BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE COMPANY OF NEW MEXICO'S SECOND ANNUAL GRID MODERNIZATION REVIEW FILING PURSUANT TO THE COMMISSION'S FINAL ORDER	)	**Docket No. 26-00000__**
PUBLIC SERVICE COMPANY OF NEW MEXICO,	)	
Applicant.	)	

DIRECT TESTIMONY

OF

JONATHAN C. HAWKINS

April 10, 2026

NMPRC DOCKET NO. 26-00000__
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WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO

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DIRECT TESTIMONY OF
JONATHAN C. HAWKINS
NMPRC DOCKET NO. 26-00000___

I. INTRODUCTION AND PURPOSE

Q. Please state your name, position, and business address.

A. My name is Jonathan Hawkins. I am the Associate Director of Grid Modernization for Public Service Company of New Mexico ("PNM" or "Company"). My business address is 4201 Edith Blvd. NE, Albuquerque, New Mexico 87107. I am testifying on behalf of PNM.

Q. Please describe your educational background and professional experience.

A. My educational background and professional experience are summarized in PNM Exhibit JCH-1

Q. Please describe your duties and responsibilities as Associate Director of Grid Modernization.

A. I am responsible for leading the strategic implementation of a variety of technology and operations capability to modernize PNM's energy grid.

Q. Please describe the purpose of your testimony.

A. I provide a status update on the implementation of certain technologies of the Grid Modernization plan. These include A) Advanced Metering Infrastructure ("AMI"); B) Customer Information and Analytics; C) Cybersecurity; and D) Data Management and Architecture. Finally, I support PNM's request to recover capital investment and operations and maintenance ("O&M") costs for the grid modernization components discussed in my testimony.

II. PROGRAM COST ESTIMATE UPDATES

A. Advanced Metering

Q. Have there been any changes to the capital costs for the Advanced Metering component of the Grid Modernization plan?

A. Yes. Costs as compared to the original application in Docket No. 22-00058-UT were re-aligned and presented to the Commission in PNM's first annual Grid Modernization Review, Docket No. 25-00049-UT. At that time updates were provided regarding a decrease in cost for meter installation labor, an increase in system integration costs, an increase in network installation costs, and a move of Software as a Service costs ("SaaS") from O&M to capital based on the terms of the contract that allowed that change in alignment with General Accepted Accounting Principles ("GAAP"). The Final Order in Docket No. 25-00049-UT required moving the year one SaaS costs from capital back to O&M. The years two through six SaaS costs remain forecasted as a capital cost in this filing as opposed to O&M. Please refer to the Direct Testimony of PNM witness Reina Gutierrez for additional information on the capital treatment of the years two through six SaaS costs and PNM's request to recover the SaaS costs as capital in this case. The vendor contract has been provided as Confidential PNM Exhibit JCH-10 providing documentation of the qualifying activities. The overall capital costs of the AMI program had increased by approximately $9.05M in Docket No. 25-00049-UT as compared to Docket No. 22-00058-UT.

As compared to Docket No. 25-00049-UT, PNM has seen some additional changes in the AMI Program forecast. The capital clearing forecast shows an increase of approximately $4.92M. The increases are primarily attributable to inclusion of licenses and system integrations for distributed intelligence applications for the AMI meters that will support customer programs that can be provided by the AMI infrastructure in future years four through six. While the specific customer programs are still being developed, the licensing for software to provide the capabilities for any distributed intelligence application would be needed to provide any additional program. The total change in capital clearings from Docket No. 22-00058-UT to the current forecast being submitted in this filing is $13.98M.

A summary of the AMI capital clearing forecasts between Docket No. 22-00058-UT and the current forecast can be found in PNM Exhibit JCH-2a.

A summary of updates between Docket No. 25-00049-UT and the current forecast for the AMI program can be found in PNM Exhibit JCH-2b.

Q. Does PNM have confirmation of project readiness showing when the AMI software is substantially complete and ready for its intended use?

A. Yes, AMI software and SaaS are currently in use by PNM, supporting meters that will be used for long-term operational support of field-installed meters, as well as supporting the field network devices that have been installed to date and will continue to be installed until the network is completed. Further, at the time of SaaS

capitalization in year 2, PNM will have begun meter deployment, at which point the software will be fully integrated and benefiting customers. Refer to the Direct Testimony of PNM witness Eric Morgan for details of the AMI meter deployment timeline. Please refer to the Direct Testimony of PNM witness Gutierrez for further information on the request to reclassify the SaaS costs to capital.

Q. Have there been any changes to the O&M costs for the AMI component of the grid modernization program?

A. Yes. As part of PNM's first annual Grid Modernization Review (Docket No. 25-00049-UT) costs compared to the original application in Docket No. 22-00058-UT showed a decrease in costs of approximately $14.17M, primarily associated with the move of SaaS costs from O&M to capital.

As compared to Docket No. 25-00049-UT, PNM has forecasted some additional changes to AMI O&M costs. PNM forecasts an O&M increase from Docket No. 25-00049-UT of approximately $6.59M. The increase is attributed to an increase of approximately $7.77M in years three and four due to increased installation costs associated with meter socket update and repair due to substandard equipment as described in the Direct Testimony of PNM witness Morgan. The cost is offset by approximately $1.28M in year one savings from projected customer communication plans and meter reader re-training costs that have been pushed out due to the timeline of when meters will start to be replaced. The total impact to O&M from Docket No. 25-00049-UT is approximately $6.59M. However, this still

represents a total O&M cost reduction from the original estimate in Docket No. 22-00058-UT of approximately $7.58M.

A summary of the AMI O&M costs comparing Docket No. 22-00058 and the current forecast can be found in PNM Exhibit JCH-3a.

A summary of the AMI O&M costs comparing Docket No. 25-00049-UT and the current forecast can be found in PNM Exhibit JCH-3b.

B. Customer Information and Analytics

Q. Have there been any changes to the capital or O&M costs for the Customer Information and Analytics component of the grid modernization program?

A. Capital Clearings: Yes. Capital cost changes compared to Docket No. 22-00058-UT were discussed in PNM's first annual Grid Modernization Review, Docket No. 25-00049-UT. As described in the first annual filing, capital cost forecast had increased by approximately $5.60M increase due to previously described Customer Information and Access Management ("CIAM") solution, an increase in cost of implementation of Customer Energy Management Platform ("CEMP") and Mobile App, and costs to deliver Green Button Connect My Data functionality. There has not been any material change between costs for the Customer Information and Analytics program from PNM's first annual filing and this case.

A summary of the Customer Information and Analytics capital clearings comparing Docket No. 22-00058-UT and the current forecast can be found in PNM Exhibit JCH-4a.

A summary of the Customer Information and Analytics capital clearings comparing Docket No. 25-00049-UT and the current forecast can be found in PNM Exhibit JCH-4b.

O&M: Yes. The O&M cost for the Customer Information and Analytics component presented in Docket No. 25-00049-UT increased by $2.17M as compared to the original Docket No. 22-00058-UT as presented to the Commission due to starting work on the CEMP and mobile app in year one. As compared to Docket No. 25-00049-UT, the current forecast cost has decreased by $0.57M due principally to reduced year one and two costs. Therefore, the overall O&M result of current forecasts as compared to Docket No. 22-00058-UT has increased by approximately $1.59M in total over years one through six.

A summary of current forecasts as compared to Docket No. 22-00058-UT costs for the Customer Information and Analytics O&M can be found in PNM Exhibit JCH-5a.

A summary of the current forecasts as compared to Docket No. 25-00049-UT costs for the Customer Information and Analytics O&M can be found in PNM Exhibit JCH-5b.

C. Cybersecurity

Q. Have there been any changes to the capital or O&M costs for the Cybersecurity component of the grid modernization program?

A. **Capital Clearings**: Yes. The cost for the Cybersecurity component presented in Docket No. 25-00049-UT increased by $0.48M as compared to the original Case No. 22-00058-UT as presented to the Commission due to refinement in software cost estimates. As compared to Docket No. 25-00049-UT, the current forecast cost has increased approximately $2.10M due to a refined estimate after design and material quotations. Therefore, the overall result of current capital forecasts as compared to Docket No. 22-00058-UT have increased by approximately $2.58M in total over years three and four.

A summary of the Cybersecurity capital clearings comparing current forecasts to Docket No. 22-00058-UT can be found in PNM Exhibit JCH-6a.

A summary of the Cybersecurity capital clearings comparing current forecasts to Docket No. 25-00049-UT can be found in PNM Exhibit JCH 6b.

O&M: No. There have not been any material changes to the Cybersecurity O&M costs.

A summary of the Cybersecurity O&M costs comparing current forecasts to the Docket No. 22-00058-UT can be found in PNM Exhibit JCH-7a.

A summary of the Cybersecurity O&M costs comparing current forecasts to Docket No. 25-00049-UT can be found in PNM Exhibit JCH-7b.

D. Data Management and Architecture

Q. Have there been any changes to the capital or O&M costs for the Data Management and Architecture component of the grid modernization program?

A. Yes to both capital and O&M, I will explain these changes below:

Capital Clearings: Data Management and Architecture costs were presented to the Commission as an increase of approximately $5.2M in Docket No. 25-00049-UT as compared to Docket No. 22-00058-UT. The increased costs presented in Docket No. 25-00049-UT were due principally to increases in the TIBCO software license costs in the initial license and future license renewal. There is not a material forecast cost increase in the Data Management and Architecture program forecast as compared to Docket No. 25-00049-UT. As a result, the current forecasted capital

cost increase as compared to Docket No. 22-00058-UT remains approximately $5.2M.

