BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF NEW MEXICO FOR REVISION OF ITS RETAIL ELECTRIC RATES PURSUANT TO ADVICE NOTICE NO. 507	)	**Case No. 14-00332-UT**
PUBLIC SERVICE COMPANY OF NEW MEXICO,	)	
Applicant	)	

DIRECT TESTIMONY AND EXHIBITS

OF

AUBREY JOHNSON

DECEMBER 11, 2014

NMPRC CASE NO. 14-00332-UT
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WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO

DIRECT TESTIMONY OF
AUBREY JOHNSON
NMPRC CASE NO. 14-00332-UT

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Aubrey Johnson. I am Vice President of New Mexico Operations for Public Service Company of New Mexico ("PNM"). My business address is 4201 Edith Blvd. NE Albuquerque, NM 87107.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS VICE PRESIDENT OF NEW MEXICO OPERATIONS.

A. As Vice President of New Mexico Operations, I am responsible for planning and directing the activities involved in delivering electric service to PNM's 500,000 retail customers throughout New Mexico. The functions I oversee generally include system planning, operations, engineering, construction and maintenance. My resume, PNM Exhibit AJ-1, lists my prior work experience.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN UTILITY REGULATION PROCEEDINGS?

A. No, I have not.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to describe PNM's Transmission and Distribution ("T&D") system which is necessary to provide safe and reliable electric service to

PNM's customers. I also address and support PNM's T&D capital investment budget for the period from July 1, 2014, through the end of the Test Period (December 31, 2016)[1] and the operations and maintenance ("O&M") expenses for the Base Period (July 1, 2013 to June 30, 2014). I describe the factors driving the need for these investments and expenditures. Specifically, in the sections that follow, I discuss:

- An overview of the PNM T&D systems;
- PNM's capital budgeting and prioritization process, including how priorities are established and how capital budgets are monitored;
- The capital investments required during the Capital Investment Period and why they are required for the safe, reliable and efficient operation of PNM's T&D systems;
- The capital costs of and benefits associated with PNM's acquisition of the remaining forty percent interest in the Eastern Interconnection Project;
- How T&D O&M expenditures are budgeted and monitored; and
- The T&D O&M capital expenditures that form the basis for the Base Period.

Q. ARE YOU SPONSORING ANY RULE 530 SCHEDULES?

A. Yes, I am sponsoring three Rule 530 schedules as follows:

- Schedule P-08 contains customer service interruption information for PNM's system by occurrence, duration and location,

[1] The period from July 1, 2014, through December 31, 2016, is referred to as the "Capital Investment Period."

- Schedule P-09 contains transmission demand and energy line loss information by voltage level, and
- Schedule P-10 contains historic reliability indices for the PNM T&D system.

Q. DOES YOUR TESTIMONY RELATE TO THE TESTIMONY PRESENTED BY OTHER COMPANY WITNESSES?

A. Yes, PNM witness Henry Monroy addresses the jurisdictional allocation of PNM's T&D capital investments and O&M expenses for purposes of developing PNM's costs of service in this proceeding.

II. SUMMARY OF KEY CONCLUSIONS

Q. WHAT ARE YOUR KEY CONCLUSIONS?

A. My key conclusions are as follows:

- PNM's T&D capital investments totaling $336,007,037 during the Capital Investment Period are required for efficient system operation, regulatory compliance and to adequately maintain the T&D infrastructure so that it continues to reliably serve PNM's customers.
- PNM uses a thorough, cost-conscious capital budgeting process to prioritize T&D capital projects, and the T&D capital investments during the Capital Investment Period are the result of this process.

- The Base Period T&D O&M costs are the result of PNM's budgeting and budget management processes and represent reasonable and prudent costs required to safely and reliably operate PNM's T&D facilities.

Q. HAVE YOU REACHED OTHER CONCLUSIONS?

A. Yes. PNM has and continues to carefully manage the cost to our customers associated with the development and operation of its T&D facilities and equipment while providing high levels of reliability. PNM is consistently within the top quartile of medium-sized utilities for reliability performance. PNM prioritizes capital investments and system expansion projects in a prudent manner. The focus of planning efforts is to ensure the system is robust enough to handle increasing peak demands and meets applicable regulatory requirements.

III. SYSTEM OVERVIEW AND KEY DRIVERS FOR CAPITAL EXPENDITURES

Q. PLEASE DESCRIBE THE NEW MEXICO TRANSMISSION SYSTEM.

A. The New Mexico transmission system is shown in PNM Exhibit AJ-2. As discussed later in my testimony, the system consists of transmission facilities owned by PNM and jointly owned with other transmission entities. The "backbone" of the system consists of several 345 kV lines and one 230 kV line that emanate from the Four Corners area in northwest New Mexico and run to the Southeast and South. Power flow on these lines is always from north to south due

to the location of base load generation resources in Four Corners, New Mexico. Southern New Mexico is served by two 345 kV lines that run from eastern Arizona to the Southeast and East towards El Paso, Texas. Historically, power has flowed in an easterly direction on these two lines. However, with the significant addition of new generation resources in southern New Mexico over the past several years, flow patterns have changed and power flows can be very light into southern New Mexico when the generation in the south is on-line and running.

As a general matter, the New Mexico transmission system has been designed to transport electricity from base load coal and nuclear-fueled resources constructed in the 1960s, 1970s, and 1980s in and around Four Corners, eastern Arizona, and Phoenix, to the large load centers in central and south-central New Mexico – namely, the Albuquerque, Santa Fe, and El Paso metropolitan areas. The transmission system also serves to connect the large load centers together for emergency support purposes and interconnects to neighboring transmission systems for stability and economic interchange purposes.

Q. PLEASE DISCUSS THE NEW MEXICO TRANSMISSION SYSTEM INTERCONNECTIONS.

A. The New Mexico transmission system connects: 1) to the North, to those of Public Service Company of Colorado and the Western Area Power Administration ("WAPA") Colorado-Missouri Division; and 2) to the West, to those of Tucson Electric Power Company ("TEP"), Arizona Public Service Company ("APS"), Salt River Project ("SRP"), and WAPA Lower Colorado Division. In addition, two 200 MW (nominal rating) asynchronous high-voltage direct current ("HVDC") stations connect the New Mexico system, located within the Western Interconnection, to the transmission system of Southwestern Public Service ("SPS") located in the Eastern Interconnection. PNM is an owner in each of these HVDC stations – the Blackwater and Eddy County (a/k/a Artesia) ties. These interconnections allow interchange of power in either direction with SPS. The Blackwater tie near Clovis, New Mexico, enables the import of power directly into the Albuquerque load area via the Blackwater-BA 345 kV line. This line presently has two wind farms connected to it and is the subject of additional interest for renewable energy resources. The Eddy County tie near Artesia, New Mexico, enables power imports by El Paso Electric Company ("EPE") and PNM's southern New Mexico load areas via the Eddy County-Amrad 345 kV line.

Q. ARE THERE OTHER MAJOR ELEMENTS TO THE NEW MEXICO TRANSMISSION SYSTEM?

A. Yes. Large autotransformers located at load centers are used to step the system voltages down to the 115 kV level. Substations located on 115 kV, 69 kV, and 46 kV lines further step the voltages down to distribution system voltages for delivery to end users.

Q. ARE THE TRANSMISSION FACILITIES YOU DESCRIBED SOLELY OWNED BY PNM OR JOINTLY OWNED?

A. They are generally solely owned. However, in New Mexico, as in much of the Southwest, there are many jointly-owned transmission projects, as well as many jointly-owned generation projects.

Q PLEASE DESCRIBE PNM'S JOINTLY-OWNED TRANSMISSION PROJECTS.

A. PNM is a part owner in six transmission projects. First, the Palo Verde Valley Transmission System ("VTS") is comprised of three 500 kV lines that span from Palo Verde east to the Phoenix metropolitan area (two to Westwing and one to Kyrene) and various transformers at the Westwing and Kyrene switchyards. PNM owns a 12.1% undivided interest in this system, with APS, SRP, and EPE owning the balance. SRP operates and maintains the VTS.

Second, PNM and TEP jointly own the San Juan-Springerville-Vail Transmission system ("San Juan-Vail System") which consists of two 345 kV transmission lines that travel south from San Juan along the New Mexico-Arizona border to the McKinley switchyard, then to the Springerville generating plant, and then to Greenlee and Vail near the Tucson load center. The Springerville to Coronado 345 kV line is also a part of the project. TEP operates and maintains the San Juan-Vail System.

Third, PNM and EPE jointly own the Southwest New Mexico Transmission Project ("SWNMT"). This system includes the Greenlee to Hidalgo to Luna 345 kV transmission lines and switching stations. The SWNMT is operated and maintained by EPE.

Fourth, PNM and EPE jointly own the Amrad-Eddy County 345 kV line and the Eddy County HVDC converter station that interconnects with SPS, as described above. EPE operates and maintains the Amrad-Eddy County line and SPS operates and maintains the Eddy County converter station through contractual arrangements with PNM.

Fifth, PNM and City of Farmington jointly own the San Juan-Shiprock transmission line, which PNM operates and maintains.

Lastly, PNM and Tri-State Generation and Transmission Association, Inc. ("Tri-State") jointly own the Alamogordo-Hollywood 115 kV line transmission line. Both PNM and Tri-State operate and maintain this transmission line.

Q. DOES PNM MAKE ANY OPERATIONAL DISTINCTION BETWEEN ITS NORTHERN NEW MEXICO AND SOUTHERN NEW MEXICO TRANSMISSION SYSTEM?

A. No. PNM operates its transmission system as a single system. The northern and southern transmission systems are different from the perspective that, although PNM owns facilities connecting its systems, it does not operate these connecting facilities and therefore transactions between the northern and southern portions of PNM's system are coordinated with EPE and TEP. Also, because PNM lacks sufficient ownership rights in transmission to move power between the northern and southern systems, it must purchase transmission service from EPE and TEP for deliveries between the northern and southern portions of PNM's system.

