

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
ABANDONMENT OF SAN JUAN ) Case No. 19-00018-UT  
GENERATING STATION UNITS 1 AND 4 )

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
CONSOLIDATED APPLICATION FOR )  
APPROVALS FOR THE ABANDONMENT, ) Case No. 19-00195-UT  
FINANCING, AND RESOURCE REPLACEMENT )  
FOR SAN JUAN GENERATING STATION )  
PURSUANT TO THE ENERGY TRANSITION ACT )

**DIRECT ERRATA TESTIMONY**

**OF**

**RONALD N. DARNELL**

**September 20, 2019**

**DIRECT ERRATA TESTIMONY  
OF RONALD N. DARNELL  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1   **Q.   PLEASE STATE YOUR NAME.**

2   **A.**   My name is Ronald N. Darnell. I am the Senior Vice President, Public Policy, for  
3       Public Service Company of New Mexico (“PNM” or “Company”). I submitted  
4       Direct Testimony in support of PNM’s Consolidated Application on July 1, 2019.

5

6   **Q.   WHAT IS THE PURPOSE OF YOUR DIRECT ERRATA TESTIMONY?**

7   **A.**   My direct errata testimony describes revisions to portions of my direct testimony  
8       filed on July 1, 2019. The revisions are needed to reflect corrections and changes  
9       to modeling information, cost estimates and potential bill impact that were used to  
10      develop and evaluate the four resource scenarios presented in PNM’s direct case  
11      filed on July 1, 2019.

12

13   **Q.   WHY IS PNM FILING CORRECTIONS TO ITS TESTIMONY AT THIS**  
14      **TIME?**

15   **A.**   PNM is filing these errata to testimonies because some errors in its modeling  
16      calculations and revenue requirement estimates were discovered in the course of  
17      responding to discovery and as PNM prepared the electronic models for parties to  
18      evaluate PNM’s proposed resource portfolio and other scenarios. It was  
19      important for PNM to provide accurate working models and input data to the  
20      parties as quickly as we were able to validate the information, so that the parties  
21      could confidently conduct their own work, and we have done so by providing  
22      updated modeling inputs and outputs through the discovery process.

23

**DIRECT ERRATA TESTIMONY  
OF RONALD N. DARNELL  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1 Although the miscalculations do not impact PNM's overall recommendations and  
2 proposed replacement resources, they minimally reduce the first full-year (*i.e.*  
3 2023) estimated customer savings that result from the shutdown of the San Juan  
4 coal plant in 2022. Nevertheless, the expected savings over 20 years are  
5 estimated to slightly increase relative to the July 1, 2019 filing. One result of the  
6 revised data and cost of service requirements is that some of the resource  
7 selections in Scenario 2 have changed; the result allows more renewable energy  
8 production in the San Juan region by replacing a more conventional gas-fired  
9 plant with a combination of smaller-capacity, more flexible gas units and a  
10 solar/battery hybrid purchased power agreement resource.

11  
12 While errors of this type are not uncommon in modeling the complicated process  
13 of retiring a coal plant and have not caused materials changes to the analysis, the  
14 individual data changes flow through the testimony and exhibits of several  
15 witnesses. PNM believes it is important to be transparent in explaining how these  
16 changes impact the comparisons among the scenarios as part of the errata process.  
17 In this filing, we are providing corrected testimony and exhibits as appropriate so  
18 that stakeholders have all the updated information available to them.

19  
20 **Q. WHO ELSE IS PROVIDING TESTIMONY IN SUPPORT OF THE**  
21 **CORRECTIONS?**

22 **A.** PNM Witnesses Thomas G. Fallgren, Nick Wintermantel and Nicholas L. Phillips  
23 provide direct errata testimony and summarize the changes and explain how

**DIRECT ERRATA TESTIMONY  
OF RONALD N. DARNELL  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1 certain data corrections impact the modeling outcomes. PNM Witness Henry E.  
2 Monroy explains changes to the 2023 revenue requirements for each scenario.  
3

4 In addition, PNM is filing an errata pleading that presents the limited corrections  
5 to calculated amounts in the testimonies and exhibits of PNM Witnesses Roger  
6 W. Nagel and Michael J. Settlage. The errata pleading also includes the corrected  
7 pages to the direct testimony and exhibits for each witness filing errata testimony.  
8 The testimonies included in the evidentiary hearing exhibits submitted by PNM  
9 will incorporate the corrections as filed in the errata pleading.  
10

**CONCLUSION**

11  
12 **Q. DO YOU HAVE ANY CLOSING COMMENTS?**

13 **A.** The replacement portfolio recommended by PNM remains unchanged, as does the  
14 relative ranking of the four scenarios presented. The modeling continues to  
15 demonstrate that, while there may be other reliable scenarios for replacing the San  
16 Juan coal plant when it is retired, PNM's proposed Scenario 1 remains a low-cost,  
17 diverse mix of resources that appropriately balances the replacement factors found  
18 in the Energy Transition Act.  
19

20 **Q. DOES THIS CONCLUDE YOUR ERRATA TESTIMONY?**

21 **A.** Yes.

GCG#526091

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

<b>IN THE MATTER OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF NEW MEXICO'S</b>	)	
<b>ABANDONMENT OF SAN JUAN</b>	)	<b>Case No. 19-00018-UT</b>
<b><u>GENERATING STATION UNITS 1 AND 4</u></b>	<b>)</b>	

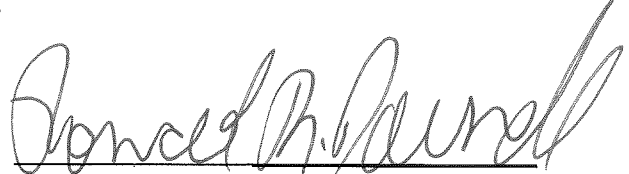
<b>IN THE MATTER OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF NEW MEXICO'S</b>	)	
<b>CONSOLIDATED APPLICATION FOR</b>	)	
<b>APPROVALS FOR THE ABANDONMENT,</b>	)	<b>Case No. 19-00195-UT</b>
<b>FINANCING, AND RESOURCE REPLACEMENT</b>	)	
<b>FOR SAN JUAN GENERATING STATION</b>	)	
<b><u>PURSUANT TO THE ENERGY TRANSITION ACT</u></b>	<b>)</b>	

**AFFIDAVIT**

STATE OF NEW MEXICO	)	
	) ss	
COUNTY OF BERNALILLO	)	

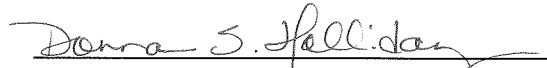
**RONALD N. DARNELL, Senior Vice President of Public Policy at Public Service Company of New Mexico and PNMR Services Company**, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing **Direct Errata Testimony of Ronald N. Darnell** and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 19<sup>th</sup> day of September, 2019.

  
RONALD N. DARNELL

SUBSCRIBED AND SWORN to before me this 19<sup>th</sup> day of September, 2019.



  
NOTARY PUBLIC IN AND FOR  
THE STATE OF NEW MEXICO

My Commission Expires:

1.21.2020

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
ABANDONMENT OF SAN JUAN ) Case No. 19-00018-UT  
GENERATING STATION UNITS 1 AND 4 )

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
CONSOLIDATED APPLICATION FOR )  
APPROVALS FOR THE ABANDONMENT, ) Case No. 19-00195-UT  
FINANCING, AND RESOURCE REPLACEMENT )  
FOR SAN JUAN GENERATING STATION )  
PURSUANT TO THE ENERGY TRANSITION ACT )

**SUPPLEMENTAL AND DIRECT ERRATA TESTIMONY**

**OF**

**THOMAS G. FALLGREN**

**September 20, 2019**

**SUPPLEMENTAL AND DIRECT ERRATA TESTIMONY  
OF THOMAS G. FALLGREN  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

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

2    **A.**    My name is Thomas G. Fallgren. I am Vice President of Generation for Public  
3           Service Company of New Mexico (“PNM”). My business address is Public  
4           Service Company of New Mexico, 2401 Aztec Rd, NE, Albuquerque, New  
5           Mexico 87107. I filed Direct Testimony on July 1, 2019, in support of PNM’s  
6           Consolidated Application.

7  
8    **Q.    WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL AND DIRECT**  
9           **ERRATA TESTIMONY?**

10   **A.**    The purpose of my Supplemental and Direct Errata Testimony is to identify and  
11           explain certain corrections to my July 1, 2019 Direct Testimony. I address the  
12           following corrections:

- 13           • There is an updated exhibit and an amendment to the Engineering,  
14           Procurement and Construction (“EPC”) contract between PNM and  
15           ProEnergy Services, LLC (“ProEnergy”) for the proposed 280 MW Pinon  
16           Gas Plant which is attached to my Direct Testimony as PNM Exhibit  
17           TGF-13.
- 18           • The estimated capital costs and the estimated operations and maintenance  
19           (“O&M”) costs for the Pinon Gas Plant were revised.
- 20           • The estimated capital costs for the Zamora Storage Project were  
21           overstated.

22



**SUPPLEMENTAL AND DIRECT ERRATA TESTIMONY  
OF THOMAS G. FALLGREN  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

- 1           • The New Mexico Gross Receipts Taxes (“GRT”) associated with the
- 2           Jicarilla Storage Project and the Arroyo Storage Project were understated
- 3           in Scenario 1. This change also impacted the battery storage power
- 4           purchase agreements (“PPAs”) in all other scenarios.
- 5           • The estimate for natural gas transportation costs for the gas projects that
- 6           were modeled were overstated.

7

8   **Q. PLEASE EXPLAIN THE REVISIONS WITH RESPECT TO THE EPC**

9   **CONTRACT FOR THE PINON GAS PLANT.**

10   **A.** The EPC contract for the Pinon Gas Plant is attached as PNM Exhibit TGF-13 to

11   my Direct Testimony. Exhibit G to the EPC contract, which is a list of approved

12   subcontractors for the project, is now being provided. In addition, PNM and

13   ProEnergy entered into an amendment (“Amendment”) dated July 19, 2019, to the

14   EPC contract related to the purchase of the seventh 40 MW LM6000 gas turbine

15   for 280 MW Pinon Gas Plant. Exhibit G and the Amendment are attached to this

16   testimony as PNM Exhibit TGF-1(Supp. 9-20-19).

17

18   **Q. WHAT REVISION IS PNM MAKING FOR THE ESTIMATED COST FOR**

19   **THE PINON GAS PLANT?**

20   **A.** The initial total estimate for the Pinon Gas Plant in my direct testimony was

21   \$190,519,121 for all seven units. The revised estimated cost is \$189,865,264. In

22   the course of finalizing the Amendment to the ProEnergy EPC contract, PNM

23   discovered that an escalation factor had inadvertently been applied twice to the

**SUPPLEMENTAL AND DIRECT ERRATA TESTIMONY  
OF THOMAS G. FALLGREN  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1        estimated cost of the seventh unit. In addition, the 2% percent cost of the  
2        performance bond had been applied to the higher estimated project cost and New  
3        Mexico GRT was incorrectly applied. Accounting for these corrections reduces  
4        the estimate for the Pinon Gas Plant by \$653,857.

5  
6        **Q.     PLEASE DESCRIBE THE NEED FOR THE REVISION TO THE O&M**  
7        **COSTS FOR THE PINON GAS PLANT.**

8        **A.**     The initial O&M cost estimates omitted certain variable and fixed costs. The  
9        annualized O&M costs for the Pinon Gas Plant were listed in my Direct  
10       Testimony on page 76, line 4 as \$892,500 for the year 2022, and on page 76, line  
11       5 as \$905,888 for 2023. These values inadvertently only represented the variable  
12       Long Term Service Agreement costs. They have been corrected with a revised  
13       O&M estimate of 2022 costs of \$2,363,604, and 2023 costs of \$2,399,058 which  
14       are now reflected in the revenue requirements provided in the Direct Errata  
15       Testimony of PNM Witness Monroy and the estimated rate impacts provided in  
16       the Errata for PNM Witness Settlage.

17  
18       **Q.     WHAT CORRECTION IS PNM MAKING WITH RESPECT TO THE**  
19       **ESTIMATED COST FOR THE ZAMORA STORAGE PROJECT?**

20       **A.**     The initial total estimate for the Zamora Storage Project was \$38,623,602 shown  
21       in PNM Table TGF-9 on page 82 of my Direct Testimony. The actual estimated  
22       cost for the Zamora Storage Project is \$38,473,602. PNM discovered that an  
23       earlier, higher estimate for the Zamora Storage Project had inadvertently been

**SUPPLEMENTAL AND DIRECT ERRATA TESTIMONY  
OF THOMAS G. FALLGREN  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1 used in developing the cost estimates in my Direct Testimony. PNM ultimately  
2 negotiated more favorable pricing for the Zamora Storage Project which was  
3 correctly reflected in PNM Exhibit TGF-15 as filed on July 1, 2019.

4  
5 **Q. PLEASE EXPLAIN THE REVISIONS WITH RESPECT TO THE**  
6 **ESTIMATES FOR THE GRT ASSOCIATED WITH THE JICARILLA**  
7 **STORAGE PROJECT AND THE ARROYO STORAGE PROJECT.**

8 **A.** Payments associated with PPAs are generally exempt from New Mexico GRT.  
9 However, battery storage PPAs include a capacity payment and are therefore  
10 subject to GRT. The updated modeling reflects the appropriate GRT for all  
11 battery storage PPAs. The specific GRT for the capacity payment for Arroyo  
12 Storage is \$0.50/kw-mo and \$0.69/kw-mo for Jicarilla Storage. This is reflected  
13 in the Direct Errata Testimony of PNM Witness Monroy.

14  
15 **Q. WHAT ADJUSTMENTS HAVE BEEN MADE WITH RESPECT TO THE**  
16 **ESTIMATED COSTS FOR GAS TRANSPORTATION?**

17 **A.** In estimating the costs for the gas facilities that were modeled, PNM did not use  
18 the then latest estimated costs for the delivery of natural gas. PNM utilized a 0.18  
19 \$/mmBTU transportation rate for delivery of natural gas to the San Juan site. The  
20 older estimate is higher, resulting in an overstatement of natural gas transportation  
21 costs for certain gas facilities. The correct natural gas cost estimate is 0.15  
22 \$/mmBTU. This change reduced the fixed gas transportation and variable O&M

**SUPPLEMENTAL AND DIRECT ERRATA TESTIMONY  
OF THOMAS G. FALLGREN  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1 rates that were provided by PNM Witness Nagel and impacted the modeling  
2 results. These changes have been incorporated into the revised modeling.

3

4 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.**

5 **A.** The changes to the modeling reaffirm the conclusions PNM reached in its original  
6 filing. In addition, the revised modeling confirms the benefits of the selected  
7 utility owned battery resources.

8

9 **Q. DOES THIS CONCLUDE YOUR DIRECT ERRATA TESTIMONY?**

10 **A.** Yes it does.

GCG#526090

Amendment 1 and Exhibit G to Pinon Gas EPC Contract

## PNM Exhibit TGF-1(Supp. 9-20-19)

Is contained in the following 48 pages.

## EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

**AMENDMENT NO. 1****ENGINEERING, PROCUREMENT, AND CONSTRUCTION CONTRACT  
PIÑON GAS PLANT**

This Amendment No. 1 dated as of July 19, 2019 (“Effective Date”), is by and between Public Service Company of New Mexico (“Owner” or “PNM”) and ProEnergy Services, LLC (“Contractor”). PNM and Contractor are sometimes referred to individually in this Amendment No. 1 as “Party” and collectively as “Parties.”

**RECITALS**

**WHEREAS**, Owner and Contractor are parties to an Engineering, Procurement, and Construction Contract dated as of June 27, 2019 (“EPC Contract”);

**WHEREAS**, the Project that is the subject of the EPC Contract includes the design, procurement, construction, testing and commissioning of a six (6) Unit LM6000 natural gas power generation facility at a site near Waterflow, New Mexico, with an option for an additional LM6000 package (“7<sup>th</sup> Unit”) and an additional generator step-up transformer (“4<sup>th</sup> GSU”);

**WHEREAS**, Attachment D-1 to the EPC Contract includes option pricing for the 7<sup>th</sup> Unit and 4<sup>th</sup> GSU, which are to be installed as part of the Project if requested by Owner and pursuant to the terms of the EPC Contract;

**WHEREAS**, Owner has notified Contractor to install the 7<sup>th</sup> Unit and 4<sup>th</sup> GSU as part of the Project;

**WHEREAS**, the Parties wish to modify the Contract Price consistent with Attachment D-1 to reflect the addition of the 7<sup>th</sup> Unit and 4<sup>th</sup> GSU to the Project and to make other related amendments and supplements to the EPC Contract.

**AGREEMENT**

**NOW, THEREFORE**, in consideration of these premises and of the mutual covenants and agreements set forth in this Amendment No. 1, the receipt and sufficiency of which are hereby acknowledged, Owner and Contractor agree to the following:

1. **Defined Terms.** All capitalized terms used in this Amendment No. 1 and not otherwise defined or modified herein shall have the meanings set forth in the EPC Contract.
2. **Recitals.** Recital A is hereby deleted in its entirety and replaced with the following:
  - A. Owner desires to develop a multiple Unit electricity generating facility fueled with natural gas with a combined nameplate rating of approximately Two Hundred Eighty (280) megawatts to be constructed in and located near Waterflow, New Mexico.

## EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

3. **Definitions.** The definition of “Project” in Section 1.1 is hereby deleted in its entirety and replaced with the following:

“**Project**” means the complete seven (7) Unit LM6000 natural gas power generation facility project and Project Substation to be located in San Juan County and designed, procured, constructed, tested and commissioned under this Contract, together with all ancillary equipment and subsystems, all equipment, supplies and materials necessary to produce electric energy (including the Equipment and Materials), together with all supporting improvements and interconnections (whether inside or outside the Project limits) to be furnished by Contractor, as generally described in, and including all items described, in or inferable from, this Contract and Exhibit A.

4. **Contract Price.** Section 6.1 is hereby deleted in its entirety and replaced with the following:

6.1 **Contract Price.** As full compensation for the Work and all of Contractor’s obligations, hereunder Owner shall pay to Contractor a fixed price amount of One Hundred Fifty-Two Million Five Hundred Seventy-Eight Thousand Four Hundred Fifteen Dollars and Fifty-Four Cents (\$152,578,415.54) (the “Contract Price”), plus applicable gross receipts taxes. The Contract Price shall be changed only by the express terms set forth in this Contract including Changes in Work approved in accordance with Article 17, and the terms of Article 22, Suspension. The Contract Price shall be paid in accordance with Article 7.

