existing Intertie lines near Newall, California.) This might allow construction of the 500-kV Intertie line west of the existing easements without having to cross any lines.

N 9. One of the design features of the COTP is to allow at least a 2,000-foot separation from the existing two Interties. Without the BPA

G Suggestion noted. On page 22 of the cited report, it has been demonstrated that raptors can and do utilize transmission towers for nesting and hunting platforms.

H There is no direct relationship between the two projects. Each project will have to be justified independently of the other.

I The two substations and the series compensation station will be designed in accordance with the required seismic design criteria in use in California.

J The timing of any second Eugene-Medford Transmission Line, regardless of whether BPA exercises its option or not, is well beyond Pacific's planning horizon at this time. The possibility of a second line was an important land use planning consideration in evaluating the alternatives and options in the FEIS for the first Eugene-Medford 500 kV line.

K The towers located at the San Joaquin River crossing contain no static wires, are shown on all aviation maps as a hazard, and are well marked. The 2,000-foot separation criteria is based upon an airplane hitting the static wire and dragging it across the other line. The design of the existing river crossing eliminates this as a credible outage.

L See Section 1.2.2 of this Final EIS/EIR. This comment is responded to under configurations not previously considered; the Beebe relocation. An alternative was suggested as a result of the Supplement to the Draft EIS/EIR that involves the relocation of one of the two existing PGandE 500 kV Intertie lines a minimum of 2,000 feet to the west in the vicinity of Brentwood and Discovery Bay. During the early development stage, a routing alternative was considered for locating the COTP 500 kV transmission line to the west of the existing Intertie along segments S9A, S9A, S9B, and S9C. This early routing option required a crossing of the two adjacent Intertie lines in order to reach Tracy Substation and was rejected in part because of this crossing.

The alternative suggested by Mr. Beebe would upgrade in place the existing Western Area Power Administration 230 kV transmission line to a 500 kV transmission line (Upgrade - Segment 8F). In addition, it would relocate the westernmost of PGandE's 500 kV transmission lines a minimum of 2,000 feet to the west in order to eliminate the requirement for a crossing near Tracy Substation.

M No Reply to
the 8/17/87 letter
for comment on
the 500 kV line
near RDD, 8/17

L
(cont.)

The suggested alternative would require the construction of two transmission lines; one along the upgrade, and one to relocate the existing PGandE line resulting in an increased cost of approximately \$3.5 million. A total length of 48.8 miles of 500 kV transmission line would be constructed to meet the requirements of this suggestion. Of that distance, 22.5 miles would be along the upgrade and 26.3 miles would be new construction of the PGandE line.

A comparison of impacts was conducted comparing the preferred alternative with the aggregate of line segments S8A, S9A, S9B, S9C, and S8F (upgrade in place). Results of the comparison are shown on Table 1.2.2-7 and indicate that Mr. Beebe's alternative suggestion would reduce the number of new structures in wetlands or floodplains; reduce the number of miles transmission line in bird flight zones, thus reducing the potential for bird collisions with the transmission line; reduce the number of miles crossed of agricultural preserve lands; and reduce by slightly (over two acres) the number of total agricultural acreage removed. However, the results of the comparison also reveal that Mr. Beebe's suggestion would result in an increase of the number of dwellings located within the right-of-way (200 feet) by approximately 16, an increase in the number of dwellings within 1,000 feet of the reference centerline, and an increase to the miles of irrigated cropland affected during construction and therefore an increase in short-term agricultural losses. An assessment of the visual resources indicates that Mr. Beebe's suggestion would increase the number of dwellings located in the foreground within 1.2 miles of the transmission line routing. Accordingly, the average number of dwellings per mile is also increased.

From an environmental perspective, the impacts analyzed would have effects on Sherman Island on the west side of the existing Intertie rather than the effects on the east side with the COTP preferred route. Also affected would be the areas of Jersey Island Road south of Dutch Slough, along Cypress, Delta, Orwood, Point of Timber, Marsh Creek, and Bixler Roads. The suggested alternative would also be located near the Dutch Slough gas fields, and nearer to the Contra Costa County Boys Ranch.

