



**From:** [corridoreiswebmaster@anl.gov](mailto:corridoreiswebmaster@anl.gov)  
**To:** [Corridoreisarchives;](#)  
**CC:**  
**Subject:** Energy Corridor Programmatic EIS Comment 80083  
**Date:** Monday, November 28, 2005 6:50:14 PM  
**Attachments:** [Comments\\_of\\_PNM\\_to\\_the\\_US\\_DOE\\_re\\_PEIS\\_112805\\_80083.doc](#)

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Thank you for your comment, David Eubank.

The comment tracking number that has been assigned to your comment is 80083. Please refer to the tracking number in all correspondence relating to this comment.

Comment Date: November 28, 2005 06:50:03PM CDT

Energy Corridor Programmatic EIS Scoping Comment: 80083

First Name: David

Middle Initial: W

Last Name: Eubank

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Privacy Preference: Don't withhold name or address from public record

Attachment: C:\Documents and Settings\DEUBANK\Desktop\Comments of PNM to the US DOE re PEIS 112805.doc

Comment Submitted:

The attached file contains the text portion of PNM's comments.

Questions about submitting comments over the Web? Contact us at:

corridoreiswebmaster@anl.gov or call the Energy Corridor Programmatic EIS Webmaster at (630)252-6182.

**From:** [corridoreiswebmaster@anl.gov](mailto:corridoreiswebmaster@anl.gov)  
**To:** [Corridoreisarchives;](#)  
**CC:**  
**Subject:** Energy Corridor Programmatic EIS Comment 80088  
**Date:** Monday, November 28, 2005 7:02:50 PM  
**Attachments:** [PNM\\_Comments\\_to\\_DOE\\_re\\_PEIS\\_Exhibits\\_2\\_and\\_3\\_112805\\_80088.doc](#)

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Thank you for your comment, David Eubank.

The comment tracking number that has been assigned to your comment is 80088. Please refer to the tracking number in all correspondence relating to this comment.

Comment Date: November 28, 2005 07:02:39PM CDT

Energy Corridor Programmatic EIS Scoping Comment: 80088

First Name: David

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Attachment: C:\Documents and Settings\DEUBANK\Desktop\PNM Comments to DOE re PEIS Exhibits 2 and 3 112805.doc

Comment Submitted:

Exhibits 2 and 3 to the text portion of PNM's comments.

Questions about submitting comments over the Web? Contact us at:  
[corridoreiswebmaster@anl.gov](mailto:corridoreiswebmaster@anl.gov) or call the Energy Corridor Programmatic EIS Webmaster at (630) 252-6182.

**From:** [corridoreiswebmaster@anl.gov](mailto:corridoreiswebmaster@anl.gov)  
**To:** [Corridoreisarchives;](#)  
**CC:**  
**Subject:** Energy Corridor Programmatic EIS Comment 80092  
**Date:** Monday, November 28, 2005 7:19:22 PM  
**Attachments:**

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Thank you for your comment, David Eubank.

The comment tracking number that has been assigned to your comment is 80092. Please refer to the tracking number in all correspondence relating to this comment.

Comment Date: November 28, 2005 07:19:21PM CDT

Energy Corridor Programmatic EIS Scoping Comment: 80092

First Name: David  
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**Comment Submitted:**

As part of its comments, PNM will also submit a transmission system map (Exhibit1) and GIS data providing centerline information for its proposed Energy Corridors. Due to file size limitations, these items will be sent via courier.

Questions about submitting comments over the Web? Contact us at:  
[corridoreiswebmaster@anl.gov](mailto:corridoreiswebmaster@anl.gov) or call the Energy Corridor Programmatic EIS

Webmaster at (630)252-6182.

Comments of PNM to the U.S. Department of Energy  
for the West-Wide Energy Corridor Programmatic  
EIS

November 28, 2005

*In accordance with the September 28, 2005 Department of Energy Notice of Intent to Prepare a Programmatic Environmental Impact Statement, Amend Relevant Agency Land Use Plans, Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement (the "September 28, 2005 Notice")*

## **I. Introduction**

The purpose of these comments is to supplement the initial comments of PNM that were provided on October 26, 2005 at the Albuquerque, New Mexico public scoping meeting.

The initial comments and these supplemental comments are provided in response to the Department of Energy (“DOE”) solicitation of comments in its Notice of a Programmatic Environmental Impact Study (“PEIS”). The PEIS was initiated to facilitate the establishment of “energy corridors” on federal lands and the associated incorporation of such corridors into federal agency land use and resource management plans.

For the purposes of these comments, the term “Energy Corridor” is ascribed the meaning set out in Section 368 of the Energy Policy Act of 2005 (“Act”). For PNM, these Energy Corridors include electric and gas transmission facilities.

