

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE)
COMPANY OF NEW MEXICO'S)
RENEWABLE ENERGY ACT PLAN)
FOR 2020 AND PROPOSED 2020 RIDER)
RATE UNDER RATE RIDER NO. 36,)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)
)
Applicant.)
_____)

Case No. 19-00____-UT

DIRECT TESTIMONY
OF
MICHAEL J. SETTLAGE

June 3, 2019

NMPRC CASE NO. 19-_____ -UT
INDEX TO THE DIRECT TESTIMONY OF MICHAEL SETTLAGE

WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO

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PNM EXHIBIT MJS-1	Resume
PNM EXHIBIT MJS-2	Derivation of Rider 36 Rate
PNM EXHIBIT MJS-3	PNM’s 16 th Revised Rider 36
PNM EXHIBIT MJS-4	Impact of 16 th Revised Rider 36 on Customers
PNM EXHIBIT MJS-5	Impact of Removal of Method A on Customer Classes

AFFIDAVIT

**DIRECT TESTIMONY OF
MICHAEL SETTLAGE
NMPRC CASE NO. 19-00 _____-UT**

1 **I. INTRODUCTION AND PURPOSE**

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

3 **A.** My name is Michael J. Settlage. I serve as Lead Pricing Analyst for Public Service
4 Company of New Mexico (“PNM”). My business address is 414 Silver SW,
5 Albuquerque, NM 87102.

6

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

9 **A.** I have worked at PNM since February 2019 as a Lead Pricing Analyst, where I am
10 responsible for providing rate design, pricing analysis, and marginal costing for PNM.
11 Prior to assuming my current responsibilities at PNM, I worked at several electrical
12 engineering and utility companies where I provided engineering consulting services
13 as well as operational support to investor owned and municipal electric utilities. A
14 statement of my experience and qualifications is attached as PNM Exhibit MJS-1.

15

16 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

17 **A.** My testimony addresses the following:

- 18 1. The development of the 2020 rate for the 16th Revised Rider No. 36 –
19 Renewable Energy Rider (“Rider 36”) that PNM proposes to implement
20 January 1, 2020, pursuant to Advice Notice No. 562, filed concurrently
21 herewith; and
22 2. The customer bill impact of the 2020 Rider 36 rate.

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1 I also summarize the changes to the Rider 36 rate design resulting from the
2 amendments to the the Renewable Energy Act, NMSA 1978, §§ 62-16-1 to -10
3 (“REA”), in the Energy Transition Act (“ETA”).

4

5 **Q. ARE YOU SPONSORING ANY EXHIBITS IN ADDITION TO PNM EXHIBIT**
6 **MJS-1?**

7 **A.** Yes, I am sponsoring the following additional exhibits:

- 8 • PNM Exhibit MJS-2: Derivation of the Rider 36 rate for calendar year 2020.
- 9 • PNM Exhibit MJS-3: PNM’s 16th Revised Rider 36, which is attached for
10 convenient reference.
- 11 • PNM Exhibit MJS-4: Impacts of Rider 36 on Residential and Small Power
12 Customers.
- 13 • PNM Exhibit MJS-5: Impact of Removal of Method A on customer classes

14

15 **II. DERIVATION OF THE PROPOSED 2020 RIDER 36 RATE**

16 **Q. WHAT MODIFICATIONS TO THE RENEWABLE ENERGY RIDER RATE**
17 **DESIGN IS PNM PROPOSING?**

18 **A.** First, PNM is proposing to modify Rider 36 to apply the same Rider 36 rate to all
19 customers except those that participate in voluntary renewable energy programs.
20 Previously PNM applied the Rider 36 rate to all customers except those that were
21 large capped customers pursuant to Section 62-16-4(A)(2), and those that were
22 exempt customers pursuant to Section 62-16-4(A)(3) of the REA. Large capped

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1 customers were capped in the amount of REA compliance costs PNM could recover
2 from them in a given year, while exempt customers were not assessed any REA
3 compliance costs. The ETA requires that this rate design be changed because it
4 repeals the caps and exemptions in Sections 62-16-4(A)(2) and (3) of the REA;
5 effective June 14, 2019, there are no more large capped or exempt customers. This
6 means that Method A, which was required in Case No. 15-00261-UT, is no longer
7 applicable.

8
9 Second, under Section 32(B)(2), the ETA exempts customers that participate in
10 voluntary programs from being assessed the renewable rider in proportion to the
11 amount of renewable energy they receive from the voluntary program. Accordingly,
12 as a result of the ETA, PNM proposes to assess the same Rider 36 rate to all
13 customers, and to provide voluntary program customers a year-end credit equal to the
14 amount of renewable energy they receive from the voluntary program each year.

15

16 **Q. PLEASE EXPLAIN HOW THE PROPOSED RIDER 36 RATE FOR 2020 WAS**
17 **DEVELOPED.**

18 **A.** PNM's Rider 36 rate is billed on a per kWh basis to all retail customers. PNM
19 witness Thomas Baker describes the estimated renewable energy annual revenue
20 requirement to be recovered through Rider 36. The 2020 Rider 36 rate was calculated
21 by dividing the Estimated Renewable Energy Rider Annual Revenue by the sum of
22 the 2020 total projected sales for each consolidated rate class. PNM Exhibit MJS-2
23 Page 1 provides the calculation.

