

## **MEMORANDUM**

**DATE:** May 20, 2010

**TO:** County Development Review Committee

**FROM:** Wayne Dalton, Building and Development Services Supervisor

**VIA:** Jack Kolkmeyer, Land Use Administrator  
Shelley Cobau, Building and Development Services Manager

**FILE REF.:** CDRC CASE # Z/DP 09-3132 PNM Caja Del Rio Substation Master Plan/  
Development Plan

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### **ISSUE:**

PNM, (Jeanette Yardman), Applicant, requests Master Plan Zoning/Preliminary and Final Development Plan approval for the construction of the Caja Del Rio Substation on 2.4 acres. The substation is needed to serve the City of Santa Fe Buckman Direct Diversion water pumping and treatment facilities. The project will consist of the substation, installation of two tap structures approximately 70' feet in height and two termination structures approximately 45' feet in height that will connect with PNM's existing 115kV transmission line.

The property is located at 11 W. Caja Del Oro Grant Rd., within Section 22, Township 17 North, Range 8 East, (Commission District 2).

### **SUMMARY:**

The Applicant requests Master Plan Zoning/Preliminary and Final Development Plan approval to allow the construction of a substation on 2.4-acres. The project will consist of a new electric substation along County Road 62 approximately three miles north of N.M. 599. The substation includes the installation of two transmission tap poles to be located adjacent to the substation within the existing transmission right-of-way. The poles are needed to tap both of the transmission lines and connect with the substation. The poles will be Corten steel and approximately 70' feet in height. The existing transmission structures are approximately 90'

feet in height. Two H-frame line termination structures will be located inside the substation and will be galvanized steel, approximately 45' feet in height that will connect with PNM's existing 115kV transmission line.

Ordinance No. 2007-5 Subsection 2.3.9b (1) states electric utility lines that transmit electricity at a voltage greater than or equal to 46 kilovolts may be placed above ground unless public health and safety requires such lines to be placed underground. Subsection 2.3.9b (3) states above ground electric utility lines that are placed on other development described in Ordinance No. 1998-5 Subsection 8.2 and 8.3.2 of the Land Development Code are not subject to height restrictions and shall be constructed at a minimum height necessary for the proposed structure to function properly for public health, safety and welfare, as demonstrated by the Applicant.

For public safety, the project will be designed and constructed to meet all applicable requirements of the National Electric Safety Code (NESC), as required by the New Mexico Public Regulations Commission (NMPRC). The substation electrical equipment and control unit will be surrounded by a chain link enclosure approximately 138' feet by 138.8' feet in width and 8' feet in height topped with three stands of barbed wire. The color of the fencing will be earth tone.

**Project Need:**

The Caja Del Rio substation is needed to provide electric service to the City of Santa Fe/Santa Fe County Water Treatment Plant associated with the Buckman Direct Diversion Project.

**Land Ownership:**

The substation location is proposed to be located on a parcel of land 2.4 acres in size which is owned by the City of Santa Fe. PNM has an exclusive easement to locate the substation at this site. An easement is also in place for the two tap structures to be located adjacent to the proposed substation.

**Existing Development:**

The property is currently vacant; the proposed substation is located adjacent to an existing electric transmission corridor.

**Adjacent Property:**

Archers de Santa Fe archery range is located directly northwest of the proposed substation site. Directly to the south is the Marty Sanchez Golf Course and the Landfill is located west of the substation site. Residential use is located to the east and northeast of Caja Del Rio and the remaining area consists of undeveloped land to the west and east.

**Water:**

No water usage is proposed within this application.

**Access/Parking:**

The property will receive access from West Caja Del Oro Grant Road (County Road 62) which is an unpaved driving surface. The access drive will be 30' feet in width and will consist of a crushed base-course driving surface. Parking is limited and will only be necessary for PNM personal for maintenance of the facility. An access permit must be obtained from the Public Works Department by the Applicant prior to Development permit issuance. Staff has determined that this application complies with Article III, Section 9 (Parking Requirements).

