Tribal Renewable Energy

To‘Hajiilee Navajo Case Study

Delores Apache, President
To‘Hajiilee Economic Development Corporation, Inc. “TEDI”

Douglas C. MacCourt, Project Counsel
Ater Wynne LLP

Tribal Energy Program Review
May 4-7, 2015
Overview of Presentation

• Goals and objectives of the tribe in developing the project
• History, background and project milestones
• Essentials for tribal renewable energy projects
New Mexico annual insolation ave 6.58 sun-hours
Output peak 7.28 kWh/m²/day)
19 miles from the center of Abq.
Why This Site?

It wasn’t because it was close to Albuquerque!

Transmission Line goes through site
Shandiin Solar Project

• 30 Megawatts (Enough peak power for approximately 11,000 homes)

• The Project consists of twenty 1.5 MW blocks, each approximately 7.2 acres. Each block consists of 18 rows of forty 425 watt solar panels.

• Each block includes inverters and transformers stepping up to 34.5 kV are located on concrete pads with a 12’X 24’ footprint.

• The medium voltage circuits carry power underground to a proposed substation located next to the PNM 115-kV Bluewater transmission line.

• A 30,000 square foot substation will include a switchyard, main transformer and a control room to house communication and equipment necessary to interconnect to the PNM system.

• The Project will include a 2,500 square foot O&M building

• The Project will create approximately 75 to 140 construction jobs during the construction period
Shandiin Solar Project Layout
SunPower Corporation – World Leader in Utility-Scale Solar Power Plants

• 2010: Revenue $2.22B – Publicly traded NASDAQ
• 5,500 Employees – HQ San Jose, CA
• 546 MW of PV Panel Shipped in 2010
• World Leader in Solar Conversion Efficiency
• More than 400 Large-Scale Solar Power Plants Deployed Worldwide
Average Daily Output of Shandiin Power Plant
Our Solar Team Now –
SHANDIIN SOLAR PROJECT TEAM

- **To’Hajiilee Economic Development, Inc. - “TEDI”**
  - Lead Developer and Landholder – Delores Apache, Board Member

- **SunPower Corporation – Richmond, California**
  - Co-Developer and Technology Provider, Ed Smeloff, Principal
  - Project Developer for Utilities and Power Plants

- **RBC Capital Markets – San Francisco & Albuquerque**
  - Project Financing Agent, Garth Salisbury and Kevin Powers

- **Ater Wynne LLP – Portland, Oregon**
  - Project Legal Counsel, Douglas MacCourt, Partner

- **Janov Law Offices, PC - Albuquerque**
  - TEDI Legal Counsel, Gwenellen Janov, Esq.

- **First American Financial Advisors, Inc. - Albuquerque**
  - Financial Advisor, Rob Burpo, President
Brief History

• In 2005 Chapter creates a development corporation – To’Hajiilee Economic Development Corp – “TEDI”
• TEDI designed to separate politics from business.
• In early 2008 our state’s largest utility sought to build solar farms around NM in order to meet state mandates for renewable energy & TEDI participated in program.
• TEDI was approached by more than a dozen firms looking to put a solar farm on our trust lands.
• The Chapter voted to allow TEDI to use trust lands in the eastern portion of the reservation for a site.
• TEDI had continued to work with solar companies thru 2009.
• In summer of 2009 TEDI was awarded a $250,000 DOE feasibility study grant.
First Steps With DOE Grant 1

- Seek Development/Industry Partner:
  - Determine transmission capacity – WAPA helped
  - Interviewed more than a dozen firms
- Created Written Agreement:
  - Negotiated a 2 year agreement – just renewed!
  - Firm committed money & expertise to project
  - Community & TEDI pledged site & cooperation
- Start the Work:
  - What has to be done to get lease approved
  - What has to be done to be financially viable
  - Who can we sell power to?
Development Partner – Technology Vendor

 Entered into an agreement with solar panel provider SunPower of Richmond, California:

  o Help us with funding for site development.
  o Help us with financial modeling based on energy to be generated at site.
  o Help us with Power Purchase Agreement discussions and negotiations.
  o Help us with site development & construction management.
  o Important in approval process with Chapter.
Site Design & Lease Approval – Go Hand in Hand

- Lease Approval Needs:
  - Environmental Assessment
  - Archeological & Historical reports
  - Hydrology study & Site survey
  - Appraisal of site as is
  - Finding Of No Significant Impact - FONSI
  - Revenues: base income + profit sharing
  - Lease between Chapter & TEDI

- Site Design:
  - Where to put panels to maximize production
  - Where to put sub-station – critical
  - Where to avoid construction – see lease items
Steps we have taken so far

Site survey

Hydrology Study
Steps we have taken so far

Archeological Approval
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE
TO'HAJILLEE SOLAR PROJECT

Prepared for:

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
NAVAJO REGION
P.O. Box 1060
Gallup, New Mexico 87305

On behalf of:

RURAL COMMUNITY INNOVATIONS
210 Cimarron Drive
Roswell, New Mexico 88201

And

TO'HAJILLEE ECONOMIC DEVELOPMENT, INC.
P.O. Box 3108
To'Hajilee, New Mexico 87026

Prepared by:

SWCA ENVIRONMENTAL CONSULTANTS
5477 Jefferson St. NE
Albuquerque, New Mexico 87109
(505) 254-1115

