

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 2022 AND PROPOSED 2022 RIDER)
RATE UNDER RATE RIDER NO. 36,)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO,)
)
)
Applicant.)
_____)**

Case No. 21-00 ___-UT

**DIRECT TESTIMONY
OF
SHANE GUTIERREZ**

June 1, 2021

NMPRC CASE NO. 21-00____-UT
INDEX TO THE DIRECT TESTIMONY OF SHANE GUTIERREZ

WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO

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PNM EXHIBIT SG-1

Resume of Shane Gutierrez

PNM EXHIBIT SG-2

RPS Calculations for 2022 and 2023

SELF AFFIRMATION

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1

I. INTRODUCTION

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

3 **A.** My name is Shane Gutierrez. My business address is Public Service Company of
4 New Mexico (“PNM”), 414 Silver Avenue Southwest, Albuquerque, New Mexico
5 87102. I am a Senior Project Manager, Financial Modeling in PNM’s Planning and
6 Resources Department. The Planning and Resources Department is responsible for
7 identifying the future resources PNM will need to provide electric service to retail
8 customers.

9

10 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
11 **PROFESSIONAL EXPERIENCE.**

12 **A.** My educational background and professional experience are summarized in PNM
13 Exhibit SG-1, which includes a tabulation of cases before the New Mexico Public
14 Regulation Commission (“NMPRC” or “Commission”) in which I have testified.

15

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

17 **A.** My testimony:

- 18 • Presents PNM’s projected renewable portfolio standard (“RPS”)
19 requirements for 2022 and 2023;
- 20 • Demonstrates that the 2022 Renewable Energy Act Procurement Plan
21 meets the requirements of the Renewable Energy Act, NMSA 1978, §§ 62-

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1 16-1 to 10 (“REA”), and the applicable requirements of Commission Rule
2 17.9.572 NMAC (“Rule 572”) in 2022 and 2023; and

- 3 • Provides certain information related to the Lightning Dock Geothermal
4 Facility (“Lightning Dock”) procurement in compliance with the Final
5 Order in Case No. 18-00158-UT.

6

7 **Q. HAVE YOU PREPARED ANY EXHIBITS IN ADDITION TO YOUR**
8 **RESUME?**

9 **A.** Yes. PNM Exhibit SG-2 is a three-page exhibit that contains the calculations
10 supporting my testimony. It summarizes the RPS requirements and the resources
11 PNM will use to meet those requirements in the plan year, 2022, and the next plan
12 year, 2023.

13

14 **II. PLAN YEAR (2022) RPS COMPLIANCE**

15 **Q. WHAT IS PNM’S RPS REQUIREMENT FOR 2022?**

16 **A.** Pursuant to Rule 572.10 and Section 62-16-4(A) of the REA, the RPS requirement
17 for 2022 is 20% of retail sales. PNM’s projected retail sales in 2022 are 9,235,671
18 MWh. For purposes of calculating the RPS, Section 6(B)(2) of the REA requires
19 PNM to reduce total projected retail sales for sales made under a Commission-
20 approved voluntary program. PNM currently offers two voluntary renewable
21 energy programs: PNM’s Sky Blue program approved in Case No. 10-00018-UT,
22 and Rate No. 36B, pursuant to which PNM provides renewable energy to match the

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1 load of its data center customer pursuant to the Special Service Contract initially
2 approved by the Commission in Case No. 16-00191-UT. Additionally, a third
3 voluntary program, Solar Direct, which was approved by the Commission in Case
4 No. 19-00158-UT, will begin in September 2021. After reducing the retail sales
5 projection by 1,214,655 MWh for sales under these three voluntary programs,
6 PNM's sales subject to the RPS are 8,021,016 MWh. The RPS requirement is
7 therefore equal to 20% of those sales, or 1,604,203 MWh. Please see PNM Exhibit
8 SG-2 for a detailed calculation of the 2022 RPS.

9

10 **Q. WILL PNM'S EXISTING RENEWABLE RESOURCES PROVIDE**
11 **SUFFICIENT RECS TO MEET THE RPS IN 2022?**

12 **A.** Yes. PNM anticipates exceeding its 2022 RPS requirements by 1,073,048 RECs,
13 as shown on page 1, line 7, in PNM Exhibit SG-2. The actual surplus and banked
14 RECs will depend on actual renewable production, actual retail sales, and
15 participation in PNM's voluntary renewable energy programs.

