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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,

Case No. 19-00\_\_\_-UT

Applicant.

# DIRECT TESTIMONY

# OF

# THOMAS G. FALLGREN

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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,

Case No. 19-00\_\_\_-UT

Applicant.

# DIRECT TESTIMONY

OF

SHANE GUTIERREZ

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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,

Case No. 19-00\_\_\_-UT

PUBLIC SERVICE COMPANY OF NEW MEXICO,

Applicant.

# DIRECT TESTIMONY

OF

**THOMAS S. BAKER** 

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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,

Case No. 19-00 -UT

Application.

# DIRECT TESTIMONY

### OF

#### **ANTHONY BUENO**

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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,

Case No. 19-00 -UT

PUBLIC SERVICE COMPANY OF NEW MEXICO,

#### DIRECT TESTIMONY

Applicant.

#### OF

#### **MICHAEL J. SETTLAGE**

# NMPRC CASE NO. 19-\_\_\_\_-UT INDEX TO THE DIRECT TESTIMONY OF MICHAEL SETTLAGE

# WITNESS FOR <u>PUBLIC SERVICE COMPANY OF NEW MEXICO</u>

I.	INTRODUCTION AND PURPOSE	1
II.	DERIVATION OF THE PROPOSED 2020 RIDER 36 RATE	2

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

AFFIDAVIT

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	А.	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	А.	My testimony addresses the following:						
18		1. The development of the 2020 rate for the $16^{\text{th}}$ 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.

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	А.	Yes, I am sponsoring the following additional exhibits:					
8		• <u>PNM Exhibit MJS-2</u> : Derivation of the Rider 36 rate for calendar year 2020.					
9		• PNM Exhibit MJS-3: PNM's 16 <sup>th</sup> 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		• <u>PNM Exhibit MJS-5</u> : 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	А.	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					

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	А.	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.

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

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.

### 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

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#### PNM Renewable Energy Rider No. 36 2020 Derrivation of Rider Rate

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

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IA	В		D	E	Г	G

Est. Renewable Energy Rider Annual Revenue Requirement \$58,935,081 [A]

Line No.	Consolidated Rate Class	2020 Projected Customers	2020 Total Projected Sales (kWh)	2020 Renewable Energy Rider Rate	Total Recovery Allocated on Per kWh Basis	Avg. Annual Rider Charge
NU.	[B]	IC1	(RWII) [D]	[E]= [ A ]/ Σ[D]	[F] = [D] * [E]	[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

<u>0.0070504</u> [M]

PNM Exhibit MJS-2 Page 1 of 2

#### PNM Renewable Energy Rider No. 36 2020 Derrivation of Rider Rate Using Hypothetical Method A

С

D

F

PNM Exhibit MJS-2 Page 2 of 2

К

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

G

A В

> \$58,935,081 [A] Est. Renewable Energy Rider Annual Revenue Requirement

J

				Revenue from C	apped Customers		Revenue from No	n-Capped Customers			
Line No.	Consolidated Rate Class	2020 Projected Customers	2020 Total Projected Sales (kWh)	2020 Projected Sales of Capped Customers (kWh)	2020 Revenue with Caps (See p. 2, Column (C) line 27)	Revenue from Non- Capped Customers	2020 Projected Sales of Exempted Customer(s) (kWh)	2020 Projected Sales of Non-Capped/Non- Exempted Customers (kWh)	2020 Renewable Energy Rider Rate	Total Recovery Allocated on Per kWh Basis	Avg. Annual Rider Charge
	[8]	[C]	[D]	[E]= MJS-5, p. 4, [E] lines 1-30	[F] = Σ(\$114,853 or 2% of Revenues of Capped Customers)	[G]= [A] -Σ[F]	[H]	[   ] = [D] - [E] - [H]	[J]= [G] / Σ[ Ι ]	[K] = [F] + [1] * [J]	[L] = [K] / [C] * 12
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	48 - Large Power	2,724	1,111,792,817	296,713,435	\$433,320		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
B	15B - Universities 115 kV	12	75,731,019	0	\$0	\$ 57,961,572	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	
16				and an and a state of the state	•						

16 17 18

Total Per kWh Rider No. 36

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0.0083012 [M] \$

#### PUBLIC SERVICE COMPANY OF NEW MEXICO ELECTRIC SERVICES

#### $15^{\text{TH}}$ - $16^{\text{TH}}$ REVISED RIDER NO. 36 CANCELLING $14^{\text{TH}}$ - $15^{\text{TH}}$ REVISED RIDER NO. 36

#### RENEWABLE ENERGY RIDER

Page 1 of 2

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

<u>APPLICABILITY</u>: 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).

**<u>TERRITORY</u>**: 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.

**<u>RIDER RATES</u>**: 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 <del>20192020</del> :	\$4 <del>6,969,9</del> 41 <u>\$58,935,081</u>	\$ <del>0.0066138 per</del> <del>kWh</del> 0.0070504 per kWh

**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. 557562

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#### PUBLIC SERVICE COMPANY OF NEW MEXICO ELECTRIC SERVICES

#### $15^{\text{TH}}$ - $16^{\text{TH}}$ REVISED RIDER NO. 36 CANCELLING $14^{\text{TH}}$ - $15^{\text{TH}}$ 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

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

А

	<u>PNM</u> able Energy Rid I Bills for 2020	
В	С	D

r										
	Residential Schedule 1A									
	Proposed									
		2020	Method A 2019							
Line		Monthly Bill	Monthly Bill	Net Impact						
No.	kWh Use	(\$)	(\$)	(\$)						
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						

		Small Po	wer Schedule 2A	
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

#### PNM Renewable Energy Rider No. 36

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

2020 Non Renewable Fuel % 85.41 (a)

		[A]	[B]	[C]	[D] [B]*[C]	[E]	[F] (a)*[B]*[E]	 [G] [D]/[A]		[H] [F]/[A]
Line No.		2020 Projected	2020 Total Projected Sales		2020 Projected Rider	2020 Proposed Fuel Factor	2020 Projected Fuel	2020 Projected Rider Average Annual	Ave	020 Projected rage Annual Fuel
	Consolidated Rate Class	Customers	(kWh)	Rate (\$/kWh)	Charge (\$)	(\$/kWh)	Charge (\$)	Charge (\$)		Charges (\$)
1	1 - Residential	5,669,040	3,247,232,249	0.007050401	\$ 22,894,290.80	0.018958	9 \$ 52,584,260.20	\$ 48.46	\$	111.31
2	2 - Small Power	641,077	977,217,194	0.007050401	\$ 6,889,773.47	0.018958	9 \$ 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	0.018958	9 \$ 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	0.018958	9 \$ 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	0.018958	9 \$ 1,128,311.66	\$ 245,623.83	\$	564,155.83
6	10 - Irrigation	4,124	25,097,999	0.007050401	\$ 176,950.97	0.018958	9 \$ 406,426.03	\$ 514.84	\$	1,182.49
7	11B - Wtr/Swg Pumping	1,968	141,283,111	0.007050401	\$ 996,102.64	0.018958	9 \$ 2,287,876.96	\$ 6,073.80	\$	13,950.47
8	15B - Universities 115 kV	12	75,731,019	0.007050401	\$ 533,934.08	0.018958	9 \$ 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	0.018958	9 \$ 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	0.018958	9 \$ 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	0.018958	9 \$ 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	0.018958	9 \$ 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	0.018958	9 \$ 239,224.93	N/A		N/A
14	20 - Street Lighting	N/A	33,457,503	0.007050401	\$ 235,888.82	0.018958	9 \$ 541,796.18	N/A		N/A
15	Total	6,371,250	8,359,110,000		\$ 58,935,081		\$ 135,363,775			

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#### PNM

Line

No.

10 33 - Large Service for Station Power

11 35 - Large Power Service >=3,000kW

13 6 - Private Lighting

14 20 - Street Lighting

15 Total

12 36B - Special Service -Renw. Energy Res.

12

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12

N/A

N/A

6,371,250

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PNM Exhibit MJS-5 Page 2 of 5

55,794.75

1,059,910.57

4,071,608.84

#### Renewable Energy Rider No. 36 2020 Renewable Energy Rider No. 36 Charges and Fuel Factor Charges with Method A Rider [A] [B] [C] [D] [E] [F] [G] [H] [1] [1] [K] [L] [M] [F]\*[G]\*cap% +[H]\*[I] [K]\*[C] [D]/[A] +[J]\*[K]\*other% [L]/[A] 2020 2020 2020 2020 Consolidated Rate Class 2020 Total Projected 2020 Method A 2020 Method A Rider 2020 Capped Total Projected 2020 Exempt Projected 2020 Other Projected Other Projected Sales RER Rate 2020 Method A Average Annual Fuel Factor Capped Sales Fuel Factor Exempt 5ales Customers Fuel Customer 5ales Method A Total Method A Annual Rider Charge (\$) Customers (kWh) (\$/kWh) Charge (\$) (\$/kWh) (kWh) (\$/kWh) (kWh) Factor (\$/kWh) (kWh) Fuel Charges 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 16,017,159 977,217,194 0.008301194 \$ 8,085,452 \$ 151.35 0.020088897 0.020088897 3,206,501 0.019756824 974,010,692 299.82 2 2 - 5mall Power 641,077 -15 Ś 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 l ś 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 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 5 5B - Mines 46/115 kV 24 69,676,553 -15 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 Ś \$ 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 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 B 15B - Universities 115 kV 12 75,731,019 ¢ 5 \$ 9 30B - Manuf. (30 MW) 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 12 l Ś

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55,795

4,239,642 \$

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4,071,609

242,151

548,589

28,278.88

67,363.53

114,853.00

PNM Renewable Energy Rider No. 36

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

		[A]	[8]		[C]		[D]		[E]	[F]		[G]	[H]		[1]	[1]
	ļ	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])
						20	20 Annual Average							1		Annual Average Net
Line No. Consolidated Rate Class	202	20 Projected	2020 Method A	20	20 Rider Charge	Ri	ider Charge Impact	2	2020 Projected	2020 Method A Rider	20	20 Fuel Charge	2020 Annual Average		Net Impact	Impact
NO.	Ride	er Charge (\$)	Rider Charge (\$)		Impact (\$)		(\$)	F	Fuel Charge (\$)	Charge (\$)		Impact (\$)	Fuel Charge 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 48 - 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
8 158 - 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	\$	(637,784)	\$ (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 Exhibit MJS-5 Page 3 of 5

PNM Exhibit MJS-5 Page 4 of 5

PNM Exhibit MJS-5

Page 4 of 5

0.0070504

					\$ 0.0070504
		Renew	able Energy Rider Cha	rges for Large Custon	ners
	A	В	C	D	E
				2020	
			Largest Customers by Se	chedule: RER Charges at Es	stimated Total RER Cap
				umental customers with annu- ubject to the \$114,853 annu-	
			<u>(A)</u>	<u>(B)</u>	(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	В	35B	79,404,000	\$3,803,387	\$76,068
3	С	35B	62,184,000	\$2,588,854	\$51,777
4	D	35B	38,280,000	\$2,223,406	\$44,468
5	Е	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	н	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	К	04B	14,022,000	\$969,811	\$19,396
12	L	04B	15,300,000	\$1,092,861	\$21,857
13	М	04B	10,362,000	\$1,139,675	\$22,793
14	N	04B	13,869,389	\$976,373	\$19,527
15	0	04B	12,502,200	\$833,960	\$16,679
16	Р	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	Т	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	Х	04B	11,265,600	\$770,382	\$15,408
25	Y	04B	10,293,600	\$847,998	\$16,960
1 00	7	040	10 705 000	E000 570	¢10,100

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.

10,735,200

204,520,241

10,728,000

10,993,056

1,134,747,701

\$909,579

\$754,131

\$803,811

\$68,848,738

\$10,303,075

\$18,192

\$114,853

\$15,083

\$16,076

\$973,508

Renewable	Energy	Rider	Charges	for Lar	ge C	ustomers

			2020		
Line No.	Customers	Sebedule	Capped Revenue from	Capped Sales from Large	
Line NO.	Customers	Schedule	Schedule	Large Customers (\$)	Customers (kWh)
31	А	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	

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04B

**Renewable Energy Rider No. 36** 

2020 Derrivation of Rider Rate

#### PNM Renewable Energy Rider No. 36

#### PNM Exhibit MJS-5 Page 5 of 5

#### Impacts on Large Customer Bills

		I			Γ	· · · ·		1			1			
			2020 Proj	iections		2020 Pro	piections		2020 Hypothe	tical Method A			Annual Impact	
			Sales	Revenue	ł	Rider Charge	Fuel Charge	1	Rider Charge	Fuel Charge	1			
Line	Customer	Schedule	(kWh)	(\$)		(\$)	(\$)		(\$)	(\$)		Rider	Fuel	Net
1	A	30B	360,784,375	\$21,355,538	F	\$2,543,675	\$5,842,385	1	\$114,853	\$7,182,530	1	\$2,428,822	(\$1,340,146)	\$1,088,676
2	В	35B	79,404,000	\$3,803,387		\$559,830	\$1,285,834		\$76,068	\$1,542,499		\$483,762	(\$256,666)	\$227,097
3	С	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	Е	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	Ī	\$158,011	\$362,924	1	\$44,128	\$435,367	1	\$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	Н	04B	30,537,600	\$2,095,333		\$215,302	\$494,513		\$41,907	\$593,222		\$173,396	(\$98,710)	\$74,686
9	1	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	1	\$26,017	\$351,860		\$101,686	(\$58,548)	\$43,138
11	К	04B	14,022,000	\$969,811		\$98,861	\$227,066	1	\$19,396	\$272,391	1	\$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	М	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	0	04B	12,502,200	\$833,960		\$88,146	\$202,455		\$16,679	\$242,867		\$71,466	(\$40,412)	\$31,054
16	Р	04B	12,398,400	\$897,098		\$87,414	\$200,774	1	\$17,942	\$240,851	1	\$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	Т	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	1	\$15,907	\$221,642	1	\$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	Х	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	L	\$77,505	\$178,017		\$16,076	\$213,551		\$61,429	(\$35,534)	\$25,895
					_			-			1			
			Sales	Revenue		Rider Charge	Fuel Charge		Rider Charge	Fuel Charge				
			(kWh)	(\$)		(\$)	(\$)		(\$)	(\$)		Rider	Fuel	Net
30	AD	N/A	131,340,706	\$432,941	F	\$926,005	\$2,033,239	1	\$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	1	\$780,507	(\$437,374)	\$343,134
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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

Case No. 19-00\_\_\_-UT

Petitioner.

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#### **AFFIDAVIT**

STATE OF NEW MEXICO

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. Settlage and it is true and correct based on

my personal knowledge and belief.

SIGNED this  $31^{+}$  day of May, 2019.

On

MICHAEL SETTLAGE

**SUBSCRIBED AND SWORN** to before me this  $31^{5+}$  day of May, 2019.

Holaida Idonna 5

NOTARY PUBLIC IN AND FOR THE STATE OF NEW MEXICO

My Commission Expires:

GCG # 525513

# NMPRC CASE NO. 19-00\_\_\_UT INDEX TO THE DIRECT TESTIMONY OF ANTHONY BUENO

# WITNESS FOR PUBLIC SERVICE COMPANY OF NEW MEXICO

I.	INTRODUCTION AND PURPOSE	1
II.	CUSTOMER SOLAR REC PURCHASE PROGRAM	2
III.	CAPACITY RESERVATION PROGAM	6

PNM Exhibit AB-1	Resume
PNM Exhibit AB-2	Summary of Proposed Program Extensions
PNM Exhibit AB-3	Revised Rate No. 32

AFFIDAVIT

1		I. INTRODUCTION AND PURPOSE
2	Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.
3	А.	My name is Anthony Bueno. I am the Manager, Retail Renewable Energy for
4		Public Service Company of New Mexico ("PNM"). My business address is 414
5		Silver Avenue, SW, Albuquerque, New Mexico 87102.
6		
7	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND
8		PROFESSIONAL QUALIFICATIONS.
9	А.	I graduated from New Mexico State University with a Bachelor of Science in
10		Electrical and Computer Engineering in 2002. I have worked for PNM in various
11		capacities since May 2006. From May 2006 to August 2008 I was an engineer in
12		the System Engineering Department. From August 2008 to April 2009 I was a
13		project manager for Construction and Maintenance Department. From April 2009
14		to January 2013 I was a program manager in the Retail Renewable Energy
15		Department. From January 2013 to November 2016 I was a Key Account
16		Engineer. I have held my current position since November 2016. My resume is
17		attached to my testimony as PNM Exhibit AB-1.
18		
19	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS
20		PROCEEDING?
21	А.	The purpose of my testimony is to support PNM's proposed changes and
22		extensions to two distributed generation ("DG") programs: the Customer Solar

1		REC Purchase Program ("CSPP"), for DG systems sized up to 100 kW, and the
2		Large Capacity Reservation Program, for DG systems larger than 100 kW up to 1
3		MW. The purpose of the program changes and extensions is to achieve increased
4		customer subscriptions to help meet the increased RPS under recent amendments
5		to the Renewable Energy Act.
6		
7		II. CUSTOMER SOLAR REC PURCHASE PROGRAM
8	Q.	PLEASE DESCRIBE THE CSPP.
9	А.	The current CSPP was approved in Case No. 16-00148-UT for a three year
10		period, from 2017 through 2019. The program has two categories for new DG
11		systems: 1) systems sized up to 10 kW of inverter capacity, and 2) systems sized
12		above 10 kW up to 100 kW of inverter capacity. Both categories have a contract
13		term of eight years from the interconnection/contract effective date and a price of
14		\$0.0025 per kWh REC. The program capacity limit for systems sized up to and
15		including 10 kW is 2 MW per year. For systems larger than 10 kW up to 100 kW,
16		the annual program limit is 1 MW.
17		
18	Q.	HOW MANY CUSTOMERS PARTICIPATE IN THE CSPP?
19	А.	From January 1, 2017 to December 31, 2018, 316 customers with a combined
20		interconnected capacity of 3,324 kW applied to participate in the CSPP. From
21		January 1, 2019 to June 1, 2019, 27 customers with a combined interconnected

22 capacity of 221 kW applied to participate in the CSPP.

# 1 Q. PLEASE DESCRIBE PNM'S PROPOSAL TO EXTEND THE CSPP.

2 A. PNM is proposing to extend the CSPP for an additional 3 years beginning January 3 1, 2020, for two categories of new DG systems: (1) systems sized up to 10 kW of 4 inverter capacity, and (2) systems sized above 10 kW up to 100 kW of inverter 5 capacity, subject to a total combined annual capacity limit of 3 MW. PNM also 6 proposes a contract term of eight years from the interconnection/contract effective 7 date and a price of \$0.0025 per kWh REC. The program capacity limit for systems sized up to and including 10 kW shall be 1 MW per year. For systems 8 9 sized larger than 10 kW up to and including 100 kW the annual program limit 10 shall be 2 MW. This information is summarized on PNM Exhibit AB-2.

11

12 Customers who submit an application for interconnection on or after January 1, 13 2020, and do not have an interconnected DG system at the time of application for 14 a new system, will be eligible to participate. Consistent with the current CSPP 15 program, customers with a system size of 10 kW or less will have nine months 16 after successfully passing the technical screening process to interconnect their 17 project and customers with a system size above 10 kW up to 100 kW will have 18 twelve months after successfully passing the technical screening process to 19 interconnect their project.

