

Exhibit D

Structure Height

Justification



NBB-64

EXHIBIT D: Response to Santa Fe County Letter dated April 27, 2018

Santa Fe County letter Item d.

The plans illustrate the proposed "H" frame structures at 120-140 feet in height. Section 7.12.1.3 of the SLDC states, "Above-ground electric utility lines that transmit electricity at a voltage greater than or equal to 46 kilovolts shall be designed and constructed at the minimum height necessary for the proposed structure to function properly and for public health, safety, and welfare, as demonstrated by the applicant" Staff has determined that sufficient justification that the proposed height is the minimum necessary for the height of the structures has not been provided. Justification of the proposed structures will be certified by a professional engineer.

PNM Response and Additional Information:

The National Electric Safety Code (NESC), introduced in 1914, provides practical safeguarding guidelines used by utilities as the industry standard for utility safety. The NESC covers basic provisions for safeguarding of persons from hazards arising from the installation, operation, or maintenance of (1) conductors and equipment in electric stations, and (2) overhead and underground electric and communication lines. It also includes work rules for the construction, maintenance and operation of electric lines and communication lines and equipment. The standard is applicable to the systems and equipment operated by utilities (IEEE Standards Association, 2017 National Electric Safety Code). The NESC is adopted as law by the New Mexico Public Regulation Commission requiring PNM to develop new facilities to the current NESC. It is also cited in Section 7.2.1.4 of the Santa Fe County Sustainable Land Development Code that all development shall comply with the NESC. The overall height of the proposed structures for the BB2 Project must accommodate the following:

- a) ground to conductor clearances per the National Electric Safety Code; These required clearances are the distances that must be maintained between the conductor and the ground in order for the line to operate safely under a range of operating conditions.
- b) sag of the conductor; The sag is the distance that the conductor dips below a straight line between two structures/points of support.
- c) length of insulators and hardware; Insulators support the weight of the suspended conductor without allowing the current to flow through the structure to ground.
- d) location of the overhead shield wire or static line that will provide necessary lightning protection. The shield wire or static line is located at the highest point and intercepts direct lightning strikes to prevent lightning from striking the conductor.

Figure 1 illustrates the typical structure dimensions for the BB2 Project H-Frame structures. For the BB2 Project, wherever possible, structure placement is planned to be adjacent to the structures on the existing BB Line. This placement maximizes the use of the existing access and the patrol 2-track system and will aid in reducing visual impacts. Using this placement, a typical span in flat level terrain is 1,400 feet. As shown in Figure 2, a structure with an above-ground height of 115 feet is required to accommodate ground clearance, sag, insulators, and shield or static wire.