16

17 **Q. WHY IS PNM PROJECTING TO RETIRE 1,607,069 RECS FOR**
18 **COMPLIANCE IN 2022 AS COMPARED TO THE CALCULATED RPS**
19 **GOAL OF 1,604,203 RECS?**

20 **A.** PNM is projecting to be slightly short of RECs needed to meet RPS compliance for
21 2021, due mainly to the delayed in-service date of the La Joya II project in 2021.
22 As shown on page 1, line 8 of PNM Exhibit SG-2, PNM is projecting a 2021
23 shortfall of 2,866 RECs. After retiring 2,866 RECs for 2021 RPS compliance,

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1 PNM will bank its 2022 surplus RECs to help meet future RPS compliance. Please
2 see the direct testimony of PNM witness Phillips for more information regarding
3 the status of the La Joya II project in 2021.

4

5 **Q. WHAT ARE THE COSTS OF PNM'S PORTFOLIO OF RPS RESOURCES**
6 **IN 2022?**

7 **A.** Total costs for 2022 are \$66,901,332, as shown on page 1, line 17 of PNM Exhibit
8 SG-2. Page 2 of PNM Exhibit SG-2 further details the resources and their projected
9 costs for 2022. PNM witness Thomas Baker provides the 2022 revenue
10 requirements for the portfolio in his direct testimony.

11

12 **Q. WHAT TYPES OF RESOURCES WILL COMPRISE PNM'S RPS**
13 **PORTFOLIO IN 2022?**

14 **A.** I describe the specific renewable resources in more detail later in my testimony.
15 The portfolio will be comprised of 51% wind, 43% solar, 2% "other" (non-wind,
16 non-solar) and 4% distributed generation resources before any REC banking
17 projections are accounted for. The components above are rounded to the nearest
18 percentage.

19

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1 **III. NEXT PLAN YEAR (2023) RPS COMPLIANCE**

2 **Q. WHAT IS PNM’S PROJECTED RPS REQUIREMENT FOR 2023?**

3 **A.** PNM’s projected retail sales in 2023 are 9,463,846 MWh. After reducing the retail
4 sales projection by 1,280,138 MWh for sales under voluntary programs, PNM’s
5 sales subject to the RPS are 8,183,708 MWh. The RPS requirement is therefore
6 equal to 20% of those sales, or 1,636,742 MWh. Please see PNM Exhibit SG-2 for
7 a detailed calculation of the 2023 RPS.

8
9 **Q. WILL PNM’S EXISTING RENEWABLE RESOURCES PROVIDE
10 SUFFICIENT RECS TO MEET THE RPS IN 2023?**

11 **A.** Yes. PNM anticipates exceeding its 2023 RPS requirements by 2,702,783 RECs,
12 as shown on page 1, line 7, in PNM Exhibit SG-2. PNM expects to bank its 2023
13 surplus RECs, which it will add to the prior year’s bank, to help meet future RPS
14 compliance. The actual surplus and banked RECs will depend on actual renewable
15 production, actual retail sales, and participation in PNM’s voluntary renewable
16 energy programs.

17
18 **Q. WHAT ARE THE PROJECTED COSTS OF PNM’S PORTFOLIO OF RPS
19 RESOURCES IN 2023?**

20 **A.** Total costs for 2023 are projected to be \$66,303,037, as shown on page 1, line 17
21 of PNM Exhibit SG-2. Page 3 of PNM Exhibit SG-2 further details the resources
22 and their projected costs for 2023.

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1 **Q. WHAT TYPES OF RESOURCES WILL COMPRISE PNM’S RPS**
2 **PORTFOLIO IN 2023?**

3 **A.** I describe the specific renewable resources in more detail below. The portfolio will
4 consist of 32% wind, 65% solar, 2% “other” and 2% distributed generation before
5 any REC banking projections are accounted for. The components above are
6 rounded to the nearest percentage.

7

8 **IV. RESOURCES FOR RPS COMPLIANCE AND PORTFOLIO COSTS**

9 **Q. HAVE YOU PREPARED AN OVERVIEW OF PNM’S EXISTING**
10 **RENEWABLE RESOURCES AND COSTS?**

11 **A.** Yes. PNM’s existing renewable resources for RPS compliance include wind, solar
12 PV, geothermal energy, and purchases of kWh-RECs associated with customer-
13 sited solar PV facilities on PNM’s system. REC projections and cost information
14 for these resources is provided on pages 2 and 3 of PNM Exhibit SG-2.

15

16 **Q. PLEASE DESCRIBE PNM’S EXISTING WIND RESOURCES.**

17 **A.** PNM has three existing sources of wind generation:

- 18 1) PNM has a power purchase agreement (“PPA”) for all the output of the 200
19 MW New Mexico Wind Energy Center (“NMWEC”) located in Quay
20 County, New Mexico, which currently generates approximately 620,000
21 MWh of energy and associated RECs annually, a portion of which is used
22 for PNM’s Sky Blue program.