A summary of the Data Management and Architecture capital clearings comparing current forecasts against Docket No. 22-00058-UT can be found in PNM Exhibit JCH-8a.

A summary of the Data Management and Architecture capital clearings comparing current forecasts against Docket No. 25-00049-UT can be found in PNM Exhibit JCH-8b.

O&M: The Data Management and Architecture O&M costs were presented to the Commission in Docket No. 25-00049-UT as a decrease of approximately $0.6M compared with Docket No. 22-00058-UT. The decreased costs presented in Docket No. 25-00049-UT were due principally to a reallocation to capital of some of the software renewal costs in the outer years of the plan. Current forecasted costs as compared to Docket No. 25-00049-UT further reduce the expected costs by approximately $0.97M. This is due to moving some of the costs for the Cybersecurity architecture development into the Cybersecurity program directly. This results in an overall decreased cost from Docket No. 22-00058-UT of approximately $1.54M.

A summary of the Data Management and Architecture O&M costs comparing currently forecasted costs against Docket No. 22-00058-UT can be found in PNM Exhibit JCH-9a.

A summary of the Data Management and Architecture O&M costs comparing currently forecasted costs against Docket No. 25-00049-UT can be found in PNM Exhibit JCH-9b.

III. U.S. DEPARTMENT OF ENERGY FUNDING

Q. Can you provide an update on the U.S. Department of Energy funding that PNM applied for as part of the Grid Resilience and Innovation Partnerships ("GRIP") grants?

A. Yes. PNM received notice that the U.S. Department of Energy has cancelled the provisionally awarded GRIP award. There is an appeals process codified under 2 C.F.R. § 910.128. PNM has filed an appeal under that process but has not received a decision. There is also a judicial appeal for the cancellation of these grants, however that process is not near completion as of the time of this filing.[1]

[1] *City of St. Paul et al. v. U.S. Department of Energy et al*., No. 1:25-cv-03899-APM (D.D.C., filed Nov. 10, 2025).

IV. TECHNOLOGY IMPLEMENTATION STATUS

Q. Please provide an update on grid modernization technologies within the AMI, Customer Information and Analytics, Cybersecurity, and Data Management and Architecture programs that have been implemented.

A. PNM has completed implementation of the following technologies as of the end of year one (2025) or plans to complete by the end of year two (2026), as noted:

- AMI Head-End System was completed in year one.
- AMI Meter Data Management System was completed in year one.
  - 59 AMI field area network devices were installed by the end of year one and the entirety of the AMI network devices will be completed by the end of year two.
- Meter farm used for test and production meters in support of operation of the AMI system.
- Customer Energy Management Platform (CEMP) and mobile application will be completed in year two for monthly read data access and interval read data presentation.
- Customer Information and Access Management ("CIAM") will be completed in year two.
- Software Defined Networking ("SDN") software and some field nodes for devices deployed in year two
- TIBCO Enterprise Service bus was completed in year one.

Q. What grid modernization technologies within the AMI, Customer Information and Analytics, Cybersecurity, and Data Management and Architecture programs will be implemented in year three?

A. The following technologies will be delivered in year three:

- AMI Meters will continue to be deployed in year three.
- Software Defined Networking ("SDN") field nodes for devices deployed in year three will continue as those field devices are deployed.

Q. Please provide an overview of the grid modernization technologies within the AMI, Customer Information and Analytics, Cybersecurity, and Data Management and Architecture programs to be implemented over years four through six.

A. The following technologies will be implemented in years four through six:

- Complete the AMI meter deployment in year four.
- Green Button Connect capability will be completed.
- Cyber security nodes for field devices will be completed as devices are installed throughout the program.

Q. Please describe any variances in the planned technology implementation from the first annual compliance filing in Docket No. 25-00049-UT

A. There have been no variances in planned technology implementations in the AMI, Customer Information and Analytics, Cybersecurity, or Data Management and Architecture components of the plan from the first annual compliance filing.

V. CUSTOMER-FACING PROGRAMS UTILIZING AMI & OTHER GRID MODERNIZATION TECHNOLOGIES

A. Customer-Facing Programs Utilizing AMI & Other Grid Modernization Technologies Outside of the Application in Docket No. 22-00058-UT

Q. Have there been any customer-facing programs utilizing AMI and other grid modernization technologies, beyond those initially included in Docket No. 22-00058-UT?

A. No. To date, we have not installed any of the AMI meters planned for this program and are currently working on completing integration of the back-office software systems to existing PNM software systems. As such, we are not quite ready to roll out customer programs relying on the AMI or other grid modernization technologies to customers.

Q. Are there any planned customer-facing programs utilizing AMI and other grid modernization technologies that will be developed apart from what was filed in Docket No. 22-00058-UT?

A. The AMI and other grid modernization technologies will continuously be evaluated as a technology to support customer programs. To date, the focus has been on implementing the AMI technology itself. However, support has been provided in public processes around Integrated Resource Planning and Energy Efficiency planning to look for use cases that can be supported. Please refer to the Direct Testimony of PNM witness Alaric Babej for additional discussion on customer-facing programs.

B. Customer-Facing Programs Utilizing AMI & Other Grid Modernization Technology Within the Scope of the Application in Docket No. 22-00058-UT

Q. From a grid modernization technology standpoint, please discuss PNM's development of customer-facing programs utilizing AMI and other grid modernization technology.

A. The specific programs being implemented utilizing AMI and other Grid Modernization technologies can be found in PNM witness Babej's testimony. The Grid Modernization technology that will support customer interaction with these programs will be the CEMP and mobile application.

Q. How do these programs leverage the capabilities of AMI and other grid modernization technologies?

A. As stated in PNM witness Babej's Direct Testimony, the AMI meters provide interval data that can enhance customer programs by providing data at a level of granularity which provides more insights into their energy usage and the times at which they use that energy. The CEMP will have tools to show personalized usage and trend charts, savings tips, rate comparisons, bill projections, energy saving tips, bill analysis, and available programs. These programs will be available as AMI meters are installed. PNM witness Pitts's Direct Testimony discusses the benefits that the home energy report emails and Energy Insights Dashboard provide current Time-of-Day pilot customers with the ability to see their hourly energy consumption data. These emails and the Energy Insights Dashboard are very similar to the CEMP that will be available to all customers who have an AMI meter.

Q. What steps is PNM taking to ensure these programs integrate effectively with existing and planned systems?

A. PNM uses industry standards and canonical data models to integrate systems together. By utilizing industry standards and canonical data models, software and systems from different vendors can work together more effectively and provide operational efficiencies and system interoperability.

Q. What additional customer-facing technologies or tools are being explored?

A. PNM is exploring capabilities utilizing edge applications and how they can support customer-facing programs such as integration of distributed energy resources or electric vehicles.

VI. CONCLUSION

Q. Please summarize the main points of your testimony.

A. PNM provided an update to the Commission in its first annual Grid Modernization Review, Docket No. 25-00049-UT, which provided updates to costs and cost drivers as compared to the original application, Docket No. 22-00058-UT. Since that filing, further updates have been made as the program progresses through the completion of designs and costs become more refined. The AMI program costs have increased primarily due primarily to year three and year four costs of inclusion of advanced applications in support of future customer programs and meter socket repairs for customer satisfaction and safety as we deploy new meters. PNM has completed the stand up of the AMI software systems, and is currently working to

complete the integrations between these systems to legacy PNM software. PNM has started network deployment for the AMI system, and will complete that in year two. PNM is still on track to start deployment of AMI meters in Q4 of 2026. There was an increase in the costs of the Cybersecurity plan based on a more detailed design and quote for software and hardware. PNM is starting the process of implementing software controls for the software defined networking platform, and will deploy devices required to implement the field portion of that network control as distribution automation devices are implemented in the field. There has been an overall decrease in costs to Customer Information and Analytics, as compared to Docket No. 25-00049-UT, due to decreased O&M costs in outer years for software updates and lower internal labor costs. The CEMP and mobile app are on track to be ready for customers in 2026. There has been a forecasted decrease in the Data Management and Architecture sector of the program due to internal labor savings during year one.

Q. Does this conclude your direct testimony?

A. Yes.

GCG#535127

Jonathan C. Hawkins' Resume

PNM Exhibit JCH-1

Is contained in the following 4 pages.

