

NAACA-PNM Meeting Minutes
12/3/24 Sandia Presbyterian Church- Sunrise Chapel

6:02pm start time. Introductions. Follow up from PNM Open house meeting.

- David Baughman, NAACA Advisor: Electrical engineer
- Jack Cadogan, NAACA Advisor: Engineering, Electrical Utilities Roles
- Lori Williams, PNM Employee, VP Integrative Planning
- Sherrick Roanhorse, Senior Govt. Affairs Manager
- PNM Colleagues introduced

PNM Slideshow Presentation. Looking to site substation in NAA. On or near Paseo del Norte between Ventura and Tramway. Area is growing in NAA and the way “we” use energy is changing. Timeline of project. Currently in public input stage. Application planning to be submitted in Spring 2025. Expect to begin construction Summer 2026. Showed preferences of site locations according to “voting.”

Q&A – [NAACA Provided 7 specific questions](#) to PNM.

- 1) [Please describe the process used to evaluate potential solutions. What technical measures are considered and what are the relative weighting for each technical measure in this analysis?](#)

PNM says they haven’t done detailed analysis yet b/c waiting for public input. They will then put weighted factor on the siting process. Wanted to get through the open houses. Found all vacant parcels to fit parameters of what they are looking for. Potential landowners preliminarily contacted. Looking at NAA sites as possible opportunities. NAA Jack mentions that other solutions should be explored, other than siting a new substation in NAA (see question 3). PNM says planning study is done before siting study.

- 2) [Please quantify the current substation shortfall and expected growth in demand for North Albuquerque Acres area. How many days per year are transformers currently operating above nominal rated level? Which and how many transformers?](#)

Load growth is not notable in this area. Not debating that equipment is not overloaded. Maybe expansion of existing substations could be a solution. PNM shows planning study (existing system review) on slide. Says Hamilton transformer and Signetics feeder over 100% of the total rating. This data is a few years old. From 2021, newer data show net increase of 1 MW, even with solar. But this is not just NAA, this is the whole area they want to serve. Jack asked where the load is coming from. PNM says apartment complexes and other uses around the parameters of area they want served as well as increased use of refrigerated air conditioning and electric vehicle charging. Jack asks PNM to show us information about net MW increase including the reducing effects of solar added for our community members to understand. PNM answers that this data won’t be available until the permit application is filed. Jack responds that this would be good information for the community to have earlier because it is an important factor and could shift the decision making from one object to another.

- 3) [Please provide details on feasibility analysis of adding a second transformer to Tramway substation and/or expanding Hamilton substation to address the current and projected electricity shortfalls. \(Note: 2010 plan identified adding a second Tramway transformer in 2013 to address far NE Heights power demand growth, that was never built.\)](#)

Why can't a second transformer or adding onto existing substation be considered. Table of planning study provides information with their reasoning. Table shows that in all cases, expansion and capacity upgrades are a viable solution that would envelope the new load projections, but challenges would with distribution feeder powerlines from the existing perimeter substations to the load growth hot spots due to distances and where the loads are, inclusive of the whole study area. No distribution feeder system improvement identified with expansion of any existing substations, but this was confirmed as a possible solution to be considered and weighted as options vs new substation. PNM talks about increasing the number of feeders. In 2019, PNM saying distribution was not the problem. NAA Jack asked if expansion of existing substation plus "express feeders" to move power directly to the need area from existing substations without high voltage transmission lines through arterial roads within NAA could be included into the plan as an option – answer Yes... However, PNM said, with building express feeders, there are fewer switching opportunities and more trouble with having quick restoration. This would be a negative weighting factor in the decision process.

Audience question about what a feeder is. PNM explains that they are lower voltage lines going into the neighborhood, not high transmission lines.

- 4) Please provide details on feasibility of building new substation on 6+ acre land near San Antonio & Tennyson, directly along RE transmission lines to address the current and projected electricity shortfalls.

6-acre plot by San Antonio and Tennyson? Why was this area not considered? PNM says it was not in the "substation location area of need." NAA Jack brings up the facilities plan and the requirement to locate new substations within or adjacent to transmission corridors (to avoid running new high voltage transmission) unless not feasible and asks PNM to examine this as a potential site. Some discussion that it is outside the area and that consideration needs to be given to new apartment complex dwellers even though they are not tax paying homeowners.