5. **Addendum 1.** The attached Addendum 1, Summary of Major Terms, shall be added to the EPC Contract.
6. **Exhibit B.** Exhibit B, Milestone Payment Schedule, is hereby amended by replacing it in its entirety with Exhibit B attached hereto.
7. **Attachment D-1.** Attachment D-1, Pricing Information Form, is hereby amended by replacing it in its entirety with Attachment D-1 attached hereto.
8. **Exhibit G.** Exhibit G, Approved Subcontractors, attached hereto shall be added to the EPC Contract.
9. **Exhibit N.** Exhibit N, Cancellation Schedule, is hereby amended by replacing it in its entirety with Exhibit N attached hereto.
10. **Exhibit O.** Exhibit O, Initial Project Schedule, is hereby amended by replacing it in its entirety with Exhibit O attached hereto.
11. **Exhibit Q.** Exhibit Q is hereby amended by deleting the reference to “6xLM6000” in the

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

- introductory paragraph and inserting “7xLM6000.”
12. **Governing Law.** This Amendment No. 1 shall be governed by the laws of the State of New Mexico, excluding its conflict of laws provisions.
  13. **Counterpart Execution.** This Amendment No. 1 may be executed by the Parties in any number of counterparts (and by each of the Parties on separate counterparts), each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument.
  14. **Entire Agreement.** The EPC Contract, as expressly amended and together with this Amendment No. 1, constitutes the entire agreement of the Parties with respect to the matters set forth therein and supersedes any and all prior oral or written understandings. All references in the EPC Contract to the “Contract” shall be deemed to refer to the EPC Contract, as amended by this Amendment No. 1. All terms and conditions of the EPC Contract not expressly amended herein remain in full force and effect as originally executed.

[Signature page(s) follow]



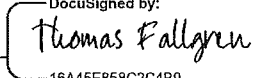
EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

IN WITNESS WHEREOF, the Parties have caused this Amendment No. 1 to be executed by their authorized representative as of the Effective Date.

OWNER:

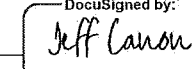
PUBLIC SERVICE COMPANY OF NEW MEXICO  
A New Mexico corporation

By:  \_\_\_\_\_  
DocuSigned by:  
16A45E858C2C4B9...

Its: Vice President, PNM Generation

CONTRACTOR:

PROENERGY SERVICES, LLC  
a Missouri limited liability company

By:  \_\_\_\_\_  
DocuSigned by:  
41406D23D30F4CC...

Its: President

## EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

**ADDENDUM 1**  
**SUMMARY OF MAJOR TERMS**  
**ENGINEERING, PROCUREMENT, AND CONSTRUCTION CONTRACT**  
**PROENERGY SERVICES, LLC**

<b>SUBJECT</b>	<b>TERMS</b>
Effective Date	June 27, 2019 (Introductory paragraph); subject to NMPRC approval (§34.2(B))
Owner	Public Service Company of New Mexico (Introductory paragraph)
Contractor	ProEnergy Services, LLC (Introductory paragraph)
Project	7-Unit LM6000 natural gas power generation facility project and project substation (Amendment No. 1, §3)
Location	San Juan County (Definition of "Project," §1.1)
Contract Price	\$152,578,415.54 (Amendment No. 1, §4)
Regulatory Approvals	NMPRC Approval (§34.2)
Limited Notice to Proceed	<ul style="list-style-type: none"> <li>No later than Nov. 15, 2019 (Engineering work to support air permit application requirements) (§8.1.2)</li> <li>No later than March 31, 2020 (Engineering services and other Project support services (§8.1.2; Exhibit O)</li> </ul>
Notice to Proceed	Date of NMPRC Approval, no later than September 30, 2020 (§8.1, §34.2)
Mechanical Completion, All Units	March 7, 2022 (Exhibit O)
Commissioning and Start-Up	March 15, 2022 (Exhibit O)
Substantial Completion	April 15, 2022 (Exhibit O)
Final Completion	June 1, 2022 (Exhibit O)
Delay Liquidated Damages	<ul style="list-style-type: none"> <li>\$300/MW of guaranteed net capacity for each day of delay beyond the Substantial Completion Guaranteed Date (§16.1)</li> <li>Capped at \$55,000/MW of guaranteed net capacity (§16.1)</li> </ul>
Buy-down Amounts	<ul style="list-style-type: none"> <li>Net Electrical Output Deficiency: \$800,000/MW x (Net Electrical Output Guarantee – Net Electrical Output); provided Net Electrical Output is &gt; 37,288 kW (Exhibit H)</li> <li>Net Heat Rate: \$120/Btu/kWh x (Net Heat Rate – Net Heat Rate Guarantee); provided Net Heat Rate &lt; 10,128 Btu/kWh (Exhibit H)</li> </ul>
Maximum Contractor Aggregate Liquidated Damages	20% of Contract Price (Definitions, §1.1)
Warranty Period	24 months beginning on the Substantial Completion Date (Definitions, §1.1)
Early Termination	<ul style="list-style-type: none"> <li>Failure to obtain NMPRC Approval (§34.2(c), (d) and (e))</li> <li>Notice to Proceed not issued by Sept. 30, 2020 (§8.1.3)</li> <li>Contractor default (§20.2(a))</li> <li>Owner default (§20.5(b))</li> <li>Owner's sole discretion (§21.1)</li> <li>Owner's inability to obtain permits within 360 days of Notice to Proceed (§21.4)</li> <li>End of suspension period with no notice to resume work (§22.2)</li> </ul>
Limitations of Liability (General)	<ul style="list-style-type: none"> <li>Contractor Liability Cap: 100% of Contract Price (§1.1) up to Substantial Completion, thereafter reduced to 10% of Contract Price (§32.2)</li> <li>Owner Liability Cap: 100% of Contract Price (§32.3)</li> </ul>

EXECUTION VERSION  
Amendment 001 – PNM Contract No. 1057666

**EXHIBIT B**  
**Milestone Payment Schedule**

Combustion Turbine Generator (CTG) Packages	Milestone No.	Description	Estimated Major Milestone Date	Estimated Weeks after NTP	% Price	Amount w/o Taxes	Cumulative Amount w/o Taxes	Amount w/Taxes	Cumulative Amount w/Taxes
	1	NTP	30-Sep-20	0	20.00%	\$14,350,000.00	\$14,350,000.00	\$15,291,718.75	\$15,291,718.75
	2	Progress	30-Oct-20	4	10.00%	\$7,175,000.00	\$21,525,000.00	\$7,645,859.38	\$22,937,578.13
	3	Progress	30-Nov-20	9	10.00%	\$7,175,000.00	\$28,700,000.00	\$7,645,859.38	\$30,583,437.50
	4	Progress	31-Dec-20	13	10.00%	\$7,175,000.00	\$35,875,000.00	\$7,645,859.38	\$38,229,296.88
	5	Progress	29-Jan-21	17	10.00%	\$7,175,000.00	\$43,050,000.00	\$7,645,859.38	\$45,875,156.25
	6	Progress	26-Feb-21	21	10.00%	\$7,175,000.00	\$50,225,000.00	\$7,645,859.38	\$53,521,015.63
	7	Progress	30-Mar-21	26	10.00%	\$7,175,000.00	\$57,400,000.00	\$7,645,859.38	\$61,166,875.00
	8	Progress	30-Apr-21	30	10.00%	\$7,175,000.00	\$64,575,000.00	\$7,645,859.38	\$68,812,734.38
	9	RTS Payment	17-May-21	33	10.00%	\$7,175,000.00	\$71,750,000.00	\$7,645,859.38	\$76,458,593.75

EXECUTION VERSION  
Amendment 001 – PNM Contract No. 1057666

EPC	Milestone No.	Description	Estimated Major Milestone Date	Estimated Weeks after NTP	% Price	Amount w/o Taxes	Cumulative Amount w/o Taxes	Amount w/Taxes	Cumulative Amount w/Taxes
	1	Air Permit Engineering	2-Jan-20	NA	0.00%	\$0.00	\$0.00	\$0.00	\$0.00
	2	LNTF - Engineering Kick-off	31-Mar-20	NA	0.00%	\$0.00	\$0.00	\$0.00	\$0.00
	3	Engineering Deliverable, Milestone 1 - Initial IFC Rev 0	30-Apr-20	NA	0.00%	\$0.00	\$0.00	\$0.00	\$0.00
	4	Engineering Deliverable, Milestone 2 - Initial IFC Rev 0	29-May-20	NA	0.00%	\$0.00	\$0.00	\$0.00	\$0.00
	5	Engineering Deliverable, Milestone 3 - Initial IFC Rev 0	30-Jun-20	NA	0.00%	\$0.00	\$0.00	\$0.00	\$0.00
	6	Engineering Deliverable, Milestone 4 - Initial IFC Rev 0	31-Jul-20	NA	0.00%	\$0.00	\$0.00	\$0.00	\$0.00
	7	Engineering Deliverable, Milestone 5 - Initial IFC Rev 0	31-Aug-20	NA	0.00%	\$0.00	\$0.00	\$0.00	\$0.00
	8	NTP	30-Sep-20	NA	5.00%	\$4,041,420.78	\$4,041,420.78	\$4,041,420.78	\$4,041,420.78
	9	ECM PO Issued	1-Oct-20	0	3.00%	\$2,424,852.47	\$6,466,273.24	\$2,563,983.41	\$6,828,404.19
	10	GSU Transformer PO Issued	1-Oct-20	0	2.50%	\$2,020,710.39	\$8,486,983.63	\$2,153,319.51	\$8,778,723.69
	11	Mobilization	1-Mar-21	22	4.75%	\$3,839,349.74	\$12,326,333.37	\$4,091,307.06	\$12,870,030.76
	12	Civil Works Complete-CTG 1	21-Apr-21	29	1.00%	\$808,284.16	\$13,134,617.52	\$861,327.80	\$13,731,358.56
	13	Civil Works Complete-CTG 2	21-Apr-21	29	1.00%	\$808,284.16	\$13,942,901.68	\$861,327.80	\$14,592,886.36
	14	Civil Works Complete-ECM 1	21-Apr-21	29	1.00%	\$808,284.16	\$14,751,185.84	\$861,327.80	\$15,454,014.17
	15	Civil Works Complete-ECM 2	21-Apr-21	29	1.00%	\$808,284.16	\$15,559,469.99	\$861,327.80	\$16,315,341.97
	16	Civil Works Complete-CTG 3	4-May-21	31	1.00%	\$808,284.16	\$16,367,754.15	\$861,327.80	\$17,176,669.77
	17	Civil Works Complete-CTG 4	4-May-21	31	1.00%	\$808,284.16	\$17,176,038.30	\$861,327.80	\$18,037,997.58
	18	Civil Works Complete-ECM 3	4-May-21	31	1.00%	\$808,284.16	\$17,984,322.46	\$861,327.80	\$18,899,325.38
	19	Civil Works Complete-ECM 4	4-May-21	31	1.00%	\$808,284.16	\$18,792,606.61	\$861,327.80	\$19,760,653.18
	20	ECM 1 Ready to Ship	17-May-21	33	1.00%	\$808,284.16	\$19,600,890.77	\$861,327.80	\$20,621,980.99
	21	ECM 2 Ready to Ship	17-May-21	33	1.00%	\$808,284.16	\$20,409,174.92	\$861,327.80	\$21,483,306.79
	22	Civil Works Complete-CTG 5	18-May-21	33	1.00%	\$808,284.16	\$21,217,459.08	\$861,327.80	\$22,344,636.59
	23	Civil Works Complete-CTG 6	18-May-21	33	1.00%	\$808,284.16	\$22,025,743.23	\$861,327.80	\$23,205,964.39
	24	Civil Works Complete-ECM 5	18-May-21	33	1.00%	\$808,284.16	\$22,834,027.39	\$861,327.80	\$24,067,292.20
	25	Civil Works Complete-ECM 6	18-May-21	33	1.00%	\$808,284.16	\$23,642,311.54	\$861,327.80	\$24,928,620.00
	26	ECM 3 Ready to Ship	24-May-21	34	1.00%	\$808,284.16	\$24,450,595.70	\$861,327.80	\$25,789,947.80
	27	ECM 4 Ready to Ship	24-May-21	34	1.00%	\$808,284.16	\$25,258,879.85	\$861,327.80	\$26,651,275.61
	28	Major Equipment Rough Seton Foundation-CTG 1	28-May-21	34	0.75%	\$606,213.12	\$25,865,092.97	\$645,995.85	\$27,297,271.46
	29	Major Equipment Rough Seton Foundation-CTG 2	28-May-21	34	0.75%	\$606,213.12	\$26,471,306.09	\$645,995.85	\$27,943,267.31
	30	Civil Works Complete-ECM 7	31-May-21	35	1.00%	\$808,284.16	\$27,279,590.24	\$861,327.80	\$28,804,595.11
	31	Civil Works Complete-CTG 7	31-May-21	35	1.00%	\$808,284.16	\$28,087,874.40	\$861,327.80	\$29,655,922.92
	32	Civil Works Complete-GSU 1	31-May-21	35	1.00%	\$808,284.16	\$28,896,158.55	\$861,327.80	\$30,527,250.72
	33	Civil Works Complete-GSU 2	31-May-21	35	1.00%	\$808,284.16	\$29,704,442.71	\$861,327.80	\$31,388,578.52
	34	ECM 5 Ready to Ship	31-May-21	35	1.00%	\$808,284.16	\$30,512,726.86	\$861,327.80	\$32,249,906.33
	35	ECM 6 Ready to Ship	31-May-21	35	1.00%	\$808,284.16	\$31,321,011.02	\$861,327.80	\$33,111,234.13
	36	Major Equipment Rough Seton Foundation-ECM 1	3-Jun-21	35	0.75%	\$606,213.12	\$31,927,224.14	\$645,995.85	\$33,757,229.98
	37	Major Equipment Rough Seton Foundation-ECM 2	3-Jun-21	35	0.75%	\$606,213.12	\$32,533,437.25	\$645,995.85	\$34,403,225.83
	38	ECM 7 Ready to Ship	7-Jun-21	36	1.00%	\$808,284.16	\$33,341,721.41	\$861,327.80	\$35,284,553.64
	39	Major Equipment Rough Seton Foundation-CTG 3	9-Jun-21	36	0.75%	\$606,213.12	\$33,947,934.52	\$645,995.85	\$35,970,549.49
	40	Major Equipment Rough Seton Foundation-CTG 4	9-Jun-21	36	0.75%	\$606,213.12	\$34,554,147.64	\$645,995.85	\$36,566,545.34
	41	Civil Works Complete-GSU 3	10-Jun-21	36	1.00%	\$808,284.16	\$35,362,431.80	\$861,327.80	\$37,417,873.14
	42	Civil Works Complete-GSU 4	10-Jun-21	36	1.00%	\$808,284.16	\$36,170,715.95	\$861,327.80	\$38,279,200.95

EXECUTION VERSION  
Amendment 001 – PNM Contract No. 1057666

43	Assembly of Major Equipment-CTG 1	11-Jun-21	36	1.00%	\$808,284.16	\$36,979,000.11	\$861,327.80	\$39,140,528.75
44	Assembly of Major Equipment-CTG 2	11-Jun-21	36	1.00%	\$808,284.16	\$37,787,284.26	\$861,327.80	\$40,001,856.55
45	Major Equipment Rough Seton Foundation-ECM 3	14-Jun-21	37	0.75%	\$808,213.12	\$38,933,497.38	\$645,995.85	\$40,647,852.41
46	Major Equipment Rough Seton Foundation-ECM 4	14-Jun-21	37	0.75%	\$808,213.12	\$38,999,710.50	\$645,995.85	\$41,293,848.26
47	GSU 1 Transformer Ready to Ship from Factory	15-Jun-21	37	1.00%	\$808,284.16	\$39,807,994.65	\$861,327.80	\$42,155,176.06
48	GSU 2 Transformer Ready to Ship from Factory	15-Jun-21	37	1.00%	\$808,284.16	\$40,616,278.81	\$861,327.80	\$43,016,503.86
49	Major Equipment Rough Seton Foundation-CTG 5	22-Jun-21	38	0.75%	\$808,213.12	\$41,222,491.92	\$645,995.85	\$43,662,489.72
50	Major Equipment Rough Seton Foundation-CTG 6	22-Jun-21	38	0.75%	\$808,213.12	\$41,828,705.04	\$645,995.85	\$44,308,495.57
51	GSU 3 Transformer Ready to Ship from Factory	23-Jun-21	38	1.00%	\$808,284.16	\$42,636,998.19	\$861,327.80	\$45,189,823.37
52	GSU 4 Transformer Ready to Ship from Factory	23-Jun-21	38	1.00%	\$808,284.16	\$43,446,273.35	\$861,327.80	\$46,031,151.18
53	Assembly of Major Equipment-CTG 3	23-Jun-21	38	1.00%	\$808,284.16	\$44,253,557.51	\$861,327.80	\$46,892,478.98
54	Assembly of Major Equipment-CTG 4	23-Jun-21	38	1.00%	\$808,284.16	\$45,061,841.66	\$861,327.80	\$47,753,806.78
55	Assembly of Major Equipment-ECM 1	23-Jun-21	38	1.00%	\$808,284.16	\$45,870,125.82	\$861,327.80	\$48,615,134.58
56	Assembly of Major Equipment-ECM 2	23-Jun-21	38	1.00%	\$808,284.16	\$46,678,409.97	\$861,327.80	\$49,476,462.39
57	Major Equipment Rough Seton Foundation-ECM 5	28-Jun-21	39	0.75%	\$808,213.12	\$47,284,623.09	\$645,995.85	\$50,122,468.24
58	Major Equipment Rough Seton Foundation-ECM 6	28-Jun-21	39	0.75%	\$808,213.12	\$47,890,836.20	\$645,995.85	\$50,768,454.09
59	Major Equipment Rough Seton Foundation-CTG 7	28-Jun-21	39	0.75%	\$808,213.12	\$48,497,049.32	\$645,995.85	\$51,414,449.94
60	Major Equipment Rough Seton Foundation-GSU 1	30-Jun-21	39	0.50%	\$404,142.08	\$48,901,191.40	\$430,663.90	\$51,845,113.85
61	Major Equipment Rough Seton Foundation-GSU 2	30-Jun-21	39	0.50%	\$404,142.08	\$49,305,333.48	\$430,663.90	\$52,275,777.75
62	Major Equipment Rough Seton Foundation-GSU 3	30-Jun-21	39	0.50%	\$404,142.08	\$49,709,475.55	\$430,663.90	\$52,706,441.65
63	Major Equipment Rough Seton Foundation-GSU 4	30-Jun-21	39	0.50%	\$404,142.08	\$50,113,617.63	\$430,663.90	\$53,137,105.55
64	Assembly of Major Equipment-ECM 3	5-Jul-21	40	1.00%	\$808,284.16	\$50,921,901.79	\$861,327.80	\$53,998,433.35
65	Assembly of Major Equipment-ECM 4	5-Jul-21	40	1.00%	\$808,284.16	\$51,730,185.94	\$861,327.80	\$54,859,761.16
66	Assembly of Major Equipment-CTG 5	6-Jul-21	40	1.00%	\$808,284.16	\$52,538,470.10	\$861,327.80	\$55,721,086.96
67	Assembly of Major Equipment-CTG 6	6-Jul-21	40	1.00%	\$808,284.16	\$53,346,754.25	\$861,327.80	\$56,582,416.76
68	Assembly of Major Equipment-CTG 7	6-Jul-21	40	1.00%	\$808,284.16	\$54,155,038.41	\$861,327.80	\$57,443,744.57
69	Major Equipment Rough Seton Foundation-ECM 7	7-Jul-21	40	1.00%	\$808,284.16	\$54,963,322.56	\$861,327.80	\$58,305,072.37
70	Assembly of Major Equipment-GSU 1	12-Jul-21	41	1.00%	\$808,284.16	\$55,771,606.72	\$861,327.80	\$59,166,400.17
71	Assembly of Major Equipment-ECM 5	19-Jul-21	42	1.00%	\$808,284.16	\$56,579,890.87	\$861,327.80	\$60,027,727.97
72	Assembly of Major Equipment-ECM 6	19-Jul-21	42	1.00%	\$808,284.16	\$57,388,175.03	\$861,327.80	\$60,889,055.78
73	Assembly of Major Equipment-GSU 2	20-Jul-21	42	1.00%	\$808,284.16	\$58,196,459.19	\$861,327.80	\$61,750,383.58
74	Assembly of Major Equipment-GSU 3	30-Jul-21	43	1.00%	\$808,284.16	\$59,004,743.34	\$861,327.80	\$62,611,711.38
75	Assembly of Major Equipment-ECM 7	3-Aug-21	44	1.00%	\$808,284.16	\$59,813,027.50	\$861,327.80	\$63,473,039.19
76	Assembly of Major Equipment-GSU 4	10-Aug-21	45	1.00%	\$808,284.16	\$60,621,311.65	\$861,327.80	\$64,334,366.99
77	Mechanical Completion Unit 1	1-Feb-22	70	1.00%	\$808,284.16	\$61,429,595.81	\$861,327.80	\$65,195,694.79
78	Mechanical Completion Unit 2	7-Feb-22	71	1.00%	\$808,284.16	\$62,237,879.96	\$861,327.80	\$66,057,022.60
79	Mechanical Completion Unit 3	11-Feb-22	71	1.00%	\$808,284.16	\$63,046,164.12	\$861,327.80	\$66,918,350.40
80	Mechanical Completion Unit 4	16-Feb-22	72	1.00%	\$808,284.16	\$63,854,448.27	\$861,327.80	\$67,779,678.20
81	Mechanical Completion Unit 5	21-Feb-22	73	1.00%	\$808,284.16	\$64,662,732.43	\$861,327.80	\$68,641,006.01
82	Mechanical Completion Unit 6	28-Feb-22	74	1.00%	\$808,284.16	\$65,471,016.58	\$861,327.80	\$69,502,333.81

EXECUTION VERSION  
Amendment 001 – PNM Contract No. 1057666

83	CTG 1 First Fire	1-Mar-22	74	1.00%	\$808,284.16	\$66,279,300.74	\$861,327.80	\$70,363,661.61
84	CTG 2 First Fire	1-Mar-22	74	1.00%	\$808,284.16	\$67,087,584.89	\$861,327.80	\$71,224,989.41
85	CTG 3 First Fire	7-Mar-22	75	1.00%	\$808,284.16	\$67,895,869.05	\$861,327.80	\$72,086,317.22
86	CTG 4 First Fire	7-Mar-22	75	1.00%	\$808,284.16	\$68,704,153.20	\$861,327.80	\$72,947,645.02
87	Mechanical Completion Unit 7	7-Mar-22	75	1.00%	\$808,284.16	\$69,512,437.36	\$861,327.80	\$73,808,972.82
88	CTG 5 First Fire	15-Mar-22	76	1.00%	\$808,284.16	\$70,320,721.52	\$861,327.80	\$74,670,300.63
89	CTG 6 First Fire	15-Mar-22	76	1.00%	\$808,284.16	\$71,128,005.67	\$861,327.80	\$75,531,628.43
90	CTG 7 First Fire	15-Mar-22	76	1.00%	\$808,284.16	\$71,937,289.83	\$861,327.80	\$76,392,956.23
91	Substantial Completion	15-Apr-22	80	10.00%	\$9,082,841.55	\$80,020,131.38	\$8,613,278.03	\$85,006,234.26
92	Final Completion	1-Jun-22	87	1.00%	\$808,284.16	\$80,828,415.54	\$861,327.80	\$85,867,562.07
				100.00%		\$152,578,415.54		\$162,326,155.82
<b>Notes:</b>								
In no event shall the cumulative amount of Milestone Payments payable by Owner for any month exceed the cumulative amounts of Milestone Payments shown as payable for the immediately subsequent								
two months as set forth in this Exhibit B.								
Any milestone dates falling on US Statutory Holidays, shall be planned for completion on the subsequent business day.								

	Price excluding Taxes	Price Including Taxes
<b>TOTAL</b>	\$152,578,415.54	\$162,326,155.82
<b>CTG Packages</b>	\$71,750,000.00	\$76,458,593.75
<b>EPC</b>	\$80,828,415.54	\$85,867,562.07
<b>TAX RATE</b>	6.56250%	

EXECUTION VERSION  
Amendment 001 – PNM Contract No. 1057666

Attachment D-1

D-1(1)

Table D-1: PRICING INFORMATION FORM  
BREAKDOWN OF RESPONDENT'S EPC PRICE

RESPONDENT: ProEnergy  
PROJECT LOCATION: Pifion Generating Station  
PROJECT TECHNOLOGY: 7xLM6000 PC Sprint  
PROJECT IN-SERVICE DATE: June 30, 2022

All Bidders are required to complete the form below providing information regarding their base price for the described Work. Pricing must be all inclusive so that the total cost is equal to the total EPC Contract Price (as listed in the Contract).

Description of Work	Manhours	Labor	Equipment and Materials	Subcontracts	Total
<b>Direct Costs:</b>					
Site Development and Civil Works	12624	\$ 797,649.79	\$ 2,113,420.17	\$ 50,000.00	\$ 2,961,069.96
Deep Foundations					
Foundations and Concrete	16535	\$ 905,607.44	\$ 2,612,390.42	\$ -	\$ 3,517,997.86
Structural Steel			\$ 547,974.75	\$ -	\$ 547,974.75
Architectural	5433	\$ 319,917.89	\$ 1,466,653.74	\$ -	\$ 1,786,571.63
Generating Unit(s) and Auxiliaries			\$ 52,188,070.95	\$ -	\$ 52,188,070.95
Solar Panel Infrastructure (if applicable)					
Battery Energy Storage System (if applicable)					
Heat Rejection System					
Balance of Plant Mechanical Equipment	29652	\$ 929,562.81	\$ 347,920.47	\$ -	\$ 347,920.47
Mechanical Commodities	11175	\$ 1,210,017.83	\$ 23,185,620.72	\$ -	\$ 24,115,189.33
Insulation and Painting	2380	\$ 130,460.63	\$ 1,110,408.77	\$ -	\$ 2,320,426.60
Balance of Plant Electrical Equipment	16981	\$ 1,354,342.39	\$ 1,099,554.21	\$ -	\$ 1,230,014.84
Electrical Commodities	18953	\$ 803,005.98	\$ 14,000,495.63	\$ -	\$ 15,354,838.02
Plant Control System	8512	\$ 621,966.44	\$ 1,579,698.38	\$ -	\$ 2,382,704.36
Instrumentation	4278	\$ 273,320.36	\$ 3,230,180.05	\$ -	\$ 3,852,146.49
		\$ 2,370,933.22	\$ -	\$ -	\$ 2,644,253.58
<b>Subtotal Direct Costs</b>	<b>126523</b>	<b>\$ 7,345,851.56</b>	<b>\$ 105,853,321.48</b>	<b>\$ 50,000.00</b>	<b>\$ 113,249,173.05</b>
<b>Indirect Costs:</b>					
Construction Field Staff (Including Expenses and Related Staff Expense)	Included above	\$ -	\$ -	\$ 1,516,933.26	\$ 1,516,933.26
Construction Equipment & Associated Operating Expenses	Included above	\$ -	\$ -	\$ -	\$ -
Small Tools & Consumables				\$ 331,568.21	\$ 331,568.21
Temporary Facilities (Contractor and Owner Trailers and Furnishings)				\$ 99,157.33	\$ 99,157.33
Support Craft and Site Services (Infrastructure, Utilities, Mainlain)				\$ 156,564.21	\$ 156,564.21
Temporary Utilities Cost				\$ 130,470.18	\$ 130,470.18
Site Safety		\$ 416,985.69	\$ 692,187.18	\$ 409,500.00	\$ 1,518,672.87
Start-up Craft Labor Support		\$ 173,960.24	\$ -	\$ -	\$ 173,960.24
Start-up Subcontracts (Chem Clean, Steam Blow, Flushing/Fills)		\$ -	\$ -	\$ -	\$ -
Start-up Management (Services/Supervision)		\$ 590,945.93	\$ 692,187.18	\$ 2,644,193.19	\$ 3,927,326.30
<b>Subtotal Indirect Costs</b>	<b>0</b>	<b>\$ 590,945.93</b>	<b>\$ 692,187.18</b>	<b>\$ 2,644,193.19</b>	<b>\$ 3,927,326.30</b>
<b>Other Costs:</b>					
Project Engineering, Home Office Support, Procurement, Project Management		\$ 4,073,819.44	\$ -	\$ 90,000.00	\$ 4,163,819.44
Insurance (CGI and BAR)		\$ -	\$ -	\$ 360,097.69	\$ 360,097.69
Misc. Costs, Warranties, etc.		\$ -	\$ -	\$ 2,319,469.82	\$ 2,319,469.82
<b>Subtotal Other Costs</b>	<b>0</b>	<b>\$ 4,073,819.44</b>	<b>\$ -</b>	<b>\$ 2,769,567.51</b>	<b>\$ 6,843,386.95</b>
<b>Total Cost (Direct, Indirect, and Other Costs)</b>	<b>126523</b>	<b>\$ 12,010,616.93</b>	<b>\$ 106,545,508.66</b>	<b>\$ 5,463,760.70</b>	<b>\$ 124,019,886.30</b>
Escalation (Direct, Indirect and Other)					\$ 2,403,550.62
Contingency					\$ 5,177,515.89
Fee and G & A Expense					\$ 16,707,894.69
Allowances and Adjustments (provide detail if used)					\$ -
				<b>Total - EPC Price Excluding Bonding and Taxes</b>	<b>\$ 146,308,647.50</b>
				Excluding Tax	\$ 146,308,647.50
				4th GSU w/ Pad & Oil	\$ 1,277,834.40
				Bond	\$ 2,691,733.64
				Contract Price (excluding taxes)	\$ 152,578,415.54
				Taxes	\$ 9,747,740.28
				Price (total)	\$ 162,326,155.82
<b>OPTION PRICING (not incl. Taxes)</b>					
Option 1 - Spare GSU w/ Pad and Oil					\$ 1,277,834.40
Option 2 - Waste Water Sump Capacity Increase to 10,000 Gallons					\$ 105,200.00
Option 3 - Blackstart Capability					\$ 417,000.00
Option 4 - 13.8KV GSU tie-in of 25MW Solar Power Feed					\$ 695,000.00



## EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

**EXHIBIT G**  
**Approved Subcontractors****1.1 General**

This Exhibit G provides a list of equipment suppliers that are acceptable to the Owner. Where the Owner has a preference for a particular supplier, the name of the supplier has a “(P)” following it. During Contractor’s procurement of equipment, preference shall be given to the Owner’s preferred suppliers. When the Owner’s preferred supplier’s offering is technically acceptable but not the lowest price, Contractor shall disclose to the Owner the difference in cost between the low Bidder and the preferred supplier.

It is fully expected by the Owner that Contractor will select a common manufacturer for the supply of all “like” equipment, materials, and commodities so as to minimize the number of manufacturers employed. As an example, if Contractor intends to use “brand X” for the supply of a motor control center (MCC) with the balance of equipment provided, Contractor shall ensure that all of its procurement documents make reference to this selection so that the Owner can ensure that other suppliers responsible for MCC supply also procure their hardware from “brand X”.

Where a brand name follows a company name (Flowserve: Edwards) only that brand name is approved. Where only a company name is listed (Flowserve) than any brand name is approved.

**2 Mechanical Equipment****2.1 Emissions Control Modules (ECM)**

- Innova-Braden Europe
- Cico Peerless
- SISU
- EnergyLink

**2.2 AIR FILTERS****2.2.1 Gas Turbine Inlet**

- AAF
- Donaldson
- Pneumafil
- Universal
- Aiguard

**2.3 EXPANSION JOINTS****2.3.1 Flue Gas Ductwork**

- Advanced Flexible Systems
- EFFOX (P)
- Fox Equipment
- PAPCO
- Flue Gas

**EXECUTION VERSION**

**Amendment 001 – PNM Contract No. 1057666**

- Parker Hannifin (RM Dynex)
- Senior Flexonics Pathway

**2.3.2 Piping**

- Piping Technology & Products/U.S. Bellows, Inc.
- Southwest Stainless
- Texas Pipe
- Harry Cooper Supply
- Miracle Supply

**2.4 FANS**

**2.4.1 Centrifugal Process Fans**

- Chicago Blower
- Howden
- Robinson
- New York Blower
- Process Barron

**2.5 FIRE PROTECTION SYSTEMS**

- F.E. Moran, Inc.
- Grinnell Fire Protection Systems
- McDaniel Fire Systems
- Shambaugh & Sons
- Webb Murray
- Automatic Sprinkler System
- Det-tronics, Inc.
- Allestec
- Kidde

**2.6 FUEL GAS EQUIPMENT**

**2.6.1 Filters and Scrubbers**

- Aether DBS
- GasTech Engineering
- KingTool Company
- Indufil, Inv.
- Pall Filters
- Peerless
- Perry Equipment Company
- Shawndra

**2.7 HEAT EXCHANGERS**

**2.7.1 Air Cooled Heat Exchangers**

- Hudson Products Corporation (Fin-Fan®)

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

- Smithco: Amercool Division
- Young Touchstone
- SPX
- Kelvion
- Evapco

**2.7.2 Plate and Frame**

- Alfa Laval
- GEA PHE Systems
- Mueller
- Tranter
- SPX: APV (formally APV Crepaco)
- Xylem: Standard Xchange (formally ITT: Standard)

**2.7.3 Shell and Tube**

- Alfa Laval
- API Heat Transfer: Basco
- Babcock Power: TEi
- Hoffman Process, Inc
- Manning & Lewis Engineering
- Ohmstede
- SPX: Yuba
- Xylem: Standard Xchange (formally ITT: Standard)

**2.8 HOISTING EQUIPMENT**

**2.8.1 Hoists**

- ACCO
- Columbus McKinnon (Budgit, Chester, Shaw-Box, Yale)
- Robbins & Myers
- Harrington
- Konecranes
- Whiting Corporation
- ProServ Cranes

**2.8.2 Monorails**

- ACCO Chain & Lifting Products (Louden)
- American Monorail
- Cleveland Tramrail, Shepard Niles
- Trambeam Corp.

**2.9 HVAC**

**2.9.1 Heating/Air Conditioning Equipment**

- BARD (for Electrical PDC units)
- Carrier (P)

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

- Daikin McQuay
- Trane
- York International

**2.9.2 Ducts, Dampers, and Accessories**

- Ductmate Industries
- Elgen Manufacturing Company, Inc.

