Applicant: Kit Carson Electric Cooperative

Project Manager: Mr. Luis A. Reyes Jr.

Project Title: Building a Modern Intelligent Distributed BESS for Resiliency in Northern New Mexico

Project Objectives:

Taos Ski Valley: Support critical loads needed in the event of proximate wildfire and power outage to enable emergency services and evacuation of the population.

- Technology: Standalone BESS.
- Impact: BESS will sustain critical loads (i.e. clinic, fire station, communication towers and water pumping stations) to allow the evacuation of residents and allow first responders to start firefighting activities.

El Rito: Support community critical loads (e.g., fire station, health clinic, child care center, telecommunications link, commercial kitchen, college dormitories, home health equipment) indefinitely in the event of an outage or PSPS; and priority loads during daylight hours.

- Technology: Adding BESS to an existing PV array.
- Impact: Increase grid reliability and resilience in the event of a wildfire or high wind event enabling power shut off without compromising critical facilities.

Picuris Pueblo: Critical and priority load support as in El Rito, providing indefinite support to critical loads and supporting priority loads during daytime hours, tailored for the Tribe's particular facilities, operations, and needs.

- Technology: Adding BESS to existing PV facilities and standalone BESS to address one of the communities that has land constraints to install PV.
- Impact: Increase grid reliability and resilience in the event of a wildfire and power shut off due to extreme weather events.

Project Description:

Kit Carson Electric Cooperative seeks $15,430,118 in federal funds from the Department of Energy BIL Grid Resilience and Innovation Partnerships (GRIP):Grid Resilience Utility and Industry Grant to deploy BESS in three locations - one tribal (Picuris), one a key tourist area (Taos Ski Valley), and one very rural (El Rito). We will deploy BESS to island these locations, in a protective sense, allowing for the lines feeding these areas to be shut down during periods of high-risk fire weather while continuing to serve key loads in these areas. In effect, this structure will allow us to perform public safety power shutoff (PSPS) while maintaining critical services locally. We plan to add solar PV to sites to ensure full microgrid capability in the case of a full grid shutdown to the area; these regions will continue to source power from the PV array and use that power through the BESS. This will enable these communities to island in the event of an unplanned utility outage, while continuing to sustain critical loads and services.