Q. HOW IS PNM'S TRANSMISSION SYSTEM USED?

A. PNM uses its transmission system to move generation and purchased power resources described by PNM witness Chris Olson to its retail and wholesale customers, and to deliver the generation resources of other entities to their own customers. As a Federal Energy Regulatory Commission ("FERC") jurisdictional

transmission provider, PNM provides open access transmission service on its system for generator interconnection and transmission delivery services pursuant to the terms and conditions of its open-access transmission tariff ("OATT"). PNM provides significant amounts of transmission service to other entities pursuant to its OATT, and PNM must plan its system to meet the needs of both its jurisdictional customers and its transmission customers.

Q. WHAT TYPES OF TRANSMISSION DELIVERY SERVICES DOES PNM PROVIDE FOR OTHER ENTITIES OVER ITS TRANSMISSION SYSTEM?

A. PNM provides Network Integration Transmission Service ("NITS") and Point-to-Point ("PTP") transmission service over its transmission system. The revenues associated with these services are accounted for in the determination of revenue requirements as described in Mr. Monroy's testimony.

Q. PLEASE DESCRIBE THE PNM DISTRIBUTION SYSTEM.

A. By definition, PNM's distribution system begins at distribution substations, which are connected to either a 115kV, 69kV or 46kV sub-transmission line. Within the substations, transformers step the transmission voltage down to distribution system voltage levels for delivery to end users. PNM has approximately 194 distribution substation transformers that typically range in size from 33.6MVA

down to 3.25MVA. The distribution substations are spread out over a large geographic area of New Mexico which includes:

- Clayton
- Las Vegas
- Albuquerque
- East Mountain area of Bernalillo Co.
- Los Lunas, Belen and portions of Valencia Co.
- Santa Fe and portions of Santa Fe Co.
- Rio Rancho and portions of Sandoval Co.
- Portions of McKinley Co.-Western Area
- Ruidoso, Tularosa, Alamogordo and portions of Otero Co.
- Deming and portions of Luna Co.
- Lordsburg, Silver City and portions of Grant Co.

The distribution system is typically a radial system arranged like branches on a tree such that customers have a single source of power. This is the most common system layout in suburban and rural areas. Nominal voltage levels for PNM's primary distribution system range from 23kV to 4,160V. The largest portion of PNM's primary distribution system utilizes a 12.47-7.2kV design voltage. Distribution class transformers then further reduce the primary distribution system voltages to service voltages between 120V to 480V for delivery to end users. The distribution system from the distribution class transformers to the end user is referred to as the secondary distribution system. PNM also utilizes a 480V network system to serve portions of downtown Albuquerque. In the case of some

larger customers, PNM directly connects customer-owned primary distribution facilities to PNM's primary distribution system at either the substation transformer or to the primary distribution feeder through a primary metered service.

IV. T& D CAPITAL BUDGETING PROCESS

Q. HOW DOES PNM DETERMINE WHEN AND WHERE TO MAKE CAPITAL INVESTMENTS TO EXPAND OR REINFORCE ITS TRANSMISSION SYSTEM?

A. Transmission planners are continually analyzing the performance of the current system and the need for future systems to ensure that electricity can be reliably delivered consistent with the North American Electric Reliability Corporation ("NERC") and the Western Electricity Coordinating Council ("WECC") requirements, and NMPRC Rule 560. PNM uses a ten-year horizon for transmission and distribution planning. Plans are updated annually in advance of the budgeting process.

Q. PLEASE EXPLAIN THE ROLE OF NERC AND WECC WITH RESPECT TO PNM'S TRANSMISSION PLANNING AND OPERATIONS.

A. NERC is a not-for-profit international regulatory authority whose mission is to ensure the reliability of the bulk transmission system in North America. NERC develops and enforces Reliability Standards under the authority of FERC;

annually assesses seasonal and long-term reliability; monitors the bulk power system through system awareness; and educates, trains, and certifies industry personnel. NERC's area of responsibility covers the bulk transmission systems in the continental United States, Canada, and the northern portion of Baja California, Mexico which serve more than 334 million people. NERC is the electric reliability organization for North America, subject to oversight by the FERC and governmental authorities in Canada. NERC's jurisdiction includes users, owners, and operators of the bulk transmission system.

WECC is one of nine regional electric reliability councils under NERC authority and is the largest regional entity. The WECC region encompasses the entire Western Interconnection, which comprises the states of Washington, Oregon, California, Idaho, Nevada, Utah, Arizona, Colorado, Wyoming, portions of Montana, South Dakota, New Mexico and Texas in the United States, the Provinces of British Columbia and Alberta in Canada, and a portion of Mexico's *Comisión Federal de Electricidad* system in Baja California. The Western Interconnection is tied to the Eastern Interconnection through eight high-voltage direct current transmission facilities. WECC develops and implements Regional Reliability Standards and WECC Regional Criteria for the Western Interconnection.

In addition, WECC formed a new not-for-profit entity called "Peak Reliability" that became effective January 1, 2014. Peak Reliability was formed to assume and carry out the NERC registered functions of Reliability Coordinator and Interchange Authority for the Western Interconnection.

PNM's transmission system is subject to NERC and WECC jurisdiction and PNM must make necessary capital investments and O&M expenditures to meet NERC and WECC standards, which in turn are subject to oversight by FERC.

Q. PLEASE ELABORATE ON PNM'S TRANSMISSION PLANNING PROCESS.

A. PNM transmission planners perform modeling and simulations of PNM's transmission system to determine its operating capabilities. The system limitations are then compared to the present and forecasted loads of PNM's retail and wholesale customers and its transmission customers. NERC reliability standards and other industry practices guide the analyses to ensure electricity can be delivered adequately and securely. As potential system deficiencies, such as over- or under-voltages or overloads of equipment, are identified, alternative solutions are identified. These alternative solutions may include the development of new or different operating procedures, the addition of voltage supporting devices, upgrades to substation or line termination equipment, the reconductoring

of lines, or the construction of new lines. Alternatives are prioritized in accordance with their ability to solve system issues, to be implemented in the timeframe needed and to provide the lowest lifecycle cost.

PNM also continually assesses the useful service life of significant components of its transmission system. In some cases the equipment (i.e., relays, breakers, transmission cross arms, and etc.) may become functionally obsolete because it has reached the end of its useful life based on the number of operating cycles, higher than planned maintenance costs, the need to meet recent compliance obligations, or when repair parts are no longer available. PNM's capital budget includes funding for replacing critical equipment that has reached the end of its useful service life.

Q. HOW DOES THE DISTRIBUTION PLANNING FUNCTION IDENTIFY SPECIFIC CAPITAL EXPANSION NEEDS?

A. Distribution planning evaluates the primary distribution system by comparing the present and forecasted customer loads of the different retail customer service areas against system limitations to determine the need for and timing of system improvement projects. The objectives of these projects are to ensure compliance with NMPRC Rule 560, and American National Standards Institute, National Electrical Safety Code, and PNM's own distribution planning criteria. Project

drivers are based on assuring that safe and reliable electric service to customers is provided within established voltage and equipment loading criteria for normal and emergency conditions. Alternative solutions are evaluated with the lowest reasonable cost solution recommended for implementation in the capital budget. Recommendations typically consist of one or more of the following possible solutions (from lowest to highest potential cost):

- reconfiguring the system service within an area by changing open points;
- balancing connected load along the distribution feeder;
- installing capacitors for voltage improvement and power factor correction;
- installing voltage regulators to maintain voltage criteria;
- upgrading existing overhead conductor/underground cable;
- adding new overhead conductor/underground cable;
- constructing a new feeder from a substation; and
- adding a new substation and/or feeders within a service area.

Q. HOW ARE ALTERNATIVE SOLUTIONS EVALUATED?

A. The process starts with an evaluation of the feasibility of the planning alternatives for any "fatal" flaws such as known permitting/environmental restrictions. The options resulting from this evaluation are then assessed to identify issues that could affect project viability such as reviewing permitting and procurement lead times to ensure they can be accommodated and whether extensive public process

or National Environmental Policy Act compliance issues may exist. Cost estimates used in the feasibility stage of planning, and for comparison between alternatives, are based upon standardized station designs, estimated line mileages, PNM cost data that are periodically updated, and PNM distribution construction standards. For alternatives that are not typical installations on PNM's system, PNM may employ consultants, vendors, and contractors to assist in providing cost estimate information. For example, high-level right-of-way costs are based on number of property owners, lot sizes and recent sales information. Estimates are then calibrated by comparing the cost of recent similar installations on the PNM system.

Final cost estimates used for project funding include project and site-specific considerations. These include the selection of a specific parcel of land or line route, identification of permitting and environmental restrictions, development of the design in terms of site layout, span lengths, and typical structure heights, and securing current vendor quotes for major equipment. In addition, a timeline for the project is prepared based upon time frames for permitting, right-of-way acquisition, engineering and design, lead times for material and equipment procurement, and construction schedules.

Q. DOES PNM HAVE A PROCESS FOR PRIORITIZING ITS CAPITAL INVESTMENTS?

A. Yes, PNM recognizes the challenges associated with delivering safe and reliable power as efficiently as possible and that it must therefore make decisions about which projects identified in the planning process it can fund. A prioritization methodology has been developed to ensure that the most needed projects are funded first. The highest priority projects include those that: 1) are currently underway; 2) are being built to satisfy PNM's obligation to serve; 3) are being built to comply with regulatory/environmental/contractual requirements; 4) address safety concerns; 5) mitigate an unacceptable reliability risk; and 6) provide benefits that are clearly evident either operationally or economically (or both) and there is a notable downside risk if not completed.

Through this prioritization process, PNM develops a list of capital projects that is reviewed by senior business unit management and consolidated with projects from other business units. A final capital investment plan is prepared and submitted to senior management for consideration and approval.

Q. DOES PNM ANTICIPATE MEETING THE FORECASTED IN-SERVICE DATES FOR ITS CAPITAL PROJECTS?

A. PNM plans to meet the in-service date for each of its capital projects and does meet the planned in-service date for the vast majority of its projects. However, it is possible that unforeseen events could cause PNM to redirect manpower and capital toward other emergent projects. PNM's budgets for capital expansion are based upon a portfolio of projects needed to maintain reliability and serve new customers. Flexibility in the specific projects to be completed is necessary to ensure the management of unforeseen events and necessary unbudgeted expenses that can arise during the year. For instance, equipment may fail, diverting the resources of the engineering and project management staff from on-going projects as well as requiring unbudgeted expenditures to ensure the supply of power to customers is not jeopardized. Projects and associated expenditures therefore cannot always be completed in the timeframe originally forecasted. A process is in place for managing mid-year changes, or "trade-offs" to ensure the funding of necessary, but unbudgeted, capital expenditures while not exceeding the approved capital target. The process requires documentation of the need for the new expenditure, the identification of a budgeted project expenditure that will be reduced to accommodate the new expenditure, and proper approvals. As a result of this process, some projects may be delayed while others are accelerated but the total amount of capital invested during the budget period will not change.

