

PNM North Albuquerque Acres Substation Project
Questions & Answers
Updated: June 2025

Note: Most questions were submitted by the public. The PNM Project Team has provided the best available answers and will update this document as new questions or information arise.

General Questions

1. What is the North Albuquerque Acres Substation Project?

PNM's North Albuquerque Acres Substation Project is a proposed new electric substation designed to meet area power demands and ensure reliable power for homes and businesses in the North Albuquerque Acres (NAA) community. It aims to significantly reduce the risk of power outages across the northeast quadrant of Albuquerque within Bernalillo County. The project team considered locations on or near Paseo del Norte between Ventura Street and Tramway Boulevard for the new substation. PNM is planning to file applications with Bernalillo County this summer to seek approval to build a new electric substation located along the Paseo del Norte Frontage Road east of Browning Street and west of Lowell Street. The Project site is directly west of Bernalillo County Fire Station No. 35 and the AMAFCA South Domingo Baca Principal Spillway. PNM is responsible for providing safe, affordable and reliable power to all customers in a technically sound and equitable manner.

2. Why is this project needed? Why now?

Customers in NAA receive electricity from existing substations located outside of their neighborhood near Paseo del Norte that do not have the capacity to accommodate ongoing growth in the NAA area. As a result, the area's energy needs exceed the normal rating of these existing substations located in other neighborhoods by up to 34 percent. The situation will worsen if a substation is not built as soon as possible.

Average energy demand at nearby substations has continued to rise, posing a risk of system overload that could lead to power outages affecting residents and businesses and could extend beyond NAA to northeastern parts of the City. Building a new substation near the load growth communities it will serve is the only way to address this issue equitably without further burdening other neighborhoods with the electric service needs of NAA.

Rooftop solar penetration can mask significant amounts of load unseen by the substation transformer metering. Approximately 9% of the gross area load is supported by rooftop solar. While rooftop solar can relieve substation transformer loading during periods of high demand, it is not a firm generation source that is dispatchable by PNM. PNM must be capable of serving the gross load of the study area if rooftop solar is lost due to variable weather conditions or other causes. Electric vehicles make up a small percentage of vehicles on the road today. However, as technology matures and more models become available, electric vehicle adoption is expected to increase dramatically. As EV adoption levels increase, charging of electric vehicles will impact the electric grid. PNM expects EV adoption in this area to increase the energy demand by about 2.5 – 8 MW.

3. Does the project include transmission?

The project will build a short transmission line connecting the new substation to PNM's existing grid. PNM prefers the Tramway Boulevard route along Paseo Del Norte, based on substantial public feedback supporting this option.

4. Is the transmission 115 kilovolt (kV)?

Yes, the new transmission line will be 115 kV.

5. What is the size of the substation?

Most of the potential sites being considered range from 2.5 to more than 10 acres, but we expect the walled footprint of the substation to be approximately 2 to 3.5 acres. The final site must be able to accommodate a substation of this size in order to effectively serve load growth in the NAA area.

6. How long would the substation wall be?

The length of the substation wall would depend on the site that is ultimately identified. However, we do know the walled substation footprint would be a minimum of 2 acres.

7. What did you factor in when evaluating growth?

Our team developed a 10-year load forecast by looking at historical growth of residential housing and commercial businesses over the past five years to determine trends. We also factored in new apartment complexes expected to interconnect to PNM's system and the increased adoption of electric vehicles and rooftop solar that actually adds to the load demands on the existing electric grid system.

8. When you looked at growth, did you also look at strip malls?

Energy demand from strip malls and other businesses within the area is included in the historical data that helped inform the load growth forecast for this project.

9. What are the potential downfalls of not approving this project?

This new substation has been planned to serve the NAA area when the need arises since 2010; that need is now. Customers in NAA and the surrounding neighborhoods are at risk of lengthy power outages caused by system overload if this project is not approved and constructed. These neighborhoods are served by our existing Tramway, Hamilton and Signetics substations, which were not originally planned, designed, and built to accommodate the growing energy demand in North Albuquerque Acres.