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1 2) PNM has a PPA for the entire output of the Red Mesa Wind Energy Center
2 ("Red Mesa"), a 102 MW facility in Cibola County, New Mexico. Energy
3 production from Red Mesa is expected to be approximately 221,000 MWh
4 in 2022 and 2023.

5 3) PNM has a PPA for the entire output of the La Joya II wind facility located
6 in Torrance County, New Mexico. La Joya II is expected to reach
7 commercial operation in June 2021. Energy production from La Joya II is
8 expected to be 537,163 MWh in 2022 and 2023. Please see the direct
9 testimony of PNM witness Phillips for more information regarding the
10 status of the La Joya II project in 2021.

11
12 **Q. PLEASE DESCRIBE PNM'S EXISTING SOLAR RPS RESOURCES.**

13 **A.** PNM owns 117 MW of solar photovoltaic ("PV") generation that has been procured
14 solely to meet RPS compliance. The 117 MW of solar PV is comprised of the
15 following:

16 a) Energy produced by 22.5 MW of solar PV facilities that were constructed
17 in 2011 ("2011 PNM Solar PV"). This includes the 0.5 MW Prosperity solar
18 PV with battery storage project. The production from these facilities is
19 projected to be 47,247 MWh in 2022 and 46,605 MWh in 2023.¹

20 b) Energy produced by 21.5 MW of solar PV facilities that became operational
21 in 2013 ("2013 PNM Solar PV"). PNM allocates the energy produced from

¹ PNM assumes that production will decline 0.5% annually due to degradation of these solar PV panels.

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1 1.5 MW of the 21.5 MW of 2013 PNM Solar PV to PNM’s Sky Blue
2 program. The energy production from 20 MW of the 2013 PNM Solar PV
3 is projected to be 45,479 MWh in 2022 and 45,252 MWh in 2023².

4 c) Energy produced by 23 MW of solar PV facilities that became operational
5 in 2014 (“2014 PNM Solar PV”). The energy production from the 2014
6 PNM Solar PV is projected to be 59,780 MWh in 2022 and 59,481 MWh in
7 2023³.

8 d) PNM owns solar PV facilities at its Algodones site (25 kW) and its Aztec
9 building in Albuquerque (5 kW). The MWh-RECs associated with the
10 energy from these facilities have a grandfathered 3-1 weighting and the
11 combined annual output from these facilities is projected to be 86 MWh in
12 2022 and 85 MWh in 2023.⁴

13 e) Energy produced by 50 MW of solar PV facilities that became operational
14 in 2019 (“2019 PNM Solar PV”). The energy production from the 2019
15 PNM Solar PV is projected to be 132,131 MWh in 2022 and 131,140 MWh
16 in 2023.⁵

17
18 **Q. WHAT SYSTEM RESOURCES IS PNM USING FOR RPS COMPLIANCE?**

19 **A.** PNM has procured 40 MW of PNM owned solar PV resources pursuant to a
20 stipulation approved in Case No. 14-00158-UT and 650 MW of solar PV as

² PNM assumes that production will decline 0.5% annually due to degradation of these solar PV panels.

³ PNM assumes that production will decline 0.5% annually due to degradation of these solar PV panels.

⁴ PNM assumes that production will decline 1.0% annually due to degradation of these solar PV panels.

⁵ PNM assumes that production will decline 0.5% annually due to degradation of these solar PV panels.

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1 approved in Case No. 19-00195-UT. An additional 450 MW is expected to be
2 added to the portfolio pending approval in Case No. 21-00083-UT. These 1,140
3 MW of system resources are described in more detail below:

4 a) PNM uses RECs produced by 40 MW of solar PV facilities that became
5 operational in 2015 (“2015 PNM Solar PV”) for RPS compliance. The
6 energy production from the 2015 PNM Solar PV is projected to be
7 95,183 MWh in 2022 and 94,469 MWh in 2023.⁶

8 b) PNM has a PPA for all the output from the 50 MW Jicarilla Solar I
9 facility that is expected to become operational by April 30, 2022. This
10 PPA was approved in Case No. 19-00195-UT. The energy production
11 from the Jicarilla Solar I facility is projected to be 96,809 MWh in 2022
12 and 135,323 MWh in 2023.

13 c) PNM has a PPA for all the output from the 300 MW Arroyo Solar
14 facility that is expected to become operational by June 30, 2022. This
15 PPA was approved in Case No. 19-00195-UT. The energy production
16 from the Arroyo Solar facility is projected to be 394,598 MWh in 2022
17 and 822,381 MWh in 2023.