These comments address and provide the following:

- Description of PNM.
- The specific purpose and need in support of PNM’s proposed designations of Energy Corridors for PNM existing, planned, and conceptual facilities.
- Data and discussion concerning the centerlines, widths and compatible uses of PNM’s proposed Energy Corridors.
- PNM’s recommendations for establishing procedures to expedite applications to construct or modify facilities within Energy Corridors.

PNM is providing existing and proposed gas and electric transmission Energy Corridor centerline information in ESRI shapefile format. The corridor centerlines were broken into three separate broad jurisdictional classes based on land ownership: federal, federal but specifically under the Bureau of Indian Affairs, and non-federal. This information is provided to assist the DOE and other federal agencies in meeting their prescribed responsibilities under the Act.

The expected outcome of this process includes the following:

- Designation of PNM’s existing, planned and certain conceptual corridors as Energy Corridors under Section 368 of the Act.
- Development of clear agency processes for expedited permitting for facilities that cross federal lands upon designated Energy Corridors.
- Development of clear interagency processes and protocols for designation, use and ongoing management of lands upon designated Energy Corridors.

## **II. Description of PNM**

PNM, a wholly owned utility operating company subsidiary of PNM Resources, Inc. (“PNMR”), is a New Mexico corporation and a public utility subject to the regulatory jurisdiction of the Federal Energy Regulatory Commission (“FERC”) and of the New Mexico Public Regulation Commission (“NMPRC”). PNM is engaged primarily in the generation, transmission, distribution, sale and marketing of electricity and in the transmission, distribution and sale of natural gas within the State of New Mexico, and also engages in electric wholesale transactions in energy markets in the Western United States. PNM’s principal place of business is Alvarado Square, Albuquerque, NM 87158.

PNM provides retail electric service to over 400,000 customers and retail natural gas service to over 460,000 customers in 100 communities throughout New Mexico.

To conduct these electric and gas service and market operations, PNM owns and operates approximately 2,740 miles of electric transmission lines and 1,480 miles of gas pipelines in New Mexico. Of these electric transmission facilities, approximately 1,000 miles of these facilities are 115kV, with the remainder being 230 and 345kV facilities.

Portions of many of these existing facilities are located on federal lands.

## **III. Purpose and Need for Energy Corridor Designations on Federal Lands for PNM Existing, Planned and Conceptual Facilities**

### **III. A. Existing Facilities**

#### **III.A.1. Provisions within the Act Relating to Existing Facilities**

PNM believes that existing facilities and their associated rights of way and existing but undeveloped rights of way must be designated as Energy Corridors within the meaning of Section 368 of the Act.

The reasoning for this is two-fold. First, such designation is consistent with both the language and the purpose of the Act. At Section 368(c)(2), describing “Ongoing Responsibilities”, the Act provides that procedures shall be established to expedite applications to **modify** facilities within “such corridors”. Modifications to existing facilities can include minor modifications (such as raising of transmission line structures to relieve sag limitations) or major modifications (such as conversion from a single circuit to a double circuit facility, line reconductoring, or conversion from a lower voltage such as 115kV to a higher voltage such as 345kV) that may also entail environmental review. These modifications are pursued to improve reliability, relieve

congestion or otherwise enhance grid capability and are thus actions that fall within the language of Section 368(d) of the Act. Similar reasoning apply to modifications of gas pipeline facilities, where modification to an existing facility may include the installation of additional compression stations or expansion of a pipeline segment from a single pipe to two or more pipes.

Second, in addition to facilitating modifications, designation as an Energy Corridor provides a means of enhancing the reliability of energy facilities by protecting existing facilities and rights-of-way from incompatible uses. This should include limiting conflicting management designations and soliciting input from permit holders for any change in management direction.

### III.A.2. Specific Purpose and Need for Energy Corridors for Existing Facilities

The existing electric and gas transmission network in New Mexico is shown in Exhibit 1.

Turning first to electric transmission, PNM is the primary owner and operator of the 345kV and 230kV facilities that extend from the Four Corners and San Juan generating stations (located in northwest New Mexico) toward the Albuquerque and Santa Fe load centers. These facilities consist of the following:

- Four Corners – West Mesa 345kV line (“FW Line”)
- San Juan – BA 345kV line (“WW Line”)
- San Juan – Ojo 345kV Line (“OJ Line”)
- Four Corners – Pillar – Bisti – Ambrosia (“AF”, “BP”, and “BI Lines”)
- Ambrosia – West Mesa 230kV line (“WA Line”)

These facilities constitute the backbone electric transmission system in northern New Mexico, delivering nearly all of the energy consumed in the region. Each of these backbone transmission facilities is critical to the reliable provision of electric service to customers in New Mexico. These facilities, along with certain portions of the underlying 115kV network operate as a system known as Path 48 within the western interconnection. PNM is responsible for the operation, maintenance and upgrade of this path.