Jonathan Hawkins
414 Silver Ave., SW
Albuquerque, NM 87102
(505) 241-2189
Jon.hawkins@txnmenergy.com

EDUCATION: **University of New Mexico, Albuquerque, New Mexico**
Bachelor of Science in Electrical Engineering – December, 1994

EXPERIENCE:

June 2025-present **PNM**, Albuquerque, NM *Associate Director, Grid Modernization*

Mar. 2010 – June 2025 **PNMR Services Company**, Albuquerque, NM. *Associate Director, Innovation and Communication*

Manage a team that monitors technology trends and provides cross functional technical support for emerging technologies in energy generation and delivery, including areas such as integration of renewable energy systems, energy storage, and smart grid technologies

Demonstrated history of employee development with employees earning advanced degrees, three Innovation Awards as presented by PNMR Board of Directors, and promotions internal and external to PNMR

Managed multi-million dollar operational and capital budgets associated with multiple departments

Led technical development and delivery of foundational and transformational technology projects at PNMR. Examples of projects include energy storage technology, microgrid integration, electric vehicle infrastructure development, advanced metering, secure substation remote access, physical security, and various projects to facilitate NERC Critical Infrastructure Protection (CIP) compliance

Led and participated in technical aspects of energy storage and microgrid projects earning national or international recognition including finalist for Platts Global Energy Award in Sustainable Innovation, runner up for POWERGRID International Renewable/Grid Integration Project of the Year, runner up for International Energy Agency (IEA) International Smart Grid Action Network (ISGAN) award, personally named 50 Smart Grid Pioneers by Smart Grid Today, and earned a Robert Price Innovation Award awarded by the PNMR Board of Directors

Participation as a technical expert for PNM in the PRC led revision of the New Mexico Interconnection Manual, the State of New Mexico's Grid Modernization Roadmapping effort and Energy Storage working group

Developed or participated in development of multiple applications for government grants with many securing funding, including a $2.3M grant for a renewables with energy storage project

Co-developer of the cyber security plan to comply with DOE requirements for an energy storage project

Authored or co-authored twelve peer-reviewed technical publications in magazines or scientific journals on energy storage and electric vehicle integration (publication list available on request)

Earned U.S Patent (U.S. Patent Number 9,692,234) “Systems and Methods for Distributing Power Using Photovoltaic Resources and a Shifting Battery System”

Invited reviewer for Department of Energy for the DOE Sunshot Program, National Science Foundation (NSF), and Small Business Innovation Research (SBIR)/Small Business Technology Transfer Research (STTR) for funding opportunities reviewing renewable energy and storage grant applications

Developed or participated in development of multiple applications for funding by the U.S Department of Energy and National Science Foundation. Multiple applications were chosen for funding where I led the projects both in terms of technical project activities as well as governmental compliance and reporting requirements

Collaboration with Japanese Government organization (NEDO) and Japanese vendors on smart grid projects in New Mexico

Led and facilitated use case workshops with multiple Japanese organizations to document and specify desired capabilities of the New Mexico smart grid projects done by NEDO. The use cases were published internationally, were promoted by NEDO as a key project success of the local micro grid project and served as foundational use cases for both the IEEE P2030.7 working group efforts for micro grids as well as in the Smart Grid Interoperability Panel (SGIP) Micro grid Domain Expert Working Group

Member of external advisory board for a Sandia National Laboratories Grand Challenge project which won an R&D100 award as an innovative solar technology

Frequent public speaker at industry conferences and local requests on topics such as energy storage, renewable energy, utility industry technology trends, IT/OT convergence, energy storage control architecture, and electric network model management

Participation in and collaboration with multiple industry standards organizations, working groups, and research organizations such as IEEE, Smart Grid Interoperability Panel, Western Energy Institute, Edison Electric Institute, Rocky Mountain Institute, Santa Fe Institute, the Electric Power Research Institute (EPRI), the State of New Mexico, multiple universities across the United States and national laboratories such as National Renewable Energy Laboratory (NREL), Idaho National Laboratory, Los Alamos National Laboratory and established a formal Cooperative Research and Development Agreement (CRADA) with Sandia National Laboratories

Manage the PNMR research and development contract with the Electric Power Research Institute (EPRI). Advisor to EPRI for programs on integration of distributed renewables, Enterprise Architecture, Cyber Security, Smart Grid Demonstration Project, Electrification Initiative, Energy Storage Integration Council (ESIC), Sector Council member for EPRI Information and Communication Technology, and former member of Research Advisory Committee (RAC)

Manage a team responsible for telecommunications, fiber optic facilities, networking and cyber security activities including NERC Critical Infrastructure Protection (CIP) compliance

Part of PNMR technology road mapping efforts serving various internal business needs including benchmarking other utility approaches

Involved in PNMR's Enterprise Risk Management program specifically addressing and providing strategic industry information on new technologies and effects to business transformation

Support Public Policy Organization for regulatory and policy needs and communication with respect to technology initiatives including support for internal and external Economic Development organizations.

Formerly PNMR's voting member to the Smart Grid Interoperability Panel (SGIP) and participant in multiple Domain Expert Working Groups (DEWGs) and Priority Action Plans (PAPs)

2002 – 2010 **Public Service Company of New Mexico (PNM).** Albuquerque, NM. *Manager, Electric Distribution Standards (Sept. 2002 to Mar. 2010), Manager Electric and Gas Standards and Technical Training (Sept. 2002 to Mar. 2004), Project Manager (Mar. 2002 – Sept. 2002)*

Managed a department that drove policies and was responsible for technical approval of all new materials, material changes and design standards used in building and maintaining electric distribution, gas distribution and gas transmission infrastructure. The department was also responsible for management of the Joint Use department responsible for co-location of electric and communication infrastructure

Managed relationships with vendors and participated in contract negotiations on multi-million-dollar, enterprise-wide contracts for electric utility equipment

Led teams to analyze business processes using Root Cause Analysis, Lean, and Six Sigma techniques

Led teams to analyze best practices and potential synergies with regard to the acquisition and integration of a utility acquired by PNMR

Responsible for managing all technical training for gas field personnel (54 classes in the syllabus), material training for electric personnel, and the Distribution Engineering Mentorship Program

Responsible for implementation and administration of Natural Gas Operator Qualification program to meet auditable Department of Transportation (DOT) regulations

Project management related to construction and maintenance on electric distribution substations throughout the state including obtaining permits, materials, and scheduling crews

1997 - 2002 **Sumitomo Sitix Silicon.** Albuquerque, NM. *Senior Quality Engineer (2000-2002), Quality Engineer II (1998-2000), Quality Engineer I (1997-1998), Production Supervisor (1994-1997)*

Quality Engineer responsible for expansion, operation, and analysis of results obtained in the plant's semiconductor material characterization laboratory. Also, process owner for multiple sets of semiconductor metrology equipment and fabrication processes throughout the plant

Process designer for aspects of ISO 9002, QS 9000, and ISO 14001 processes and active participant in initial certification and follow up surveillance audits

Continuing education courses in advanced statistical process control and Design of Experiments

Managed a 6:00 PM to 6:00 AM production shift. Responsible for interviewing and hiring a staff of 16 Material Processors during facility start-up. Implemented employee development matrices and provided periodic performance appraisals. Responsible for coordinating resources to meet productivity and on-time delivery requirements. Also, served as Emergency Response Team Incident Commander

ORGANIZATIONS:

President of the Board of Directors for New Mexico Math, Engineering , Science Achievement (MESA) 2017, Board member since 2015

Board of Directors for the New Mexico Engineering Foundation (2007-2013) – served as Vice President (two terms), President, and Past President (two terms)

Quality New Mexico Award Examiner auditing New Mexico companies against the Malcolm Baldrige National Quality Award criteria for 14 years. Seven of those years served as a team lead

Member of DNP3 Users Group and IEEE

Current member of Advisory Board for the College of Electrical and Computer Engineering at the University of New Mexico

Current member of New Mexico's State Committee for DOE's Experimental Program to Stimulate competitive Research (EPSCoR)

Certified C Licensed Coach by U.S. Soccer and coach of youth club soccer teams

Advanced Metering Capital Clearings Compared to Docket No. 22-00058-UT

PNM Exhibit JCH-2a

Is contained in the following 1 page.

PNM Exhibit JCH-2a
Advanced Metering Capital Clearings Compared to Docket No. 22-00058-UT Forecast
($ in millions)

	Docket No. 22-00058-UT Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Meter Installation Costs	**$ -**	**$ 8.71**	**$ 18.06**	**$ 16.34**	**$ -**	**$ -**	**$ 43.11**
Meter & Meter Infrastructure Costs	**$ 1.68**	**$ 39.58**	**$ 45.40**	**$ 39.47**	**$ 1.72**	**$ -**	**$ 127.86**
Advanced AMI Use Case License	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Advanced AMI Use Case System Integratior	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Advanced Meters	$ -	$ 19.26	$ 39.93	$ 36.13	$ -	$ -	$ 95.32
Handheld units	$ -	$ 0.04	$ -	$ -	$ -	$ -	$ 0.04
Head End / MDMS SaaS Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Initial Project Costs	$ -	$ 5.02	$ 3.34	$ 3.34	$ 1.72	$ -	$ 13.43
Internal Labor	$ -	$ -	$ -	$ -	$ -	$ -	$ -
MDMS	$ -	$ 1.45	$ -	$ -	$ -	$ -	$ 1.45
MDMS System Integration/CIS Enhancement	$ -	$ 2.13	$ 2.13	$ -	$ -	$ -	$ 4.27
Meter Head End	$ -	$ 8.20	$ -	$ -	$ -	$ -	$ 8.20
Network Hardware/PNM AMI Access Point Install	$ 1.68	$ 3.47	$ -	$ -	$ -	$ -	$ 5.16
Testing	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Advanced Metering	**$ 1.68**	**$ 48.29**	**$ 63.46**	**$ 55.81**	**$ 1.72**	**$ -**	**$ 170.97**