18 d) PNM has a PPA for all the output from the 200 MW San Juan Solar
19 facility that is expected to become operational by June 30, 2022. This
20 PPA was approved in Case No. 19-00195-UT. The energy production

⁶ PNM assumes that production will decline 0.7% annually due to degradation of these solar PV panels.

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1 from this facility is projected to be 271,146 MWh in 2022 and 566,888
2 MWh in 2023.

3 e) PNM has a PPA for all the output from the 100 MW Rockmont Solar
4 facility that is expected to become operational by June 2023. PNM
5 initially expected this resource to be online by June 2022, however PNM
6 is projecting a one-year delay for this project to be placed in-service.
7 This PPA was approved in Case No. 19-00195-UT. The energy
8 production from this facility is projected to be 138,608 MWh in 2023.
9 Please see the direct testimony of PNM witness Phillips for more
10 information regarding the status and delay of the Rockmont Solar
11 project.

12 f) PNM has a PPA for all the output from the 150 MW Jicarilla Solar
13 Energy Facility I that is expected to become operational by June 1, 2023.
14 This PPA is pending approval in Case No. 21-00083-UT. The energy
15 production from this facility is projected to be 232,954 MWh in 2023.

16 g) PNM has a PPA for all the output from the 300 MW Atrisco Solar
17 facility that is expected to become operational by June 1, 2023. This
18 PPA is pending approval in Case No. 21-00083-UT. The energy
19 production from this facility is projected to be 526,480 MWh in 2023.

20

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1 **Q. PLEASE DESCRIBE PNM’S EXISTING “OTHER” (NON-WIND, NON-**
2 **SOLAR) RESOURCES.**

3 **A.** PNM has a PPA for the full output produced by Lightning Dock, a facility that
4 generates electricity from geothermal resources located near Lordsburg, New
5 Mexico. In December 2020, Cyrq Energy provided PNM with an updated forecast
6 for the Lightning Dock facility. Annual projections have decreased from last year’s
7 projections by approximately 11,500 MWh, due to an updated production forecast
8 which accounts for grid-related interruptions they have encountered and expect to
9 continue. Energy production from this facility is projected to be 65,526 MWh in
10 2022 and in 2023.

11

12 **Q. WHAT REC PURCHASE ARRANGEMENTS DOES PNM HAVE FOR**
13 **CUSTOMER-SITED SOLAR PV SYSTEMS?**

14 **A.** Pursuant to REC purchase programs approved by the Commission, PNM has REC
15 purchase contracts with PNM customers who interconnect solar PV systems to their
16 homes, commercial buildings or other customer facilities. Under these programs,
17 PNM acquires some or all the RECs associated with the energy generated from the
18 customer-sited solar PV facility. These programs include the Large PV REC
19 Purchase Program (“Large PV Program”), the Solar REC Incentive Programs
20 (“SIP”), the Capacity Reservation Program and the Customer Solar REC Purchase
21 Program (“CSPP”), which was extended through 2022 in Case No. 19-00159-UT.
22 The Small PV REC Purchase Program (“Small PV Program”) contracts all end in
23 2021 and therefore will no longer provide RECs to PNM’s portfolio in 2022 and

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1 2023. PNM projects that these programs collectively will generate 99,031 RECs
2 in 2022 and 107,010 RECs in 2023.

3

4 **Q. PLEASE DESCRIBE THE WREGIS COSTS ASSOCIATED WITH PNM'S**
5 **RENEWABLE RESOURCES.**

6 **A.** Pursuant to Rule 572.17(E), WREGIS⁷ certification is required for all RECs used
7 to demonstrate compliance with the RPS. PNM's annual WREGIS fee is \$83 per
8 year to maintain an account. Additionally, WREGIS charges a fee of \$0.004 per
9 REC for certificate issuance or transfer and \$0.004 per REC for retirement, for a
10 total fee of \$0.008 per REC. For the Red Mesa and Lightning Dock resources, PNM
11 only incurs the cost to retire MWh-RECs from those facilities as those RECs are
12 transferred to PNM, thus only \$0.004 per REC is applied. Additionally, PNM
13 applies the WREGIS fee for REC retirement only in the year that RECs or banked
14 RECs are used for RPS compliance.

15

16 **Q. ARE THERE RECS FROM ANY OTHER RESOURCES THAT PNM IS**
17 **PROPOSING TO RETIRE IN 2022 FOR RPS COMPLIANCE?**

18 **A.** Yes. PNM is proposing to retire approximately 200 vintage 2022 RECs associated
19 with a new microgrid project at the Mesa del Sol subdivision in Albuquerque as
20 well as 3,494 vintage 2018 RECs associated with the 1.5 MW of solar resource
21 dedicated to the Sky Blue voluntary program in 2022 to meet the RPS. Please see

⁷ WREGIS is the Western Renewable Energy Generation Information System.

