

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF THE APPLICATION)
OF PUBLIC SERVICE COMPANY OF NEW)
MEXICO FOR DECERTIFICATION AND)
ABANDONMENT OF 114MW OF LEASED)
PALO VERDE NUCLEAR GENERATING)
STATION CAPACITY AND SALE AND)
TRANSFER OF RELATED ASSETS)
AND FOR APPROVAL TO PROCURE)
NEW RESOURCES UNDER 17.9.551 NMAC)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)
)
Applicant.)
_____)**

Case No. 21-____-UT

**DIRECT TESTIMONY
OF
MICHAEL J. SETTLAGE**

April 2, 2021

**NMPRC CASE NO. 21-____-UT
INDEX TO THE DIRECT TESTIMONY OF
MICHAEL J. SETTLAGE**

**WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO**

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AFFIDAVIT

**DIRECT TESTIMONY
OF MICHAEL J. SETTLAGE
NMPRC CASE NO. 21-____-UT**

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

2 **A.** My name is Michael J. Settlage. I am a Pricing Principal for Public Service
3 Company of New Mexico (“PNM” or “Company”). My business address is 414
4 Silver Avenue SW, Albuquerque, New Mexico 87102.

5

6 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
7 **PROFESSIONAL QUALIFICATIONS.**

8 **A.** Please see PNM Exhibit MJS-1 for my educational background and professional
9 qualifications.

10

11 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NEW MEXICO**
12 **PUBLIC REGULATION COMMISSION (“NMPRC” OR**
13 **“COMMISSION”)?**

14 **A.** Yes. A list of cases in which I have testified or filed testimony is included in PNM
15 Exhibit MJS-1.

16

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

18 **A.** The purpose of my testimony is to present: 1) the combined customer bill impacts
19 of the abandonment of PNM’s leased interests in the Palo Verde Nuclear
20 Generation Station (“PVNGS”) and the procurement of the proposed replacement
21 resources, and 2) the customer bill impacts of the procurement of the proposed
22 reliability resources. The replacement resources and reliability resources are

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1 described in the direct testimonies of PNM Witnesses Thomas G. Fallgren and
2 Nicholas L. Phillips.

3 **I. IMPACTS OF ABANDONMENT OF THE PVNGS LEASED INTERESTS**

4
5 **Q. WHICH PNM WITNESS PRESENTS THE REVENUE REQUIREMENT**
6 **IMPACT OF ABANDONING PNM’S LEASED INTERESTS IN PVNGS**
7 **AND ACQUIRING REPLACEMENT RESOURCES?**

8 **A.** PNM Witness Kyle Sanders presents the anticipated changes to PNM’s revenue
9 requirements from the abandonment and acquisition of replacement resources.
10 These changes are driven by savings from the abandonment of PVNGS leases, non-
11 fuel costs for replacement resources, and fuel savings due to the change in resource
12 mix. As PNM witness Sanders explains, the total expected revenue requirement
13 change is a \$12.6 million reduction.

14
15 **Q. HAVE YOU CALCULATED THE IMPACT TO EACH OF PNM’S RATE**
16 **CLASSES OF THIS \$12.6 MILLION REVENUE REQUIREMENT**
17 **REDUCTION?**

18 **A.** Yes. PNM Exhibit MJS-2 page 1 shows the overall impact to the revenue
19 requirements for each customer class resulting from the abandonment and
20 replacement of PNM’s leased interests in PVNGS compared to continued
21 operations. PNM Exhibit MJS-2 page 1 also shows the impact of the individual
22 cost components—savings from the abandonment of the leased interests, recovery

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1 of abandonment costs, replacement resource non-fuel costs, and total fuel and
2 purchased power or energy storage costs—on each rate class. These impacts were
3 determined using the allocators from PNM’s most recent general rate case and the
4 Fuel and Purchased Power Cost Adjustment Clause, Rider No. 23, and are
5 presented for illustrative purposes only.

6

7 **Q. HAVE YOU CALCULATED THE IMPACTS ON CUSTOMER BILLS AT**
8 **A VARIETY OF KWH USAGES?**

9 A. Yes. PNM Exhibit MJS-2 page 2 shows the 2024 impact on Residential and Small
10 Power customers’ bills of the abandonment of the leased interests and procurement
11 of replacement resources over a variety of usage levels. These two rate classes
12 comprise over 99% of all PNM customers. For Residential customers, the
13 approximate savings range from \$0.00 to \$5.37 per month depending upon kWh
14 use. The savings for an average residential customer using about 600 kWh is
15 approximately \$1.61 per month.