20

# 21 Q. IF THE ANNUAL CAPACITY ALLOCATION IN A CATEGORY 22 BECOMES FULLY SUBSCRIBED BEFORE THE END OF THE YEAR,

1		WILL ADDITIONAL APPLICANTS BE PLACED IN A QUEUE FOR THE						
2		FOLLOWING YEAR?						
3	А.	No. Once the allotment in a category becomes fully subscribed, further						
4		applications will be placed on a waiting list and will be processed if an approved						
5		application for 2020's allocation lapses due to a failure to complete construction						
6		within the authorized time frame. In that event, the next approved application on						
7		the waiting list will be awarded the REC purchase contract. In no event will a						
8		program application for capacity available in the year it is filed be considered an						
9		application for capacity available in any other year.						
10								
11	Q.	WHY IS PNM PROPOSING TO APPORTION THE 3 MW OF ANNUAL						
11 12	Q.	WHY IS PNM PROPOSING TO APPORTION THE 3 MW OF ANNUAL PROGRAM CAPACITY BETWEEN THE SMALL AND LARGE						
	Q.							
12	Q. A.	PROGRAM CAPACITY BETWEEN THE SMALL AND LARGE						
12 13	-	PROGRAM CAPACITY BETWEEN THE SMALL AND LARGE PROJECTS ON A 1 MW TO 2 MW BASIS?						
12 13 14	-	PROGRAMCAPACITYBETWEENTHESMALLANDLARGEPROJECTS ON A 1 MW TO 2 MW BASIS?PNM has observed more than 50% of the capacity remaining for the program						
12 13 14 15	-	PROGRAMCAPACITYBETWEENTHESMALLANDLARGEPROJECTS ON A 1 MW TO 2 MW BASIS?PNM has observed more than 50% of the capacity remaining for the programcategory for systems sized up to 10 kW of inverter capacity. PNM has observed a						
12 13 14 15 16	-	PROGRAMCAPACITYBETWEENTHESMALLANDLARGEPROJECTS ON A 1 MW TO 2 MW BASIS?PNM has observed more than 50% of the capacity remaining for the programcategory for systems sized up to 10 kW of inverter capacity. PNM has observed amuch higher rate of CSPP participation for the program category for systems						
12 13 14 15 16 17	-	PROGRAM CAPACITY BETWEEN THE SMALL AND LARGEPROJECTS ON A 1 MW TO 2 MW BASIS?PNM has observed more than 50% of the capacity remaining for the programcategory for systems sized up to 10 kW of inverter capacity. PNM has observed amuch higher rate of CSPP participation for the program category for systemssized above 10 kW up to 100 kW. To match the demand and increase the CSPP						

# 1Q.HOW DID PNM DETERMINE THE PRICE TO BE PAID FOR THE2SOLAR DG RECS?

3 A. The REC price is consistent with the \$0.0025 REC purchase contract approved by 4 the Commission for the CSPP extension in Case No. 16-00148-UT. PNM's most recent request for proposals ("RFP") that obtained pricing for future REC 5 purchases was issued on January 13, 2016. The lowest cost solar-REC-only bid 6 7 resulting from that RFP was \$2.54 per MWh-REC. PNM used this price to 8 support the REC purchase price for the extension of the CSPP in Case No. 16-9 00148-UT, and is proposing the same price for the extended CSPP here. For the 10 Capacity Reservation program, the Final Order in Case No. 11-00265-UT 11 provides that the REC purchase price should be determined by the lowest 12 accepted bid for RECs that PNM received pursuant to a RFP. PNM did not need 13 to purchase stand-alone RECs for 2017, therefore, had not obtained a more recent 14 price. PNM will, however, purchase stand-alone RECs for 2018 at a cost of \$1.00 15 per MWh-REC (or \$0.0010 per kWh-REC). The proposed price of \$0.0025 per 16 kWh/REC not only satisfies that requirement but would establish the same price 17 paid for REC purchases in both the CSPP and the Capacity Reservation programs 18 and is greater than the most recent price of \$0.0010 per kWh-REC.

19

1	Q.	WHY IS PNM PROPOSING AN EIGHT-YEAR CONTRACT TERM?
2	А.	The eight-year contract term is consistent with the eight year REC purchase
3		contract term approved by the Commission for the CSPP in Case No. 12-00131-
4		UT and Case No. 16-00148-UT.
5		
6	Q.	WHY IS PNM PROPOSING TO EXTEND THE CSPP PROGRAM?
7	A.	PNM will need to acquire significant RECs to meet the increased RPS in 2025
8		and beyond. The CSPP program provides low cost RECs to meet this
9		requirement. In addition, the CSPP is popular with customers and promotes the
10		development of renewable resources in PNM's service territory.
11		
12		III. CAPACITY RESERVATION PROGAM
13	Q.	IS PNM PROPOSING TO EXTEND THE LARGE CAPACITY
14		RESERVATION PROGRAM FOR SOLAR DG FACILITIES LARGER
15		THAN 100 KW?
16	А.	Yes. PNM proposes to offer a three-year capacity reservation of 2 MW at a
17		purchase price of \$0.0025 per kWh of RECs for new solar interconnection
18		customers with systems sized over 100 kW and up to 1 MW. New solar
19		interconnection customers will be customers who submit an application for
20		interconnection on or after January 1, 2020, and who do not have an
21		interconnected DG system at the time of application for a new system. Customers

with a system size above 100 kW up to 1 MW will have twelve (12) months after 1 2 successfully passing the technical screening process to interconnect their project. 3 The current program is a one-year program and will terminate at the end of 2019. 4 5 Per the Final Order adopting the Hearing Examiner's Recommended Decision in 6 Case No. 11-00265-UT, extension of the Capacity Reservation Program is subject 7 to PNM's RPS compliance costs being lower than the Reasonable Cost Threshold 8 ("RCT"). As discussed in Mr. Fallgren's testimony, however, the ETA changed 9 the definition of the RCT from one that is portfolio based to one that is resource 10 based. The large capacity reservation program is lower cost than the RCT under 11 the ETA. From January 1, 2017, to December 31, 2017 the program was not 12 available, therefore there were 0 participants. From January 1, 2018 to December 13 31, 2018, four customers with a combined interconnected capacity of 541 kW 14 applied to participate in the Large Capacity Reservation Program. From January 1, 2019 to June 1, 2019, two customers with a combined interconnected capacity 15 16 of 258 kW applied to participate in the Large Capacity Reservation Program.

17

# 18 Q. WHY IS PNM PROPOSING A PURCHASE PRICE OF \$0.0025 PER 19 KWH/REC FOR THE CAPACITY RESERVATION PROGRAM?

A. This is based on PNM's most recent RFP, as I previously discussed. PNM is
 proposing the same price for the extended CSPP here for the reasons discussed
 above. The proposed price of \$0.0025 per kWh/REC would establish the same

1		price paid for REC purchases in both the CSPP and the Capacity Reservation
2		programs.
3		
4	Q.	IS PNM PROPOSING AN UPDATED TARIFF TO INCORPORATE THE
5		PROPOSED CHANGES TO THE DG PROGRAMS?
6	А.	Yes. Please see PNM Exhibit AB-3 for a copy of the revised Rate 32 that was
7		filed as a part of Advice Notice 562.
8		
9	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
10	A.	Yes.

# Anthony Bueno EDUCATIONAL AND PROFESSIONAL SUMMARY

Name:	Anthony Bueno
Address:	PNM Resources Inc. MS 0605 414 Silver SW Albuquerque, NM 87102
Position:	Manager, Retail Renewable Energy
Education:	Bachelor of Science, Electrical Engineering, New Mexico State University - 2002

#### **Employment:**

#### PNM:

Manager, Retail Renewable Energy: November 2016 - Present

Engineer, Key Accounts: January 2013 - November 2016

Program Manager, Photovoltaic: April 2009 - January 2013

Project Manager, Construction and Maintenance: August 2008 – April 2009

Electrical Engineer, System Engineering: May 2006 - August 2008

				0 to 10 kW	
Year		Capacity	ity Price		Contract Expiration Date
2013	1st half	1,000	\$	0.0400	2021
	2nd half	1,000	\$	0.0350	2021
2014	1st half	1,000	\$	0.0300	2022
2014	2nd half	1,000	\$	0.0250	2022
2015	1st half	500	\$	0.0250	2022
2015	2nd half	500	\$	0.0250	2023
2016	1st half	500	\$	0.0250	2024
2016	2nd half	500	\$	0.0250	2024
2017		2,000	\$	0.0025	2025
2018		2,000	\$	0.0025	2026
2019	<u>,</u>	2,000	\$	0.0025	2027
2020		1,000	\$	0.0025	2028
2021		1,000	\$	0.0025	2029
2022		1,000	\$	0.0025	2030
Total		15,000			

# Customer Solar REC Purchase Program Summary of Pricing Terms

10 to 100kW					
Year		Capacity	city Price		Contract Expiration Date
2012	1st half	500	\$	0.0500	2021
2013	2nd half	500	\$	0.0450	2021
2014	1st half	500	\$	0.0400	2022
2014	2nd	500	\$	0.0350	2022
2015	1st half	250	\$	0.0300	2022
2015	2nd half	250	\$	0.0250	2023
2016	1st half	250	\$	0.0250	2024
2016	2nd half	250	\$	0.0250	2024
2017		1,000	\$	0.0025	2025
2018		1,000	\$	0.0025	2026
2019		1,000	\$	0.0025	2027
2020		2,000	\$	0.0025	2028
2021		2,000	\$	0.0025	2029
2022		2,000	\$	0.0025	2030
Total 12,000					

### $4^{\text{TH}} \underline{5}^{\text{TH}} \text{REVISED RATE NO. 32}$ CANCELING $3^{\text{RD}} \underline{4th}$ REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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**<u>APPLICABILITY</u>**: The Solar Renewable Energy Certificate Purchase Program applies to RECs purchased by Public Service Company of New Mexico pursuant to any of the following standard form agreements:

- 1. Standard Small Solar REC Purchase Agreement for Participation in PNM's Solar REC Incentive Program.
- 2. Standard Large Solar REC Purchase Agreement for Participation in PNM's Solar REC Incentive Program.
- 3. Standard Small Solar REC Purchase Agreement for Participation by Third-Party Owner in PNM's Solar REC Incentive Program.
- 4. Standard Large Solar REC Purchase Agreement for Participation by Third-Party Owner in PNM's Solar REC Incentive Program.
- 5. Standard Small Solar REC Purchase Agreement for Participation in PNM's Interim Solar REC Incentive Program.
- 6. Standard Large Solar REC Purchase Agreement for Participation in PNM's Interim Solar REC Incentive Program.
- 7. Standard Small Solar REC Purchase Agreement for Third Party Ownership in PNM's Interim Solar REC Incentive Program.
- 8. Standard Large Solar REC Purchase Agreement for Third Party Ownership in PNM's Interim Solar REC Incentive Program.
- Standard Large Solar Renewable Energy Certificate Purchase Agreement for Third-Party Owner Participation in PNM'S Solar REC Incentive Program for Systems Sized 100kW to 1MW.
- 10. Standard Large Solar Renewable Energy Certificate Purchase Agreement for Participation in PNM's Solar REC Incentive Program for Systems Sized 100kW to 1MW.

Any services hereunder will be furnished subject to the Company's Rules and Regulations and any subsequent revisions. These Rules and Regulations are available at the Company's office and are on file with the New Mexico Public Regulation Commission. These Rules and Regulations are a part of this Schedule as if fully written herein.

This rate will apply to:

- 1. Customers with Solar Facilities less than or equal to 100 kW<sub>AC</sub> who submitted applications to PNM after August 31, 2010,
- 2. Customers with Solar Facilities larger than 100 kW<sub>AC</sub> who submitted applications after August 27, 2010,

Advice Notice No. 531-562

Mark A. Fenton

Executive Director, Regulatory Policy and Case ManagementGerard T. Ortiz

Vice President, PNM Regulatory Affairs

#### $4^{\text{TH}} \underline{5}^{\text{TH}}$ REVISED RATE NO. 32 CANCELING $3^{\text{RD}} \underline{4}$ th REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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- Customers with applications for Solar Facilities larger than 100 kW<sub>AC</sub> that were pending with PNM as of August 27, 2010, unless grandfathered by the Commission into PNM's Large PV REC Purchase Program, and
- 4. Customers and Third-Party Owners of Solar Facilities who submitted applications after December 31, 2010.

TERRITORY: All territory served by the Company in New Mexico.

**DEFINITIONS:** The following definitions apply to the terms discussed within this Schedule:

Company or PNM is Public Service Company of New Mexico.

<u>Customer</u> is an account holder of PNM who has entered into the standard agreements for interconnection and net metering and a standard form agreement for the purchase of RECs by PNM, as identified above.

<u>Large Solar Facility</u> is a solar PV or solar thermal facility generating electricity that is sized greater than 10 kW<sub>AC</sub> up to and including 1,000 kW<sub>AC</sub> (or 1 MW<sub>AC</sub>) based on the rated capacity of the inverter.

<u>NMPRC or Commission</u> is the New Mexico Public Regulation Commission or a successor agency exercising jurisdiction over the subject matter of this Rate Number 32.

<u>Small Solar Facility</u> is a solar PV or solar thermal facility that is sized at 10 kW<sub>AC</sub> or smaller based on the rated capacity of the inverter.

<u>Solar Renewable Energy Certificate or REC</u> is a document evidencing that the enumerated renewable energy kilowatt-hours (kWh) have been generated from a Solar Facility.

<u>Third-Party Owner</u> is a party other than a landlord that owns and/or operates a Solar Facility that is sited at the location of a Customer and that is sized to supply no more than one hundred twenty percent (120%) in kWh of the average annual consumption of electricity by Customer at the location of the Solar Facility.

#### TERMS OF SERVICE:

Eligibility – Customers and Third-Party Owners eligible for this rate must:

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Mark A. Fenton

Executive Director, <u>Regulatory Policy and Case Management</u>Gerard <u>T. Ortiz</u>

Vice President, PNM Regulatory Affairs

### $4^{\text{TH}} \underline{-5}^{\text{TH}}$ REVISED RATE NO. 32 CANCELING $3^{\text{RD}} \underline{-4th}$ REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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- 1. Have a Solar Facility inverter capacity no greater than 1 MW<sub>AC</sub>, which for Third-Party Owners must be sized to supply no more than one hundred twenty percent (120%) in kWh of the average annual consumption of electricity by Customer at the location of the Solar Facility.
- 2. Submit a complete application.
  - For Small Solar Facilities: A complete application shall include Application Form, Non-Refundable Application Fee, One-Line Electric Diagram, Site-Map and Inverter Specification Sheet as described in the application
  - \* For Large Solar Facilities: A complete application shall include Application Form, Application Fee, One-Line and Three-Line Electric Diagram which must be stamped by a professional engineer licensed to practice in the state of New Mexico if the generating facility is larger than 50 kW<sub>AC</sub>, Site-Map and Inverter Specification Sheet as described in the application;
- 3. Receive from PNM a Notice of Completion of Application and REC Reservation, which shall include the REC price that PNM will pay for RECs generated by the Solar Facility provided that the Solar Facility is interconnected within the time frame set forth in Section 4 below, consistent with the originally proposed design and capacity;
- 4. Interconnect the Solar Facility within 12 months for Large Solar Facilities or within 9 months for Small Solar Facilities of being notified by PNM, through a Notice of Completion of Technical Screening, that the Solar Facility has passed PNM's technical screening. Except as provided in Section 5 below, the price for RECs generated by a Solar Facility that fails to interconnect within the applicable time period will be the REC price for the price step shown in Table 1 that is open at the time of interconnection;
- 5. If, after PNM issues a Notice of Completion of Application and REC Reservation for a Solar Facility, capacity is added to the Solar Facility above the capacity and design stated in that completed application, a new application must be submitted. The REC price for the entire output of the Solar Facility described in that new application (i.e., the originally installed capacity and the additional capacity), will be the REC price in the price step open on the date PNM provides its Notice of Completion of Application and REC Reservation for that new application.

#### REC Price:

When PNM has determined that an application for interconnection and/or REC purchase is complete, PNM shall provide Customer and Third-Party Owner, if applicable, a Notice of Completion of Application and REC Reservation which shall include the applicable price at which PNM will purchase RECs generated by the Solar Facility. This REC price shall be based on the REC Price shown in Table 1, taking into account:

Advice Notice No. <u>531–562</u>	
Mark A. Fenton Executive Director,	
<u>Regulatory Policy and Case Management</u> Gera <del>T. Ortiz</del>	<del>ird</del>
	2609

### $4^{\text{TH}} - 5^{\text{TH}}$ REVISED RATE NO. 32 CANCELING $3^{\text{RD}} - 4$ th REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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- 1. The date the application is determined by PNM to be complete as stated in PNM's standard Interconnection Application form,
- 2. The inverter size (in kW<sub>AC</sub>) listed in the application, which will determine the program category shown in Table 1 to which the Solar Facility will be assigned,
- The rated capacity in kW<sub>AC</sub> of the Solar Facility, which will be calculated at 72% of the installed panel capacity in kW<sub>DC</sub> for Small Solar Facilities and at 75% of the installed panel capacity in kW<sub>DC</sub> for Large Solar Facilities,
- 4. The program category shown in Table 1 that is open for subscription for solar generating facilities sized consistent with the inverter size of the Small or Large Solar Facility at the time the application is determined to be complete, and
- 5. The applicable REC price(s) shown in Table 1 for the open price step for which the Solar Facility qualifies based on the installed solar capacity in kW<sub>AC</sub>.

If a Small or Large Solar Facility is sized greater than the capacity available in the open price step shown in Table 1, the capacity in excess will be assigned to the next successive price step (even if it is before the open period), and the REC price will be calculated as a weighted average of the portion of the Solar Facility's capacity in the two price steps using the methodology shown in Table 2.

When the capacity available for a price step shown in Table 1 is fully subscribed, the REC price for that step will no longer be available or offered by PNM.

For Large Solar Facilities sized greater than 100 kW eligible for price steps subject to a capacity reservation, PNM will propose a price to the Commission in its annual Renewable Energy Portfolio Procurement Plan that would be offered on a first-come, first-serve basis. The price is anticipated to be based upon the highest price offered by a renewable energy developer to PNM and accepted by PNM as a result of the most recently conducted Request for Proposal process, or upon other criteria as may be ordered by the Commission. PNM anticipates that such Request for Proposals will be issued during the first quarter of each calendar year provided that new procurements are required for compliance with PNM's Renewable Portfolio Standard requirements. In years during which a Request for Proposal process is not conducted, and provided that a capacity reservation is available, PNM may propose to the Commission a continuation of the most recent Commission-approved price or other reasonably determined price.

Solar REC Purchases:

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Mark A. Fenton

Executive Director, Regulatory Policy and Case ManagementGerard T. Ortiz

Vice President, PNM Regulatory Affairs

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#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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PNM will only purchase Solar RECs generated by a Solar Facility located on a Customer's premises. On a monthly basis, PNM will purchase the Solar RECs associated with the energy generated at the applicable REC Price described above, pursuant to an executed PNM standard form agreement as identified above.

- For Small Solar Facilities, PNM will purchase all RECs associated with the entire amount of electricity generated by the Solar Facility as metered by PNM.
- For Large Solar Facilities, PNM will only purchase RECs associated with the amount of electricity generated by the Solar Facility that is consumed each month on Customer's premises as metered by PNM.

**REALLOCATION OF CAPACITY:** Capacity within a price step shown in Table 1 shall be committed to a proposed Solar Facility at the time the application is determined by PNM to be complete. A proposed Large Solar System must be interconnected within 12 months, and a proposed Small Solar Facility must be interconnected within 9 months from the date shown on PNM's Notice of Completion of Technical Screening to the Applicant that the proposed Solar Facility has passed the screening process.

For capacity subscribed prior to December 31, 2016, the Applicant will forfeit the Solar Facility's committed capacity within a particular REC price step shown in Table 1 if the Solar Facility is not interconnected within the applicable time period. PNM shall reallocate the forfeited capacity to the then currently open REC price step within the applicable program category shown on Table 1.

For price steps applicable to solar facilities sized 100 kW or less in 2013 through 2016, any cancelled capacity from the SIP or Interim SIP rolled into these price steps will be included on an equivalent dollar basis on a 2 to 1 ratio in the 0 to 10 kW category and 10 to 100 kW category, respectively. The capacity and related prices will be such that the amount of capacity times the applicable step price will equal the same total amount of dollars as the amount of cancelled capacity times the originally reserved price step. For example, if a 300 kW<sub>AC</sub> project with an \$0.08 per kWh REC reservation price under the SIP is cancelled during the first six months of 2013, the cancellation will add the amount of capacity which equates to the same amount of costs for REC purchases under the CSPP at the REC prices then in effect. The cancelled capacity amount will be divided between the 0 to 10 kWAC and 10 to 100 kWAC size categories on a 2:1 ratio such that the cancellation will add 400 kW<sub>AC</sub> of capacity at the \$0.04 per kWh REC price in the 0 to 10 kW<sub>AC</sub> category and 160 kW<sub>AC</sub> of capacity at \$0.05 per kWh in the 10 to 100 kW<sub>AC</sub> category under the CSPP.

