

Jicarilla Apache First Steps Project

Renewable Energy & Energy Efficiency Strategic Planning

Jicarilla Apache Utility Authority

Merl Elote, Project Manager
Mike Hamman, CEO
October 26, 2006

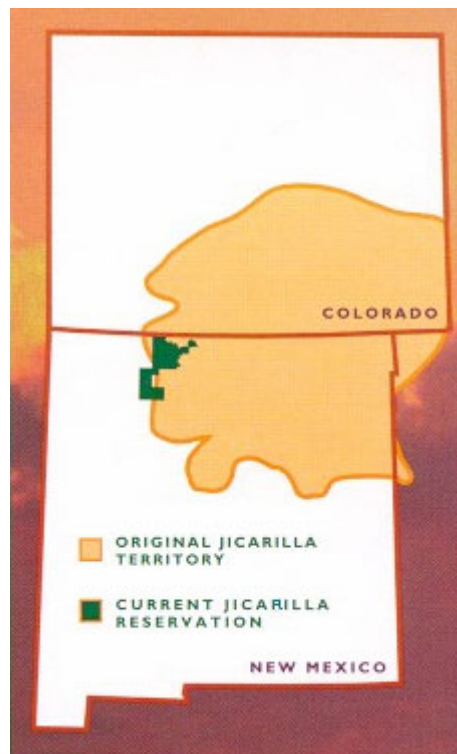


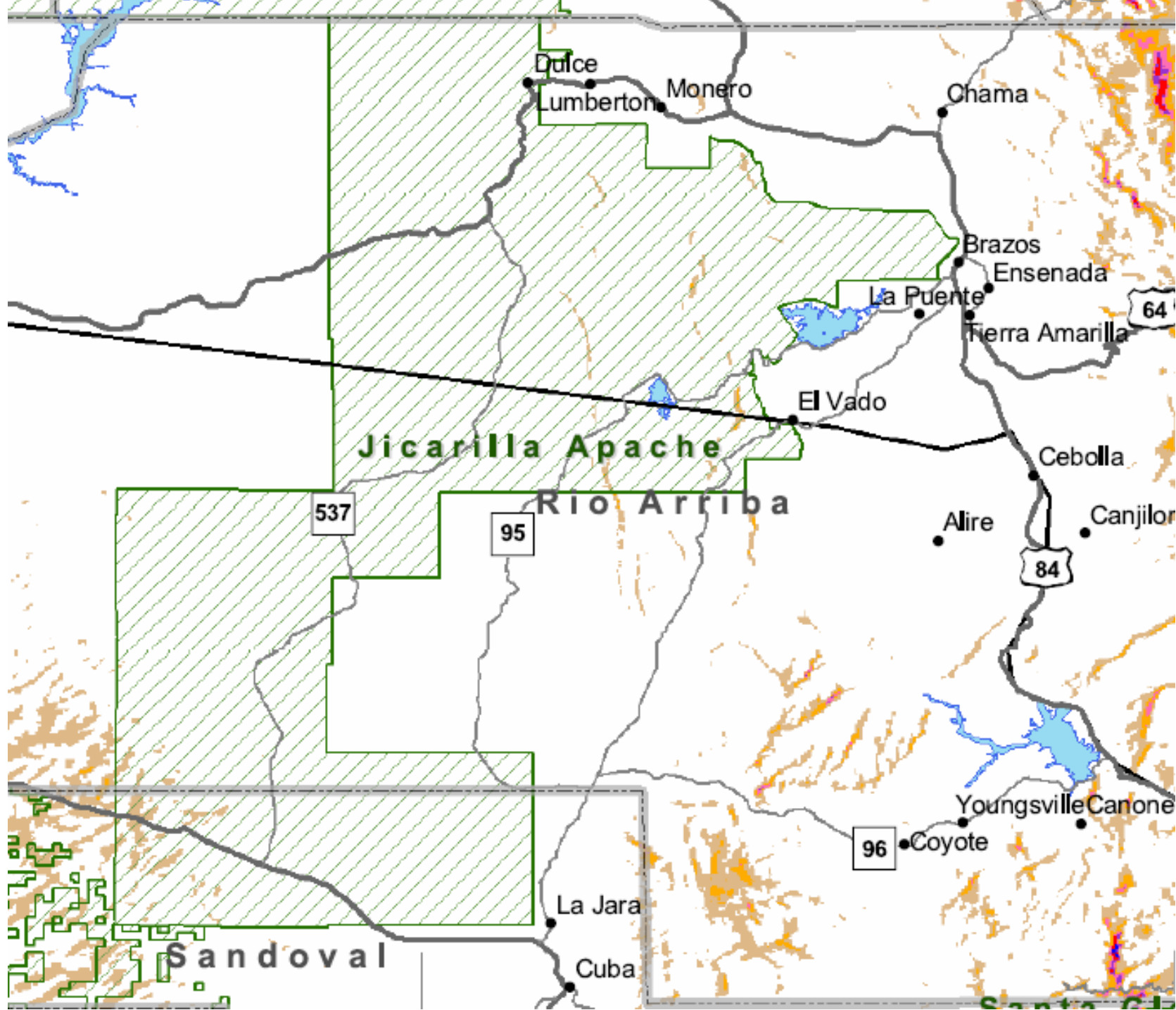


Presentation Outline

- Location
- First Steps
- Phase 2
- Project Objective
- Jicarilla Apache Utility Authority
- Renewable Resources
- Low Income Tax / Housing
- Economic Opportunities

Jicarilla Apache Reservation is located in North central New Mexico. The reservation is about 970,000 acres. The elevation varies from 5500ft-9500ft. The lower reservation consist of primarily open sagebrush, pinion-Juniper and the upper reservation consist of ponderosa pine and spruce. The population is about 3500 Tribal members.





First Steps Project

- Phase 1 – Baseline Assessment
- Phase 2 – Plan Development
- Phase 3 – Project Development

- Partners & Consultants
 - JAUUA
 - Jicarilla Apache Nation
 - HARC
 - DEA

Phase 2 Plan Development

Consultant contract was signed 1/25/6. Work has begun on plan integration and strategy development

Energy Efficiency	Educational Weatherization Program	In progress Develop criteria for Evaluating priorities
Renewable Energy	Inventory Assessment	In progress Identification of recognizing RE Availability
Integration Issues	Coordinating with tribal government/ Support for future funding	In progress/ Newly Elected Officials
Energy Strategy	Development of goals and objectives	In progress/ Strategy Now being developed

Project Objectives

- To develop a strategic plan to optimize the responsible development of renewable energy and efficiency resources and opportunities both on and off the Jicarilla Apache Nation Reservation.