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1 **Q. WHAT IS THE PROJECTED IMPACT OF REMOVING LARGE CAPPED**
2 **AND EXEMPT CUSTOMER CLASSIFICATIONS ON THE**
3 **CONSOLIDATED RATE CLASSES?**

4 **A.** Removing the large capped and exempt customer classifications simplifies how the
5 Rider 36 rate is calculated. In order to project the customer impacts, I calculated a
6 hypothetical 2020 Rider 36 rate including these classifications, as shown in PNM
7 Exhibit MJS-2 at page 2.

8
9 Removing the large capped and exempt customer classifications also impacts the Fuel
10 and Purchased Power Cost Adjustment Clause, Rider No. 23 (“FPPCAC”), as PNM
11 witness Stephanie Meeks explains in her Direct Testimony. Exhibit MJS-5 at page 1
12 shows the Rider 36 and FPPCAC charges for each consolidated rate class for 2020
13 without the customer classifications. For comparison purposes, Exhibit MJS-5 at page
14 2 shows the Rider 36 and FPPCAC charges for each consolidated rate class as if the
15 customer classifications were in effect in 2020. Exhibit MJS-4 at page 4 shows the
16 net impacts of removing these classifications.

17

18 **Q. WHAT IS THE PROJECTED BILL IMPACT OF THE PROPOSEDRIDER 36**
19 **RATE CHANGE ON PNM’S RESIDENTIAL AND SMALL POWER RATE**
20 **CLASSES?**

21 **A.** Because the Rider 36 rate is assessed as a per kWh charge, the bill impact on each
22 customer will vary with usage. To show this impact, PNM compared 2019 bills,
23 including the large capped and exempt customer classifications impacting Rider 36

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1 and the FPPCAC rate, to 2020 bills without the customer classifications and with the
2 FPPCAC rate for 2020. PNM Exhibit MJS-4, at page 1, shows this combined impact
3 at a variety of usage levels for PNM Residential 1A and Small Power 2A rate classes.
4 For these residential customers, the impact ranges from \$0.00 to \$7.22 per month
5 depending on kWh use. An average residential customer using 600 kWh per month
6 will pay an additional \$2.16 per month under the 2020 Rider 36 rate and FPPCAC
7 rate and renewable percentage. For small power customers, the impact ranges from
8 \$0.00 to \$56.98 per month depending upon kWh use.

9
10 PNM Exhibit MJS-5 provides estimated customer impacts for all capped and exempt
11 customers. The Rider 36 charges increase because the caps and exemptions are
12 removed and the revenue requirement to be recovered through Rider 36 increases.
13 The FPPCAC charges decrease because the fuel rate decreases and the renewable
14 percentage increases.

15
16 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

17 **A.** Yes, it does.

GCG#525553

MICHAEL J. SETTLAGE

EXPERIENCE AND QUALIFICATIONS

CURRENT POSITION: *Lead Pricing Analyst*, Pricing and Regulatory Services.
Public Service Company of New Mexico (PNM)

EDUCATION: B.S. Electrical and Computer Engineering, Clemson University
(CU), 1984.

M.S. Electrical and Computer Engineering, *Specialization in Power
Engineering*. Clemson (CU), 1985.

EXPERIENCE: *Lead Pricing Analyst*, Public Service Company of New Mexico
(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	Regulatory 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 2018 Energy Efficiency Incentive	NMPRC	17-00076-UT
Testimony in Support of 2020 Energy Efficiency Incentive	NMPRC	17-00076-UT

Renewable Energy Rider at \$58,935,081 (Calendar Year 2020): Per kWh Revenue Allocation

A	B	C	D	E	F	G
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Est. Renewable Energy Rider Annual Revenue Requirement **\$58,935,081** [A]

Line No.	Consolidated Rate Class [B]	2020 Projected Customers [C]	2020 Total Projected Sales (kWh) [D]	2020 Renewable Energy Rider Rate [E] = [A] / Σ[D]	Total Recovery Allocated on Per kWh Basis [F] = [D] * [E]	Avg. Annual Rider Charge [G] = [F] / [C] * 12
1	1 - Residential	5,669,040	3,247,232,249	\$ 0.0070504	\$22,894,291	\$48.46
2	2 - Small Power	641,077	977,217,194	\$ 0.0070504	\$6,889,773	\$128.97
3	3B/3C - General Power	52,196	1,874,799,840	\$ 0.0070504	\$13,218,091	\$3,038.85
4	4B - Large Power	2,724	1,111,792,817	\$ 0.0070504	\$7,838,586	\$34,531.21
5	5B - Mines 46/115 kV	24	69,676,553	\$ 0.0070504	\$491,248	\$245,623.83
6	10 - Irrigation	4,124	25,097,999	\$ 0.0070504	\$176,951	\$514.84
7	11B - Wtr/Swg Pumping	1,968	141,283,111	\$ 0.0070504	\$996,103	\$6,073.80
8	15B - Universities 115 kV	12	75,731,019	\$ 0.0070504	\$533,934	\$533,934.08
9	30B - Manuf. (30 MW)	12	360,784,375	\$ 0.0070504	\$2,543,675	\$2,543,674.66
10	33 - Large Service for Station Power	12	3,406,604	\$ 0.0070504	\$24,018	\$24,017.93
11	35 - Large Power Service >=3,000kW	48	219,337,655	\$ 0.0070504	\$1,546,419	\$386,604.63
12	36B - Special Service -Renw. Energy Res.	12	204,520,241	\$ 0.0070504	\$1,441,950	\$1,441,949.80
13	6 - Private Lighting	N/A	14,772,841	\$ 0.0070504	\$104,154	N/A
14	20 - Street Lighting	N/A	33,457,503	\$ 0.0070504	\$235,889	N/A
15	Total	6,371,250	8,359,110,000		\$58,935,081	