10. Where is reliability data available?

Historical reliability data was not the basis for the substation capacity need. However, increasing substation capacity in the area will provide redundancy to improve operations of the system and maintain reliability. 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.

11. Will the equipment be buried underground?

All PNM substations are above-ground facilities that allow for air cooling of the equipment and to facilitate access for monitoring and maintenance purposes. Bernalillo County does not require any power lines, either distribution or transmission, to be installed underground. The City of Albuquerque does not require any transmission lines to be built underground. The City of Albuquerque requires some new distribution lines to be installed underground.

The New Mexico Public Regulation Commission not only requires PNM to provide reliable electric service but also to keep costs reasonable. Underground transmission lines cost significantly more

than overhead transmission lines to build and maintain. PNM conducted a study in 2019 to determine the cost of installing the transmission line underground, and the costs were about 17 times that of overhead construction. Although the proposed transmission line along Eubank Boulevard or Tramway Boulevard does not meet the criteria for undergrounding, we are looking at ways to minimize impacts wherever possible while working to prevent lengthy power outages for our customers in northeast Albuquerque and beyond.

Substation Siting

12. Where would the project be located? Have you identified a site?

Through thorough evaluation and public input, we identified a preferred site for the substation, along with two alternatives. The preferred site is located near the intersection of Paseo Del Norte Boulevard and Lowell Street adjacent to AMAFCA's large South Domingo Baca dam and spillway and Bernalillo County Fire Station No. 35.

13. How did you identify the potential locations?

Our siting team began by identifying a project study area, which extends along Paseo del Norte between Ventura Street and Tramway Boulevard. This area is where a substation must be sited to operate efficiently, which allows us to serve the community's current and future energy needs most affordably for our customers. From there, PNM conducted an initial analysis of the study area and identified seven sites for further evaluation. Additionally, we have and continue to take community feedback into consideration.

14. How will you determine the proposed site that will be submitted to Bernalillo County for review?

As we evaluate potential sites, our team will look at several system considerations, site characteristics and environmental factors, in addition to community feedback. We have identified a proposed site based on these factors, which include proximity to the customers being served; access to existing power lines and roads; special design and construction requirements; size, topography, drainage and soil type; availability of the property; land use compatibility and zoning; environmental justice; residences and institutions nearby; visual impacts and screening potential; hazardous waste; threatened or endangered species; wetlands and floodplains; and cultural resources.

15. Can you build this project on the vacant land near Barstow Street?

Our siting study looked at potential locations throughout the substation requirement area where the project must be located to serve customers most efficiently. Barstow Street is located outside the siting area, which extends along Paseo Del Norte between Ventura Street and Tramway Boulevard.

16. Why can't you build the substation somewhere else? What other options are there?

This type of facility is most effective and most equitable when located near the homes and businesses driving the load growth that it will serve. Locating this new substation near the load it will serve minimizes voltage drop, improves customer power quality, enhances distribution system flexibility and bolsters transmission system reliability.

At this time, the NAA does not have a dedicated substation to meet residents' current energy needs, which puts the community – and other neighborhoods – at risk of power outages caused by system overload. This project is needed to keep the power on for our customers in NAA and provide enhanced reliability and equitable access to infrastructure for all neighborhoods and customers across the northeast Albuquerque metro area.

17. Why is this substation being proposed in a residential area and not at an existing substation? For example, why can't you expand the Tramway substation or build on Paseo del Norte or Wyoming where there is more commercial development?

We considered several options, including expanding existing substations. But these substations in other neighborhoods that currently provide electric service both to them and NAA are built out and cannot be expanded. Our analysis found that this new substation is the only way to meet the growing load growth area's energy needs and significantly reduce the risk of lengthy power outages. Further, it must be located in the load growth area it would serve.

18. Why are you planning to build this substation in NAA when the growth is occurring in other areas?

There is still ample vacant land to be developed in NAA and infill growth is ongoing and will continue for some time. Although some new homes and businesses are being constructed in outlying areas, this project is being proposed specifically to address load growth – that is, the increasing demand for electricity – within NAA. Energy demand in this area already exceeds the capacity of existing substations and continues to grow due to increasing adoption of electric vehicles and other factors.