**2.9.3 Fire Dampers**

- Ductmate: Aire Technologies
- Prefco
- Ruskin
- Aerovent

**2.9.4 Ventilation Fans**

- Aerovent
- Cincinnati Fan and Ventilator Company, Inc.
- Greenheck
- Hartzell Air Movement
- PennBarry

**2.10 HYDRAULIC FLUID COUPLINGS**

- Voith
- Howden Gyrol Fluid Drives
- Rexnord (P)
- Lovejoy

**2.11 LUBRICANTS**

- Chevron
- Conoco
- Exxon/Mobile

**2.12 MECHANICAL SEALS**

- Chesterton
- FlowServe
- John Crane

**2.13 PIPE HANGERS AND SUPPORT**

- Anvil International
- Basic-PSA
- Lisega
- PHS Industries
- Pipe Supports Group (Bergen-Power Pipe Supports)
- Piping Technology & Products

## **2.14 PUMPS**

### **2.14.1 ANSI or API Horizontal End Suction**

- Carver Pump
- Flowserve: Durco, Lawrence
- ITT Industries: Goulds
- Peerless Pump
- Sulzer Pumps
- Thomas Pump
- RotoJet

### **2.14.2 Lube Oil**

- IMO Delaval
- Viking
- Tuthill
- Thomas Pump
- Voith

## **2.15 SAFETY SHOWER/EYEWASH**

- Bradley
- Haws
- Sentry

## **2.16 VALVES**

### **2.16.1 Ball – Soft Seat**

- Apollo
- Conval
- Flow-tek (a subsidiary of Bray)
- Jamesbury
- Pentair: Keystone
- Velan
- Jomar
- Watts

### **2.16.2 Ball – Metal Seat**

- Flow-Tek
- MOGAS Industries
- SST-Severe Service Technologies
- Valv Technologies
- Velan

### **2.16.3 Ball – Instrumentation Service**

- Anderson Greenwood
- Parker

- Swagelok (P)
- Watts
- Dragon

**2.16.4 Ball – Fuel Gas Service**

- Cameron: Cameron, Grove, WKM

**2.16.5 Ball - Ceramic**

- Fujikin
- SST-Severe Service Technologies

**2.16.6 Bronze Valves**

- CRANE Energy Flow Solutions: Jenkins, Stockham
- Nibco
- Pentair: Lunkenheimer
- Powell

**2.16.7 Butterfly – General Service (MSS-SP-67)**

- Bray
- CRANE Energy Flow Solutions: XOMOX
- DeZURIK
- Pentair: Keystone

**2.16.8 Butterfly - High Performance (MSS-SP-68)**

- Bray
- Crane: XOMOX
- DeZURIK
- Metso: Jamesbury
- Pentair: Keystone
- Weir: Tricentric

**2.16.9 Butterfly - Buried Service (AWWA C504)**

- Butterfly Valves & Controls, Inc.
- DeZurik
- GA Industries, Inc.
- Henry Pratt
- Rodney Hunt Company

**2.16.10 Check – Nozzle or Venturi Style**

- Cameron: ENTECH
- Champion Valves Inc.
- Crane: Noz-Check
- DFT Inc.
- Europa Valve
- Check-All (small bore only)

## EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

**2.16.11 Check – Wafer Style**

- Cameron: TECHNO (Dual Plate Type)
- Crane: Uni-Check, Duo-Check (Swing and Dual Plate)
- Ritepro Corporation: Check Rite (Swing Type)
- Mueller Steam Specialty: CHEXTER (Swing Type)

**2.16.12 Control Valves (see Control Vales in I&C section)****2.16.13 Fire Protection Service****2.16.13.1 *Buried Ductile Iron Gate Valves***

- American AVK
- American Flow Control
- Mueller Company
- McWane Group (Kennedy, Clow, M&H, American R/D)

**2.16.13.2 *Above Grade Valves***

- American AVK
- Mueller Company
- Grinell
- Nibco
- Victualic

**2.16.14 Gate, Globe, Angle, Check – Cast Steel, Pressure Seal**

- CRANE Energy Flow Solutions: Pacific
- Flowserve: Edwards
- Pentair: Dewarance
- Velan
- Weir Valves & Controls: Atwood & Morrill

**2.16.15 Gate, Globe, Angle, Check - Cast Steel, Bolted Bonnet**

- Cameron: Newco
- CRANE Energy Flow Solutions: Crane, Pacific
- Flowserve: Edwards, Vogt
- Powell
- Velan
- William E. Williams Valve Corporation

**2.16.16 Gate, Globe, Angle, Check - Forged Steel**

- Bonney Forge
- Cameron: Newco, OIC
- Conval
- Flowserve: Edwards, Vogt
- Powell
- Velan

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

- William E. Williams Valve Corporation

**2.16.17 Plug**

- DeZurik
- Flowserve: Durco
- Velan
- Xomox: Nordstrom/Tuflin

**2.16.18 Safety / Relief Valves**

**2.16.18.1 *Boiler or Steam Safety***

- GE: Consolidated
- Pentair: Anderson-Greenwood, Crosby

**2.16.18.2 *Relief***

- GE: Consolidated
- Pentair: Anderson-Greenwood, Crosby, Kunkle
- Curtis-Wright: Farris

**2.16.19 Solenoid (See I&C Section)**

**2.17 VENT SILENCERS**

- Aarding Thermal Acoustics
- Burgess-Manning, Inc.
- Universal
- Aerovent
- Innova/Braden
- VAW



### **3 ELECTRICAL EQUIPMENT**

#### **3.1 CABLE**

##### **3.1.1 Coaxial and Triaxial**

- Belden (P)
- Brand Rex
- Rockbestos
- Honeywell
- Genesis

##### **3.1.2 Instrumentation**

- Brand Rex
- Continental
- Delta-Surprenant
- L&N
- Okonite
- Rockbestos
- Samuel Moore
- Southwire
- Houston Wire & Cable (P)
- Omni Cable
- ADC
- Lake
- Nexans

##### **3.1.3 Thermocouple Extension**

- Brand Rex
- Continental
- Delta-Surprenant
- Rockbestos
- Samuel Moore
- Tefzel Insulation
- Houston Wire & Cable (P)
- TE Wire
- Thermal Wire

##### **3.1.4 Cathodic Protection**

- Harco
- Allied
- Corpro (P)
- Service Wire
- Kalas
- ADC

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

**3.1.5 Cathodic Protection Connectors (ground) (must be exothermic)**

- Cadweld
- Thermoweld

**3.1.6 600V Control Cable**

- Belden
- Brand Rex
- Continental
- Houston Wire & Cable (P)
- Okonite
- Pirelli
- Rockbestos
- Tefzel Insulation
- Draka USA Tamaqua
- General Cable
- Southwire
- Dekoron
- Omni Cable
- ADC
- Service Wire

**3.1.7 600V Power Cable**

- Okonite
- Brand Rex
- Cablec
- Okonite
- Rockbestos
- Houston Wire & Cable (P)
- Pirelli
- Draka USA/Tamaqua
- Southwire
- General Cable
- Omni Cable
- Superior Essex

**3.1.8 Medium Voltage Power Cable**

- Cablec
- General Cable
- Houston Wire & Cable (P)
- Kerite
- Okonite
- Pirelli
- Rome
- Southwire

**EXECUTION VERSION**

**Amendment 001 – PNM Contract No. 1057666**

**3.1.9 Medium Voltage Cable Terminations and Accessories**

- 3M (P)
- Raychem
- T&B
- Omni Cable

**3.2 CABLE TRAY SYSTEM**

- GS Metals Corp.
- B-Line Systems
- Chalfant Products
- Husky Products (Burndy)
- P-W Industries (P)
- T.J. Cope
- US Gypsum Globe Div.
- MP Husky

**3.3 CONDUIT**

**3.3.1 Aluminum**

- Alflex
- Breeze-Illinois
- Condux International
- New Jersey Aluminum Easco
- Reynolds Metal Company
- VAW of America, Inc.

**3.3.2 Steel**

- Allied Tube and Conduit
- Clifton Conduit Corp.
- Republic Steel
- The Steelduct Co.
- Torrance Turbine Div.
- Triangle Conduit/Cable
- Westmoreland Conduit
- Wheatland Tube Col
- Youngstown Sheet and Tube
- Conduit (PVC) Coated (prefer not to use above ground PVC)
- Rob Roy
- Stahl
- Ocal Inc.

**3.4 DISTRIBUTION PANELBOARDS-120V AC/125V DC**

- Allen Bradley
- General Electric

- ITE/ Siemens
- Powell
- Square D
- Westinghouse/ Cutler-Hammer

### **3.5 DRIVES – VARIABLE SPEED, 600V AND BELOW**

- Allen Bradley (P)
- Square D
- Reliance
- Robicon

### **3.6 DISTRIBUTION, TRANSFORMERS AND POWER PANELS**

- Cutler-Hammer
- General Electric
- Siemens
- Square D
- Allen-Bradley

### **3.7 EMERGENCY POWER SUPPLY**

#### **3.7.1 Batteries**

- EnerSys
- Exide Technologies: GNB Battery (P)
- Saft
- Deka

#### **3.7.2 Battery Chargers and Uninterruptible Power Supply (UPS)**

- Ametec/SCI (P)
- C&D Power
- Cyberex Inc
- Emerson: Chloride Industrial Systems
- Gutor
- LaMARCHE
- SENS
- Solid State Controls
- Hindle/BAE (24 VDC battery systems only)
- APC (Small computer/network cabinet applications only)

### **3.8 FREEZE PROTECTION EQUIPMENT**

#### **3.8.1 Heaters / Electrical Heat Tracing**

- Chromalox (P)
- Nelson
- Thermon
- Raychem

### **3.8.2 Enclosures**

- Bylin
- Chemelex
- Nelson
- O'Brien (P)
- Thermon

## **3.9 HIGH VOLTAGE**

### **3.9.1 Circuit Breakers**

- ABB, Inc
- Areva
- Hitachi
- Mitsubishi
- Siemens

### **3.9.2 Equipment Packagers**

- DIS-TRAN
- GE
- Hamby Young
- MD Henry
- Peak Power
- Crown Technical Systems

### **3.9.3 Tubular Steel Dead End Structures**

- Falcon Steel
- FL Meyer
- JEM Engineering and Manufacturing
- V S Shuler
- Valmont Industries
- Whitlow Electric
- ProSteel Manufacturing

## **3.10 ISO PHASE BUS**

- ABB
- Alstom
- AZZ Calvert
- Delta-Unibus
- GE
- Technibus/Simelectro
- Crown Electric

**EXECUTION VERSION**

**Amendment 001 – PNM Contract No. 1057666**

**3.11 LIGHTING**

**3.11.1 General**

- Cree
- Crouse Hinds
- Dialight
- General Electric
- Holophane
- Lithonia

**3.11.2 Panelboard**

- Allen Bradley
- General Electric
- ITE
- Square D
- Siemens

**3.11.3 Photo electric light**

- Sigma Instruments Co.

**3.11.4 Receptacles**

- Crouse Hinds Co.
- Hubbell, Inc.

**3.11.5 Light Fixtures**

- General Electric
- Holophane Lighting
- Crouse Hinds

**3.12 MOTORS**

**3.12.1 Low Voltage**

- Baldor
- Siemens
- TECO/Westinghouse
- Reliance
- US Motors
- WEG

**3.12.2 Medium Voltage**

- Siemens
- TECO/Westinghouse
- General Electric
- ABB
- Reliance
- US Motors

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

- Toshiba
- Hyundai

### 3.13 MOTOR CONTROL CENTERS (MCC'S)

- Allen-Bradley (Rockwell Automation)
- Cutler Hammer (P)
- Square D
- Siemens
- General Electric

### 3.14 RELAYS

#### 3.14.1 Auxiliary Control

- Allen Bradley (P)
- Diversified Electronics
- General Electric
- Square D
- Potter Brumfield
- SEL
- Phoenix Contact

#### 3.14.2 Timing

- Eagle
- Adalake
- Potter Brumfield
- Diversified Electronics
- Allen Bradley (P)

#### 3.14.3 Protective

- Schweitzer (SEL) (P)
- Basler
- Beckwith

### 3.15 SWITCHBOARDS – AC AND DC

- ABB
- General Electric
- Square D
- Siemens

### 3.16 SWITCHGEAR

- Powell Electrical
- Eaton / Cutler Hammer
- Siemens Industrial Automation
- Square D
- ESS Metron (Integration only – breakers from first four bullets of this section)

**EXECUTION VERSION**

**Amendment 001 – PNM Contract No. 1057666**

- M&I (Integration only – breakers from first four bullets of this section)

**3.17 TRANSDUCERS (ELECTRICAL)**

- Moore Industries
- Rochester Instruments
- Scientific Columbus
- Transdata

**3.18 TRANSFORMERS**

**3.18.1 Low Voltage Dry Type**

- General Electric
- Hevi-Duty
- ABB
- Square D

**3.18.2 Power and Loadcenter**

- ABB
- Siemens
- Square D
- General Electric

**3.18.3 GSU and Station Auxiliary Transformers**

- ABB
- Siemens
- Square D
- General Electric
- JSHP Transformer (JiangSu HuaPeng Transformer Co., Ltd.)

**3.19 TERMINAL BLOCKS (LOW VOLTAGE INSTRUMENTATION)**

- Allen Bradley
- General Electric
- Square D
- Phoenix Contact
- Entrelec



#### **4 CIVIL/STRUCTURAL EQUIPMENT**

Not Used

## **5 INSTRUMENTATION AND CONTROLS EQUIPMENT**

### **5.1 ACTUATORS**

#### **5.1.1 Dampers**

- Auma – On/Off Service
- Beck
- Limitorque (P)

#### **5.1.2 Hydraulic**

- Clarkson
- Parker

#### **5.1.3 Motor Operated Valves**

- Rotork – On/Off Service
- Beck – Modulating Service
- Limitorque – On/Off Service (P)

#### **5.1.4 Pneumatic Operated Valves**

- Flowserve: Automax
- Emerson: Fisher (P)
- Tyco: Keystone

### **5.2 ANALYZERS**

#### **5.2.1 Gas – Ammonia (for slip)**

- Rosemount
- Siemens
- Unisearch

#### **5.2.2 Gas – Chromatography/BTU**

- Daniel Industries
- Yokogawa
- Rosemount
- Emerson

#### **5.2.3 Gas – Co, In-Situ**

- Thermo-Environmental
- Ametek

#### **5.2.4 Gas - Dewpoint**

- Endress-Hauser
- Kahn
- Panametrics (P)
- Shaw

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

**5.2.5 Gas – Humidity**

- Vaisala (P)

**5.2.6 Gas – Oxygen, In-Situ**

- Anarad
- Rosemount
- Teledyne
- Yokogawa

**5.2.7 Gas - Opacity**

- Enviropplan
- Lear Siegler/Monitor Labs
- Thermo Environmental Inst. (P)
- Spectrum
- Environmental Monitoring System

**5.2.8 Water - Conductivity**

- Endress & Hauser
- Foxboro (P)
- Rosemount
- Yokogawa
- L&N
- Bailey

**5.2.9 Water – Dissolved Oxygen**

- Foxboro (P)
- Rosemount
- Yokogawa

**5.2.10 Water - pH**

- Endress & Hauser
- Foxboro (P)
- ITT Barton
- KayRay/Sensall Inc
- Ohmart
- Rosemount

**5.2.11 Water - Silica**

- Hach (P)
- Analyzers, Water - Sodium
- Orion Research

**5.3 COMPUTER PERIPHERALS - SWITCHES**

- Black Box
- Cisco (P)

- Enterasys
- Ntron
- Ruggedcom
- Allen Bradley
- Hirschman

## **5.4 CONTINUOUS EMISSION MONITORING SYSTEM EQUIPMENT**

### **5.4.1 Data Acquisition System**

- Cisco

### **5.4.2 Systems Integration**

- Cisco

### **5.4.3 Analyzers**

- Thermo Scientific
- Teledyn
- CAI

## **5.5 CONTROL PANELS**

- Comsip Customline
- Hatch Inc.
- KEMCO
- Powell
- Sewell

## **5.6 CONTROL STATIONS (LOCAL)**

- Allen Bradley
- Crouse Hinds
- Cutler Hammer
- Square D

## **5.7 DISTRIBUTED CONTROL SYSTEMS - DCS**

- Invensys: Foxboro

## **5.8 CONTROL VALVES**

### **5.8.1 Control Valves - Steam Service**

- Fisher
- CCI (P)
- Masonelian International
- Samson
- Woodward (CTG applications only)

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

**5.8.2 Control Valves – General Service**

- Emerson: Fisher (P)
- Masoneilan
- Flowserve: Valtek (P)
- Woodward (CTG applications only)

**5.8.3 Control Valves – Severe Service**

- CCI (P)
- Emerson: Fisher
- Masoneilan
- Rockwell

**5.8.4 Control Valves – Rotary**

- Emerson: Fisher (P)
- Flowserve: Valtek
- Jamesbury
- Masonelian International

**5.9 FIRE DETECTION**

- Chemetron
- Grinnell/Automatic Sprinkler
- Notifier
- Honeywell
- Kidde

**5.10 FITTINGS, TUBE**

- Swagelok

**5.11 FLAME SCANNERS**

- Fireye
- Forney Engineering (P)
- Fossil Power Systems
- Iris
- MPS Talantum
- ABB
- Det-Tronics

**5.12 FLOW DEVICES**

**5.12.1 Averaging Pitot Tubes**

- Emerson Annubar (Dieterich Standard Corp.)
- FCI
- Veris, Inc.

#### **5.12.2 Flow Nozzles and Primary Flow Elements**

- Badger Meter
- Flow Tech
- Fluidic Techniques
- PRC Flow Measurement (Tulsa)
- PFS (Primary Flow Signal) (Tulsa)
- TRIAD Measurement
- Vickery-Simms

#### **5.12.3 Sight**

- Brooks Instruments DI
- Ernst Gauge
- Penberthy
- Universal Flow Monitor

#### **5.12.4 Flow Indicators**

- Universal
- Rosemont
- Yokogawa

#### **5.12.5 Magnetic Flow meter**

- ABB
- Fisher & Porter
- Foxboro

#### **5.12.6 Positive Displacement Flow Meter**

- Badger Meter
- Brooks
- FME Measurement Solutions
- Neptune

#### **5.12.7 Rotameters**

- ABB
- Brooks Instruments
- Fisher & Porter
- Penberthy
- Wallace & Tiernan

#### **5.12.8 Flow Transmitter (DP)**

- Emerson: Rosemount 3051S
- Foxboro
- Yokogawa

#### **5.12.9 Turbine Flow Meter**

- Badger Meter

**EXECUTION VERSION**

Amendment 001 – PNM Contract No. 1057666

- Foxboro
- ITT Barton
- Yokogawa
- Emerson
- Flow Technologies Inc.

**5.12.10 Ultrasonic Flow Meter**

- Endress & Hauser
- Foxboro
- Panametrics
- Polysonics
- Rosemount

**5.12.11 Vortex Shedding Flow Meter**

- ABB
- Emerson: Rosemount
- Foxboro
- Yokogawa

**5.13 FREQUENCY TRANSDUCERS**

- Scientific Columbus

**5.14 I/P CONVERTERS**

- ABB
- Emerson Fisher
- Foxboro
- Masoneilan International

**5.15 INSTRUMENTS (GENERAL CONTROL AND INDICATION)**

- General Electric (Type CR2940 Control Switch)
- Honeywell (Type CMC Control Switch)
- Allen Bradley
- United Electric
- Rosemount
- Yokogawa

**5.16 INSTRUMENTS (LABORATORY)**

- Fisher Scientific
- Mettler Instrument Corp.
- Perkin Elmer

**5.17 INSTRUMENTS – (PH PROBES)**

- Endress & Hauser
- Yokagawa
- Honeywell

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

- Hach
- Rosemount

**5.18 INSTRUMENTS – MEDIUM VOLTAGE SWITCHGEAR**

(Control switches, indicating lamps, etc.)