- 5) Existing substations in NE heights and other more modern substations (i.e. Scenic, La Morada) are less than 0.5 acres in area. What is the reason the NAA substation must be 2-4 acres? Can you provide a top-down view of the proposed NAA substation? What is PNM's position on differences in defining substation in existing neighborhood vs new infrastructure in emerging areas?

Question about vast majority of substations limited to .5 acres. Why is the scale of this one so much larger. PNM says the walled footprint of this one is 1.5 acres with site being 2-2.5 acres. Larger primarily due to new design standards for adding ring bus segmentation in addition to traditional transformers and breakers as currently exist in neighborhood substations on less than 1 acre. This segmentation allows for isolation of faults without losing the whole substation (all distribution feeds to neighborhood loads) but does significantly add to the footprint. Additional footprint area is also included in the modern substation lot size for buffer/landscape requirements of NAA sector plan and to create space for maintenance equipment access inside the perimeter wall. Admitting that cell towers not planned by requesting companies can ask for permit to be added. This would be much higher.

- 6) The SW corner of Tramway and Paseo del Norte has Approximately 1.15 acres of buildable land owned by AMAFCA that could host a substation of up to about 0.75 acres in size. The land would easily support a dual transformer substation similar in size to Mission or Wayne expansion, and transmission lines could be extended up the east side of Tramway along bike path. Please explain why a substation sized similar to the Scenic substation situated on this property would not work to meet the required power demand.

Question about building on southwest corner of Tramway and & Paseo 1.15 acres of buildable land owned by AMAFCA. PNM says they have not approached AMAFCA for land purchase – perhaps there is some complexity with this. PNM says that there is a potential route through Tramway and PNM going through permit process for access from the DOT. Reminding us that they are still in siting process. Referring to Eubank Corridor: need 75' corridor for transmission lines, but this can swing over road and only needs 35' on each side of pole. PNM later sent out a note with this lot highlighted so it appears this will be considered.

- 7) The map PNM showed at the Open House indicating possible lots to build a substation on was outdated, especially along the Eubank corridor where homes are currently being built or have been built. PNM has listed a very quick time frame for this sub-station project. It would seem PNM has already picked priority lots. For transparency purposes will PNM divulge these lots?

Question about priority of lots. Sites by school & church less favorable. Saying #4 is more favorable because water reservoir tank. PNM currently owns a small parcel of site #4, but favorable are #9, #10.

Q&A - Community members given the chance to ask questions, but time limited to three minutes.

Neighbor (owner of preschool) is more concerned about transmission line safety than substation location.

Question why some proposed sites have homes on them (eg, site #16). PNM says that sites will be reevaluated and that they used satellite maps to show potential sites.

Neighbor not convinced that substation should be a residential lot on sector plan. Question asking if commercial sites can be looked at. PNM says that whole community is considered A-1 and the majority of proposed sites are sitting along Paseo.