19. Why can't you move the substation farther west to the commercial area that's driving the need for this project?

This project is needed to serve the current and growing energy demand in NAA. As a result, it must be located within the load growth area it would serve.

20. What is PNM's load growth information, including the source and growth potential? Are you double-counting solar meters?

PNM's load information comes from historically measured loads at the existing substations, which account for existing solar generation contribution. Solar meters are not double counted.

21. What is the proposed capacity of the new substation and the loading/capacity of the existing substations?

The proposed capacity of the new substation is approximately 66 MVA. The total capacity of the three nearest existing substations is also around 66 MVA, meaning the new substation will effectively double the capacity for the area.

22. Why can't you expand an existing substation in this area instead of building a new one?

We evaluated several possible ways to meet NAA's current demand and prevent power outages in surrounding communities, including the expansion of one or more existing substations not located in NAA and the addition of a new battery energy storage system. But the substations in other neighborhoods that currently provide electric service both to them and NAA are built out and cannot be expanded. This analysis found that building a new substation near the load growth area it would serve is the only way to avoid system overload and meet NAA customers' energy needs now and in the future.

23. How will community input be incorporated into the project?

The community input received is one of several factors we will use to help evaluate and select a final location. We also welcome community feedback on design elements such as the substation wall and landscaping.

24. Where can we see the site and comment on it?

You can also find a map of the sites at www.pnm.com/naa and can submit questions and any comments to partners@pnm.com.

25. Why are you asking for community input when you won't change the project location?

Based on the feedback from our initial proposal, PNM has studied multiple viable sites for the substation. We are looking at different locations and welcome the community's feedback on these potential sites. However, the site that is ultimately selected must be located on or near Paseo Del Norte Road between Ventura Street and Tramway Boulevard. We have identified this area based on its proximity to the load growth communities the new substation would serve.

26. Has PNM done or are they planning to do any environmental studies regarding wildlife? Site #17 is adjacent to an arroyo that is heavily used by coyotes, bobcats, hawks and other animals for hunting.

PNM will perform natural and cultural resource surveys as a best management practice and as required by the federal, state, and BernCo governments related to the development of this substation. Potential impacts to threatened or endangered species are also one of several siting considerations we are looking at to help us select a proposed site.

27. Why can't PNM build a smaller substation to the east and expand the Signetics Substation's service in the area closest to it?

The Signetics Substation is needed to serve the area closest to it and presently has distribution circuits that are beyond their capability supporting the NAA community. Reducing the load from the NAA community off of those Signetics circuits will bring the circuits back into compliance and allow for growth near the Signetics Substation.

28. Did you explore other locations where the load demand is increasing?

The specific data that demonstrates the need is in the study and will be provided in the application to Bernalillo County. Existing substations and distribution circuits in the area are presently operating beyond their normal, safe rating.

29. Can you explain the demand numbers and the potential for outages?

The existing power demand for NAA area customers is being supplied by the Hamilton, Signetics and Tramway substations. The loading of these transformers and observations are in the study and will be provided in the county application.

30. Why is a substation not being considered in the Sandia Heights area?

The Sandia Heights area is outside the substation location need area. It is not near the load center and does not meet the technical requirements for a new substation with respect to size, access to transmission, and space for new feeder routes. This would entail asking the Sandia Heights area to carry the load for NAA.

31. Why did PNM approve of the power usage for a recent development of apartments within the City, like Ventura/Carmel and Tramway (Tennyson)/San Antonio?

PNM is obligated by state law and New Mexico PRC Rules to provide power to all customers unless there are extreme risks to the grid system, which we are getting close to reaching in the areas driving load growth, including NAA and surrounding neighborhoods.