- General Electric (Type SB-1 Control Switches, ET-16 Lamp Holder)
- ABB
- Yokagawa
- Electro Industries
- Gauge Tech

**5.19 INSTRUMENTS – 480V METERING AND RELAYING EQUIPMENT**

- Schweitzer (P)
- Multilin
- General Electric
- Westinghouse
- Yokogawa
- Gauge Tech
- Electro Industries

**5.20 ISOLATORS, ELECTRICAL**

- Black Box
- Rochester Instrument
- Rosemount

**5.21 LEVEL DEVICES**

**5.21.1 Level Gauges – Bubbler**

- Meriam Instrument
- Uehling

**5.21.2 Level Gauges – Float**

- Clark Reliance
- ProMag
- K-Tek (P)

**5.21.3 Level Gauges – Sight Glass**

- Ernst & Whitney Press
- Ernst Gage
- Jurgens
- Yarway
- Penberthy
- Kenco



**EXECUTION VERSION**

Amendment 001 – PNM Contract No. 1057666

**5.21.4 Level Gauges – Tank Monitoring**

- Groth Equipment
- L&J Technologies
- Rosemount – Varec
- Shand & Jurs
- Linc

**5.21.5 Level Switches - Conductivity**

- Clark Reliance
- Fossil Power Systems
- Solartron

**5.21.6 Level Switches - Float**

- Magnetrol
- SOR

**5.21.7 Level Switches - Ultrasonic**

- Milltronics
- Sensall
- Magnetrol

**5.21.8 Level Transmitters – Ultra Sonic**

- Emerson Milltronics
- Magnetrol
- Endress Hauser
- Rosemount

**5.21.9 RF Admittance**

- Drexelbrook Engineering
- Endress & Hauser
- K-Tek
- Magnetrol
- Milltronics
- Rosemount

**5.22 LIMIT SWITCHES**

**5.22.1 Proximity**

- Allen Bradley
- Balluff
- GE
- Topworx (P)
- Square D

**EXECUTION VERSION**

**Amendment 001 – PNM Contract No. 1057666**

**5.22.2 Rotary Position**

- ABB
- Emerson Fisher

**5.23 MANIFOLDS**

- Anderson-Greenwood
- Swagelok (P)

**5.24 PANEL DEVICES**

**5.24.1 Panel Lights**

- Allen Bradley
- General Electric
- Square D
- Hoffman-Pentair

**5.24.2 Analog Panel Meters**

- Yokogawa
- General Electric
- Newport

**5.24.3 Digital Panel Meters**

- Digitec
- Newport
- Precision
- Red Lion
- Weschler
- Yokogawa

**5.24.4 Digital - Counters**

- Eagle Signal Controls
- Veeder-Root
- Newport

**5.24.5 Digital – Tachometers**

- Bentley Nevada
- IRD Mechanalysis
- Newport
- Weschler
- AI-Tek

**5.25 POWER SUPPLIES**

- Lambda
- Phoenix Contact

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

## **5.26 PRESSURE DEVICES**

### **5.26.1 Manometers**

- Meriam Instrument

### **5.26.2 Pressure gauges**

- Ashcroft
- Dwyer
- Wika

### **5.26.3 Pressure Transmitters**

- Emerson: Rosemount 3051S
- Foxboro
- Yokogawa

### **5.26.4 Pressure Switches**

- ASCO
- Barksdale
- Dwyer
- SOR
- United Electric
- Neodyne

## **5.27 PROGRAMMABLE LOGIC CONTROLLERS**

- Allen Bradley ControlLogix

## **5.28 SOLENOID VALVES (FOR ACTUATORS)**

- ASCO
- Bray (for Bray Valves Only)
- Skinner
- Atkomatic
- Co-Ax

## **5.29 TAGS (IDENTIFICATION)**

- AMP
- W.H. Brady
- Electromark Company
- Raychem Corporation
- Stanco Products Inc.
- The Thomas and Betts Co.
- Phoenix Contact

## **5.30 TEMPERATURE DEVICES**

### **5.30.1 Temperature Indicators**

- Ashcroft

EXECUTION VERSION

Amendment 001 – PNM Contract No. 1057666

- Weksler
- Wika

**5.30.2 RTD**

- Omega
- Thermo Electric
- Pyromotion
- Sandelius
- STI
- Rosemount
- Minco

**5.30.3 Thermocouples**

- Omega
- Thermo Electric
- Pyromotion
- Sandelius
- STI

**5.30.4 Thermometers**

- Ashcroft
- Palmer Instruments
- Wika
- Weksler

**5.30.5 Thermometers - Dial**

- Ashcroft
- Palmer Instruments
- Wika
- Weksler

**5.30.6 Thermowells**

- Omega
- Thermo Electric
- Pyromotion
- Sandelius
- STI
- Rosemount

**5.30.7 Temperature switches**

- ASCO
- Ashcroft
- United Electric Controls
- Barksdale
- SOR

- Neodyne

### **5.31 VAR TRANSDUCERS**

- Scientific Columbus

### **5.32 VIBRATION**

#### **5.32.1 Vibration Monitoring Systems**

- GE: Bently Nevada (P)
- IRD
- Allen-Bradley

### **5.33 VOLTAGE DEVICES**

#### **5.33.1 Transducers**

- Scientific Columbus

### **5.34 WATTAGE DEVICES**

#### **5.34.1 Watthour Meters**

- Scientific Columbus
- General Electric

#### **5.34.2 Watt Transducers**

- Scientific Columbus

**EXHIBIT N**  
**Cancellation Schedule**

Combution Turbine Generator (CTG) Packages		
Milestone No.	Milestone Description	Termination Amount
1	NTP	\$21,525,000.00
2	Progress	\$28,700,000.00
3	Progress	\$57,400,000.00
4	Progress	\$57,400,000.00
5	Progress	\$57,400,000.00
6	Progress	\$57,400,000.00
7	Progress	\$57,400,000.00
8	Progress	\$64,575,000.00
9	RTS Payment	N/A-Title Transfers

EPC		
Milestone No.	Milestone Description	Termination Amount
1	Air Permit Engineering	\$172,348.28
2	LNTP - Engineering Kick-off	\$817,193.70
3	Engineering Deliverable, Milestone 1 - Initial IFC Rev 0	\$1,462,039.11
4	Engineering Deliverable, Milestone 2 - Initial IFC Rev 0	\$2,106,884.53
5	Engineering Deliverable, Milestone 3 - Initial IFC Rev 0	\$2,751,729.94
6	Engineering Deliverable, Milestone 4 - Initial IFC Rev 0	\$3,396,575.36
7	Engineering Deliverable, Milestone 5 - Initial IFC Rev 0	\$4,041,420.78
8	NTP	\$12,124,262.33
9	ECM PO Issued	\$22,631,956.35
10	GSU Transformer PO Issued	\$31,118,939.98
11	Mobilization	\$40,616,278.81
12	Civil Works Complete-CTG 1	\$41,424,562.96
13	Civil Works Complete-CTG 2	\$42,232,847.12
14	Civil Works Complete-ECM 1	\$43,041,131.27
15	Civil Works Complete-ECM 2	\$43,849,415.43
16	Civil Works Complete-CTG 3	\$44,657,699.58
17	Civil Works Complete-CTG 4	\$45,465,983.74
18	Civil Works Complete-ECM 3	\$46,274,267.89
19	Civil Works Complete-ECM 4	\$47,082,552.05
20	ECM 1 Ready to Ship	\$47,082,552.05
21	ECM 2 Ready to Ship	\$47,082,552.05
22	Civil Works Complete-CTG 5	\$47,890,836.20
23	Civil Works Complete-CTG 6	\$48,699,120.36
24	Civil Works Complete-ECM 5	\$49,507,404.52
25	Civil Works Complete-ECM 6	\$50,315,688.67
26	ECM 3 Ready to Ship	\$50,315,688.67
27	ECM 4 Ready to Ship	\$50,315,688.67
28	Major Equipment Rough Set on Foundation-CTG 1	\$50,921,901.79
29	Major Equipment Rough Set on Foundation-CTG 2	\$51,528,114.90
30	Civil Works Complete-ECM 7	\$52,336,399.06
31	Civil Works Complete-CTG 7	\$53,144,683.21
32	Civil Works Complete-GSU 1	\$53,952,967.37
33	Civil Works Complete-GSU 2	\$53,952,967.37
34	ECM 5 Ready to Ship	\$53,952,967.37
35	ECM 6 Ready to Ship	\$54,761,251.53
36	Major Equipment Rough Set on Foundation-ECM 1	\$55,367,464.64
37	Major Equipment Rough Set on Foundation-ECM 2	\$55,973,677.76
38	ECM 7 Ready to Ship	\$56,781,961.91
39	Major Equipment Rough Set on Foundation-CTG 3	\$57,388,175.03
40	Major Equipment Rough Set on Foundation-CTG 4	\$57,994,388.15
41	Civil Works Complete-GSU 3	\$58,802,672.30
42	Civil Works Complete-GSU 4	\$59,610,956.46
43	Assembly of Major Equipment-CTG 1	\$59,610,956.46

44	Assembly of Major Equipment-CTG 2	\$59,610,956.46
45	Major Equipment Rough Set on Foundation-ECM 3	\$60,217,169.57
46	Major Equipment Rough Set on Foundation-ECM 4	\$60,823,382.69
47	GSU 1 Transformer Ready to Ship from Factory	\$60,823,382.69
48	GSU 2 Transformer Ready to Ship from Factory	\$61,631,666.85
49	Major Equipment Rough Set on Foundation-CTG 5	\$62,237,879.96
50	Major Equipment Rough Set on Foundation-CTG 6	\$62,844,093.08
51	GSU 3 Transformer Ready to Ship from Factory	\$63,652,377.23
52	GSU 4 Transformer Ready to Ship from Factory	\$63,652,377.23
53	Assembly of Major Equipment-CTG 3	\$64,460,661.39
54	Assembly of Major Equipment-CTG 4	\$64,460,661.39
55	Assembly of Major Equipment-ECM 1	\$64,460,661.39
56	Assembly of Major Equipment-ECM 2	\$64,460,661.39
57	Major Equipment Rough Set on Foundation-ECM 5	\$64,258,590.35
58	Major Equipment Rough Set on Foundation-ECM 6	\$64,056,519.31
59	Major Equipment Rough Set on Foundation-CTG 7	\$64,662,732.43
60	Major Equipment Rough Set on Foundation-GSU 1	\$65,066,874.51
61	Major Equipment Rough Set on Foundation-GSU 2	\$65,471,016.58
62	Major Equipment Rough Set on Foundation-GSU 3	\$65,066,874.51
63	Major Equipment Rough Set on Foundation-GSU 4	\$65,471,016.58
64	Assembly of Major Equipment-ECM 3	\$66,279,300.74
65	Assembly of Major Equipment-ECM 4	\$67,087,584.89
66	Assembly of Major Equipment-CTG 5	\$67,895,869.05
67	Assembly of Major Equipment-CTG 6	\$68,704,153.20
68	Assembly of Major Equipment-CTG 7	\$69,512,437.36
69	Major Equipment Rough Set on Foundation-ECM 7	\$70,320,721.52
70	Assembly of Major Equipment-GSU 1	\$71,129,005.67
71	Assembly of Major Equipment-ECM 5	\$71,937,289.83
72	Assembly of Major Equipment-ECM 6	\$72,745,573.98
73	Assembly of Major Equipment-GSU 2	\$73,553,858.14
74	Assembly of Major Equipment-GSU 3	\$74,362,142.29
75	Assembly of Major Equipment-ECM 7	\$75,170,426.45
76	Assembly of Major Equipment-GSU 4	\$75,978,710.60
77	Mechanical Completion Unit 1	\$76,786,994.76
78	Mechanical Completion Unit 2	\$77,191,136.84
79	Mechanical Completion Unit 3	\$77,999,420.99
80	Mechanical Completion Unit 4	\$78,403,563.07
81	Mechanical Completion Unit 5	\$79,211,847.22
82	Mechanical Completion Unit 6	\$80,020,131.38
83	CTG 1 First Fire	\$80,828,415.54
84	CTG 2 First Fire	\$80,828,415.54
85	CTG 3 First Fire	\$80,828,415.54
86	CTG 4 First Fire	\$80,828,415.54
87	Mechanical Completion Unit 7	\$80,828,415.54
88	CTG 5 First Fire	\$80,828,415.54
89	CTG 6 First Fire	\$80,828,415.54
90	CTG 7 First Fire	\$80,828,415.54
91	Substantial Completion	\$80,828,415.54
92	Final Completion	N/A - Work Complete



## EXHIBIT O

### Initial Project Schedule

Definitions for the purposes of Exhibit O,

**“Equipment Ready to Ship”** means that the related Equipment, in its entirety, has been fabricated, painted, protected, inspected with all associated quality control forms completed, so that all that remains is to package the Equipment for shipment once a date for transport has been determined. Note that not all items shipped will be in a single enclosure, and may be shipped loose. These items while considered “Ready to Ship” may remain on-site at Sedalia until an appropriate time in accordance with Contractor’s construction plan and the Project Schedule.

**“Equipment”** for the related Ready to Ship definition shall include:

- For the CTG: Turbine Package, GT engine, Generator Package, including all associated Auxiliary Skids.
- For the GSU: Main Tank, Radiator, including all required accessories
- For the ECM: SCR/CO Catalyst frame, Ducting Assembly, Expansion Joints, Exhaust Stack. This milestone is not applicable to any CEMS equipment/structures.

**“Site Mobilization”** means the first instance when any of Contractor or its Subcontractors or other representatives is present on the Site for construction related activities after Owner has issued the Notice to Proceed.

**“Civil Works Complete”** means all required clearing, excavation, and foundation work has been performed for the rough set of the respective Equipment. Civil Works Complete shall require that the applicable foundations are cured, set, inspected, and available for rough set of the respective Equipment.

**“Equipment Rough Set on Foundation”** means the related Equipment is delivered to the site and set on its anchor bolts and on its final foundation which has been fully cured. “Equipment” for this definition shall include:

- For the CTG: Turbine Package and Generator Package. Note that the GT engine for each Turbine Package may be shipped separately and/or at a later time in accordance with Contractor’s construction plan and the Project Schedule.
- For the GSU: Main Tank
- For the ECM: SCR/CO Catalyst frame, Ducting Assembly, Exhaust Stack. This milestone is not applicable to any CEMS equipment/structures.

**“Assembly of Equipment Complete”** means the Equipment is mechanically and structurally constructed in accordance with the requirements of this Contract, the Statement of Work and Industry Standards, except for Non-Critical Deficiencies, in advance of fulfilling the requirements for Mechanical Completion.

**“Equipment”** for this definition shall include:

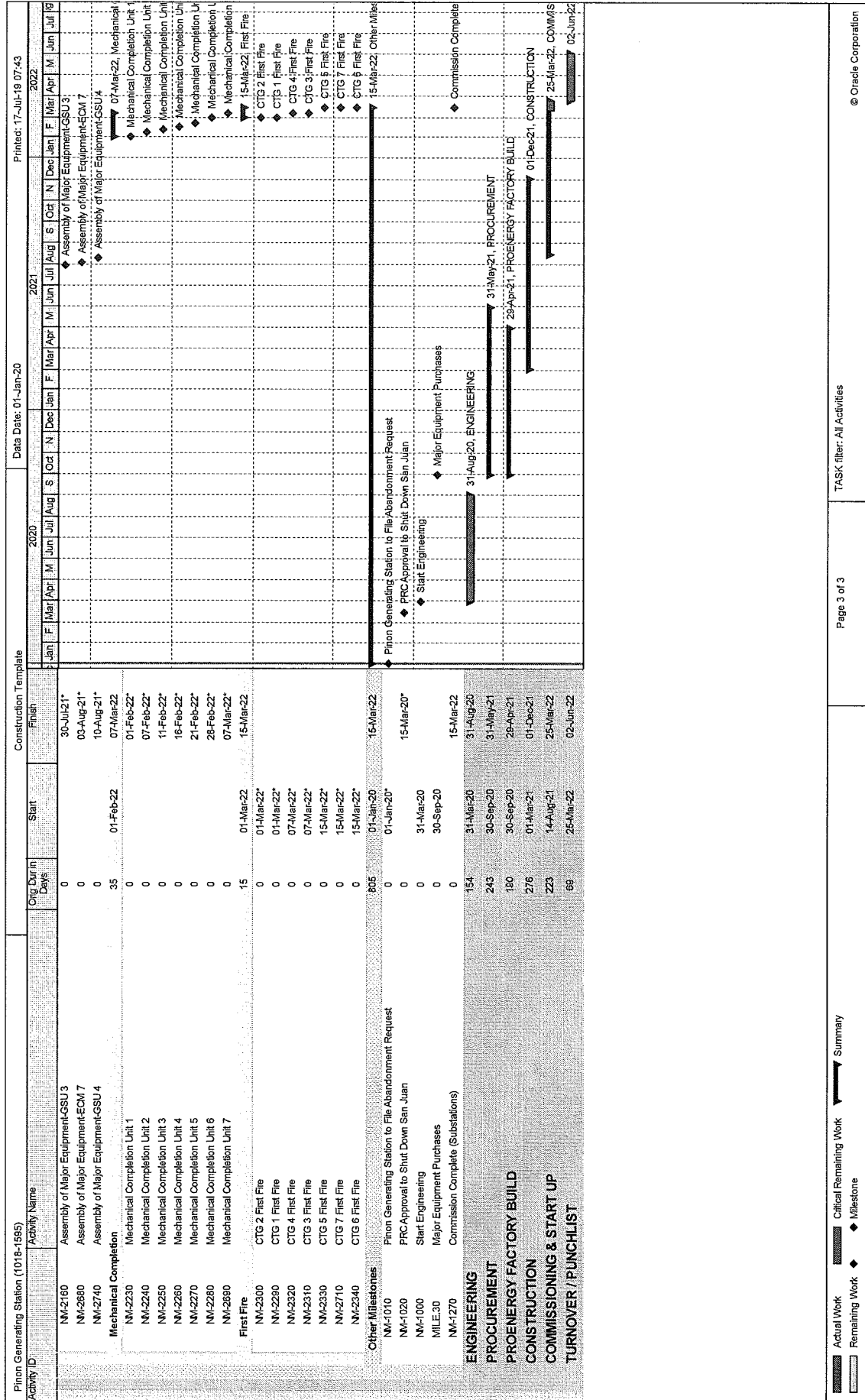
- For the CTG: Turbine Package, GT Engine, Generator Package, including all associated Auxiliary Skids. Note that in the event of an Owner Caused Delay or other Excusable Condition delaying the date of First Fire, the GT Engine will remain in preservation at ProEnergy’s facilities until such time as shipment to the site is required to satisfy the delayed First Fire date. In this case, placement of the GT Engine will not be a requirement of this milestone, however, the Agreement terms regarding Excusable Conditions shall apply.
- For the GSU: Main Tank, Radiator, including all required accessories
- For the ECM: SCR/CO Catalyst frame, Ducting Assembly, Expansion Joints, Exhaust Stack. This milestone is not applicable to any CEMS equipment/structures.