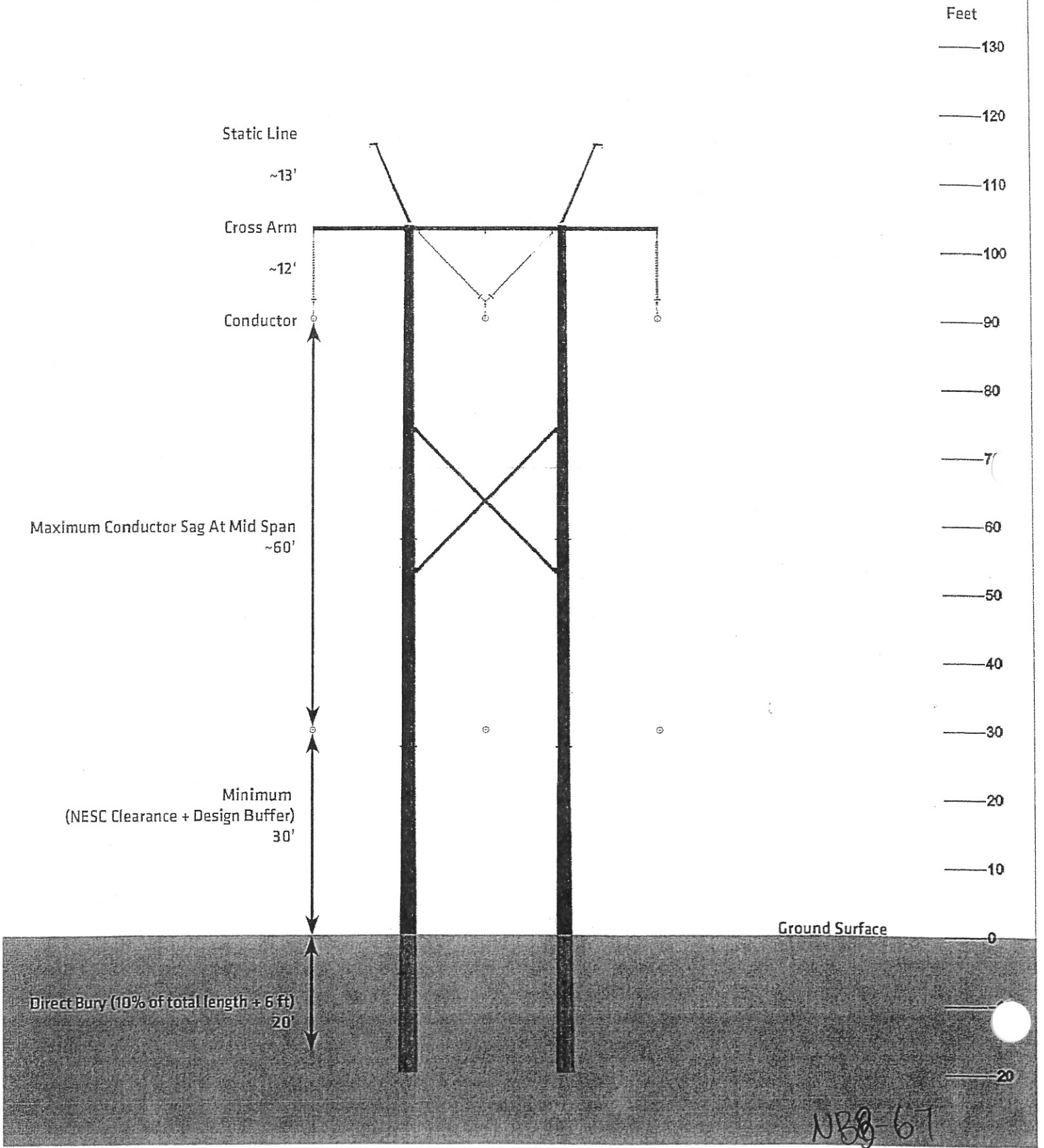
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Generally, the taller the structures are, the longer the span will be. In areas with uneven terrain, or where drainage features or roads are to be spanned or environmentally sensitive sites are to be avoided, taller structures will be needed, potentially up to 150 feet in height (as noted in the April 12th Development Report on page 3), in order to lengthen the span. For these reasons, the structure heights may vary and account for the range of above-ground heights presented in the application. Figure 3 illustrates how uneven terrain or potential avoidance areas such as environmentally sensitive areas, roads or drainage features can affect structure height by lengthening the span which would require taller structures.

It should also be noted that the height of the new BB2 structures will be approximately 8 to 10 feet shorter than the structures on the existing BB line.

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Figure 1 - Typical Structure Dimensions