	Variance						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Meter Installation Costs	**$ -**	**$ (8.37)**	**$ (4.05)**	**$ (2.74)**	**$ -**	**$ -**	**$ (15.16)**
Meter & Meter Infrastructure Costs	**$ 16.52**	**$ (0.86)**	**$ 12.27**	**$ (7.06)**	**$ 7.31**	**$ 0.96**	**$ 29.14**
Advanced AMI Use Case License	$ -	$ -	$ -	$ 0.88	$ 0.92	$ 0.96	$ 2.75
Advanced AMI Use Case System Integratior	$ -	$ -	$ -	$ 1.99	$ -	$ -	$ 1.99
Advanced Meters	$ -	$ (5.21)	$ 11.81	$ (7.13)	$ -	$ -	$ (0.53)
Handheld units	$ 0.01	$ (0.04)	$ -	$ -	$ -	$ -	$ (0.03)
Head End / MDMS SaaS Costs	$ -	$ 5.47	$ -	$ -	$ 7.03	$ -	$ 12.50
Initial Project Costs	$ 8.06	$ (0.60)	$ 0.38	$ (3.23)	$ (0.64)	$ -	$ 3.96
Internal Labor	$ 1.19	$ 0.91	$ 0.88	$ 0.43	$ -	$ -	$ 3.40
MDMS	$ 1.19	$ (1.45)	$ -	$ -	$ -	$ -	$ (0.26)
MDMS System Integration/CIS Enhancement	$ -	$ 5.36	$ (0.79)	$ -	$ -	$ -	$ 4.57
Meter Head End	$ 6.57	$ (8.20)	$ -	$ -	$ -	$ -	$ (1.63)
Network Hardware/PNM AMI Access Point Install	$ (0.96)	$ 2.89	$ -	$ -	$ -	$ -	$ 1.93
Testing	$ 0.47	$ 0.00	$ -	$ -	$ -	$ -	$ 0.47
Total Advanced Metering	**$ 16.52**	**$ (9.24)**	**$ 8.22**	**$ (9.80)**	**$ 7.31**	**$ 0.96**	**$ 13.98**

	Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Meter Installation Costs	**$ -**	**$ 0.34**	**$ 14.01**	**$ 13.60**	**$ -**	**$ -**	**$ 27.94**
Meter & Meter Infrastructure Costs	**$ 18.21**	**$ 38.72**	**$ 57.67**	**$ 32.41**	**$ 9.03**	**$ 0.96**	**$ 157.00**
Advanced AMI Use Case License	$ -	$ -	$ -	$ 0.88	$ 0.92	$ 0.96	$ 2.75
Advanced AMI Use Case System Integratior	$ -	$ -	$ -	$ 1.99	$ -	$ -	$ 1.99
Advanced Meters	$ -	$ 14.06	$ 51.74	$ 29.00	$ -	$ -	$ 94.79
Handheld units	$ 0.01	$ -	$ -	$ -	$ -	$ -	$ 0.01
Head End / MDMS SaaS Costs	$ -	$ 5.47	$ -	$ -	$ 7.03	$ -	$ 12.50
Initial Project Costs	$ 8.06	$ 4.42	$ 3.72	$ 0.11	$ 1.08	$ -	$ 17.39
Internal Labor	$ 1.19	$ 0.91	$ 0.88	$ 0.43	$ -	$ -	$ 3.40
MDMS	$ 1.19	$ -	$ -	$ -	$ -	$ -	$ 1.19
MDMS System Integration/CIS Enhancement	$ -	$ 7.50	$ 1.34	$ -	$ -	$ -	$ 8.84
Meter Head End	$ 6.57	$ -	$ -	$ -	$ -	$ -	$ 6.57
Network Hardware/PNM AMI Access Point Install	$ 0.73	$ 6.36	$ -	$ -	$ -	$ -	$ 7.09
Testing	$ 0.47	$ 0.00	$ -	$ -	$ -	$ -	$ 0.47
Total Advanced Metering	**$ 18.21**	**$ 39.06**	**$ 71.68**	**$ 46.01**	**$ 9.03**	**$ 0.96**	**$ 184.94**

Advanced Metering Capital Clearings Compared to Docket No. 25-00049-UT

PNM Exhibit JCH-2b

Is contained in the following 1 page.

PNM Exhibit JCH-2b
Advanced Metering Capital Clearings Compared to Docket No. 25-00049-UT Forecast
($ in millions)

	Docket No. 25-00049-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Meter Installation Costs	**$ -**	**$ 0.34**	**$ 13.67**	**$ 13.69**	**$ -**	**$ -**	**$ 27.70**	**$ -**	**$ (0.01)**	**$ 0.34**	**$ (0.09)**	**$ -**	**$ -**	**$ 0.24**	**$ -**	**$ 0.34**	**$ 14.01**	**$ 13.60**	**$ -**	**$ -**	**$ 27.94**
Meter & Meter Infrastructure Costs	**$ 18.52**	**$ 38.28**	**$ 51.49**	**$ 35.86**	**$ 8.17**	**$ -**	**$ 152.32**	**$ (0.32)**	**$ 0.45**	**$ 6.18**	**$ (3.45)**	**$ 0.86**	**$ 0.96**	**$ 4.68**	**$ 18.21**	**$ 38.72**	**$ 57.67**	**$ 32.41**	**$ 9.03**	**$ 0.96**	**$ 157.00**
Advanced AMI Use Case License	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.88	$ 0.92	$ 0.96	$ 2.75	$ -	$ -	$ -	$ 0.88	$ 0.92	$ 0.96	$ 2.75
Advanced AMI Use Case System Integration	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1.99	$ -	$ -	$ 1.99	$ -	$ -	$ -	$ 1.99	$ -	$ -	$ 1.99
Advanced Meters	$ -	$ 12.95	$ 46.99	$ 35.31	$ -	$ -	$ 95.26	$ -	$ 1.10	$ 4.74	$ (6.31)	$ -	$ -	$ (0.47)	$ -	$ 14.06	$ 51.74	$ 29.00	$ -	$ -	$ 94.79
Handheld units	$ 0.02	$ -	$ -	$ -	$ -	$ -	$ 0.02	$ (0.01)	$ -	$ -	$ -	$ -	$ -	$ (0.01)	$ 0.01	$ -	$ -	$ -	$ -	$ -	$ 0.01
Head End / MDMS SaaS Costs	$ 0.88	$ 5.56	$ -	$ -	$ 7.08	$ -	$ 13.51	$ (0.88)	$ (0.09)	$ -	$ -	$ (0.05)	$ -	$ (1.01)	$ -	$ 5.47	$ -	$ -	$ 7.03	$ -	$ 12.50
Initial Project Costs	$ 5.48	$ 3.22	$ 3.63	$ 0.11	$ 1.09	$ -	$ 13.53	$ 2.58	$ 1.20	$ 0.09	$ (0.00)	$ (0.01)	$ -	$ 3.86	$ 8.06	$ 4.42	$ 3.72	$ 0.11	$ 1.08	$ -	$ 17.39
Internal Labor	$ 0.45	$ 1.50	$ 0.87	$ 0.44	$ -	$ -	$ 3.26	$ 0.73	$ (0.58)	$ 0.01	$ (0.01)	$ -	$ -	$ 0.15	$ 1.19	$ 0.91	$ 0.88	$ 0.43	$ -	$ -	$ 3.40
MDMS	$ 1.19	$ -	$ -	$ -	$ -	$ -	$ 1.19	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1.19	$ -	$ -	$ -	$ -	$ -	$ 1.19
MDMS System Integration/CIS Enhancements	$ -	$ 10.47	$ -	$ -	$ -	$ -	$ 10.47	$ -	$ (2.97)	$ 1.34	$ -	$ -	$ -	$ (1.63)	$ -	$ 7.50	$ 1.34	$ -	$ -	$ -	$ 8.84
Meter Head End	$ 6.57	$ -	$ -	$ -	$ -	$ -	$ 6.57	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6.57	$ -	$ -	$ -	$ -	$ -	$ 6.57
Network Hardware/PNM AMI Access Point Install.	$ 3.31	$ 4.59	$ -	$ -	$ -	$ -	$ 7.90	$ (2.58)	$ 1.78	$ -	$ -	$ -	$ -	$ (0.81)	$ 0.73	$ 6.36	$ -	$ -	$ -	$ -	$ 7.09
Testing	$ 0.62	$ -	$ -	$ -	$ -	$ -	$ 0.62	$ (0.15)	$ 0.00	$ -	$ -	$ -	$ -	$ (0.15)	$ 0.47	$ 0.00	$ -	$ -	$ -	$ -	$ 0.47
Total Advanced Metering	**$ 18.52**	**$ 38.62**	**$ 65.16**	**$ 49.55**	**$ 8.17**	**$ -**	**$ 180.02**	**$ (0.32)**	**$ 0.44**	**$ 6.52**	**$ (3.54)**	**$ 0.86**	**$ 0.96**	**$ 4.92**	**$ 18.21**	**$ 39.06**	**$ 71.68**	**$ 46.01**	**$ 9.03**	**$ 0.96**	**$ 184.94**

Advanced Metering O&M Compared to Docket No. 22-00058-UT

PNM Exhibit JCH-3a

Is contained in the following 1 page.