16

17 For Small Power customers, the savings range from \$0.00 to a \$23.51 per month
18 depending upon kWh use.

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1 **II. IMPACTS OF ACQUISITION OF RELIABILITY RESOURCES**

2 **Q. DOES PNM WITNESS SANDERS ALSO PRESENT THE EXPECTED**
3 **REVENUE REQUIREMENT IMPACT OF ACQUIRING THE**
4 **RELIABILITY RESOURCES?**

5 **A.** Yes. As PNM Witness Sanders describes, the main changes to PNM’s revenue
6 requirements from acquiring reliability resources include the non-fuel costs for
7 replacement resources and fuel costs due to the change in resource mix. The total
8 revenue requirement is higher than the current revenue requirement by \$20.0
9 million.

10

11 **Q. HAVE YOU CALCULATED THE IMPACT TO EACH OF PNM’S RATE**
12 **CLASSES OF THIS \$20.0 MILLION REVENUE REQUIREMENT**
13 **INCREASE?**

14 **A.** Yes. PNM Exhibit MJS-3 page 1 shows the overall impact to the revenue
15 requirements for each customer class resulting from acquiring the reliability
16 resources. PNM Exhibit MJS-3 page 1 also shows the impact of the individual non-
17 fuel and fuel and PPA components on each rate class.

18

19 **Q. HAVE YOU CALCULATED THE IMPACTS ON CUSTOMER BILLS AT**
20 **A VARIETY OF KWH USAGES?**

21 **A.** Yes. PNM Exhibit MJS-3 Page 2 shows the 2024 impact on customer bills of the
22 acquisition of the reliability resources over a variety of usage levels for the

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1 Residential and Small Power classes. For residential customers, the approximate
2 cost ranges from \$0.00 to \$4.98 per month depending upon kWh use. The cost for
3 an average residential customer using about 600 kWh is approximately \$1.87 per
4 month.

5

6 For Small Power customers, the cost ranges from \$0.00 to a \$36.12 per month
7 depending upon kWh use.

8

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

10 **A.** Yes, it does.

11

GCG#527872

Resume of Michael J. Settlage

PNM Exhibit MJS-1

Is contained in the following 2 pages.

Michael J. Settlage
EDUCATIONAL AND PROFESSIONAL
SUMMARY

Name: Michael J. Settlage

Address: PNM Resources, Inc.
MS 0605
414 Silver SW, Albuquerque, NM 87102

Position: Principal, Pricing and Regulatory Service
Public Service Company of New Mexico (PNM)

Education: Bachelor of Science- Electrical and Computer Engineering
Clemson University, 1984

Master of Science- Electrical and Computer Engineering
Specialization in Power Engineering
Clemson University, 1985

Employment: - *Lead Pricing Analyst*, PNM (02/2019-Present);
- *Manager of Grid Modernization*, PowerServices, Inc. (07/2017-02/2019);
- *Director of Engineering and Project Management*, Nexgrid, LLC. (01/2017-07/2017);
- *Operations Manager*, ElectriCities of NC. (01/2011-01/2017);
- *Owner, ConciseConcept, LLC.* (01/2007-11/2013);
- *Various Positions*, Carolina Power & Light/ Progress Energy/ Progress Ventures/ Arclight Energy Marketing. (01/1986-06/2007);
- *Research Associate*, Clemson University, Clemson University Electric Power Research Association (CUEPRA). (08/1983-12/1985).

Previous Testimony:

Proceeding	Body	Docket
Adjustment of Base Rates for Fuel Costs of Carolina Power & Light Company	Public Service Commission of South Carolina	1995-1-E

Annual Review of Carolina Power and Light Base Rates for Fuel Costs	Public Service Commission of South Carolina	1998-1-E
Testimony Supporting Reconciliation of PNM's 2018 Energy Efficiency Incentive	NMPRC	17-00076-UT
Testimony in Support of PNM's 2020 Energy Efficiency Incentive	NMPRC	17-00076-UT
PNM's Application for Approval of PNM Solar Direct Voluntary Renewable Energy Program	NMPRC	19-00158-UT
PNM's Renewable Energy Act Plan for 2020	NMPRC	19-00159-UT
PNM's Consolidated Application for Abandonment of San Juan Generating Station	NMPRC	19-00195-UT
PNM's Application for Approval of Energy Efficiency 2021 Plan	NMPRC	20-00087-UT
PNM's Application for Approval of Demand Response Plan	NMPRC	20-00218-UT
PNM's Application for Facebook PPA and ESA 3	NMPRC	21-00031-UT

Impacts on Revenue Requirements and Customer Bills for Palo Verde
Nuclear Station Lease Replacement

PNM Exhibit MJS-2

Is contained in the following 2 pages.

PNM
Impacts on Revenue Requirements for Palo Verde Nuclear Generation Station ("PVNGS") Lease Replacement
Comparison of Continued Operations vs Replacement

	[A]	[B]	[C]	[D]	[E] A+B+C+D	
Line	Consolidated Customer Class	Total Non-Fuel Revenue Requirement Savings from PVNGS Abandonment (\$)	Recovery of Abandonment Costs (\$)	Replacement Power Resources (Non-Fuel) (\$)	Total Fuel and PPA Costs(\$)	Net Impact (\$)
1	1 - Residential	(\$25,905,980)	\$6,897,105	\$675,347	\$9,790,767	(\$8,542,761)
2	2 - Small Power	(\$5,499,105)	\$1,464,060	\$143,357	\$2,388,812	(\$1,502,876)
3	3B - General Power	(\$7,333,075)	\$1,952,329	\$191,167	\$3,656,507	(\$1,533,072)
4	3C - General Power Low LF	(\$1,031,295)	\$274,568	\$26,885	\$443,003	(\$286,839)
5	4B - Large Power	(\$4,307,150)	\$1,146,719	\$112,284	\$2,107,821	(\$940,327)
6	5B - Lg. Svc. (8 MW)	(\$225,903)	\$60,143	\$5,889	\$97,973	(\$61,898)
7	10 - Irrigation	(\$151,743)	\$40,400	\$3,956	\$60,222	(\$47,166)
8	11B - Wtr/Swg Pumping	(\$380,465)	\$101,293	\$9,918	\$264,697	(\$4,556)
9	15B - Universities 115 kV	(\$234,768)	\$62,504	\$6,120	\$137,873	(\$28,271)
10	30B - Manuf. (30 MW)	(\$1,243,854)	\$331,159	\$32,426	\$718,523	(\$161,746)
11	33B - Lg. Svc. (Station Power)	(\$10,114)	\$2,693	\$264	\$6,273	(\$884)
12	35B - Lg. Svc. (3 MW)	(\$706,119)	\$187,994	\$18,408	\$719,918	\$220,201
13	36B - SSR - Renew. Energy Res.	(\$87,233)	\$23,225	\$2,274	\$303,123	\$241,389
14	6 - Private Lighting	(\$24,719)	\$6,581	\$644	\$22,125	\$4,632
15	20 - Streetlighting	(\$71,574)	\$19,055	\$1,866	\$46,945	(\$3,707)
		(\$47,213,096)	\$12,569,827	\$1,230,805	\$20,764,583	(\$12,647,881)

PNM
Impacts on Customer Bills for Palo Verde Nuclear Generation Station ("PVNGS") Lease Replacement
Comparison of Continued Operations vs Replacement

A	B	C	D	E	F	G	H
						B+C+D+E+F	G-B

Residential Schedule 1A

Line No.	kWh Use	Monthly Bill Using Current Base Rates (\$)	Total Non-Fuel Revenue Requirement Savings from PVNGS Abandonment (\$)	Recovery of Abandonment Costs (\$)	Replacement Power Resources (Non-Fuel) (\$)	Total Fuel and PPA Costs(\$)	Monthly Bill with Abandonment Impacts (\$)	Net Impact (\$)
1	0	\$7.11	\$0.00	\$0.00	\$0.00	\$0.00	\$7.11	\$0.00
2	50	\$11.01	(\$0.41)	\$0.11	\$0.01	\$0.15	\$10.87	(\$0.13)
3	100	\$14.90	(\$0.81)	\$0.22	\$0.02	\$0.31	\$14.64	(\$0.27)
4	150	\$18.80	(\$1.22)	\$0.33	\$0.03	\$0.46	\$18.40	(\$0.40)
5	200	\$22.70	(\$1.63)	\$0.43	\$0.04	\$0.62	\$22.16	(\$0.54)
6	250	\$26.60	(\$2.03)	\$0.54	\$0.05	\$0.77	\$25.92	(\$0.67)
7	300	\$30.49	(\$2.44)	\$0.65	\$0.06	\$0.92	\$29.69	(\$0.81)
8	400	\$38.29	(\$3.26)	\$0.87	\$0.08	\$1.23	\$37.21	(\$1.07)
9	500	\$47.75	(\$4.07)	\$1.08	\$0.11	\$1.54	\$46.41	(\$1.34)
10	600	\$58.88	(\$4.88)	\$1.30	\$0.13	\$1.85	\$57.27	(\$1.61)
11	700	\$70.00	(\$5.70)	\$1.52	\$0.15	\$2.15	\$68.12	(\$1.88)
12	750	\$75.57	(\$6.10)	\$1.63	\$0.16	\$2.31	\$73.55	(\$2.01)
13	800	\$81.13	(\$6.51)	\$1.73	\$0.17	\$2.46	\$78.98	(\$2.15)
14	900	\$92.26	(\$7.32)	\$1.95	\$0.19	\$2.77	\$89.84	(\$2.42)
15	1,000	\$105.08	(\$8.14)	\$2.17	\$0.21	\$3.08	\$102.39	(\$2.68)
16	1,200	\$130.72	(\$9.77)	\$2.60	\$0.25	\$3.69	\$127.50	(\$3.22)
17	1,600	\$181.99	(\$13.02)	\$3.47	\$0.34	\$4.92	\$177.70	(\$4.29)
18	2,000	\$233.27	(\$16.28)	\$4.33	\$0.42	\$6.15	\$227.90	(\$5.37)