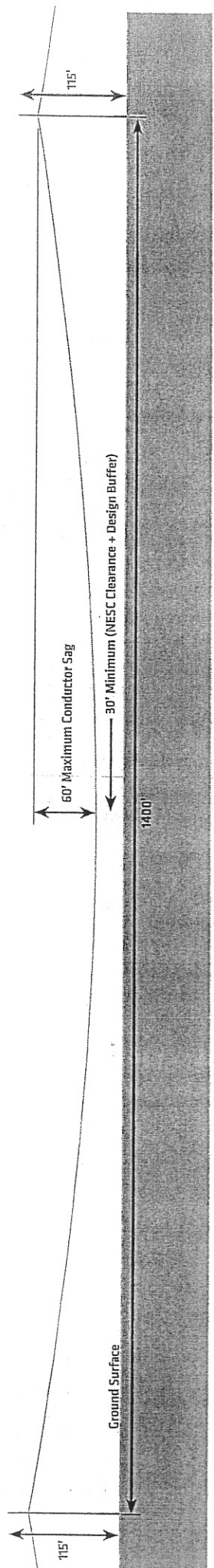


Figure 2 - Typical Span Length Shown On Flat/Even Terrain

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Appendix B: Use Matrix

Use Matrix. Uses permitted in each zoning districts are shown in the Use matrix in Appendix B. All uses are designated as permitted, accessory, or conditional, or prohibited as further explained in Table 8-4. Accessory uses may be subject to specific regulations as provided in Chapter 10, and conditional uses are subject to the conditional use permit standards provided in Chapter 4. In addition, uses may be subject to modification by the overlay zoning regulations included in this chapter.

Table 8-4: Use Matrix Labels.

P	Permitted Use: The letter "P" indicates that the listed use is permitted by right within the zoning district. Permitted uses are subject to all other applicable standards of the SLDC.
A	Accessory Use: The letter "A" indicates that the listed use is permitted only where it is accessory to a use that is permitted or conditionally approved for that district. Accessory uses shall be clearly incidental and subordinate to the principal use and located on the same tract or lot as the principal use.
C	Conditional Use: The letter "C" indicates that the listed use is permitted within the zoning district only after review and approval of a Conditional Use Permit in accordance with Chapter 4.
DCI	Development Of Countywide Impact: The letters "DCI" indicate that the listed use is permitted within the zoning district only after review and approval as a Development Of Countywide Impact.
X	Prohibited Use: The letter "X" indicates that the use is not permitted within the district.

The Use Matrix also includes Function, Activity and Structure Codes in accordance with the Land Based Classification System.

Uses not specifically enumerated. When a proposed use is not specifically listed in the use matrix, the Administrator may determine that the use is materially similar to listed use if:

The proposed use is listed as within the same structure or function classification as the use specifically enumerated in the use matrix as determined by the Land-Based Classification Standards (LBCS) of the American Planning Association (APA); or

If the use cannot be located within one of the LBCS classifications, the Administrator shall refer to the most recent manual of the North American Industry Classification System (NAICS). The proposed use shall be considered materially similar if it falls within the same industry classification of the NAICS manual. A proposed use shall be treated in the same manner as the listed use to which it is materially similar. For example, if the proposed use is materially similar to a permitted use, this proposed use shall also be a permitted use.



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Use	Function	Structure	Activity	Agriculture/Ranching	Rural	Rural Fringe	Rural Residential	Residential Fringe	Residential Estate	Residential Community	Traditional Community	Commercial Neighborhood	Mixed Use	Commercial General	Industrial General	Industrial Light	Public Institutional	Planned Development	Special Conditions
Airport maintenance and hangar facilities		5620		C	C	C	X	X	X	X	X	X	X	C	C	C	C	P	
Heliport facility		5640		C	C	C	X	X	X	X	X	X	C	C	C	C	C	P	
Helistops				C	C	C	X	X	X	X	X	X	C	C	C	C	C	P	
Glide port, stolport, ultralight airplane, or balloon port facility		5650		C	C	C	X	X	X	X	X	X	C	C	C	C	C	P	
Railroad tracks, spurs, and sidings				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
Railroad switching, maintenance, and storage facility		5700		C	C	X	X	X	X	X	X	X	X	P	P	C	C	P	
Railroad passenger station		5701		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
Railroad freight facility		5702		C	C	X	X	X	X	X	X	X	C	P	P	C	X	P	
Utility																			
Local distribution facilities for water, natural gas, and electric power		6100		P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	
Telecommunications lines				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
Electric power substations				C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
High-voltage electric power transmission lines				C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
Dam		6220		C	C	C	C	C	C	C	C	X	C	C	C	C	C	C	
Livestock watering tank or impoundment				P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	
Levee		6230		C	C	C	C	C	C	C	C	A	C	C	C	C	C	C	



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April 12, 2018

Mr. Jose Larranaga
Santa Fe County
Development Review Team Leader
P.O. Box 276
Santa Fe, NM 87504

Subject: PNM BB2 345kV Transmission Project

Dear Mr. Larranaga:

PNM respectfully submits PNM's BB2 345kV Transmission Project (BB2 Project) application to Santa Fe County for a Conditional Use Permit approval and Site Development Plan Approval. The BB2 Project is proposed in response to a wind farm developer who has entered into an agreement with PNM to transmit into the transmission grid the electricity generated by a new wind development in Torrance County, New Mexico. PNM is required by the Federal Energy Regulatory Commission (FERC) to develop the requested capacity on its transmission system to serve this wind farm developer. In order to serve the wind farm developer, PNM will need to build a new transmission line in southern Santa Fe County to deliver this new wind energy. The new single-circuit line will be located immediately adjacent to the existing BB 345kV transmission line and this will expand the existing utility corridor.

The BB2 Project consists of construction in southern Santa Fe County from the existing PNM Clines Corners 345kV Switching Station on State Land in Santa Fe County to just west of NM-14 to the Santa Fe County line then to a point in Sandoval County. The BB2 Project is approximately 31 miles on private property for the new single-circuit 345kV transmission line. The line is also located on approximately 2.5 miles of State Land to the existing Clines Corner Switching Station.

The following zoning is on the parcels being traversed: Ag/Ranch (AR); Rural (RUR) and Public/Institutional (PI) State Land. The area is used for ranching and dispersed rural residential use; both uses can continue. Access for the BB2 Project will be from existing roads and PNM patrol 2-track.

Structure type and color for the BB2 Project proposed to be an "H" frame with dull galvanized treatment matching the existing structure color. The proposed structure type was selected as the preferred type by the traversed property owners. Switching station expansion will occur within the footprint of the existing Clines Corners 345kV Switching Station located on State Land which is needed to accommodate the start of the new single-circuit 345kV line. The in-service date is Fall 2020. The BB2 Project will result in a reallocation of the costs of transmission lines



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for PNM network customers, point-to-point customers and ratepayers. The net effect on PNM ratepayers will be beneficial or neutral.

PNM has completed a variety of public outreach. The required Pre-Application Neighborhood Meeting was held on April 4, 2018 from 5 to 7 pm at the Moriarty Civic Center. Notice was mailed to 190 individual parcel owners and County of Santa Fe identified Community Organization (1) and Registered Organizations (3). Additionally, PNM has held individual meetings with property owners and their representatives and hosted a property owner dinner and conducted a day and half Utility Search Conference (USC) with representatives selected by the USC Leadership Team.

 In response to Section 4.9.6.5 CONDITIONAL USE PERMIT APPROVAL CRITERIA, the BB2 Project will not:

1. be detrimental to the health, safety and general welfare of the area;

The BB2 Project is not detrimental to the health, safety and general welfare of the area. PNM follows the National electric Safety code requirements for the safety of the general public and utility workers. PNM is placing the BB2 Project in an existing electric transmission corridor adjacent to an existing 345kV transmission line.

2. tend to create congestion in roads;

The BB2 Project will not create congestion in roads. Construction traffic will occur; however, after construction is complete, there will be no traffic from the Project.

3. create a potential hazard for fire, panic, or other danger;

The BB2 Project must comply with North American Electric Reliability Corporation (NERC) requirements and standards for removing any potential fire hazard. The BB2 Project is electric transmission line and not a building.

4. tend to overcrowd land and cause undue concentration of population;

The BB2 Project is an electric transmission line and not a residential development. Existing uses are ranching and dispersed rural residential which can continue.

5. interfere with adequate provisions for schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements;

The BB2 Project is an electric transmission project and will not cause a deficiency of existing levels of service for Santa Fe County schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements, emergency response service, roads, parks, trails or open space or schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements or create any other public service costs. The BB2 Project will provide Santa Fe County with annual property tax payments estimated at \$386,876 per year.

6. interfere with adequate light and air; and

The BB2 Project as an open air electric transmission facility and will not interfere with adequate light and air.

7. be inconsistent with the purposes of the property's zoning classification or in any other way inconsistent with the spirit and intent of the SLDC or SGMP.

The BB2 Project is located on Ag/Ranch (AR); Rural (RUR) and Public/Institutional (PI) State Land zoning and does not interfere with existing uses in those zones. SGMP Chapter 7 fully

supports the development of new transmission lines to deliver renewable energy which is the purpose of the BB2 Project. The BB2 Project complies with the SLDC.

The enclosed BB2 Project submittal request includes the following components:


- Development Permit Application Form
- Development Report for the Conditional Use Permit with attachments
- Preliminary and Final Site Development Plan

Following the staff Pre-Application meeting Checklist and the TAC Letter, the enclosed BB2 Project submittal does not include the following non-applicable components:

- Water Supply, Wastewater and Water Conservation (Section 7.13) is not applicable
- Traffic Study
- Signage and Lighting Plan
- Fire Protection Plan
- Landscaping and Buffering
- Parking and Loading
- Road Design Standards/Plan & Profile Section (7.11)
- No Utilities
- Open Space
- Special Flood Hazard Area (Section 7.18)
- Solid Waste (Section 7.20)
- Infrastructure and Right of Way Dedication (Section 7.226)
- Water Availability Report (WSAR Section 6.1.2.2)
- Traffic Circulation Plan
- Plan and Profile for water/wastewater
- Approved Emergency 911 Assigned Address Form

Please contact me at (505) 241-2792 if you have any questions, need any additional information, or if you would like to schedule a site visit with the planners, environmental scientists, and engineers who have technical knowledge of the project.

Sincerely,



Laurie Moyer
Coordinator Regulatory Project & Public Participation

Enclosures:

- Development Report for Conditional Use Permit
- Attachment 1: Pre-Application Neighborhood Meeting Report
- Attachment 2: Site Development Plan
- Attachment 3: Structure Profiles showing ROW width
- Attachment 4: Structure Elevations
- Attachment 5: Residential Dwellings and Non-Residential Structures
- Attachment 6: Typical Pole Site
- Attachment 7: Typical Arrangement of the Project
- Attachment 8: Proposed Access Routes: Detail Map A, B and C
- Attachment 9: Environmental Impact Report (EIR)
- Attachment 10: Fiscal Impact Analysis (FIA)
- Attachment 11: Archaeological Resources Investigation – CONFIDENTIAL

Attachment 12: Land and Landowner Data

1. Parcel Map
2. Spreadsheet Summary of Land and Landowner Data addressing
 - a. UPC Code
 - b. Santa Fe County Acct No
 - c. Book and Page
 - d. Owner Names and Addresses
 - e. Deeds/Ownership Documents Provided
 - f. Agreement to Access Property Agreement Provided
 - g. Estimated Length of Easement
 - h. Status of Property Taxes
3. Copies of Relevant Deeds and other Proof of Ownership Documents
4. Copies of Agreements to Access Real Property
5. Tax Research

Attachment 9: Environmental Impact Report (EIR)



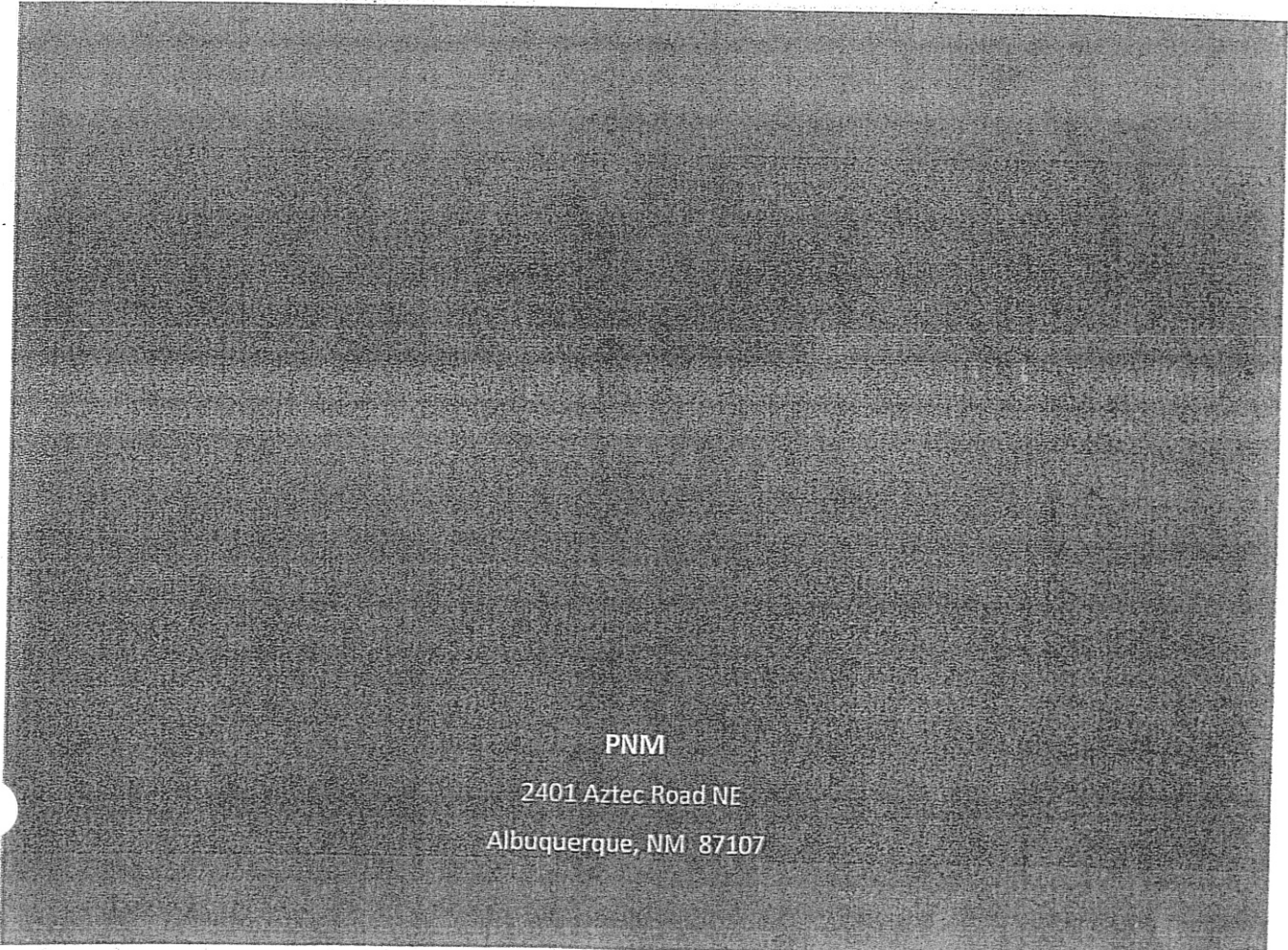
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ENVIRONMENTAL IMPACT REPORT

PROPOSED PNM BB2 TRANSMISSION LINE

PREPARED FOR SANTA FE COUNTY APRIL 12, 2018



PNM
2401 Aztec Road NE
Albuquerque, NM 87107

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- Figure 3 Zoning Map
- Figure 4 Facilities Overview
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APPENDICES

- Appendix A TAC Letter and Graphic Depicting Structure
- Appendix B Soils, Floodplains and Santa Fe County Species Lists
- Appendix C Geotechnical Engineering Report Excerpts
- Appendix D Photo Simulations

Attachment 10: Fiscal Impact Analysis (FIA)



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BB2 Project

6.7 FISCAL IMPACT ANALYSIS (FIA)

6.7.1. Generally.

The proposed BB2 Project will not affect the adequacy and financial provision for public facilities and services including but not limited to public works and operational costs for additional public works, park, law enforcement, fire and emergency response service full time employees and technicians to construct, operate, service and maintain roads, storm water management systems, fire, law enforcement, emergency response, trails, parks, open space, scenic vista sites, environmentally sensitive areas and historic, cultural and archaeological artifacts and sites.