- This project involves assessment of viable renewable energy resources and business opportunities.
- Finally the results of the analysis will be incorporated into a strategic plan that includes a vision statement, prioritization, mapping of goals, and development of an action plan.

Jicarilla Apache Utility Authority

- Established in 1998
- Primarily focused on water & gas, so far
- Strong focus on building institutional capacity
- Significant accomplishments:
 - Water & wastewater treatment
 - Water resource management
 - Gas service
 - Gas well buy back VPP deal
 - Low income tax credit housing

Renewable Resources

- Solar-initiated at high school/ middle school
- Biomass- currently pellet plant proposal
- Geothermal-identified locations need funding.
- Small wind- future anemometer set up
- Energy efficiency- looking at weatherization on tribal offices and residential.

This solar project is design to accept sun power and wind power to a Grid-tie inverter. The DC voltage is converted to AC power. The AC voltage output goes to the main utility breaker panel, to a Net Metering device. This project assist students in learning about solar energy at the Dulce Independent Schools.



Oil & Gas is the backbone of the tribal economy. We need to development tribal entities to drill, explore, and develop pipelines. Hopefully in the future gas turbines will generate electricity for the nation.

- Geothermal Sites have been identified but not developed.
- Protection of the environment.
- Mitigation measures on existing and new leases



Biomass

- Current entertaining the idea of a pellet plant operation.
- Feasibility studies are currently in the process.
- Possibly a cooperative agreement from outside entities.
- We will analyze economic priorities for possibility of development.
- Will apply for grant funding.