16
 17
 18

Total Per kWh Rider No. 36 0.0070504 [M]

Renewable Energy Rider at \$58,935,081 (Calendar Year 2020): Per kWh Revenue Allocation

A	B	C	D	E	F	G	H	I	J	K	L
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Est. Renewable Energy Rider Annual Revenue Requirement \$58,935,081 [A]

Line No.	Consolidated Rate Class [B]	2020 Projected Customers [C]	2020 Total Projected Sales (kWh) [D]	Revenue from Capped Customers		Revenue from Non-Capped Customers				Total Recovery Allocated on Per kWh Basis [K] = [F] + [I] * [J]	Avg. Annual Rider Charge [L] = [K] / [C] * 12	
				2020 Projected Sales of Capped Customers (kWh) [E] = MJS-5, p. 4, [E] lines 1-30	2020 Revenue with Caps (See p. 2, Column (C) line 27) [F] = Σ(\$114,853 or 2% of Revenues of Capped Customers)	Revenue from Non-Capped Customers [G] = [A] - Σ[F]	2020 Projected Sales of Exempted Customer(s) (kWh) [H]	2020 Projected Sales of Non-Capped/Non-Exempted Customers (kWh) [I] = [D] - [E] - [H]	2020 Renewable Energy Rider Rate [J] = [G] / Σ[I]			
1	1 - Residential	5,669,040	3,247,232,249	0	\$0		94,033	3,247,138,216	\$ 0.0083012	\$26,955,124	\$57.06	
2	2 - Small Power	641,077	977,217,194	0	\$0		3,206,501	974,010,692	\$ 0.0083012	\$8,085,452	\$151.35	
3	3B/3C - General Power	52,196	1,874,799,840	0	\$0		33,429,292	1,841,370,548	\$ 0.0083012	\$15,285,574	\$3,514.17	
4	4B - Large Power	2,724	1,111,792,817	296,713,435	\$433,320	\$ 57,961,572	21,230,042	793,849,340	\$ 0.0083012	\$7,023,217	\$30,939.28	
5	5B - Mines 46/115 kV	24	69,676,553	60,349,380	\$98,783			0	9,327,173	\$ 0.0083012	\$176,210	\$88,104.88
6	10 - Irrigation	4,124	25,097,999	0	\$0			0	25,097,999	\$ 0.0083012	\$208,343	\$606.17
7	11B - Wtr/Swg Pumping	1,968	141,283,111	0	\$0			122,846,560	18,436,551	\$ 0.0083012	\$153,045	\$933.20
8	15B - Universities 115 kV	12	75,731,019	0	\$0			61,021,559	14,709,460	\$ 0.0083012	\$122,106	\$122,106.08
9	30B - Manuf. (30 MW)	12	360,784,375	360,784,375	\$114,853			0	0	\$ 0.0083012	\$114,853	\$114,853.00
10	33 - Large Service for Station Power	12	3,406,604	0	\$0			0	3,406,604	\$ 0.0083012	\$28,279	\$28,278.88
11	35 - Large Power Service >=3,000kW	48	219,337,655	212,380,270	\$211,700			0	6,957,385	\$ 0.0083012	\$269,454	\$67,363.53
12	36B - Special Service -Renw. Energy Res.	12	204,520,241	204,520,241	\$114,853			0	0	\$ 0.0083012	\$114,853	\$114,853.00
13	6 - Private Lighting	N/A	14,772,841	0	\$0			52,743	14,720,098	\$ 0.0083012	\$122,194	N/A
14	20 - Street Lighting	N/A	33,457,503	0	\$0			163,908	33,293,595	\$ 0.0083012	\$276,377	N/A
15	Total	6,371,250	8,359,110,000	1,134,747,701	\$973,508			242,044,637	6,982,317,662		\$58,935,081	

Total Per kWh Rider No. 36 \$ 0.0083012 [M]

~~45TH-16TH~~ REVISED RIDER NO. 36
CANCELLING ~~44TH-15TH~~ REVISED RIDER NO. 36

RENEWABLE ENERGY RIDER

DESCRIPTION: This Rider is established to recover Renewable Portfolio Standard (“RPS”) compliance costs.

APPLICABILITY: All PNM customers. ~~This Rider is subject to the limitations of NMSA 1978, Section 62-16-4(A)(2) (2011) applicable to certain nongovernmental customers and it is not applicable to customers exempt from charges for renewable energy procurements pursuant to NMSA 1978, Section 62-16-4(A)(3) (2011).~~

X

TERRITORY: All territory served by the Company under PNM Electric Services tariffs.

RENEWABLE ENERGY COSTS TO BE RECOVERED: The dollar amounts to be collected pursuant to this Rider shall be determined by the RPS compliance costs approved in PNM’s annual Renewable Energy Procurement Plans, and will be collected from PNM customers to whom the this Rider applies.