PNM Exhibit JCH-3a
Advanced Metering O&M Compared to Docket No. 22-00058-UT Forecast
($ in millions)

	Docket No. 22-00058-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Meter Installation Costs	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3.88**	**$ 3.88**	**$ -**	**$ -**	**$ 7.77**	**$ -**	**$ -**	**$ 3.88**	**$ 3.88**	**$ -**	**$ -**	**$ 7.77**
Meter & Meter Infrastructure Costs	**$ 5.70**	**$ 6.41**	**$ 4.92**	**$ 3.33**	**$ 1.40**	**$ (2.42)**	**$ 19.35**	**$ (3.33)**	**$ (2.30)**	**$ (2.27)**	**$ (2.47)**	**$ (2.47)**	**$ (2.51)**	**$ (15.35)**	**$ 2.38**	**$ 4.11**	**$ 2.65**	**$ 0.87**	**$ (1.07)**	**$ (4.93)**	**$ 4.01**
Subtotal: AMI O&M Internal Labor and Expense	**$ 1.06**	**$ 1.20**	**$ (0.53)**	**$ (2.40)**	**$ (4.29)**	**$ (6.28)**	**$ (11.24)**	**$ (0.76)**	**$ (0.24)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ (1.00)**	**$ 0.30**	**$ 0.96**	**$ (0.53)**	**$ (2.40)**	**$ (4.29)**	**$ (6.28)**	**$ (12.24)**
AMI Internal Labor and Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.30	$ -	$ -	$ -	$ -	$ -	$ 0.30	$ 0.30	$ -	$ -	$ -	$ -	$ -	$ 0.30
AMI Business Process Change Management	$ 0.40	$ 0.40	$ 0.40	$ 0.40	$ 0.40	$ -	$ 2.00	$ (0.40)	$ (0.24)	$ -	$ -	$ -	$ -	$ (0.64)	NA*	$ 0.16	$ 0.40	$ 0.40	$ 0.40	$ -	$ 1.36
AMI Database Administrator/Analyst	$ 0.17	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 1.11	$ (0.17)	$ -	$ -	$ -	$ -	$ -	$ (0.17)	NA*	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 0.94
AMI Marketing FTE	$ 0.17	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ -	$ 0.90	$ (0.17)	$ -	$ -	$ -	$ -	$ -	$ (0.17)	NA*	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ -	$ 0.74
AMI Meter Troubleshooting Employee	$ -	$ 0.11	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.60	$ -	$ -	$ -	$ -	$ -	$ -	$ -	NA*	$ 0.11	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.60
AMI Pick Up Reads Employee	$ -	$ -	$ -	$ -	$ 0.11	$ 0.12	$ 0.22	$ -	$ -	$ -	$ -	$ -	$ -	$ -	NA*	$ -	$ -	$ -	$ 0.11	$ 0.12	$ 0.22
AMI Radio Frequency (RF) Technician	$ 0.17	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 1.11	$ (0.17)	$ -	$ -	$ -	$ -	$ -	$ (0.17)	NA*	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 0.94
AMI System Administrator	$ 0.17	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 1.11	$ (0.17)	$ -	$ -	$ -	$ -	$ -	$ (0.17)	NA*	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 0.94
Avoided Meter Reader and Associated Costs	$ -	$ -	$ (1.76)	$ (3.67)	$ (5.71)	$ (7.48)	$ (18.62)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (1.76)	$ (3.67)	$ (5.71)	$ (7.48)	$ (18.62)
Opt-Out Meter Reading Employees	$ -	$ -	$ -	$ -	$ -	$ 0.33	$ 0.33	$ -	$ -	$ -	$ -	$ -	$ -	$ -	NA*	$ -	$ -	$ -	$ -	$ 0.33	$ 0.33
Subtotal: Other AMI O&M Costs	**$ 4.64**	**$ 5.21**	**$ 5.45**	**$ 5.73**	**$ 5.70**	**$ 3.87**	**$ 30.60**	**$ (2.57)**	**$ (2.06)**	**$ (2.27)**	**$ (2.47)**	**$ (2.47)**	**$ (2.51)**	**$ (14.35)**	**$ 2.07**	**$ 3.15**	**$ 3.18**	**$ 3.26**	**$ 3.22**	**$ 1.35**	**$ 16.25**
AMI Meter Reader Retraining	$ 0.40	$ 0.40	$ 0.40	$ 0.40	$ 0.40	$ -	$ 2.00	$ (0.40)	$ -	$ -	$ -	$ -	$ -	$ (0.40)	$ -	$ 0.40	$ 0.40	$ 0.40	$ 0.40	$ -	$ 1.60
AMI Vehicle Costs	$ -	$ -	$ -	$ -	$ -	$ 0.10	$ 0.10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.10	$ 0.10
Call Center Support for Deployment - Temp Labor	$ -	$ 0.50	$ 0.52	$ 0.54	$ 0.56	$ -	$ 2.12	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.50	$ 0.52	$ 0.54	$ 0.56	$ -	$ 2.12
Customer Education and Communication Plan	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ -	$ 5.00	$ (0.88)	$ -	$ -	$ -	$ -	$ -	$ (0.88)	$ 0.12	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ -	$ 4.12
Field Service Unit Maintenance Fee	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.02	$ (0.00)	$ (0.00)	$ 0.00	$ (0.00)	$ 0.00	$ (0.00)	$ (0.01)	$ -	$ -	$ 0.01	$ -	$ 0.01	$ -	$ 0.01
Head End Hardware Secur. Module (NEW) 3 Yr. Maint.	$ 0.09	$ -	$ -	$ 0.09	$ -	$ -	$ 0.18	$ (0.09)	$ -	$ -	$ (0.02)	$ -	$ -	$ (0.11)	$ -	$ -	$ -	$ 0.07	$ -	$ -	$ 0.07
Head End / MDMS Maintenance & Support	$ 3.15	$ 3.31	$ 3.52	$ 3.70	$ 3.73	$ 3.76	$ 21.18	$ (1.20)	$ (2.05)	$ (2.27)	$ (2.45)	$ (2.48)	$ (2.51)	$ (12.95)	$ 1.95	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 8.23
Total Advanced Metering	**$ 5.70**	**$ 6.41**	**$ 4.92**	**$ 3.33**	**$ 1.40**	**$ (2.42)**	**$ 19.35**	**$ (3.33)**	**$ (2.30)**	**$ 1.62**	**$ 1.41**	**$ (2.47)**	**$ (2.51)**	**$ (7.58)**	**$ 2.38**	**$ 4.11**	**$ 6.53**	**$ 4.75**	**$ (1.07)**	**$ (4.93)**	**$ 11.77**

Note:
NA*: Variance reporting for individual internal labor resource costs are presented as an aggregate of internal labor and expense.

Advanced Metering O&M Compared to Docket No. 25-00049-UT

PNM Exhibit JCH-3b

Is contained in the following 1 page.

PNM Exhibit JCH-3b
Advanced Metering O&M Compared to Docket No. 25-00049-UT Forecast
($ in millions)