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1 the direct testimony of PNM witness Phillips for a description of the microgrid
2 project.

3

4 **Q. HOW DID YOU CALCULATE THE 3,494 SKY BLUE RECS PROPOSED**
5 **TO BE RETIRED IN 2022 FOR RPS PURPOSES?**

6 **A.** The 3,494 RECs represent generation during 2018 allocated to the 1.5 MW portion
7 of the 8 MW Manzano Solar Facility that sources the Sky Blue Program and that
8 were not retired through the Sky Blue program. The 3,494 RECs are presently held
9 in PNM's WREGIS REC bank.

10

11 **Q. WHEN WERE THE SKY BLUE RECS ISSUED AND WHEN WILL THEY**
12 **EXPIRE?**

13 **A.** The banked RECs available in WREGIS were issued to PNM's account between
14 1/30/2019 and 4/1/2019. Pursuant to Section 62-16-5(B)(4) of the REA, these
15 RECs will expire beginning January 2023, four years from their date of issuance.

16

17 **Q. ARE RECS FROM THE NEW MICROGRID PROJECT AND SKY BLUE**
18 **REFLECTED IN YOUR 2023 NEXT PLAN YEAR PROJECTIONS?**

19 **A.** No. I have not reflected RECs from these resources in my 2023 next plan year RPS
20 compliance projections because it is uncertain how many RECs will be available
21 from these resources in 2023. Regarding the Sky Blue voluntary program RECs,
22 PNM will propose to retire vintage 2019 RECs from the Sky Blue solar resource to
23 meet RPS compliance in 2023 in its REA plan case filed next year that have not

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1 been retired through subscriptions to the voluntary program by the date of filing.
2 PNM will monitor the installed microgrid renewable energy facilities from the
3 project in 2022 and will forecast the number of RECs it proposes to retire from the
4 project in the plan year in its 2023 REA plan filing.

5

6 **V. CASE NO. 18-00158-UT LIGHTNING DOCK REPORTING**
7 **REQUIREMENTS**

8 **Q. WHAT LIGHTNING DOCK REPORTING REQUIREMENTS FROM**
9 **CASE NO. 18-00158-UT DO YOU ADDRESS?**

10 **A.** I address the requirement to state the annual energy output by the geothermal
11 facility for the prior calendar year and the first three months of the following year.
12 PNM witness Phillips addresses the remaining Case No. 18-00158-UT reporting
13 requirements in his direct testimony.

14

15 **Q. WHAT WAS LIGHTNING DOCK’S PRODUCTION IN 2020 AND THE**
16 **FIRST THREE MONTHS OF 2021?**

17 **A.** Lightning Dock’s production for calendar year 2020 was 53,212 MWh. Lightning
18 Dock’s production through March of 2021 was 17,234 MWh. PNM witness
19 Phillips provides more information about Lightning Dock’s 2020 production in his
20 testimony.

21

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1 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

2 **A.** Yes, it does.

GCG#528270

SHANE GUTIERREZ
EXPERIENCE AND QUALIFICATIONS

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

Position: Senior Project Manager, Financial Modeling

Education: B.S., Electrical Engineering, New Mexico State University, 2001

Employment:

Public Service Company of New Mexico
Senior Project Manager, Financial Modeling, 2021-Present
Engineer IV, Planning & Resources Dept., 2010 to 2021
Engineer, Utility Margin Department, 2009-2010

Public Service Company of Colorado
*Planning Engineer/Engineer, Transmission Planning and Transmission
Access Dept., 2002 to 2009*

Testimony Filed:

New Mexico Public Regulation Commission

- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2013, Case No. 12-00131-UT, filed April 30, 2012.
- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2014 And Proposed 2014 Rider Rate under Rate Rider No. 36, Case No. 13-00183-UT, filed July 1, 2013.
- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2015 And Proposed 2015 Rider Rate under Rate Rider No. 36, Case No. 14-00158-UT, filed June 2, 2014.
- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2016 And Proposed 2016 Rider Rate under Rate Rider No. 36, Case No. 15-00166-UT, filed June 1, 2015.
- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2017 And Proposed 2017 Rider Rate under Rate Rider No. 36, Case No. 16-00148-UT, filed June 1, 2016.

- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2018 And Proposed 2018 Rider Rate under Rate Rider No. 36, Case No. 17-00129-UT, filed June 1, 2017.
- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2019 And Proposed 2019 Rider Rate under Rate Rider No. 36, Case No. 18-00158-UT, filed June 1, 2018.
- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2020 And Proposed 2020 Rider Rate under Rate Rider No. 36, Case No. 19-00159-UT, filed June 3, 2019.
- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2021 And Proposed 2021 Rider Rate under Rate Rider No. 36, Case No. 20-00124-UT, filed June 3, 2020.