- 32. PNM cannot compare the power usage from huge apartment complexes with hundreds of occupants on the outskirts of NAA to the A1 zoning (1 home per acre) NAA sector. The growth has been extremely slow because of the sector plan and the fact that we have several acres that are unbuildable.**

High-density does not always correspond to high electricity usage, and low density does not always correspond to low electricity usage. Electric load demand growth is driven in large part by the heating, cooling, and lighting needs per square foot. Extraordinary uses, such as heated swimming pools, electric vehicle charging, rooftop solar, and other factors impact electricity demand in addition to the number of dwelling units per acre. For example, a 6,000 square-foot, single family home may consume as much or more electricity than six 1,000 square foot apartment units. If that home has a swimming pool, rooftop solar, and charges electric vehicles, then its electricity demand may be much more than the corresponding square footage of apartment units.

- 33. PNM was slated to build a substation in a pre-emptive plan for growth of power usage in the area. The La Cueva substation was to be completed and running by 2011 with a site in the area that would have prevented this strain. Why wasn't it built then?**

Proposed alignments and station locations listed in the BernCo Electric Facility Plan (EFP) 2010 project list were based on the electric utility's best available knowledge at that time. The EFP indicates that a variety of changes and updates, including changes in land use, the inability to obtain right-of-way, a change in the location of load centers, and various other factors, could lead to future changes in proposed alignments and/or station sites. It also indicates that some sites may not be large enough to accommodate expansion, requiring the selection of a new site in the vicinity. Lastly, it notes that project lists and corresponding map figures are provided for informational purposes and do not bind the electric utilities to alignments or station sites. The EFP states that a project location may be changed at the time application is made for project approval.

- 34. Where is that specific PNM site location now? Did PNM sell the land for profit to another entity?**

PNM is not obligated to disclose its private real estate transactions to the public unless required as part of a NM PRC application or action.

Transmission Line

- 35. What is the planning and approval process for transmission?**

Bernalillo County and PNM have an approved franchise agreement that allows PNM to utilize the public right-of-way for electric facilities, including power lines, as long as this critical infrastructure is coordinated with other infrastructure in the public right-of-way, such as water and sewer lines, gas lines and data lines. State Law also provides for accommodation of utility infrastructure in NMDOT facilities such as Tramway and Paseo del Norte. If there is a need to locate transmission structures on private land, then PNM is obligated to negotiate with property owners for utility easements with appropriate conditions.

- 36. What are the criteria for siting transmission lines?**

Transmission lines are sited based on the location of the facilities being connected and the availability of space for a corridor that accounts for safety clearance requirements from the National Electric Safety Code (NESC), best industry practices, and PNM design criteria and policy, including prudent avoidance of sensitive populations and facilities, such as primary schools and medical facilities.

[Excerpt from EFP for informational purposes only:]

A. Location Standards

1. Where practical, future transmission lines shall avoid traversing residential land.
2. There are three levels of preference for the location of transmission lines in the City of Albuquerque and Bernalillo County.

In order of preference they are as follows:

- a. Interstate highways and arterial streets are particularly appropriate corridors for transmission lines; some major drainage channels may also be appropriate.
- b. Collector streets, especially nonresidential collector streets, are appropriate in some cases for transmission lines.
- c. Other potential corridors will be evaluated where appropriate.

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37. Do you intend to run the transmission along San Antonio and up Eubank?

There are two technically feasible transmission line routes to bring bulk power to the new NAA substation: one that would run along Eubank Boulevard or along Tramway Boulevard and then along Paseo del Norte to the new substation. PNM prefers the Tramway Boulevard route along Paseo Del Norte, based on substantial public feedback supporting this option.

38. Why can't the transmission line run along Paseo del Norte instead? Or along Wyoming, which is already designated for transmission?

PNM has franchise agreements with Bernalillo County and the City of Albuquerque that give PNM the right and the privilege to develop electric facilities, such as transmission lines, in their public rights-of-way. The final transmission route will depend on positive coordination with NMDOT and obtaining the necessary permits to be in their right-of-way to maximize efficiency while minimizing impacts. Once more, PNM prefers to run the transmission line from Tramway Boulevard and then along Paseo Del Norte to the new substation.

39. Have you looked at running transmission from the Tramway substation, as there appears to be more open space and less impact on residents?