Small Power Schedule 2A

Line No.	kWh Use	Monthly Bill Using Current Base Rates (\$)	Total Non-Fuel Revenue Requirement Savings from PVNGS Abandonment (\$)	Recovery of Abandonment Costs (\$)	Replacement Power Resources (Non-Fuel) (\$)	Total Fuel and PPA Costs(\$)	Monthly Bill with Abandonment Impacts (\$)	Net Impact (\$)
19	0	\$15.77	\$0.00	\$0.00	\$0.00	\$0.00	\$15.77	\$0.00
20	500	\$64.10	(\$2.87)	\$0.76	\$0.07	\$1.25	\$63.31	(\$0.78)
21	1,000	\$112.43	(\$5.73)	\$1.53	\$0.15	\$2.49	\$110.86	(\$1.57)
22	1,500	\$160.75	(\$8.60)	\$2.29	\$0.22	\$3.74	\$158.40	(\$2.35)
23	2,000	\$209.08	(\$11.47)	\$3.05	\$0.30	\$4.98	\$205.95	(\$3.13)
24	3,000	\$305.74	(\$17.20)	\$4.58	\$0.45	\$7.47	\$301.03	(\$4.70)
25	4,000	\$402.39	(\$22.94)	\$6.11	\$0.60	\$9.96	\$396.12	(\$6.27)
26	5,000	\$499.05	(\$28.67)	\$7.63	\$0.75	\$12.46	\$491.21	(\$7.84)
27	7,000	\$692.36	(\$40.14)	\$10.69	\$1.05	\$17.44	\$681.38	(\$10.97)
28	9,000	\$885.67	(\$51.61)	\$13.74	\$1.35	\$22.42	\$871.56	(\$14.11)
29	12,000	\$1,175.63	(\$68.82)	\$18.32	\$1.79	\$29.89	\$1,156.82	(\$18.81)
30	15,000	\$1,465.60	(\$86.02)	\$22.90	\$2.24	\$37.37	\$1,442.09	(\$23.51)

Impacts on Revenue Requirements and Customer Bills for Reliability
Resources

PNM Exhibit MJS-3

Is contained in the following 2 pages.

Reliability PPAs

PNM
Impacts on Revenue Requirements for Reliability PPAs

		[A]	[B]	[C] A+B
Line	Consolidated Customer Class	Reliability Resources (Non-Fuel) (\$)	Fuel	Net Impact (\$)
1	1 - Residential	\$709,986	\$9,205,312	\$9,915,298
2	2 - Small Power	\$150,710	\$2,158,204	\$2,308,914
3	3B - General Power	\$200,972	\$3,187,694	\$3,388,666
4	3C - General Power Low LF	\$28,264	\$401,465	\$429,729
5	4B - Large Power	\$118,043	\$1,846,110	\$1,964,153
6	5B - Lg. Svc. (8 MW)	\$6,191	\$88,554	\$94,745
7	10 - Irrigation	\$4,159	\$55,809	\$59,968
8	11B - Wtr/Swg Pumping	\$10,427	\$214,695	\$225,122
9	15B - Universities 115 kV	\$6,434	\$115,738	\$122,172
10	30B - Manuf. (30 MW)	\$34,089	\$605,340	\$639,430
11	33B - Lg. Svc. (Station Power)	\$277	\$5,205	\$5,483
12	35B - Lg. Svc. (3 MW)	\$19,352	\$548,815	\$568,167
13	36B - SSR - Renew. Energy Res.	\$2,391	\$208,639	\$211,030
14	6 - Private Lighting	\$677	\$17,189	\$17,866
15	20 - Streetlighting	\$1,962	\$38,515	\$40,476
		\$1,293,934	\$18,697,284	\$19,991,218