From an overall perspective, to build only the preferred route affects 26.4 miles of right-of-way. To build the upgrade and to relocate one of the existing lines would impact up to 26.3 miles of new right-of-way and 22.5 miles of existing right-of-way due to construction activities. Although the suggestion does have some merit in reducing certain impacts, the overall impacts associated with affecting only one right-of-way along the preferred route are less than the impact of the suggestion, even when considering that a portion of the suggested route will be done along the upgrade. Based on the above, this alternative has not been adopted as part of the preferred route. The comment is also responded to in Section 1.2.2 of Volume 1 of this Final EIS/EIR.

M

See response to L-91 D and Section 4.1.4 in the Phase II Report of Volume 2A of the Draft EIS/EIR.

SL-125 (continued)

COTP letter, 8/17/87
page #4

N

option to purchase the additional capacity of the Eugene-Medford line, the existing Intertie corridor in central Oregon has three 500-kV lines running parallel in close proximity from Buckley south to Malin. Why the need to maintain a separation in California, when one does not appear to exist for much of the lines in Oregon?

For your time and attention, once again, my appreciation and thanks are extended. And, too, my thank-you for the opportunity to meet some of the staff at the Tracy meeting.

Sincerely,



Richard D. Beebe
1280 Coolidge Ave.
Tracy, California 95376
209/836-9262

N

The commentor is correct that one of the design criteria of the COTP is to provide 2,000 feet of separation for the purpose of reliability of operating all three 500 kV transmission lines. Studies were conducted to determine the consequences of the simultaneous failure of all three 500 kV transmission lines which represents loss of 4,800 MW of energy being transferred. These studies revealed that sudden loss of this amount of energy being transferred from the northwest grid into California could result in the catastrophic breakup and failure of the electric transmission system throughout the Western United States. The effect of the simultaneous failure of three 500 kV transmission lines within Oregon on the BPA system is under review. Such an outage may not result in such a catastrophic failure due to the availability of separate paths for energy to flow between end points within the Northwest transmission network. In addition, electric utilities have been encouraged by the U. S. Department of Energy to avoid heavy concentrations of power facilities that could result in catastrophic failure.

STATE OF CALIFORNIA

GEORGE DEUKMEJIAN, Governor

BOARD OF FORESTRY

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SACRAMENTO, CA 94744-7460
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August 14, 1987

Ms. Laura Edlin
California-Oregon Transmission
Line Project
P. O. Box 660970
Sacramento, CA 95866

Dear Laura:

I have received three questions on the project from Board members which were not raised in the Board's comments on the EIR/EIS or at the June 3, 1987 meeting in Redding.

They are as follows:

- A** A. Why was a route which utilized the existing Canadian gas line right-of-way not fully discussed in the environmental documents?
- B** B. Was full consideration given to the following three items in the economic studies:
- C** 1. Is the power availability from the Bonneville Power Authority guaranteed for the projected life of the project? If not, where will other sources of power be found and what will be the cost of that power?
- D** 2. Is the cost of the power from the Bonneville Power Project firm, or is there a possibility that the rates will be increased to a prohibitive level in the future? If it is a possibility, the effect on the net benefit of the project should be discussed.
- E** 3. Do any of the municipalities or other participants have a firm price commitment or supply commitment from the Bonneville Power Authority? Again, what will be the economic effect on the project if rates are raised to a prohibitive level?

A See responses to L-159 F, L-177 A, L-307 K, L-307 II, and T-69 F.

B See responses to SL-126 C, SL-126 D, and SL-126 E. Each of these items was considered at length.

C No entity will "guarantee" delivery of the power. Probable sources and costs of power are discussed in Sections 3, 6, 7, 8, and 9 of Appendix B, Volume 3A, of the Draft EIS/EIR. See also the responses to L-3 T, L-306 R1, L-306 H1, L-306 D1, and L-306 KK.

D The basis for the pricing of Bonneville Power Administration (BPA) power will be availability and the value of displaced power generation in California. The availability of cost effective power from the Pacific Northwest, including BPA, is predicated upon the premise that if there is available power in the Pacific Northwest, there is a means to transmit it to California, and the cost of power that would be generated in California is higher than the delivered cost of power from the Pacific Northwest, the delivery will be made to the economic benefit of both regions. As discussed in Section 6 of Appendix B, Volume 3A of the Draft EIS/EIR, a range of prices for BPA power was evaluated to address this power market condition. Each pricing scenario is considered in determining the probable economic benefit of the Project.