Substantial portions of each of these transmission lines and their rights of way are located on federal land. Certain portions of these lines have been subjected to encroachment by land agency and congressional actions. These actions include overlapping or adjacent protected status designations, including Wilderness Study Areas, National Monuments, Areas of Critical Environmental Concern, Special Management Areas, and federal land sales and swaps.

Because of the criticality of these existing facilities and the known and the potential need to modify them in the future, PNM submits that Energy Corridor status

should be applied to each of these backbone facilities, along with the associated underlying 115kV system. Protection of existing corridors will reduce the need to designate new Energy Corridors in the future; facilitate necessary future modifications, including those modifications associated with integration of new facilities on new corridors; and reduce the potential future conflicts associated with further encroachments and incompatible uses of overlapping or adjacent federal lands.

PNM's gas transmission facilities are equally critical components of the New Mexico energy infrastructure. In PNM's view, the approximately 1,480 miles of gas transmission facilities also warrant the protection of having their associated rights of way included within the designation Energy Corridors.

### III.B. Planned Facilities – The Northern New Mexico Transmission Project

PNM's current projections show that the capacity of the existing backbone transmission system will be insufficient to meet customer needs by the 2012-2014 time frame.<sup>1</sup> As a result, PNM has determined that a new 345kV transmission line, developed in part on existing rights of way, and in part on a new right-of-way will be required to meet the needs of its customers.

The purpose and need for this project includes reliability enhancement (including maintaining PNM's ability to adhere to WECC and NERC reliability criteria)<sup>2</sup>, and relief of congestion on the northern New Mexico transmission system. Congestion relief will provide economic benefits through reduction of expensive "load-side" generation. Other benefits associated with the project include increased ability to perform maintenance on the existing FW, WW, and OJ Lines.

A schematic diagram of this project is provided in Exhibit 2. The new transmission line extends from the existing Rio Puerco series compensation station on the FW and WW 345kV line corridor to a new planned switching station on the existing OJ Line.

Approximate corridor designations for this project are shown in recent Western Utility Group ("WUG") reports, and are also shown on the example map developed by DOE for use at the public scoping meetings for this Programmatic EIS. GIS data associated with the proposed new Energy Corridor for this project is provided in the electronic data submittal.

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<sup>1</sup> The capacity of the existing electric transmission system has been maximized through numerous reinforcements over the past 10-15 years. These reinforcements include the raising of structures to alleviate conductor sag limitations, the installation of series compensation on the FW and WW Lines and various other measures.

<sup>2</sup> WECC refers to the Western Electricity Reliability Council. NERC is the North American Electric Reliability Council.

### III.C. Conceptual Facilities and Energy Corridor Designations needed to Facilitate Federal and State Energy Policy Objectives.

The federal government - primary through the FERC - and the states have pursued and implemented a number of policies that affect PNM and its planning for electric transmission facilities.

FERC policies that affect PNM include the provision of open access transmission service. Open access transmission service includes the obligation to construct transmission facilities for the purposes of 1) providing wholesale transmission delivery service and 2) interconnecting new wholesale generating facilities.

Chief among energy policies at the state level is the adoption of renewable energy goals. These renewable energy goals are typically formulated as renewable energy portfolio standards. Renewable energy portfolio standards require an electric utility to plan to obtain a specific percentage of its future energy supply from renewable generation sources. These percentages typically range from 3-4% in the near term to levels as high as 10% within 10 years.

Commercially available renewable resources include biomass, wind, solar and geothermal power. These resources are located in areas that are generally remote from existing load centers and backbone transmission grid facilities, meaning that new transmission corridors will be needed to realize the potential of these resources.

These governmental policies combine to create substantial obligations on transmission owning and operating utilities such as PNM. Obtaining rights of way across federal lands can be an impediment to meeting these governmental policy objectives and to complying with governmental regulations.

In late 2003 and early 2004, PNM, along with several other transmission providers within the Southwest Area Transmission ("SWAT") planning group and numerous other parties, examined conceptual transmission grid reinforcements that would be required to transmit large amounts of wind energy generated in New Mexico to markets in Arizona and California.

These transmission grid reinforcements have been reviewed and discussed by various parties, and represent one example of a large-scale transmission development plan. Any implementation of this conceptual plan would require the assistance and support of federal agencies, and will require designations of Energy Corridors for the plan to be viable.

PNM recommends that conceptual plans such as the New Mexico wind power export plan be addressed in this PEIS process. A schematic diagram of the facilities is provided in Exhibit 3.

## **IV. Widths of and Compatible Uses within Energy Corridors**

As mentioned previously, PNM is providing, via electronic data submittal, the centerlines for each of its existing electric and gas transmission facilities, and the centerlines for certain planned electric transmission facilities.

The widths of Energy Corridors should be established to provide for adequate minimum separations between facilities within each corridor. A one-mile minimum width is needed to allow for adequate separation between existing facilities and any potential new facilities.