V. T&D CAPITAL PROJECTS DURING THE CAPITAL INVESTMENT PERIOD

Q. WHAT TOPICS DO YOU ADDRESS IN THIS SECTION OF YOUR DIRECT TESTIMONY?

A. In this section of my direct testimony, I address PNM's more significant capital investments for T&D facilities during the Capital Investment Period and summarize the justification for making these investments. Specifically, I address the ten largest individual capital projects and the four largest blanket capital projects. A list of all T&D projects is attached to my testimony as PNM EXHIBIT AJ-3. The Eastern Interconnection Project is one of the ten largest capital projects and is described separately in Section V.C. of my testimony due to its uniqueness. PNM has undertaken a capital investment program focused on addressing the key needs of regulatory compliance, safety and security, reliability, operational efficiency and aging infrastructure.

Q. WHAT IS THE TOTAL PNM T&D CAPITAL BUDGET THROUGH THE END OF THE TEST PERIOD?

A. PNM T&D's capital investments during the Capital Investment Period for the plant that is anticipated to be in service by December 31, 2016 are summarized on Table AJ-1. Included in the totals presented is PNM's share of jointly owned projects.

TABLE AJ-1

CAPITAL CATEGORY	CAPITAL INVESTMENT PERIOD CLEARINGS TOTAL
Distribution Blankets	$93,942,746
Distribution Specific Projects	$68,657,400
Transmission	$173,406,891
Total	$336,007,037

The above figures represent the total PNM transmission and distribution capital expenditures. The jurisdictional allocations of these costs are discussed by Mr. Monroy.

A. Individual T&D Capital Projects

Q. PLEASE DESCRIBE THE TOP TEN T&D CAPITAL PROJECTS TO BE COMPLETED DURING THE CAPITAL INVESTMENT PERIOD AND THE FACTORS DRIVING THE NEED FOR EACH.

A. Below is a description of the top ten capital T&D projects which represent 31.6% of the total T&D capital investment during the Capital Investment Period.

1. Rio Puerco Static VAR Compensator (SVC) (ID 65009313); Estimated Cost: $30.3 million – This project provides the flexible voltage support needed to maximize the utilization of existing transmission assets by: 1) improving voltage support during forced or planned transmission outages, 2) eliminating

the need to maintain a number of complex tools and procedures to address voltage limits, and 3) reducing the need to commit Albuquerque-based (load-side) generation for voltage support. The SVC will enhance reliability by automating the system's response to outage events, thereby enabling PNM to meet the more stringent reliability requirements.

The SVC project will maximize the import capability over PNM's Northern New Mexico transmission import path and WECC Path 48. The SVC will be located in the Central Rio Grande Valley area load center, where approximately eighty percent of PNM's peak summer load is located, to provide flexible voltage support that will enable the full utilization of existing transmission assets. The SVC will also provide voltage support on the bulk power system during non-peak load periods, when, due to increases in loads, there is need for reliability improvements. PNM performs needed maintenance on substation equipment, transmission lines and load-side generation facilities during shoulder months when loads are not at either summer or winter peaks. When equipment is taken out of service for maintenance and the system is not at full capability, the rest of the system must be able to withstand an additional outage. This project will improve PNM's ability to maintain compliance with mandatory NERC and WECC planning and operating standards and will allow WECC Path 48 to be

operated up to thermal limits and will significantly improve voltage control during planned and unexpected outages.

2. Rio Puerco Station Expansion (ID 65009012) Estimated Cost $19.5 million - This project is to mitigate overloads of transmission facilities serving the Albuquerque metropolitan area related to the outage of a transmission line(s) or other critical equipment. The project consists of: 1) expanding the existing Rio Puerco 345 kV station from a three breaker ring bus to a "breaker and a half" bus design, 2) looping in the existing Four Corners-West Mesa 345 kV and San Juan-BA 345 kV lines and 3) performing protection modifications for the existing Rio Puerco series capacitor banks.

This Project will tie in existing 345 kV lines at the Rio Puerco site resulting in two 345 kV paths between BA and Rio Puerco and two 345 kV paths between West Mesa and Rio Puerco. The creation of parallel 345 kV paths allows the higher capacity 345 kV lines to carry the load for outages of the existing BA-Rio Puerco and Rio Puerco-West Mesa 345 kV lines, thereby preventing overloads of the BA transformer and BA-Reeves 115 kV lines. This project maintains PNM's compliance with mandatory NERC and WECC planning and operating standards.

3. Second Transformer at Yah-Ta-Hey (ID 65009014) Estimated Cost: $9.5 million – The addition of a second transformer has been planned as a result of planning studies which show that the loss of a single contingency outage of major 345 kV and 230 kV transmission facility or existing Yah-Ta-Hey transformer would violate NERC reliability criteria for equipment loading and low voltages. This project also includes expansion of the existing McKinley 345 kV station (jointly owned with TEP and operated by TEP) and a rebuild of the Yah-Ta-Hey 115 kV station to interconnect the transformer. The transformers provide a connection between the McKinley 345 kV switching station and the adjacent Yah-Ta-Hey 115 kV switching station. TEP will be responsible for the construction activities in the McKinley Switchyard at PNM's cost. This project maintains PNM's compliance with mandatory NERC and WECC planning and operating standards.

4. Distribution Cable Testing and Replace (ID 60003115); Estimated Cost: $7.9 million - This blanket includes the testing, identification and replacement of failing and damaged underground cables, or cables that did meet the current operating standards based upon partial discharge cable testing. Underground cable has a normal life expectancy of between 25 and 40 years and this blanket also covers testing to assist in identifying those cables that have reached the end of their useful life and those that can continue to remain in

service. Costs include engineering, project coordination, testing, material, and labor.

5. Station Hardening (ID 65007514); Estimated Cost $7.7 million - The project includes the establishment of a security operations center, development of enhanced security procedures and retrofits to switching stations to meet the requirements of NERC CIP V5 which addresses both cyber and physical security requirements. This project will also help minimize or eliminate copper theft and other vandalism at key stations through detection and deterrence. Theft and vandalism at stations can cause serious safety issues for PNM personnel as well as lead to unscheduled equipment outages. PNM estimates that over the two-year period from January 2012 through December 31, 2013, it incurred costs associated with vandalism and copper thefts in the amount of $3 million. This does not include costs to customers as a result of service interruptions.

6. Richmond Switching Station (ID 65009013); Estimated Cost: $7.4 million - This project is to provide additional transmission support to the Albuquerque area 115kV transmission network in order to mitigate overloads on several 115 kV lines during single and double contingencies by adding an additional 115 kV looped source into the Sandia station. The project includes the

construction of a new three-breaker ring switching station that loops in the Prager-North 115 kV line to the Sandia-North/Prager 115 kV line. This project addresses capacity limits and low voltages in the southeast Albuquerque area under contingency conditions necessary to maintain PNM's compliance with mandatory NERC and WECC planning and operating standards.

7. Transmission Breaker Replacement (ID 64807513); Estimated Cost: $6.2 million – This undertaking involves the replacement of between 13 and 16 aging transmission circuit breakers on the system with new, modern, reliable breakers. Voltage classes include 345kV, 230kV and 115kV. In some cases, the older breakers are no longer manufactured and replacement parts are difficult, if not impossible, to acquire. Other issues with the aging breakers include structural integrity, environmental issues, inability to meet system electrical requirements, increased maintenance, and greater likelihood of unscheduled equipment outages. PNM conducts prioritization and evaluation of this key equipment to determine which breakers should be replaced in a given year. The age and condition of these breakers is a significant risk to the reliability of the transmission system for PNM as well as for others interconnected with and/or utilizing the transmission system.

8. Rio Puerco Progress 115kV Line (ID 64807813); Estimated Cost: $5.9 million – This project will provide a looped feed to the Progress station by building 8 miles of 115 kV transmission line to connect the existing Rio Puerco and Progress stations. A looped feed to substations is a standard utility practice and ensures reliable service because it provides two transmission sources to serve a substation. In this case, this project provides the capability of serving the growing area of northern Rio Rancho from two separate directions, either from the Rio Puerco Switching Station or from Pachmann Switching Station. The Project is also necessary to fully integrate the Rio Puerco station into the Albuquerque 115 kV system. This will increase the reliability of the 115 kV system as it will enable Rio Puerco to function as either an additional primary or back-up source to that system. This project will improve compliance with NERC and WECC planning and operating standards by mitigating overloads that occur on the Albuquerque area transmission system for 345 kV outages between Rio Puerco and West Mesa.

9. 345kV Wood Structure Replacement (ID 64807113); Estimated Cost $5.9 million – This project replaces thirty-four (34) existing 345 kV wood pole dead-end structures that are vulnerable to pole fires and other maintenance problems, and could adversely affect the reliability of PNM's 345 kV transmission lines in northwest New Mexico, with steel structures. These 345 kV wood pole dead-end structures have been in service since the mid 1960's. This particular structure design is more

vulnerable to fire than other wood structures in the system because the outside phase is closer to the pole than on any other structures. The pole fires can result in unscheduled outages and the need for immediate repairs. These transmission lines are particularly important since outages on PNM's 345 kV system have the potential to affect significant percentages of PNM's customers.

10. 115kV Breaker Replace Fault Current (ID 64807713); Estimated Cost $5.6 million – This project replaces twenty-two 115 kV circuit breakers in the Albuquerque area. The breakers are being replaced at PNM's North, Person, Sandia, Reeves and West Mesa 115 kV stations to ensure continued reliable operation of PNM's 115 kV system in the Albuquerque area and to capably interrupt increased fault current on the transmission system.