SL-126 (continued)

E

None of the Participants have firm price commitments or supply arrangements for power to be delivered over the COTP at this time. Negotiations to achieve specific price and/or supply commitments for portions of the power will occur in the near future. Project benefits do not depend on specific price levels being negotiated prior to commencement of Project development.

Ranges of prices and supplies of Northwest power are evaluated in the Draft EIS/EIR. The projected net benefits consider the ranges including cases where firm power is not purchased.

SL-126 (continued)

Ms. Laura Edlin
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F

C. The Board also has concerns similar to those of the California Department of Forestry and Fire Protection in the area of fire protection. Neither the Draft EIR/EIS nor the Supplement address the potential hazard the powerlines create for the use of helicopters of airtankers on wildfires.

Would you please be prepared to discuss these questions, as well as the comments offered by the Board in the February 27, 1987 letter by Chairman Walt.

G

I am in the process of reviewing the supplement which was released on June 23, 1987 and describes some routing alternatives for minor segments of the preferred project route. The supplement appears to rely on the initial draft EIR/EIS for discussion of impacts and mitigations. I do not see any discussion of those impacts or mitigations the Board believed to be deficient in the draft EIR/EIS. Though I'm not aware of any regulatory requirement that this be done on nonstatutory supplements, I would have expected that some of the environmental issues would have been addressed. I believe that the Board members may also wonder why some of the points raised were not addressed.

If you have any questions, or wish to discuss what I believe are valid concerns with the supplement, please contact me at phone 322-0128.


Doug Wickizer
Forester III

F

See response to L-362 Z.

G

See responses to L-321 and SL-100 A.

SL-127

Mrs. Wirt W. Woolley
157 Alma Street
San Francisco, CA 94117

August 11, 1987

Environmental Coordinator
California-Oregon Transmission Project
Post Office Box 660970
Sacramento, California 95866

Dear Sir:

A [My two boys own property in the Pit River Canyon area of Shasta County, and they are very upset about your proposed routing of another transmission line in that area (there are enough already).

I'm 96 years old, and when my boys are upset, I'm upset.

B [I hope you have given this project consideration in depth as to the total effect on the whole surrounding territory. My husband of sixty years and I spent a lot of time in the Pit River area camping, hunting, and fishing before his death in 1972, and I feel this proposed power line would not do a thing for the environment. Who needs the power, anyway. Isn't there already enough?

D [I'm not against progress, but what this is accomplishing escapes me. Please back up and reconsider.

Yours truly,

Mrs Wirt W Woolley

A Your opposition to the transmission line being routed through the Pit River Canyon is noted.

B Comment noted.

C The extensive analysis of Project economics in the Draft EIS/EIR concludes that the Project is more economic than alternative sources of power for California. The analysis also indicates that the Project will displace the addition of future generation capacity in California.

D The lead agencies will utilize the information presented in the Draft EIS/EIR, the Supplement to the Draft EIS/EIR, the public comments on the Draft and Supplement, and the information presented in this Final EIS/EIR before a decision is made on whether to approve the COTP.

Round Mountain Cal
Aug 18 - 87

California Oregon Trans Project.

Dear Sir!

A I am owner of 40 acres of Mountain property West
east of Redding Calif. I already have 2 sets of
transmission lines cutting right through the center
of my property, this cuts the value of my
property and makes it undesirable for anyone
else to buy from me. For these 40 acres I
paid almost 50,000. I originally bought this place
because I have a good building site and very
good view of the hills; But I want to sell this
property and return to the Bay area. But with
the new transmission lines that will be
installed here taking up more of the land than
has already been taken up by transmission lines
no one wants to buy my land, this makes
it almost worthless after paying the 50,000
mentioned above. I put another 9,000 improvements
into this land. Including drilling a 400 ft
deep well, a septic system, underground wires,
and a 30x60 ft cement block building that would
make an excellent storage or shop for maintaining
the transmission lines. If you are determined
to put these new lines through my property
and finish unhooking it for me why don't you
just purchase it and use (the building) and the
property for a maintenance base for your
project. All I ask for my share is to get
back what I put in it for improvements.

A See responses to T-82 C and L-184 A.

B See responses to T-82 C and L-184 A.

C See responses to T-82 C and L-184 A.

D See responses to T-82 C and L-184 A.