GCG#52854

2022 Plan RPS and RCT Summary				
Line	2022 Plan RPS and RCT Summary	2022	2023	Line
1	Annual Retail Sales (MWh)	9,235,671	9,463,846	1
2	(-) Voluntary Tariff Sales (MWh)	1,214,655	1,280,138	2
3	Net Annual Retail Sales (MWh)	8,021,016	8,183,708	3
4	RPS (%)	20%	20%	4
5	RPS (MWh)	1,604,203	1,636,742	5
RPS Compliance & Diversity		2022	2023	
6	Portfolio RECs	2,677,251	4,339,525	6
7	Portfolio REC Surplus to Bank	1,073,048	2,702,783	7
8	Prior-Year Banked RECs	(2,866)	1,070,182	8
9	On-Year REC Bank	1,070,182	3,772,965	9
10	RECs used for RPS Compliance	1,607,069	1,636,742	10
11	Portfolio Percent of Annual Sales (%)	20%	20%	11
12	Portfolio Percent of RPS Goal (%)	100%	100%	12
13	Wind Diversity (%)	51%	32%	13
14	Solar Diversity (%)	43%	65%	14
15	Other Diversity (%)	2%	2%	15
16	DG Diversity (%)	4%	2%	16
Portfolio Cost		2022	2023	
17	Portfolio Cost (\$)	\$66,901,332	\$66,303,037	17

Notes for Numbered Rows

- ¹ Includes annual retail sales and impacts due to energy efficiency and distributed generation
- ² Includes sum of lesser of voluntary customer sales or renewable production
- ³ Line 1 - Line 2
- ⁴ Renewable Portfolio Standard goal
- ⁵ Line 3 x Line 4
- ⁶ Annual Sum of projected RECs for PNM's portfolio for RPS Compliance
- ⁷ Line 6 - Line 5
- ⁸ Prior Year Banked RECs
- ⁹ Line 7 + Line 8
- ¹⁰ If Line 8 < 0 = Line 6 - Line 7 - Line 8, If Line 8 > 0 = Line 6 - Line 7
- ¹¹ Line 10 ÷ Line 3
- ¹² Line 10 ÷ Line 5
- ¹³ Sum of Wind RECs divided by Portfolio RECs
- ¹⁴ Sum of Solar RECs divided by Portfolio RECs
- ¹⁵ Sum of Other RECs divided by Portfolio RECs
- ¹⁶ Sum of DG RECs divided by Portfolio RECs
- ¹⁷ Sum of portfolio procurement costs, including WREGIS fees