Technical studies have shown that the growth-related transmission and generation additions in the Albuquerque metro area have contributed to an increase in the available fault current on the 115 kV transmission system. As a result, the breakers are undersized for the interrupt requirements of the existing system based on the manufacturers design limits. Exceeding the design ratings can lead to failure of a breaker to clear a fault with consequences ranging from larger customer outage impacts to catastrophic equipment failure. In addition, some of these breakers are approaching 50 years of service and are beyond their effective service life. Similar to

the aging breaker project described above, a number of these breakers also raise concerns about structural integrity, lack of availability of replacement parts, increased maintenance, and greater likelihood of unscheduled equipment outages. The stations identified above are critical to providing reliable service in the metropolitan area. Loss of a critical piece of equipment can put the transmission grid at risk.

B. T&D Blanket Capital Projects

Q. PLEASE DESCRIBE THE WHAT IS MEANT BY "BLANKET" CAPITAL INVESTMENT.

A. Distribution Blankets include labor for design and installation, materials, permitting and right-of-way acquisition for the installation of new and upgraded electric distribution facilities to enable continued and new service to residential and non-residential customers. The materials include many items too numerous to list individually including: transformers, primary and secondary wires and cables, meters, poles and supporting structures, trenches, overhead and underground switches and duct systems.

Distribution Blanket projects include line extensions for new and upgraded services, removal and replacement of failing equipment, relocation of facilities for road widening projects, minor system improvements, transformer purchases, meter purchases installations and replacements, and cable and pole replacements, and streetlights.

Q. PLEASE DESCRIBE THE TOP FOUR DISTRIBUTION BLANKETS TO BE COMPLETED THROUGH THE END OF THE TEST PERIOD AND THE FACTORS DRIVING THE NEED FOR EACH.

A. The top four blanket projects, representing 11.32% of the total T&D capital investment during the Capital Investment Period:

1. Transformers (ID 10000907) Blanket; Estimated Cost: $13.8 million - This blanket includes the purchase of transformers for new customer line extensions, customer upgrades, and replacement of failed or damaged transformers.

2. Services (ID 10000807) Blanket; Estimated Cost: $8.7 million - This blanket includes the costs of engineering, inspections, materials, and installation of service wires and equipment to provide service to residential and non-residential customers.

3. Meter Equipment (ID 10001007) Blanket; Estimated Cost: $7.8 million - This blanket includes meter purchases for new service, and replacement of meters, both planned (due to the vintage of the meter and/or results of periodic testing as required under NMPRC Rule 560) and unplanned due to vandalism or damage.

4. Distribution Remove & Replace (ID 10000607) Blanket; Estimated Cost: $7.7 million - This blanket includes removal and replacement of existing electric distribution facilities that have failed or been damaged. Generally this is replacement of like for like. This also includes relocations of facilities in road rights of way for road re-alignments or widening projects. Project drivers include equipment failure and public improvement projects.

C. The Eastern Interconnection Project

Q. PLEASE DESCRIBE THE EASTERN INTERCONNECTION PROJECT.

A. In 1985, PNM completed construction of the Eastern Interconnection Project ("EIP") consisting of 216 miles of 345kV transmission line, a HVDC converter station, and related facilities connecting PNM's transmission system with SPS that permit bidirectional flows of power between the Southwest Power Pool and WECC grids, located in New Mexico. Upon commercialization of the transmission line and converter station, PNM entered into two 30-year sale/leaseback financing arrangements with two financing entities - one for a 60% ownership interest and one for a 40% ownership interest. In 2002, PNM repurchased the 60% ownership interest from the lessor. The lease of the remaining 40% ownership interest, owned by Tortoise Capital Resources Corporation ("Tortoise"), has an April 1, 2015 expiration date.

Q. DID DIVIDED OWNERSHIP OF THE EIP FACILITIES CREATE ANY PROBLEMS?

A. Yes. The divided ownership of the EIP created delays in the processing of transmission service requests because of the joint ownership structure and questions concerning ownership after the expiration of the leases. This created issues between PNM and its transmission customers. On July 5, 2012, FERC issued an order in response to a complaint filed by one of these customers against PNM and Tortoise that directed PNM and Tortoise to identify the party responsible for immediately providing long-term transmission service over the forty percent of the capacity owned by Tortoise.

Q. HOW DID THE PARTIES RESPOND TO THE FERC ORDER?

A. On September 5, 2012, PNM informed FERC that PNM and Tortoise had reached an agreement under which PNM will purchase Tortoise's 40% interest on April 1, 2015, and take responsibility for providing long-term transmission service on the entire EIP. Under the agreement, PNM will purchase the 40% interest for net book value of $7.2M.

Q. PLEASE DESCRIBE THE BENEFITS OF PNM'S FULL OWNERSHIP OF THE EIP FACILITIES.

A. Full ownership will give PNM control over the use of the EIP facilities as well as day-to-day operations and maintenance decisions. It will remove the existing cumbersome and time-consuming joint ownership issues I described. PNM's full

ownership will also provide positive benefits to PNM, the state, and the region by ensuring that the EIP can be fully integrated with the "bigger picture" plans being considered for the regional delivery of renewable energy. It also resolves the uncertainty over how the transmission capacity will be made available.

Q. ARE THE CAPITAL PROJECTS DESCRIBED IN YOUR TESTIMONY NEEDED TO MEET PNM'S SERVICE OBLIGATION?

A. Yes. These projects and their associated costs are necessary for PNM to continue to provide safe and reliable electric service to its New Mexico customers. In addition, many of these projects are required for regulatory compliance purposes. These projects have been carefully vetted and prioritized and the associated costs are reasonable.

VI. O&M EXPENSES FOR T&D

Q. WHAT ARE THE TYPICAL O&M EXPENDITURES ASSOCIATED WITH THE PNM'S T&D FACILITIES?

A. O&M expenses for T&D include the labor and expenses of the employees and contract workers that directly support the functions that monitor and control the power system, schedule the outages and maintain and repair the stations, lines and equipment, trim the trees and brush, and perform system reliability, interconnection and engineering cost studies. O&M expenses also include the

amortization of T&D right-of-way acquisition costs, regulatory assessment fees and the cost of transmission of electricity by others (third-party transmission expenses). Third-party transmission costs are discussed by Mr. Monroy.

Q. PLEASE DESCRIBE THE THIRD-PARTY TRANSMISSION SERVICES PNM PURCHASES FROM OTHER TRANSMISSION PROVIDERS TO SERVE LOAD.

A. PNM purchases transmission service to serve load from: APS, Tri-State, EPE, and TEP. PNM also has transmission exchange agreements with WAPA under which PNM and WAPA provide transmission service to each other under a single contract.

Q. PLEASE DESCRIBE THE TRANSMISSION SERVICES PNM PURCHASES FROM APS.

A. PNM has two transmission service agreements with APS for delivery of PNM's Palo Verde resources to New Mexico. The first is a non-OATT bilateral contract for a 130 MW path utilizing the Westwing to Four Corners path. PNM uses this transmission path to deliver 130 MW of its Palo Verde generation entitlement to its New Mexico transmission system as a network resource for service to PNM's native load customers. As the Palo Verde owners have undertaken certain upgrades to the generating units, the net generation capacity related to PNM's

ownership share has increased by 10 MW. Hence, PNM has purchased an additional 10 MW of transmission service from APS under APS's OATT on the Kyrene to Four Corners path.

In addition, PNM has entered into PTP transmission service agreements under the APS OATT for transmission service from the Palo Verde to Four Corners, for a total of 135 MW of transmission capacity. This transmission will be utilized for delivery of Palo Verde Unit 3 if a CCN for that capacity is granted in NMPRC Case No. 13-00390-UT. PNM has deferred the commencement of the transmission service for 2014 and 2015 by paying APS a one-month reservation fee for each of these years.

Q. PLEASE DESCRIBE THE TRANSMISSION SERVICES PNM PURCHASES FROM TRI-STATE.

A. PNM purchases network integration transmission service from Tri-State OATT to serve PNM's retail load in Clayton, New Mexico. PNM has interconnections with Tri-State at Ojo Station north of Santa Fe, New Mexico and at Storrie Lake, north of Las Vegas, New Mexico. PNM delivers power and energy to Tri-State at these interconnections for service to Clayton on Tri-State's transmission system.

Q. PLEASE DESCRIBE THE TRANSMISSION SERVICES PNM PURCHASES FROM EPE.

A. PNM purchases firm PTP transmission service under EPE's OATT as shown in Table AJ-2 below.

Table AJ-2

Transmission Services Provided to PNM by EPE		
Receipt	**Delivery**	**Reservation**
West Mesa 345 kV	Amrad 115 kV	25 MW
Afton Generating Station	West Mesa 345 kV	30 MW
Afton Generating Station	Springerville 345 kV	94 MW
Afton Generating Station	West Mesa 345 kV	111 MW
Luna Generating Station	Springerville 345 kV	60 MW

PNM purchases 25 MW of firm PTP transmission service from EPE to deliver PNM network resources from PNM's interconnection with EPE at West Mesa 345kV to the Amrad station 115kV interconnection to serve PNM's southeastern New Mexico retail loads. PNM purchases 141 MW of firm PTP transmission service from EPE to deliver a portion of Afton Generating Station from the EPE system to PNM's system at West Mesa. PNM also purchases an additional 154 MW of transmission service from EPE to deliver the remaining portion of the 111 MW of Afton Generating Station and 60 MW of Luna Generating Station to Springerville.

PNM also makes short-term firm purchases under EPE's OATT during the summer months to support system deliveries to Amrad from PNM's southern New Mexico system.

Q. PLEASE DESCRIBE THE TRANSMISSION SERVICES PNM PURCHASES FROM TEP.

A. PNM purchases 14 MW of firm PTP transmission service under TEP's OATT from San Juan to Greenlee to support system deliveries in southern New Mexico.

Q. PLEASE DESCRIBE THE TRANSMISSION SERVICE EXCHANGE AGREEMENTS BETWEEN PNM AND WAPA.

A. The transmission service exchange agreements are Contract 2425 and Contract P0695. Under Contract 2425, PNM provides WAPA 140 MW of transmission service from Four Corners to West Mesa. In exchange, PNM receives from WAPA 84 MW of transmission service from Westwing to Four Corners. Under Contract P0695, PNM provides WAPA up to 107 MW of transmission service between Four Corners and various points of delivery on PNM's transmission system In return, WAPA provides PNM 50 MW of transmission service from Westwing to Four Corners.

