

## ***PNM responses to North Albuquerque Acres Community Association Engineering-related Questions:***

1. Slide 11 table of the Dec 5th 2024 meeting presentation indicated all proposed alternative options failed a previously unstated criteria for powerlines serving homes and businesses in the service area in question. However, the proposed NAA Substation option seemingly was being promoted as widely solving distribution loading criteria for across the same area. Would you provide clarifying information on the existing main distribution feeders across the service area that shows the before and after NAA substation loading effects (in percent of maximum allowable loading)?

***The loading of each substation transformer before and after the introduction of new substation capacity will be provided in the county application for the various options studied.***

2. On slide 11 of the material presented at the NAACA special meeting on Dec 3, 2024, there is a summary matrix of potential design solutions against technical considerations.
  - a. Please describe the potential design solution identified as “BESS Option”.

***A substation design for Battery Storage (BESS) was not evaluated because it did not solve the capacity issues and was not the ideal solution.***

- b. The last row is “EV Charging Sensitivity”. Please elaborate on what this consideration entails. What are the criteria that potential solutions were evaluated against?

***EV adoption and charging behavior is difficult to predict; however, it is expected to be a main contributor to load growth in the NAA area.***

- c. The second to last row is “Transmission System”. Please explain this evaluation criterium’s applicability to the stated problem of insufficient capacity to meet current and future demands for Far NE Albuquerque. Is it simply that the NAA substation extends existing transmission lines?

**It would make more sense to rate transmission extension as a negative neighborhood-impact when there is no other viable way of avoiding it. NAACA suggests that running a new transmission corridor through its boundaries should be considered a negative weighting factor associated with a new substation located away from current transmission corridors, contrary to the requirements of the facility plan.**

*The insufficient capacity issues related to Northeast Albuquerque at this time only relate to substation transformer and distribution system capacity. Transmission line capacity in the area is adequate. Existing transmission lines would be extended to the substation site.*

3. Slide 10 of the presentation provided “2021 Area Load MVA”. 2021 was unique, in that it occurred in the middle of the COVID pandemic, where a significant portion of the area population worked from home and spent more time than usual at home. Please comment on applicability of 2021 data to present (or whatever the latest year's load data is e.g.: 2023) and projected usage.

*Substation transformers have been steadily loaded beyond the normal ratings even through changing customer behavior during the pandemic. Recent load data was compared with the study to confirm that additional capacity is still necessary. Substation transformer load data will be provided in the study in the county application.*

4. According to the Planning Study Summary on slide 11, upgrades to Tramway and/or Hamilton substation fail the criteria for “Powerlines serving homes and businesses.” One option that is not included on slide 11 is a split substation option, described below.
  - a. Add the previously planned second transformer to Tramway substation but with the capacity to convert existing 115kV transmission feed to a subtransmission voltage, such as 45 kV.
  - b. Run 1-2 three phase subtransmission lines up Tramway on 40'-50' poles to Paseo del Norte.
  - c. Add small substation on AMAFCA land near corner of Paseo del Norte and Tramway Blvd. Substation contains transformer(s) to convert 45 kV subtransmission voltage to 12.47 kV, and medium voltage switchgear to tie into existing feeders.
  - d. Tie switchgear output into existing feeders along Paseo del Norte, Tennyson and Tramway

This approach addresses loading of powerlines serving homes and businesses similar to the proposed NAA substation, and provides necessary transformer capacity and emergency restoration capabilities. In addition, this approach saves significant costs and community impact associated with transmission line extension, and minimizes land acquisition costs. NAACA requests the split substation option be included in the site selection evaluation.

*Thank you for the comments and feedback.*

5. The NAACA is requesting the 2 lots next to the Church of the Nazarene at PDN and Barstow be considered as site locations and be included in the site location weighting process.

*Thank you for the comments and feedback.*

6. The NAACA is requesting our 2 neighborhood engineers be allowed to attend and participate in the site location weighting process meeting(s).

*As we appreciate the cooperation with the community, PNM will be using standard siting analysis process for the weighting of the various siting criteria. To make it fair for all communities, there will be opportunities for the community to have input through the county commission process.*

7. The NAACA is requesting a copy of the Load Study of NAA for years 2021, 2022 and 2023 before the weighting process meetings begin and disclose who conducted the Load Study.

*As we appreciate the community's wish to participate in the engineering process, PNM supported the community in a community open house to obtain the community's perspective and input. The community will have opportunities for additional input through the county commission process.*