SWCA Project No. 16715

March 2011

United States Department of the Interior
Navajo Region
P.O. Box 1060
Gallup, New Mexico 87305

May 5, 2014

Mr. Coleman Ramaha, National Services Office
SWCA Environmental Consultants, Inc.
5477 Jefferson St. NE
Albuquerque, NM 87109

Re: Final Environmental Assessment for the To’Hajilee Solar Project

Dear Mr. Ramaha,

The Environmental Assessment, EA-12-144, for the To’Hajilee Economic Development Incorporated (To’Hajilee) proposed To’Hajilee Solar Project located on Cibola and Navajo Trust lands for To’Hajilee, Chapter, Navajo Nation, New Mexico has been reviewed at the Navajo Regional Office of the Bureau of Indian Affairs. The project has been determined to be the proposed action. It will not have a significant impact on the quality of the human and natural environment. An Environmental Impact Statement for the proposed project is not required.

Should you require additional information, you may contact Ms. Herbene J. Yazzie, Navajo Regional NEPA Coordinator, at (505) 848-3217.

Sincerely,

[Signature]

Herbene J. Yazzie, NEPA Coordinator, NAVAJO REGION
RESOLUTION OF THE CAÑONCITO BAND OF NAVAJOS/TO'HAJILLEE CHAPTER APPROVING AND AUTHORIZING APPLICATION BY TO'HAJILLEE ECONOMIC DEVELOPMENT, INC. FOR BUSINESS LEASE ON 48.1 ACRES OF CAÑONCITO BAND LAND LOCATED IN PARTS OF SECTIONS 31 AND 6, IN ACCORDANCE WITH APPLICABLE RULES AND REGULATIONS IN 25 USC AND AS LAND OWNERS, TO DEVELOP AND CONSTRUCT A SOLAR ENERGY PLANT TO PRODUCE RENEWABLE ENERGY ON SAID CBN LANDS

WHEREAS:

1. The Cañoncito Band of Navajos (“CBN”) was granted by the United States Government certain lands in New Mexico to be held in trust for CBN by the Act of August 13, 1949 and with this recognition the CBN/To’Hajíleé Chapter government has provided services to the CBN people; and

2. The CBN/To’Hajíleé Chapter (“Chapter”) government currently provides services to enrolled members of the Cañoncito Band of Navajos; and

3. The Chapter delegated to the To’Hajíleé Economic Development, Inc. (“TEDI”) the Chapter’s responsibility for and performance of economic planning and development and other ventures and activities for the To’Hajíleé community and members of the Cañoncito Band of Navajos; and

4. Although TEDI was originally wholly owned by Dine Development Corporation (“Dine”), on September 9, 2009, full ownership was transferred from Dine to the Chapter at no cost to the Chapter, pursuant to CBN Resolution No. TOH-09-09-08-01, dated September 8, 2009, in which the Chapter requested and accepted full ownership of TEDI; and

5. In December 2008, TEDI made a formal request to the Chapter to secure a Business Lease to develop a solar energy project (“the Solar Project”) on CBN land located in parts of Sections 31 and 6; and

6. The Chapter approved TEDI’s request for a Business Lease at a meeting held on December 18, 2008, but the written resolution approving said request was never signed; and

7. The Chapter wishes to confirm its support of the Solar Project and approval of TEDI’s request for a Business Lease for this purpose; and
Interconnection Study Completed

Transition Definitive Interconnection System Impact Study

Cluster 1

IA-PNM-2011-02 and IA-PNM-2011-04

May 2012

Prepared by:
Public Service Company of New Mexico

Required by Federal Energy Regulatory Commission (FERC)
Next Steps

- **Finalize Ownership in Limited Liability Corporation:**
  - TEDI sub-leases site to Shandiin Solar LLC
  - Chartered in Delaware
  - Allows for legal remedies suitable for investors and lenders.
  - Allows for tribal and non-tribal ownership
  - Allows tax payers to put money into project in exchange for tax benefits
  - When tax benefits expire (5-7 years) they exit ownership
  - Provides 50% equity – reduces price per kwh
  - Tribe/tribal corporation then owns majority/ exclusive shares of company
What Chapter Voted To Do With Rent Income

1. Senior Affairs
2. Community Health Needs
3. Community Infrastructure Development
4. Housing Needs
5. Education & Scholarship
6. Economic Development
7. Veterans Affairs
8. Emergency Fund
9. Land Acquisition

10. NO PER CAPITA PAYMENTS EVER
Final Steps

- Current Use of Grant Funds:
- Studies on Transmission line:
  - Capacity determined by Interconnect Study – done
  - Next study determines sub-station issues – 5 mo.
  - Last is the interconnection agreement – 2 mo.
  - Transmission capacity – 1 mo. or so.

- Sell Power:
  - Negotiating with buyers
  - Need to find better access to federal buyers!

- Finalize Financing – 2 years of work already done
Financing and Cost of Funds

• Debt is only 46.16% of total cost of the project:
  – If power is delivered to rural communities a federal government agency could become the lender = 4-5% interest rate
  – If power is delivered to metro communities, other credit enhancements available = 7% interest rate

• Various forms of equity comprise 53.84% of the cost of the Project:
  – Tax Equity Investors = 19.59%
  – Federal Investment Tax Credits = 25.3%
  – New Market Tax Credits = 8.23%
  – Road Grant = .72%