**Utility Manager's Report**
**January 19, 2022**

1. Emergency Management has scheduled a meeting for next week to review the December snowsquall storm event that caused the extended power outage. In addition to damaged caused by 12 fallen trees onto the electric distribution lines, DPU did sustained approximately $14,000 of damage to the solar panels on the landfill and needed to replace one transmission pole at El Vado.

2. Over the next month, the County has asked for employees who can telework to do so to help reduce the spread of the Omicron variant. This latest wave is impacting DPU's operations with one work group at half the staffing level last week due to COVID exposures or illness. DPU has made schedule adjustments to help reduce employee contact while maintaining minimum operations.

3. Attended the UAMPS Project Management Committee (PMC) Meeting regarding the CFPP. Work on the Standard Plant Design (SPD) and COLA preparation continue at a good pace and staying nearly on schedule. The level three cost estimate is due by the end of September 2022. LAC's subscription remains at 2.15-MW based on the investment cap of $1.26 million.

4. For the PNM/Avangrid merger case (PRC Case Number 20-00222-UT), Avangrid has appeal the decision by the Public Regulatory Commission to the NM Supreme Court.

5. Participated in the informal hearings on the PNM Transmission Formula Rate Case. This week's discussions were positive and LAC and DOE hope to reach a settlement with PNM over the next month.

6. Met with IBEW regarding the County's proposal for an additional observed federal holiday, Juneteenth.

7. The SJGS ownership group has held two ownership meetings and continue to work on the term sheet with Farmington and Enchant. Once all these details are finalized, the term sheet will be brought back to BPU and Council for consideration.

8. Attended the N3B Technical Working Group meeting to finalize the discussion on the MDA-L interim measure. The Interim measure remains a soil vapor extraction system.

9. Sensus is still waiting to receive the balance of commercial meters to install due to supply chain issues. DPU requested a confirmation on a delivery date to help schedule the balance of meters to install. The Sensus Customer Portal is still on track to roll out in February.

10. Held two meetings on Tyler 311 and MyCivic software programs. Staff received a detailed presentation on the system capabilities, and we are in the process to complete a Tyler questionnaire required to help build the County's customized system. The goal remains to roll out its implementation by July 1, 2022.

11. The customer survey is ongoing with the on-line survey closing on January 25, the phone survey will be from January 26th until February 9th. A report will be completed by the end of February. The transactional survey will have a report generated after each quarter.

12. Participated as a member of the Board of Appeals in the Sirphey Hearing.

13. TRIAD approached staff over the holidays to help identify energy transition projects that both facilitate DOE's mission and can assist our communities related to the recently enacted Infrastructure Law which provides more than $62 billion for DOE energy infrastructure and production projects. The Energy Community Alliance are reviewing these project requests and wants to ensure some of these funds are invested in the communities around DOE facilities. Below is the list of projects that TRIAD submitted for consideration.

# LOS ALAMOS COUNTY / LOS ALAMOS NATIONAL LABORATORY
## ENERGY COMMUNITY ALLIANCE
## INFRASTRUCTURE BILL PROJECT PROPOSALS

*January 7, 2022*

1. **Purchase Small Modular Reactor** (SMR) module in the Carbon Free Power Project being developed by the Utah Associated Municipal Power Systems at the Idaho National Laboratory, to provide base load dispatchable power for Los Alamos National Laboratory (LANL), Sandia National Laboratory and Kirtland Airforce Base (SK). Los Alamos County (LAC) has an Electric Coordination Agreement with DOE-NNSA whereby we combine resources to serve the combined load for LANL and LAC. LANL accounts for 80% of the combined load and the remaining 20% is for the County residents and commercial businesses. Through the ECA, Los Alamos County's Power Operations is contracted to provide merchant desk services for SK.
    - **Benefits:** Development of this resource enables LANL to meet the EO goals 100 percent carbon pollution-free electricity on a net annual basis by 2030, including 50 percent 24/7 carbon pollution-free electricity. Having a carbon free dispatchable resource with a 95% capacity factor will support a resource portfolio with a high concentration of intermittent renewable resource using wind and solar. In addition, the new executive order is high bar to meet with wind and solar. Wind and Solar do not provide the much-needed flexibility to match generation to load needs. This one capital expenditure would help two New Mexico DOE Sites and one Airforce base.
    - **Costs:** $834,000,000 for roughly 1/6 of the Plant. Can be used over 40 years at least, more likely 60-80 years. This projected cost is for capital only. O&M, Fuel, etc. can be negotiated through the Electric Coordination Agreement. The cost of power would be negotiated in a post 2025 ECA. Expected power delivery in 2030 to meet executive order for carbon neutral goal.

2. **Purchase Solar Plus Storage** adjacent to PNM interconnections to develop a 25 MW around the clock supply. Utility Scale is the most economic option for the resource due to economies of scale. Several projects have been identified through PNM's IRP and an opportunity to partner on land for additional capacity is possible. There is a need for 25 MW of clean energy Around the Clock requiring approximately 16 hours of storage resulting in a solar capacity need of approximately 100 MW of solar using a 25 % capacity factor.
    - **Benefits:** Development of this resource enables LANL to meet the EO goals 100 percent carbon pollution-free electricity on a net annual basis by 2030, including 50 percent 24/7 carbon pollution-free electricity. Take advantage of low costs of generation. Batteries allow for use of the cheap energy when it is most advantageous for the DOE Sites and partnering communities. The complimentary nature of solar production to an Industrial load such as the laboratories is ideal. The addition of battery capacity aids in avoidance of higher priced energy during the duck curve. By default, the community at large would benefit from the battery capacity due to cost

sharing nature of the Electric Coordination Agreement. Battery placement could support resiliency for critical infrastructure at the National Laboratories.

- **Costs:** 100,000KW it is roughly $1,100/KW installed capacity equals $110 M and Storage is roughly $4,600 per kW in 2022 for 16 hours of storage per NREL. ($4,600 x 25,000 kW = $115M) Total project cost estimated at $225M.

3. **Purchase Solar Development** - 10 MW located in Northern NM to supply LAC and LANL. DOE/NNSA and Los Alamos County (LAC) have a long-standing cooperative contractual arrangement for electrical infrastructure and energy supply to Los Alamos National Laboratory (LANL) and LAC. Los Alamos and northern New Mexico are well positioned for development and use of PV energy. The LANL/LAC load has a 10 MW diurnal power consumption that matches well with PV energy production.
    - **Benefits:** Support of electrification of DOE Fleet as well as personally owned vehicles due to access of charging stations.
    - **Costs:** $10M **c**apital costs for the PV array for one or two of the proposed site. Other costs for installation and siting would be funded through a PPA with the developer.

    Several potential sites will be evaluated to determine the best location.
    a. TA-16 (DOE/NNSA property, NEPA and execution ready). DOE/NNSA would provide a special purpose lease (or similar agreement) to LAC for third party development of an 8-10 MW PV array. Estimated power delivery in 2024.
    b. TA-21 (DOE/NNSA property, real estate transaction needed, cleanup needed, NEPA needed). DOE/NNSA would provide a special purpose lease (or similar agreement) to LAC for third party development of a 10 MW PV array. Estimated power delivery in 2030-31 dependent on final clean-up determination for the TA-21 site.
    c. Northern New Mexico College (NNMC) Tierra Amarilla PPA (would benefit college, no upfront costs). Funding provided to Northern New Mexico College for development of a 10 MW PV array on their property in Tierra Amarilla, NM. LAC would establish a PPA with Northern New Mexico College to provide power to LAC/LANL. Estimated delivery date would be 2025-26. Investment provides beneficial redevelopment of a site NNMC has no other planned use for and provides a long-term revenue stream for NNMC to support that institution.
    d. Cuyamungue PPA (tribal property) LAC would establish a PPA with developer to provide power to LAC/LANL. Estimated delivery date would be 2025-26. Investment provides a long-term revenue stream for tribal entities.

4. **Construct Commuter Transit Centers.** Development of commuter transit centers in Los Alamos, White Rock, and Espanola will enable the expansion of mass-transit options for LANL commuters. The transit centers will link regional transit services with local and LANL onsite transit options to provide and end-end commuting solution for LANL employees. The transit centers would include electric vehicle charging and hydrogen refueling capability for busses. A public private partnership would be possible to provide level 3 DC fast charging electric charging sites at these facilities to enable recharging of commuter and government vehicles. The change to central transit sites serves the Laboratory and regional sites in neighboring communities. This proposal couples with carbon free power resources to provide infrastructure for carbon-free

commuting options. The Los Alamos Transit Center would include a 450 space-parking garage and serve as a downtown development hub.

- **Benefits:** Support of electrification of LANL employee commuting as well as personally owned vehicles due to access of charging stations. Reduces LANL scope 3 emissions
- **Costs:** Los Alamos Transit Center $33M ($18M parking garage, $4M hydrogen fueling site, $1M bus charging station, $10M site development. White Rock and Espanola Transit Centers $10 M ($1M bus charging, $4M hydrogen fueling, and $5M site development. EV Charging Station at select gas stations within the identified communities, $1M.

The prosed sites are as follows:

a. Los Alamos Townsite Center – primary transit center in the region to be in the central business district to include land acquisition, a parking structure to include indoor waiting area/restrooms and auto EV charging equipment, EV fast charging stations for buses, and hydrogen charging station.
b. White Rock Center – transit center to be in the White Rock community to include land acquisition, a parking structure to include indoor waiting area/restrooms and auto EV charging equipment, EV fast charging stations for buses and hydrogen charging station.
c. Espanola Park & Ride Facility – located in the City of Espanola near the intersection of US 285 and NM30 to include land acquisition, site development, and surface parking.
d. North Central Regional Transit District (NCRTD) Fueling Infrastructure – Located at the NCRTD headquarters site to include EV slow and fast charging stations for buses and a hydrogen charging station.
e. Equipment for fast EV charging stations for installation at gas stations in the communities of Los Alamos, White Rock, and Espanola to enable LANL commuters' access to carbon free transportation fueling opportunities ($1M).

5. **Construct Local Pumped Hydro** in conjunction with a local solar site this project would provide a level of resiliency to the National Laboratory. With available land and the topography of Los Alamos, a pumped hydro storage facility is more than possible. Due to the lack of infrastructure this type of project has been cost prohibitive however with monies made available Los Alamos is a prime destination for this project. Open reservoirs or tanks would also provide additional fire protection in the event of wildfires. This concept also relieves transmission import constraints in the future.
    - Benefits: Local pumped hydro storage in conjunction with solar array to meet National Laboratory resiliency goals. This project would work in conjunction with renewable generation to provide around the clock generation.
    - Cost Range: $2,250/kW, 50 MW $112,500,000