T. Ortiz

Vice President, PNM Regulatory Affairs

Advice Notice No. 531-562

Regulatory Policy and Case ManagementGerard

Mark A. Fenton

Executive Director,

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### $4^{\text{TH}}$ - $5^{\text{TH}}$ REVISED RATE NO. 32 CANCELING $3^{\text{RP}}$ -4th REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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For price steps applicable to solar facilities sized 100 kW or less in 2013 through 2016, any unsubscribed capacity during a subscription period will roll over into the next period at the same price. Once the capacity has filled, the new capacity allotment and associated price will start. Any unsubscribed capacity or cancelled capacity shall be deemed unavailable for further subscription after December 31, 2016. For price steps applicable to solar facilities sized 100 kW or less in 2017 through 2019, any unsubscribed capacity during a subscription period will not be rolled over to the next year.

For price steps applicable to solar facilities sized 100 kW or less in 2013 through 2016, any unsubscribed capacity in given size category at the end of the year will be allocated to the size category that achieved 100% subscription at the beginning of the next year. Any unsubscribed capacity or cancelled capacity shall be deemed unavailable for further subscription after December 31, 2016. For price steps applicable to solar facilities sized 100 kW or less in 2017 through 2019, any unsubscribed capacity in given size category at the end of the year will not be rolled over to the next year.

For Large Solar Facilities sized greater than 100 kW eligible for price steps subject to a capacity reservation, PNM will propose a reservation of capacity to the Commission in its annual Renewable Energy Portfolio Procurement Plan for the procurement of RECs during the next calendar year. Upon Commission approval, PNM will file an Advice Notice to update Rate No. 32 for implementation of the approved new annual capacity reservation and price. The capacity reservation is available on a first-come, first-serve basis for subscription beginning on January 1 of the following calendar year, or upon the date of NMPRC approval of the annual Renewable Energy Portfolio Procurement Plan, if subsequent to January 1. The capacity reservation will not be assigned by system sized category. PNM will post on its web site at <u>PNM.com</u> information explaining the capacity reservation proposed by PNM in any pending Renewable Energy Portfolio Procurement Plan and the approved capacity reservation will be updated, if appropriate, on a bi-weekly basis.

**ACCESSIBILITY:** Equipment used to meter RECs must be physically accessible in a location acceptable to the Company. The meter socket must be installed in accordance with the Company's Rules and Regulations.

#### **TERMS OF PAYMENT:**

For Customer-owned Solar Facilities:

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Mark A. Fenton

Executive Director, <u>Regulatory Policy and Case Management</u>Gerard <del>T. Ortiz</del>

Vice President, PNM Regulatory Affairs

#### $4^{\text{TH}} \underline{5}^{\text{TH}}$ REVISED RATE NO. 32 CANCELING $3^{\text{RD}} \underline{4th}$ REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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REC payments shall commence in the billing period subsequent to the execution of a Standard Interconnection Agreement and subsequent to PNM's receipt and execution of the applicable Standard Small or Large Solar REC Purchase Agreement.

Customers will receive information on the monthly electric bill documenting the number of kWh produced by the Solar Facility and the number of RECs purchased by PNM. Bills for Customers receiving payment will include the applicable REC purchase price and the total payment for RECs purchased from the Customer by PNM during the billing period.

REC purchase payments will be applied as a credit to Customer's electric bill on a monthly basis, and credits in excess of certain amounts will be paid, as follows:

- \* For Small Solar Facilities: if the amount paid for the RECs is greater than the total of the Customer's monthly electric bill by up to \$20.00, the resulting credit will be carried forward to be applied toward the following month's electric bill. If the REC payment balance results in a customer credit in excess of \$20.00, the total balance will be paid directly to the Customer before the beginning of the Customer's next billing cycle.
- \* For Large Solar Facilities: if the amount paid for the RECs is greater than the total of Customer's monthly electric bill by up to \$200.00, the resulting credit will be carried forward to the following month's electric bill. If REC payment balance results in a Customer credit in excess of \$200.00, the total balance will be paid directly to Customer before the beginning of the Customer's next billing cycle.

For Third-Party Owned Solar Facilities:

Payments by PNM to a Third-Party Owner for Solar RECs generated by the Third-Party Owner Solar Facility will commence subsequent to the execution of a Standard Interconnection Agreement, PNM's receipt and execution of the applicable Standard Small or Large Solar REC Purchase Agreement, and 30 days following the billing cycle in which the meters on Customer's Premises are read by PNM.

Third-Party Owners will receive a statement from PNM that documents the number of kWh produced by the Solar Facility, the number of RECs purchased by PNM, the applicable REC purchase price and the total payment for RECs purchased by PNM for the Customer's billing period.

\* For Small Solar Facilities: PNM shall purchase all RECs generated. Solar REC purchase payments that total in excess of \$20 will be paid on a monthly basis. If the amount due for the Solar RECs is less than \$20 the amount will be carried forward to

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Mark A. Fenton

Executive Director, Regulatory Policy and Case ManagementGerard T. Ortiz

Vice President, PNM Regulatory Affairs

### $4^{\text{TH}} \underline{5}^{\text{TH}} \text{ REVISED RATE NO. 32}$ CANCELING $3^{\text{RD}} \underline{4th}$ REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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the following month until such time as the balance due exceeds \$20, at which time the total balance due will be paid directly to Third-Party Owner.

\* For Large Solar Facilities: Solar REC purchase payments that total in excess of \$200 will be paid on a monthly basis. If the amount due for the Solar RECs is less than \$200 the amount will be carried forward to the following month until such time as the balance due exceeds \$200, at which time the total balance due will be paid directly to Third-Party Owner. If the Large Solar Facility generates electricity in excess of the amount of electricity consumed by Customer each month on the Premises ("Excess Energy"), PNM shall purchase such Excess Energy from Customer at its avoided cost, and PNM shall receive from Customer, without cost, all RECs associated with such Excess Energy, to the extent authorized by the New Mexico Renewable Energy Act.

Advice Notice No. 531-562

Mark A. Fenton

Executive Director, Regulatory Policy and Case ManagementGerard T. Ortiz

Vice President, PNM Regulatory Affairs

## 4<sup>™</sup>-5<sup>™</sup> REVISED RATE NO. 32 CANCELING 3<sup>RD</sup>-4th REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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Line		Price Step Size in	REC Price per kWh	
Number	Program Category	MW <sub>AC</sub>	for this Step	
1	Small Solar - 0 to 10 kW <sub>AC</sub>	0.593	\$0.1200	
2		0.593	\$0.1100	
3		0.593	\$0.1000	
4		0.593	\$0.0900	
5		0.593	\$0.0800	
6		0.593	\$0.0700	
7	·	0.593	\$0.0600	
8		0.593	\$0.0500	Interim Price Step (1)
9	-	0.593	\$0.0400	Interim Price Step (1)
10		0.593	\$0.0300	Interim Price Step (1)
<b>1</b> 1		1.000	\$0.0400	For Jan. – June, 2013
12		1.000	\$0.0350	For July-Dec., 2013
13		1.000	\$0.0300	For JanJune, 2014
14		1.000	\$0.0250	For July-Dec., 2014
15		.500	\$0.0250	For JanJune, 2015
16		.500	\$0.0250	For July-Dec., 2015
17		.500	\$0.0250	For JanJune, 2016
18		.500	\$0.0250	For July-Dec., 2016
19		2.000	\$0.0025	Annual for 2017, 2018, and 2019
<u>20</u>		<u>1.000</u>	<u>\$0.0025</u>	Annual for 2020, 2021, and 2022
<del>20<u>21</u></del>	> 10 kW <sub>AC</sub> to 100 kW <sub>AC</sub>	0.450	\$0.1400	
2122		0.450	\$0.1300	
<del>22<u>23</u></del>		0.450	\$0.1200	
<del>23<u>24</u></del>		0.450	\$0.1100	
2425		0.450	\$0.1000	
2526		0.450	\$0.0900	
2627		0.450	\$0.0800	
2728		0.450	\$0.0700	
28 <u>29</u>		0.450	\$0.0600	
<del>29</del> <u>30</u>		0.450	\$0.0500	Interim Price Step (1)
<u>3031</u>		0.450	\$0.0400	Interim Price Step (1)
<u>3132</u>		.500	\$0.0500	For Jan. – June, 2013
3233		.500	\$0.0450	For July-Dec., 2013
3334		.500	\$0.0400	For JanJune, 2014
3435		.500	\$0.0350	For July-Dec., 2014
<del>35<u>36</u> 2627</del>	<u> </u>	.250	\$0.0300	For JanJune, 2015
3637		.250	\$0.0250	For July-Dec., 2015
3738		.250	\$0.0250	For JanJune, 2016
<u>3839</u>		.250	\$0.0250	For July-Dec., 2016
3940		1.000	\$0.0025	Annual for 2017, 2018, and 2019
<u>41</u>		2.000	\$0.0025	Annual for 2020, 2021, and 2022

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Advice Notice No. 531 562

Mark A. Fenton

Executive Director, Regulatory Policy and Case ManagementGerard T. Ortiz

## $4^{\text{TH}}$ - $5^{\text{TH}}$ REVISED RATE NO. 32 CANCELING $3^{\text{RD}}$ -4th REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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<u>42</u>	>100 kW <sub>ac</sub> to 1 MW <sub>ac</sub>	5.000	<u>\$0.0200</u>	For 2012
43		2.000	\$0.0200	For 2013-2016
44		2.000	<u>\$0.0025</u>	For 2018-2022
olar REC	incentive (SIP) Categories No Longe	r Available		
40 <u>41</u>	> 100kW <sub>AC</sub> to 250 kW <sub>AC</sub>	0.560	\$0.1300	<u>(2)</u>
<u>4142</u>		0.560	\$0.1200	
42 <u>43</u>		0.560	\$0.1100	
4344		0.560	\$0.1000	
4445		0.560	\$0.0900	
4 <u>546</u>		0.560	\$0.0800	
4647		0.560	\$0.0700	
4748		0.560	\$0.0600	
48 <u>49</u>		(2)	\$0.0200	Capacity Reservation Price Step (2)
4 <u>950</u>	> 250 kW <sub>AC</sub> to 1 MW <sub>AC</sub>	1.250	\$0.1200	
<u>51</u>		1.250	<u>\$0.1000</u>	
<u>52</u>		<u>1.250</u>	<u>\$0.0800</u>	
<u>53</u>		<u>1.250</u>	<u>\$0.0600</u>	
<u>54</u>		(2)	<u>\$0.0200</u>	Capacity Reservation Price Step (2)
<u>55</u>	Large 1 MW <sub>AC</sub>	2.500	<u>\$0.1100</u>	
<u>56</u>		2.500	<u>\$0.0900</u>	
<u>57</u>		<u>1.500</u>	<u>\$0.0700</u>	
<u>58</u>		<u>1.500</u>	<u>\$0.0500</u>	
<u>59</u>		(2)	<u>\$0.0200</u>	Capacity Reservation Price Step (2)

TABLE 1: PRICES FOR RECS FROM SMALL AND LARGE SOLAR FACILITIES (Continued)

1.250

<del>1,250</del> <del>1,250</del>

Price Step Size in REC Price per kWh MW<sub>AC</sub> for this Step

Line-Number	Program Category	<del>M</del> 44
<del>5</del> 0		
<del>51</del>		
<del>52</del>		

Advice Notice No. 531-562

Mark A. Fenton

Executive Director, Regulatory Policy and Case ManagementGerard T. Ortiz

Vice President, PNM Regulatory Affairs

\$0.1000 \$0.0800

<del>\$0.0600</del>

## $4^{\text{TH}} \underline{5}^{\text{TH}}$ REVISED RATE NO. 32 CANCELING $3^{\text{RP}} \underline{4th}$ REVISED RATE NO. 32

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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53 54 55 56	Large 1 MW <sub>AG</sub>	<u>(2)</u> 2,500 2,500 1,500	\$0.0200 \$0.1100 \$0.0900 \$0.0700	Capacity Reservation Price Step <del>(2)</del>
57		<del>1.500</del>	<del>\$0.0500</del>	
<del>58</del>		<del>(2)</del>	<del>\$0.0200</del>	Capacity Reservation Price Step (2)

(1) The Interim Price Steps were approved by the Final Order in Case No. 11-00265-UT as modified by the Order Granting Motion. Contracts for REC purchases for the Interim Price Steps have a termination date of December 31, 2020.

(2) The total combined capacity reserved for these three categories listed below is 2,000 kW<sub>AC</sub> or 2 MW<sub>AC</sub>.

- a. > 100 kw<sub>AC</sub> to 250 kW<sub>AC</sub> (line 46)
- b.  $> 250 \text{ kW}_{AC}$  to 1 MW<sub>AC</sub> (line 51)
- c. Large 1 MW<sub>AC</sub> (line 56)

The capacity reservation and price for future price steps in these categories will be determined and updated annually.

Advice Notice No. 531-562

Mark A. Fenton

<u>Executive Director,</u> <u>Regulatory Policy and Case Management</u>Gerard <del>T. Ortiz</del>

Vice President, PNM Regulatory Affairs

## $4^{\text{TH}} - 5^{\text{TH}} \text{REVISED RATE NO. 32}$ CANCELING $3^{\text{RD}} - 4 \text{th} \text{REVISED RATE NO. 32}$

#### SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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#### TABLE 2

#### EXAMPLE OF CALCULATION TO DETERMINE WEIGHTED AVERAGE PRICE FOR RECS FROM A SMALL SOLAR FACILITY THAT COMPLETES THE AVAILABLE CAPACITY

Program Category - Small Solar 0 to 10 kWAC

Total Capacity in first step Available Capacity in step	1,000 kW <sub>AC</sub> 5 kW <sub>AC</sub>
REC price in first step REC price in next step	\$0.0400 / kWh \$0.0350 / kWh
Project Rated Capacity	8 kW <sub>AC</sub>
Calculation of REC Price	((5 kW <sub>AC</sub> * \$0.0400 / kWh) + (3 kW <sub>AC</sub> * \$0.0350 / kWh))/8 kW <sub>AC</sub>
REC price	\$0.0381 / kWh

Note: Methodology consistent with Final Order Partially Adopting Recommended Decision in NMPRC Case No. 10-00037-UT

# EXAMPLE OF CALCULATION TO DETERMINE WEIGHTED AVERAGE PRICE FOR RECS FROM A LARGE SOLAR FACILITY THAT COMPLETES THE AVAILABLE CAPACITY

Program Category >10 kW<sub>AC</sub> to 100 kW<sub>AC</sub>

Total Capacity in first step Available Capacity in step	500 kW <sub>AC</sub> 5 kW <sub>AC</sub>
REC price in this step Price in next step	\$0.0500 / kWh \$0.0450 / kWh
Next project	15 kW <sub>AC</sub>
Calculation of REC Price	((5 kW <sub>AC</sub> * \$0.0400 / kWh) + (10 kW <sub>AC</sub> * \$0.0350 /kWh))/15 kW <sub>AC</sub>
REC price	\$0.0467 /kWh

Advice Notice No. 531-562

Mark A. Fenton

Executive Director, Regulatory Policy and Case ManagementGerard T. Ortiz

Vice President, PNM Regulatory Affairs

### **BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

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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

Case No. 19-00 -UT

Petitioner.

#### **AFFIDAVIT**

STATE OF NEW MEXICO ) ) ss COUNTY OF BERNALILLO )

ANTHONY BUENO, Manager, Retail Renewable Energy 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 Anthony Bueno and it is true and correct based on my personal knowledge and belief. SIGNED this <u>3</u>/ day of May, 2019.

**ANTHONY BUENO** 

**SUBSCRIBED AND SWORN** to before me this  $3 \le t$  day of May, 2019.

Ya

NOTARY PUBLIC IN AND FOR THE STATE OF NEW MEXICO

My Commission Expires:

GCG # 525515

## NMPRC CASE NO. 19-00\_\_\_-UT INDEX TO THE DIRECT TESTIMONY OF THOMAS S. BAKER

## WITNESS FOR <u>PUBLIC SERVICE COMPANY OF NEW MEXICO</u>

I.	INTRODUCTION AND PU	RPOSE 1			
II.	REVENUE REQUIREMENT COMPONENTS OF THE 2020 RIDER				
III.		T FOR THE 140 MW LA JOYA II WIND 			
IV.	OTHER MATTERS				
PNM	EXHIBIT TSB-1	Resume of Thomas S. Baker			
PNM	EXHIBIT TSB-2	Summary 2020 Renewable Rider Requirement Projected			
PNM	EXHIBIT TSB-3	2020 Estimated Annual Revenue Requirement for the PNM-Owned 2011 Facilities			
PNM	EXHIBIT TSB-4	2020 Estimated Annual Revenue Requirement for the PNM-Owned 2013 Facilities			
PNM	EXHIBIT TSB-5	2020 Estimated Annual Revenue Requirement for the PNM-Owned 2014 facilities			
PNM	EXHIBIT TSB-6	2020 Estimated Annual Revenue Requirement for the PNM-Owned 2019 Facilities			
PNM	EXHIBIT TSB-7	2020 Estimated Annual Revenue Requirement for Purchased Power Agreements and Renewable Energy Certificate Purchases			
PNM	EXHIBIT TSB-8	December 31, 2018 Year End Weighted Average Cost of Capital			
PNM	EXHIBIT TSB-9	Estimated Annual Revenue Requirement for the 140 MW La Joya II Wind Purchase Power Agreement			
AFFII	DAVIT				

1		I. INTRODUCTION AND PURPOSE
2	Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.
3	A.	My name is Thomas S. Baker. I serve as Manager, Cost of Service, for PNMR
4		Services Company and its affiliates, including Public Service Company of New
5		Mexico ("PNM" or the "Company"). My business address is Public Service Company
6		of New Mexico, 414 Silver SW, Mail Stop 0915, Albuquerque, NM 87102.
7		
8	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
9		PROFESSIONAL EXPERIENCE.
10	A.	My educational background and professional experience are summarized in PNM
11		Exhibit TSB-1, which includes a list of cases in which I have testified before the New
12		Mexico Public Regulation Commission ("Commission" or "NMPRC").
13		
14	Q.	HAVE YOU PREPARED ADDITIONAL EXHIBITS?
15	А.	Yes, as follows:
16		• PNM Exhibit TSB-2: Summary 2020 Renewable Rider Revenue Requirement -
17		Projected
18		• PNM Exhibit TSB-3: 2020 Estimated Annual Revenue Requirement for the
19		PNM-Owned 2011 Facilities
20		• PNM Exhibit TSB-4: 2020 Estimated Annual Revenue Requirement for the
21		PNM-Owned 2013 Facilities

1

1		• PNM Exhibit TSB-5: 2020 Estimated Annual Revenue Requirement for the
2		PNM-Owned 2014 Facilities
3		• PNM Exhibit TSB-6: 2020 Estimated Annual Revenue Requirement for the
4		PNM-Owned 2019 Facilities
5		• PNM Exhibit TSB-7: 2020 Estimated Annual Revenue Requirement for
6		Purchased Power Agreements and Renewable Energy Certificate Purchases
7		• PNM Exhibit TSB-8: December 31, 2018 Year End Weighted Average Cost of
8		Capital
9		• PNM Exhibit TSB-9: Estimated Annual Revenue Requirement for the 140 MW
10		La Joya II Wind Purchase Power Agreement
11		
12	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
12 13	Q. A.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?The purpose of my testimony is to provide the revenue requirement components of
13		The purpose of my testimony is to provide the revenue requirement components of
13 14		The purpose of my testimony is to provide the revenue requirement components of PNM's Renewable Energy Rider No. 36 ("Rider 36" or "Rider") rate to be effective
13 14 15		The purpose of my testimony is to provide the revenue requirement components of PNM's Renewable Energy Rider No. 36 ("Rider 36" or "Rider") rate to be effective January 1, 2020 ("2020 Rider Rate"). I also discuss the annual earnings test and the
13 14 15 16		The purpose of my testimony is to provide the revenue requirement components of PNM's Renewable Energy Rider No. 36 ("Rider 36" or "Rider") rate to be effective January 1, 2020 ("2020 Rider Rate"). I also discuss the annual earnings test and the
13 14 15 16 17		The purpose of my testimony is to provide the revenue requirement components of PNM's Renewable Energy Rider No. 36 ("Rider 36" or "Rider") rate to be effective January 1, 2020 ("2020 Rider Rate"). I also discuss the annual earnings test and the Rider 36 true-up procedures.
13 14 15 16 17 18		The purpose of my testimony is to provide the revenue requirement components of PNM's Renewable Energy Rider No. 36 ("Rider 36" or "Rider") rate to be effective January 1, 2020 ("2020 Rider Rate"). I also discuss the annual earnings test and the Rider 36 true-up procedures.
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>		The purpose of my testimony is to provide the revenue requirement components of PNM's Renewable Energy Rider No. 36 ("Rider 36" or "Rider") rate to be effective January 1, 2020 ("2020 Rider Rate"). I also discuss the annual earnings test and the Rider 36 true-up procedures. I provide, for informational purposes, the estimated revenue requirement for the proposed procurement of 140 MW of wind energy from La Joya Wind, LLC in 2021
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>		The purpose of my testimony is to provide the revenue requirement components of PNM's Renewable Energy Rider No. 36 ("Rider 36" or "Rider") rate to be effective January 1, 2020 ("2020 Rider Rate"). I also discuss the annual earnings test and the Rider 36 true-up procedures. I provide, for informational purposes, the estimated revenue requirement for the proposed procurement of 140 MW of wind energy from La Joya Wind, LLC in 2021 pursuant to a power purchase agreement ("La Joya II Wind PPA"). I do not provide a