[illegible]

DocuSign Envelope ID: 1F03507F-800D-4D7D-9853-4C630DEF963B

Pinon Generating Station (1018-1995)										Construction Template												Data Date: 01-Jan-20												Printed: 17-Jul-19 07:43											
Activity ID	Activity Name	Orig Dur in Days	Start	Finish	202020212022																																								
					S	Jan	F	Mar	Apr	M	Jun	Jul	Aug	S	Oct	N	Dec	Jan	F	Mar	Apr	M	Jun	Jul	Aug	S	Oct	N	Dec	Jan	F	Mar	Apr	M	Jun	Jul									
NM-1810	Civil Works Complete-CTG 4	0		04-May-21*																																									
NM-1800	Civil Works Complete-CTG 3	0		04-May-21*																																									
NM-1920	Civil Works Complete-ECM 6	0		18-May-21*																																									
NM-1830	Civil Works Complete-CTG 6	0		18-May-21*																																									
NM-1820	Civil Works Complete-CTG 5	0		18-May-21*																																									
NM-1910	Civil Works Complete-ECM 5	0		18-May-21*																																									
NM-1850	Civil Works Complete-GSU 2	0		31-May-21*																																									
NM-1840	Civil Works Complete-GSU 1	0		31-May-21*																																									
NM-2630	Civil Works Complete-ECM 7	0		31-May-21*																																									
NM-2640	Civil Works Complete-CTG 7	0		31-May-21*																																									
NM-1860	Civil Works Complete-GSU 3	0		10-Jun-21*																																									
NM-2720	Civil Works Complete-GSU 4	0		10-Jun-21*																																									
Equipment Rough Set on Foundations																																													
NM-1940	Major Equipment Rough Set on Foundation-CTG 2	0	28-May-21	07-Jul-21																																									
NM-1930	Major Equipment Rough Set on Foundation-CTG 1	0		28-May-21*																																									
NM-2030	Major Equipment Rough Set on Foundation-ECM 2	0		03-Jun-21*																																									
NM-2020	Major Equipment Rough Set on Foundation-ECM 1	0		03-Jun-21*																																									
NM-1960	Major Equipment Rough Set on Foundation-CTG 4	0		09-Jun-21*																																									
NM-1950	Major Equipment Rough Set on Foundation-CTG 3	0		09-Jun-21*																																									
NM-2050	Major Equipment Rough Set on Foundation-ECM 4	0		14-Jun-21*																																									
NM-2040	Major Equipment Rough Set on Foundation-ECM 3	0		14-Jun-21*																																									
NM-1980	Major Equipment Rough Set on Foundation-CTG 6	0		22-Jun-21*																																									
NM-1970	Major Equipment Rough Set on Foundation-CTG 5	0		22-Jun-21*																																									
NM-2070	Major Equipment Rough Set on Foundation-ECM 6	0		28-Jun-21*																																									
NM-2060	Major Equipment Rough Set on Foundation-ECM 5	0		28-Jun-21*																																									
NM-2650	Major Equipment Rough Set on Foundation-CTG 7	0		28-Jun-21*																																									
NM-2010	Major Equipment Rough Set on Foundation-GSU 3	0		30-Jun-21*																																									
NM-2000	Major Equipment Rough Set on Foundation-GSU 2	0		30-Jun-21*																																									
NM-1990	Major Equipment Rough Set on Foundation-GSU 1	0		30-Jun-21*																																									
NM-2730	Major Equipment Rough Set on Foundation-GSU 4	0		30-Jun-21*																																									
NM-2680	Major Equipment Rough Set on Foundation-ECM 7	0		07-Jul-21*																																									
Assembly of Equipment Complete																									</																				

DocuSign Envelope ID: 1F03507F-800D-4D7D-9853-4C63D9FC9B3B



**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

**IN THE MATTER OF PUBLIC SERVICE )**  
**COMPANY OF NEW MEXICO'S )**  
**ABANDONMENT OF SAN JUAN ) Case No. 19-00018-UT**  
**GENERATING STATION UNITS 1 AND 4 )**

**IN THE MATTER OF PUBLIC SERVICE )**  
**COMPANY OF NEW MEXICO'S )**  
**CONSOLIDATED APPLICATION FOR )**  
**APPROVALS FOR THE ABANDONMENT, ) Case No. 19-00195-UT**  
**FINANCING, AND RESOURCE REPLACEMENT )**  
**FOR SAN JUAN GENERATING STATION )**  
**PURSUANT TO THE ENERGY TRANSITION ACT )**

**AFFIDAVIT**


STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

**THOMAS G. FALLGREN, Vice President of Generation for Public Service**  
**Company of New Mexico**, upon being duly sworn according to law, under oath, deposes  
and states: I have read the foregoing **Supplemental Direct Errata Testimony of**  
**Thomas G. Fallgren** and it is true and accurate based on my own personal knowledge  
and belief.

SIGNED this 18<sup>th</sup> day of September, 2019.

  
THOMAS G. FALLGREN

SUBSCRIBED AND SWORN to before me this 18<sup>th</sup> day of September, 2019.

  
NOTARY PUBLIC IN AND FOR  
THE STATE OF NEW MEXICO

My Commission Expires:

1-21-2020

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
ABANDONMENT OF SAN JUAN ) Case No. 19-00018-UT  
GENERATING STATION UNITS 1 AND 4 )

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
CONSOLIDATED APPLICATION FOR )  
APPROVALS FOR THE ABANDONMENT, ) Case No. 19-00195-UT  
FINANCING, AND RESOURCE REPLACEMENT )  
FOR SAN JUAN GENERATING STATION )  
PURSUANT TO THE ENERGY TRANSITION ACT )

**DIRECT ERRATA TESTIMONY**

**OF**

**NICHOLAS PHILLIPS**

**September 20, 2019**



**DIRECT ERRATA TESTIMONY  
OF NICHOLAS PHILLIPS  
NMPRC CASE NO. 19-00018-UT & 19-00195-UT**

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

2   **A.**   My name is Nicholas Phillips. I am the Director of Integrated Resource Planning  
3       for Public Service Company of New Mexico (“PNM”). My address is 414 Silver  
4       Avenue, SW, Albuquerque, New Mexico 87102.

5

6   **Q.   WHAT IS THE PURPOSE OF YOUR ERRATA TESTIMONY?**

7   **A.**   I filed direct testimony in this case on July 1, 2019. The purpose of my errata  
8       testimony is to discuss the resulting modeling implications due to corrections  
9       related to capital cost revisions for the Piñon Plant and Zamora Storage Project,  
10      gross receipt tax (“GRT”) for the battery storage proposals and the natural gas  
11      transportation costs. In addition, I address the impact of incorrect long-term San  
12      Juan coal pricing and Accumulated Deferred Income Taxes (“ADIT”)  
13      assumptions on the San Juan Continues Scenario.

14

15   **Q.   PLEASE DESCRIBE EACH OF THE ITEMS LISTED IN YOUR**  
16   **PREVIOUS ANSWER.**

17   **A.**   As more fully described in the Supplemental and Direct Errata Testimony of  
18       PNM Witness Fallgren, corrections have been made to modeling inputs for capital  
19       cost revisions, addition of GRT for energy storage agreements (“ESAs”) and the  
20       transportation costs associated with delivery of natural gas to certain gas  
21       resources interconnecting at the San Juan site. As it relates to PNM resource  
22       planning analysis, the capital cost revisions and the fixed gas transportation costs

**DIRECT ERRATA TESTIMONY  
OF NICHOLAS PHILLIPS  
NMPRC CASE NO. 19-00018-UT & 19-00195-UT**

1 modeling inputs were originally overstated and the costs for all battery storage  
2 bids were understated within EnCompass.

3  
4 **Q. PLEASE EXPLAIN THE CHANGES TO THE SAN JUAN CONTINUES**  
5 **SCENARIO.**

6 **A.** The long-term coal prices used in the San Juan Continues Scenario analysis were  
7 understated. PNM modeled the San Juan Coal Plant using the 2017 IRP coal  
8 price forecast, not the more recent update from the San Juan Coal Company (June  
9 2018). Overall the prices used in the analysis from 2019-2023 were correct;  
10 however, for the years beyond 2023 the coal pricing modeled was slightly lower  
11 than used in PNM's June 2018 analysis. While this change does not impact the  
12 replacement resources, it does increase the costs associated with the Net Present  
13 Value ("NPV") of the San Juan Continues Scenario. The resulting NPV for the  
14 San Juan Continues Scenario, is higher than the reported NPV in the original  
15 filing.

16  
17 Further, in reviewing the numbers for San Juan Continues Scenario the ADIT  
18 balance was miscalculated. The values included in the revenue requirements were  
19 understated and consequently, the NPV of revenue requirements for the SJGS  
20 Continues scenario has increased. This miscalculation does not impact the  
21 replacement resources.

**DIRECT ERRATA TESTIMONY  
OF NICHOLAS PHILLIPS  
NMPRC CASE NO. 19-00018-UT & 19-00195-UT**

1     **Q.     HOW DO THESE CORRECTIONS IMPACT PNM'S ANALYSIS?**

2     **A.**     Correcting the SJGS coal price and ADIT estimates do not alter the analysis in  
3             any significant way. Both corrections increase the NPV for only the San Juan  
4             Continues Scenario, further reinforcing the decision for PNM to abandon its  
5             interests in the coal plant.

6

7             The revisions for capital cost for Piñon and Zamora resulted in reducing the NPV  
8             for those scenarios they were included in. Because the portfolio cost impact is  
9             relatively small (approximately \$0.9 million NPV), this correction did not change  
10            the results. While the addition of GRT for all battery ESA did not impact the  
11            replacement resources selection for the Scenarios, it did cause changes to the  
12            NPV's for those scenarios in which they were included. For Scenario 3, which  
13            has the largest amount of battery ESAs, the NPV increased by approximately \$9  
14            million.

15

16            Correcting the fixed gas transportation costs that were used in PNM's modeling  
17            reduces the projected operating costs of certain aeroderivative natural gas  
18            resources relative to other resource alternatives. This correction reduces the  
19            production costs in the original filing for those aeroderivative units in the  
20            modeling database and the result of this correction leads to a change in the  
21            resulting replacement resource portfolio for Scenario 2.

22

**DIRECT ERRATA TESTIMONY  
OF NICHOLAS PHILLIPS  
NMPRC CASE NO. 19-00018-UT & 19-00195-UT**

1   **Q.   WHAT IS THE CORRECTED SCENARIO 2 REPLACEMENT**  
2   **PORTFOLIO?**

3   **A.**   In PNM's original filing, the replacement resource portfolio resulting from  
4       Scenario 2 was a replacement resource portfolio of all new natural gas fired  
5       resources consisting of 7 LM6000 gas turbines (268.8 MW Summer Net  
6       Capacity) and 1 Heavy Frame Combustion Turbine (196 MW Summer Net  
7       Capacity). After correcting the input data, the resulting replacement resource  
8       portfolio for Scenario 2 is now 11 LM6000 gas turbines (422.4 MW Summer Net  
9       Capacity) and a 100 MW Solar / 30 MW Battery hybrid PPA/ESA. As modeled  
10      in EnCompass, the result of these corrections reduces the NPV of Scenario 2 by  
11      approximately \$17 million relative to PNM's July 1, 2019 filing; however,  
12      Scenario 2 remains approximately \$12 million more expensive than Scenario 1.

13

14   **Q.   HAVE THE RELATIVE ECONOMICS BETWEEN THE FOUR**  
15   **SCENARIOS PRESENTED BY PNM IN ITS JULY 1, 2019 FILING**  
16   **CHANGED?**

17   **A.**   No. The best decision for all of PNM's customers remains for PNM to abandon  
18       its interest in the San Juan coal plant and replace that generating capacity with a  
19       more economic and flexible portfolio of replacement resources. Scenario 1 is still  
20       PNM's proposed replacement portfolio due to its low cost and balance of  
21       environmental impacts and locating resources within the Central Consolidated  
22       School District all while maintaining reliability requirements.

**DIRECT ERRATA TESTIMONY  
OF NICHOLAS PHILLIPS  
NMPRC CASE NO. 19-00018-UT & 19-00195-UT**

1   **Q.   DO THE ENCOMPASS DATABASES THAT WERE PROVIDED TO**  
2       **PARTIES CONDUCTING THEIR OWN MODELING ANALYSIS**  
3       **INCLUDE THESE CORRECTIONS?**

4   **A.   Yes.**

5

6   **Q.   HAVE YOU PREPARED CORRECTIONS TO YOUR DIRECT**  
7       **TESTIMONY TO REFLECT THE REVISIONS DISCUSSED ABOVE?**

8   **A.   Yes. PNM is separately making an Errata filing that includes the updated tables to**  
9       **my Direct Testimony.**

10

11   **Q.   DOES THIS CONCLUDE YOUR ERRATA TESTIMONY?**

12   **A.   Yes it does.**

*GCG#526094*

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

<b>IN THE MATTER OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF NEW MEXICO'S</b>	)	
<b>ABANDONMENT OF SAN JUAN</b>	)	<b>Case No. 19-00018-UT</b>
<b><u>GENERATING STATION UNITS 1 AND 4</u></b>	<b>)</b>	

<b>IN THE MATTER OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF NEW MEXICO'S</b>	)	
<b>CONSOLIDATED APPLICATION FOR</b>	)	
<b>APPROVALS FOR THE ABANDONMENT,</b>	)	<b>Case No. 19-00195-UT</b>
<b>FINANCING, AND RESOURCE REPLACEMENT</b>	)	
<b>FOR SAN JUAN GENERATING STATION</b>	)	
<b><u>PURSUANT TO THE ENERGY TRANSITION ACT</u></b>	<b>)</b>	

**AFFIDAVIT**

STATE OF NEW MEXICO	)	
	) ss	
COUNTY OF BERNALILLO	)	

**NICHOLAS PHILLIPS, Director, Integrated Resource Planning, 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 Errata Testimony of Nicholas Phillips** and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 19<sup>th</sup> day of September, 2019.

  
NICHOLAS PHILLIPS

SUBSCRIBED AND SWORN to before me this 19<sup>th</sup> day of September, 2019.

  
NOTARY PUBLIC IN AND FOR  
THE STATE OF NEW MEXICO

My Commission Expires:

1-21-2020

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
ABANDONMENT OF SAN JUAN ) Case No. 19-00018-UT  
GENERATING STATION UNITS 1 AND 4 )

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
CONSOLIDATED APPLICATION FOR )  
APPROVALS FOR THE ABANDONMENT, ) Case No. 19-00195-UT  
FINANCING, AND RESOURCE REPLACEMENT )  
FOR SAN JUAN GENERATING STATION )  
PURSUANT TO THE ENERGY TRANSITION ACT )

**DIRECT ERRATA TESTIMONY**

**OF**

**NICK WINTERMANTEL**

**September 20, 2019**



**DIRECT ERRATA TESTIMONY  
OF NICK WINTERMANTEL  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1   **Q.   PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND PLACE OF**  
2       **EMPLOYMENT.**

3   **A.**   My name is Nick Wintermantel, and my business address is 1935 Hoover Court,  
4       Hoover, AL, 35226. I am a Principal Consultant and Partner at Astrapé  
5       Consulting (“Astrapé”), which is a consulting firm that provides expertise in  
6       resource planning and resource adequacy to utilities across the United States and  
7       internationally.

8

9   **Q.   WHAT IS THE PURPOSE OF YOUR DIRECT ERRATA TESTIMONY?**

10   **A.**   I filed Direct Testimony in this case on July 1, 2019, on behalf of Public Service  
11       Company of New Mexico (“PNM”). As part of Astrapé’s review since the  
12       original filing on July 1, we have identified items in our modeling that need to be  
13       revised.

14

15   **Q.   PLEASE SUMMARIZE THE REVISIONS THAT HAVE BEEN**  
16       **IDENTIFIED AND INCORPORATED INTO THE ASTRAPE SERVVM**  
17       **MODELING.**

18   **A.**   Astrapé has revised its modeling in this case to reflect the following revisions  
19       described by PNM Witness Fallgren in his Supplemental and Direct Errata  
20       Testimony:

21       • The capital costs for the Pinon gas plant and Zamora battery storage  
22       facility.

**DIRECT ERRATA TESTIMONY  
OF NICK WINTERMANTEL  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

- The fixed gas transportation costs for new gas resources.
- The New Mexico Gross Receipts Tax on the battery storage power purchase agreement (“PPA”) projects.

The following adjustments, limited to the SERVVM modeling, have also been made:

- Gas operations and maintenance (“O&M”) costs were adjusted to include the Long Term Service Agreement (“LTSA”) \$/hour costs, which were not included due to a coding error within the SERVVM modeling, and the start charge on gas frame option was input incorrectly. Both of these gas O&M costs have been corrected. The inclusion of LTSA \$/hour increased the Net Present Values (“NPV”) of costs for any replacement resource combination that included gas aeroderivatives and reciprocating engines. The start charge on the gas frame resources reduced the NPV of costs for any replacement resource combination that included the frame option. The NPV impacts vary based on the operation of the units in each replacement resource combination.
- The interconnection costs for the Zamora 30 MW Storage Project have been corrected to reflect that these are distribution rather than transmission costs. This increased the NPVs by approximately \$1.1 million for any replacement resource combinations with the Zamora Storage Project.

**DIRECT ERRATA TESTIMONY  
OF NICK WINTERMANTEL  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

- 1           • The 140 MW wind resource used to satisfy the renewable portfolio  
2           standard has been modeled to reflect an earlier in-service date. Because  
3           this resource is in every replacement resource combination, it had no  
4           impact on the comparative analysis of any replacement resource  
5           combination. This update reduced the NPV in all replacement resource  
6           combinations by approximately \$22.7 million.
- 7           • Specific to Scenario 4, the transmission costs of two of the wind projects  
8           in that resource replacement combination have been corrected. These  
9           changes impacted Scenario 4 by increasing the NPV by approximately  
10          \$24.5 million.

11  
12   **Q.   PLEASE SUMMARIZE THE IMPACT THESE CHANGES HAD ON THE**  
13   **MODELING RESULTS.**

14   **A.**   The relative comparison and ranking among Scenarios 1, 2, 3 and 4 remain the  
15   same. Further, while all the NPVs changed, the best replacement resource  
16   combinations from the Tier 1 and Tier 2 modeling remained the same, and  
17   Scenario 1 remained within \$1 million NPV of costs from the top combination  
18   within the Constrained Modeling. The 2023 fuel outputs from these updated  
19   SERVM modeling runs for Scenarios 1 through 4 and the San Juan Continues  
20   scenario were provided to PNM Witness Monroy.

