REQUEST FOR PROPOSALS

Engineering Design Services for Pueblo Microgrid

Pueblo of Picuris, NM

Issued August 14, 2026

Posted at:

www.picurispueblo.org/microgridstudy

Electronic Submittal Deadline: Friday, October 16, 2026. 5:00 PM MT
Version: First Issue

1. Introduction

The Pueblo of Picuris is inviting qualified A&E firms to provide engineering design and technical specifications for a microgrid. The microgrid will support approximately 100 homes and tribal administration and community buildings. It will be interconnected with the Kit Carson Electric Co-operative (KCEC) so that it primarily meets the needs of the Pueblo while providing grid support to KCEC as and when it is available to do so.

The on-site generation/energy storage resources include an existing PV array, a soon to be installed battery energy storage and future natural gas-fired generator(s) as needed for the microgrid.

A one-line of the Picuris distribution system is shown in Exhibit 1.

This RFP is for engineering design only. Procurement, construction, and commissioning are not included.

2. Partnerships

KCEC has been and continues to be a partner in the Picuris energy vision and will guide the design of the microgrid. In addition to KCEC, Sandia National Laboratories

has historically conducted energy studies for the Pueblo and will continue to advise on microgrid design moving forward.

3. Reference and Optional Configuration

Reference Configuration:

The reference configuration of the microgrid which must be analyzed will consist of:

1. Existing photovoltaic system: 750 kW (AC)
2. 1 MW/4MWh Tesla Megapack, expected to be installed in November 2026.
3. Natural Gas Generators: 2 natural gas-fired gensets. Size and location within the Picuris distribution network will be determined by the design modelling.

The reference microgrid will support approximately 100 homes and administration and community buildings clustered in a small geographic area. Each electrical load is individually metered by KCEC and the selected A&E will work with KCEC to obtain load and consumption data from KCEC as needed for the design study.

Optional Configuration:

At their discretion, the A&E can study and analyze an optional microgrid configuration in which all base assumptions remain the same as the reference case, except, the battery storage capacity and photovoltaic capacity is increased to support optimal battery charging and performance, while reducing engine run time.

4. Scope of Services

Develop electrical design and specify all software and hardware for the microgrid

Specify microgrid control architecture and system design

Protection coordination and interconnection with KCEC grid, in compliance with KCEC codes and standards

Communication and control compatible with KCEC SCADA is a must

Energy modeling and system optimization for reference and optional configurations of the proposed microgrid

Comparative analysis of options with recommendation

Development of technical specifications for procurement.

5. Duration of Study

The study duration is eight (8) months which starts from the day a Notice to Proceed is issued to the selected A&E.

6. Engineering Deliverables

The A&E shall provide the following deliverables:

- 30% Design: Conceptual layout, single-line diagrams, preliminary system architecture and modeling approach
- 60% Design: Detailed engineering drawings, equipment specifications, updated modeling with base assumptions
- 90% Design: Final design package suitable for procurement
- 100% (Issued for Bid): Stamped drawings and technical specifications
- Complete interconnection package for utility coordination
- Protection coordination study and relay settings
- Final engineering report with recommended option.

The final report will include the following sections:

Technical Specifications

BESS: 1 MW, 4 MWh / X MWh optimized (vendor proposed), NFPA 855 (2023) and UL 9540 compliant

PV: 750 kW AC system

Generators: natural gas as dictated by modeling and optimization

EMS: KCEC coordination, dispatch optimization, load following, islanding control

Winter Month Modeling

Low solar output (~4 sun hours)

Generator-dominant operation

Battery provides overnight support

Compare all options including optimized case

Spring/Summer Month Modeling

Higher solar (~6 sun hours)

PV supplies all or majority of daytime load

Battery shifts energy to evening

Evaluate reduced generator runtime across all options

7. Required Comparative Analysis

Proposers shall include a comparative evaluation of reference and optional configuration considering the following parameters:

- Capital cost estimate
- Lifecycle cost (NPV over 20 years)
- Fuel consumption and generator runtime – summer and winter months
- Renewable energy contribution (%) - summer and winter months
- Resilience (hours/days of autonomy)
- Operational complexity and intuitive controls
- Recommended configuration with justification

8. Evaluation Criteria and Scoring

Proposals will be evaluated using the following criteria:

- Innovation in technical approach and completeness (50%)
  (Innovative approaches for the microgrid design will be scored higher than designs developed with existing commercial microgrid design software.)
- Experience of the project team with microgrids and renewable systems (20%)
- Strength of recommended optimal solution (15%)
- Cost of engineering services (15%)

9. Project and Data Ownership

All engineering calculations, models, simulation files, databases, GIS information, protection studies, EMS logic descriptions, CAD drawings, specifications, and other work products prepared under this contract shall become the property of the Pueblo of Picuris upon completion of the project.

10. Proposal Responses, Due Date, and Inquiries

Proposals should be addressed to:

Wayne Yazza,
Director of Utilities,
Pueblo of Picuris.

Proposals are due no later 5:00 PM MT on Friday, October 16, 2026.
Proposal responses must be emailed to:

solar@picurispueblo.org

Proposals should be in PDF in two sections: Technical and Cost.

The Technical section should not exceed 40 pages; the Cost section should not exceed 10 pages.

Team resumes and prior project experience may be excluded from the 40 page limit at the discretion of the proposer.

Proposers will provide 10 hard copies upon request.