The net effect of the two contracts is that PNM provides WAPA up to 247 MW of transmission service and, in exchange, receives some revenue and 134 MW of transmission service from WAPA on the Westwing to Four Corners transmission path. PNM uses this transmission path to deliver 134 MW of its Palo Verde generation entitlement to its New Mexico transmission system as a network resource for service to PNM's native load customers.

Q. WHAT IS THE PROCESS THAT PNM T&D USES TO ESTABLISH ITS O&M BUDGET?

A. PNM's O&M budget development is a multi-step process. Each department within PNM T&D reviews data from the previous years and projects forward five years. Examples of categories that are reviewed are staffing levels, payroll (both straight time and overtime), outside services, employee expenses, equipment and materials, etc. Each department adjusts the projection based on historical data for known variances, such as scheduled maintenance work, additional contract studies, etc., and inputs this data into PNM's budgeting system. Senior management must review and approve the final budget.

Q. WHAT IS THE BUDGETING PROCESS FOR JOINTLY OWNED TRANSMISSION FACILITIES?

A. For the jointly-owned transmission facilities previously mentioned, the operating agent for each facility prepares the annual O&M budget. PNM budgets for these projects based upon the annual projected O&M budgets prepared by the operating agent. The operating agents are responsible for the necessary maintenance and repairs to the transmission facilities and invoice the other joint owners for their respective share of O&M costs.

Q. HOW DOES PNM MONITOR AND CONTROL ITS O&M COSTS?

A. PNM has managed its O&M expenditures by reviewing all aspects of its operations for savings. I conduct reviews of the O&M budget with department heads on a monthly basis. Appropriate efforts are made to help ensure that the budgets remain on target.

Q. PLEASE DESCRIBE PNM'S O&M EXPENDITURES IN THE BASE PERIOD.

A. The Base Period O&M expenditures are the actual O&M expenditures related to T&D functions during the twelve months ending June 30, 2014. These expenditures are the product of the rigorous budgeting and cost control measures

as I described. PNM's methodology for forecasting O&M costs in the Test Period are discussed by PNM witness Henry Monroy.

VII. CONCLUSIONS

Q. DO YOU HAVE ANY CONCLUDING OBSERVATIONS?

A. Yes. PNM strives to minimize customer costs while providing a high degree of reliability in the delivery of electric service. PNM has an excellent reliability track record, achieving a top quartile national ranking for its reliability performance over the past five years. The PNM T&D capital investments are prudent and necessary to provide electric service that is adequate to the needs of PNM's customers. These investments permit PNM to maintain its reliability performance by ensuring all appropriate industry reliability standards are met. PNM has a rigorous and structured process for identifying and prioritizing capital investment in advance of its need. PNM's reliability track record demonstrates the Company's ability to plan, build and operate T&D systems capably.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

GCG#518976

Resume of Aubrey Johnson

PNM Exhibit AJ-1

Is contained in the following 3 pages.

Aubrey A. Johnson

1906aj@gmail.com

5817 Royal Oak Dr. NE | Albuquerque, NM 87111

505-332-8858 Residence | 770-262-6521 Cell

Objective

An executive management level position that will allow me to utilize my leadership, management and operations expertise to lead new initiatives and/or enhance market presence.

Summary

Experienced executive with extensive field service, project and facility management experience. Proven track record of developing people, improving processes and cycle times; optimizing budgets to improve reliability and financial results. Managed transitions from union to non-union and non-regulated to regulated environments. Demonstrated success with both P&L and cost center operations. Successfully grew P&L operation by 50%. Strong customer focus; experience working in highly matrixed environments.

Skills Profile

KEY COMPETENCIES INCLUDE:

Electric Utility Operations & Maintenance
Strategic Planning and execution
P&L Management/Cost Control
Training, Mentoring, Team Development
Interpersonal and Presentation Skills
Customer Relations
Project Management

Accomplishments

- Drove significant improvements in overall safety metrics during first full year with PNM.
- Led efforts to improve employee relations within the business unit.
- Built development program to attract and retain entry level engineers.
- Led increased focus on project management efforts, and execution of extensive project list.
- Built a consolidated OnSite Repairs team by transferring work from three Northeastern Service Centers establishing a geographically dispersed workforce. Led efforts to hire over 125 field service technicians. $105MM billed in 2011.
- Led action workouts delivering a 60% cycle and 30% cost reduction in the emergent parts turbine buckets manufacturing cell. Championed workouts that led to a $200K reduction in cost for a multi-unit generator field rewind project.
- Managed transition from a unionized operations staff to a non-covered, non-exempt work force. Developed performance plans for front line supervisors focused on improving interaction between management and staff functions.
- Led operations due diligence and transition teams during the acquisition of two power plants.
- Built and developed the initial staff; led startup and checkout operations for a two unit combined cycle power plant.
- Directed daily activities of over 100 employees in the maintenance department of a 1,300 MW power plant. Managed a $15MM operations budget, and a 5 year $100MM outage budget. Successfully executed planned outages in excess of $30MM on multiple units.

Professional Experience

2012 - Present | Public Service Company of New Mexico (PNM)

Vice-President, New Mexico Operations | Albuquerque, NM | 2012 - Present

- Oversees transmission policy, development and construction. Distribution engineering, planning and construction. Technical services, system reliability and management. PNM Business operations.
- Leads a team of ~500 employees on 7 campuses throughout the state of New Mexico

2008 - 2012 | GE Energy Services

On Site Repairs Business Leader | Atlanta, GA | 2009 - 2012

- Provide the strategic and operational leadership necessary to build and enhance the On Site Repairs capability of the Steam/Generator Repair Network.
- Built an organization capable of fulfilling repair opportunities in the US and selected international regions.
- Current staff includes 215+ technicians located in 30 + states; liquidated over 340,000 Man-hours; $105MM + in revenues billed (2011)

Network Transformation Leader | Atlanta, GA | 2008 - 2009

- Developed gating templates, drove gating/lean concepts across the Steam/Generator Repair network.
- Developed job assignments, goals and expectations for entry level program participants (GE entry level leadership programs).
- Delivered "Lean Principles" training to over 350 employees; led key transformation projects within the Pittsburgh Service Center.

2001 – 2008 | The Southern Company

Southern Company operates regulated utilities Alabama Power, Georgia Power, Gulf Power, and Mississippi Power, which serve about 4.4 million electricity customers in the southeastern U.S. Revenues last year were $15.B.

Plant Manager – Wansley Combined Cycle Plant | Southern Power Company | Franklin, GA | 2007 - 2008

- Directed the operation and maintenance of the plant in a safe and efficient manner; met controllable operating margin target (net income) in excess of $80MM. Managed a $10MM O&M budget along with an $800K capital budget.
- Provided management oversight for the inter-departmental team ensuring consistency with Instrument & Controls projects.
- Optimized budget to execute facility improvements which led to greater employee morale and equipment reliability.
- Responsible official for Title V permitting. (Zero environmental violations. Zero OSHA Recordable incidents.)

Portfolio & Asset Manager | Southern Power Company | Birmingham, AL | 2005-2007

- Reviewed requests for proposals to ensure operational requirements were achievable.
- Provided support for inquiries, initiatives, etc. as specified by the SVP, Production Officer of Southern Power.
- Led efforts to renegotiate Long Term Service Agreements with GE Energy.
- Served as the liaison between the operating power plants, Generation Development, Asset Management and the Engineering & Construction departments of Southern Company as well as major equipment vendors.
- Played an active role in Southern Company leadership development initiatives and engineering recruiting programs.

Plant Manager – McIntosh Combined Cycle Plant | Georgia Power Company | Rincon, GA | 2003-2005

- Supported the startup and check out of a two unit, $563MM, 1,240 MW Combined Cycle Plant. This included initial staffing, procurement of tools and materials as well as managing a $10MM startup budget.
- Established training plans for team leaders, chemistry technicians, and general plant operators.
- Authored and orchestrated communication plan with local officials and community leaders to minimize concerns, issues associated with the project.

Maintenance Manager – Plant Yates | Georgia Power Company | Newnan, GA | 2002-2003

- Improved union relationships; which led to improved communication and co-operation in achieving plant goals.
- Increased department productivity by approximately 7% by optimizing the work schedule.

Planning & Engineering Manager – Plant Yates | Georgia Power Company | Newnan, GA | 2001-2002

- Directed all engineering projects, programs and maintenance planning to ensure reliable plant performance.
- Recruited, hired and developed entry level engineers for the plant and the Southern Co. system.
- Worked with supply chain management organization to improve spending with minority and female-owned businesses.

1991 – 2001 | GE Energy Services

Service Manager | Norcross, GA | 1998-2001

- Developed operating plans, responded to proposal inquires, assigned field service engineers and specialist to projects to meet specific customer requirements.
- Managed major equipment maintenance inspections on Large Steam Turbine Generators in Georgia and Tennessee.
- Completed major equipment retrofits on turbine generators (Controls, Steam Paths, and Generators).
- Lead recruiter for field engineering candidates at Tuskegee University and North Carolina A&T.
- Co-chaired the GE Large Steam Turbine Generator Conference.
- Achieved Six Sigma Green Belt Certification.

Specialist – Commercial Support Services | Norcross, GA | 1997-1998

- Developed quotations for inspections on GE equipment in support of field offices across the globe.
- Assisted in the refinement of products for the initial offerings on the Energy Services "E" business portal.

Field Service Engineer | Norcross, GA | 1991-1997

- Provided Technical Direction and Project Management for major inspections of Turbine Generators. Assigned to major projects in commercial and municipal utilities as well as industrial manufacturing plants.
- Specialized in large steam turbine generator inspections.

1990 – 1991 | Westinghouse, SRC | Aiken, SC

QA Engineer – Reactor Restart Project

- Reviewed procedures and technical specifications to ensure compliance with the Code of Federal Regulations.
- Conducted plant walk downs to validate accuracy of procedures.