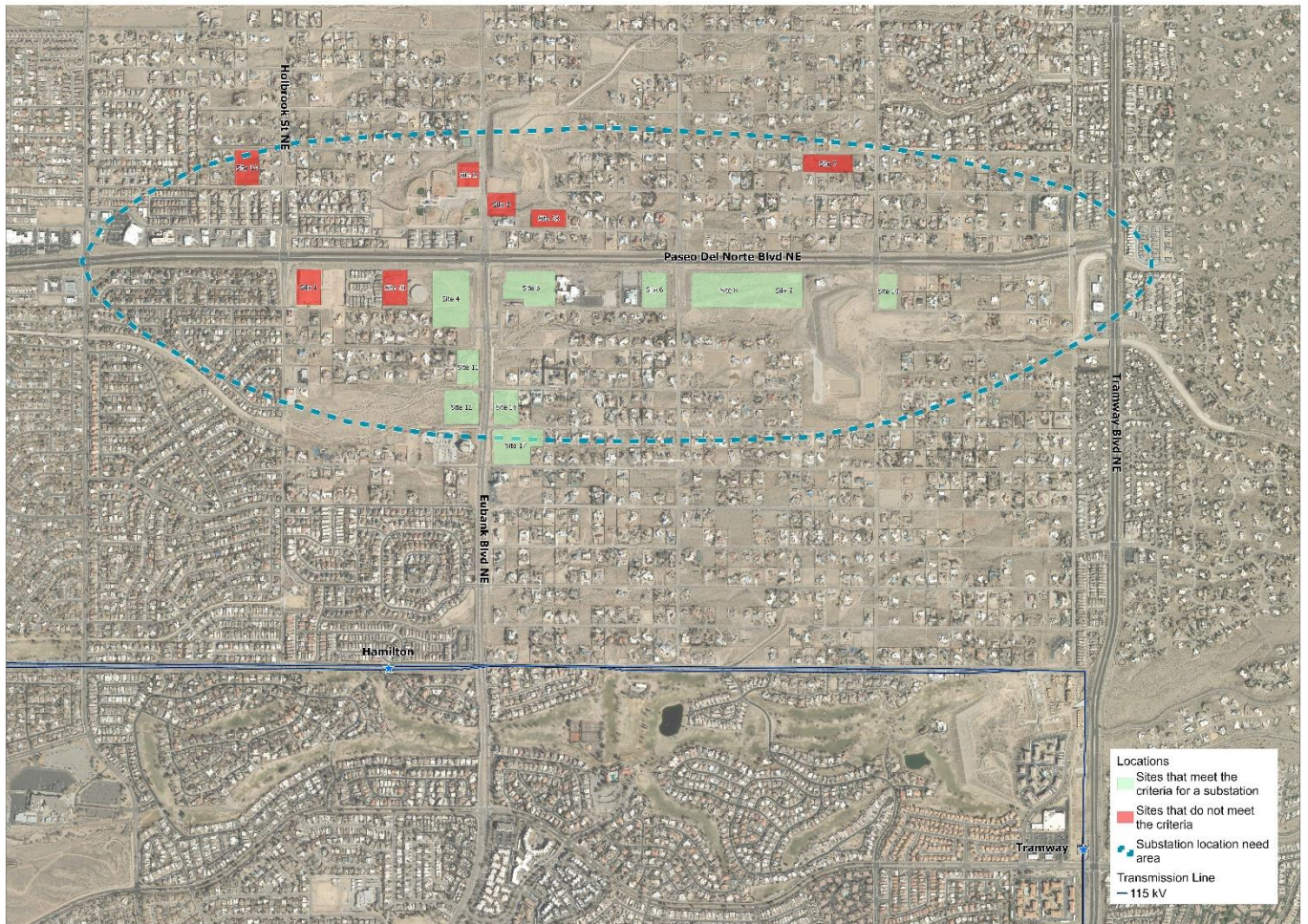
Question about 2021 substation transformer loading chart. PNM says that red line is 80% loading capacity. Signetics feeder is very overloaded. Transformer is not overloaded.

Question about hypothetical connections. Hamilton and Tramway on same transmission line. For example, to get power to site #8, how would that work? PNM answer, through Tramway or Eubank to Paseo del Norte, one set of 90' poles, two sets of wires (one on each side), and overhead 115kV lines. A-frame structures in substation (45'), that catch the wire. Once you get to substation, you have feeder lines coming out (12.47kV) and going to neighborhoods. PNM saying feeder lines coming out of Hamilton are overloaded. Currently each substation transformer has 4 feeder lines coming out of them at 12.47kV. From new substation, they would tie into existing substation feeder lines to reroute if needed. This would free up capacity on existing transformers.

Question asking if there is any change from prior proposal area for project. PNM says that it is same study area. But they say that this project will not serve Sandia Casino or users on the West side of I25, which was part of proposal last time. PNM says that the area of need was refined.

Question about Eubank Corridor (for towers) and needing 75ft clearance. PNM says it's 75ft total, so 35ft each side.

PNM survey: <https://www.surveymonkey.com/r/pnmnaa>



Potential Sites for Proposed North ABQ Acres Substation

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