	Docket No. 25-00049-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Meter Installation Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3.88	$ 3.88	$ -	$ -	$ 7.77	$ -	$ -	$ 3.88	$ 3.88	$ -	$ -	$ 7.77
Meter & Meter Infrastructure Costs	$ 3.55	$ 4.11	$ 2.65	$ 0.87	$ (1.07)	$ (4.93)	$ 5.18	$ (1.18)	$ -	$ -	$ -	$ -	$ -	$ (1.18)	$ 2.38	$ 4.11	$ 2.65	$ 0.87	$ (1.07)	$ (4.93)	$ 4.01
Subtotal: AMI O&M Internal Labor and Expense	$ 0.82	$ 0.96	$ (0.53)	$ (2.40)	$ (4.29)	$ (6.28)	$ (11.72)	$ (0.52)	$ -	$ -	$ -	$ -	$ -	$ (0.52)	$ 0.30	$ 0.96	$ (0.53)	$ (2.40)	$ (4.29)	$ (6.28)	$ (12.24)
AMI Internal Labor and Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.30	$ -	$ -	$ -	$ -	$ -	$ 0.30	$ 0.30	$ -	$ -	$ -	$ -	$ -	$ 0.30
AMI Business Process Change Management	$ 0.16	$ 0.16	$ 0.40	$ 0.40	$ 0.40	$ -	$ 1.52	$ (0.16)	$ -	$ -	$ -	$ -	$ -	$ (0.16)	NA*	$ 0.16	$ 0.40	$ 0.40	$ 0.40	$ -	$ 1.36
AMI Database Administrator/Analyst	$ 0.17	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 1.11	$ (0.17)	$ -	$ -	$ -	$ -	$ -	$ (0.17)	NA*	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 0.94
AMI Marketing FTE	$ 0.17	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ -	$ 0.90	$ (0.17)	$ -	$ -	$ -	$ -	$ -	$ (0.17)	NA*	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ -	$ 0.74
AMI Meter Troubleshooting Employee	$ -	$ 0.11	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.60	$ -	$ -	$ -	$ -	$ -	$ -	$ -	NA*	$ 0.11	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.60
AMI Pick Up Reads Employee	$ -	$ -	$ -	$ -	$ 0.11	$ 0.12	$ 0.22	$ -	$ -	$ -	$ -	$ -	$ -	$ -	NA*	$ -	$ -	$ -	$ 0.11	$ 0.12	$ 0.22
AMI Radio Frequency (RF) Technician	$ 0.17	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 1.11	$ (0.17)	$ -	$ -	$ -	$ -	$ -	$ (0.17)	NA*	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 0.94
AMI System Administrator	$ 0.17	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 1.11	$ (0.17)	$ -	$ -	$ -	$ -	$ -	$ (0.17)	NA*	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.20	$ 0.94
Avoided Meter Reader and Associated Costs	$ -	$ -	$ (1.76)	$ (3.67)	$ (5.71)	$ (7.48)	$ (18.62)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (1.76)	$ (3.67)	$ (5.71)	$ (7.48)	$ (18.62)
Opt-Out Meter Reading Employees	$ -	$ -	$ -	$ -	$ -	$ 0.33	$ 0.33	$ -	$ -	$ -	$ -	$ -	$ -	$ -	NA*	$ -	$ -	$ -	$ -	$ 0.33	$ 0.33
Subtotal: Other AMI O&M Costs	$ 2.73	$ 3.15	$ 3.18	$ 3.26	$ 3.22	$ 1.35	$ 16.91	$ (0.66)	$ -	$ -	$ -	$ -	$ -	$ (0.66)	$ 2.07	$ 3.15	$ 3.18	$ 3.26	$ 3.22	$ 1.35	$ 16.25
AMI Meter Reader Retraining	$ 0.40	$ 0.40	$ 0.40	$ 0.40	$ 0.40	$ -	$ 2.00	$ (0.40)	$ -	$ -	$ -	$ -	$ -	$ (0.40)	$ -	$ 0.40	$ 0.40	$ 0.40	$ 0.40	$ -	$ 1.60
AMI Vehicle Costs	$ -	$ -	$ -	$ -	$ -	$ 0.10	$ 0.10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.10	$ 0.10
Call Center Support for Deployment - Temp Labor	$ -	$ 0.50	$ 0.52	$ 0.54	$ 0.56	$ -	$ 2.12	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.50	$ 0.52	$ 0.54	$ 0.56	$ -	$ 2.12
Customer Education and Communication Plan	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ -	$ 5.00	$ (0.88)	$ -	$ -	$ -	$ -	$ -	$ (0.88)	$ 0.12	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ -	$ 4.12
Field Service Unit Maintenance Fee	$ 0.01	$ -	$ 0.01	$ -	$ 0.01	$ -	$ 0.02	$ (0.01)	$ -	$ -	$ -	$ -	$ -	$ (0.01)	$ -	$ -	$ 0.01	$ -	$ 0.01	$ -	$ 0.01
Head End Hardware Secur. Module (NEW) 3 Yr. Maint.	$ 0.07	$ -	$ -	$ 0.07	$ -	$ -	$ 0.14	$ (0.07)	$ -	$ -	$ -	$ -	$ -	$ (0.07)	$ -	$ -	$ -	$ 0.07	$ -	$ -	$ 0.07
Head End / MDMS Maintenance & Support	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 7.53	$ 0.70	$ -	$ -	$ -	$ -	$ -	$ 0.70	$ 1.95	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 1.25	$ 8.23
Total Advanced Metering	$ 3.55	$ 4.11	$ 2.65	$ 0.87	$ (1.07)	$ (4.93)	$ 5.18	$ (1.18)	$ -	$ 3.88	$ 3.88	$ -	$ -	$ 6.59	$ 2.38	$ 4.11	$ 6.53	$ 4.75	$ (1.07)	$ (4.93)	$ 11.77

Note:
NA*: Variance reporting for individual internal labor resource costs are presented as an aggregate of internal labor and expense.

Customer Information & Analytics Capital Clearings Compared to Docket No. 22-00058-UT

PNM Exhibit JCH-4a

Is contained in the following 1 page.

PNM Exhibit JCH-4a
Customer Information & Analytics Capital Clearings Compared to Docket No. 22-00058-UT Forecast
($ in millions)

	Docket No. 22-00058-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Customer Information & Analytics Portal	$ -	$ 0.52	$ -	$ -	$ -	$ -	$ 0.52	$ -	$ 1.71	$ -	$ -	$ -	$ -	$ 1.71	$ -	$ 2.23	$ -	$ -	$ -	$ -	$ 2.23
Customer Info. & Access Management ("CIAM"	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1.70	$ -	$ 1.63	$ -	$ -	$ 3.33	$ -	$ 1.70	$ -	$ 1.63	$ -	$ -	$ 3.33
GreenButton Connect My Data	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.28	$ -	$ -	$ -	$ 0.28	$ -	$ -	$ 0.28	$ -	$ -	$ -	$ 0.28
Total Customer Information & Analytics	**$ -**	**$ 0.52**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 0.52**	**$ -**	**$ 3.41**	**$ 0.28**	**$ 1.63**	**$ -**	**$ -**	**$ 5.32**	**$ -**	**$ 3.93**	**$ 0.28**	**$ 1.63**	**$ -**	**$ -**	**$ 5.85**

Customer Information & Analytics Capital Clearings Compared to
Docket No. 25-00049-UT

PNM Exhibit JCH-4b

Is contained in the following 1 page.

PNM Exhibit JCH-4b
Customer Information & Analytics Capital Clearings Compared to Docket No. 25-00049-UT Forecast
($ in millions)

	Case No. 25-00049-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Customer Information & Analytics Portals	$ -	$ 1.43	$ -	$ -	$ -	$ -	$ 1.43	$ -	$ 0.80	$ -	$ -	$ -	$ -	$ 0.80	$ -	$ 2.23	$ -	$ -	$ -	$ -	$ 2.23
Customer Info. & Access Management ("CIAM")	$ -	$ 2.65	$ -	$ 1.75	$ -	$ -	$ 4.40	$ -	$ (0.95)	$ -	$ (0.12)	$ -	$ -	$ (1.07)	$ -	$ 1.70	$ -	$ 1.63	$ -	$ -	$ 3.33
GreenButton Connect My Data	$ -	$ -	$ 0.29	$ -	$ -	$ -	$ 0.29	$ -	$ -	$ (0.01)	$ -	$ -	$ -	$ (0.01)	$ -	$ -	$ 0.28	$ -	$ -	$ -	$ 0.28
Total Customer Information & Analytics	**$ -**	**$ 4.08**	**$ 0.29**	**$ 1.75**	**$ -**	**$ -**	**$ 6.12**	**$ -**	**$ (0.15)**	**$ (0.01)**	**$ (0.12)**	**$ -**	**$ -**	**$ (0.28)**	**$ -**	**$ 3.93**	**$ 0.28**	**$ 1.63**	**$ -**	**$ -**	**$ 5.85**

Customer Information & Analytics O&M Compared to Docket No. 22-00058-UT

PNM Exhibit JCH-5a

Is contained in the following 1 page.

PNM Exhibit JCH-5a
Customer Information & Analytics O&M Compared to Docket No. 22-00058-UT Forecast
($ in millions)

	Docket No. 22-00058-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Cust. Info. & Analytics Support O&M	$ -	$ 1.06	$ 1.06	$ 1.06	$ 1.06	$ 1.06	$ 5.30	$ 0.80	$ (0.09)	$ 0.27	$ 0.28	$ 0.29	$ 0.30	$ 1.85	$ 0.80	$ 0.97	$ 1.33	$ 1.34	$ 1.35	$ 1.36	$ 7.15
Cust. Portal Mgmt. & Analytics Emps.	$ -	$ 0.33	$ 0.34	$ 0.36	$ 0.38	$ 0.39	$ 1.80	$ 0.04	$ (0.32)	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ (0.25)	$ 0.04	$ 0.01	$ 0.35	$ 0.37	$ 0.38	$ 0.40	$ 1.55
Total Customer Information & Analytics	**$ -**	**$ 1.39**	**$ 1.40**	**$ 1.42**	**$ 1.44**	**$ 1.45**	**$ 7.10**	**$ 0.84**	**$ (0.40)**	**$ 0.27**	**$ 0.28**	**$ 0.30**	**$ 0.31**	**$ 1.59**	**$ 0.84**	**$ 0.99**	**$ 1.68**	**$ 1.70**	**$ 1.73**	**$ 1.76**	**$ 8.70**

Customer Information & Analytics O&M Compared to Docket No. 25-00049-UT

PNM Exhibit JCH-5b

Is contained in the following 1 page.

PNM Exhibit JCH-5b
Customer Information & Analytics O&M Compared to Docket No. 25-00049-UT Forecast
($ in millions)

	Docket No. 25-00049-UT Forecast							Variance							Current Forecast						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Total**
Cust. Info. & Analytics Support O&M	$ 1.15	$ 0.83	$ 1.19	$ 1.41	$ 1.43	$ 1.46	$ 7.46	$ (0.35)	$ 0.14	$ 0.14	$ (0.07)	$ (0.08)	$ (0.10)	$ (0.32)	$ 0.80	$ 0.97	$ 1.33	$ 1.34	$ 1.35	$ 1.36	$ 7.15
Cust. Portal Mgmt. & Analytics Emps.	$ -	$ 0.33	$ 0.34	$ 0.36	$ 0.38	$ 0.39	$ 1.80	$ 0.04	$ (0.32)	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ (0.25)	$ 0.04	$ 0.01	$ 0.35	$ 0.37	$ 0.38	$ 0.40	$ 1.55
Total Customer Information & Analytic	**$ 1.15**	**$ 1.16**	**$ 1.53**	**$ 1.77**	**$ 1.81**	**$ 1.85**	**$ 9.27**	**$ (0.31)**	**$ (0.18)**	**$ 0.15**	**$ (0.06)**	**$ (0.08)**	**$ (0.09)**	**$ (0.57)**	**$ 0.84**	**$ 0.99**	**$ 1.68**	**$ 1.70**	**$ 1.73**	**$ 1.76**	**$ 8.70**

Cybersecurity Capital Clearings Compared to Docket No. 22-00058-UT

PNM Exhibit JCH-6a

Is contained in the following 1 page.