PNM considered two technically feasible transmission line routes: either along Eubank Boulevard or Tramway Boulevard and then along Paseo del Norte to the new NAA Substation. PNM prefers to run the transmission line from Tramway Boulevard and then along Paseo Del Norte to the new substation.

40. Did you look at alternative transmission line routes that avoid Eubank? If so, which routes did you consider and why did you determine they were not feasible? Are you considering other options? Can you consider Tramway as an option? What considerations would you need to address if transmission is moved in from Sandia Pueblo? Can you run a new transmission line down Paseo? Why wasn't transmission routed along Paseo years ago?

Sandia Pueblo is served by a different substation and will not benefit from this new substation intended to serve North Albuquerque Acres and the surrounding area. PNM will not request that Sandia Pueblo bear the infrastructure burden for a nearby area. Transmission line alternatives going

up Ventura Street and Browning Street were evaluated, but there is insufficient space in these corridors without having poles and conductors located directly in residential areas.

41. How large are the transmission poles? What is the typical transmission infrastructure you would build, and what would it look like? What are some recent examples of new transmission projects?

We have not finalized the design yet but expect the transmission poles to be about 90 feet tall.

42. Will you avoid placing transmission structures in front of residential lots? Where will they be located?

PNM will strive to minimize impacts on residential lots when designing the placement of necessary transmission structures to meet technical and safety standards.

43. Will PNM bury the transmission lines or compensate those who may have to move to accommodate the lines?

See response to number 11. No residents will have to move to accommodate any electric utility infrastructure for this project as there is vacant land for the substation and power lines can for the most part be located in the public right-of-way.

The New Mexico Public Regulation Commission not only requires PNM to provide reliable electric service but also to keep costs reasonable. Underground transmission lines cost significantly more than overhead transmission lines to build and maintain. PNM conducted a study in 2019 to determine the cost of installing the transmission line underground, and the costs were about 17 times that of overhead construction. Although the proposed transmission line along Eubank Boulevard or Tramway Boulevard does not meet the criteria for undergrounding, we are looking at ways to minimize impacts wherever possible while working to prevent lengthy power outages for our customers in Northeast Albuquerque and beyond.

The Department of Homeland Security identifies electric service as critical infrastructure that enables all other infrastructure. This substation would be considered critical infrastructure necessary to prevent lengthy power outages caused by system overloads. PNM continues to explore ways to minimize impacts to the community and has welcomed community input. Homeowners would not receive financial compensation if the substation were approved. With that being said, PNM continues to state that homes in this area will benefit from the power the substation provides, now and in the future. Homes with resilient and reliable electric service tend to be more valuable than homes with increased outage risks.

Potential Impacts

44. What would the substation look like, and how would it affect the view from my home? What about the transmission line?

The substation plans include equipment such as transformers that would be surrounded by a decorative security wall and landscaping to enhance views from the community. Specific details of both the substation and transmission line will depend on the site selected and the location of each home, but we welcome the community's feedback as we work to meet their growing energy needs. The substation design will meet any requirements defined in the NAA Development Plan.

45. Will you be performing a viewshed analysis to determine the true visibility of the substation and transmission line?

There are no federal, State, or Bernalillo County view protection regulations or requirements applicable to the study area. A substation facility is critical infrastructure with utility scale electric equipment located behind an attractive, articulated security wall designed to comply with applicable design standards from the area's Sector Development Plan.

46. Would the substation equipment be noisy, and if so, how would you reduce those impacts?

No, the substation will not be noisy and will meet the County's Noise Control Ordinance standards. The substation equipment may produce a humming or buzzing noise, but we do not expect it to be audible outside the substation walls or above any ambient noise in the area (i.e., traffic). We are looking for ways to minimize impacts on the community and welcome their input as we work to keep the lights on in NAA and other communities across the region.

47. What about the transmission line?

Transmission lines may occasionally emit a buzzing or humming sound known as a corona discharge. At approximately 25 decibels, this noise is typically not audible for lines below 230kV. Since this line will be 115kV, the sound may only be distinguishable when standing directly under the conductors, particularly in the absence of ambient noise or during snowfall.

