



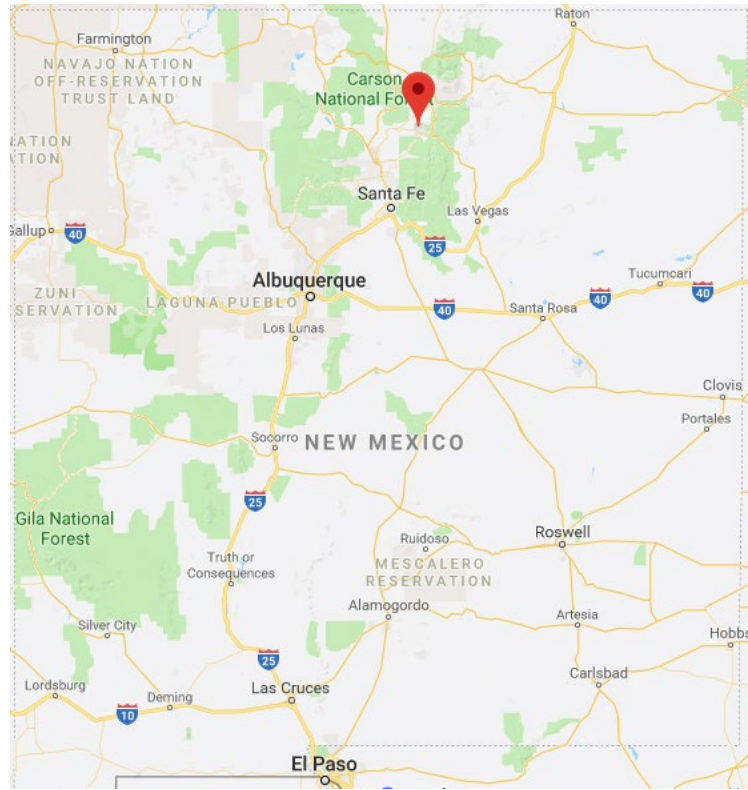
PICURIS COMMUNITY SOLAR PHASE II

By

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About Picuris Pueblo

Pueblo Governor is Craig Quanchello

Picuris Pueblo is located 60 miles north of Santa Fe, and 24 miles southeast of Taos on scenic Highways 75 & 76.

Picuris Pueblo currently has 306 members and 90 homes.

Our traditional way of life starts with respect of the land and nature and our natural resources.

Our everyday life consist of farming, hunting, providing for our families and honoring our culture by practicing traditions and beliefs as our ancestors did before us.

Our tranquil village rests along the banks of the Rio Pueblo which nourishes the evergreens, cottonwoods, aspens, grasses and flowers that blanket our valley and surrounding mountains. The scenic beauty is unsurpassed in New Mexico, **The Land of Enchantment.**

Picuris pueblo is nestled in a setting of serene beauty in what is known as the "**hidden valley**" of the Sangre de Cristo Mountains in Northern New Mexico.









Tribal Considerations



- Traditional Values of the Tribe and its relationship to Mother Earth
- Self determination
- Remove dependency on third party energy infrastructure
- Protection from external threats:
 - Wildfires that impact utility Grid
 - Cyber security concerns
 - Terrorism
- Decrease cost of electricity and foster economic growth

Community Solar Phase I Completed 2017



Phase I of Picuris Community Solar commenced commercial operation in January 2018.

The 1 MW project utilized a combination of funds from a Department of Energy (DOE) Grant and a conventional loan. Energy produced goes directly into the Kit Carson Electric Cooperative grid.

The tribe derives revenue from a power purchase agreement with Kit Carson Electric Co-op.

The tribal buildings and tribal member homes are billed by Kit Carson as any other consumer subject to the PRC approved rates.

The surplus generated by the difference of the monthly revenue received and the monthly loan payments has allowed for a \$ 75 subsidy per household for the four winter months and \$ 50 subsidy per household for the remaining eight months.

Community Solar Phase II (Under Construction)



The Pueblo has secured another DOE grant for a Solar Microgrid project that would provide electricity directly into the tribal buildings, tribal member homes and economic development buildings that would include the new travel center complex. The matching requirements for the tribe has been reached from funds from Wells Fargo and from 11th Hour Project Foundation.

The microgrid design includes energy storage that would support the electricity needs when the solar array is not generating and would be available for backup if the utility grid is off line. The tribe partnered with Sandia National Labs to provide an energy analysis that would be used as the basis for requesting grant funds.

The microgrid will reduce the cost of electricity and will be significantly less than the present cost that uses the Kit Carson Coop system. The goal is that with both solar projects, the tribal household members would have their electric bills completely subsidized.





Phased Development of Grid-Connected Microgrid

Phase I – 1 MW Solar Array – Completed 2018.

PPA with Kit Carson Electric Co-op generates revenue
Subsidizes cost of electricity to tribe.

Phase IIa – Build 750 kW Solar Array – Broke ground in October 2023
Completion in May 2024. Annual production 1.6 GWh

Phase IIb – Build 250 kW Solar Array planned extension of Phase IIa
In conceptual stages; Estimated Annual production 480 MWh

Phase III – Add 1 MW/4 hour Energy Storage: 2024/2025
Contract with Sandia Lab for system specs and RFP

Phase IV – Complete microgrid with solar, energy storage
backed up with natural gas generators- planned for 2025/2026