PNM Exhibit JCH-6a
Cybersecurity Capital Clearings Compared to Docket No. 22-00058-UT Forecast
($ in millions)

	Docket No. 22-00058-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Firewalls/IDP	$ -	$ 0.32	$ -	$ -	$ -	$ -	$ 0.32	$ -	$ (0.13)	$ -	$ -	$ -	$ -	$ (0.13)	$ -	$ 0.19	$ -	$ -	$ -	$ -	$ 0.19
Network Security Monitoring (5 Yr Invest.)	$ 0.07	$ 0.35	$ 0.21	$ 0.21	$ 0.22	$ -	$ 1.06	$ (0.07)	$ 0.74	$ 0.96	$ 0.94	$ (0.22)	$ -	$ 2.35	$ -	$ 1.09	$ 1.17	$ 1.15	$ -	$ -	$ 3.41
SIEM	$ -	$ 1.03	$ -	$ -	$ -	$ -	$ 1.03	$ -	$ (0.16)	$ -	$ -	$ -	$ -	$ (0.16)	$ -	$ 0.86	$ -	$ -	$ -	$ -	$ 0.86
Software Defined Networking/Network Seg.	$ -	$ 2.36	$ -	$ -	$ -	$ -	$ 2.36	$ -	$ 0.52	$ -	$ -	$ -	$ -	$ 0.52	$ -	$ 2.88	$ -	$ -	$ -	$ -	$ 2.88
Total Cybersecurity	**$ 0.07**	**$ 4.06**	**$ 0.21**	**$ 0.21**	**$ 0.22**	**$ -**	**$ 4.77**	**$ (0.07)**	**$ 0.96**	**$ 0.96**	**$ 0.94**	**$ (0.22)**	**$ -**	**$ 2.58**	**$ -**	**$ 5.02**	**$ 1.17**	**$ 1.15**	**$ -**	**$ -**	**$ 7.35**

Cybersecurity Capital Clearings Compared to Docket No. 25-00049-UT

PNM Exhibit JCH-6b

Is contained in the following 1 page.

PNM Exhibit JCH-6b
Cybersecurity Capital Clearings Compared to Docket No. 25-00049-UT Forecast
($ in millions)

	Docket No. 25-00049-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Firewalls/IDP	$ -	$ 0.36	$ -	$ -	$ -	$ -	$ 0.36	$ -	$ (0.17)	$ -	$ -	$ -	$ -	$ (0.17)	$ -	$ 0.19	$ -	$ -	$ -	$ -	$ 0.19
Network Security Monitoring (5 Yr Invest.)	$ 0.08	$ 0.39	$ 0.21	$ 0.21	$ 0.21	$ -	$ 1.10	$ (0.08)	$ 0.70	$ 0.96	$ 0.94	$ (0.21)	$ -	$ 2.31	$ -	$ 1.09	$ 1.17	$ 1.15	$ -	$ -	$ 3.41
SIEM	$ -	$ 1.15	$ -	$ -	$ -	$ -	$ 1.15	$ -	$ (0.29)	$ -	$ -	$ -	$ -	$ (0.29)	$ -	$ 0.86	$ -	$ -	$ -	$ -	$ 0.86
Software Defined Networking/Network Seg.	$ -	$ 2.64	$ -	$ -	$ -	$ -	$ 2.64	$ -	$ 0.24	$ -	$ -	$ -	$ -	$ 0.24	$ -	$ 2.88	$ -	$ -	$ -	$ -	$ 2.88
Total Cybersecurity	**$ 0.08**	**$ 4.54**	**$ 0.21**	**$ 0.21**	**$ 0.21**	**$ -**	**$ 5.25**	**$ (0.08)**	**$ 0.48**	**$ 0.96**	**$ 0.94**	**$ (0.21)**	**$ -**	**$ 2.10**	**$ -**	**$ 5.02**	**$ 1.17**	**$ 1.15**	**$ -**	**$ -**	**$ 7.35**

Cybersecurity O&M Compared to Docket No. 22-00058-UT

PNM Exhibit JCH-7a

Is contained in the following 1 page.

PNM Exhibit JCH-7a
Cybersecurity O&M Compared to Docket No. 22-00058-UT Forecast
($ in millions)

	Docket No. 22-00058-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Cybersecurity Internal Labor & Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.00	$ -	$ -	$ -	$ -	$ -	$ 0.00	$ 0.00	$ -	$ -	$ -	$ -	$ -	$ 0.00
Cyber Systems - Annual Software Maint. Fees	$ -	$ 0.22	$ 0.23	$ 0.24	$ 0.25	$ 0.26	$ 1.20	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.22	$ 0.23	$ 0.24	$ 0.25	$ 0.26	$ 1.20
Total Cybersecurity	**$ -**	**$ 0.22**	**$ 0.23**	**$ 0.24**	**$ 0.25**	**$ 0.26**	**$ 1.20**	**$ 0.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 0.00**	**$ 0.00**	**$ 0.22**	**$ 0.23**	**$ 0.24**	**$ 0.25**	**$ 0.26**	**$ 1.20**

Cybersecurity O&M Compared to Docket No. 25-00049-UT

PNM Exhibit JCH-7b

Is contained in the following 1 page.

PNM Exhibit JCH-7b
Cybersecurity O&M Compared to Docket No. 25-00049-UT Forecast
($ in millions)

	Docket No. 25-00049-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Cybersecurity Internal Labor & Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.00	$ -	$ -	$ -	$ -	$ -	$ 0.00	$ 0.00	$ -	$ -	$ -	$ -	$ -	$ 0.00
Cyber Systems - Annual Software Maint. Fees	$ -	$ 0.22	$ 0.23	$ 0.24	$ 0.25	$ 0.26	$ 1.20	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.22	$ 0.23	$ 0.24	$ 0.25	$ 0.26	$ 1.20
Total Cybersecurity	**$ -**	**$ 0.22**	**$ 0.23**	**$ 0.24**	**$ 0.25**	**$ 0.26**	**$ 1.20**	**$ 0.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 0.00**	**$ 0.00**	**$ 0.22**	**$ 0.23**	**$ 0.24**	**$ 0.25**	**$ 0.26**	**$ 1.20**

Data Management & Architecture Capital Clearings Compared to Docket No. 22-00058-UT

PNM Exhibit JCH-8a

Is contained in the following 1 page.

PNM Exhibit JCH-8a
Data Management & Architecture Capital Clearings Compared to Docket No. 22-00058-UT Forecast
($ in millions)

	Docket No. 22-00058-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Hardware - OSI Soft PI	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.79	$ 0.76	$ 0.77	$ -	$ 2.32	$ -	$ -	$ 0.79	$ 0.76	$ 0.77	$ -	$ 2.32
Network Model Mgmt./Connectivity Model/GIS Integr	$ -	$ 1.09	$ 1.09	$ 1.09	$ -	$ -	$ 3.27	$ -	$ (1.09)	$ 0.87	$ 0.03	$ -	$ -	$ (0.19)	$ -	$ -	$ 1.96	$ 1.12	$ -	$ -	$ 3.08
Onsite Infrastructure Support	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
OSI Soft PI AMI Data Lake Infrastructure	$ -	$ 0.35	$ -	$ -	$ -	$ -	$ 0.35	$ -	$ (0.35)	$ 0.38	$ -	$ -	$ -	$ 0.03	$ -	$ -	$ 0.38	$ -	$ -	$ -	$ 0.38
OSI Soft PI AMI Data Lake Setup Labor	$ -	$ 0.14	$ -	$ -	$ -	$ -	$ 0.14	$ -	$ (0.14)	$ 0.15	$ -	$ -	$ -	$ 0.01	$ -	$ -	$ 0.15	$ -	$ -	$ -	$ 0.15
OSI Soft PI Configuration Support	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Technical Lead	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.15	$ -	$ -	$ -	$ -	$ 0.15	$ -	$ 0.15	$ -	$ -	$ -	$ -	$ 0.15
TIBCO Labor Cost for Setup of New Tibco Instance	$ 0.13	$ -	$ -	$ -	$ -	$ -	$ 0.13	$ (0.13)	$ -	$ -	$ -	$ -	$ -	$ (0.13)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TIBCO Hardware	$ 0.46	$ -	$ -	$ -	$ -	$ -	$ 0.46	$ (0.46)	$ 0.64	$ -	$ -	$ -	$ -	$ 0.18	$ -	$ 0.64	$ -	$ -	$ -	$ -	$ 0.64
TIBCO Licensing	$ 2.03	$ -	$ -	$ -	$ -	$ -	$ 2.03	$ 0.81	$ 0.07	$ -	$ -	$ 2.19	$ -	$ 3.07	$ 2.84	$ 0.07	$ -	$ -	$ 2.19	$ -	$ 5.09
TIBCO RedHat and OracleLicensing	$ 0.25	$ -	$ -	$ -	$ -	$ -	$ 0.25	$ (0.25)	$ -	$ -	$ -	$ -	$ -	$ (0.25)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Data Management & Architecture	**$ 2.86**	**$ 1.58**	**$ 1.09**	**$ 1.09**	**$ -**	**$ -**	**$ 6.62**	**$ (0.03)**	**$ (0.72)**	**$ 2.18**	**$ 0.80**	**$ 2.96**	**$ -**	**$ 5.19**	**$ 2.84**	**$ 0.86**	**$ 3.27**	**$ 1.89**	**$ 2.96**	**$ -**	**$ 11.81**

Data Management & Architecture Capital Clearings Compared to Docket No. 25-00049-UT

PNM Exhibit JCH-8b

Is contained in the following 1 page.