1		Commission, PNM will start collecting the revenue requirement for this new resource
2		through Rider 36 in 2021, once the facilities are on-line and serving customers.
3		
4		II. REVENUE REQUIREMENT COMPONENTS OF THE 2020 RIDER
5	Q.	PLEASE IDENTIFY THE REVENUE REQUIREMENT COMPONENTS OF
6		THE PROPOSED 2020 RIDER.
7	A.	PNM Exhibit TSB-2 summarizes the annual revenue requirement used in the
8		derivation of the 2020 Rider Rate. The total estimated annual revenue requirement to
9		be collected under the 2020 Rider Rate is \$58,935,081, comprised of the following:
10		1. \$3,941,665 for PNM-Owned 2011 Solar Facilities;
11		2. \$3,982,178 for PNM-Owned 2013 Solar Facilities;
12		3. \$4,286,080 for PNM-Owned 2014 Solar Facilities;
13		4. \$9,373,657 for PNM-Owned 2019 Solar Facilities;
14		5. \$928 for PNM-Owned 2015 Facilities Western Renewable Energy
15		Generation Information System ("WREGIS") REC fees;
16		6. \$7,200,318 for the purchases under the Lightning Dock purchased power
17		agreement ("PPA"), based on the projected purchase of 77,000 MWh;
18		7. \$6,419,710 for the purchases under the Red Mesa Wind PPA, based on the
19		projected purchase of 208,223 MWh;
20		8. \$16,475,752 for the purchases under the New Mexico Wind Energy Center
21		("NMWEC") PPA, based on the projected purchase of 604,393 MWh;

3

1		9. \$7,227,787 for the REC purchases under PNM's Distributed Generation
2		("DG") REC Purchase Programs;
3		10. The cost of RECs purchased for compliance with the 2018 Renewable
4		Portfolio Standard ("RPS") requirement pursuant to Paragraph 7 of the
5		Stipulation approved in Case No. 14-00158-UT. These REC purchases are
6		estimated to cost \$1.00 per MWh. The total estimated cost is \$829 including
7		WREGIS fees.
8		11. \$1,093 addition for the estimated WREGIS fees associated with the 2019
9		banked RECs utilized for 2020 RPS;
10		12. \$25,000 of estimated cost associated with providing public notice of the 2020
11		Renewable Energy Plan filing and the proposed revision of Rider 36 and for
12		other direct costs of this filing; and
13		13. PNM's annual WREGIS fee of \$83.
14		
15	Q.	PLEASE COMPARE THE REVENUE REQUIREMENT FROM THE 2019
16		RIDER TO THE 2020 RIDER.
17	A.	PNM Table TSB-1 below identifies the differences between the revenue requirements
18		for the 2019 Rider, updated February 28, 2019, for PNM's annual Rider true up
19		filing, and the 2020 Rider.
20		

#### 1

### PNM TABLE TSB-1

B-1			
2019 Revenue Requirement *			Change
\$ 3,924,184	\$	3,941,665	17,481
4,134,543	\$	3,982,178	(152,365)
4,465,293	\$	4,286,080	(179,213)
3,328,133	\$	9,373,657	6,045,524
928	\$	928	n 1. f. f. f. fernet fan de fersterne ferster fan de ferster ferster ferster ferster ferster ferster ferster fe
15,853,081		21,584,508	5,731,427
5,017,650	\$	7,200,318	2,182,668
6,293,854	\$	6,419,710	125,856
16,097,867	\$	16,475,752	377,885
27,409,370	- ()	30,095,780	2,686,410
	5 5 5 5 5 5	er an	
6,234,360	\$	7,227,787	993,428
-	\$	829	829
6,234,360		7,228,616	994,257
(1,093)		1,093	2,186
25,000		25,000	24704459449944994444444444444444444444444
83	\$	83	-
49,520,802	**************************************	58,935,081	9,414,279
	Requirement *           \$ 3,924,184           4,134,543           4,134,543           4,465,293           3,328,133           928           15,853,081           5,017,650           6,293,854           16,097,867           27,409,370           6,234,360           -           6,234,360           -           6,234,360           -           6,234,360           -           83	Requirement *         R           \$ 3,924,184         \$           \$ 4,134,543         \$           4,465,293         \$           3,328,133         \$           928         \$           15,853,081         -           5,017,650         \$           6,293,854         \$           16,097,867         \$           27,409,370         -           6,234,360         \$           -         \$           6,234,360         \$           -         \$           6,234,360         \$           -         \$           6,234,360         \$           -         \$           83         \$	Requirement *         Requirement           \$ 3,924,184         \$ 3,941,665           4,134,543         \$ 3,982,178           4,465,293         \$ 4,286,080           3,328,133         \$ 9,373,657           928         \$ 9,28           15,853,081         21,584,508           5,017,650         \$ 7,200,318           6,293,854         \$ 6,419,710           16,097,867         \$ 16,475,752           27,409,370         30,095,780           6,234,360         \$ 7,227,787           -         \$ 829           6,234,360         \$ 7,228,616           (1,093)         1,093           25,000         25,000           83         \$ 83

2

Q. PLEASE EXPLAIN THE INCREASE IN THE REVENUE REQUIREMENT
FOR THE PNM-OWNED SOLAR FACILITIES IN 2020 COMPARED TO
2019.

A. Typically, the annual revenue requirements for PNM-owned solar facilities decline
 each year as the net book value of the investment decreases due to the on-going
 depreciation of the assets. A principal advantage of using a rate rider to recover the

1	costs of owned renewable resources is that customers receive the benefit of the
2	declining revenue requirements promptly through the annual reset of the rider rate.
3	However, the increase in the overall revenue requirement for PNM owned solar
4	facilities is driven by the PNM owned 2019 solar facilities, which were approved in
5	Case No. 17-00129-UT. The increase is the result of the addition of those facilities
6	periodically during 2019, meaning 2020 is the first full year that all PNM owned
7	2019 solar facilities will be operational. PNM Exhibit TSB-3, PNM Exhibit TSB-4,
8	PNM Exhibit TSB-5, and TSB-6 present the calculation of the 2020 annual revenue
9	requirement for the PNM-Owned 2011 Solar Facilities, PNM-Owned 2013 Solar
10	Facilities, PNM-Owned 2014 Solar Facilities, and PNM-Owned 2019 Solar Facilities
11	respectively. Cost of registering and retiring RECs in the WREGIS.

12

## 13

#### THE **REVENUE** Q. WHY IS THERE Α SLIGHT INCREASE IN **REQUIREMENT FOR THE PNM OWNED 2011 SOLAR FACILITIES?** 14

The increase is caused by an update to the revenue requirements for the PNM owned 15 A. 2011 solar facilities to reflect a lower New Mexico production tax credit ("PTC") 16 The 2020 revenue requirement reflects the PTC rate of \$0.020 per kWh 17 rate. produced in 2020 as compared to the 2019 rate of \$0.025 per kWh. These PTC rates 18 19 are set by the State of New Mexico Taxation and Revenue Department. The reduction in the tax credit increases state tax expense by \$161,100 when compared to 20 21 2019, largely offsetting the lower return on rate base due to depreciation on existing assets as discussed earlier. This change is only applicable to the 2011 Solar Facilities, 22

1		as the remainder of the PNM-Owned Solar Facilities were put in service after the
2		state PTC program cap was reached.
3		
4	Q.	WHY DOES PNM ONLY INCLUDE WREGIS FEES IN THE REVENUE
5		<b>REQUIREMENT FOR THE PNM-OWNED 2015 SOLAR FACILITIES?</b>
6	A.	Pursuant to paragraph 2 of the stipulation approved by the Commission in Case No.
7		14-00158-UT, PNM recovers the majority of costs associated with the PNM-Owned
8		2015 Solar facilities through base rates. PNM has historically recovered the
9		WREGIS fees on the RECs associated with these facilities through the renewable
10		rider rather than base rates because these costs are necessary for demonstrating RPS
11		compliance.
12		
13	Q.	PLEASE EXPLAIN THE CHANGE IN PPA REVENUE REQUIREMENTS
14		BETWEEN THE 2019 RIDER AND THE 2020 RIDER .
15	А.	The amounts included in the 2020 Rider Revenue Requirement are based on PNM's
16		current projections of purchases under the PPAs. These projections can be found in
17		PNM Exhibit TSB-7. The change in the PPA revenue requirement is primarily due to
18		the Lightning Dock PPA because the costs are estimated to be \$2,182,668 higher in
19		2020 compared to 2019. The increase is primarly due to the Lighting Dock
20		Geothermal facility operator indicating that the facility will produce approximately
21		77,000 MWh during 2020, compared to 55,000 MWh projected for 2019. Please

22 refer to PNM witness Shane Gutierrez's Direct Testimony for further discussion of

23 the projected MWh of all PPA facilities.

1	Q.	PLEASE DESCRIBE THE CHANGE IN THE DG REC PURCHASE
2		AMOUNTS BETWEEN THE 2019 RIDER REVENUE REQUIREMENT AND
3		THE 2020 RIDER REVENUE REQUIREMENT.
4	A.	The amounts included in the 2020 Rider Revenue Requirement are based on PNM's
5		current projections of DG REC purchases. As seen in PNM Table TSB-1, DG REC
6		purchases in 2020 are projected to be \$993,428 higher compared to 2019. The DG
7		REC forecasts are described by PNM witness Shane Gutierrez. PNM Exhibit TSB-7
8		presents the estimated annual revenue requirement for the DG REC purchases.
9		
10	Q.	PLEASE DESCRIBE THE REVENUE REQUIREMENTS FOR THE 2018
11		COMPLIANCE REC PURCHASES.
12	А.	PNM has included \$829 (including WREGIS fees) in the 2020 Rider Rate for 2018
13		compliance REC purchases. PNM will purchase 825 MWh/RECs in 2019, at a cost of
14		\$1.00 per MWh to make up for a shortfall in REC retirements in 2018. PNM has
15		entered into an agreement to purchase the RECs at a cost of \$1.00 per MWh and is in
16		the process of finalizing the procurement. Please refer to PNM's Renewable Energy
17		Portfolio Report filed on June 3, 2019, for further information on the 2018 deficit.
18		
19	Q.	IS THERE A CHANGE IN RENEWABLE FILING AND REPRODUCTION
20		COSTS BETWEEN THE 2019 RIDER REVENUE REQUIREMENT AND
21		THE 2020 RIDER REVENUE REQUIREMENT.
22	A.	No. PNM has estimated the costs for the 2020 filing to be \$25,000, which is
23		consistent with prior Renewable Plan filing costs.

8

1	Q.	BRIEFLY EXPLAIN THE WREGIS FEE ADJUSTMENT TO PNM'S
2		PROJECTED 2020 RIDER REVENUE REQUIREMENT.
3	А.	PNM estimated a surplus of RECs in 2019, allowing PNM to bank approximately
4		218,554 RECs. As a result of banking the surplus RECs, PNM does not expect to pay
5		WREGIS fees to retire these RECs until they are utilized in 2020 for RPS
6		compliance. The estimated cost to retire the banked RECs will be approximately
7		\$1,093 and is included in PNM's 2020 Renewable Energy Rider revenue
8		requirement. Please see the direct testimony of PNM witness Shane Gutierrez for
9		futher discussion on the estimated 2019 banked RECs utilized in 2020.
10		
11 12		III. REVENUE REQUIREMENT FOR THE 140 MW LA JOYA II WIND PROCUREMENT
13	Q.	PLEASE DESCRIBE THE LA JOYA II WIND PROCUREMENT?
14	A.	The La Joya II Wind procurement is a PPA between PNM and La Joya Wind, LLC to
15		purchase 140 MW of wind generation. PNM Witness Thomas Fallgren describes the
16		PPA in more detail in his direct testimony.
17		
18	Q.	HAS PNM ESTIMATED THE ANNUAL REVENUE REQUIREMENT FOR
19		THE LA JOYA II WIND PPA?
20	A.	Yes, the estimated annual revenue requirement for the La Joya II Wind PPA in 2021,
21		the first full year of operation, is \$9,392,295.
22		

1	Q.	PLEASE EXPLAIN THE CALCULATION OF THE 2021 REVENUE
2		REQUIREMENT FOR THE LA JOYA II WIND PPA.
3	А.	PNM Exhibit TSB-9 presents the calculation of the 2021 estimated revenue
4		requirement for the La Joya II Wind PPA. The PPA revenue requirement is
5		calculated by multiplying the estimated energy of 537,163 MWh by the agreed PPA
6		price of \$17.48/MWh. In addition to the cost to purchase the energy from the La Joya
7		II Wind facility, PNM has also included the cost to register and retire RECs with
8		WREGIS, which is \$0.01/REC.
9		
10		IV. OTHER MATTERS
11	Q.	PLEASE DESCRIBE THE TRUE-UP OR RECONCILIATION PROCESS
12		FOR THE 2020 RIDER.
13	A.	Pursuant to Paragraph 8 of the recommended decision in Case No. 12-00007-UT,
14		PNM will file a report on February 28, 2020, which will include the following items:
15		1. Reconciliation of actual 2019 Rider revenues to actual 2019 procurement costs,
16		and
17		2. True-up of projected costs included in the 2020 Rider with actual costs to the
18		extent available, including an update to the 2018 year end Weighted Average Cost
19		of Capital ("WACC") as shown in PNM Exhibit TSB-8, based on the 2019 year-
20		end WACC. PNM will propose a true-up to the rider based on the amounts
21		calculated above.
22		

### PLEASE EXPLAIN THE EARNINGS TEST THAT WAS PUT IN PLACE IN 1 Q. 2 CASE NO. 12-00007-UT. Pursuant to Paragraph H of the recommended decision in Case No. 12-00007-UT, 3 А. PNM will file a pro forma cost of service based on actual accounting records for the 4 5 2020 calendar year by April 1, 2021, that will reflect appropriate cost of service 6 adjustments in accordance with the final order in PNM's most recent general rate case, Case No. 16-00276-UT. If PNM's retail earned Return on Equity ("ROE") 7 8 exceeds the currently approved ROE by 50 basis points or more, the 2021 Rider will 9 be adjusted to refund the amount of PNM's earnings in excess of 50 basis points 10 above its authorized ROE. 11 **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?** 12 **Q**.

13 A. Yes.

GCG #

## THOMAS S. BAKER EDUCATIONAL AND PROFESSIONAL SUMMARY

Name:	Thomas S. Baker
Address:	PNM Resources Inc. MS 0915 414 Silver SW Albuquerque, NM 87102
Position:	Manager, Cost of Service
Education:	Masters of Accountancy, New Mexico State University, 2014 Bachelor of Accountancy, New Mexico State University, 2011 Certified Public Accountant in the State of New Mexico, July 2016
Employment:	Employed by Public Service Company of New Mexico since 2014. Positions held within the Company include:
	Manager, Cost of Service Project Manager, Cost of Service Sr. Analyst, Cost of Service Sr. Analyst, Income Tax
Filed Testimo	ny:
Appro for Va filed F • In the Renew	Matter of the Application of Public Service Company of New Mexico for val of Renewable Energy Rider No. 36 Pursuant to Advice Notice No. 439 and riances from Certain Filing Requirements, NMPRC Case No. 12-00007-UT, ebruary 28, 2018 ( <i>PNM's Rider No. 36 Reconciliation for 2017.</i> ) Matter of the Application of Public Service Company of New Mexico vable Energy Act Plan for 2019 and Proposed 2019 Rider Rate Under Rate No. 36, NMPRC Case No. 18-00158-UT, filed June 1, 2018 ( <i>PNM's</i>

*Renewable Rider Plan for 2019.*)
In the Matter of the Application of Public Service Company of New Mexico for Approval of Renewable Energy Rider No. 36 Pursuant to Advice Notice No. 439 and for Variances from Certain Filing Requirements, NMPRC Case No. 12-00007-UT, filed February 28, 2019 (PNM's Rider No. 36 Reconciliation for 2018.)

PNM Exhibit TSB-2 2020 Renewable Energy Rider Summary 2020 Renewable Rider Revenue Requirement - Projected

Line 2020 Revenue No. Description Requirement Reference **PNM-Owned Facilities** 1 2 PNM Owned 2011 Facilities Revenue Requirement - 22.5 MW Ś 3,941,665 PNM Exhibit TSB-3, page 3, Column EH, Line 124 3 PNM Owned 2013 Facilities Revenue Requirement - 20 MW 3,982,178 PNM Exhibit TSB-4, page 2, Column DA, Line 82 4 PNM Owned 2014 Facilities Revenue Requirement - 23 MW 4,286,080 PNM Exhibit TSB-5, pg. 2, Column BY, Line 82 5 PNM Owned 2019 Facilities Revenue Requirement - 50 MW 9,373,657 PNM Exhibit TSB-6, pg. 2, Column AF, Line 75 6 Total REC Fees for PNM Owned 2015 facilities - 40MW 928 Note 1 7 8 **Total PNM Owned Facilities Revenue Requirement** 21,584,508 9 10 **Purchased Power Agreements** 11 Geothermal PPA 7,200,318 PNM Exhibit TSB-7, page 1, Line 9 12 Red Mesa PPA 6,419,710 PNM Exhibit TSB-7, page 1, Line 20 13 New Mexico Wind Energy Center (NMWEC) 16,475,752 PNM Exhibit TSB-7, page 1, Line 31 14 **Total PPA Revenue Requirement** 30,095,780 15 16 Renewable Energy Certificates DG Programs REC Purchases PNM Exhibit TSB-7, page 2, Line 36 17 7,227,787 18 2018 Compliance REC Purchases 829 PNM Exhibit TSB-7, page 2, Line 46 19 **Total REC Revenue Requirements** 7,228,616 20 21 WREGIS Fee Adjustment (2019 Banked RECs) 1,093 22 **Renewable Filing and Reproduction Costs** 23 25,000 24 25 WREGIS Annual Registration Fee 83 26 27 Total 2019 Revenue Requirement 58,935,081 \$ 28 (Line 8 + Line 14 + Line 19 + Line 21 + Line 23 + Line 25)

Note 1: Retail share of REC costs associated with PNM Owned 2015 facilities are estimated to be: 92,775 MWh \* \$.010/MWh = \$928 REC Fee.

Page 1 of 1

PNM Exhibit TSB - 3 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM-Owned 2011 Facilities

		А	в	c	D	F	F	G	н	1		к	ι	м
		<u> </u>					2020							2020 Projected
Line No.		January	February	March	April	May	June	July	August	September	October	November	December	Revenue Regulrement
1	Plant In Service													
2														
3	22 MW Solar Facilities - Generation													
4	Land	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329	4,042,329
5	Generation	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256	83,217,256
6	Total Gross Plant - 22 MW Solar Generation	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586	87,259,586
7	Accumulated Depreciation	(25,957,790)	(26,192,377)	(26,426,965)	(26,651,553)	(26,896,141)	(27,130,728)	(27,365,316)	(27,599,904)	(27,834,492)	(28,069,080)	(28,303,667)	(28,538,255)	(28,538,255)
8	Net Plant In Service - 22 MW Solar Generation	61,301,796	51,057,208	60,832,620	60,598,033	60,363,445	60,128,857	59,894,269	59,659,682	59,425,094	59,190,506	58,955,918	58,721,330	58,721,330
9														
10	Solar Facilities - Transmission & Distribution									011.070	911,679	911,679	911.679	911,679
11	Total Gross Plant - T&D	911,579	911,679	911,679	911,679	911,679	911,679 (165,530)	911,679 (167,297)	911,679 (169,063)	911,679 (170,830)	(172,597)	(174,364)	(176,131)	(176,131)
12	Accumulated Depreciation	(156,696)	(158,462)	(160,229)	(161,996)	(163,763) 747,915	746,149	744,383	742,616	740,849	739,082	737,315	735,549	735.549
13	Net Plant in Service - T&D	754,984	753,217	751,450	749,683	747,915	746,149	/44,383	/42,616	740,849	739,082	/3/,315	/30,549	/35,545
14														
15	Energy Storage Project	3,564,859	3,564,859	3,564,859	3,564,859	3,564,859	3,564,859	3,564,859	3,564,859	3,554,859	3,564,859	3,564,859	3,564,859	3,564,859
16	PV	2,824,228	2,824,228	2,824,228	2,824,228	2,824,228	2,824,228	2,824,228	2.824.228	2,824,228	2,824,228	2,824,228	2,824,228	2,824,228
17	DOE Battery	6,389,087	5,389,087	6,389,087	6,389,087	6,389,087	6,389,087	6,389,087	6,389,087	6,389,087	6,389,087	6,389,087	6,389,087	6,389,087
18 19	Total Gross Plant - Energy Storage Accumulated Depreciation	(3,369,647)	(3,402,642)	(3,435,636)	(3,468,631)	(3,501.625)	(3,534,620)	(3,567,615)	(3,600,609)	(3,633,604)	(3,666,599)	(3,699,593)	(3,732,588)	(3,732,588)
20	Net Plant in Service - Energy Storage	3,019,440	2,985,446	2,953,451	2,920,456	2,887,462	2,854,467	2,821,472	2,788,478	2,755,483	2,722,489	2,689,494	2,656,499	2,656,499
20	Net Plant In Service - Energy Storage	3,013,440	2,500,440	10000	2,520,450	2,007,402	2,004,407	2,022,472	2,100,110	4,100,100			-,,	
21	Total Net Plant in Service - Renewables	65,076,220	64,805,870	64,537,521	64,268,172	63,998,823	63,729,474	63,460,124	63,190,775	62,921,426	62,652,077	62,382,728	62,113,378	62,113,378
23	TOTOL WELL PRIME IN SERVICE - WEITER ODDES	03,010,220	04,000,070		• .,,	,,								
23	Accumulated Deferred Income Taxes													
25	ADIT Balance as of 12/31/2018	(21,890,280)	(21,890,280)	(21,890,280)	{21,890,280}	(21,890,280)	(21,890,280)	(21,890,280)	(21,890,280)	(21,890,280)	(21,890,280)	(21,890,280)	(21,890,280)	{21,890,280}
26	Liberalized Depreciation - 22 MW Solar	1,243,030	1,292,730	1,342,430	1,392,130	1,441,830	1,491,530	1,541,230	1,590,930	1,640,630	1,690,330	1,740,030	1,789,730	1,789,730
27	Liberalized Depreciation - T&D	11,220	11,669	12,117	12,566	13,015	13,464	13,913	14,361	14,810	15,259	15,708	16,157	16,157
28	Liberalized Depreciation - Energy Storage	161,451	169,529	177,608	185,686	193,764	201,843	209,921	218,000	226,078	234,156	242,235	250,313	250,313
29	Excess Deferred Federal Income Taxes (EDFIT)	642,357	669,122	695,887	722,652	749,417	776,182	802,947	829,712	856,476	883,241	910,006	936,771	936,771
30	Excess Deferred State Income Taxes (EDSIT)	295,601	307,918	320,235	332,552	344,868	357,185	369,502	381,819	394,135	405,452	418,769	431,086	431,086
31	Unamortized NM Advanced Energy Credit ADIT	102,680	106,787	110,894	115,001	119,108	123,215	127,323	131,430	135,537	139,644	143,751	147,858	147,858
32	Total Accumulated Deferred income Taxes	(19,433,941)	(19,332,525)	(19,231,109)	(19,129,593)	{19,028,277}	(18,926,861)	(18,825,445)	(18,724,029)	(18,622,613)	(18,521,197)	(18,419,781)	(18,318,365)	(18,318,365)
33														
34	Other Rate Base Additions (Deductions)	1												
35	Prepaid Insurance	16,169	16,169	16,169	16,169	16,169	16,169	16,169	16,169	16,169	16,169	15,169	15,169	16,169
35	Unamortized ARRA Section 1603 Grant	(15,919,380)	(15,839,140)	(15,758,899)	(15,678,659)	(15,598,418)	(15,518,177)	(15,437,937)	(15,357,696)	(15,277,455)	(15,197,215)	(15,116,974)	(15,036,733)	(15,036,733)
37	Unamortized NM Advanced Energy Credit	(3,053,378)	(3,037,208)	(3,021,038)	(3,004,868)	(2,988,698)	(2,972,528)	(2,956,358)	(2,940,188)	(2,924,018)	(2,907,848)	(2,891,678)	(2,875,508)	(2,875,508)
38	Total Other Rate Base Additians (Deductions)	(18,956,589)	(18,860,178)	(18,763,768)	(18,667,357)	(18,570,946)	(18,474,536)	(18,378,125)	(18,281,715)	(18,185,304)	(18,088,893)	(17,992,483)	{17,896,072}	(17,896,072)
39							26 220 677	26,256,554	26,185,032	26,113,509	26,041,985	25,970,464	25,898,941	25,898,941
40	Total Rate Base	26,685,690	26,514,168	26,542,645	25,471,122	26,399,600	26,328,077	26,256,554	26,185,032	20,113,509	20,041,980	23,970,404	23,636,941	25,038,541
41														
42	Operations & Maintenance Expenses		9,764	58,781	10,055	36,489	63,233	9,798	10,865	84,329	12,865	10,625	79,749	410,762
43	Total Operations & Maintenance Expense	4,20B	9,764	58,/81	10,055	30,463	63,233	3,756	10,005	04,323	12,005	10,010	/ 3,/ 43	420,702
44														
45	Depreciation & Amortization Expense	234,588	234,588	234,588	234,588	234,588	234,588	234,588	234,588	234,588	234,558	234,588	234,588	2,815,053
46	Depreciation Expense - 22 MW Solar		234,588	1,767	1,767	1,767	1,767	1,767	1,767	1,767	1,767	1,767	1,767	21,202
47	Depreciation Expense - T&D	1,767 32,995	32,995	32,995	32,995	32,995	32,995	32,995	32,995	32,995	32,995	32,995	32,995	395,936
48 49	Depreciation Expense - Energy Storage Total Depreciation & Amartization Expense	269,349	269,349	269,349	269,349	269,349	269,349	269,349	269,349	269,349	269,349	269,349	269,349	3,232,191
49	lotal pepreciation & Amartization expense	209,349	203,343	202,349	233,343	200,040	233,345	20000	200,040		_00,040	,		
50	Property Taxes													
51 \$2	Total Property Taxes	46,927	46,927	45,927	46,927	46.927	46,927	46,927	46,927	45,927	46,927	46,927	45,927	563,119
32	fotor Property Taxes	40,527									and the second se	and the second se		and the second se

PNM Exhibit TSB - 3 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM-Owned 2011 Facilities

														Page 2 of 3
		A	8	c	D	E	F 2020	G	н	1	1	ĸ	ι	M 2020 Projected
							2020							2020 Projected
Line No.		January	February	March	April	May	June	yinf	August	September	October	November	December	<u>Revenue</u> Requirement
53 54	Other Allowable Expenses Amortization - NM Advanced Energy Credit	(16,170)	(15,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(194,040)
55	Total Other Allowable Expenses	(16,170)	(16,170)	{16,170}	(16,170)	(16,170)	(16,170)	{16,170}	{16,170}	(16,170)	(16,170)	(16,170)	(16,170)	(194,040)
57	Federal Income Tax													
58	Total Net Original Cost Rate Base	26,685,590	26,614,168	26,542,645	26,471,122	26,399,600	26,328,077	26,256,554	26,185,032	26,113,509	26,041,986	25,970,464	25,898,941	25,898,941
59 60	Weighted Cost of Capital (PNM Exhibit T58-8, line 4) Return on Rate Base	7.15% 159,002	<u>7.15%</u> 158,576	<u>7.15%</u> 158,150	7.15% 157,724	<u>7.15%</u> 157,298	<u>7.15%</u> 156,871	<u>7.15%</u> 156,445	<u>7.15%</u> 156,019	7.15% 155,593	<u>7.15%</u> 155,167	<u>7.15%</u> 154,741	7.15% 154,315	<u>7,15%</u> 1,879,901
61	Less Return Adjustments	200,000	120,270	150,150	127,724	137,230	130,071	200,440	130,015		133,107	104,/41	154,515	A,075,501
52 53	Interest on Long Term Debt Tax/Book Adjustments	(55,150)	(55,003)	(54,855)	(54,707)	(54,559)	(54,411)	(54,264)	(54,116)	(53,968)	(53,820)	(53,672)	(53,524)	(652,049)
64	AFUDC Equity	19	19	19	19	19	19	19	19	19	19	19	19	227
65 66	Flow Thru Item - ITC - 22 MW Solar	38,929 1,192	38,929 1,192	38,929 1,192	38,929 1,192	38,929	38,929 1,192	38,929 1,192	38,929 1,192	38,929 1,192	38,929	38,929	38,929	467,148
67	Flow Thru item - iTC - Energy Storage Total Permanent Tax/Book Differences	40,139	40,139	40,139	40,139	1,192 40,139	40,139	40,139	40,139	40,139	1,192 40,139	1,192 40,139	1,192 40,139	14,298 481,673
65	Depreciation	228,556	228,556	228,556	228,555	228,556	228,556	228,556	228,556	228,556	228,556	228,556	228,556	2,742,667
69	AFUDC Debt	654	654	654	654	654	654	654	654	654	654	654	654	7,850
70	New Mexico Advanced Energy Credit	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(16,170)	(15,170)	(16,170)	(194,040)
71	Deferred State Income Tax	(11,869)	(11,869)	(11,869)	(11,869)	(11,869) 201,171	(11,869)	(11,859)	(11,869)	(11,869)	(11,869)	(11,869)	(11,869)	(142,429)
72 73	Total Temporary Tax/Book Differences	201,171	201,171	201,171	201,171	201,1/1	201,171	201,171	201,171	201,171	201,171	201,171	201,171	2,414,048
74 75	Total Return Adjustments	186,160	186,308	186,455	186,603	186,751	185,899	187,047	187,194	187,342	187,490	187,638	187,785	2,243,672
76 77	Net Taxable Equity Return	345,162	344,884	344,605	344,327	344,049	343,770	343,492	343,214	342,935	342,657	342,379	342,100	4,123,573
78	Federal Income Tax Adjustments													
79	Total Investment Tax Credit or Grant Amortization	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(962,888)
80 81	Amortization of Excess Deferred Federal Taxes Deferred Federal Income taxes before NOL	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(26,765) (42,246)	(321,179) (506,950)
82	Total Federal Income Tax Adjustments before NOL	(149,251)	(149,251)	(149,251)	(149,251)	(149,251)	(149,251)	(149,251)	(149,251)	(149,251)	(149,251)	(149,251)	(149,251)	(1,791,016)
83														
84 85	Adjusted Equity Return before NOL Net Operating Loss Carryover	195,911	195,632	195,354	195,076	194,797	194,519	194,241	193,962	193,684	193,406	193,127	192,849	2,332,556
86	NOL Deferred State Income Tax			-	-	-			-		-			
87	NOI, Deferred Federal Income Tax	-	-	-	-	-		-		-	-		-	
84	Adjusted Current Equity Return After NOL	195,911	195,632	195,354	195,076	194,797	194,519	194,241	193,962	193,684	193,406	193,127	192,849	2,332,556
85	Federal Tax Factor (Rate/1-Rate)	26.5823%	26.5823%	26,5823%	26.5823%	26.5823%	26.5823%	25.5823%	26.5823%	26.5823%	25.5823%	26.5823%	25,5823%	26.5823%
86 87	Current Federal Income Tax Add:	52,078	52,004	51,930	51,856	51,782	51,70B	51,634	51,560	51,485	51,412	51,338	51,264	620,047
88	Add: Amortization of Excess Deferred Federal Taxes	(26,765)	(26,765)	(26,765)	(26,765)	(26,765)	(26,765)	(26,765)	(26,765)	(25,765)	(26,765)	(26,765)	(26,765)	(321,179)
89	Total Provision for Deferred Income Tax	(42,245)	(42,245)	(42,245)	(42,246)	(42,246)	(42,245)	(42,246)	(42,245)	(42,246)	(42,245)	(42,246)	(42,245)	(506,950)
90	Total Investment Tax Credit or Grant Amortization	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(80,241)	(962,888)
91 92	Net Allowable Federal Income Tax	(97,174)	(97,248)	(97,322)	(97,396)	(97,470)	(97,544)	(97,618)	(97,692)	(97,766)	(97,840)	(97,914)	(97,988)	(1,170,969)
93														
94 95	State Income Tax	450.000	158,576	158,150	157,724	157,298	156,871	156,445	156.019	155,593	155,167	154,741		4 070 001
96	Return on Rate Base Less: Return Adjustments	159,002	138,576	156,150	137,724	137,298	130,071	138,443	120,019	100,000	135,167	134,/41	154,315	1,879,901
97	Interest on Long Term Debt	(55,150)	(55,003)	(54,855)	(54,707)	(54,559)	(54,411)	(54,264)	(54,116)	(53,968)	(53,820)	(53,672)	(53,524)	(652,049)
98	Permanent Tax/Book Adjustments	40,139	40,139	40,139	40,139	40,139	40,139	40,139	40,139	40,139	40,139	40,139	40,139	481,673
99	Temporary Tax/ Book Adjustments	201,171	201,171	201,171	201,171	201,171	201,171	201,171	201,171	201,171	201,171	201,171	201,171	2,414,048
100	Add: Net Aliowable FIT	(97,174)	(97,248)	(97,322)	(97,396)	(97,470)	(97,544)	(97,618)	(97,692)	(97,766)	(97,840)	(97,914)	(97,988)	(1,170,969)
101 102	Production Tax Credits (PTC) State Taxable Income	247,988	247,536	247,283	245,931	- 246,579	246,225	245,874	245,522	245.169	- 244,817	244,465	244,112	2,952,604
102	State Tax Factor (Rate/1-Rate)	5.9000%	5.9000%	5,9000%	5,9000%	5.9000%	5,9000%	5,9000%	5,9000%	5,9000%	5,9000%	5,9000%	5,9000%	5.9000%
104	State Income Tax	14,631	14,611	14,590	14,569	14,548	14,527	14,507	14,485	14,465	14,444	14,423	14,403	174,204
105	Provision for Deferred State Income Tax	(11,869)	(11,869)	(11,869)	(11,869)	(11,869)	(11,869)	(11,869)	(11,859)	(11,859)	(11,869)	(11,869)	(11,869)	(142,429)
105	Amortization of Excess Deferred Taxes	(15,591)	(15,591)	(15,591)	(15,591)	(15,591)	(15,591)	(15,591)	(15,591)	(15,591)	(15,591)	(15,591)	(15,591)	(187,090)
106 107	Add: State Renewable ITC and PTC	(53,700)	(53,700)	(53,700)	(53,700)	(53,700)	(53,700)	(53,700)	(53,700)	(53,700)	(53,700)	(53,700)	(53,700)	(644,400)
105	Net Allowable State Income Tax	(66,529)	(66,549)	(66,570)	(66,591)	(66,612)	(66,633)	(66,653)	(66,674)	(66,695)	(66,716)	(66,736)	(66,757)	(799,715)

PNM Exhibit TSB - 3 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM-Owned 2011 Facilities

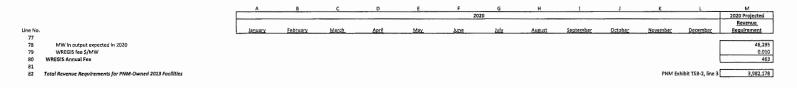
														Page 3 of 3
		А	B	с	D	E	F	G	н	1	3	κ	L	м
							2020							2020 Projected
Line No.		January	February	March	April	May	June	ylut	August	September	October	November	December	<u>Revenue</u> Requirement
109	Revenue Requirement Summary													
110	Return on Rate Base	159,002	158,576	158,150	157,724	157,298	156,871	156,445	156,019	155,593	155,167	154,741	154,315	1,879,901
111	Total Operating Expenses	304,313	309,870	358,887	310,161	336,595	383,339	309,904	310,971	384,435	312,971	310,731	379,855	4,012,032
112	Net Allowable Federal Income Tax	(97,174)	(97,248)	(97,322)	(97,396)	(97,470)	(97,544)	(97,618)	(97,692)	(97,766)	(97,840)	(97,914)	(97,988)	(1,170,969)
113	Net Allowable State Income Tax	(66,529)	(66,549)	(66,570)	(66,591)	(65,612)	(56,633)	(66,653)	(66,574)	(66,695)	(66,716)	(66,736)	(66,757)	(799,715)
114	Total Revenue Regulrements before Revenue Tax	299,613	304,649	353,145	303,898	329,811	376,034	302,078	302,624	375,557	303,582	300,821	369,425	3,921,248
115	Revenue Tax Factor	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%
116	Revenue Tax	1,524	1,549	1,796	1,546	1,677	1,912	1,536	1,539	1,910	1,544	1,530	1,879	19,942
117														
118	Revenue Requirements	301,137	306,198	354,941	305,443	331,489	377,947	303,614	304,163	377,477	305,126	302,351	371,303	3,941,191
119														
120	MWh output expected in 2020												[	47,461
121	WREGIS fee \$/MWh												1	0.010
122	WREGIS Registration Fee												1	475
123														
124	Total Revenue Requirements											PNM Ex	hibit TSB-2, line 2	3,941,665

2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM Owned 2013 Facilities

PNM Exhibit TSB - 4

2020 2020 Projected Revenue Ortober November Requirement Line No. Februar March Anrii Max lune Juiv Atteriet September Decembe Plant In Service 44,740,757 44,740,757 44,740,767 44,740,767 44,740,767 44,740,767 44,740,767 44,740,767 44,740,767 44,740,767 44,740,757 44,740,767 44.740.767 20 MW PV Solar 665,400 45,406,167 665,400 665,400 45,406,167 665,400 665,400 665,400 665,400 665.400 665,400 665,400 665,400 665.400 655,400 Land 45,406,167 45,406,167 Total Gross Plant in Service 45,406,167 45,406,167 45,406,167 45,406,167 45,406,167 45,406,167 45,406,167 45,405,157 45,406,167 (9,163,867) (9,288,200) (9,412,533) (9,536,866) (9,661,199) (9,785,531) (9,909,864) (10,034,197) (10,158,530) (10,282,863) (10,407,195) (10,531,529) (10.531.529) Accumulated Depreciation 36,242,300 36,117,967 35,993,634 35,869,301 35,744,968 35.620.636 35,496,303 35,371,970 35,247,637 35,123,304 34,998,971 34,874,638 34,874,638 Net Plant in Service Accumulated Deferred Income Taxes (37,527,506) (37,527,506) (37,527,506) (37,527,506) (37,527,506) (37,527,506) (37,527,506) (37,527,506) (37,527,506) (37.527.506) (37.527.506)(37.527.506) (37,527,506) Tax Depreciation 11 30,028,327 29,923,387 29.818.448 29,713,508 29,608,568 29,503,629 29,398,689 29,293,749 29,188,809 29,083,870 28,978,930 28,873,990 28,873,990 12 Deferred 13 Flow- Through AFUDC Equity and ITC Basis Diff 282,253 281,273 280 284 279 294 278 305 277 316 275 325 275 337 274 347 273 358 272.369 271.379 271.379 (12,374,365) (12,374,365) (12,374,365) (12,374,365) (12,374,355) (12,374,365) (12,374,365) (12,374,365) (12,374,365) (12,374,365) ADIT Balance as of 12/31/2017 (12,374,365) (12,374,365) (12,374,365) 14 423,638 438,758 453,898 469.028 484.158 499 288 514,418 529,548 529.548 Excess Deferred Federal income Taxes (EDFIT) 363,118 378,248 393,378 408,508 15 Excess Deferred State Income Taxes (EDSIT) 167 101 174.053 181.025 187.988 194.951 201,913 208.876 215,838 222,801 229,763 236.726 243.689 243,689 16 535,533 588,842 615,497 642,151 642,151 428,914 455,569 508,878 562,187 17 Deferred Tax - Plant 348,950 375,604 402.259 482,223 (11,251,460) (11,202,713) (11,153,966) (11,105,219) (11,056,472) (11,007,725) (10,958,977) (10,958,977 18 Total Accumulated Deferred income Taxes (11,495,196) (11,446,449) (11,397,702) (11,348,955) (11,300,208) - 19 14.373 Other Rate Base Additions (Deductions) Prepaid Insurance 14,373 14,373 14,373 14,373 14,373 14.373 14,373 14.373 14.373 14.373 14.373 14.373 20 71 24,610,305 24,534,719 24,459,134 24,383,548 24,307,962 24,232,376 24,156,791 24,081,205 24,005,619 23,930,033 23,930,033 Total Rate Base 24,751,477 24,685,891 22 7.15% 7,15% 7.15% 7.15% 7.15% 7.15% 7.15% 7.15% 7.15% 7.15% 7.15% 74 Weighted Cost of Capital (PNM Exhibit TSB-8, line 4) 7,15% 7.15% 25 143,033 142,583 1,740,721 Return on Rate Base 147.537 147.087 146.636 146,186 145,736 145.285 144,835 144,385 143,934 143,484 26 8,877 9,141 33,172 75,667 8,907 9,877 76,663 11,696 9,659 72,499 373,420 Operations & Maintenance Expense 3,825 53,437 28 124,333 124,333 124,333 124,333 124,333 124,333 124,333 124,333 124,333 124,333 124,333 124,333 1,491,995 30 Depreciation and Amortization Expense Property Taxes 25,115 25.116 26.116 25.116 26.116 26.116 26.116 25,115 26.115 26.116 25,116 26.116 313,391 32 34 Federal Income Tax Return Adjustments 35 (51,174) (51.018)(50.861) (50.705) (50.549) (50.393) (50.236) (50.080) (49,924) (49,768) (49,612) (49,455) (603,775) Interest 37 Tax/Book Adjustments Flow Thru Item - ITC 11,873 989 989 AFUDC Equity 989 989 989 989 989 989 989 989 989 989 39 40 Investment Tax Credits 989 98 989 980 989 980 980 989 11,873 989 989 989 41 Total Permanent Differences Depreciation & AFUDC Debt 104 940 104,940 104,940 104.940 104.940 104,940 104.940 104,940 104,940 104.940 104,940 104.940 1.259.277 4,390 4,390 4,390 (70,158 43 Deferred State Income Tax 4,390 4,390 4,390 4,390 4,390 4,390 4,390 4,390 4,390 Total Temporary Differences 109.329 109.329 109.329 109,329 109,329 109.329 109,329 109,329 109,329 109,329 109,329 109,329 1,189,119 44 (15,130) (15,130) (15,130) (15.130) (15,130) (15,130) (15,130) (15,130 (15,130) (15,130) (15,130) (181,559 Amortization of Excess Deferred Federal Income Taxes (EDFIT) (15, 130)45 46 Deferred Federal Taxes before NO (22,959) (22,959) (22,959) (22,959) (22,959) (22,959) (22,959) (22, 959)(22,959) (22, 959)(22,959) (22,959) (249,715 168,593 168,299 168,005 167,711 167,417 167,122 166,828 156,534 166.240 165.946 165.652 165.357 1.905,664 47 Adjusted Current Equity Return before NOL 48 Net Operating Loss Carryove NOL Deferred State income Tax 49 50 NOL Deferred Federal Income Ta 165,945 165,652 165,357 1,906,664 Net Current Taxable Equity Return 168.593 168,299 168.005 167.711 167.417 167,122 166.828 166,534 156,240 51 26.5823% 26.5823% 26,5823% 25,5823% Federal Tax Bate 26.5823% 26.5823% 26,5823% 26.5823% 26.5823% 26.5823% 26,5823% 26.5823% 26.5823% 52 44,347 44,269 44,112 44,034 43,956 506.835 44,816 44,660 44,581 44,503 44,425 44,190 Total Current Federal Income Tax 44,738 53 Total Provision for Deferred Federal Income Tax (22,959) (22,959) (22,959) (22 959) (22.959) 172 9591 (22 959) (22,959) (22.959) (22,959) (22.959)(22,959) (249.715) (15,130) (15,130) (15,130) (15,130) (15,130) (181,559 (15,130) (15,130) 55 Amortization of Excess Deferred Federal Income Taxes (EDFIT) {15,130} (15, 130)(15, 130)(15,130) (15,130) 56 Investment Tax Credits 6,570 6,258 6,179 6,101 6,023 5.945 5.867 75.561 5,727 6,549 6,492 6,414 6.335 Total Federal Income Tax 57 59 State Income Tax 210,803 210.430 210.058 209 686 209.313 2,413,499 Net Current Taxable Equity Return 213,409 213,037 212,654 212,292 211,920 211,547 211,175 60 State Tax Rate 5.9000% 5.9000% 5.9000% 5.9000% 5,9000% 12,503 5,9000% 5.9000% 12,459 5,9000% 5,9000% 5,9000% 5.9000% 5,9000% 5,9000% 12,393 12,371 12,349 142,396 12,415 Total Current State Income Tax 12.591 12,569 12,547 12.525 12,481 12,437 67 (6,450) (6,450) (6,450) (6,450) (6,450) (6,450) (6,450) (6,450) (6.450) (6,450) (6.450) (6.450) (70.158) Total Deferred State Income Tax 63 (8,813) (8,813) (8,813) (8,813) (8,813) (8,813) (8,813) (8,813) (105,760 Amortization of Excess Deferred Taxes (8,813) (8,813) (8,813) (8,813) 64 (2,826) (2,848) (2,870) (2,892) (2.914) (33,521) (2,717) (2,739) (2,761) (2,782) (2,804) Total State Income Tax (2,673) (2,695) 65 67 Revenue Requirement Summary 145.285 144.835 144 385 143 934 143 484 143.033 142,583 1.740.721 147,537 147,087 146,636 146,186 145,736 Return on Rate Base 2,178,807 154,274 159,326 203.885 159,590 183.621 226.115 159.356 150,326 227.111 162.145 150,108 222,948 Total Operating Expenses 6,336 6,258 6,179 6.101 6.023 5,945 5,867 75,551 Net Allowable Federal Income Tax 6.727 6,649 6,570 6,492 6,414 70 (2,673) (2,695) (2,717) (2,739) (2,761) (2,782) (2,804) (2,826) (2,848) (2,870) (2,892) (2.914) (33.521) 71 Net Allowable State Income Tax 374,954 307,644 308,054 374,298 308,781 306,194 365,484 3,961,568 305,865 310,366 354,376 309,529 333,010 72 Total Revenue Regulrements before Revenue Tax 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% 0.508573% Revenue Tax Factor 73 1,874 20,147 74 Revenue Tax 1,556 1,578 1,802 1,574 1,694 1,907 1,565 1,567 1,904 1,570 1,557 309,209 309,631 376,202 310,351 307,751 370,358 3,981,715 307,421 311.945 356.179 311,104 334,704 376,861 75 Revenue Requirements for PNM Owned 2013 Facilities

PNM Exhibit TSB - 4 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM Owned 2013 Facilities

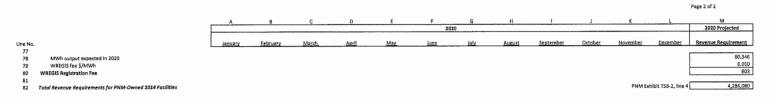


PNM Exhibit TSB-5 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM Owned 2014 Facilities

г			В	c	D	E	F 202	G	н	I		ĸ	L	M 2020 Projected
Line No		January	February	March	April	May	June	July	August	September	October	November	December	Revenue Regulrement
1	-													
2	Plant in Service 23 MW PV Solar	44.781.651	44,781,651	44,781,651	44,781,651	44,781,651	44.781.651	44,781,651	44.781.651	44.781.651	44.781.651	44,781,651	44.781.651	44,781,651
4	Land	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747	1,714,747
5	Total Gross Plant in Service	46,496,398	46,496,398	46,496,398	46,496,398	46,496,398	46,496,398	45,496,398	46,496,398	46,496,398	46,496,398	46,496,398	46,496,398	46,496,398
6	Accumulated Depreciation - 23 MW	(7,517,481)	(7.641,458)	(7,765,435)	(7,889,411)	(8,013,388)	(8,137,365)	(8,261,342)	(8,385,318)	(8,509,295)	(8,633,272)	[8,757,248]	(8,881,225)	(8,881,225)
7 8	Net Plant In Service	38,978,917	38,854,940	38,730,964	38,606,987	38,483,010	38,359,033	38,235,057	38,111,080	37,987,103	37,863,127	37,739,150	37,615,173	37,615,173
9	Accumulated Deferred Income Taxes													
10	Tax Depreciation	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)	(37,527,359)
11											30.503.522	30.398.910	30,294,297	30,294,297
12 13	Deferred Flow-Through AFUDC Equity and ITC Basis Diff	31,445,036 (803,341)	31,340,423 (822,705)	31,235,811 (842,069)	31,131,198 (861,433)	31,026,585 (880,797)	30,921,973 (900,162)	30,817,360 (919,526)	30,712,748 (938,890)	30,608,135 (958,254)	30,503,522 (977,618)	30,398,910 (996,982)	30,294,297 (1,015,345)	(1,016,346)
14	ADIT Balance as of 12/31/2017	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)	(12,054,527)
15	Excess Deferred Federal Income Taxes (EDFIT)	353,733	368,472	383,211	397,950	412,688	427,427	442,155	456,905	471,644	486,383	501,122	515,861	515,861
16 17	Excess Deferred State Income Taxes (EDSIT)	162,782 (203,323)	169,564	176,347 (150,180)	183,129 (123,608)	189,912 (97,036)	196,695 (70,465)	203,477 (43,893)	210,260 {17,322}	217,042 9,250	223,825 35,822	230,607 62,393	237,390 88,965	237,390 88,965
18	Deferred Tax - Piant Total Accumuleted Deferred income Taxes	(11,741,335)	(176,751) (11,693,242)	(130,180) (11,645,149)	(11,597,056)	(11,548,963)	(11,500,870)	(11,452,777)	(11,404,584)	(11,356,591)	(11,308,498)	(11,260,405)	(11,212,312)	(11,212,312)
19	Total Accumulated Delerred income Taxes	(11,741,535)	(11,035,242)	(11,043,143)	(11,557,030)	(11,346,903)	(11,300,870)	{11,432,777]	(11,404,004)	(11,330,331)	(11,506,458)	(11,200,403)	(11,214,312)	(11,212,512)
20 21	Other Rate Base Additions (Deductions) Prepaid Insurance	16,475	16,475	16,475	16,475	16,475	16,475	16,475	16,475	15,475	16,475	16,475	16,475	16,475
22 23	Total Rate Base	27,254,057	27,178,173	27,102,289	27,025,406	26,950,522	26,874,638	26,798,755	26,722,871	26,645,987	26,571,104	26,495,220	26,419,336	26,419,336
24 25	Weighted Cost of Capital (PNM Exhibit TSB-8, line 4)	7.15%	7.15%	7.15%	7.15%	7,15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%
26 27	Return on Rate Base	162,389	161,937	161,484	161,032	160,580	160,128	159,676	159,224	158,772	158,319	157,867	157,415	1,918,824
28 29	Operations & Maintenance Expense	4,399	10,208	61,453	10,512	38,148	87,017	10,244	11,359	88,152	13,450	11,108	83,374	429,433
30 31	Depreciation and Amortization Expense	123,977	123,977	123,977	123,977	123,977	123,977	123,977	123,977	123,977	123,977	123,977	123,977	1,487,721
32 33	Property Taxes	28,081	28,081	28,081	28,081	28,081	28,081	28,081	28,081	28,081	28,081	28,081	28,081	336,971
34	Federal Income Tax													
35 36	Return Adjustments Interest	(56,325)	(56,168)	(56,011)	(55,855)	(55,698)	(55,541)	(55,384)	(55,227)	(55,070)	(54,914)	(54,757)	(54,600)	(665,550)
35	Tax/Book Adjustments	(56,325)	(56,168)	(30,011)	(55,655)	(22,030)	(33,341)	(33,384)	(53,247)	(55,070)	(34,314)	(34,/37)	(34,600)	1005,5501
38	Flow Thru Item - ITC													-
39	AFUDE Equity	1,031	1,031	1,031	1,091	1,031	1,031	1,031	1,031	1,031	1,031	1,031	1,031	12,370
40 41	Investment Tax Credits Total Permanent Differences	1.031	1,031	1,031	1,031	1,031	1,031	1.031	1,031	1.031	1.031	1.031	1.031	12,370
41	Depreciation & AFUDC Debt	(67,926)	104,613	104,613	104,613	104,613	104,613	104,513	104,613	104,613	104,613	104,613	104,613	1,082,813
43	Deferred State Income Tax	3,784	(5,828)	(5,828)	(5,828)	(5,828)	(5,828)	(5,828)	(5,828)	(5,828)	(5,828)	(5,828)	(5,828)	(60,327)
44	Total Temporary Differences	(64,141)	98,784	98,784	98,784	98,784	98,784	98,784	98,784	98,784	98,784	98,784	98,784	1,022,487
45 46	Amortization of Excess Deferred Federal Income Taxes (EDFIT)	(14,739) 13,470	(14,739) (20,745)	(14,739) (20,745)	(14,739) (20,745)	(14,739) (20,745)	(14,739) (20,745)	(14,739) (20,745)	(14,739) (20,745)	{14,739} (20,745)	(14,739) (20,745)	(14,739) (20,745)	(14,739) (20,745)	(176,866) (214,722)
45 47	Deferred Federal Taxes before NOL Adjusted Current Equity Return before NOL	41,684	~ 170,100	169,805	169,509	169,214	168,919	168,523	168,328	168,033	167,737	167,442	167,147	1,896,542
48	Net Operating Loss Carryover	-	- 170,100	-	-	-	-	100,015	-	-	-	-	-	-
49	NOL Deferred State Income Tax	-	-	•	-	-	-	-		-	-		-	-
50	NOL Deferred Federal Income Tax			<u> </u>			-		-			-		
51 52	Net Current Taxable Equity Return Federal Tax Rate	41,684 <u>26,5823%</u>	170,100 26.5823%	169,805 26.5823%	169,509 <u>26.5823%</u>	169,214 26.5823%	168,919 26,5823%	168,623 26.5823%	168,328 26.5823%	168,033 26.5823%	167,737 26.5823%	167,442 26.5823%	167,147 26.5823%	1,896,542 <u>26.5823%</u>
52	Total Current Federal Income Tax	11,081	45,216	45,13B	45,059	44,981	44,902	44,824	44,745	44,667	44,588	44,510	44,431	504,144
54	Total Provision for Deferred Federal Income Tax	13,470	(20,745)	(20,745)	(20,745)	(20,745)	(20,745)	(20,745)	(20,745)	(20,745)	(20,745)	(20,745)	(20,745)	(214,722)
55 56	Amortization of Excess Deferred Federal Income Taxes (EDFIT) Investment Tax Credits	(14,739)	(14,739)	(14,739)	(14,739)	(14,739)	(14,739)	(14,739)	(14,739)	(14,739)	(14,739)	(14,739)	(14,739)	(176,866)
55 57 58	Total Federal Income Tax	9,811	9,733	9,654	9,576	9,497	9,419	9,340	9,262	9,183	9,105	9,026	8,948	112,556
58	State income Tax													
60	Net Current Taxable Equity Return	52,765	215,316	214,943	214,569	214,195	213,821	213,447	213,074	212,700	212,326	211,952	211,578	2,400,686
61	State Tax Rate	5,9000%	5,9000%	5,9000%	5,9000%	5.9000%	5.9000%	5.9000%	5,9000%	5,9000%	5,9000%	5.9000%	5,9000%	5.9000%
62 63	Total Current State Income Tax Total Deferred State Income Tax	3,113 3,784	12,704 (5,828)	12,682 (5,828)	12,660 (5.828)	12,638 (5,828)	12,615 (5,828)	12,593 (5,828)	12,571 (5,828)	12,549 (5,828)	12,527 (5,828)	12,505 (5,828)	12,483 (5,828)	141,640 (60,327)
64	Amortization of Excess Deferred Taxes	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(103,026)
65	Total State Income Tax	(1,688)	(1,710)	(1,732)	{1,754}	(1,776)	(1,798)	(1,820)	(1,842)	(1,865)	(1,887)	(1,909)	(1,931)	(21,713)
66														
67	Revenue Requirement Summary	162,389	161.937	161.484	161.032	160.580	160,128	159.676	159,224	158,772	158,319	157,867	157,415	1,918,824
68 69	Return on Rate Base Total Operating Expenses	162,389 156,456	161,937 162,265	161,484 213,511	161,032 162,570	160,580 190,206	160,128 239,074	159,675 162,301	159,224 163,417	158,772 240,220	158,319 165,508	157,867 163,166	235,432	1,918,824 2,254,125
70	Net Allowable Federal income Tax	9,811	9,733	9,654	9,576	9,497	9,419	9,340	9,262	9,183	9,105	9,026	B,948	112,555
71	Net Allowable State Income Tax	(1,588)	(1,710)	(1,732)	(1,754)	(1,776)	(1,798)	(1,820)	(1,842)	(1,865)	(1,887)	(1,909)	(1,931)	(21,713)
72	Total Revenue Requirements before Revenue Tax	326,968	332,225	382,917	331,424	358,507	406,823	329,497	330,060	406,310	331,045	328,151	399,864	4,263,792
73 74	Revenue Tax Factor Revenue Tax	0.508573% 1,663	0.508573% 1,690	0,508573% 1,947	0.508573% 1,686	0,508573% 1,823	0.508573% 2,069	0.508573%	0.508573% 1,679	0,508573% 2,066	0.508573% 1,684	0.508573% 1,669	0.508573% 2,034	0.508573%
74		4,003	1,030	4,047	4,000	1,023	2,005		4,01.5	2,000	2,004	2,003		
76	Revenue Requirements for PNM-Owned 2014 Facilities	328,631	333,915	384,865	333,109	360,330	408,892	331,173	331,739	408,376	332,729	329,820	401,898	4,285,476

PNM Exhibit TSB-5 Page 1 of 2

PNM Exhibit TSB-5 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM Owned 2014 Facilities

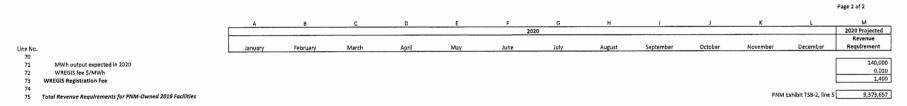


PNM Exhibit TSB-6 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM Owned 2019 Facilities

		Α	В	с	D	E	F 202	G	н	1	J	к	L	M 2020 Projected
			F-1	March	April	Мау	June	July	August	September	October	November	December	Revenue Regulrement
Line No 1	) <b>.</b>	January	February	March	Apri	мау	June	Juiy	August	September	October	November	December	Requirement
2	Plant in Service 50 MW PV Solar	69,720,996	69,720,996	69,720,996	69,720,996	69,720,996	69,720,996	69,720,995	69,720,996	69,720,995	69,720,996	69,720,996	69,720,996	69,720,995
3	50 MW PV Solar Land	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000
5	Total Gross Plant In Service	72,920,996	72,920,996	72,920,996	72,920,996	72,920,996	72,920,996	72,920,995	72,920,996	72,920,996	72,920,996	72,920,996	72,920,996	72,920,996
6	Accumulated Depreciation	(969,257)	(1,162,926)	(1,356,596)	(1,550,265)	(1,743,934)	(1,937,604)	(2,131,273)	(2,324,943)	(2,518,612)	(2,712,282)	(2,905,951)	(3,099,620) 69,821,376	(3,099,620) 69,821,376
7	Net Plant In Service	71,951,740	71,758,070	71,564,401	71,370,731	71,177,062	70,983,393	70,789,723	70,596,054	70,402,384	70,208,715	70,015,045	03,821,370	69,821,376
9	Accumulated Deferred Income Taxes											/ <b></b> -		/00 500 0501
10 11	Tax Depreciation	(12,445,173.74)	(13,912,789.74)	(15,380,405.74)	(16,848,021.74)	(18,315,637.75)	(19,783,253.75)	(21,250,869.75)	(22,718,485.75)	(24,186,101.75)	(25,653,717.75)	(27,121,333.75)	(28,588,949.76)	(28,588,950)
12	Deferred	12,801,809	14,104,925	15,408,041	16,711,156	18,014,272	19,317,388	20,620,503	21,923,619	23,226,735	24,529,850	25,832,965	27,136,082	27,136,082
13 14	Flow- Through AFUDC Equity and ITC Basis Diff Deferred Tax - NDL	795,962	767,793	738,623	709,454	680,285	651,116	621,947	592,77B	563,609	534,440	505,270	476,101	476,101
14	Deferred Tax - Not	(3,251,660)	(3,582,651)	(3,913,642)	(4,244,634)	(4,575,625)	(4,906,616)	(5,237,608)	(5,568,599)	(5,899,591)	(6,230,582)	(6,561,573)	(6,892,565)	(6,892,565)
16	Total Accumulated Deferred Income Taxes	(3,251,660)	(3,582,651)	(3,913,642)	(4,244,634)	(4,575,625)	(4,906,616)	(5,237,608)	(5,568,599)	(5,899,591)	(5,230,582)	(6,561,573)	(6,892,565)	(6,892,565)
17									65,027,454	64,502,794	63,978,133	63,453,472	62,928,811	62,928,811
18 19	Total Rate Base	68,700,080	68,175,419	67,650,759	67,126,098	66,601,437	66,076,776	65,552,115	65,027,454	64,502,794	63,978,133			, .
20 21	Weighted Cost of Capital (PNM Exhibit TSB-8, line 4)	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%	7.15%
22	Return on Rate Base	409,338	406,212	403,086	399,960	396,834	393,707	390,581	387,455	384,329	381,203	378,077	374,951	4,705,733
23 24	Operations & Maintenance Expense	9,563	22,192	133,593	22,852	82,931	189,166	22,269	24,694	191,656	29,239	24,148	181,248	933,550
25 26	Depreciation and Amortization Expense	193,669	193,669	193,669	193,669	193,669	193,669	193,659	193,669	193,669	193,669	193,669	193,669	2,324,033
27	Property Taxes	51,809.74	51,809.74	51,809.74	51,809.74	51,809.74	51,809.74	51,809.74	51,809.74	51,809.74	51,809,74	51,809,74	51,809.74	521,717
29		51,805.74	51,805.74	51,805.74	51,865.74	51,005.74	51,005.74	51,005.14	51,005114	\$2,005114	51,0051,1	52,000171		
30 31	Federal Income Tax Return Adjustments													
31	Interest	(141,980)	(140,896)	(139,812)	(138,727)	(137,643)	(136,559)	(135,474)	(134,390)	(133,305)	(132,221)	(131,137)	(130,053)	(1,632,198)
33	Tax/Book Adjustments													
34	Flow Thru Item - ITC	-	-	-	-	-	- (175,001)	- (175,001)	(175,001)	(175,001)	- (175,001)	(175,001)	(175,001)	- (900,888)
35 36	AFUDC Equity Investment Tax Credits	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(1/5,001)	(1/5,001)	(1/5,001)	(1/5,001)	(175,001)	(175,001)	(500,668)
37	Total Permanent Differences	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(175,001)	(900,888)
38	Depreciation & AFUDC Debt	(1,303,116)	(1,303,116)	(1,303,116)	(1,303,116)	(1,303,116)	{1,303,116} 72,600	(1,303,116) 72,600	(1,303,116) 72,600	(1,303,116) 72,600	(1,303,116) 72,600	(1,303,116) 72,600	(1,303,116) 72,600	(1,303,116) 72,600
39 40	Deferred State Income Tax Total Temporary Differences	72,600 (1,230,515)	72,600 (1,230,515)	72,600 (1,230,515)	72,600 (1,230,515)	72,600	(1,230,515)	(1,230,515)	(1,230,515)	(1,230,515)	(1,230,515)	(1,230,515)	(1,230,515)	(1,230,515)
41	Deferred Federal Taxes before NOL	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408
42	Adjusted Current Equity Return before NOL	(879,750)	(881,792)	(883,834)	(885,875)	(887,917)	(889,959)	(892,001)	(894,043)	(896,085)	(898,126)	(900,168)	(902,210)	1,200,540
43 44	Net Operating Loss Carryover NOL Deferred State income Tax													
45	NOL Deferred Federal Income Tax													
46	Net Current Taxable Equity Return	(879,750)	(881,792)	(883,834)	(885,875)	(887,917)	(889,959)	(892,001)	(894,043)	(896,085)	(898,126)	(900,168)	(902,210)	1,200,540
47	Federal Tax Rate	26.5823% (233,858)	26.5823% (234,401)	26,5823% (234,943)	26.5823% (235,486)	26.5823% (236,029)	26,5823% (236,572)	26.5823% (237,114)	26.5823% (237,657)	26.5823% (238,200)	26.5823% (238,743)	26,5823% (239,285)	26.5823% (239,828)	26,5823%
48 49	Total Current Federal Income Tax Total Provision for Deferred Federal Income Tax	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408	258,408
50	Investment Tax Credits	-	-	-	-		-		-	-	-	-		-
51 52	Totai Federal Income Tax	24,550	24,008	23,465	22,922	22,379	21,837	21,294	20,751	20,208	19,666	19,123	18,580	577,539
53	State Income Tax												(a. a. u.a. ana a)	
54	Net Current Taxable Equity Return	{1,113,608} 5,9000%	(1,116,192) 5.9000%	(1,118,777) 5.9000%	(1,121,362) 5.9000%	(1,123,946) 5.9000%	(1,126,531) 5.9000%	(1,129,115) 5.9000%	(1,131,700) 5.9000%	(1,134,284) 5.9000%	(1,136,869) 5.9000%	(1,139,454) 5,9000%	(1,142,038) 5.9000%	1,519,671 5.9000%
55 56	State Tax Rate Total Current State Income Tax	(65,703)	(65,855)	(66,008)	(66,160)	(66,313)	(66,465)	(66,618)	(66,770)	(66,923)	(67,075)	(67,228)	(67,380)	89,661
57	Total Deferred State Income Tax	72,600	72,600	72,600	72,600	72,600	72,600	72,600	72,600	72,600	72,600	72,600	72,600	72,600
58 59	Total State Income Tax	6,898	6,745	6,593	6,440	6,288	6,135	5,983	5,830	5,678	5,525	5,373	5,220	162,261
59	Revenue Requirement Summary													
51	Return on Rate Base	409,338	406,212	403,086	399,960	396,834	393,707	390,581	387,455	384,329	381,203	378,077	374,951	4,705,733
62	Total Operating Expenses	255,042	257,671	379,073	268,331	328,410	434,646	257,748 21,294	270,173 20,751	437,135 20,208	274,718 19,666	269,627 19,123	426,727 18,580	3,879,300
63 64	Net Allowable Federal Income Tax Net Allowable State Income Tax	24,550 6,898	24,008 6,745	23,465 6,593	22,922 6,440	22,379 6,288	21,837 6,135	21,294 5,983	5,830	5,678	5,525	5,373	5,220	162,261
65	Total Revenue Requirements before Revenue Tax	695,828	704,636	812,215	697,653	753,910	856,325	685,605	684,209	847,351	681,112	672,199	825,478	9,324,834
66	Revenue Tax Factor	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%	0.508573%
67 68	Revenue Tax	3,539	3,584	4,131	3,548	3,834	4,355	3,487	3,480	4,309	3,464	3,419	4,198	47,424
69	Revenue Requirements for 50 MW Facilities	699,366	708,219	816,346	701,201	757,744	860,680	689,092	687,689	851,660	684,576	675,618	829,676	9,372,257

PNM Exhibit TSB-6 Page 1 of 2

#### PNM Exhibit TSB-6 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for the PNM Owned 2019 Facilities



PNM Exhibit TSB-6 Page 2 of 2

# PNM Exhibit TSB - 7 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for Purchased Power Agreements and Renewable Energy Certificate Purchases

Line No.				
	Purchased Power Agreement		Amount	Page 1 of 2
1	Geothermal PPA			
2	Annual Sales (MWh)		77,000	
3	Price (\$/MWh)	\$	93.51	
4	Energy/REC Cost	\$	7,199,933	-
5				
6	WREGIS cost per MWh	\$	0.005	
7	WREGIS fees		\$385	
8				
9	Total Geothermal PPA		\$7,200,318	PNM Exhibit TSB-2, line 11
10	Total Geothermal PPA Cost per MWh	\$	93.51	
11				
12	Red Mesa PPA			
13	Annual Sales (MWh)		208,223	
14	Price (\$/MWh)	\$	30.83	
15	Energy/REC Cost	\$	6,418,669	
16				
17	WREGIS cost per MWh	\$	0.005	
18	WREGIS fees		\$1,041	
19				
20	Total Red Mesa PPA		\$6,419,710	PNM Exhibit TSB-2, line 12
21	Total Red Mesa PPA Cost per MWh	\$	30.83	
22				
23	New Mexico Wind Energy Center (NMWEC) PPA			
24	Annual Sales (MWh)		604,393	
25	Price (\$/MWh)	\$\$	27.25	
26	Energy/REC Cost	\$	16,469,708	
27				
28	WREGIS cost per MWh	\$	0.010	
29	WREGIS fees		\$6,044	
30				
31	Total NMWEC PPA		\$16,475,752	PNM Exhibit TSB-2, line 13
32	Total NMWEC PPA Cost per MWh	\$	27.26	

# PNM Exhibit TSB - 7 2020 Renewable Energy Rider 2020 Estimated Annual Revenue Requirement for Purchased Power Agreements and Renewable Energy Certificate Purchases

#### Line No.

Page 2 of 2

			00
33	REC Purchases		_
34	DG Programs		-
35	DG Annual Purchases (MWh)	108,053	
36	Total DG Programs REC Purchases	\$7,227,787	PNM Exhibit TSB-2, line 17
37	Total DG Programs REC Cost per MWh	\$ 66.89	
38			
39	2018 Compliance REC Purchases -MWh	 825	_
40	Total REC Costs	 \$825	-
41	Average Price (\$/MWh)	\$1.00	
42			
43	WREGIS cost per MWh	\$0.005	
44	WREGIS fees	 \$4	-
45			
46	2018 Compliance REC Purchases - True-Up	\$ 829	PNM Exhibit TSB-2, line 18

# PNM Exhibit TSB - 8 2020 Renewable Energy Rider December 31, 2018 Weighted Average Cost of Capital

Page 1 of 1

Line No.	Capital Component	A Total Capitalization Base Period	B Percentage of Total Capitalization	C Capital Component Cost	D Weighted Average Cost
1	Long Term Debt	1,465,845	50.99%	4.86%	2.48%
2	Preferred Stock	11,529	0.40%	4.62%	0.02%
3	Common Equity	1,397,359	48.61%	9.575%	4.65%
4	Total	2,874,733	100.00%		7.15%
					25.400/

Composite Tax Rate:	25.40%
	Tax Gross-Up
Debt	2.48%
Preferred	0.03%
Common	6.23%
Total	8.74%

Page 1 of 1

# PNM Exhibit TSB - 9 2020 Renewable Energy Rider 2021 Estimated Annual Revenue Requirement for Purchased Power Agreements and Renewable Energy Certificate Purchases

Line No.		
	Purchased Power Agreement	Amount
1	La Joya II Wind PPA	
2	Annual Sales (MWh)	537,163
3	Price (\$/MWh)	 17.48
4	Energy/REC Cost	\$ 9,389,609
5		
6	WREGIS cost per MWh	\$ 0.005
7	WREGIS fees	\$2,686
8		
9	Total La Joya II PPA	 \$9,392,295
10	Total La Joya II PPA Cost per MWh	\$ 17.49

# **BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

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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

Case No. 19-00 -UT

Petitioner.

# **AFFIDAVIT**

STATE OF NEW MEXICO ) ) ss COUNTY OF BERNALILLO )

THOMAS S. BAKER, Manager, Cost of Service, for PNMR Services Company, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing Direct Testimony of Thomas S. Baker and it is true and correct based on my

personal knowledge and belief.

SIGNED this \_\_\_\_\_\_ day of May, 2019.



THOMAS S. BAKER

**SUBSCRIBED AND SWORN** to before me this  $315^{+}$  day of May, 2019.

plo: da Forna

NOTARY PUBLIC IN AND FOR THE STATE OF NEW MEXICO

My Commission Expires:

pok

1.21.2020

GCG **# 525512** 

# NMPRC CASE NO. 19-00\_\_\_\_-UT INDEX TO THE DIRECT TESTIMONY OF SHANE GUTIERREZ

# WITNESS FOR <u>PUBLIC SERVICE COMPANY OF NEW MEXICO</u>

I.	INTRODUCTION	1
II.	PLAN YEAR (2020) RPS COMPLIANCE	4
III.	NEXT PLAN YEAR (2021) RPS COMPLIANCE	6
IV.	RESOURCES FOR RPS COMPLIANCE AND PORTFOLIO COSTS	8
V.	CASE NO. 18-00158-UT LIGHTNING DOCK REPORTING REQUIREMENTS1	6

PNM EXHIBIT SG-1	Resume of Shane Gutierrez
PNM EXHIBIT SG-2	2020 Renewable Energy Act Procurement Plan
PNM EXHIBIT SG-3	RPS Calculations for 2020 and 2021

# AFFIDAVIT

1		I. INTRODUCTION
2	Q.	PLEASE STATE YOUR NAME, TITLE, BUSINESS ADDRESS AND
3		POSITION.
4	А.	My name is Shane Gutierrez. My business address is Public Service Company of
5		New Mexico ("PN+M"), 414 Silver Avenue Southwest, Albuquerque, New
6		Mexico 87102. I am an Engineer IV in PNM's Planning and Resources
7		Department. The Planning and Resources Department is responsible for
8		identifying the future resources PNM will need to provide electric service to retail
9		customers.
10		
11	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
12		PROFESSIONAL EXPERIENCE.
13	А.	My educational background and professional experience are summarized in PNM
14		Exhibit SG-1, which includes a tabulation of cases before the New Mexico Public
15		Regulation Commission ("NMPRC" or "Commission") in which I have testified.
16		
17	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
18	А.	My testimony:
19		• Presents PNM's projected renewable portfolio standard ("RPS")
20		requirements for 2020 and 2021;
21		• Demonstrates that the 2020 Plan meets the requirements of the Renewable
22		Energy Act, NMSA 1978, §§ 62-16-1 to -10 ("REA"), and Commission

1		Rule 17.9.572 NMAC ("Rule 572"), as amended by the Energy Transition
2		Act ("ETA"), in 2021, and meets the requirements of the REA and Rule
3		572 in 2020 with the exception of complying with the RPS and;
4		• Provides certain information related to the Lightning Dock Geothermal
5		Facility ("Lightning Dock") procurement in compliance with the Final
6		Order in Case No. 18-00158-UT.
7		
8	Q.	HAVE YOU PREPARED ANY EXHIBITS IN ADDITION TO YOUR
9		RESUME?
10	A.	Yes. PNM Exhibit SG-2 is the 2020 Renewable Energy Act Procurement Plan.
11		PNM Exhibit SG-3 is a three-page exhibit that contains the calculations
12		supporting my testimony. It summarizes the RPS requirements and the resources
13		PNM will use to meet those requirements in the plan year, 2020, and next plan
14		year, 2021.
15		
16	Q.	PLEASE COMPARE PNM'S 2020 PLAN WITH THE PROJECTIONS
17		FOR 2020 THAT PNM PROVIDED IN ITS 2019 PLAN, WHICH WAS
18		APPROVED IN CASE NO. 18-00158-UT.
19	А.	PNM's 2020 Plan differs from the projected plan PNM filed in Case No. 18-
20		00158-UT largely due to the impact of the recently enacted Energy Transition Act
21		("ETA"). In the 2019 Plan, PNM projected that it would comply with the RPS in
22		2020. However, the ETA effectively increased the RPS requirement for 2020
23		because it removed the reductions to the RPS for certain large governmental and

1	nongovernmental customers described in the former Sections 62-16-4(A)(2) and
2	(3) of the REA, which were repealed by the ETA. Even though the RPS remains
3	20% of retail sales for 2020, the effect of removing the large customer adjustment
4	and the reduction for large exempt customers means that PNM's 2020 RPS
5	requirement increased from the 1,363,086 MWh PNM projected in the 2019 Plan
6	to 1,671,822 MWh.
7	
8	In addition to amending the way the RPS is calculated, the ETA also amended the
9	calculation of the reasonable cost threshold ("RCT"). Section 28(E) of the ETA
10	provides that the RCT is now defined as "an average annual levelized cost of sixty
11	dollars (\$60.00) per megawatt-hour at the point of interconnection of the
12	renewable energy resource with the transmission system, adjusted for inflation
13	after 2020." Accordingly, the portfolio RCT presented in the 2019 Plan is no
14	longer applicable to the 2020 plan year. Mr. Fallgren explains in his direct
15	testimony that PNM's proposed new wind procurement complies with the RCT.
16	
17	Finally, the ETA amended the REA to remove the requirement in the former
18	Section 62-16-4(A)(4) that REA resource portfolios "be diversified as to the type
19	of renewable energy resource."
20	

1

# II. PLAN YEAR (2020) RPS COMPLIANCE

# 2 Q. WHAT IS PNM'S RPS REQUIREMENT FOR 2020?

3 Pursuant to Rule 572.10 and Section 62-16-4(A) of the REA, the RPS A. 4 requirement is 20% of retail sales in 2020. PNM's projected retail sales in 2020 are 8,805,689 MWh. Section 32(B)(2) of the ETA requires PNM to reduce total 5 6 projected retail sales for sales under a Commission-approved voluntary program 7 for purposes of calculating the RPS. PNM currently has two voluntary renewable energy programs: the Sky Blue program approved in Case No. 10-00018-UT, and 8 9 Rate 36B, pursuant to which PNM provides renewable energy to its data center customer pursuant to the Special Service Contract initially approved by the 10 11 Commission in Case No. 16-00191-UT. After reducing the retail sales projection 12 by 446,579 MWh for sales under these two voluntary programs, PNM's sales 13 subject to the RPS are 8,359,110 MWh. The RPS requirement then is equal to 20% of those sales, or 1.671.822 MWh. Please see PNM Exhibit SG-3 for a 14 15 detailed calculation of the 2020 RPS.

16

# 17 Q. WILL PNM'S EXISTING RENEWABLE RESOURCES PROVIDE 18 SUFFICIENT MWH-RECS TO MEET THE RPS IN 2020?

A. No. Utilizing existing renewable procurements, which I discuss later in my
 testimony, and projected banked RECs from 2019, PNM is expected to be short
 68,611 MWh-RECs as shown on page 1, line 10, in PNM Exhibit SG-3.

22

# Q. IS IT POSSIBLE FOR PNM TO PROCURE SUFFICIENT RENEWABLE ENERGY TO MEET THE RPS IN 2020?

- 3 A. No. As Mr. Fallgren explains in his direct testimony, PNM's proposed La Joya II wind facility procurement will be in service at the end of 2020 and will not 4 provide sufficient RECs for PNM to meet the 2020 RPS. PNM is not aware of 5 6 any other renewable energy procurement that would allow it to meet the RPS in 7 2020, as modified by the ETA. It might be possible for PNM to procure 8 sufficient, unbundled RECs on the market, however, the ETA now provides that 9 RECs used to meet the RPS must be associated with renewable energy actually delivered to PNM's system. PNM is not aware of any such RECs that would 10 11 allow it to meet the 2020 RPS other than to use RECs generated in 2021 by the La Joya II facility and retire them in the future to make-up the deficit from 2020. For 12 these reasons, PNM requests a variance from the requirement in Rule 572 that 13 PNM meet the RPS in 2020, as discussed by Mr. Fallgren 14
- 15

# 16 Q. WHAT NEW RESOURCES WILL PRODUCE ENERGY AND/OR RECS 17 TO APPLY TOWARD RPS COMPLIANCE IN 2020?

A. As discussed by PNM Witness Anthony Bueno, PNM is requesting continuation
of the Customer Solar REC Purchase Program ("CSPP") program for DG systems
sized up to 100 kW and the Capacity Reservation program for DG systems sized
over 100 kW and up to 1 MW. The RECs projected to be purchased under these
programs are included in the RPS compliance calculations for the 2020 and 2021.