	A	B	C	D = B + C	E = A * D	F	G	
	2022	MWh RECs	Cost \$/MWh-REC	WREGIS Cost \$/MWh-REC	Total Cost \$/MWh-REC	Total Cost \$	2022 RCT	Compare to col. D
[1]	Utility Wind							
[2]	New Mexico Wind Energy Center ¹	608,379	\$27.25	\$0.008	\$27.26	\$16,583,190	\$61.81	Below
[3]	Red Mesa	221,000	\$32.07	\$0.004	\$32.08	\$7,088,642	\$61.81	Below
[4]	<u>La Joya II</u>	<u>537,163</u>	<u>\$17.48</u>	<u>\$0.004</u>	<u>\$17.48</u>	<u>\$9,391,758</u>	\$61.81	Below
[5]	Total Utility Wind	1,366,542				\$33,063,590		
[6]								
[7]	Distributed Generation							
[8]	Small PV RECs	0	\$0.00	\$0.008	\$0.01	\$0	\$61.81	Below
[9]	Large PV RECs	14,646	\$150.00	\$0.008	\$150.01	\$2,197,082	\$61.81	Above
[10]	SIP RECs \$0.14 - \$0.05	34,586	\$85.28	\$0.008	\$85.29	\$2,949,788	\$61.81	Above
[11]	2012-2015 DG Capacity Reservations	9,498	\$19.22	\$0.008	\$19.23	\$182,661	\$61.81	Below
[12]	2018-2022 DG Capacity Reservations	8,650	\$2.50	\$0.008	\$2.51	\$21,695	\$61.81	Below
[13]	CSPP RECs	23,166	\$34.43	\$0.008	\$34.44	\$797,762	\$61.81	Below
[14]	<u>Case 13-00390-UT Stipulation</u>	<u>8,485</u>	<u>\$2.50</u>	<u>\$0.008</u>	<u>\$2.51</u>	<u>\$21,279</u>	\$61.81	Below
[15]	Total Distributed Generation	99,031				\$6,170,267		
[16]								
[17]	Utility Solar							
[18]	Algodones/Aztec @3:1	86	\$0.00	\$0.008	\$0.008	\$1	\$61.81	Below
[19]	2011 PNM Solar PV 22.5 MW	47,247	\$102.70	\$0.008	\$102.71	\$4,852,626	\$61.81	Above
[20]	2013 PNM Solar PV 20 MW ¹	45,479	\$84.82	\$0.008	\$84.83	\$3,857,755	\$61.81	Above
[21]	2014 PNM Solar PV 23 MW	59,780	\$71.11	\$0.008	\$71.12	\$4,251,463	\$61.81	Above
[22]	2015 PNM Solar PV 40 MW	95,183	\$0.00	\$0.008	\$0.008	\$761	\$61.81	Below
[23]	2019 PNM Solar PV 50 MW	132,131	\$59.45	\$0.008	\$59.46	\$7,856,773	\$61.81	Below
[24]	Jicarilla Solar I PPA 50 MW	96,809	\$0.00	\$0.008	\$0.008	\$774	\$61.81	Below
[25]	Arroyo Solar PPA 300 MW	394,598	\$0.00	\$0.008	\$0.008	\$3,157	\$61.81	Below
[26]	San Juan Solar 1 PPA 200 MW	271,146	\$0.00	\$0.008	\$0.008	\$2,169	\$61.81	Below
[27]	Rockmont Solar PPA 100 MW	0	\$0.00	\$0.008	\$0.008	\$0	\$61.81	Below
[28]	<u>Mesa Del Sol Microgrid RECs</u>	<u>200</u>	<u>\$0.00</u>	<u>\$0.008</u>	<u>\$0.008</u>	<u>\$2</u>	\$61.81	Below
[29]	Total Utility Solar	1,142,659				\$20,825,482		
[30]								
[31]	Utility "Other"							
[32]	Dale Burgett Geothermal PPA	65,526	\$98.24	\$0.004	\$98.24	\$6,437,494	\$61.81	Above
[33]								
[34]	RECs for RPS							
[35]	2018 Sky Blue RECs	3,494	\$109.83	\$0.004	\$109.83	\$383,697	\$61.81	Above
[36]	2022 Vintage RECs	(1,070,182)	\$0.00	\$0.004	\$0.00	(\$4,281)	\$61.81	Below
[37]								
[38]								
[39]	2022 Total Production & Costs	1,607,069				\$66,876,249		
[40]	2022 Filing Costs & Fees (\$)					\$25,083		
[41]	2022 Portfolio Costs (\$)					\$66,901,332		
[42]	2022 Average Cost (\$/MWh-REC)					\$41.63		
[43]	2022 RPS Compliance Goal (%)					20.0%		
[44]	2022 RPS Compliance (%)					20.0%		

Notes

- 1). Projected energy accounts for allocation to PNM Sky Blue Program.
- 2). Includes \$25,000 of Renewable Filing Costs and WREGIS Annual Fee of \$83