**Fire Protection:**

Fire protection will be provided by the Agua Fria Fire Department. The applicant shall comply with all Fire Marshal requirements.

**Signage:**

Proposed signage is minimal; one PNM substation identification sign and eight warning signs are proposed to be located at the site. All proposed signage will be located on the chain link fence. Staff has determined that this project complies with Article VIII (Sign Regulations) of the Santa Fe County Land Development Code.

**Terrain Management/Landscaping:**

The proposed project does not impact any major slopes and or arroyo/drainage. The property is presently covered with a mixture of native trees, shrubs, and grasses. The terrain slopes generally down from southeast to the northwest on a slope of approximately 2%. A 14,587 cubic foot retention pond is proposed to capture water run-off from the site. A portion of the upstream runoff will be intercepted and directed to the roadside swale. Runoff normally carried by the swale, will be conveyed beneath the driveway through 24" culvert. All disturbed areas will be re-vegetated with a seed mix compatible with the area to re-establish native vegetation and prevent soil loss. Staff has determined that this project complies with Article VII, Section III (Terrain Management) of the Santa Fe County Land Development Code.

**Lighting:**

No outdoor lighting is proposed.

**Noise:**

Noise in the area would not increase from the construction of the substation.

**Threatened & Endangered Species:**

A survey for federally listed threatened or endangered plant and animal species, federal state and local listed species, as well as agency-sensitive species was conducted for the substation site. No threatened and endangered species were identified.

**Electric and Magnetic Fields:**

Numerous scientific studies have been completed regarding EMF and health issues over the last several years. Electric and magnetic fields, or more specifically 60 cycle electric and magnetic fields, are associated with the power system. These fields are present with PNM lines, house wiring, and use of electric appliances; however, while research in the area of EMF (specifically magnetic fields) and human health still continues, to date, exposure to low level 60 cycle magnetic fields has not been proven to cause any adverse human health effects.

**REQUIRED ACTION:**

The CDRC should review the attached material and consider the recommendation of staff; take action to approve, deny, approve with conditions or table for further analysis of this request.

**RECOMMENDATION:**

Staff has reviewed this Application and has found the following facts to support this submittal: uses permitted under Ordinance No. 1998-15 which amended Article III, Section 8.1 (Other Development) specifies all uses otherwise not regulated by the Code are permitted to locate anywhere in the County provided a request for zoning approval is granted per Article III. Such uses specifically include, but are not limited to utilities, parking facilities, and cemeteries provided the development standards, criteria and submittal requirements set forth in Subsection 4.4 and 4.5 are met. Notwithstanding the fact that these uses are permitted, a development permit is still required.

This Application is in compliance with Article V, Section 5 (Master Plan Procedures), Article III, Section 4.4 (Development Plan Procedures) of the Land Development Code. Staff recommends Master Plan Zoning and Preliminary Development Plan **approval** with Final Development Plan to be approved administratively for the construction of the Caja Del Rio Substation on 2.4-acres subject to the following condition;

1. An alternate method of fencing material to enclose the substation shall be considered by PNM. Staff recommends 8' foot coyote fencing with concrete pilasters to be placed at 16' foot minimum intervals.

**ATTACHMENTS:**

- Exhibit "A"- Applicant's Report
- Exhibit "B"- Applicant's Plans
- Exhibit "C"- Review Agency Comments
- Exhibit "D"- Termination/Tap Structure Detail
- Exhibit "E"- Photo Simulations
- Exhibit "F"- Ordinance No. 2007-5
- Exhibit "G"- Ordinance N. 1998-15
- Exhibit "H"- Letters of Opposition
- Exhibit "I"- Letter from State Rep. Ben Ray Lujan
- Exhibit "J"- Vicinity map
- Exhibit "K"- Record of Decision for the Buckman Water Diversion Project