### **IV.A. Existing Gas Transmission Corridors**

#### **IV.A.1. Width**

PNM submits that a one-mile wide energy corridor (one-half mile on either side of the existing facility centerline) should be established for each existing gas transmission pipeline facility on its system.

#### **IV.A.2. Compatible Uses**

PNM submits that the following activities are compatible with a gas transmission Energy Corridor:

- Grazing
- Temporary Storage
- Erosion Control Programs
- Foot Trails
- Mountain Biking
- Parallel facilities within one quarter mile with appropriate permit holder notification and acceptance
- Grading or other land modification, within a pipeline facility Energy Corridor with permit holder consultation and acceptance

#### *Additional Considerations Associated with Compatible Uses:*

- Compatible uses must be established in a manner that allows for unimpeded, around the clock, all weather access for PNM maintenance of gas pipeline facilities
- Road closures should exempt PNM energy crews to extent needed to carry out necessary maintenance
- Fencing extensions across Energy Corridor permit areas should be granted by the land agency only after consultation with permit holder
- Road modifications or extensions should be done in consultation with permit holder

#### IV.A.3. Incompatible Uses

PNM submits that the following activities are incompatible with an existing gas transmission line Energy Corridor:

- Firearm shooting ranges
- Off-Road Vehicle (“ORV”) use
- Wildlife enhancement projects
- Airstrips
- Special Management Area (“SMA”) and Area of Critical Environmental Concern (“ACEC”) designations
- Prescribed burning within one half mile of gas pipelines
- Cemeteries
- Retention ponds
- Drain fields
- Wells
- Conservation easements
- Mining and quarrying

#### IV.B. Existing Electric Transmission Corridors

##### IV.B.1. Width

PNM submits that a one-mile wide energy corridor (one-half mile on either side of the existing facility centerline) should be established for each existing electric transmission facility on its system.

##### IV.B.2. Compatible Uses

PNM submits that the following activities are compatible with an existing electric transmission Energy Corridor:

- Grazing
- Temporary Storage
- Mountain Biking
- Erosion Control Programs
- Foot Trails
- Grading within 75 feet of an electric facility with permit holder consultation and acceptance

##### *Additional Considerations Associated with Compatible Uses:*

- Compatible uses must be established in a manner that allows for unimpeded, around the clock, all weather access for maintenance of electric transmission facilities
- Road closures should exempt energy crews to extent needed to carry out necessary maintenance
- Fencing extensions across Energy Corridor permit areas should be granted by the land agency only after consultation with permit holder

- Road modifications or extensions should be done in consultation with permit holder in order to ensure continued safe vertical separation

#### IV.B.3. Incompatible Uses

PNM submits that the following activities are incompatible with an existing electric transmission Energy Corridor:

- Firearm shooting ranges
- ORV use
- Wildlife enhancement projects
- Airstrips
- SMA/ACEC designations
- Prescribed burning within one half mile of electric transmission lines
- Drain fields
- Mining and quarrying

#### IV.C. Planned Gas Transmission Corridors

##### IV.A.1. Width

PNM submits that a two-mile wide energy corridor should be established for each planned gas transmission pipeline facility on its system. This two-mile width is needed to allow for consideration of differing transmission line options during the siting process. Such consideration of multiple options is a standard requirement of federal agency siting processes.

##### IV.A.2. Compatible Uses

PNM submits that the following activities are compatible with a gas transmission pipeline Energy Corridor:

- Grazing
- Temporary Storage
- Erosion Control Programs
- Foot Trails
- Mountain Biking
- Other similar facilities with appropriate separation, coordination and agreement of any existing energy facility permit holder

##### IV.A.3. Incompatible Uses

PNM submits that the following activities are incompatible with a planned gas transmission pipeline Energy Corridor:

- Firearm shooting ranges
- ORV use
- Wildlife enhancement projects

- Airstrips
- SMA/ACEC designations
- Mining and quarrying

#### IV.D. Planned Electric Transmission Corridors

##### IV.D.1. Width

PNM submits that a two-mile wide energy corridor should be established for each planned electric transmission facility on its system. This two-mile width is needed to allow for consideration of differing transmission line options during the siting process. Such consideration of multiple options is a standard requirement of federal agency siting processes.

##### IV.D.2. Compatible Uses

PNM submits that the following activities are compatible with an electric transmission line Energy Corridor:

- Grazing
- Temporary Storage
- Erosion Control Programs
- Foot Trails
- Mountain Biking
- Other similar facilities with appropriate separation, coordination and agreement of any existing energy facility permit holder

##### IV.D.3. Incompatible Uses

PNM submits that the following activities are incompatible with a planned electric transmission line Energy Corridor:

- Firearm shooting ranges
- ORV use
- Wildlife enhancement projects
- Airstrips
- SMA/ACEC designations
- Mining and quarrying