Education, Certification and Memberships

Bachelor of Science, Mechanical Engineering | Tuskegee University | Tuskegee, AL | 1990

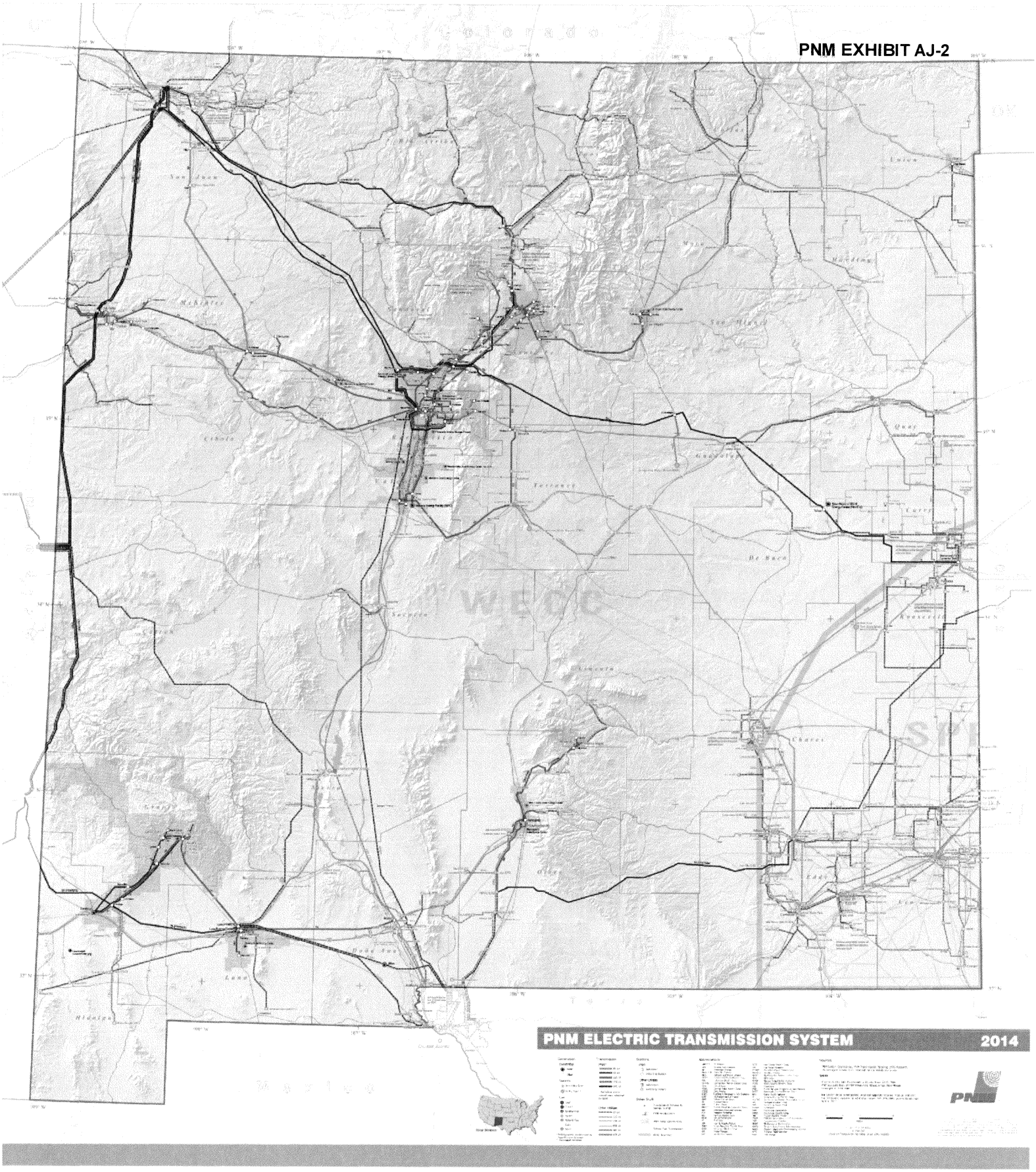
- APS Foundation, Board of Directors
- Leadership New Mexico 2014
- 2013 United Way Campaign Co-Chair
- GE Parts & Repair Services Impact Award
- Certified Six Sigma Green Belt
- American Society of Mechanical Engineers

Map of Transmission System

PNM Exhibit AJ-2

Is contained in the following page.

PNM EXHIBIT AJ-2



Transmission and Distribution Projects

PNM Exhibit AJ-3

Is contained in the following 10 pages.

DIRECT TESTIMONY OF
AUBREY JOHNSON
NMPRC CASE NO. 14-00332-UT

Project No.	Project Description	Estimated Completion Date	Clearings Through End of Linkage	Clearings Through End of Test Period	Total
	Distribution				
01401614	2014 Dist Solar	12/31/14	185,973	-	185,973
10000107	Line Extensions - Residential	N/A	2,436,647	1,442,561	3,879,208
10000207	Line Extension - Commercial	N/A	1,776,841	1,275,699	3,052,541
10000507	Lighting	N/A	100,912	148,763	249,675
10000607	Distr. Remove & Replace	N/A	4,554,429	3,119,401	7,673,831
10000707	System Improvements	N/A	3,076,481	1,676,679	4,753,160
10000807	Services	N/A	4,600,793	4,124,662	8,725,455
10000907	Transformers	N/A	8,041,524	5,788,969	13,830,493
10001007	Meter Equipment	N/A	5,193,345	2,602,080	7,795,425
10001207	Pole Replacement	N/A	1,337,524	449,096	1,786,619
10001307	Cable Replacement	N/A	2,153,673	504,503	2,658,176
10001614	Hawkins Feeder 22	12/31/15	192,754	-	192,754
10001615	Hawkins Feeder 21	07/01/15	483,087	-	483,087
10001707	Albuquerque Pure Project	N/A	2,343,314	879,827	3,223,141
10001814	Hazeldine Voltage Conversion	01/02/15	481,922	-	481,922
10001914	Keleher Substation and Ball Park 13 Voltage Conversion	06/30/15	672,441	-	672,441
10002010	Four Hills 13 to Lawrence 14 Feeder Tie	12/01/14	292,225	-	292,225
10002014	Ball Park 14 Voltage Conversion	12/01/14	151,482	-	151,482
10002114	Ball Park 11 Voltage Conversion	12/19/14	165,440	-	165,440
10002210	Bird Guard Project ABQ	N/A	37,327	18,567	55,895
10002214	Hawkins Feeder 23	12/31/15	553,400	-	553,400
10002314	Albuquerque Feeder testing and repl	07/31/15	2,173,022	-	2,173,022
10002513	Upgrade the RCCS System	12/31/14	3,510	-	3,510

10002514	Coronado Improvements	12/31/16	-	383,036	383,036
10030514	ESC RO Warehouse Roof Replacement	08/15/14	45,823	-	45,823
10030610	Communications Equipment Capital Budget	N/A	40,005	19,861	59,866
10030814	Line Dept HVAC Replacement	08/30/14	21,693	-	21,693
10032014	Ice Machine ESC Tool Room	09/30/14	10,446	-	10,446
10032114	Desk for Veg Management	07/10/14	1,208	-	1,208
10032214	DOC Ops Upgrades	10/31/14	1,597,727	-	1,597,727
10034007	ABQ Metro Tools & Equipment	N/A	178,370	72,161	250,532
10034012	Tech Serv Distr Tools	N/A	49,209	67,030	116,239
14000107	Line Extensions - Residential	N/A	44,109	50,545	94,654
14000207	Line Extensions - Commercial	N/A	(5,650)	11,945	6,295
14000607	Distr. Remove & Replace	N/A	299,432	139,322	438,754
14000707	Distr. System Improvements	N/A	415,003	186,138	601,141
14000807	Services	N/A	145,473	131,418	276,891
14001612	Tijeras 11 4/0 ACSR to 397 AAC	12/01/14	101,058	-	101,058
14001614	Zamora 12 SCADA controlled V Reg	12/01/14	125,834	-	125,834
14001615	San Antonito 12 Reconductor	12/01/14	100,737	-	100,737
14001707	Abq East Mtn Pure Project	N/A	34,862	9,964	44,826
14001714	11 and Zamora 11 2/0 ACSR to 397 AAC	12/01/14	278,264	-	278,264
14001814	Sedillo Rd 3-Phase Rebuild	12/01/14	289,521	-	289,521
14001914	Open Meadow Drive 3-Phase Rebuild	12/31/14	158,537	-	158,537
14002014	San Antonito 12 to San Antonito 22 Feeder Tie	06/30/15	1,207,587	-	1,207,587
14002114	Dressage Drive 3-Phase	12/01/14	151,809	-	151,809
20000107	Line Extension - Residential	N/A	17,595	4,114	21,710
20000207	Line Extensions - Commercial	N/A	126,475	82,585	209,060
20000507	Lighting	N/A	1,489	967	2,456
20000607	Distr. Remove & Replace	N/A	907,914	240,437	1,148,351
20000707	Distr. System Improvements	N/A	421,406	106,101	527,507
20000807	Services	N/A	312,540	192,338	504,878
20001207	Pole Replacements	N/A	0	31,096	31,096
20001613	Renewable Solar 22MW-Deming	03/15/14	159	-	159
20001707	Deming Pure Project	N/A	149,478	38,727	188,205
20001711	Deming Capital Bird Guard Project	N/A	-	18,127	18,127
20001713	Gold 12 Deming West 13	02/10/15	300,992	-	300,992
20001813	Deming Distribution Transformers	12/31/15	484,432	-	484,432