48. How would this project impact my property values?

We understand the community's concerns and are seeking feedback on potential sites to help minimize any effects, including impacts to property values. With that being said, it's important to keep in mind that other neighborhoods in the surrounding areas already have their own substations, which have not negatively affected nearby properties. Further, NAA residents – and their property values – would benefit from the reduced outage risk this project would provide; homes with resilient and reliable electric service are generally more valuable than homes with increased outage risks.

49. Would homeowners be compensated for reduced property values due to the substation?

This substation is a critical infrastructure necessary to prevent lengthy power outages caused by system overloads. We are exploring ways to minimize impacts and welcome community input; however, homeowners would not receive financial compensation if the substation were approved. That said, homes in this area would benefit from the power the substation provides, now and in the future. Homes with resilient and reliable electric service tend to be more valuable than homes with increased outage risks.

50. Would PNM use eminent domain to obtain the land for this project?

As we continue evaluating potential sites, we will look at several factors, including availability of the property. While there are other siting considerations that must be considered, our goal is to work with a willing seller and avoid the use of eminent domain.

51. What are electric and magnetic fields (EMF)?

Electric and magnetic fields, or EMFs, are used to describe the energy released in the area around electric infrastructure, household electric wiring, and appliances such as ovens, computers, microwaves, cellular phones, televisions, and vacuum cleaners, as well as some types of lighting. EMFs are measured in a unit called milligauss (mG) and are present wherever there is electricity.

52. What levels of EMF would the new substation emit?

There are two types of electric and magnetic fields (EMFs): low-frequency EMFs and high-frequency EMFs. Substations and items such as mobile phones and microwaves emit low-frequency EMFs.

EMFs from substation equipment significantly decrease outside the facility's walls and are comparable to background EMF levels.

53. What health impacts are associated with exposure to the EMFs this substation would emit?

We understand the community's concern, but in more than 30 years of research, scientists have not found any adverse health effects associated with EMF exposure from this type of substation. Some studies have found a weak association between exposure to high EMF levels and childhood leukemia, but there is no conclusive cause and effect. We take health and safety very seriously and will continue to monitor the latest studies on this issue as we work to keep the lights on in NAA and other communities. There are currently no federal, state, or local government regulations or standards for electromagnetic fields.

54. Have you considered EMF in your planning?

Given that there are no federal, state, or local government regulations or standards for electromagnetic fields, PNM practices prudent avoidance of potentially sensitive populations and facilities when technically feasible.

55. How do you measure EMF and EMF exposure for residents? What measures will PNM put in place to measure EMF, as there is not one standard to do so?

As there are no federal, state, or local government regulations or standards for electromagnetic fields, PNM practices prudent avoidance of potentially sensitive populations and facilities when technically feasible. PNM relies on research conducted by independent organizations to evaluate the impact of EMF and EMF exposure. If measurements are required, PNM will use specialized meters designed to measure Electric and Magnetic Field, following recommended guidelines.

56. Why are NAA residents getting all the impacts for this project when it's being constructed to benefit other neighborhoods?

Currently, growth in NAA is causing overloads to surrounding areas that are providing power to NAA. This project is intended and planned to directly benefit the NAA area by providing equitable access to critical infrastructure while reducing the overloads in surrounding areas. While the project will help prevent lengthy power outages in those neighborhoods, its primary purpose is to meet the current and future energy needs of our NAA customers. PNM's existing substations in the surrounding communities were not built to accommodate the current demand from NAA residents. A new substation in the area would provide customers in NAA with the power they need for electric vehicle charging, air conditioning and other uses.

57. Why should I be impacted by this project when I have solar panels at my home and would not benefit from a new substation?

Solar panels are connected to PNM's electric grid so that customers continue to receive power even when the sun is not shining. As a result, NAA residents with their own solar generation systems would benefit from the new substation, which is needed to help meet their current and future energy needs. It's also important to understand that PNM must be able to meet our customers' electricity needs at any time – such as during weather conditions when solar panels are not generating power. A house with solar panels and NOT connected to the PNM grid would not benefit from this planned facility.