Entire energy infrastructure and microgrid is located on sovereign tribal land

Phases IIa and IIb Solar Array

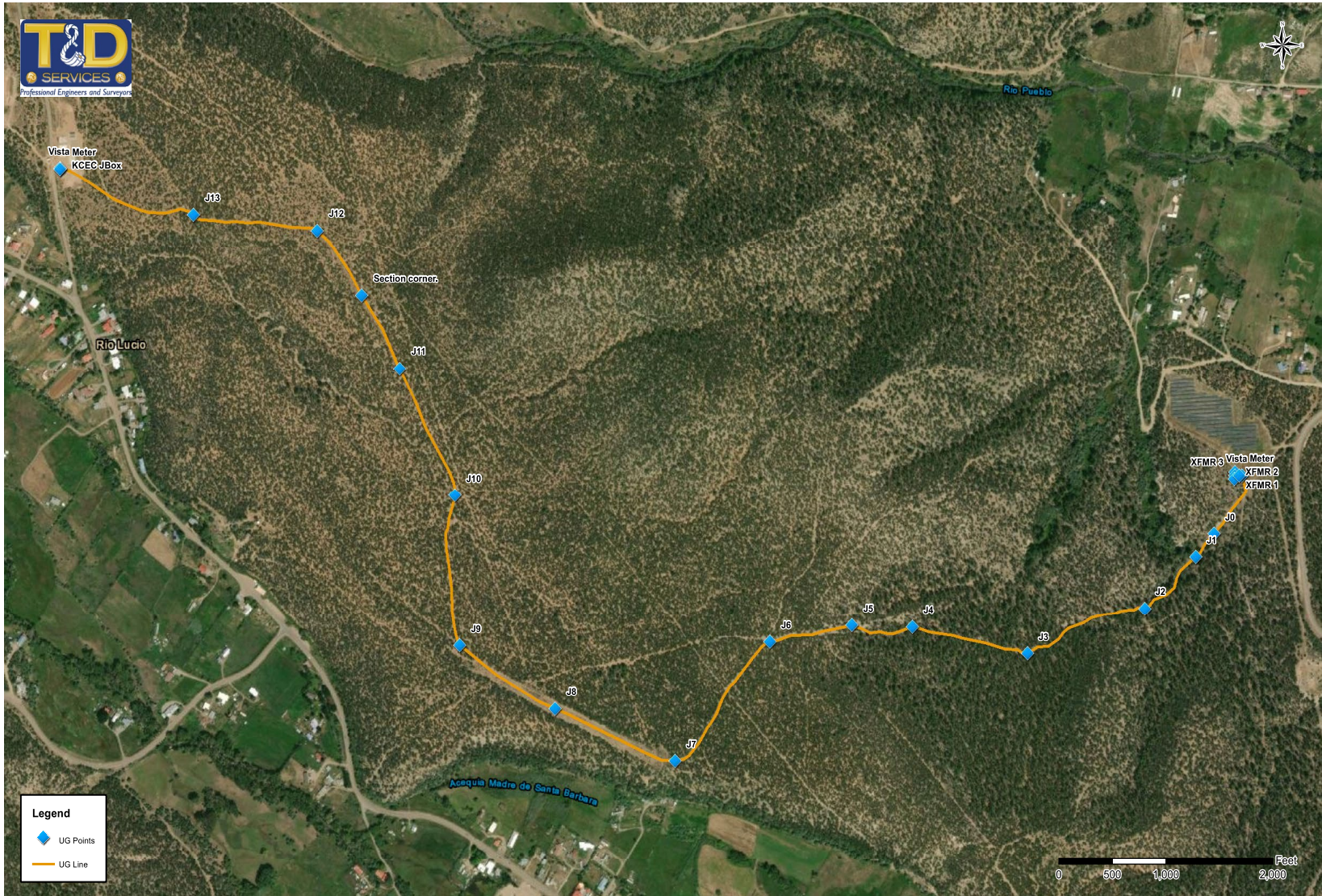


Phase IIa under construction has 1,440 Trina Solar panels w/2 Solar Edge 330 kW inverters
Phase IIb planned will have 420 Trina Solar panels w/1 Solar Edge 330 kW inverter

Dedicated 2.3 mile 15 kV feeder underground and overhead sections connect Phase II Solar Array to Pueblo loads



1.3 mile is underground to assure high reliability by protecting it from extreme weather



Phase II Solar Array Under Construction

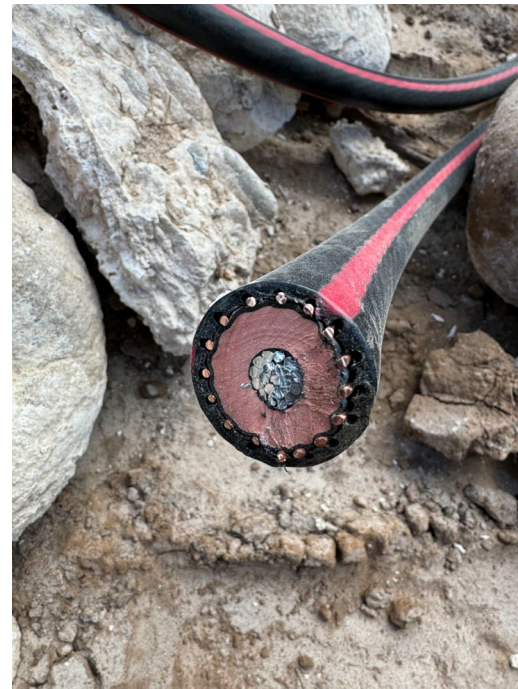


January 30, 2024



April 25, 2024: Ground posts for racks being set in place

Trenching and Installation of the Dedicated 1.3 mile 15 kV feeder



← Cross section of underground power cable



1.3 mile 15 kV feeder underground section completed in three weeks on November 10, 2024

Includes fiber for high speed communication and control of Phase II solar array



Termination of feeder on Pueblo side



Archeological Mapping to Locate Buried Artifacts on the Overhead Pole Route May 2024





Poles Delivered to Site for the 1.0 mile Overhead Section November 15, 2024

Pole Installation Will Commence on November 18, 2024
(as we speak)





Project Partners and Sponsors

US DOE Office of Indian Energy

UD DOE Office of Electricity Energy Storage Program

11th Hour Project Foundation/Wells Fargo Bank

Southern Methodist University/Cornell University

Sandia National Laboratories

Kit Carson Electric Cooperative

Sol Luna Solar