Tribal Energy Program
Summer Internship

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DOE Program Review Meeting
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Pueblo of Laguna Utility Authority
Mission Statement

The Pueblo of Laguna is committed to working toward its energy goals while actively remaining as environmentally responsible as is practical. Laguna Pueblo seeks to improve the overall quality and reliability of electric service within its communities. Laguna also wants to promote energy self-sufficiency in responsible manner.
Where are they?
- Natural Gas not accessible to 2 villages.
- High Energy Burden.
- HUD homes are not energy efficient.
- Utility companies must meet tribal needs.

Where do they want to be?
- Energy Independence.
- Reduce energy consumption by 30%
- Build traditional homes.

How do they get there?
- Education: people and tribal council
- Data: Creating community profile
- Utility company partnerships & Grants
- Build internal capacity: Training
How the Utility Authority Developed A Solar Program

**Energy Grant 2006**
- Feasibility Study
- Research thru Capacity Building
- Fatal Flaw Analysis
- Monitoring for Wind
- Solar is best fit

**Low Income Home Energy Assistance Program (LIHEAP)**
- Customer Service Program
- Energy Burden
- Community Poverty Level
## What is Renewable Energy?

Renewable energy involves energy sources that are naturally replenished and can be used to generate electricity. These sources include wind, solar, hydro, geothermal, and biomass.

### Solar Power: Photovoltaics (PV)

Solar power is generated using photovoltaic cells, which convert sunlight into electricity. These cells are made of materials that absorb light energy, generate an electric current, and can be used to power homes and businesses.

### Wind Power

Wind power harnesses the energy of the wind to generate electricity. Wind turbines are used to convert the kinetic energy of the wind into electrical energy.

### Hydro Power

Hydro power involves the use of water flowing from a high to a low point to generate electricity. Hydroelectric dams create reservoirs, which store water for use in generating electricity when needed.

### Geothermal Power

Geothermal power uses the heat from the Earth to generate electricity. Geothermal power plants are designed to tap into the Earth's natural heat to heat water, which is then used to generate electricity.

### Biomass

Biomass involves the use of organic matter, such as wood, crops, and waste, to generate electricity. Biomass power plants use this organic matter to produce steam, which is used to generate electricity.

## Community Outreach

Community outreach involves engaging with communities to inform them about renewable energy and its benefits. This can include workshops, presentations, and interactive exhibits that are designed to educate the public about renewable energy.

## Customer Service

Customer service involves providing support to customers who have questions or concerns about renewable energy. This can include providing information about renewable energy options, answering questions about renewable energy programs, and resolving any issues that customers may have.

## Survey

Surveys are used to gather information about customer satisfaction with renewable energy programs. Surveys can be used to identify areas for improvement and to ensure that customers are happy with the services they receive.

## LIHEAP

LIHEAP is a program that provides assistance to low-income households to pay their energy bills. LIHEAP funding can be used to purchase energy-efficient appliances, install energy-efficient systems, and provide weatherization assistance to reduce energy costs for low-income households.
Survey Results

Is the Community Ready for Renewable Energy?

Words from the Community:

“It is good to know that our Tribe is being proactive in considering all viable options in addressing renewable energy projects”

“I totally support renewable energy projects that are a good fit for our people, especially tribal members who don’t have access to natural gas or households who must depend on wood only.”

“Our Father gave us an abundant amount of sun and wind. It is only plausible to make use of it.”
Community Survey Results

Pueblo of Laguna Renewable Energy Survey Results
Have you had any experience with renewable energy power generation?

- YES: 22%
- NO: 78%
Community Survey Results

Pueblo of Laguna Renewable Energy Survey Results
Do you feel there is a need for renewable energy power generation within the Pueblo of Laguna?

- Yes: 86%
- No: 5%
- No Response: 9%
Community Survey Results

Pueblo of Laguna Renewable Energy Survey Question Results
Do you feel that the Pueblo of Laguna should produce power to sell to others outside of Laguna?

- NO: 38%
- YES: 38%
- NO RESPONSE: 24%
Cultural Standards

Traditional Values

Cultural Zoning and Standards

Sacred spaces

Village Officials may regulate historical value

Architectural Integrity
Capacity Building

• Hands-on training for current technical staff to install PV systems
• After installation maintenance will be ongoing.
Tribal Energy Program

Next Steps—Apply for funding to install solar panels donated by WAPA

- Target LIHEAP recipients
- Community Centers
- Elderly and Low Income
- Areas without Natural Gas
- Assistance from UNM Planning Student Interns
Summer Memories
Thank you!

Any Questions?

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