20034009	Deming Tools & Equipment	N/A	21,800	11,833	33,633
30000107	LV-Line Extensions - Residentia	N/A	6,179	1,610	7,789
30000207	Line Extension - Commercial	N/A	41,747	1,714	43,461
30000607	Distr. Remove & Replace	N/A	66,116	11,233	77,350
30000707	Distr. system Improvements	N/A	64,709	27,912	92,621
30000807	Services	N/A	105,743	93,598	199,341
30001207	Pole Replacement	N/A	2,192	-	2,192
30001307	Las Vegas Cable Replacements	N/A	129,044	-	129,044
30001707	Las Vegas Pure Project	N/A	173,617	-	173,617
30034007	Tools & Equipment	N/A	8,233	4,233	12,466
41000107	Line Extensions - Residential	N/A	235,947	160,707	396,655
41000207	Line Extensions - Commercial	N/A	927,117	823,956	1,751,073
41000607	Distr. Remove & Replace	N/A	912,467	624,191	1,536,657
41000707	Distr. System Improvements	N/A	2,232,161	1,139,824	3,371,984
41000807	Services	N/A	1,590,229	1,430,872	3,021,101
41001207	Pole Replacement	N/A	135,108	56,838	191,946
41001307	Cable Replacement	N/A	1,499,993	323,461	1,823,454
41001612	Santa Fe Bird Guard	N/A	75,758	2,894	78,652
41001614	Colinas Single Phase loop Galisteo Phase 2	12/31/15	190,218	-	190,218
41001615	Camel Tracks 12 to Beckner 13 Tie	06/30/15	602,893	-	602,893
41001707	Santa Fe Pure Project	N/A	183,951	127,608	311,560
41001711	Ft Marcy 14 A-phase at Pole Y58B104 Upgrade	07/15/14	52,428	-	52,428
41001714	Halona 11 Voltage Conversion	02/01/15	474,586	-	474,586
41001715	Mejia 14 Fin Del Sindero Rd Line Extension	06/30/16	-	651,940	651,940
41001814	Hickox 11 Voltage Conversion	02/01/15	405,294	-	405,294
41001914	Hickox 12 Voltage Conversion	10/30/14	314,079	-	314,079
41001915	Mejia 14 Estrada Calabasa Line Extension	06/30/16	-	1,142,178	1,142,178
41002113	Downtown Manhattan Feeder phase 1	12/31/14	1,289,672	-	1,289,672
41002115	Downtown Manhattan Feeder phase 2	12/31/14	126,276	-	126,276
41002213	Beckner 14 to State Pen 13 FDR tie 2013-2014	09/30/14	5,609	-	5,609
41002314	Halona 14 Voltage Conversion	12/01/14	528,108	-	528,108
41002315	Eldorado Single phase loop redesign phase 2	10/31/15	45,031	-	45,031
41002714	Eldorado Single phase loop redesign phase 1	12/31/14	91,786	-	91,786
41002814	Colinas Single Phase loop Galisteo Phase 1	12/31/14	217,602	-	217,602
41003014	Paseo del tierra	12/31/19	238,582	-	238,582

41003114	Eldorado to Colinas Tie	12/30/16	-	825,136	825,136
41034007	Tools & Equipment	N/A	90,241	48,517	138,759
50000107	Line Extension - Residential	N/A	49,173	25,964	75,136
50000207	Line Extension - Commercial	N/A	188,193	174,026	362,219
50000507	Lighting	N/A	38,366	24,904	63,270
50000607	Distr. Remove & Replace	N/A	514,531	439,565	954,096
50000707	Distr. System Improvements	N/A	1,038,530	663,088	1,701,618
50000807	Services	N/A	542,626	419,182	961,808
50001613	Renewable Solar 22MW-Dist Valencia	09/30/14	(977)	-	(977)
50001614	Los Morros Feeder 24	12/01/14	396,883	-	396,883
50001707	Belen Pure Project	N/A	289,889	86,465	376,354
60001611	SW Mesa Substation	12/15/14	57,240	-	57,240
60001613	Unser 14 System Improvements	08/30/14	188,289	-	188,289
60001713	SF Switchgear Replacements	12/31/14	628,421	331,932	960,352
60001714	College Substation	06/30/16	-	4,014,084	4,014,084
60001813	Plateau Fiber Project Co 001	12/31/14	147,140	-	147,140
60001814	La Morada Substation	05/01/15	4,306,788	0	4,306,788
60002010	Misc Substation Improvements	N/A	1,203,604	351,409	1,555,013
60002013	Distr Substation Grounding Repairs	12/20/18	490,239	553,799	1,044,039
60002110	Misc 46kv Line	N/A	235,940	26,076	262,016
60002113	46 kV Switch Replacement	01/31/15	221,721	-	221,721
60002213	Distribution Breaker Replacement	06/01/15	3,076	-	3,076
60002313	Emergency and Aging Equip Distr	12/31/18	1,964,285	594,330	2,558,615
60002314	ZB 46kv retirement	12/31/14	401,943	-	401,943
60002315	Zamora Substation Upgrade	12/30/15	3,282,845	-	3,282,845
60002409	Corrales Bluff Unit Transformer	06/01/16	-	3,704,310	3,704,310
60002413	La Mirada Land Acquisition	07/15/14	281	-	281
60002608	Santo Domingo Substation & Fdrs	08/13/14	850	-	850
60002613	Santo Domingo Sub Improvement	08/15/14	820,180	-	820,180
60002614	PNM Facilities Sale to City of Gall	12/31/14	151,289	-	151,289
60002715	12.5kV breaker replacment	12/01/18	2,355,494	230,868	2,586,363
60002912	San Clemente Station CO1	08/01/17	89,646	-	89,646
60002913	Winrock Improvements	02/15/15	1,021,494	-	1,021,494
60003115	Distr Cable Testing and Replace 2015	12/31/16	2,027,892	5,912,253	7,940,145
60003116	Distr Cable Testing and Replace 2016	12/31/17	-	2,548,828	2,548,828

60003212	Subbstation Metering Modifications	12/01/14	21,519	-	21,519
60004413	Remote Racking	03/31/15	163,051	-	163,051
60005910	Substation Equipment Replacement IA	N/A	1,303,810	416,868	1,720,678
60028013	Outage Communication Project	12/31/14	121,210	1,433	122,642
60028014	DOC upgrades	12/31/14	239,845	-	239,845
60028113	DOC Scada System Replace	12/20/14	569,275	-	569,275
60028114	Doc Wall Monitor System Phase II	10/31/14	641,159	-	641,159
60028213	Spidamin-Spidacalc Software	05/15/14	(1,422)	-	(1,422)
60029905	Capital Reallocation	N/A	(507,386)	-	(507,386)
60030013	Specialty Equip & Vehicle Co 001	12/18/15	747,059	-	747,059
60030114	Fleet Retires Co1	12/31/14	(8,335)	-	(8,335)
60030515	General Serice Wedge Co1	N/A	599,784	383,247	983,031
60032014	Plotter Replacement NM Ops Co1	08/30/14	12,998	-	12,998
60033313	High Resolution Display Wall ESC	10/31/14	2,448,220	-	2,448,220
60034013	Updated Mobile Comp Line Trucks	09/30/14	150,321	-	150,321
60034214	Reeves Training Center	12/31/17	-	10,188	10,188
60034913	ESC Trash Compactor	12/12/14	64,406	-	64,406
89900107	Line Extension - Residential	N/A	335,699	(67,314)	268,385
89900207	Line Extensions - Commercial	N/A	710,912	348,963	1,059,875
89900507	Lighting	N/A	92,517	77,252	169,769
89900607	Distr. Remove & Replace	N/A	1,129,699	763,375	1,893,074
89900707	Distr. system Improvements	N/A	760,403	928,534	1,688,938
89900807	Services	N/A	616,590	529,903	1,146,494
89901207	Bernalillo Pole Replacement	N/A	14,747	28,712	43,459
89901307	Bernalillo Cable Replacements	N/A	8,571	-	8,571
89901613	Rio Hondo Service Area Reconfiguration	02/28/16	-	1,041,666	1,041,666
89901615	Veranda Feeder 23	06/01/15	486,365	-	486,365
89901707	Bernalillo Pure Project	N/A	92,623	17,846	110,469
89901715	Westside Blvd Feeder Tie	06/01/15	178,772	-	178,772
89901815	Veranda 22 to Black Ranch 11 Feeder Tie	06/01/15	402,950	-	402,950
89901915	Veranda 22 Rainbow Blvd Upgrade	06/01/15	291,761	-	291,761
89902113	Veranda 11 to Palm 12 tie in 2013	12/30/15	226,569	-	226,569
90000207	Clayton Line Extension - Commercial	N/A	8,547	11,154	19,701
90000607	Clayton Remove and Replace	N/A	5,058	4,390	9,448
90000707	Clayton System Improvements	N/A	2,304	2,997	5,301

90000807	Clayton Transformers	N/A	20,920	10,731	31,651
60002015	Distribution Capital Reallocation Project 4	N/A	(8,088,248)	-	(8,088,248)
15001712	Alamorgordo Bird Guard	N/A	4,439	-	4,439
15002214	MD#1 Transformer Upgrade	05/15/16	-	981,075	981,075
15003010	SNM Substation Equip Repl	N/A	86,101	67,178	153,278
15030510	Communications (CO 34)	N/A	69,260	38,942	108,202
15030515	General Service Wedge Co34	12/31/19	54,881	54,931	109,813
15034007	Tools & Equipment	N/A	26,881	14,599	41,479
15100107	Line Extension - Residential	N/A	236,001	105,591	341,592
15100207	Line Extension - Commercial	N/A	130,407	79,653	210,059
15100507	Lighting	N/A	180,056	127,897	307,953
15100607	ED Remove & Replace	N/A	693,828	305,121	998,949
15100707	ED Remove & Replace	N/A	537,271	296,634	833,905
15100807	Services	N/A	426,403	256,300	682,703
15100907	Transformers	N/A	340,143	266,604	606,747
15101007	Meter Equipment	N/A	106,664	74,316	180,979
15101207	Pole Replacement	N/A	0	18,700	18,700
15101307	Cable Replacement	N/A	334,800	216,949	551,749
15101613	Renewable Solar 22MW-Alamogordo	03/15/14	93	-	93
15101614	Alamogordo Feeder 12-12 Reconductor	12/31/14	373,695	-	373,695
15101714	Alamogordo Feeder 12-11 Reconductor	12/31/15	780,047	-	780,047
15101807	Alamorgordo Pure Project	N/A	118,799	52,966	171,766
15102116	Alamo FDR 12-83 Reconductor	02/28/15	907,441	-	907,441
15134007	Tools & Equipment	N/A	38,281	14,667	52,947
15200107	Line Extension - Residential	N/A	25,776	21,842	47,618
15200207	Line Extension - Commercial	N/A	43,693	48,803	92,496
15200507	Lighting	N/A	98,189	54,461	152,650
15200607	ED Remove & Replace	N/A	283,579	190,548	474,127
15200707	ED System Improvements	N/A	628,008	119,010	747,018
15200807	Services	N/A	235,839	143,154	378,994
15200907	Transformers	N/A	215,077	122,206	337,283
15201007	Meter Equipment	N/A	103,221	72,293	175,514
15201207	Pole Replacement	N/A	-	8,637	8,637
15201307	Cable Replacement	N/A	12,485	8,904	21,389
15201613	Ruidoso White Mountain Subdivision	03/10/15	419,150	-	419,150