#### **V. Recommended Procedures to Expedite Applications to Construct or Modify facilities within Energy Corridors**

PNM is a member of the Edison Electric Institute. As mentioned in EEI's previously submitted comments, designation of an Energy Corridor should provide for and define streamlined procedures available to Energy Companies siting within a Designated Corridor. PNM strongly urges the agencies to develop sound and effective streamlined procedures for siting facilities within a designated corridor. The procedures

should recognize that much of the environmental analysis and review will have already taken place and so long as the facilities are consistent with the parameters set for a corridor, that work should not have to be repeated. At a minimum, we encourage federal agencies to establish a rebuttable presumption that there will be a categorical exclusion from NEPA. These should be established in each Department's list of categorical exclusions. That would be consistent with Section 390 of the Act for pipelines. PNM submits that electric transmission should not be treated differently than pipelines. EEI recommends the agencies to consider an alternative, streamlined consultation process where threatened or endangered species may be implicated.

Provisions for management should also clearly define procedures for the transfer or exchange of lands from federal jurisdiction. Such transfers should be made such that any existing permit is converted to a perpetual easement prior to, or at the time of, transfer.

Procedures also need to be developed in land management plans or agency guidance for designation of additional Energy Corridors in the future. Provision for Energy Corridors should not be viewed as a one-time event. The energy grid is a dynamic system. A process should be developed to allow for an energy company to recommend an area for designation in the future.

Clear procedures and responsibilities should also be established for the timely notification to and coordination with existing permit holders of new applications or changes in management direction within Energy Corridors. Without such procedures, the planning accomplished with this effort is unlikely to reap the long-term benefits to the nation's energy infrastructure that Congress intended.

PNM also recommends establishment of teams of specialists at the state or regional level that familiar with energy facilities and linear corridors to oversee and facilitate the timely, consistent processing of energy applications.

## **VI. Comments Regarding the "Proposed Action and Alternatives" Section in the September 28, 2005 Notice**

PNM does not believe that the "No Action Alternative" will allow PNM to continue to meet the energy needs of its customers. The reasons are twofold.

First, Energy Corridor designations under a coordinated approach are designed to provide tangible improvements -- including expedited processing and reduced uncertainty in the permitting and siting of energy facilities on federal lands. Without these procedural improvements, PNM questions whether needed facilities will be able to be permitted and constructed within the timelines needed to meet the energy needs of its customers.

Second, the “No Action Alternative” apparently forecloses designation of Energy Corridors for existing facilities. PNM believes that the provisions in the Act that facilitate modification of existing facilities are equally important to provisions that facilitate development of new facilities. For the reasons discussed in Section III.A. above, PNM maintains that Energy Corridors should be designated for its existing electric and gas transmission facilities.

PNM is also concerned that the “Increased Utilization Alternative” and the “Optimization Criteria Alternative” may promote crowding of facilities within existing corridors. PNM submits that these alternatives should be pursued with care to avoid outcomes that result in crowding of facilities or overlapping uses that are incompatible with maintaining safe and reliable operation of electric and gas transmission systems.

## **VII. Proposal for Further Discussions with DOE and Other Interested Parties Regarding PNM’s Proposed Corridor Designations**

PNM believes that it is appropriate for PNM; DOE and other agencies; and other interested parties in New Mexico to convene one or more meetings to address the pressures placed on existing facility corridors and to better understand the rationale for PNM’s proposed Energy Corridors. PNM will contact the DOE Programmatic EIS project managers to discuss the arrangements for such a meeting.

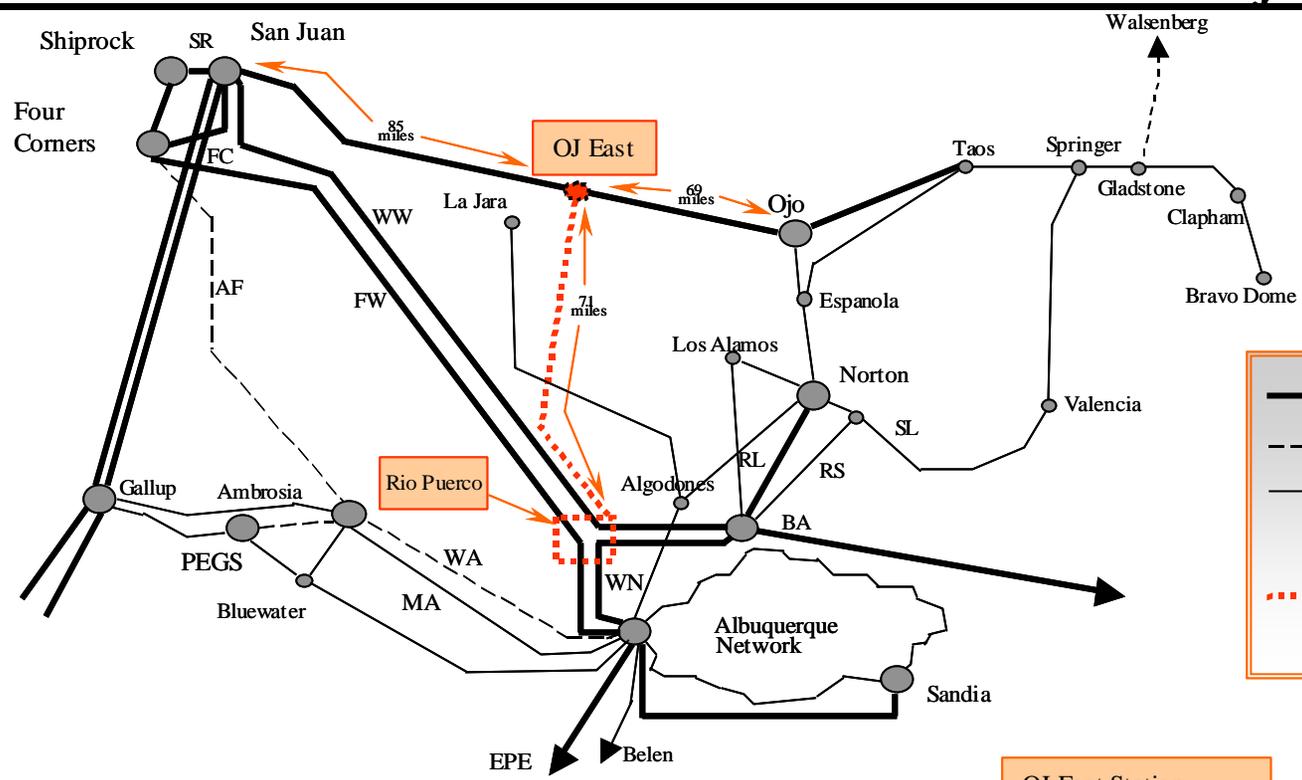
PNM appreciates the opportunity to comment on this Programmatic Environmental Impact Statement. We look forward to the prospect of meeting soon with the project staff to discuss these comments and the PEIS process.

### **Contact Information:**

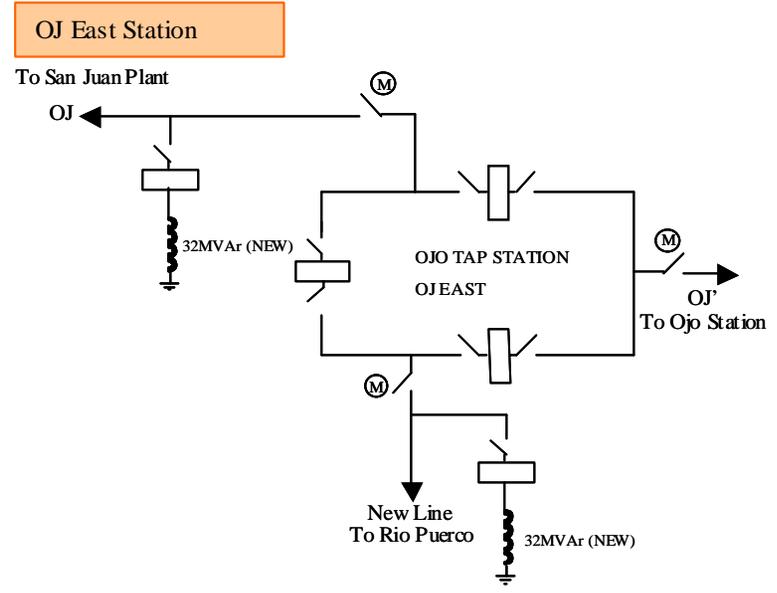
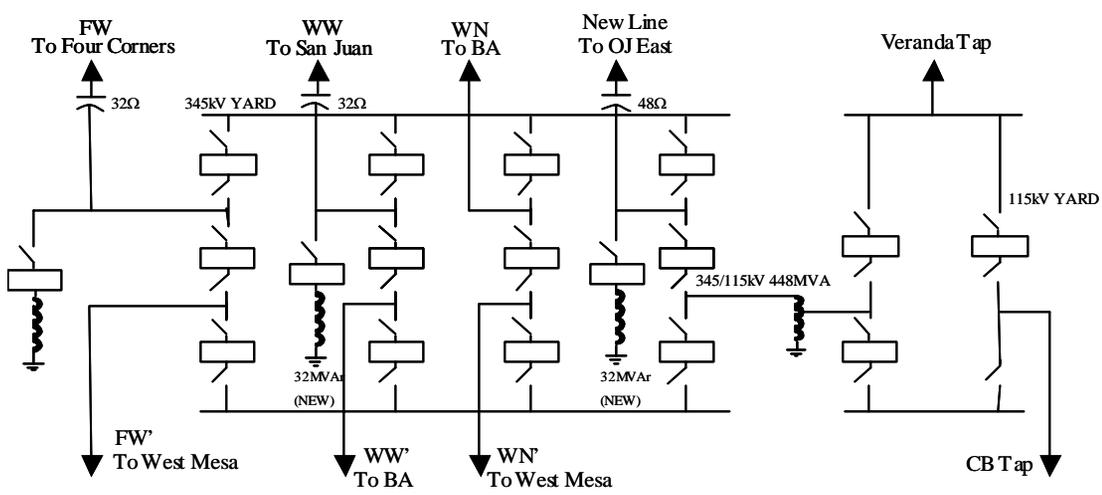
**If there should be any questions concerning these comments, please contact one of the following individuals at PNM:**

<b>Doug Campbell</b>	<b>505-241-2025</b>	<b>Environmental Services</b>
<b>David Eubank</b>	<b>505-241-4589</b>	<b>Transmission Development &amp; Contracts</b>
<b>Michelle Gallegos</b>	<b>505-241-0841</b>	<b>Right of Way</b>
<b>Richard Precek</b>	<b>505-241-0787</b>	<b>System Engineering</b>

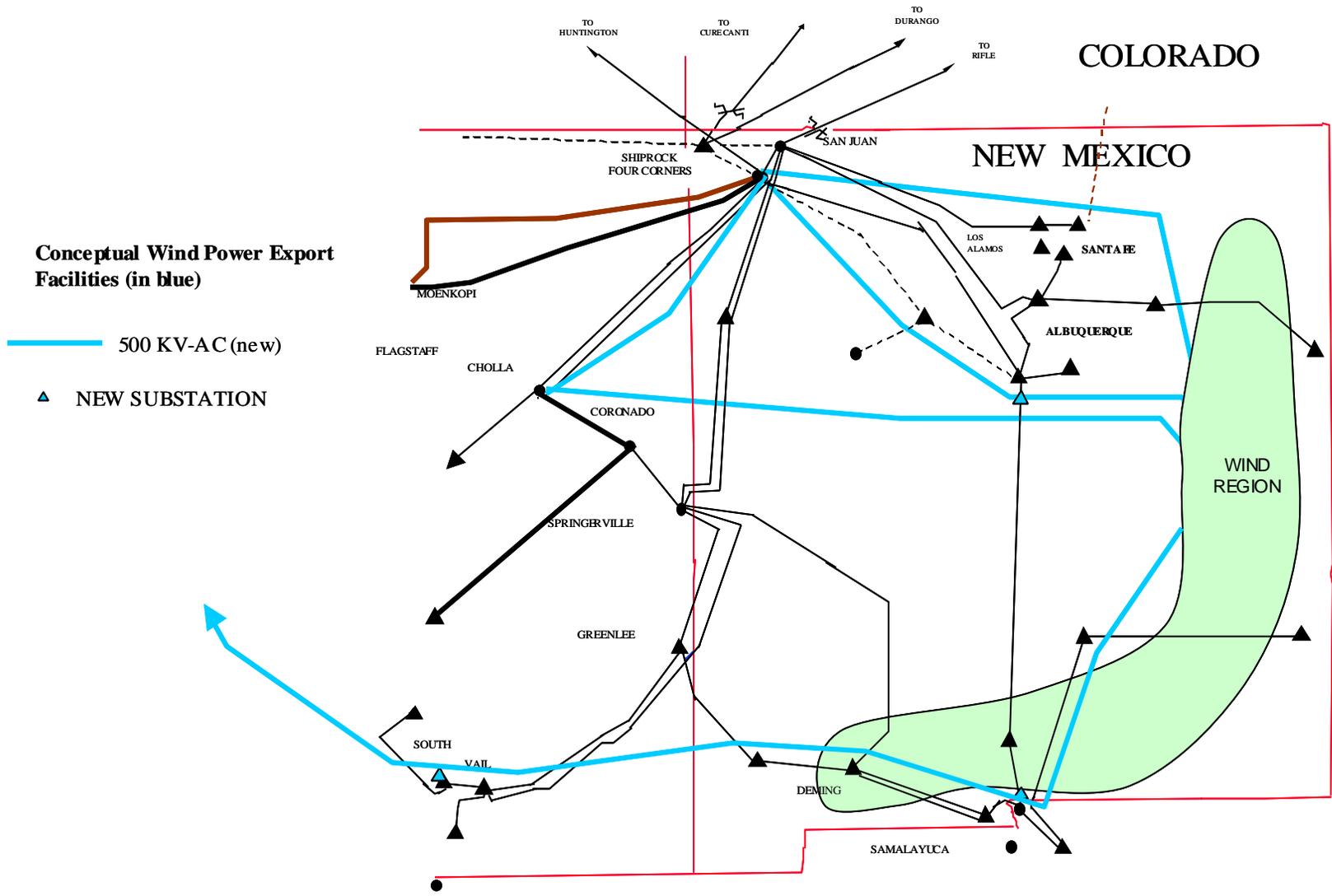
# Exhibit 2 Northern New Mexico Transmission Project