**DIRECT ERRATA TESTIMONY  
OF NICK WINTERMANTEL  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1   **Q.   DO THE SERVIM DATABASES THAT WERE PROVIDED TO PARTIES**  
2           **CONDUCTING THEIR OWN MODELING INCLUDE THESE**  
3           **CORRECTIONS?**

4   **A.   Yes.**

5

6   **Q.   DOES THIS CONCLUDE YOUR DIRECT ERRATA TESTIMONY?**

7   **A.   Yes.**

*GCG#526093*

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
ABANDONMENT OF SAN JUAN ) Case No. 19-00018-UT  
GENERATING STATION UNITS 1 AND 4 )

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
CONSOLIDATED APPLICATION FOR )  
APPROVALS FOR THE ABANDONMENT, ) Case No. 19-00195-UT  
FINANCING, AND RESOURCE REPLACEMENT )  
FOR SAN JUAN GENERATING STATION )  
PURSUANT TO THE ENERGY TRANSITION ACT )

**AFFIDAVIT**

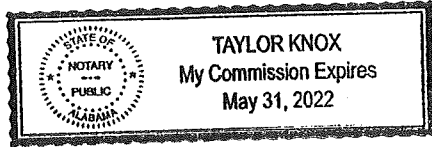
STATE OF ALABAMA )  
 ) ss  
COUNTY OF JEFFERSON )

NICK WINTERMANTEL, Principal, Astrape Consulting, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing **Direct Errata Testimony of Nick Wintermantel** and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 11 day of September, 2019.

  
\_\_\_\_\_  
NICK WINTERMANTEL

SUBSCRIBED AND SWORN to before me this 11 day of September, 2019.



  
\_\_\_\_\_  
NOTARY PUBLIC IN AND FOR  
THE STATE OF ALABAMA

My Commission Expires:

5/31/22

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
ABANDONMENT OF SAN JUAN ) Case No. 19-00018-UT  
GENERATING STATION UNITS 1 AND 4 )

IN THE MATTER OF PUBLIC SERVICE )  
COMPANY OF NEW MEXICO'S )  
CONSOLIDATED APPLICATION FOR )  
APPROVALS FOR THE ABANDONMENT, ) Case No. 19-00195-UT  
FINANCING, AND RESOURCE REPLACEMENT )  
FOR SAN JUAN GENERATING STATION )  
PURSUANT TO THE ENERGY TRANSITION ACT )

**DIRECT ERRATA TESTIMONY**

**OF**

**HENRY E. MONROY**

**September 20, 2019**

**DIRECT ERRATA TESTIMONY  
OF HENRY E. MONROY  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

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

2    **A.**    My name is Henry E. Monroy. I am the Controller, Utility Operations for PNM  
3           Resources, Inc. ("PNMR") and am employed by PNMR Services Company  
4           ("PNMR Services"). My testimony is submitted on behalf of Public Service  
5           Company of New Mexico ("PNM"), a public utility subsidiary of PNMR. My  
6           address is 414 Silver Avenue, SW, Albuquerque, New Mexico 87102.

7

8    **Q.    WHAT IS THE PURPOSE OF YOUR ERRATA TESTIMONY?**

9    **A.**    My errata testimony explains revisions to my Direct Testimony, filed on July 1,  
10           2019, which resulted from corrections to modeling and cost data that were  
11           recently identified. The corrected pages to my Direct Testimony and exhibits are  
12           included in PNM's list of errata which is being filed concurrently. PNM Table  
13           HEM-1 (Errata 9-20-19) below summarizes the updates and the changes to the  
14           2023 revenue requirements for Scenarios 1, 2, 3, and 4.

15



**DIRECT ERRATA TESTIMONY  
OF HENRY E. MONROY  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1

**PNM Table HEM-1 (Errata 9-20-19)**

PNM Table HEM Errata - 1				
Impacts to 2023 Revenue Requirement for Scenarios				
\$ in millions				
	Scenario 1	Scenario 2	Scenario 3	Scenario 4
<b>As Filed - July 1, 2019</b>	(83.2)	(79.4)	(81.0)	12.4
<b>Updates</b>				
Capital Updates	(0.1)	(4.8)	-	-
Gas Plant O&M	1.5	(0.5)	-	-
New PPA in Resource Selection	-	3.1	-	-
Transmission for PPA **	-	0.4	3.5	13.5
Subtotal: 2023 New Owned Resources - Non Fuel	1.4	(1.8)	3.5	13.5
Other Costs Not Included in Energy Transition Charge - Update for Carrying Charges on SJCCC Severance	0.4	0.4	0.4	0.4
GRT on PPA Demand	0.4	-	1.8	-
Fuel Costs/(Savings) Net, Due to Changes in Resources*	0.6	3.4	(0.1)	(0.1)
Subtotal: 2023 Fuel Impacts	1.0	3.4	1.7	(0.1)
<b>Total</b>	<b>2.8</b>	<b>2.0</b>	<b>5.6</b>	<b>13.8</b>
<b>Updated</b>	<b>(80.4)</b>	<b>(77.4)</b>	<b>(75.4)</b>	<b>26.2</b>
* Scenario 1,3,4 - reflects new fuel dispatch based on updates to gas variable and transportation costs; Scenario 2 - reflects new resource selections				
**Scenario 2 - new transmission due to change in resource selection, Scenario 3 and 4 - no change to modeling, but excluded 1st year impact				

2

3 **Q. PLEASE DESCRIBE THE REVISIONS TO YOUR DIRECT TESTIMONY**  
4 **THAT RESULT FROM CHANGES IN CAPITAL COSTS.**

5 **A.** I have revised my revenue requirements for Scenario 1 to reflect net changes in  
6 capital costs for the proposed 280 MW Pinon Gas Plant and the Zamora 30 MW  
7 Battery facilities that are sponsored by PNM Witness Fallgren. The revisions to  
8 the capital costs for the 280 MW Pinon Gas Plant caused the original 2023

**DIRECT ERRATA TESTIMONY  
OF HENRY E. MONROY  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1 revenue requirement to decrease by approximately \$0.1 million. The Zamora 30  
2 MW Battery capital cost revisions caused the original 2023 revenue requirement  
3 to decrease by approximately \$0.02 million. This decrease includes the impacts to  
4 return on rate base, depreciation expense, and property tax.

5  
6 **Q. WHAT UPDATES TO O&M, AS DISCUSSED BY PNM WITNESS**  
7 **FALLGREN IN HIS SUPPLEMENTAL AND DIRECT ERRATA**  
8 **TESTIMONY, IMPACTED YOUR DIRECT TESTIMONY?**

9 **A.** As a result of the Pinon Gas Plant update to O&M expenses shown in PNM  
10 Witness Fallgren's Supplemental and Direct Errata Testimony, the original 2023  
11 revenue requirement increased by approximately \$1.5 million.

12  
13 **Q. WHAT UPDATES TO DEMAND CHARGES FOR BATTERY PPAS, AS**  
14 **DISCUSSED BY PNM WITNESS FALLGREN IN HIS SUPPLEMENTAL**  
15 **AND DIRECT ERRATA TESTIMONY, IMPACTED YOUR DIRECT**  
16 **TESTIMONY?**

17 **A.** My Direct Testimony's 2023 demand charges are being revised to add New  
18 Mexico Gross Receipts Tax ("GRT") for battery PPAs which increases both the  
19 Arroyo 300 MW Solar/Battery PPA and the Jicarilla 50 MW Solar/20 MW  
20 Battery PPA approximately \$0.2 million each.

**DIRECT ERRATA TESTIMONY  
OF HENRY E. MONROY  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1    **Q.    ARE THERE ANY UPDATES TO 2023 ESTIMATED FUEL SAVINGS?**

2    **A.**    Yes. As a result of various updates discussed by PNM Witnesses Fallgren and  
3           Wintermantel, PNM's 2023 estimated fuel savings for Scenario 1 decreased by  
4           approximately \$0.6 million.

5

6    **Q.    DOES THE CHANGE IN SELECTED RESOURCES FOR SCENARIO 2**  
7           **RESULT IN A REVISED ESTIMATED 2023 REVENUE REQUIREMENT**  
8           **FOR SCENARIO 2?**

9    **A.**    Yes. The change in the selected resources for Scenario 2 that is discussed by  
10          PNM Witness Phillips in his Direct Errata Testimony causes a decrease in the  
11          Scenario 2 2023 revenue requirement.

12

13   **Q.    DESCRIBE THE UPDATED SCENARIO 3 ESTIMATED 2023 REVENUE**  
14          **REQUIREMENT?**

15   **A.**    PNM is increasing the estimated 2023 demand charges by approximately \$1.8  
16          million for the Battery PPAs included in Scenario 3 battery PPAs to add GRT.

17

18          PNM has increased estimated 2023 fuel savings by approximately \$0.1 million to  
19          reflect modeling updates discussed by PNM Witness Wintermantel.

20

21          PNM inadvertently omitted a first year revenue requirement of approximately  
22          \$3.5 million for approximately \$73 million in transmission network upgrades for

**DIRECT ERRATA TESTIMONY  
OF HENRY E. MONROY  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1 renewable PPAs. This omission was limited to the 2023 first year revenue  
2 requirement impacts as the capital costs were included in the resource modeling.  
3

4 **Q. DESCRIBE THE UPDATED SCENARIO 4 ESTIMATED 2023 REVENUE**  
5 **REQUIREMENT.**

6 **A.** PNM has increased estimated 2023 fuel savings by approximately \$0.1 million to  
7 reflect modeling updates discussed by PNM Witness Wintermantel in his Direct  
8 Errata Testimony.  
9

10 PNM identified that the first-year revenue requirement of approximately \$13.5  
11 million for an estimated \$217 million in transmission network upgrades  
12 associated with renewable PPAs was inadvertently excluded from the originally  
13 estimated 2023 first year revenue requirement impacts. This omission was  
14 limited to the 2023 first year revenue requirement impacts as the capital costs  
15 were included in the resource modeling.  
16

17 **Q. HAVE YOU SEPARATELY IDENTIFIED ANY OTHER REVISIONS TO**  
18 **PNM'S ESTIMATED 2023 REVENUE REQUIREMENTS?**

19 **A.** Yes. My Direct Testimony identified that carrying charges on severance  
20 payments for SJCC employees would be requested but did not quantify the  
21 carrying charges due to timing of those payments. PNM estimates the severance  
22 payments for SJCC employees may occur in April 2020. PNM has updated its  
23 calculation of carrying charges to reflect the April 2020 payment date for SJCC

**DIRECT ERRATA TESTIMONY  
OF HENRY E. MONROY  
NMPRC CASE NOS. 19-00018-UT & 19-00195-UT**

1 severances and job training. As a result of this update, PNM estimates total  
2 carrying costs increased approximately \$1.3 million, and the first year requested  
3 amortization in 2023 increased by \$0.4 million. This increase in carrying costs is  
4 reflected in Scenarios 1, 2, 3 and 4.

5

6 **Q. DOES THIS CONCLUDE YOUR ERRATA TESTIMONY?**

7 **A.** Yes.

*GCG#526089*

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

<b>IN THE MATTER OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF NEW MEXICO'S</b>	)	
<b>ABANDONMENT OF SAN JUAN</b>	)	<b>Case No. 19-00018-UT</b>
<b><u>GENERATING STATION UNITS 1 AND 4</u></b>	<b>)</b>	


<b>IN THE MATTER OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF NEW MEXICO'S</b>	)	
<b>CONSOLIDATED APPLICATION FOR</b>	)	
<b>APPROVALS FOR THE ABANDONMENT,</b>	)	<b>Case No. 19-00195-UT</b>
<b>FINANCING, AND RESOURCE REPLACEMENT</b>	)	
<b>FOR SAN JUAN GENERATING STATION</b>	)	
<b><u>PURSUANT TO THE ENERGY TRANSITION ACT</u></b>	<b>)</b>	

**AFFIDAVIT**

STATE OF NEW MEXICO	)	
	)	ss
COUNTY OF BERNALILLO	)	

**HENRY E. MONROY, Controller, Utility Operations at PNMR Services Company,** upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing **Direct Errata Testimony of Henry E. Monroy** and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 19<sup>th</sup> day of September, 2019.

  
HENRY E. MONROY

SUBSCRIBED AND SWORN to before me this 19<sup>th</sup> day of September, 2019.

  
NOTARY PUBLIC IN AND FOR  
THE STATE OF NEW MEXICO

My Commission Expires:

1-21-2020

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

<b>IN THE MATTER OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF NEW MEXICO'S</b>	)	
<b>ABANDONMENT OF SAN JUAN</b>	)	<b>Case No. 19-00018-UT</b>
<b><u>GENERATING STATION UNITS 1 AND 4</u></b>	<b>)</b>	

<b>IN THE MATTER OF PUBLIC SERVICE</b>	)	
<b>COMPANY OF NEW MEXICO'S</b>	)	
<b>CONSOLIDATED APPLICATION FOR</b>	)	
<b>APPROVALS FOR THE ABANDONMENT,</b>	)	<b>Case No. 19-00195-UT</b>
<b>FINANCING, AND RESOURCE REPLACEMENT</b>	)	
<b>FOR SAN JUAN GENERATING STATION</b>	)	
<b><u>PURSUANT TO THE ENERGY TRANSITION ACT</u></b>	<b>)</b>	

**CERTIFICATE OF SERVICE**

I hereby certify that **Supplemental and Direct Errata Testimony of Thomas G. Fallgren and the Direct Errata Testimony of Ronald N. Darnell, Nicholas Phillips, Nick Wintermantel and Henry E. Monroy** were mailed first-class, postage-paid, or emailed to those persons at the email addresses and hand-delivered on September 20, 2019 as shown below:

Stacey Goodwin  
PNM Resources, Inc.  
Corporate Headquarters - Legal Department  
Albuquerque, NM 87158-0805  
[stacey.goodwin@pnmresources.com](mailto:stacey.goodwin@pnmresources.com)

Rick Alvidrez  
Miller Stratvert P.A.  
500 Marquette NW, Suite 1100  
P.O. Box 25687  
Albuquerque, New Mexico 87125  
[ralvidrez@mstlaw.com](mailto:ralvidrez@mstlaw.com)  
[dakenhead@mstlaw.com](mailto:dakenhead@mstlaw.com)

Ryan Jerman  
PNM Resources, Inc.  
Corporate Headquarters - Legal Department  
Albuquerque, NM 87158-0805  
[ryan.jerman@pnmresources.com](mailto:ryan.jerman@pnmresources.com)

Raymond L. Gifford  
Wilkinson Barker Knauer LLP  
1755 Blake St., Suite 470  
Denver, CO 80202  
[rgifford@wbklaw.com](mailto:rgifford@wbklaw.com)  
[apeters@wbklaw.com](mailto:apeters@wbklaw.com)

Carey Salaz  
PNM Resources, Inc.  
Corporate Headquarters  
Albuquerque, NM 87158-1105  
[carey.salaz@pnm.com](mailto:carey.salaz@pnm.com)

Nann M. Winter, Esq.  
Stelzner, Winter, Warburton, Flores, Sanchez  
& Dawes, P.A.  
P. O. Box 528  
Albuquerque, NM 87103-0528  
[nwinter@stelznerlaw.com](mailto:nwinter@stelznerlaw.com)



Cholla Khoury  
Office of the Attorney General  
PO Drawer 1508  
Santa Fe, NM 87504-1508  
[ckhoury@nmag.gov](mailto:ckhoury@nmag.gov)  
[EHeltman@nmag.gov](mailto:EHeltman@nmag.gov)

Steven S. Michel, Esq.  
Western Resource Advocates  
409 E. Palace Ave., Unit 2  
Santa Fe, NM 87501  
[smichel@westernresources.org](mailto:smichel@westernresources.org)

Peter J. Gould, Esq.  
PO Box 34127  
Santa Fe, NM 87594-4127  
[peter@thegouldlawfirm.com](mailto:peter@thegouldlawfirm.com)

Charles F. Noble, Esq.  
CCAIE  
409 E. Palace Ave., Unit #2  
Santa Fe, NM 87501  
[Noble.ccae@gmail.com](mailto:Noble.ccae@gmail.com)

Donald E. Gruenemeyer, P.E.  
Sawvel & Associates, Inc.  
100 East Main Cross Street, Suite 300  
Findlay, Ohio 45840-4889  
[degruen@sawvel.com](mailto:degruen@sawvel.com)

Steven Gross  
Porter Simons, P.C.  
40200 Truckee Airport Rd., Suite One  
Truckee, CA 96161  
[gross@portersimon.com](mailto:gross@portersimon.com)

James R. Dittmer  
Utilitech, Inc.  
623 NE Saint Andrews Circle  
Lee's Summit, MO 64064  
[jdittmer@utilitech.net](mailto:jdittmer@utilitech.net)

Gideon Elliot  
Office of the Attorney General  
PO Drawer 1508  
Santa Fe, NM 98504-1508  
[gelliot@nmag.gov](mailto:gelliot@nmag.gov)

Dahl Harris  
2753 Herradura Road  
Santa Fe, NM 87505  
[dahlharris@hotmail.com](mailto:dahlharris@hotmail.com)

Peter Auh, General Counsel  
ABCWUA  
P. O. Box 1293  
Albuquerque, NM 87103-1293  
[pauh@abcwua.org](mailto:pauh@abcwua.org)

Thomas Manning  
406 S. Arizona St.  
Silver City, NM 88061  
[cfreecleanenergy@yahoo.com](mailto:cfreecleanenergy@yahoo.com)

Lisa Tormoen Hickey  
Tormoen Hickey LLC  
14 N. Sierra Madre, Suite A  
Colorado Springs, CO 80903  
[lisahickey@newLawgoup.com](mailto:lisahickey@newlawgoup.com)

Marcos D. Martinez  
City Attorney Office  
City of Santa Fe  
P. O. Box 909  
Santa Fe, NM 87501  
[mdmartinez@santafenm.gov](mailto:mdmartinez@santafenm.gov)

Martin R. Hopper  
M-S-R Public Power Agency  
P. O. Box 4060  
Modesto, CA 95352  
[mhopper@msrpower.org](mailto:mhopper@msrpower.org)

Randy S. Bartell  
Montgomery & Andrews, P.A.  
P. O. Box 2307  
Santa Fe, NM 87504-2307  
[rbartell@montand.com](mailto:rbartell@montand.com)

Bruce C. Throne, Esq.  
1440-B South St. Francis Drive  
Santa Fe, NM 87505  
[bthroneatty@newmexico.com](mailto:bthroneatty@newmexico.com)

Jeffrey H. Albright, Esq.  
JAlbright Law, LLC  
201 Third Street NW, Suite 1880  
Albuquerque, NM 87102  
[JA@jalbLaw.com](mailto:JA@jalbLaw.com)

Mariel Nanasi  
New Energy Economy  
343 East Alameda St.  
Santa Fe, NM 87501-2229  
[mariel@seedsbeneaththesnow.com](mailto:mariel@seedsbeneaththesnow.com)