SL-129 (continued)

That is the \$49,000. There is also a \$41,000 loan outstanding on the 40000 parcel. If you would want to build a pad to land a helicopter for putting the line, we will be doing line construction. There is plenty of room here to land a helicopter, and being if we have now, is room to put up more buildings for maintenance areas for material and equipment. There is a good access road to the property from Oak Run road approx. 3 miles from highway 299 or you can go to Redding on Oak Run road by way of Palo Alto. Highway 44 to Redding. I feel that in view of the fact that my land will become so depopulated in value that you have an obligation to me and at the same time, the land could be an advantage to the project. Please, let me know what you decide.

Sincerely
Arthur H. Fisher
PO Box 338
Round Mountain, Ga 30684

See responses to T-82 C and L-184 A.

The commentor will be notified of the decision on the Project by the lead agencies.

SL-130



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street
San Francisco, Ca. 94105

19 AUG 1987

Nancy H. Weintraub
Western Area Power
Administration
1825 Bell Street
Sacramento, CA 95825

Dear Ms. Weintraub:

In accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act, the Environmental Protection Agency (EPA) has reviewed the Supplement to the Draft Environmental Impact Statement (SDEIS) for the CALIFORNIA-OREGON TRANSMISSION PROJECT AND THE LOS BANOS-GATES TRANSMISSION PROJECT, SOUTHERN OREGON, NORTHERN AND CENTRAL CALIFORNIA.

A Based on the information in the SDEIS, most of the north routing options appear to reduce impacts to water resources, vegetation, and wildlife when compared to the preferred alignment. However, we continue to have the same concerns that were discussed in our previous comment letter (3/4/87) for all new options. These include the effects of pesticide/herbicide use on water resources and the effectiveness of mitigation measures and compliance mechanisms.

B In addition, EPA is concerned about the lack of consideration of the south route alignment, S-8F, in the SDEIS. As stated in our previous comment letter, this segment should be thoroughly analyzed since it substantially reduces the number of structures in wetland/floodplain areas. This is important since Section 404 (b)(1) Guidelines (40 CFR 230) presume that practicable alternatives are available unless there is a clear demonstration otherwise. The Guidelines require avoiding fill in waters of the United States, regardless of the availability of mitigation. Specifically, mitigation should not be used to justify unnecessary fills when less-damaging, practicable alternatives (e.g., alignment S-8F) may be available to achieve project purposes.

Because of these concerns, we have rated the SDEIS as Category EC-2, Environmental Concerns - Insufficient Information (see attached "Summary of Rating Definitions and Follow-Up Action"). A summary of EPA's comments will be published in the Federal Register in accordance with our public disclosure responsibilities under Section 309 of the Clean Air Act.

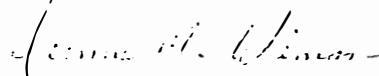
A See responses to your letter L-364.

B The S-8 F route segment would be the continuation of the upgrading of the existing WAPA 230 kV line south of the Sacramento River. This was discussed in the Draft EIS/EIR as not being feasible due to reliability concerns. South of the Sacramento River, the 230 kV lines have only 162-212 feet of separation from the existing two 500 kV lines. It appears that wetlands and waters of the United States can be avoided with specific centerline siting and tower placement of the preferred alternative South B.

SL-130 (continued)

We appreciate the opportunity to review this SDEIS. Please send five copies of the Final EIS to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions regarding our comments, please contact Enrique Manzanilla, Office of External Affairs, at (415) 974-0948 or FTS 454-0948.

Sincerely,



Deanna M. Wieman
Director
Office of External Affairs

Enclosure (1 page)

cc: Transmission Agency of Northern California (Att. Rick Lind)
U.S. Forest Service - San Francisco (Att. Debbie Stephan)
U.S. Fish and Wildlife Service - Sacramento (Att. Roger
Guinee)
U.S. Army Corps of Engineers - Sacramento (Att. Art Champ)

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION*

SL-130 (continued)

Environmental Impact of the Action

IO—Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC—Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO—Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1—Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

SL-131

A

Please ^{reroute} ~~Reroute~~
transmission lines
further away from Lava
Beds Natl. Monument where
some of the largest
roosting area for the
Bald Eagles exists
in continental US

Sincerely

John W. Coney

A

The preferred route is located approximately 2.5 miles from the Lava Beds National Monument at its closest point. The bald eagle roosting areas in the Tulelake basin would not be affected by the preferred route.