58. Does your load growth data take homes and businesses with solar into account? What about the future of solar?

Yes. Rooftop solar generation plays an important role in the local electric system, but our analysis has determined that a new substation in NAA is the only way to reduce outage risks and reliably meet the area's current and growing energy demand, even with the continued growth of rooftop solar.

59. How much would this project cost, and would my electric bill increase to pay for it?

We expect this project to cost approximately \$35 million. The costs would be shared by all 525,000 customers within PNM's service area.

60. Would you raise electricity rates to pay for this project?

Project costs would be recovered in a future rate review.

61. I've read about substations being shot up. What security parameters will be put in place?

We take safety and security very seriously. The new substation would be surrounded by a 12-foot concrete wall and feature additional security features consistent with PNM's guidelines.

62. Would there be any negative impacts to wildlife, such as the red tail hawks that use the arroyo as a hunting and migratory area?

Potential impacts to threatened or endangered species are one of several siting considerations we are looking at to help us select a proposed site.

63. How would you contain any spills, and what is the mineral oil content?

Every piece of equipment that uses mineral oil has containment measures and is regularly examined for leaks or spills.

64. Would the new transmission line pose a hazard to balloonists landing in the area?

Skilled pilots are typically aware of power line locations and should be able to avoid existing and proposed power lines. Accidents due to pilot error or wind gusts are inherent risks of ballooning. In addition, PNM engineering implements robust protection measures to ensure that impacts to the electric grid are quickly detected and addressed.

Project Alternatives

65. What alternatives to meet NAA's energy demand did you consider?

We looked at several alternatives, including the expansion of one or more existing substations and the addition of a new battery energy storage system. Our analysis found that building a new substation near the load growth area is the only way to meet NAA customers' energy needs now and in the future.

66. What criteria were considered in your alternatives analysis?

There are many factors that are considered to evaluate alternatives, including thermal loading, voltage levels, space for expansion for existing facilities, expected growth for both loads and solar, and potential transmission routes.

67. What are the pros and cons of each alternative?

The pros of expanding existing sites include not needing a new substation site. However, the cons are that the existing sites lack the necessary space for the capacity in the area, even with expansions.

68. Why can't you improve the Signetics Substation instead?

We considered several options, including expanding existing substations. However, our analysis found that this new substation is the only way to meet the load growth area's growing energy needs and significantly reduce the risk of lengthy power outages.

69. Does rooftop solar help with capacity?

Rooftop solar provides an additional energy source when the sun is shining, but it does not address the load growth issues that could cause a system overload resulting in a lengthy power outage. Building a new substation to serve NAA customers is the only way to address this issue.

70. With new technologies like battery storage, why are you building this type of outdated facility?

Substations remain a critical part of the electric grid, even with solar, battery storage and other technological advancements. In fact, some growing technologies – such as electric vehicles – can increase demand for electricity. The NAA Substation Project would help meet this demand and keep the lights on for residents.

71. Why can't you underground the new transmission line?

The New Mexico Public Regulation Commission not only requires PNM to provide reliable electric service but also to keep costs reasonable. Underground transmission lines cost significantly more than overhead transmission lines to build and maintain. The proposed transmission line along Eubank Boulevard does not meet the criteria for undergrounding, but we are looking at ways to minimize impacts wherever possible while working to prevent lengthy power outages for our customers in Northeast Albuquerque and beyond.

72. What are the specific costs of overhead vs. underground, how would that difference affect customers' bills, and how did you calculate these costs?

Bernalillo County does not require power lines to be constructed underground, either in the public right-of-way or on private properties. PNM conducted a study in 2019 to determine the cost of installing the transmission line underground, and the costs were about 17 times that of overhead construction.

73. What are the details of undergrounding vs. overhead construction? What would the vaults, risers and other equipment look like?

Transmission line construction will be overhead. Bernalillo County does not have any requirements for distribution lines coming from the new substation to be underground.