Reliability PPAs

PNM
Impacts on Customer Bills for Reliability Resources

A	B	C	D	E	F
				B+C+D	E-B

Residential Schedule 1A

Line No.	kWh Use	Monthly Bill Using Current Base Rates (\$)	Reliability Resources (Non-Fuel) (\$)	Fuel	Monthly Bill with Reliability Resource Impacts (\$)	Net Impact (\$)
1	0	\$7.11	\$0.00	\$0.00	\$7.11	\$0.00
2	50	\$11.01	\$0.01	\$0.14	\$11.16	\$0.16
3	100	\$14.90	\$0.02	\$0.29	\$15.22	\$0.31
4	150	\$18.80	\$0.03	\$0.43	\$19.27	\$0.47
5	200	\$22.70	\$0.04	\$0.58	\$23.32	\$0.62
6	250	\$26.60	\$0.06	\$0.72	\$27.37	\$0.78
7	300	\$30.49	\$0.07	\$0.87	\$31.43	\$0.93
8	400	\$38.29	\$0.09	\$1.16	\$39.53	\$1.25
9	500	\$47.75	\$0.11	\$1.45	\$49.31	\$1.56
10	600	\$58.88	\$0.13	\$1.74	\$60.74	\$1.87
11	700	\$70.00	\$0.16	\$2.02	\$72.18	\$2.18
12	750	\$75.57	\$0.17	\$2.17	\$77.90	\$2.34
13	800	\$81.13	\$0.18	\$2.31	\$83.62	\$2.49
14	900	\$92.26	\$0.20	\$2.60	\$95.06	\$2.80
15	1,000	\$105.08	\$0.22	\$2.89	\$108.19	\$3.12
16	1,200	\$130.72	\$0.27	\$3.47	\$134.45	\$3.74
17	1,600	\$181.99	\$0.36	\$4.63	\$186.98	\$4.98

Small Power Schedule 2A

Line No.	kWh Use	Monthly Bill Using Current Base Rates (\$)	Reliability Resources (Non-Fuel) (\$)	Fuel	Monthly Bill with Reliability Resource Impacts (\$)	Net Impact (\$)
1	0	\$15.77	\$0.00	\$0.00	\$15.77	\$0.00
2	500	\$64.10	\$0.08	\$1.13	\$65.30	\$1.20
3	1,000	\$112.43	\$0.16	\$2.25	\$114.83	\$2.41
4	1,500	\$160.75	\$0.24	\$3.38	\$164.36	\$3.61
5	2,000	\$209.08	\$0.31	\$4.50	\$213.90	\$4.82
6	3,000	\$305.74	\$0.47	\$6.75	\$312.96	\$7.22
7	4,000	\$402.39	\$0.63	\$9.00	\$412.02	\$9.63
8	5,000	\$499.05	\$0.79	\$11.25	\$511.08	\$12.04
9	7,000	\$692.36	\$1.10	\$15.76	\$709.21	\$16.86
10	9,000	\$885.67	\$1.41	\$20.26	\$907.34	\$21.67
11	12,000	\$1,175.63	\$1.89	\$27.01	\$1,204.53	\$28.89
12	15,000	\$1,465.60	\$2.36	\$33.76	\$1,501.71	\$36.12

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF THE APPLICATION)
OF PUBLIC SERVICE COMPANY OF NEW)
MEXICO FOR ABANDONMENT OF 114MW)
OF LEASED PALO VERDE NUCLEAR)
GENERATING STATION CAPACITY AND)
SALE AND TRANSFER OF RELATED)
ASSETS, AND FOR APPROVAL OF)
REPLACEMENT RESOURCES UNDER)
17.9.551 NMAC,)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)
Applicant)
_____)**

Case No. 21-_____-UT

SELF AFFIRMATION

MICHAEL J. SETTLAGE, Principal, Pricing, PNMR Services Company, upon penalty of perjury under the laws of the State of New Mexico, affirm and state: I have read the foregoing **Direct Testimony of Michael J. Settlege** and it is true and correct based on my personal knowledge and belief.

DATED this 2nd day of April, 2021

/s/ Michael J. Settlege

MICHAEL J. SETTLAGE