Barry W. Dixon  
Business Manager  
IUOE Local 953  
4260 Highway 64  
P.O. Box 2127  
Kirkland, NM 87417  
[Bwdixon953@msn.com](mailto:Bwdixon953@msn.com)

Jason Marks  
Jason Marks Law, LLC  
1011 Third St NW  
Albuquerque, NM 87102  
(505) 385-4435  
[lawoffice@jasonmarks.com](mailto:lawoffice@jasonmarks.com)

Daniel R. Dolan  
Dolan & Associates  
3321 Candelaria NE, #126  
Albuquerque, NM 87107  
[drd@lobo.net](mailto:drd@lobo.net)

Michael I. Garcia  
Assistant County Attorney, Sr.  
Bernalillo County Legal Department  
520 Lomas Blvd. NW, 4<sup>th</sup> Floor  
Albuquerque, NM 87102  
[mikgarcia@bernco.gov](mailto:mikgarcia@bernco.gov)

Joan Drake  
Modrall Sperling  
500 Fourth Street NW, Suite 1000  
Albuquerque, NM 87102  
[joan.drake@modrall.com](mailto:joan.drake@modrall.com)

Keith W. Herrmann  
Stelzner, Winter, Warburton, Flores, Sanchez  
& Dawes, PA  
PO Box 528  
Albuquerque, NM 87103  
[kherrmann@stelznerlaw.com](mailto:kherrmann@stelznerlaw.com)

Stephen Curtice  
Youtz & Valdez, P.C.  
900 Gold Ave, SW  
Albuquerque, NM 87102  
[Stephen.curtice@youtzvaldez.com](mailto:Stephen.curtice@youtzvaldez.com)

Kyle J. Tisdell  
Western Environmental Law Center  
208 Paseo del Pueblo Sur, Unit 602  
Taos, New Mexico 87571  
(575) 613-8050  
[tisdell@westernlaw.org](mailto:tisdell@westernlaw.org)

Erik Schlenker-Goodrich  
Western Environmental Law Center  
208 Paseo del Pueblo Sur, Unit 602  
Taos, New Mexico 87571  
[eriksg@westernlaw.org](mailto:eriksg@westernlaw.org)

Andrea Crane  
The Columbia Group Inc.  
2805 East Oakland Park Blvd, #401  
Ft. Lauderdale, FL 33306  
[ctcolumbia@aol.com](mailto:ctcolumbia@aol.com)

Sharon T. Shaheen  
Montgomery & Andrews, P.A.  
325 Paseo de Peralta  
Santa Fe, New Mexico 87501  
[sshaheen@montand.com](mailto:sshaheen@montand.com)

David Ortiz  
Montgomery & Andrews, P.A.  
325 Paseo de Peralta  
Santa Fe, New Mexico 87501  
[DOrtiz@montand.com](mailto:DOrtiz@montand.com)

Marvin T. Griff, Esq.  
Thompson Hine, LLC  
1919 M St., NW, Suite 700  
Washington, DC 20036-3537  
[Marvin.griff@thompsonhine.com](mailto:Marvin.griff@thompsonhine.com)

Richard L. C. Virtue  
Carla R. Najjar  
Virtue & Najjar, PC  
P.O. Box 22249  
Santa Fe, NM 87505-2249  
Telephone: (505) 983-6101  
[rvirtue@virtuelaw.com](mailto:rvirtue@virtuelaw.com)  
[csnajjar@virtuelaw.com](mailto:csnajjar@virtuelaw.com)

Jane L. Yee, Assistant City Attorney  
City of Albuquerque, Legal Department  
P.O. Box 2248  
Albuquerque, NM 87103  
[jyee@cabq.gov](mailto:jyee@cabq.gov)

Stephanie Dzur  
Attorney for CCAE  
5724 Nugget Ct NE  
Albuquerque, NM 87111  
(505) 730-5295  
[Stephanie@Dzur-Law.com](mailto:Stephanie@Dzur-Law.com)

Doug Gegax  
Doug Gegax Consulting  
4805 Sage Road  
Las Cruces, NM 88011  
[dgegax@nmsu.edu](mailto:dgegax@nmsu.edu)

John F. McIntyre  
Montgomery & Andrews, P.A.  
325 Paseo de Peralta  
Santa Fe, New Mexico 87501  
[jmcintwe@montand.com](mailto:jmcintwe@montand.com)

Jennifer Breakell  
City Attorney  
City of Farmington  
800 Municipal Drive  
Farmington, NM 87401-2663  
[jbreakell@fmtn.org](mailto:jbreakell@fmtn.org)

Katherine L. Coleman  
Thompson & Knight  
98 San Jacinto Blvd., Suite 1900  
Austin, Texas 78701  
[katie.coleman@tklaw.com](mailto:katie.coleman@tklaw.com)

Jeremy Cottrell  
Westmoreland Mining, LLC  
9540 S. Maroon Circle, Suite 300  
Englewood, CO 80112  
[cottrell@westmoreland.com](mailto:cottrell@westmoreland.com)

Larry Blank, Ph.D.  
TAHOEconomics  
6061 Montgomery Road  
Midlothian, Texas 76065  
[Ib@tahoeeconomics.com](mailto:Ib@tahoeeconomics.com)

Debra S. Doll, Esq., LLM  
Attorney for Prosperity Works  
909 Copper Avenue, NW  
Albuquerque, New Mexico. 87102  
(505) 702-3653  
[Debra@doll-law.com](mailto:Debra@doll-law.com)

**Hand Deliver To:**

Ashley Schannauer  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[MichaelC.Smith@state.nm.us](mailto:MichaelC.Smith@state.nm.us)

**Hand Deliver To:**

Michael C. Smith, Esq.  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[MichaelC.Smith@state.nm.us](mailto:MichaelC.Smith@state.nm.us)

**Hand Deliver To:**

Honorable Chair Theresa Becenti-Aguilar  
NMPRC  
1120 Paseo de Peralta  
Santa Fe, NM 87504  
[T.Becenti@state.nm.us](mailto:T.Becenti@state.nm.us)  
[JenniferA.Baca@state.nm.us](mailto:JenniferA.Baca@state.nm.us)

**Hand Deliver To:**

Honorable Commissioner Jeff L. Byrd  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[jeff.byrd@state.nm.us](mailto:jeff.byrd@state.nm.us)  
[Deborah.Bransford@state.nm.us](mailto:Deborah.Bransford@state.nm.us)

**Hand Deliver To:**

Honorable Commissioner Cynthia B. Hall  
NMPRC  
1120 Paseo de Peralta  
Santa Fe, NM 87504  
[Cynthia.Hall@state.nm.us](mailto:Cynthia.Hall@state.nm.us)  
[Heather.alvarez@state.nm.us](mailto:Heather.alvarez@state.nm.us)

Saif Ismail, Energy Specialist Project Manager  
City of Albuquerque, Department of Municipal  
Development  
1801 4th Street NW, Bldg. B  
Albuquerque, NM 87102  
[sismail@cabq.gov](mailto:sismail@cabq.gov)

**Hand Deliver To:**

Anthony Medeiros  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[MichaelC.Smith@state.nm.us](mailto:MichaelC.Smith@state.nm.us)

**Hand Deliver To:**

Honorable Vice-Chair Valerie Espinoza  
NMPRC  
1120 Paseo de Peralta  
Santa Fe, NM 87504  
[Valerie.Espinoza@state.nm.us](mailto:Valerie.Espinoza@state.nm.us)  
[Savanna.Leyba@state.nm.us](mailto:Savanna.Leyba@state.nm.us)

**Hand Deliver To:**

Honorable Commissioner Stephen Fischmann  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[Stephen.Fischmann@state.nm.us](mailto:Stephen.Fischmann@state.nm.us)  
[Brian.Harris@state.nm.us](mailto:Brian.Harris@state.nm.us)

**Hand Deliver To:**

Elisha Leyba-Tercero  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[Elisha.leyba-tercero@state.nm.us](mailto:Elisha.leyba-tercero@state.nm.us)

**Hand Deliver To:**

John Reynolds  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[john.reynolds@state.nm.us](mailto:john.reynolds@state.nm.us)

**Hand Deliver To:**

Milo Chavez  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[Milo.chavez@state.nm.us](mailto:Milo.chavez@state.nm.us)

**Email**

Robert Lundin  
[rlundin@nmag.gov](mailto:rlundin@nmag.gov)

Mark Fenton  
[Mark.Fenton@pnm.com](mailto:Mark.Fenton@pnm.com)

Erin Overturf, Esq.  
[Erin.overturf@westernresources.org](mailto:Erin.overturf@westernresources.org)

Noah Long  
[nlong@nrhc.org](mailto:nlong@nrhc.org)

Don Hancock  
[srcdon@earthlink.net](mailto:srcdon@earthlink.net)

Mariam Wheir  
[mwheir@gmail.com](mailto:mwheir@gmail.com)

Josh Ewing, Esq.  
[je@fbdlaw.com](mailto:je@fbdlaw.com)

Joseph A. Herz  
[jaherz@sawvel.com](mailto:jaherz@sawvel.com)

Jack Sidler  
[Jack.sidler@state.nm.us](mailto:Jack.sidler@state.nm.us)

Dhiraj Solomon  
[Dhiraj.solomon@state.nm.us](mailto:Dhiraj.solomon@state.nm.us)

Bradford Borman  
[Bradford.borman@state.nm.us](mailto:Bradford.borman@state.nm.us)

Ana Kippenbrock  
[Ana.kippenbrock@state.nm.us](mailto:Ana.kippenbrock@state.nm.us)

David Rhodes  
[rhodesd@southwestgen.com](mailto:rhodesd@southwestgen.com)

**Hand Deliver To:**

Jason Montoya  
New Mexico Public Regulation Commission  
1120 Paseo De Peralta  
Santa Fe, NM 87504  
[JasonN.Montoya@state.nm.us](mailto:JasonN.Montoya@state.nm.us)

Jody Garcia  
[Jgarcia@stelznerlaw.com](mailto:Jgarcia@stelznerlaw.com)

Ned Parker  
[Edwardgparker88@gmail.com](mailto:Edwardgparker88@gmail.com)

Kelly Gould  
[Kelly@thegouldlawfirm.com](mailto:Kelly@thegouldlawfirm.com)

David Van Winkle  
[davidvanwinkle2@gmail.com](mailto:davidvanwinkle2@gmail.com)

Ramona Blaber  
[Ramona.blaber@sierraclub.org](mailto:Ramona.blaber@sierraclub.org)

John W. Boyd, Esq.  
[jwb@fbdlaw.com](mailto:jwb@fbdlaw.com)

Tom Singer  
[Singer@westernlaw.org](mailto:Singer@westernlaw.org)

Michael Dirmeier  
[mdirmeie@gmail.com](mailto:mdirmeie@gmail.com)

John Bogatko  
[John.bogatko@state.nm.us](mailto:John.bogatko@state.nm.us)

Georgette Ramie  
[georgette.ramie@state.nm.us](mailto:georgette.ramie@state.nm.us)

Beverly Eschberger  
[beverly.eschberger@state.nm.us](mailto:beverly.eschberger@state.nm.us)

Anthony Sisneros  
[Anthony.sisneros@state.nm.us](mailto:Anthony.sisneros@state.nm.us)

Carla Sonntag  
[Carla@nmusa.org](mailto:Carla@nmusa.org)

Chris Hunter  
[Chris@cornerstoneresults.com](mailto:Chris@cornerstoneresults.com)

Evan Gillespie  
[evan.gillespie@sierraclub.org](mailto:evan.gillespie@sierraclub.org)

Antonio Paez  
[apaez@daimc.com](mailto:apaez@daimc.com)

Pete Lewis  
[plewis@daimc.com](mailto:plewis@daimc.com)

Alex Dreisbach  
[adreisbach@daimc.com](mailto:adreisbach@daimc.com)

Germaine R. Chappelle, Esq.  
[Gchappelle.law@gmail.com](mailto:Gchappelle.law@gmail.com)

Andrew Harriger  
[akharriger@sawvel.com](mailto:akharriger@sawvel.com)

Aaron El Sabrout  
[aaron@newenergyeconomy.org](mailto:aaron@newenergyeconomy.org)

Edward Montoya  
[eamontoya@cabq.gov](mailto:eamontoya@cabq.gov)

Amanda Edwards  
[AE@Jalblaw.com](mailto:AE@Jalblaw.com)

Jason Marks, Esq.  
[lawoffice@jasonmarks.com](mailto:lawoffice@jasonmarks.com)

Lorraine Talley  
[ltalley@montand.com](mailto:ltalley@montand.com)

Vicky Ortiz  
[Vortiz@montand.com](mailto:Vortiz@montand.com)

Kathleen Fraser  
[kfraser@energystrat.com](mailto:kfraser@energystrat.com)

April Elliott  
[April.elliott@westernresources.org](mailto:April.elliott@westernresources.org)

Steve Schwebke  
[Steve.schwebke@pnm.com](mailto:Steve.schwebke@pnm.com)

Rob Witwer, Esq.  
[witwerr@southwestgen.com](mailto:witwerr@southwestgen.com)

Maurice Brubaker  
[mbrubaker@consultbai.com](mailto:mbrubaker@consultbai.com)

Rachel Brown  
[rabrown@santafecountynm.gov](mailto:rabrown@santafecountynm.gov)

Jay Kumar  
[jkumar@etcinc.biz](mailto:jkumar@etcinc.biz)

Camilla Feibelman  
[Camilla.feibelman@sierraclub.org](mailto:Camilla.feibelman@sierraclub.org)

State Senator Steve Neville  
[steven.neville@nmlegis.gov](mailto:steven.neville@nmlegis.gov)

Representative James Strickler  
[jamesstrickler@msn.com](mailto:jamesstrickler@msn.com)

Representative Anthony Allison  
[Antony.allison@nmlegis.gov](mailto:Antony.allison@nmlegis.gov)

Senator Carlos Cisneros  
[carlos.cisneros@nmlegis.gov](mailto:carlos.cisneros@nmlegis.gov)

State Senator William Sharer  
[bill@williamsharer.com](mailto:bill@williamsharer.com)

Representative Rod Montoya  
[roddmontoya@gmail.com](mailto:roddmontoya@gmail.com)

Representative Paul Bandy  
[paul@paulbandy.org](mailto:paul@paulbandy.org)

Representative Patricia A. Lundstrom  
[Patricia.lundstrom@nmlegis.gov](mailto:Patricia.lundstrom@nmlegis.gov)

Caitlin Liotiris  
[ccollins@energystrat.com](mailto:ccollins@energystrat.com)

James Dauphinais  
[jdauphinais@consultbai.com](mailto:jdauphinais@consultbai.com)

Heather Allen  
[Heather.allen@pnmresources.com](mailto:Heather.allen@pnmresources.com)

Pat O'Connell  
[pat.oconnell@westernresources.org](mailto:pat.oconnell@westernresources.org)

Michael Milligan  
[milligangridolutions@gmail.com](mailto:milligangridolutions@gmail.com)

Tyler Comings  
[tyler.comings@aeclinic.org](mailto:tyler.comings@aeclinic.org)

Anna Sommer  
[ASommer@energyfuturesgroup.com](mailto:ASommer@energyfuturesgroup.com)

John M. Brittingham  
[John.Brittingham@troutman.com](mailto:John.Brittingham@troutman.com)

Josh Combs  
[Josh.Combs@troutman.com](mailto:Josh.Combs@troutman.com)

Eric Koontz  
[eric.koontz@troutman.com](mailto:eric.koontz@troutman.com)

David Getts  
[dgetts@southwesternpower.com](mailto:dgetts@southwesternpower.com)

Katherine Lagen  
[Katherine.lagen@sierraclub.org](mailto:Katherine.lagen@sierraclub.org)

Mike Eisenfeld  
[mike@sanjuancitizens.org](mailto:mike@sanjuancitizens.org)

Carol Davis  
[caroljdavis.2004@gmail.com](mailto:caroljdavis.2004@gmail.com)

Douglas J. Howe  
[dhowe@highrocknm.com](mailto:dhowe@highrocknm.com)

Thompson & Knight  
[Tk.eservice@tklaw.com](mailto:Tk.eservice@tklaw.com)

Richard Sweet  
[rjs@levitan.com](mailto:rjs@levitan.com)

Seth Parker  
[sgp@levitan.com](mailto:sgp@levitan.com)

Michael Gorman  
[mgorman@consultbai.com](mailto:mgorman@consultbai.com)

Cydney Beadles  
[cydney.beadles@westernresources.org](mailto:cydney.beadles@westernresources.org)

Chelsea Hotaling  
[CHotaling@energyfuturesgroup.com](mailto:CHotaling@energyfuturesgroup.com)

Brian Andrews  
[bandrews@consultbai.com](mailto:bandrews@consultbai.com)

Melissa Buttler  
[Melissa.Butler@troutman.com](mailto:Melissa.Butler@troutman.com)

Bob Edwards  
[Bob.Edwards@troutman.com](mailto:Bob.Edwards@troutman.com)

Kiran Mehta  
[Kiran.Mehta@troutman.com](mailto:Kiran.Mehta@troutman.com)

Matthew Gerhart  
[matt.gerhart@sierraclub.org](mailto:matt.gerhart@sierraclub.org)

Shane Youtz  
[shane@youtzvaldez.com](mailto:shane@youtzvaldez.com)

Robyn Jackson  
[chooshgai.bitsi@gmail.com](mailto:chooshgai.bitsi@gmail.com)

Greg Sonnenfeld  
[gsonnenf@gmail.com](mailto:gsonnenf@gmail.com)

Michael Goggin  
[mgoggin@gridstrategiesllc.com](mailto:mgoggin@gridstrategiesllc.com)

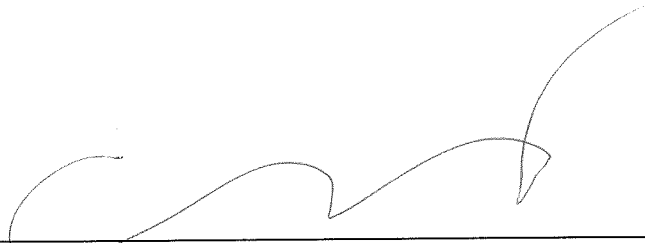
Josh Finn  
[Joshua.finn@navajopower.com](mailto:Joshua.finn@navajopower.com)

James Montalbano  
[james@youtzvaldez.com](mailto:james@youtzvaldez.com)

Alexander Mattfolk  
[ajm@levitan.com](mailto:ajm@levitan.com)

Dated this 20th day of September, 2019.

By:



---

Carey Salaz, Senior Project Manager  
PNM Regulatory Planning and Policy  
Public Service Company of New Mexico