74. What is different about this project compared to prior versions proposed a few years ago?

Our extensive analysis has determined that the need for this project remains unchanged, which is why we are planning to file a new application with BernCo. With that being said, we are conducting a new siting study and taking public feedback into account to identify a site that minimizes impacts to the community and meets the current and growing energy needs of NAA.

Since then, there has also been more development that further stresses the existing grid system, making this project even more imperative.

75. Please provide specifics of the types of increase power requirements for NAA for standard homes, multifamily homes, commercial, industrial, and non-commercial automobile charging stations.

The increased power requirements for the NAA area homes and businesses were evaluated in the study and will be provided in the county application.

76. Can you provide more information about the acreage requirement, the height and location of the poles, and where there is a similar substation to this project locally?

The substation walled-in area required for the equipment in the substation and the maintenance access to that equipment is approximately 1.5 acres. Required property offsets, landscaping plan and grading needs would extend the site to closer to two acres, depending on the site aspect ratio.

We have not finalized the design yet but expect the transmission poles to be about 90 feet tall. The exact locations will be determined as part of the design process and will depend on the substation site selected.

The proposed substation will not look like our substations in rural areas, which are open air and have chain link fencing with no landscape buffer. This substation will have a similar electrical design to Sagebrush and Prosperity but in a much smaller footprint. It is smaller than many other rural substations such as Tome and Manzanita.

Approval Process

77. Who is responsible for approving this project?

The Bernalillo County Planning Commission and Board of Commissioners will ultimately vote on the project after considering PNM's application.

78. What is involved in the County's review process?

The Bernalillo County Planning Commission must approve a Special Use Permit to ensure the project is consistent with the health, safety, and general welfare of residents in affected communities. They may identify conditions to help ensure that adopted Bernalillo County goals and policies are furthered by the use. Prior to the Planning Commission hearing, County departments and other agencies will provide comments on PNM's application. In addition, all the potential project sites are located in the Paseo Del Norte/North Albuquerque Acres Sector Development Plan area. As a result, the project will require a Sector Plan Amendment. The Planning Commission will hold a hearing and make a recommendation to the Bernalillo County Board of Commissioners, which is the ultimate decision-making body.

79. Will there be an environmental study?

PNM will perform all required environmental studies as required by the federal, state, and Bernalillo County governments related to the development of this substation.

80. How can I stop this project from being approved?

The Bernalillo County Board of Commissioners will ultimately decide on the project. However, it's important to understand that a new substation is needed in this area to prevent lengthy outages related to system overload and to meet the current energy needs of NAA residents and nearby businesses.

81. Why are you proposing this project again when you know the community doesn't want it and the Bernalillo County Board of Commissioners has already rejected it?

We understand the community's concerns and are looking for ways to address these issues and minimize impacts. That said, a new substation in this location remains critical to preventing lengthy

power outages across large areas and to meeting NAA residents' current and future energy needs, including electric vehicle charging.

PNM hopes to present a revised plan to the Bernalillo County Board of Commissioners that demonstrates an approach that is understood by the community and stakeholders and reliably serves the current and future growth and development of the community.

82. Do people and organizations who oppose this project have leverage to stop it from being built?

We are committed to educating and working with the community about why this project is needed not only for today's power needs but also for future demands. We hope for its approval, but it's vital for Bernalillo County Planning Commission and Board of Commissioners to hear from project supporters.

83. If I support this effort, where would my letter go?

You can email us your letter addressed to the Bernalillo County Planning Commission and Board of Commissioners, and we will ensure it is delivered prior to the final hearings. We will provide updated information once the applications are filed with the County.

84. What's the timeline for completing this project?

PNM plans to begin construction in 2026 after Bernalillo County Planning Commission and Board of County Commissioner approval of this project. We expect the new NAA substation to be in service in 2027.

85. Why are you rushing this project?

PNM has planned for this project for over a decade. A previous effort to obtain land use approval from Bernalillo County was attempted in 2021. The risk of overloads and outages has only increased for the existing substations currently serving NAA, which lack the capacity to continue to do so. As a result, NAA and surrounding area customers will be at risk of power outages due to system overload until the new substation is built.