PNM Exhibit JCH-8b
Data Management & Architecture Capital Clearings Compared to Docket No. 25-00049-UT Forecast
($ in millions)

	Docket No. 25-00049-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Hardware - OSI Soft PI	$ 0.40	$ -	$ -	$ -	$ -	$ -	$ 0.40	$ (0.40)	$ -	$ 0.79	$ 0.76	$ 0.77	$ -	$ 1.92	$ -	$ -	$ 0.79	$ 0.76	$ 0.77	$ -	$ 2.32
Network Model Mgmt./Connectivity Model/GIS Integrt.	$ -	$ 1.25	$ 1.21	$ 1.10	$ -	$ -	$ 3.57	$ -	$ (1.25)	$ 0.75	$ 0.02	$ -	$ -	$ (0.49)	$ -	$ -	$ 1.96	$ 1.12	$ -	$ -	$ 3.08
Onsite Infrastructure Support	$ 0.26	$ -	$ -	$ -	$ -	$ -	$ 0.26	$ (0.26)	$ -	$ -	$ -	$ -	$ -	$ (0.26)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
OSI Soft PI AMI Data Lake Infrastructure	$ -	$ 0.40	$ -	$ -	$ -	$ -	$ 0.40	$ -	$ (0.40)	$ 0.38	$ -	$ -	$ -	$ (0.02)	$ -	$ -	$ 0.38	$ -	$ -	$ -	$ 0.38
OSI Soft PI AMI Data Lake Setup Labor	$ -	$ 0.16	$ -	$ -	$ -	$ -	$ 0.16	$ -	$ (0.16)	$ 0.15	$ -	$ -	$ -	$ (0.01)	$ -	$ -	$ 0.15	$ -	$ -	$ -	$ 0.15
OSI Soft PI Configuration Support	$ 0.16	$ -	$ -	$ -	$ -	$ -	$ 0.16	$ (0.16)	$ -	$ -	$ -	$ -	$ -	$ (0.16)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Technical Lead	$ 0.16	$ 0.16	$ -	$ -	$ -	$ -	$ 0.32	$ (0.16)	$ (0.01)	$ -	$ -	$ -	$ -	$ (0.17)	$ -	$ 0.15	$ -	$ -	$ -	$ -	$ 0.15
TIBCO Labor Cost for Setup of New Tibco Instance	$ -	$ -	$ -	$ -	$ -	$ -	$ -							$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TIBCO Hardware	$ 0.53	$ -	$ -	$ -	$ -	$ -	$ 0.53	$ (0.53)	$ 0.64	$ -	$ -	$ -	$ -	$ 0.10	$ -	$ 0.64	$ -	$ -	$ -	$ -	$ 0.64
TIBCO Licensing	$ 3.52	$ -	$ -	$ -	$ 2.20	$ -	$ 5.72	$ (0.68)	$ 0.07	$ -	$ -	$ (0.01)	$ -	$ (0.62)	$ 2.84	$ 0.07	$ -	$ -	$ 2.19	$ -	$ 5.09
TIBCO RedHat and OracleLicensing	$ 0.27	$ -	$ -	$ -	$ -	$ -	$ 0.27	$ (0.27)	$ -	$ -	$ -	$ -	$ -	$ (0.27)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Data Management & Architecture	**$ 5.31**	**$ 1.97**	**$ 1.21**	**$ 1.10**	**$ 2.20**	**$ -**	**$ 11.80**	**$ (2.47)**	**$ (1.11)**	**$ 2.06**	**$ 0.78**	**$ 0.76**	**$ -**	**$ 0.02**	**$ 2.84**	**$ 0.86**	**$ 3.27**	**$ 1.89**	**$ 2.96**	**$ -**	**$ 11.81**

Data Management & Architecture O&M Compared to Docket No. 22-00058-UT

PNM Exhibit JCH-9a

Is contained in the following 1 page.

PNM Exhibit JCH-9a
Data Management & Architecture O&M Compared to Docket No. 22-00058-UT Forecast
($ in millions)

	Docket No. 22-00058-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Data Management - OSI PI Incremental Distribution	$ -	$ 0.13	$ 0.13	$ 0.13	$ 0.14	$ 0.14	$ 0.67	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.13	$ 0.13	$ 0.13	$ 0.14	$ 0.14	$ 0.67
Data Management - OSI PI Servers for AMI	$ -	$ 0.53	$ 0.55	$ 0.56	$ 0.58	$ 0.60	$ 2.83	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.53	$ 0.55	$ 0.56	$ 0.58	$ 0.60	$ 2.83
OT/IT/Data/Cybersecurity Architecture & Engineering (Capital costs not in line item, assumed to be within each capital initiative)	$ 1.11	$ 1.15	$ 0.44	$ 0.46	$ 0.48	$ 0.50	$ 4.15	$ (0.97)	$ -	$ -	$ -	$ (0.00)	$ 0.00	$ (0.97)	$ 0.14	$ 1.15	$ 0.44	$ 0.46	$ 0.48	$ 0.50	$ 3.18
Production Support/Application/Database/Info Analytics/ System Integration (For all applications ADMS/MDMS etc.)	$ -	$ -	$ 0.83	$ 0.86	$ 0.90	$ 0.94	$ 3.53	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.83	$ 0.86	$ 0.90	$ 0.94	$ 3.53
TIBCO Licensing	$ -	$ 0.04	$ 0.04	$ 0.23	$ 0.24	$ 0.25	$ 0.80	$ -	$ -	$ -	$ (0.18)	$ (0.19)	$ (0.20)	$ (0.58)	$ -	$ 0.04	$ 0.04	$ 0.04	$ 0.05	$ 0.05	$ 0.22
Total Data Management & Architecture	**$ 1.11**	**$ 1.85**	**$ 1.99**	**$ 2.25**	**$ 2.34**	**$ 2.44**	**$ 11.97**	**$ (0.97)**	**$ -**	**$ -**	**$ (0.18)**	**$ (0.19)**	**$ (0.20)**	**$ (1.54)**	**$ 0.14**	**$ 1.85**	**$ 1.99**	**$ 2.07**	**$ 2.15**	**$ 2.23**	**$ 10.43**

Data Management & Architecture O&M Compared to Docket No. 25-00049-UT

PNM Exhibit JCH-9b

Is contained in the following 1 page.

PNM Exhibit JCH-9b
Data Management & Architecture O&M Compared to Docket No. 25-00049-UT Forecast
($ in millions)

	Docket No. 25-00049-UT Forecast							Variance							Current Forecast						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Data Management - OSI PI Incremental Distribution	$ -	$ 0.13	$ 0.13	$ 0.13	$ 0.14	$ 0.14	$ 0.67	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.13	$ 0.13	$ 0.13	$ 0.14	$ 0.14	$ 0.67
Data Management - OSI PI Servers for AM	$ -	$ 0.53	$ 0.55	$ 0.56	$ 0.58	$ 0.60	$ 2.83	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.53	$ 0.55	$ 0.56	$ 0.58	$ 0.60	$ 2.83
OT/IT/Data/Cybersecurity Architecture & Engineering (Capital costs not in line item, assumed to be within each capital initiative)	$ 1.11	$ 1.15	$ 0.44	$ 0.46	$ 0.48	$ 0.50	$ 4.15	$ (0.97)	$ -	$ -	$ -	$ (0.00)	$ 0.00	$ (0.97)	$ 0.14	$ 1.15	$ 0.44	$ 0.46	$ 0.48	$ 0.50	$ 3.18
Production Support/Application/Database/Info Analytics/ System Integration (For all applications ADMS/MDMS etc.)	$ -	$ -	$ 0.83	$ 0.86	$ 0.90	$ 0.94	$ 3.53	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.83	$ 0.86	$ 0.90	$ 0.94	$ 3.53
TIBCO Licensing	$ -	$ 0.04	$ 0.04	$ 0.04	$ 0.05	$ 0.05	$ 0.22	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.04	$ 0.04	$ 0.04	$ 0.05	$ 0.05	$ 0.22
Total Data Management & Architecture	**$ 1.11**	**$ 1.85**	**$ 1.99**	**$ 2.07**	**$ 2.15**	**$ 2.23**	**$ 11.39**	**$ (0.97)**	**$ -**	**$ -**	**$ -**	**$ (0.00)**	**$ 0.00**	**$ (0.97)**	**$ 0.14**	**$ 1.85**	**$ 1.99**	**$ 2.07**	**$ 2.15**	**$ 2.23**	**$ 10.43**

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE COMPANY OF NEW MEXICO'S SECOND ANNUAL GRID MODERNIZATION REVIEW FILING PURSUANT TO THE COMMISSION'S FINAL ORDER	)	**Docket No. 26-00000__**
PUBLIC SERVICE COMPANY OF NEW MEXICO,	)	
Applicant.	)	

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

JONATHAN C. HAWKINS, Associate Director of Grid Modernization, 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 of Jonathan C. Hawkins,** and it is true and accurate based on my own personal knowledge and belief.

Dated this 10th day of April, 2026.

/s/ Jonathan C. Hawkins
JONATHAN C. HAWKINS

GCG # 534765