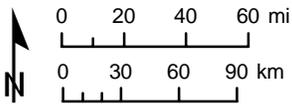
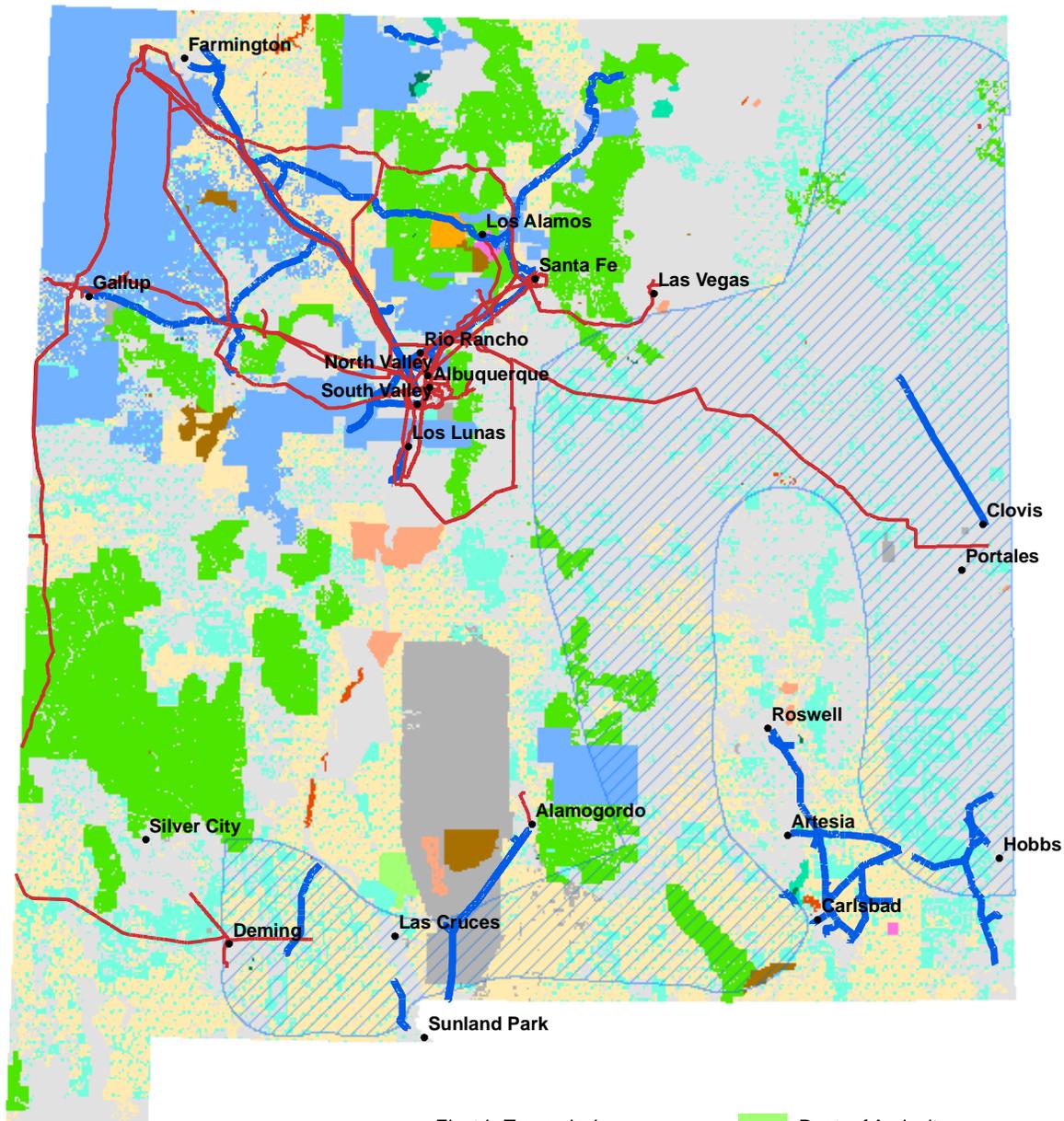


	345 kV Lines
	230 kV Lines
	115kV Lines
	Switching Stations
	New Facilities



# Exhibit 3      Conceptual Wind Power Export System - New Mexico Facilities





- |  |  |
|--|--|
|  Electric Transmission            |  Dept. of Agriculture         |
|  Gas Transmission                 |  Forest Service               |
|  Wind Energy Resource Location    |  Dept. of Defense             |
| <b>New Mexico Land Ownership</b>   |  |
|  Bureau of Land Management        |  Dept. of Energy              |
|  National Park Service            |  Tribal                       |
|  Valles Caldera National Preserve |  State                        |
|  Bureau of Reclamation            |  New Mexico State Game & Fish |
|  Fish & Wildlife Service          |  New Mexico State Park        |
|  |  Private                      |