6.7.1.1.

The proposed BB2 Project will not affect adopted levels of service for law enforcement, fire and emergency response service to southern Santa Fe County in which the project is located. It will not create the need for full time paid public service workers necessary to provide fire, law enforcement, emergency response service, road, drainage, environmentally sensitive area, and historic, cultural and archaeological artifacts and site necessary for maintenance and operation of the facilities and services. It will not cause a deficiency of existing levels of service for Santa Fe County fire, law enforcement, emergency response service, roads, parks, trails or open space or other public service costs.

6.7.1.2.

No public service costs for new workers and worker families will be required to be brought into the BB2 Project area.

6.7.2. Determination of Costs and Revenues.

Fiscal and economic models were not used in determining costs and revenue. Instead, it is determined that Santa Fe County will benefit from increased revenue from annual property tax payments paid by PNM which the County can apply towards public facilities and services, schools, roads and other local needs. The fiscal implications of this project the first year after it is placed in service include annual property tax payments to Santa Fe County estimated at \$386,876 per year. From these annual payments to the County paid by PNM, the County will have funds available to pay for expenditures it deems appropriate.

6.7.2.1.

N/A.

6.7.2.2.

N/A.

6.7.2.3.

N/A

NBB-8Z

Exhibit E

Fire Review and

Access



NBB-83

**EXHIBIT E: Response to Santa Fe County Discussion held May 2, 2018
Fire and Emergency Services**

Provide information on fire prevention and emergency services in regards to the transmission line construction operations for Fire Marshal review.

PNM Response and Additional Information:

PNM has discussed the approach to emergency responses (both fire and medical/accidents) with potential transmission line construction contractors. Construction contractors are accustomed to working in remote areas with limited access. They fully plan for and train to be immediately responsive to emergencies that may arise during construction.

Advance Preparation by the contractor includes the following:

- Meeting and coordinating with local emergency personnel prior to the start of the project. This would include a discussion of available access routes, identifying areas of key interest (such as fire prevention/fighting), sharing contact information, and establishing protocols for working together throughout the construction of the project;
- Identification of the nearest emergency services such as hospitals, clinics, and fire stations;
- Assure that a number of crew members are trained in current basic first aid and CPR. Vehicles are equipped with first aid kits. Some firms also carry AEDs;
- Make advance arrangements with third-party rescue services such as a helicopter ambulance service who can reach remote areas; and
- Develop site-specific emergency procedures and safety plans.

Daily activities of the contractor:

- Evaluate jobsites and daily job activities for hazardous conditions;
- Carry firefighting equipment/kits as required;
- Record GPS coordinates for the work locations as part of each day's safety meeting. Assure that all crew members know how to locate these coordinates quickly; and
- Carry communications equipment that has been confirmed to work in the remote project area, such as satellite phones or Company radios.

PNM developed a series of access maps showing public roads and access to the BB2 Project in Santa Fe County which was included in the April 12th BB2 Project submittal package as Attachment 8. A larger-scale version enlarged for fire review with state and county public roads labeled clearly along with non-public access patrol 2-tracks used by PNM is included for additional information as Figures 1A through 1G for the County Fire Marshal's information. The non-public patrol 2-tracks are not accessible with a fire truck; therefore, the construction contractors would be responsible for transporting any accident victims to the closest public road.

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Frequency of Inspections and Visits

After construction is complete, PNM will regularly inspect the transmission line and the right-of-way. Routine maintenance is then performed as needed. Expectation is that this would average approximately four trips or less per year along the 31 mile-transmission corridor in Santa Fe County.

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