	A	B	C	D = B + C	E = A * D	F	G	
2023	MWh RECs	Cost \$/MWh-REC	WREGIS Cost \$/MWh-REC	Total Cost \$/MWh-REC	Total Cost \$	2023 RCT	Compare to col. D	
[1] Utility Wind								[1]
[2] New Mexico Wind Energy Center ¹	608,960	\$27.25	\$0.008	\$27.26	\$16,599,029	\$62.74	Below	[2]
[3] Red Mesa	221,000	\$32.71	\$0.004	\$32.72	\$7,230,397	\$62.74	Below	[3]
[4] <u>La Joya II</u>	<u>537,163</u>	<u>\$17.48</u>	<u>\$0.004</u>	<u>\$17.48</u>	<u>\$9,391,758</u>	\$62.74	Below	[4]
[5] Total Utility Wind	1,367,123				\$33,221,184			[5]
[6]								[6]
[7] Distributed Generation								[7]
[8] Small PV RECs	0	\$0.00	\$0.008	\$0.01	\$0	\$62.74	Below	[8]
[9] Large PV RECs	14,573	\$150.00	\$0.008	\$150.01	\$2,186,096	\$62.74	Above	[9]
[10] SIP RECs \$0.14 - \$0.05	34,413	\$85.28	\$0.008	\$85.29	\$2,935,039	\$62.74	Above	[10]
[11] 2012-2015 DG Capacity Reservations	9,451	\$19.22	\$0.008	\$19.23	\$181,748	\$62.74	Below	[11]
[12] 2018-2023 DG Capacity Reservations	11,332	\$2.50	\$0.008	\$2.51	\$28,421	\$62.74	Below	[12]
[13] CSPP RECs	23,050	\$34.43	\$0.008	\$34.44	\$793,773	\$62.74	Below	[13]
[14] <u>Case 13-00390-UT Stipulation</u>	<u>14,192</u>	<u>\$2.50</u>	<u>\$0.008</u>	<u>\$2.51</u>	<u>\$35,594</u>	\$62.74	Below	[14]
[15] Total Distributed Generation	107,010				\$6,160,671			[15]
[16]								[16]
[17] Utility Solar								[17]
[18] Algodones/Aztec @3:1	85	\$0.00	\$0.008	\$0.008	\$1	\$62.74	Below	[18]
[19] 2011 PNM Solar PV 22.5 MW	46,605	\$102.66	\$0.008	\$102.67	\$4,785,008	\$62.74	Above	[19]
[20] 2013 PNM Solar PV 20 MW ¹	45,252	\$83.39	\$0.008	\$83.40	\$3,773,791	\$62.74	Above	[20]
[21] 2014 PNM Solar PV 23 MW	59,481	\$70.05	\$0.008	\$70.06	\$4,167,393	\$62.74	Above	[21]
[22] 2015 PNM Solar PV 40 MW	94,469	\$0.00	\$0.008	\$0.008	\$756	\$62.74	Below	[22]
[23] 2019 PNM Solar PV 50 MW	131,140	\$57.66	\$0.008	\$57.66	\$7,562,155	\$62.74	Below	[23]
[24] Jicarilla Solar I PPA 50 MW	135,323	\$0.00	\$0.008	\$0.008	\$1,083	\$62.74	Below	[24]
[25] Arroyo Solar PPA 300 MW	822,381	\$0.00	\$0.008	\$0.008	\$6,579	\$62.74	Below	[25]
[26] San Juan Solar 1 PPA 200 MW	566,888	\$0.00	\$0.008	\$0.008	\$4,535	\$62.74	Below	[26]
[27] Rockmont Solar PPA 100 MW	138,608	\$0.00	\$0.008	\$0.008	\$1,109	\$62.74	Below	[27]
[28] Jicarilla SEC I PPA 150 MW	232,954	\$0.00	\$0.008	\$0.01	\$1,864	\$62.74	Below	[28]
[29] Atrisco Solar PPA 300 MW	526,480	\$0.00	\$0.008	\$0.01	\$4,212	\$62.74	Below	[29]
[30] <u>Mesa Del Sol Microgrid RECs</u>	<u>199</u>	<u>\$0.00</u>	<u>\$0.008</u>	<u>\$0.01</u>	<u>\$2</u>	\$62.74	Below	[30]
[31] Total Utility Solar	2,799,865				\$20,308,486			[31]
[32]								[32]
[33] Utility "Other"								[33]
[34] Dale Burgett Geothermal PPA	65,526	\$100.70	\$0.004	\$100.70	\$6,598,424	\$62.74	Above	[34]
[35]								[35]
[36] RECs for RPS								[36]
[37] 2023 Vintage RECs	(2,702,783)	\$0.00	\$0.004	\$0.00	(\$10,811)	\$62.74	Below	[37]
[38]								[38]
[39] 2023 Total Production & Costs	1,636,742				\$66,277,954			[39]
[40] 2023 Filing Costs & Fees (\$)					\$25,083			[40]
[41] 2023 Portfolio Costs (\$)					\$66,303,037			[41]
[42] 2023 Average Cost (\$/MWh-REC)					\$40.51			[42]
[43] 2023 RPS Compliance Goal (%)					20.0%			[43]
[44] 2023 RPS Compliance (%)					20.0%			[44]

Notes

- 1). Projected energy accounts for allocation to PNM Sky Blue Program.
- 2). Includes \$25,000 of Renewable Filing Costs and WREGIS Annual Fee of \$83

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 2022 AND PROPOSED 2022 RIDER)
RATE UNDER RATE RIDER NO. 36)
)
PUBLIC SERVICE COMPANY OF NEW)
MEXICO)
)
Petitioner.)
_____)**

Case No. 21-____-UT

SELF AFFIRMATION

SHANE GUTIERREZ, Senior Project Manager, Financial Modeling, Public Service Company of New Mexico, upon penalty of perjury under the laws of the State of New Mexico, affirm and state: I have read the foregoing **Direct Testimony of Shane Gutierrez** and it is true and correct based on my personal knowledge and belief.

DATED this 1st day of June, 2021.

/s/ Shane Gutierrez
SHANE GUTIERREZ