Proposal inquiries and clarifications can be addressed to:

solar@picurispueblo.org

All inquiries will be individually acknowledged and inquiries/questions that are relevant to the RFP will be posted at the microgrid portal.

11. No Obligation and Reservation of Rights

The issuance of this RFP does not obligate the Pueblo of Picuris to award a contract, enter into an agreement, or procure any services described herein. The Pueblo reserves the right, in its sole discretion, to accept or reject any or all proposals, in whole or in part; to waive minor informalities or irregularities; to request clarification or additional information from any responder; to negotiate with one or more responders; to modify, suspend, cancel, or reissue this RFP; or to terminate the procurement process at any time when determined to be in the best interests of the Pueblo.

All costs incurred by a responder in preparing, submitting, presenting, or otherwise participating in this RFP process, including any interviews, presentations, negotiations, or travel, shall be borne solely by the responder. The Pueblo shall have no liability or obligation for such costs.

Selection of a A&E firm as a finalist, invitation to make a presentation, commencement of negotiations, or notice of an intended selection shall not create a contractual relationship or otherwise obligate the Pueblo. No obligation shall arise until a final written contract and notice to proceed has been issued by the Pueblo of Picuris Tribal Council, executed by duly authorized representatives of the Pueblo and the selected A&E, and all other required approvals have been obtained.

12. Additional Background

The following information is provided as additional background:

1. A Community Solar Phase II, 750 kWac nominal photovoltaic array has been built to primarily serve the Pueblo loads. It is located 2.5 miles away from the Pueblo. A partial overhead and underground 12.47 kV feeder has also been installed to feed the power directly to the Pueblo. The Phase II is awaiting commissioning and interconnection with Pueblo loads and the KCEC grid. The Phase II array and the feeder are located entirely on Picuris sovereign lands.

2. Eight years prior to the construction of the Community Solar Phase II array, a separate Phase I 1 MWac array was built and connected to the KCEC grid only. Both Phase I and II arrays are co-located on 10 acre parcel 2.5 miles from the Pueblo. Notably, the Phase I array feeds solely into the KCEC grid

and generates revenue for the Pueblo through a 20-year Power Purchase Agreement with KCEC.

3. Acquisition of a 1 MW/4 MWh battery energy storage system (BESS) is underway, and delivery and installation is expected in November 2026. The BESS location is currently proposed near the termination of the u/g feeder near the entrance to the Pueblo.

Tribal and cultural details of Pueblo of Picuris can be found at:

https://www.picurispueblo.org/home-1.html

Additional background about KCEC can be found at:

https://kitcarson.com/2018-media-kit/

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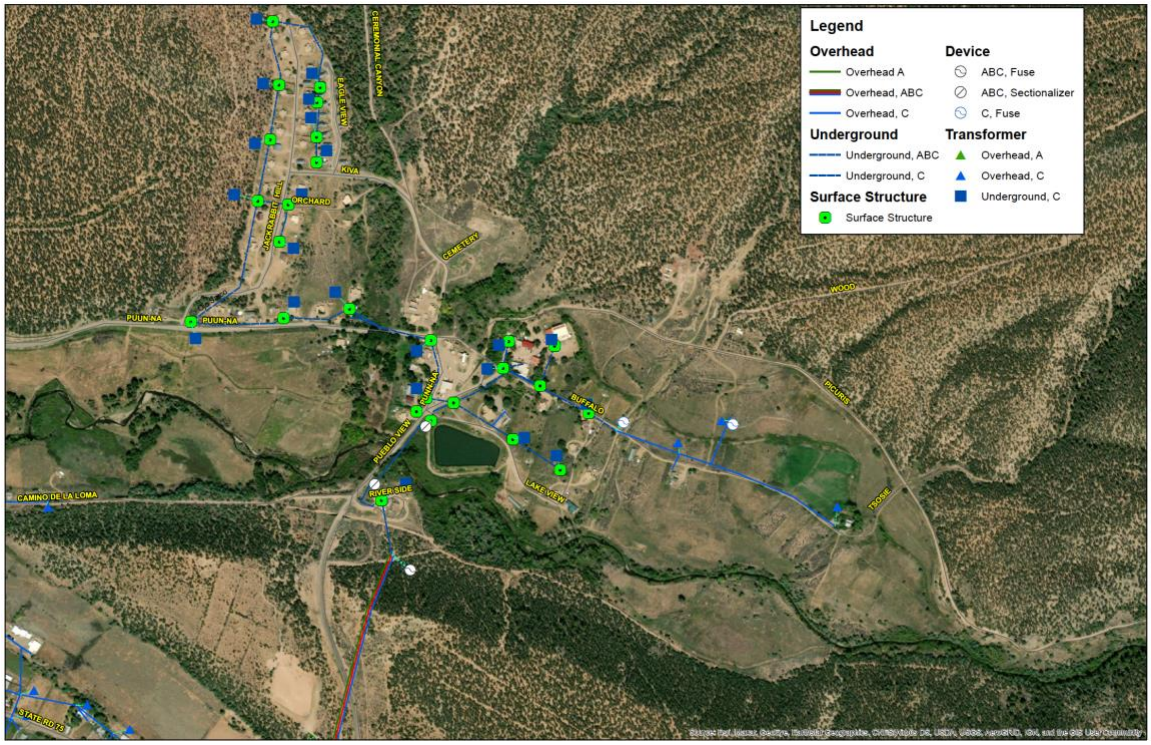

Picuris One-line