15201707	Ruidoso Pure Project	N/A	29,577	23,879	53,455
15234007	Tools & Equipment	N/A	18,506	11,515	30,020
15500107	Line Extension - Residential	N/A	91,376	34,158	125,534
15500207	Line Extension - Commercial	N/A	132,867	76,727	209,593
15500507	Lighting	N/A	51,861	25,960	77,821
15500607	ED Remove & Replace	N/A	905,048	459,170	1,364,218
15500707	ED System Improvements	N/A	1,036,217	341,925	1,378,142
15500807	Services	N/A	600,900	376,153	977,053
15500907	Transformers	N/A	439,893	297,087	736,980
15501007	Meter Equipment	N/A	102,911	64,181	167,092
15501207	Pole Replacement	N/A	0	18,700	18,700
15501307	Cable Replacement	N/A	81,790	261,900	343,690
15501613	Tyrone Circuit 12-395 Reconductor	12/31/15	460,849	-	460,849
15501707	Silver City Pure Project	N/A	179,779	95,782	275,561
15501711	Silver City Capital Bird Guarding	N/A	22,145	4,147	26,292
15501715	Silver City 12-17 North Silver 12-1065	06/30/16	-	469,322	469,322
15534007	Tools & Equipment	N/A	33,996	17,063	51,058
	Total Distribution		**100,322,494**	**62,277,653**	**162,600,146**
	Transmission				
64807013	Station Hardening Pilot Trans	12/31/14	2,768,106	1,487,247	4,255,353
64807113	345kV Wood Structure Replacement	12/18/15	5,015,422	839,379	5,854,802
64807213	Fiber Buildout OPGW ADS	07/31/16	-	4,287,043	4,287,043
64807314	West Mesa Capacitor Replacement	03/31/15	1,176,256	-	1,176,256
64807413	Trans Emergency & Aging Equip	12/20/15	1,879,979	-	1,879,979
64807414	ROW Clearing Project-LiDAR	12/16/14	1,401,283	-	1,401,283
64807513	Transmission Breaker Replacement	03/31/16	4,040,366	2,197,715	6,238,081
64807713	115kV Breaker Replace Fault Current	05/30/16	4,834,368	764,355	5,598,723
64807813	Rio Puerco-Progress 115 kV Line	02/20/15	5,942,805	-	5,942,805
64807913	115 kV Relay Replacement	07/31/14	19,419	-	19,419
64807916	NERC Compliance Improvements	12/31/19	-	300,731	300,731
64808013	Metro Splice Replacement	11/30/14	240,534	-	240,534
64808213	SONET System Expansion	02/15/14	613,918	-	613,918
64808413	Spread Spectrum Radio Replacement	12/01/14	562,380	-	562,380
64808513	2013 Microwave System Upgrade	11/15/14	2,016,238	485,674	2,501,912

64828113	Substation Remote Access	09/30/14	569,719	-	569,719
64830013	Specialty Equip and Vehicle Co 002	11/20/19	685,047	-	685,047
64830513	General Services	12/20/15	1,429,205	-	1,429,205
65006010	San Juan Vail	N/A	721,084	600,846	1,321,930
65006110	ANPP Transmission	N/A	917,184	195,999	1,113,183
65006210	SW NM Transmission	N/A	325,653	166,175	491,828
65007010	Misc. Station Improvements	N/A	1,356,163	365,670	1,721,833
65007013	345/115kV spare Transformer	12/31/14	1,689,229	-	1,689,229
65007014	El Cerro 115kV Breaker	07/30/14	78,604	-	78,604
65007016	Los Morros	10/31/14	87,526	-	87,526
65007110	Misc. Transmission	N/A	1,106,021	100,421	1,206,442
65007114	Sandoval County Landfill Relocation	10/30/14	892,696	-	892,696
65007115	EIP Purchase 40%	04/30/15	7,223,989	-	7,223,989
65007220	San Juan Shunt Reastor Circuit Breaker	12/31/14	1,208,744	-	1,208,744
65007313	Blackwater 230kV Transformer repair	04/02/14	(995,919)	-	(995,919)
65007314	La Morada Tap	06/01/15	552,299	-	552,299
65007413	Replace Blwtr 230 345kV CVTs	11/01/14	545,062	-	545,062
65007414	NERC Line Clearance 2013	08/31/14	7,650	-	7,650
65007510	Moriarty Switching Station and Shunt Capacitors	06/30/14	(3,594)	-	(3,594)
65007513	CE/AL Replacement Crossarms	03/31/14	2,091	-	2,091
65007514	Station hardening	12/15/18	3,642,680	4,107,215	7,749,894
65007616	Transmission Access Improvements	11/15/17	-	570,361	570,361
65007625	FW Reactor replacement	12/31/13	1,601,462	-	1,601,462
65007710	Station Equip Replacement IA	N/A	1,269,991	457,113	1,727,104
65007713	Trans Sub Ground Repairs	12/20/18	664,631	175,862	840,493
65007714	NERC Tier 3 Funding Projects	01/31/15	1,632,449	-	1,632,449
65007814	College Substation	07/31/16	-	1,566,318	1,566,318
65007914	Relay IA	N/A	110,062	37,405	147,467
65008014	TWS Upgrade	12/20/14	-	235,978	235,978
65008114	PNM Facilities Sale to City of Gall	12/31/14	140,278	-	140,278
65008211	Replace OJO 345/115 kv transformer	10/30/14	2,454,383	-	2,454,383
65008313	345kV Structure Grounding Impr	12/30/14	960,254	-	960,254
65008314	Ambrosia Capacitor Switcher	09/30/15	476,554	-	476,554
65008410	NextEra Red Mesa	11/30/11	31	-	31
65008610	Modify NH Reactor Scheme	06/30/15	12,464	-	12,464

65008715	Corrales Bluff Unit Transformer	06/01/16	106,928	304,830	411,758
65008912	San Clemente Station CO2	08/01/17	535,386	-	535,386
65009012	Rio Puerco 345kV Station Expansion	06/01/16	-	19,476,722	19,476,722
65009013	Richmond Switching Station	12/31/14	2,578,915	4,805,602	7,384,517
65009014	Second 345/115 KV Transformer at Yah-Ta-Hey	12/31/15	7,585,507	1,915,582	9,501,089
65009213	Jicarilla Apache Nation Trans IA	10/31/14	1,638,791	-	1,638,791
65009214	Sandia 345/115kV Spare Transformer	01/31/17	4,022,529	-	4,022,529
65009313	Rio Puerco SVC	01/01/16	-	30,330,681	30,330,681
65009606	Blackwater Station Life Extension	12/31/14	203,608	-	203,608
65028014	Vegetation Management Software	10/03/14	733,043	-	733,043
65028113	eTAMIS Upgrade	02/09/14	37,518	-	37,518
65029905	Results Base Pay	N/A	(452,306)	-	(452,306)
65030513	Backup Generator Upgrades	07/31/13	165	-	165
65030515	General Service Wedge Co2	N/A	144,570	110,124	254,694
65030610	2011 Communications Equipment Capital Budget	N/A	72,053	38,929	110,982
65032114	Plotter Replacement NM Ops Co2	08/30/14	53,771	-	53,771
65034010	Co 2 Tools & Equipment	N/A	219,362	36,175	255,537
65034012	Tech Serv Transm Tools	N/A	482,300	203,345	685,645
65034014	ID Line Fiber Wrap Replacement Phase I (2014)	12/31/14	187,205	-	187,205
65034114	SJ DWDM Upgrade	12/31/14	247,795	-	247,795
65034314	Fiber connectivity Farmington Elec alt route	01/31/16	185,448	29,222	214,670
65034414	Telecom Transport Improvements	12/31/14	26,029	-	26,029
65034514	WB 115 OPGW Reconduct Los Morros to Belen	12/31/16	-	587,107	587,107
65034814	Telecom Transport Improvements	12/31/14	117,883	-	117,883
65034914	Power Ops-San Juan Radio Upgrade	12/31/16	-	626,763	626,763
65035014	Corporate LAN improvements	08/31/15	31,736	-	31,736
65035114	Spread Spectrum Microwave Radio Replacements Phase I	12/31/16	224,935	272,614	497,549
65008807	Transmission Capital Reallocation Project 5	12/31/15	3,994,636	-	3,994,636
22007010	Misc. Trans. Station Imp Foreca	N/A	411,963	164,120	576,082
22007110	Misc. 115kv Trans Imp Forecast	N/A	156,509	86,564	243,073
22007111	SNM Misc 69Kv Line Impr.	N/A	193,963	84,782	278,745
22007214	69kV Breaker Replacements	12/31/14	561,700	-	561,700
22007308	HVDC Converter Station-Eddy Cou	12/31/19	390,584	44,898	435,482
22007314	Amrad Eddy Line Rebuild	03/31/15	2,361,048	2,526,846	4,887,894

22007410	PD Load Shedding	05/31/16	-	41,736	41,736
22007514	Alamogordo Replacement Capacitor Installation	08/31/15	2,438,713	-	2,438,713
22007714	NERC Tier 3 Funding Projects	01/31/15	1,344,601	-	1,344,601
22009008	Alamo 115kv Static Var Compensator	09/15/14	67,083	-	67,083
	Total Transmission		**92,778,744**	**80,628,147**	**173,406,891**
	Grand Total NM T&D		**193,101,237**	**142,905,799**	**336,007,037**

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF NEW MEXICO FOR REVISION OF ITS RETAIL ELECTRIC RATES PURSUANT TO ADVICE NOTICE NO. 507	)	**Case No. 14-00332-UT**
PUBLIC SERVICE COMPANY OF NEW MEXICO, Applicant.	)	

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

AUBREY JOHNSON, Vice-President of New Mexico Operations for Public Service Company of New Mexico, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing **Direct Testimony and Exhibits of Aubrey Johnson** and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 4 day of December, 2014.

AUBREY JOHNSON

SUBSCRIBED AND SWORN to before me this 4th day of December, 2014.

NOTARY PUBLIC IN AND FOR
THE STATE OF NEW MEXICO

OFFICIAL SEAL
Ronda Morehead
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 7/5/15

My Commission Expires: