BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE COMPANY OF NEW MEXICO'S APPLICATION FOR APPROVAL OF AN AMENDED SPECIAL SERVICE CONTRACT WITH GREATER KUDU LLC, THREE PURCHASED POWER AGREEMENTS AND THREE ENERGY STORAGE AGREEMENTS PURSUANT TO 17.9.551 NMAC, AMENDED RATE NO. 36B, AMENDED RIDER NO. 47 AND AMENDED RIDER NO. 49	)	**Case No. 25-00048-UT**
PUBLIC SERVICE COMPANY OF NEW MEXICO,	)	
Applicant.	)	

DIRECT TESTIMONY

OF

STEPHEN JENKINS

June 13, 2025

NMPRC CASE NO. 25-00____-UT
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WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO

DIRECT TESTIMONY OF
STEPHEN JENKINS
NMPRC CASE NO. 25-00____-UT

I. INTRODUCTION AND PURPOSE

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

A. My name is Stephen Jenkins. I am the Manager of Transmission Planning Engineering at Public Service Company of New Mexico ("PNM"). My business address is Public Service Company of New Mexico, 2401 Aztec Rd. NE, Albuquerque, NM 87107.

Q. Please summarize your education and professional qualifications and describe your job duties.

A. My education and professional qualifications are provided in PNM Exhibit SJ-1. In my role as Manager of Transmission Planning, I oversee technical evaluation of generator interconnection applications to ensure reliability of the bulk electric system and inform company strategy surrounding the capital expansion of the transmission system.

Q. Have you previously testified in regulatory proceedings?

A. Yes. Cases in which I have testified before the New Mexico Public Regulation Commission ("Commission") are identified in PNM Exhibit SJ-1.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to address the transmission and interconnection investments associated with the three purchased power agreements ("PPAs") and

the three energy storage agreements ("ESAs") that PNM is seeking approval of in this case to meet the terms of the Third Amended and Restated Special Service Contract ("Restated SSC") with Greater Kudu LLC ("Customer")[1], as amended and proposed in PNM's Application. Specifically, my testimony will:

- Address the Rule 551.8(D)(3)[2] which requires a utility seeking approval of a long-term purchased power agreement ("LTPPA") to describe transmission costs which may include third-party transmission wheeling or construction of transmission to facilitate purchases under the LTPPA;
- Provide a description of PNM's generator interconnection and transmission service procedures;
- Describe the transmission and interconnection facilities required for the three PPAs and three ESAs; and
- Provide an overview of the Federal Energy Regulatory Commission ("FERC") process that governs open access transmission interconnections and how PNM used that process to identify the transmission facilities and cost responsibilities required to interconnect the Large Generating Facilities that are subjects of the PPAs and ESAs PNM seeks approval for in this case.

[1] Effective December 5, 2017, Facebook, Inc. assigned its interest in the SSC to its wholly owned subsidiary Greater Kudu LLC and executed an unconditional and irrevocable parental guaranty to guarantee Greater Kudu's prompt payment of all sums due under the SSC.
[2] 17.9.551 NMAC ("Rule 551").

Q. Please summarize the PPAs and ESAs PNM is seeking approval.

A. PNM seeks approval of the following PPAs which are described fully in the direct testimony of PNM Witness Barnard:

1) Star Light PPA will sell the energy output from the 100 megawatt ("MW") Star Light Energy Center facility ("Star Light Solar") to PNM over a 20-year term;
2) Four-Mile Mesa PPA will sell the output from the 100 MW 4-Mile facility ("4-Mile Solar") to PNM over a 20-year term;
3) Windy Lane PPA will sell the output from the 90 MW Windy Lane facility ("Windy Lane Solar") to PNM over a 20-year term;
4) Star Light ESA will sell the energy storage capacity from the 100 MW, 400 megawatt-hour ("MWh") Star Light Energy Center facility ("Star Light Storage") to PNM over a 20-year term;
5) Four-Mile Mesa ESA will sell the energy storage capacity from the 100 MW, 400 MWh 4-Mile facility ("4-Mile Storage") to PNM over a 20-year term; and
6) Windy Lane ESA will sell the energy storage capacity from the 68 MW, 272 MWh Windy Lane facility ("Windy Lane Storage") to PNM over a 20-year term.

Q. Are there any terms you will use in your testimony that you would like to define now?

A. Yes. It is necessary to identify PNM's Open Access Transmission Tariff ("OATT") which defines the terms established by FERC that govern the facilities necessary

for interconnection and transmission service associated with generation facilities interconnected to PNM's transmission system. All FERC regulated utilities that own, control, or operate transmission are required to have an OATT. The OATT is approved by FERC and provides rates and terms that determine how a utility runs its transmission business.

Q. Is PNM's OATT publicly accessible?

A. Yes. The complete OATT is available on PNM's Open Access Same-Time Information System website at http://www.oatioasis.com/pnm/index.html. Attachment N to the OATT, Large Generator Interconnection Procedures ("LGIP") describes the procedures that PNM must follow to interconnect Large Generating Facilities to its transmission system. Capitalized terms referenced in this testimony not defined herein are defined by the LGIP. The LGIP includes the standard Large Generator Interconnection Agreement ("LGIA"), which is the agreement that PNM enters into with Interconnection Customers that provides the terms, conditions, and costs applicable to the interconnection.

Q. Which OATT defined terms will you use in your testimony?

A. LGIA; Surplus Interconnection Agreement ("SIA"); Interconnection Customer's Interconnection Facilities ("ICIF"); Transmission Provider's Interconnection Facilities ("TPIF"); and Station Network Upgrades and Transmission System Network Upgrades.

Q. Has PNM executed LGIAs for the facilities included in the Application?

A. Yes, PNM has executed an LGIA for the Four Mile Mesa facilities on September 20, 2021, and Star Light facilities on July 30, 2024.

Q. Has PNM executed SIAs for the facilities included in the Application?

A. No, PNM has not yet executed an SIA for the Windy Lane facilities. The execution of this agreement is anticipated no later than June 30, 2025. Note that PNM has the existing signed LGIA with Casa Mesa wind under which the SIA for Windy Lane will exist.

Q. Does PNM's construction of the transmission facilities you describe below depend on Commission approval of the PPAs or ESAs?

A. No, PNM has an obligation to construct the transmission facilities under the LGIA given the obligations between PNM, as a FERC regulated Transmission Provider and Transmission Owner, and the Interconnection Customer, provided the Interconnection Customer has given Notice to Proceed and provided a proper form of financial security to PNM. This process is governed by FERC and independent of whether the Commission approves the PPAs and ESAs.

II. RULE 551 REQUIREMENTS

Q. Please describe the transmission costs PNM will incur or pay to receive the purchased power pursuant to the three PPAs and three ESAs (17.9.551.8 (D)(3) NMAC).

A. Based on the facilities study for each of the projects, PNM estimates the costs to be:

1) Star Light PPA and ESA

The TPIF costs required to interconnect this project were estimated in 2023 to be $289,208. The station costs are estimated to be $1,380,619. This project had estimated Network Upgrade costs; but after notice to proceed was given and the project was reevaluated, the need for the Cluster 13 Central sub-cluster Network Upgrades was deemed unnecessary to interconnect the Star Light facilities.

2) Four Mile PPA and ESA

The TPIF costs required to interconnect this project were estimated in 2021 to be $1,295,656. The station Network Upgrades were estimated to be $27,494,254, but this estimate assumed interconnection into San Juan North station. Subsequently, a material modification study in 2023 located the facility behind a shared gen-tie with San Juan Solar IA-PNM-2017-13. This eliminated the need to build-out San Juan North with eight additional breakers. Cost estimates are not completed as a part of a material modification request because the purpose of that study is to determine the impact the change might have on other interconnection customers but makes no guarantee it would not have impact on cost or schedule of the project itself. It is

expected that the total TPIF would be very similar in scope to Windy Lane which is also sharing a gen-tie with an existing 345 kV generator interconnection. This cost estimate is $3,334,067.

3) Windy Lane PPA and ESA

The TPIF costs required to interconnect this surplus interconnection were estimated in 2025 to be $3,334,067. This estimate was completed during the facilities study portion of the surplus interconnection study. Station upgrades are not part of surplus interconnection service as surplus uses existing station equipment only.

Q. Is it appropriate to consider the estimated Network Upgrades as being exclusively associated with the PPAs and ESAs?

A. Yes. The station Network Upgrades were defined in the previous questions. There are no transmission network upgrades associated with the projects beyond station Network Upgrades to add an additional terminal to an already existing substation. These Network Upgrades only add facilities required to interconnect into the existing station and would not be associated with any other project.

III. GENERAL DESCRIPTION OF PNM'S LARGE GENERATOR INTERCONNECTION PROCESS

Q. What is the process required to interconnect a new generation facility to the PNM transmission system?

A. An Interconnection Customer applies to interconnect through the LGIP process. PNM Transmission Planning performs an in-depth technical analysis of the project

providing estimated transmission upgrades and costs required to interconnect. At the conclusion of this process, an LGIA is executed memorializing the project specifications and study results. The Interconnection Customer then markets their project through various competitive processes to utility companies or in this case a large network customer. After selection through the bid process, the Interconnection Customer gives Notice to Proceed (NTP) to PNM, pays requisite securities, and begins the final design and engineering procurement and construction (EPC) of the project.

Q. Is PNM required to enter into an LGIA with an interconnection customer regardless of whether PNM purchases the power from the generator?

A. Yes. One of the purposes of the OATT is to provide open, non-discriminatory access to the transmission system for Interconnection Customers that comply with the LGIA process regardless of who they may eventually sell their power to. As a public utility owning, controlling, and operating its transmission system, PNM is federally required to comply with these regulatory requirements to provide such generation interconnection services. PNM is also, therefore, required to construct all necessary station Network Upgrades and TPIF to interconnect all Large Generating Facilities provided the Interconnection Customer complies with the terms of the LGIP. FERC Order 2003 requires Transmission Providers to follow a formal standardized process to study potential interconnectors. To ensure non-discriminatory access to the transmission system, this process must be

independent from evaluations by the Transmission Provider of its own potential generation resources.

Q. Who is responsible for the costs of the transmission facilities?

A. The Interconnection Customer to the LGIA is responsible for the costs of the TPIF required for their interconnection. The cost of the Network Upgrades, including station network upgrades, are recovered in base rates.

IV. DESCRIPTION OF THE INTERCONNECTION FACILITIES AND NETWORK UPGRADES REQUIRED FOR THE PPAS AND ESAS

Q. Please describe Star Light Solar and BESS.

A. Star Light Solar PPA and ESA is a hybrid solar photovoltaic ("PV") generation facility with a net output of 100 MW co-located with a 100 MW 4-hour battery energy storage system ("BESS") interconnecting into the existing Sun Ranch 115 kV substation located along I-25 around mile marker 200 bordering nearby Los Lunas, New Mexico and Belen, New Mexico in Valencia County. A map showing the location of Star Light solar is included in PNM Witness Barnard's Exhibit GBB-3.

Q. Please describe Four Mile Mesa Solar and BESS.

A. Four Mile Mesa Solar PPA and ESA is a solar PV generation facility with a net output of 100 MW co-located with a 100 MW 4-hour BESS interconnecting into the existing San Juan 345 kV substation located near the San Juan coal mine north

of Waterflow, NM. A map showing the location of Four Mile Mesa solar is included in PNM Exhibit GBB-2

Q. Please describe Windy Lane Solar and BESS.

A. Windy Lane Solar PPA and ESA is a hybrid solar PV generation facility with a net output of 90 MW co-located with a 68 MW 4-hour BESS interconnecting behind a shared POI with an existing wind generating facility known as Casa Mesa. Casa Mesa is located North of PNM 345 kV substation Taiban Mesa which is the POI of the project. Taiban Mesa is located in a very rural location along NM-252 14 miles northeast of Fort Sumner, New Mexico the county seat of De Baca County, where the project is located. A map showing the location of Windy Lane Solar is included in PNM Exhibit GBB-4.

Q. Please identify the interconnection facilities required to interconnect each of the PPA projects.

A. Star Light requires the addition of one breaker at Sun Ranch to create the required termination at Sun Ranch. Both Four Mile Mesa and Windy Lane are interconnecting behind existing interconnections at San Juan Solar and Casa Mesa wind respectively.

Q. Will PNM notify the Commission prior to proceeding with the interconnection facilities for each of these projects?

A. Yes. 17.5.440.9 NMAC requires such notification. PNM will submit the required filing in a timely manner.

Q. Does interconnection of the ESA projects require additional facilities?

A. None beyond those required to interconnect the PPA portion of each project.

Q. Are transmission upgrades required for the ESA projects?

A. No.

Q. Please identify the interconnection facilities required to interconnect the ESA projects.

A. All the ESAs are interconnecting to the Interconnection Customer facilities behind a shared gen-tie with the PPA portion of each project.

Q. What is the cost identified in the LGIA to interconnect the ESA projects?

A. The costs are included with the PPA portion of each project; these costs were identified earlier in my testimony.

Q. Will PNM notify the Commission prior to proceeding with the interconnection facilities for the ESA projects?

A. Yes. PNM will submit timely notice in accordance with 17.5.440.9 NMAC.

V. OTHER MATTERS

Q. What are the estimated costs of on-going operations and maintenance of the transmission facilities outlined herein?

A. Annual operations and maintenance costs are roughly estimated to be under $2,000 using the 0.1% rule-of-thumb multiplier to the capital cost of the incremental facility addition of a single breaker at Sun Ranch.

Q. Are the costs of the transmission facilities required to interconnect the large generating facilities that are the subject of the PPAs and ESA reasonable?

A. Yes. The costs were determined through the Interconnection Studies in accordance with the FERC-approved OATT. PNM is obligated to incur the costs to construct the facilities necessary to interconnect the transmission facilities regardless of whether the PPA and ESA in this Filing are approved.

VI. CONCLUSION

Q. Does this complete your direct testimony?

A. Yes.

GCG#533861

Resume of Stephen Jenkins

PNM Exhibit SJ-1

Is contained in the following 1 page.

Stephen L Jenkins

Professional Experience

Public Service Company of New Mexico (2022-) Transmission Planning Manager

- Lead transmission planning team of 7 and various consultants through 10- and 20-year transmission planning studies, generation interconnection process, FERC regulatory reforms of the open access transmission tariff (OATT), and liaison for technical interactions with developers.
- Manage subject matter experts on regulatory standards covering topics such as modeling, transmission planning coordination, interconnection process, system restoration, and facility ratings.
- Leverage power system modeling packages including GE PSLF, TARA and PSCAD to model, analyze, predict, and optimize the performance and behavior of transmission level grid design and planning. Lead development of new tools like the FERC 2023 heatmap, GSAT, THCT, and more.
- Researcher and active, regular presenter at NATF, NERC, IEEE, and EPRI industry meetings. Key areas of interest include renewable energy integration, datacenter load modeling, power system dynamics, power electronics, and inverter-based resource modeling.

Meta Platforms, Inc (2020-2022) Electrical Subject Matter Expert – Senior

- Leader of electrical infrastructure systems and equipment spanning from 115 kV substation down to 120 V commercial office space.
- Responsible for electrical systems for substation, conventional hyper-scale data center in building 3, and integration of new technologies for cold storage data center in building 4.
- Account manager for 5-year ABB maintenance contract and $10 million budget which covered all electrical systems except for UPS at the data center.
- Hands-on troubleshooting, repair, and maintenance of electrical equipment as well as management and oversight of 3rd party contractors and consultants acting in support of operations requirements.
- Coordination and scheduling of contractor and site crews through in-house developed project management and scheduling software.
- Author processes, procedures and reporting metrics including switching procedures, lock out tag out safety procedures, arc flash studies.
- On-site lead for root-cause analysis activities in system protection and utility transmission service. Performed root-cause analysis for voltage sag event that tripped over-current protection, commissioning failure on substation transformer caused by incorrect metering transformer tap ratio, and communications failure of fiber channels between substation switch gear and PNM.
- Provide training to Critical Facility Engineers on electrical equipment and procedures. Qualification training to allow these crews to work on electrical systems during shift work.

El Paso Electric Company (2015-2020) System Operations Engineer – Staff

- Resolve system issues through both real time and planned power flow studies with GE PSLF, EMS Network Applications, and Dispatcher Training Simulator on GE-Alstom EMS.
- Perform daily evaluations of the power system to forecast and prevent issues in real time in support of NERC TOP-001. Served as Subject Matter Expert in 2018 audit for TOP-001.
- Build team processes from ground up to support of new TOP-001-4 compliance in 2017 starting alone in 2017 and ending off with a team of 4 in 2020.
- Develop and use tools to monitor dynamic system conditions in real time to prevent overloads on the loss of the most severe single contingency.
- Draft and review standard operating procedures to include industry best practices and address new concerns and standards in the industry.
- Ensure that the company meet requirements of industry standards (such as NERC BAL and TOP)

Education Background

Bachelor of Science in Electrical Engineering May 13th, 2017
New Mexico State University in Las Cruces, NM

Certifications

Professional Engineer (New Mexico) Earned: June 15th, 2022
New Mexico Board of Licensure for Professional Engineers and Professional Surveyors. License: #27906

GCG #533191v2

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IN THE MATTER OF PUBLIC SERVICE COMPANY OF NEW MEXICO'S APPLICATION FOR APPROVAL OF AN AMENDED SPECIAL SERVICE CONTRACT WITH GREATER KUDU LLC, THREE PURCHASED POWER AGREEMENTS AND THREE ENERGY STORAGE AGREEMENTS PURSUANT TO 17.9.551 NMAC, AMENDED RATE NO. 36B, AMENDED RIDER NO.47 AND AMENDED RIDER NO. 49	)	**Case No. 25 -00048-UT**
PUBLIC SERVICE COMPANY OF NEW MEXICO	)	

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

STEPHEN JENKINS, Manager of Transmission Planning Engineering, 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 Stephen Jenkins,** and it is true and accurate based on my own personal knowledge and belief.

DATED this 13th day of June, 2025.

/s/ Stephen Jenkins Stephen L Jenkins, PE 2025.06.13 09:26:38 -06'00'

STEPHEN JENKINS