RIDER RATES: This Rider, where applicable, shall be added to each customer’s bill and applied as a per kilowatt-hour (kWh) charge for all kWh consumed by a customer. The Rider rate consists of the sum of two components, a RPS Compliance Component and an Earning Test Component as follows:

RPS Compliance Component:

	Amount to be recovered	Rate
Renewable Energy Rate for Calendar Year 2019 2020:	\$46,969,941 \$58,935,081	\$0.0066138 per-kWh 0.0070504 per kWh

X

EARNINGS TEST COMPONENT: PNM will file an adjustment pursuant to this Rider as a separate component if PNM’s return on equity (“ROE”) exceeds 10.075%, based on data presented in conformance with 17.3.510.12(B) NMAC (“Rule 510”). The amount of the adjustment will be equal to the revenue reduction that would have resulted in an earned ROE of 10.075%. The Rule 510 filing to determine if an adjustment is applicable will be made no later than April 1, of each year, based on the previous calendar year results. The adjustment, if applicable, will be applied to customers’ bills over an eight month period beginning with bills rendered May 1, and continuing through the end of the calendar year.

Advice Notice No. ~~557~~562

Mark Fenton
Executive Director, Regulatory Policy and Case Management

45TH-16TH REVISED RIDER NO. 36
CANCELLING 44TH-15TH REVISED RIDER NO. 36

RENEWABLE ENERGY RIDER

Page 2 of 2

ANNUAL RECONCILIATION FILING: This Rider shall be adjusted annually to account for new Commission-approved procurements and changes in revenue requirements related to amortization, depreciation, accumulated deferred income tax ("ADIT"), property taxes and other relevant factors. The Company shall annually file with the Commission a report to reconcile the amounts to be collected pursuant to this Rider. The report will be due by February 28 of each year, and will adjust the Rider to reconcile actual RPS compliance costs for the previous year with actual Rider revenues, and to account for new Commission-approved procurements for the current calendar year. The previous year's compliance costs will include revenue requirements of Company-owned renewable facilities, the costs of renewable energy PPAs, the purchase of RECs used for RPS compliance, and any other RPS compliance cost approved by the Commission.

The report also will true-up the previous calendar year Renewable Energy Rider collections. The report will contain:

- a. a summary of the Rider Rate for the previous calendar year;
- b. a detailed listing of collections pursuant to this Rider, for the previous calendar year by affected customer class;
- c. calculation of the Rider Rate to be applied in the current calendar year, including over/under collections from the previous calendar year;
- d. a summary of annual projected sales revenue and any other relevant data used to estimate the Rider Rate.

Advice Notice No. 557562

Mark Fenton
Executive Director, Regulatory Policy and Case Management

GCG#525339

PNM
Renewable Energy Rider No. 36
2020 Rider Rate and Fuel Impact

PNM
Renewable Energy Rider No. 36
Typical Bills for 2020 vs 2019

A	B	C	D
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<u>Residential Schedule 1A</u>				
Line No.	kWh Use	Proposed 2020 Monthly Bill (\$)	Method A 2019 Monthly Bill (\$)	Net Impact (\$)
1	0	\$7.11	\$7.11	\$0.00
2	50	\$12.17	\$11.99	\$0.18
3	100	\$17.23	\$16.87	\$0.36
4	150	\$22.29	\$21.75	\$0.54
5	200	\$27.35	\$26.63	\$0.72
6	250	\$32.41	\$31.50	\$0.90
7	300	\$37.47	\$36.38	\$1.08
8	400	\$47.58	\$46.14	\$1.44
9	500	\$59.37	\$57.57	\$1.80
10	600	\$72.82	\$70.66	\$2.16
11	700	\$86.27	\$83.75	\$2.53
12	750	\$93.00	\$90.29	\$2.71
13	800	\$99.73	\$96.84	\$2.89
14	900	\$113.18	\$109.93	\$3.25
15	1,000	\$128.32	\$124.71	\$3.61
16	1,200	\$158.61	\$154.28	\$4.33
17	1,600	\$219.18	\$213.41	\$5.77
18	2,000	\$279.76	\$272.54	\$7.22

<u>Small Power Schedule 2A</u>				
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Line No.	kWh Use	Proposed 2020 Monthly Bill (\$)	Method A 2020 Monthly Bill (\$)	Net Impact (\$)
19	0	\$15.77	\$15.77	\$0.00
20	500	\$75.72	\$73.92	\$1.80
21	1,000	\$135.67	\$132.06	\$3.61
22	1,500	\$195.62	\$190.21	\$5.41
23	2,000	\$255.57	\$248.35	\$7.22
24	3,000	\$375.47	\$364.64	\$10.82
25	4,000	\$495.37	\$480.93	\$14.43
26	5,000	\$615.26	\$597.23	\$18.04
27	7,000	\$855.06	\$829.81	\$25.25
28	9,000	\$1,094.86	\$1,062.39	\$32.47
29	12,000	\$1,454.56	\$1,411.26	\$43.29
30	15,000	\$1,814.25	\$1,757.27	\$56.98