Transmission

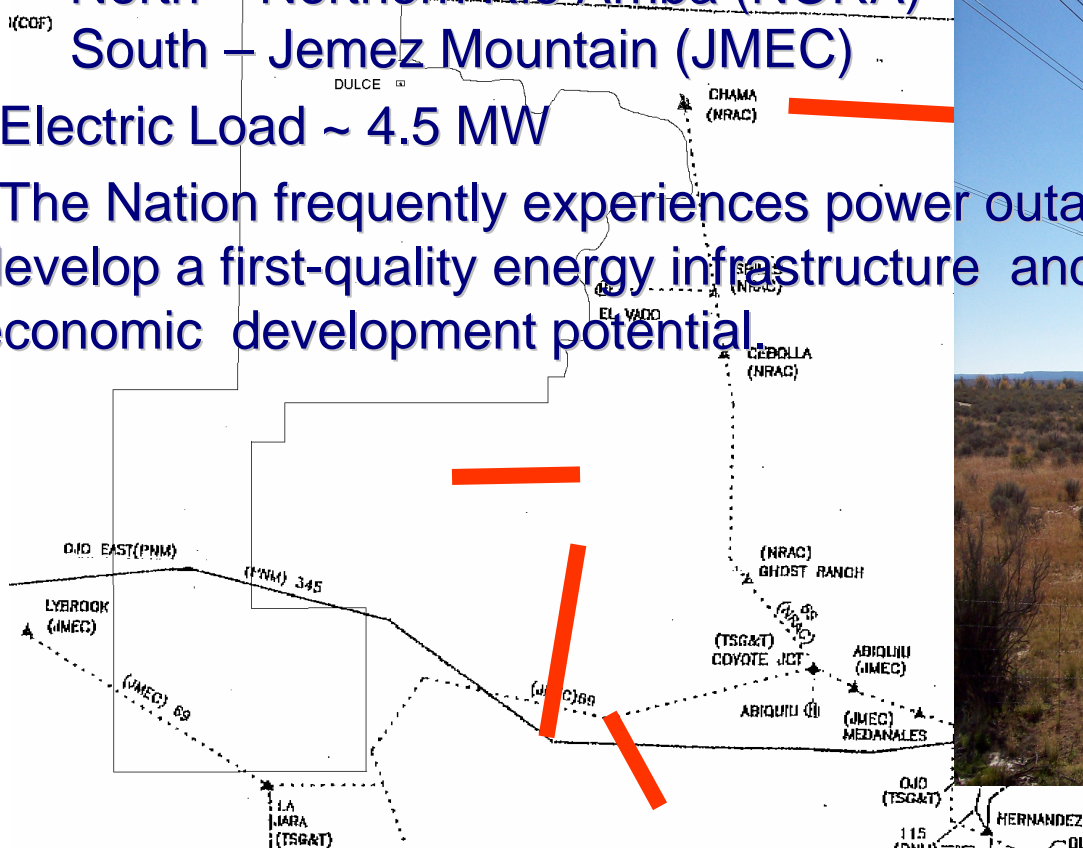
Two coops

North – Northern Rio Arriba (NORA)

South – Jemez Mountain (JMEC)

■ Electric Load ~ 4.5 MW

■ The Nation frequently experiences power outages and surges. We need to develop a first-quality energy infrastructure and serves if it is to achieve its full economic development potential.



Low Income Tax Credit housing

- The Low Income Housing Tax Credit Project is operated under Section 42 of the Internal Revenue Code.
- This program is designed to facilitate the housing needs of low-income families.
- Residence at Mundo Ranch requires that applicants meet certain qualifying standards established by the government and the Managing Agent.
- Residency in the Low Income Housing Tax Credit Project is limited to those households having low incomes. In addition to standard wages, income includes monies received from many sources such as Employment, Assets, Alimony, Child support, Pensions, Social security

Economic Opportunities



- A comprehensive strategic plan that prioritizes opportunities for maximizing the potential of RE & EE on the Jicarilla Apache Nation Reservation (and beyond)
- Resource quality
- Promising technologies
- Economic development opportunities
- Integrated solutions

Thank You!

- Merl Elote, Project Manager
- PO Box 916
Dulce, NM 87528 JAUA
e-mail: merlelote@yahoo.com
e: t:505-759-9176

- Mike Hamman
Chief Executive Officer, JAUA
e: mikehamman@valornet.com
t: 505.759.9176