Proposed 2020 Renewable Energy Rider No. 36 charges and Fuel Factor Charges

2020 Non Renewable
Fuel % 85.41 (a)

Line No.	[A] Consolidated Rate Class	[B] 2020 Projected Customers	[C] 2020 Total Projected Sales (kWh)	[D] 2020 Proposed RER Rate (\$/kWh)	[E] 2020 Projected Rider Charge (\$)	[F] 2020 Proposed Fuel Factor (\$/kWh)	[G] 2020 Projected Fuel Charge (\$)	[H] 2020 Projected Average Annual Charge (\$)	[I] 2020 Projected Average Annual Fuel Charges (\$)
					[B]*[C]		(a)*[B]*[E]	[D]/[A]	[F]/[A]
1	1 - Residential	5,669,040	3,247,232,249	0.007050401	\$ 22,894,290.80	0.0189589	\$ 52,584,260.20	\$ 48.46	\$ 111.31
2	2 - Small Power	641,077	977,217,194	0.007050401	\$ 6,889,773.47	0.0189589	\$ 15,824,628.25	\$ 128.97	\$ 296.21
3	3B/3C - General Power	52,196	1,874,799,840	0.007050401	\$ 13,218,091.41	0.0189589	\$ 30,359,689.43	\$ 3,038.85	\$ 6,979.73
4	4B - Large Power	2,724	1,111,792,817	0.007050401	\$ 7,838,585.63	0.0189589	\$ 18,003,887.09	\$ 34,531.21	\$ 79,312.28
5	5B - Mines 46/115 kV	24	69,676,553	0.007050401	\$ 491,247.67	0.0189589	\$ 1,128,311.66	\$ 245,623.83	\$ 564,155.83
6	10 - Irrigation	4,124	25,097,999	0.007050401	\$ 176,950.97	0.0189589	\$ 406,426.03	\$ 514.84	\$ 1,182.49
7	11B - Wtr/Swg Pumping	1,968	141,283,111	0.007050401	\$ 996,102.64	0.0189589	\$ 2,287,876.96	\$ 6,073.80	\$ 13,950.47
8	15B - Universities 115 kV	12	75,731,019	0.007050401	\$ 533,934.08	0.0189589	\$ 1,226,355.04	\$ 533,934.08	\$ 1,226,355.04
9	30B - Manuf. (30 MW)	12	360,784,375	0.007050401	\$ 2,543,674.66	0.0189589	\$ 5,842,384.52	\$ 2,543,674.66	\$ 5,842,384.52
10	33 - Large Service for Station Power	12	3,406,604	0.007050401	\$ 24,017.93	0.0189589	\$ 55,165.06	\$ 24,017.93	\$ 55,165.06
11	35 - Large Power Service >=3,000kW	48	219,337,655	0.007050401	\$ 1,546,418.51	0.0189589	\$ 3,551,858.16	\$ 386,604.63	\$ 887,964.54
12	36B - Special Service -Renw. Energy Res.	12	204,520,241	0.007050401	\$ 1,441,949.80	0.0189589	\$ 3,311,911.43	\$ 1,441,949.80	\$ 3,311,911.43
13	6 - Private Lighting	N/A	14,772,841	0.007050401	\$ 104,154.46	0.0189589	\$ 239,224.93	N/A	N/A
14	20 - Street Lighting	N/A	33,457,503	0.007050401	\$ 235,888.82	0.0189589	\$ 541,796.18	N/A	N/A
15	Total	6,371,250	8,359,110,000		\$ 58,935,081		\$ 135,363,775		

2020 Renewable Energy Rider No. 36 Charges and Fuel Factor Charges with Method A

Line No.	Consolidated Rate Class	[A]	[B]	[C]	Rider [D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L] [F]*[G]*cap% +[H]*[I] +[J]*[K]*other%	[M] [L]/[A]
		2020 Projected Customers	2020 Total Projected Sales (kWh)	2020 Method A RER Rate (\$/kWh)	2020 Method A Rider Charge (\$)	2020 Method A Rider Average Annual Charge (\$)	2020 Capped Fuel Factor (\$/kWh)	2020 Total Projected Capped Sales (kWh)	2020 Exempt Fuel Factor (\$/kWh)	2020 Projected Exempt Sales (kWh)	2020 Other Customers Fuel Factor (\$/kWh)	2020 Projected Other Customer Sales (kWh)	Method A Total Fuel Charges	Method A Annual Average Fuel Charge
1	1 - Residential	5,669,040	3,247,232,249	0.008301194	\$ 26,955,124	\$ 57.06	0.020088897	-	0.020088897	94,033	0.019756824	3,247,138,216	\$ 53,184,841	\$ 112.58
2	2 - Small Power	641,077	977,217,194	0.008301194	\$ 8,085,452	\$ 151.35	0.020088897	-	0.020088897	3,206,501	0.019756824	974,010,692	\$ 16,017,159	\$ 299.82
3	3B/3C - General Power	52,196	1,874,799,840	0.008301194	\$ 15,285,574	\$ 3,514.17	0.020088897	-	0.020088897	33,429,292	0.019756824	1,841,370,548	\$ 30,830,274	\$ 7,087.92
4	4B - Large Power	2,724	1,111,792,817	0.008301194	\$ 7,023,217	\$ 30,939.28	0.020088897	296,713,435	0.020088897	21,230,042	0.019756824	793,849,340	\$ 19,192,420	\$ 84,548.11
5	5B - Mines 46/115 kV	24	69,676,553	0.008301194	\$ 176,210	\$ 88,104.88	0.020088897	60,349,380	0.020088897	-	0.019756824	9,327,173	\$ 1,325,109	\$ 662,554.55
6	10 - Irrigation	4,124	25,097,999	0.008301194	\$ 208,343	\$ 606.17	0.020088897	-	0.020088897	-	0.019756824	25,097,999	\$ 411,065	\$ 1,195.99
7	11B - Wtr/Swg Pumping	1,968	141,283,111	0.008301194	\$ 153,045	\$ 933.20	0.020088897	-	0.020088897	122,846,560	0.019756824	18,436,551	\$ 2,769,813	\$ 16,889.11
8	15B - Universities 115 kV	12	75,731,019	0.008301194	\$ 122,106	\$ 122,106.08	0.020088897	-	0.020088897	61,021,559	0.019756824	14,709,460	\$ 1,466,773	\$ 1,466,773.36
9	30B - Manuf. (30 MW)	12	360,784,375	0.008301194	\$ 114,853	\$ 114,853.00	0.020088897	360,784,375	0.020088897	-	0.019756824	-	\$ 7,182,530	\$ 7,182,530.39
10	33 - Large Service for Station Power	12	3,406,604	0.008301194	\$ 28,279	\$ 28,278.88	0.020088897	-	0.020088897	-	0.019756824	3,406,604	\$ 55,795	\$ 55,794.75
11	35 - Large Power Service >=3,000kW	48	219,337,655	0.008301194	\$ 269,454	\$ 67,363.53	0.020088897	212,380,270	0.020088897	-	0.019756824	6,957,385	\$ 4,239,642	\$ 1,059,910.57
12	36B - Special Service -Renw. Energy Res.	12	204,520,241	0.008301194	\$ 114,853	\$ 114,853.00	0.020088897	204,520,241	0.020088897	-	0.019756824	-	\$ 4,071,609	\$ 4,071,608.84
13	6 - Private Lighting	N/A	14,772,841	0.008301194	\$ 122,194		0.020088897	-	0.020088897	52,743	0.019756824	14,720,098	\$ 242,151	
14	20 - Street Lighting	N/A	33,457,503	0.008301194	\$ 276,377		0.020088897	-	0.020088897	163,908	0.019756824	33,293,595	\$ 548,589	
15	Total	6,371,250	8,359,110,000		\$ 58,935,081			1,134,747,701		242,044,637		6,982,317,662		

Proposed 2020 Renewable Energy Rider No. 36 Charges and Fuel Factor Charges vs Method A 2020

Line No.	Consolidated Rate Class	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
		page 1 [D]	page 2 [D]	[A]-[B]	[C]/(page 2 [A])	page 1 [F]	page 2 [L]	[E]-[F]	[G]/(page 2 [A])	[C]+[G]	[I]/(page 2 [A])
		2020 Projected Rider Charge (\$)	2020 Method A Rider Charge (\$)	2020 Rider Charge Impact (\$)	2020 Annual Average Rider Charge Impact (\$)	2020 Projected Fuel Charge (\$)	2020 Method A Rider Charge (\$)	2020 Fuel Charge Impact (\$)	2020 Annual Average Fuel Charge Impact (\$)	Net Impact (\$)	Annual Average Net Impact (\$)
1	1 - Residential	\$ 22,894,291	\$ 26,955,124	\$ (4,060,833)	\$ (8.60)	\$ 52,584,260	\$ 53,184,841	\$ (600,581)	\$ (1.27)	\$ (4,661,414)	\$ (9.87)
2	2 - Small Power	\$ 6,889,773	\$ 8,085,452	\$ (1,195,678)	\$ (22.38)	\$ 15,824,628	\$ 16,017,159	\$ (192,531)	\$ (3.60)	\$ (1,388,209)	\$ (25.99)
3	3B/3C - General Power	\$ 13,218,091	\$ 15,285,574	\$ (2,067,482)	\$ (475.32)	\$ 30,359,689	\$ 30,830,274	\$ (470,585)	\$ (108.19)	\$ (2,538,067)	\$ (583.50)
4	4B - Large Power	\$ 7,838,586	\$ 7,023,217	\$ 815,369	\$ 3,591.93	\$ 18,003,887	\$ 19,192,420	\$ (1,188,533)	\$ (5,235.83)	\$ (373,165)	\$ (1,643.90)
5	5B - Mines 46/115 kV	\$ 491,248	\$ 176,210	\$ 315,038	\$ 157,518.96	\$ 1,128,312	\$ 1,325,109	\$ (196,797)	\$ (98,398.72)	\$ 118,240	\$ 59,120.23
6	10 - Irrigation	\$ 176,951	\$ 208,343	\$ (31,392)	\$ (91.34)	\$ 406,426	\$ 411,065	\$ (4,639)	\$ (13.50)	\$ (36,032)	\$ (104.83)
7	11B - Wtr/Swg Pumping	\$ 996,103	\$ 153,045	\$ 843,057	\$ 5,140.59	\$ 2,287,877	\$ 2,769,813	\$ (481,936)	\$ (2,938.64)	\$ 361,121	\$ 2,201.96
8	15B - Universities 115 kV	\$ 533,934	\$ 122,106	\$ 411,828	\$ 411,828.00	\$ 1,226,355	\$ 1,466,773	\$ (240,418)	\$ (240,418.32)	\$ 171,410	\$ 171,409.68
9	30B - Manuf. (30 MW)	\$ 2,543,675	\$ 114,853	\$ 2,428,822	\$ 2,428,821.66	\$ 5,842,385	\$ 7,182,530	\$ (1,340,146)	\$ (1,340,145.87)	\$ 1,088,676	\$ 1,088,675.79
10	33 - Large Service for Station Power	\$ 24,018	\$ 28,279	\$ (4,261)	\$ (4,260.95)	\$ 55,165	\$ 55,795	\$ (630)	\$ (629.69)	\$ (4,891)	\$ (4,890.65)
11	35 - Large Power Service >=3,000kW	\$ 1,546,419	\$ 269,454	\$ 1,276,964	\$ 319,241.10	\$ 3,551,858	\$ 4,239,642	\$ (687,784)	\$ (171,946.03)	\$ 589,180	\$ 147,295.07
12	36B - Special Service -Renw. Energy Res.	\$ 1,441,950	\$ 114,853	\$ 1,327,097	\$ 1,327,096.80	\$ 3,311,911	\$ 4,071,609	\$ (759,697)	\$ (759,697.41)	\$ 567,399	\$ 567,399.38
13	6 - Private Lighting	\$ 104,154	\$ 122,194	\$ (18,040)	N/A	\$ 239,225	\$ 242,151	\$ (2,926)	N/A	\$ (20,966)	N/A
14	20 - Street Lighting	\$ 235,889	\$ 276,377	\$ (40,488)	N/A	\$ 541,796	\$ 548,589	\$ (6,793)	N/A	\$ (47,280)	N/A
15	Total	\$ 58,935,081	\$ 58,935,081	\$ 0		\$ 135,363,775	\$ 141,537,772	\$ (6,173,997)		\$ (6,173,996)	

PNM
Renewable Energy Rider No. 36
2020 Derivation of Rider Rate

PNM Exhibit MJS-5
Page 4 of 5

\$ 0.0070504

Renewable Energy Rider Charges for Large Customers

2020					
Largest Customers by Schedule: RER Charges at Estimated Total RER Cap					
(At this rate, Non-Governmental customers with annual revenue in excess of \$5,742,650 are subject to the \$114,853 annual hard cap limit)					
		(A)	(B)	(C)= Lower of \$114,853 or 2% of (B)	
Line No.	Customer	Schedule	Projected Sales 2020	Projected Revenue 2020	Cap Amount Renewable Energy Rider Charges
1	A	30B	360,784,375	\$21,355,538	\$114,853
2	B	35B	79,404,000	\$3,803,387	\$76,068
3	C	35B	62,184,000	\$2,588,854	\$51,777
4	D	35B	38,280,000	\$2,223,406	\$44,468
5	E	35B	32,512,270	\$1,969,329	\$39,387
6	F	05B	22,411,620	\$2,206,422	\$44,128
7	G	05B	37,937,760	\$2,732,732	\$54,655
8	H	04B	30,537,600	\$2,095,333	\$41,907
9	I	04B	30,240,000	\$2,039,012	\$40,780
10	J	04B	18,112,850	\$1,300,863	\$26,017
11	K	04B	14,022,000	\$969,811	\$19,396
12	L	04B	15,300,000	\$1,092,861	\$21,857
13	M	04B	10,362,000	\$1,139,675	\$22,793
14	N	04B	13,869,389	\$976,373	\$19,527
15	O	04B	12,502,200	\$833,960	\$16,679
16	P	04B	12,398,400	\$897,098	\$17,942
17	Q	04B	10,405,440	\$961,645	\$19,233
18	R	04B	15,472,800	\$1,119,323	\$22,386
19	S	04B	11,822,400	\$824,568	\$16,491
20	T	04B	13,509,600	\$803,464	\$16,069
21	U	04B	11,409,600	\$795,353	\$15,907
22	V	04B	11,320,800	\$882,234	\$17,645
23	W	04B	11,412,900	\$848,520	\$16,970
24	X	04B	11,265,600	\$770,382	\$15,408
25	Y	04B	10,293,600	\$847,998	\$16,960
26	Z	04B	10,735,200	\$909,579	\$18,192
27	AA	36B	204,520,241	\$10,303,075	\$114,853
28	AB	04B	10,728,000	\$754,131	\$15,083
29	AC	04B	10,993,056	\$803,811	\$16,076
30			1,134,747,701	\$68,848,738	\$973,508

Note: The \$99,000/Yr. Cap (adjusted by inflation) or 2% of revenues cap applies only to non-governmental customers with consumption exceeding 10 million kilowatt-hours per year, pursuant to 17.9.572.7.M. NMAC. Certain governmental customers can be exempted from the Renewable Energy Rider in accordance with 17.9.572.16 NMAC.

Renewable Energy Rider Charges for Large Customers

2020					
Line No.	Customers	Schedule	Capped Revenue from Large Customers (\$)	Capped Sales from Large Customers (kWh)	
31	A	30B	\$114,853	\$360,784,375	
32	B-E	35B	\$211,700	\$212,380,270	
33	F-G	05B	\$98,783	\$60,349,380	
34	H-Z, AB-AC	04B	\$433,320	\$296,713,435	
35	AA	36B	\$114,853	\$204,520,241	
36	Total		\$973,508	\$1,134,747,701	

Impacts on Large Customer Bills

Line	Customer	Schedule	2020 Projections		2020 Projections		2020 Hypothetical Method A		Annual Impact		
			Sales (kWh)	Revenue (\$)	Rider Charge (\$)	Fuel Charge (\$)	Rider Charge (\$)	Fuel Charge (\$)	Rider	Fuel	Net
1	A	30B	360,784,375	\$21,355,538	\$2,543,675	\$5,842,385	\$114,853	\$7,182,530	\$2,428,822	(\$1,340,146)	\$1,088,676
2	B	35B	79,404,000	\$3,803,387	\$559,830	\$1,285,834	\$76,068	\$1,542,499	\$483,762	(\$256,666)	\$227,097
3	C	35B	62,184,000	\$2,588,854	\$438,422	\$1,006,981	\$51,777	\$1,207,984	\$386,645	(\$201,004)	\$185,641
4	D	35B	38,280,000	\$2,223,406	\$269,889	\$619,890	\$44,468	\$743,626	\$225,421	(\$123,736)	\$101,685
5	E	35B	32,512,270	\$1,969,329	\$229,225	\$526,489	\$39,387	\$631,582	\$189,838	(\$105,093)	\$84,745
6	F	05B	22,411,620	\$2,206,422	\$158,011	\$362,924	\$44,128	\$435,367	\$113,882	(\$72,443)	\$41,439
7	G	05B	37,937,760	\$2,732,732	\$267,476	\$614,348	\$54,655	\$736,978	\$212,822	(\$122,630)	\$90,192
8	H	04B	30,537,600	\$2,095,333	\$215,302	\$494,513	\$41,907	\$593,222	\$173,396	(\$98,710)	\$74,686
9	I	04B	30,240,000	\$2,039,012	\$213,204	\$489,693	\$40,780	\$587,441	\$172,424	(\$97,748)	\$74,676
10	J	04B	18,112,850	\$1,300,863	\$127,703	\$293,312	\$26,017	\$351,860	\$101,686	(\$58,548)	\$43,138
11	K	04B	14,022,000	\$969,811	\$98,861	\$227,066	\$19,396	\$272,391	\$79,465	(\$45,325)	\$34,140
12	L	04B	15,300,000	\$1,092,861	\$107,871	\$247,762	\$21,857	\$297,217	\$86,014	(\$49,456)	\$36,558
13	M	04B	10,362,000	\$1,139,675	\$73,056	\$167,798	\$22,793	\$201,292	\$50,263	(\$33,494)	\$16,769
14	N	04B	13,869,389	\$976,373	\$97,785	\$224,595	\$19,527	\$269,426	\$78,257	(\$44,831)	\$33,426
15	O	04B	12,502,200	\$833,960	\$88,146	\$202,455	\$16,679	\$242,867	\$71,466	(\$40,412)	\$31,054
16	P	04B	12,398,400	\$897,098	\$87,414	\$200,774	\$17,942	\$240,851	\$69,472	(\$40,077)	\$29,395
17	Q	04B	10,405,440	\$961,645	\$73,363	\$168,501	\$19,233	\$202,136	\$54,130	(\$33,635)	\$20,495
18	R	04B	15,472,800	\$1,119,323	\$109,089	\$250,560	\$22,386	\$300,574	\$86,703	(\$50,014)	\$36,689
19	S	04B	11,822,400	\$824,568	\$83,353	\$191,447	\$16,491	\$229,662	\$66,861	(\$38,215)	\$28,647
20	T	04B	13,509,600	\$803,464	\$95,248	\$218,769	\$16,069	\$262,437	\$79,179	(\$43,668)	\$35,510
21	U	04B	11,409,600	\$795,353	\$80,442	\$184,762	\$15,907	\$221,642	\$64,535	(\$36,880)	\$27,655
22	V	04B	11,320,800	\$882,234	\$79,816	\$183,324	\$17,645	\$219,917	\$62,172	(\$36,593)	\$25,578
23	W	04B	11,412,900	\$848,520	\$80,466	\$184,816	\$16,970	\$221,707	\$63,495	(\$36,891)	\$26,604
24	X	04B	11,265,600	\$770,382	\$79,427	\$182,430	\$15,408	\$218,845	\$64,019	(\$36,415)	\$27,604
25	Y	04B	10,293,600	\$847,998	\$72,574	\$166,690	\$16,960	\$199,963	\$55,614	(\$33,273)	\$22,341
26	Z	04B	10,735,200	\$909,579	\$75,687	\$173,841	\$18,192	\$208,542	\$57,496	(\$34,700)	\$22,795
27	AA	36B	204,520,241	\$10,303,075	\$1,441,950	\$3,311,911	\$114,853	\$4,071,609	\$1,327,097	(\$759,697)	\$567,399
28	AB	04B	10,728,000	\$754,131	\$75,637	\$173,725	\$15,083	\$208,402	\$60,554	(\$34,677)	\$25,877
29	AC	04B	10,993,056	\$803,811	\$77,505	\$178,017	\$16,076	\$213,551	\$61,429	(\$35,534)	\$25,895
30	AD	N/A	131,340,706	\$432,941	\$926,005	\$2,033,239	\$0	\$2,638,490	\$926,005	(\$605,251)	\$320,754
31	AE	N/A	110,703,932	\$351,389	\$780,507	\$1,786,546	\$0	\$2,223,920	\$780,507	(\$437,374)	\$343,134

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE)
COMPANY OF NEW MEXICO'S)
APPLICATION FOR APPROVAL OF ITS)
RENEWABLE ENERGY ACT PLAN)
FOR 2020 AND PROPOSED 2020 RIDER)
RATE UNDER RATE RIDER NO. 36)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO)
)
Petitioner.)
_____)

Case No. 19-00 ___-UT

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

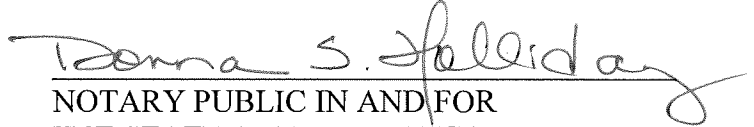
MICHAEL J. SETTLAGE, Lead Pricing Analyst for Public Service Company of New Mexico, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing **Direct Testimony of Michael J. Settlege** and it is true and correct based on my personal knowledge and belief.

SIGNED this 31st day of May, 2019.



MICHAEL SETTLAGE

SUBSCRIBED AND SWORN to before me this 31st day of May, 2019.



NOTARY PUBLIC IN AND FOR
THE STATE OF NEW MEXICO

My Commission Expires:

11-21-2020

GCG # 525513