1	Q.	WHAT ARE THE COSTS OF PNM'S PORTFOLIO OF REA
2		RESOURCES IN 2020?
3	A.	Total net costs for 2020 are \$29.1 million, as shown on page 1, line 19 of PNM
4		Exhibit SG-2. Page 2 of PNM Exhibit SG-3 further details the resources and their
5		projected costs for 2020.
6		
7	Q.	WHAT TYPES OF RESOURCES WILL COMPRISE PNM'S REA
8		PORTFOLIO IN 2020?
9	A.	I describe the specific renewable resources in more detail later in my testimony.
10		The portfolio will be comprised of 64% wind, 24% solar, and 5% "other" as
11		defined in Rule 572.7(G).
12		
13		III. NEXT PLAN YEAR (2021) RPS COMPLIANCE
14	Q.	WHAT IS PNM'S PROJECTED RPS REQUIREMENT FOR 2021?
15	А.	PNM's projected retail sales in 2021 are 9,098,400 MWh. After reducing the
16		retail sales projection by 878,062 MWh for sales under voluntary programs,
17		PNM's sales subject to the RPS are 8,220,337 MWh. The RPS requirement then
18		is equal to 20% of those sales, or 1,644,067 MWh. Please see PNM Exhibit SG-3
19		for a detailed calculation of the 2021 RPS.
20		

1	Q.	ARE PNM'S EXISTING AND NEW RENEWABLE RESOURCE
2		PROJECTIONS SUFFICIENT TO MEET THE RPS REQUIREMENT IN
3		2021?
4	A.	Yes. PNM is projected to be long 274,331 MWh-RECs as shown on page 1, line
5		10, in PNM Exhibit SG-3. To make up for the shortfall in 2020, PNM is
6		proposing to retire RECs in the amount equal to the 2020 deficit using excess
7		RECs from 2021. This results in a bank of RECs by the end of 2021 of 205,720
8		MWh-RECs as shown on page 1, line 11, in PNM Exhibit SG-3.
9		
10	Q.	WHAT ARE THE PROJECTED COSTS OF PNM'S PORTFOLIO OF
11		REA RESOURCES IN 2021?
12	A.	Total net costs for 2021 are \$25.5 million, as shown on page 1, line 19 of PNM
13		Exhibit SG-2. Page 2 of PNM Exhibit SG-3 further details the resources and their
14		projected costs for 2021.
15		
16	Q.	IS THE PROJECTED COST OF THE LA JOYA II WIND PROJECT
17		WITHIN THE RCT?
18	А.	Yes. PNM has compared the cost of the La Joya II Wind project to the RCT set
19		forth in the ETA. As shown on page 2, line 3, column B, of PNM Exhibit SG-3,
20		the La Joya PPA cost is \$17.48/MWh in 2020 and is fixed over a 20-year term.
21		Therefore, the new procurement meets the requirement in Section 28(E) of the
22		ETA as this resource falls below the average annual levelized cost of
23		\$60.90/MWh (\$60 adjusted for 1.5% annual inflation from 2020).

1	Q.	IS THE PROJECTED COST FOR THE EXTENSION OF THE CSPP
2		WITHIN THE RCT?
3	А.	Yes. PNM has compared the cost of the CSPP Extension to the RCT set forth in
4		the ETA. As shown on page 2, line 18, column B, of PNM Exhibit SG-3 the
5		CSPP Extension cost is \$2.50/MWh-REC in 2020 and is fixed over the program
6		term. Therefore, the new procurement meets the requirement in Section 28(E) of
7		the ETA as this resource falls below the average annual levelized cost of
8		\$60.90/MWh (\$60 adjusted for 1.5% annual inflation from 2020).
9		
10	Q.	WHAT TYPES OF RESOURCES WILL COMPRISE PNM'S REA
11		PORTFOLIO IN 2021?
12	A.	I describe the specific renewable resources in more detail below. The portfolio
13		will be 65% wind, 23% solar, and 5% "other" as defined in Rule 572.7(G).
14		
15	Г	V. RESOURCES FOR RPS COMPLIANCE AND PORTFOLIO COSTS
16	Q.	HAVE YOU PREPARED AN OVERVIEW OF PNM'S EXISTING
	Q٠	
17		RENEWABLE RESOURCES AND COSTS?
18	А.	Yes. PNM's existing renewable resources include wind, solar PV, geothermal
19		energy, and purchases of MWh-RECs associated with customer-sited solar PV
20		facilities on PNM's system. Projected production and cost information for these
21		resources is provided on pages 2 and 3 in PNM Exhibit SG-3.
22		

# 1 Q. WHAT ARE PNM'S EXISTING WIND RESOURCES?

- 2 **A.** PNM has two existing sources of wind generation:
- a) PNM has a PPA for all of the output of the 200 MW New Mexico Wind
  Energy Center ("NMWEC") located in Quay County, New Mexico, which
  currently generates approximately 620,000 MWh of energy and associated
  MWh-RECs annually, a portion of which is used for PNM's Sky Blue
  program. The RPS net cost of this resource is projected to be \$1.3 million
  in 2020, and \$1.4 million in 2021.
- b) PNM has a PPA for the entire output of the Red Mesa Wind Energy
  Center ("Red Mesa"), a 102 MW facility in Cibola County, New Mexico.
  Energy production from Red Mesa is expected to be 208,223 MWh in
  2020 and 2021. The RPS net cost of the PPA is projected to be \$1.2
  million in 2020 and \$1.3 million in 2021.
- 14

# 15 Q. WHAT ARE PNM'S EXISTING SOLAR RESOURCES?

- A. PNM owns 107 MW of solar photovoltaic ("PV") generation with an additional
  50 MW to be constructed in 2019. PNM currently allocates the energy produced
  from 1.5 MW of these facilities to PNM's Sky Blue program. The 157 MW of
  PNM-owned solar PV is comprised of the following:
- a) Energy produced by 22.5 MW of solar PV facilities that were constructed
  in 2011 ("2011 PNM Solar PV"). This includes the 0.5 MW Prosperity
  solar PV with battery storage project. The production from these facilities

1		is projected to be 47,461 MWh in 2020 and 47,220 MWh 2021. <sup>1</sup> The RPS
2		net cost of these facilities is projected to be \$2.7 million in 2020 and \$3.3
3		million in 2021.
4	b)	Energy produced by 20 MW of solar PV facilities that became operational
5		in 2013 ("2013 PNM Solar PV"). The energy production from the 2013
6		PNM Solar PV is projected to be 46,295 MWh in 2020 and 46,063 MWh
7		in $2021^2$ . The projected net cost for these facilities is \$2.8 million in 2020
8		and in 2021.
9	c)	Energy produced by 23 MW of solar PV facilities that became operational
10		in 2014 ("2014 PNM Solar PV"). The energy production from the 2014
11		PNM Solar PV is projected to be 60,346 MWh in 2020 and 60,044 MWh
12		in 2021 <sup>3</sup> . The RPS net cost of these facilities is projected to be \$2.8
13		million in 2020 and in 2021.
14	d)	Energy produced by 40 MW of solar PV facilities that became operational
15		in 2015 ("2015 PNM Solar PV"). The energy production from the 2015
16		PNM Solar PV is projected to be 92,775 MWh in 2020 and 92,080 MWh
17		in 2021. <sup>4</sup> Per the Stipulation in Case No. 14-00158-UT, these facilities are
18		considered a system resource and capital and O&M costs are therefore not
19		included in the calculation of PNM's RPS net costs. Only the costs to
20		register and retire the associated MWh-RECs with Western Renewable
21		Energy Generation Information System ("WREGIS") are included.

 <sup>&</sup>lt;sup>1</sup> PNM assumes that production will decline 0.5% annually due to degradation of these solar PV panels.
 <sup>2</sup> PNM assumes that production will decline 0.5% annually due to degradation of these solar PV panels.
 <sup>3</sup> PNM assumes that production will decline 0.5% annually due to degradation of these solar PV panels.
 <sup>4</sup> PNM assumes that production will decline 0.75% annually due to degradation of these solar PV panels.

1		e) PNM owns solar PV facilities at its Algodones site (25 kW) and its Aztec
2		building in Albuquerque (5 kW). The MWh-RECs associated with the
3		energy from these facilities have a grandfathered 3-1 weighting and the
4		combined annual output from these facilities is projected to be 112 MWh
5		in 2020 and 111 MWh in 2021.5 The capital investment in these facilities
6		is fully amortized; therefore no annual costs are associated with MWh-
7		RECs from these facilities, although WREGIS fees and avoided fuel costs
8		are included in the RCT calculations for 2020 and 2021.
9		f) Energy produced by 50 MW of solar PV facilities approved in Case No.
10		17-00129-UT that are expected to become operational in 2019 and be fully
11		operational in 2020 ("2019 PNM Solar PV"). The energy production from
12		the 2019 PNM Solar PV is projected to be 140,000 MWh in 2020 and
13		138,950 MWh in 2021 <sup>6</sup> . The RPS net cost of these facilities is projected to
14		be \$5.8 million in 2020 and in 2021.
15		
16	Q.	WHAT ARE PNM'S EXISTING "OTHER" (NON-WIND, NON-SOLAR)
17		<b>RESOURCES?</b>
18	A.	PNM has a PPA for the full output produced by Lightning Dock, a facility that
19		generates electricity from geothermal resources and is located near Lordsburg,
20		New Mexico. As a result of the NMPRC approval of an amended procurement

21 from Lightning Dock in PNM's 2018 Plan, this facility is being expanded from 4

<sup>&</sup>lt;sup>5</sup> PNM assumes that production will decline 1.0% annually due to degradation of these solar PV panels.

<sup>&</sup>lt;sup>6</sup> PNM assumes that production will decline 0.5% annually due to degradation of these solar PV panels.

1		MW to 15 MW nameplate capacity. The expansion was completed by the end of
2		2018. Electric generation from this facility is projected to produce approximately
3		77,000 MWh in 2020 and in 2021. The RPS net cost for this resource is projected
4		to be \$5.3 million in 2020 and \$5.5 million in 2021.
5		
6	Q.	WHAT REC PURCHASE ARRANGEMENTS DOES PNM HAVE FOR
7		CUSTOMER-SITED SOLAR PV SYSTEMS?
8	А.	Pursuant to programs approved by the Commission, PNM has numerous REC
9		only purchase contracts with PNM customers who interconnect solar PV systems
10		to their homes, commercial buildings or other customer facilities. Under these
11		programs, PNM acquires some or all of the RECs associated with the energy
12		generated from the customer-sited solar PV facility. These programs include the
13		Small PV REC Purchase Program ("Small PV Program"), Large PV REC
14		Purchase Program ("Large PV Program"), the Solar REC Incentive Programs
15		("SIP"), the Capacity Reservation Program and the Customer Solar REC Purchase
16		Program ("CSPP"), which was extended through 2019 in Case No. 16-00148-UT
17		and which PNM proposes in this case to extend again beginning in 2020. PNM
18		projects that these programs collectively will generate 108,053 RECs in 2020 and
19		107,168 RECs in 2021 at an annual RPS net cost of \$7.2 million in 2020 and \$6.6
20		million in 2021.

# 1 Q. HOW MANY RECS DOES PNM PROJECT WILL BE GENERATED BY

# 2 THE NEW PROCUREMENTS PROPOSED IN THIS CASE?

3 As discussed by Mr. Fallgren, PNM is requesting approval of an additional wind A. resource in this case, expected to be online and producing energy by the end of 4 5 December 2020. The La Joya II facility is a 140 MW wind resource located in Torrance County, New Mexico. PNM does not assume any production from this 6 facility in 2020, but assumes 537,163 MWh of production in 2021. Additionally, 7 8 as Mr. Bueno describes, I have included the number of MWh-RECs under PNM's extension of the CSPP DG REC purchase program, as well as the capacity 9 reservation program. These numbers are shown on PNM Exhibit SG-3, page 2, 10 line 19. 11

12

# Q. PLEASE DESCRIBE THE WREGIS COSTS ASSOCIATED WITH PNM'S RENEWABLE RESOURCES.

Pursuant to Rule 572.17(E), WREGIS certification is required for all MWh-RECs 15 A. 16 used to demonstrate compliance with the RPS. PNM's annual WREGIS fee is \$83 per year to maintain an account. Additionally, WREGIS charges a fee of 17 \$0.005 per MWh-REC for certificate issuance or transfer and \$0.005 per MWh-18 19 REC for retirement for a total fee of \$0.010 per MWh-REC. For the Red Mesa and Lighting Dock resources, PNM will only incur the cost to retire MWh-RECs 20 from those facilities as those RECs are transferred to PNM, thus only \$0.005 per 21 MWh-REC is applied. Additionally, PNM is only applying the WREGIS fee for 22

MWh-REC retirement in the year that RECs or banked RECs will be used for
 RPS compliance.

3

# 4 Q. HAS PNM INCLUDED THE COSTS OR COST SAVING ELEMENTS 5 DESCRIBED IN RULE 572.14(C)(1) AS ADJUSTMENTS TO REVENUE 6 REQUIREMENTS FOR EXISTING AND APPROVED RENEWABLE 7 RESOURCES IN THE 2020 PLAN?

8 A. The REA, as amended by the ETA, no longer requires that PNM calculate the 9 RCT on a portfolio basis, including adjustments for the costs and cost savings 10 elements described in Rule 572.14(C)(1). However, because this is the first year 11 that PNM has filed an REA plan under the ETA, PNM has included these 12 adjustments for illustrative purposes only, including adjustments for avoided fuel, 13 purchased power, capacity, generation, transmission or distribution, operation and 14 maintenance, back-up and load-following, regulation costs and off-system sales 15 opportunity impacts. PNM witness Stephanie Meeks details these avoided costs in 16 her Direct Testimony. Ms. Meeks shows that avoided costs for 2020 are \$25.18 17 and for 2021 are \$25.00, in excess of the La Joya II purchase price. In other 18 words, under the RCT methodology described in Rule 572, the addition of the La 19 Jova II procurement reduces the cost of PNM's RPS compliance.

1	Q.	DID PNM CONDUCT AN ANALYSIS TO DETERMINE ANY COST
2		SAVINGS FOR AVOIDED CAPACITY IN THE PLAN YEAR?
3	А.	No. Since the La Joya II Wind project is not expected to be in-service until
4		December 31, 2020, the new resource does not impact the plan year. As a result,
5		no avoided capacity costs were applied to the revenue requirements.
6		
7	Q.	HAS PNM CONDUCTED AN ANALYSIS TO DETERMINE IF THERE
8		ARE COSTS OR COST SAVINGS FOR CAPACITY, TRANSMISSION
9		AND DISTRIBUTION IN THE PLAN YEAR?
10	A.	No. Cost savings for capacity, transmission and distribution have not been
11		analyzed as no new resources are applicable to the plan year. Cost increases to the
12		portfolio for capacity have been evaluated in PNM's 2017 IRP (Appendix P -
13		Reliability Analysis Study). That analysis ("Reliability Analysis Study") shows
14		that until the percentage of energy from PNM's generation portfolio is in the
15		range of 40%-50%, and load-following targets are increased, no new resources
16		are required for PNM to maintain the reliability metric of 0.2 LOLE (Loss of
17		Load Expectation), which is equivalent to 2 loss of load events in a 10 year span.
18		The 0.2 LOLE target is a recommended target for PNM's system as shown in the
19		Reliability Analysis Study. Per PNM's 2017 IRP Most Cost Effective Portfolio,
20		by 2020, PNM expects its renewable penetration percentage, including renewable
21		resources not used for RPS compliance, to be approximately 20%.

1 2		V. CASE NO. 18-00158-UT LIGHTNING DOCK REPORTING REQUIREMENTS
3	Q.	WHAT LIGHTNING DOCK REPORTING REQUIREMENTS FROM
4		CASE NO. 18-00158-UT DO YOU ADDRESS?
5	A.	I address the requirement to state the annual energy output by the geothermal
6		facility for the prior calendar year and the first three months of the following year.
7		Mr. Fallgren addresses the remaining Case No. 18-00158-UT reporting
8		requirements in his direct testimony.
9		
10	Q.	WHAT WAS LIGHTNING DOCK'S PRODUCTION IN 2018 AND THE
11		FIRST THREE MONTHS OF 2019?
12	A.	Lightning Dock's production for calendar year 2018 was 10,952 MWh. Lightning
13		Dock's production through March of 2019 was 17,109 MWh.
14		
15	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
16	A.	Yes it does.

GCG#525557

# SHANE GUTIERREZ EXPERIENCE AND QUALIFICATIONS

Address:	PNM Resources Inc. 414 Silver Ave. SW Albuquerque, NM 87102
Position:	Engineer IV
Education:	B.S., Electrical Engineering, New Mexico State University, 2001
Employment:	Public Service Company of New Mexico Engineer IV, Planning & Resources Dept., 2010 to Present 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.

GCG#525545

# BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

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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, Applicant.

Case No. 19-00\_\_\_-UT

# PUBLIC SERVICE COMPANY OF NEW MEXICO'S

# **RENEWABLE ENERGY ACT PLAN**

# FOR 2020

June 3, 2019

#### I. INTRODUCTION

Public Service Company of New Mexico ("PNM" of "Company") files this Renewable Energy Act Plan for 2020 ("2020 Plan" or "Plan") pursuant to the Renewable Energy Act ("REA"), NMSA 1978, §§ 62-16-1 to -10, as amended through 2019, and 17.9.572 NMAC ("Rule 572") of the rules of the New Mexico Public Regulation Commission ("NMPRC" or "Commission"). The Plan is supported by the testimony and exhibits of PNM witnesses Thomas G. Fallgren, Shane Gutierrez, Anthony Bueno, Thomas S. Baker, Michael J. Settlage and Stephanie Meeks.

# **II. SUMMARY OF 2020 PLAN PROCUREMENTS**

The 2020 Plan shows that PNM does not expect to fully comply with its Renewable Portfolio Standard ("RPS") requirements in 2020 using existing renewable energy resources previously approved by the Commission. PNM does, however, expect to comply with the 2021 RPS using existing resources, as well as an additional 140 MW wind project expected to be online at the end of 2020. The 2020 Plan proposes the following additions to PNM's portfolio of renewable resources:

- Approval of a procurement from La Joya Wind LLC through a purchase power agreement ("PPA") for the output from the 140 MW La Joya II wind farm in Torrance County at a purchase price of \$17.48 MWh; and
- Continuation of two distributed generation ("DG") programs, for systems up to 100 kW and for systems above 100 kW and up to 1 MW, that were approved by the Commission in previous PNM cases.

PNM will recover the costs of implementing the 2020 Plan, including costs for registering and retiring renewable energy credits ("REC") in the Western Renewable Energy Generation Information System ("WREGIS") through a reset rate for PNM's Renewable Energy Rider, Rider No. 36 effective January 1, 2020.

#### **III. RPS AND RCT CALCULATIONS**

The RPS and reasonable cost threshold ("RCT") calculations differ from those in previous PNM REA plans largely due to the impact of recent amendments to the REA contained in the Energy Transition Act ("ETA"). In the 2019 Plan, PNM projected that it would comply with the RPS in 2020. However, the ETA effectively increased the RPS requirement for 2020 because it removed the reductions to the RPS for certain large governmental and nongovernmental customers described in the former Sections 62-16-4(A)(2) and (3) of the REA. Even though the RPS remains 20% of retail sales for 2020, the effect of removing the large customer adjustment and the reduction for exempt customers means that the 2020 RPS increased from the 1,363,086 MWh PNM projected in the 2019 Plan to 1,671,822 MWh.

In addition to amending the way the RPS is calculated, the ETA also amended the calculation of the RCT. Section 28(E) of the ETA provides that the RCT is now defined as "an average annual levelized cost of sixty dollars (\$60.00) per megawatt-hour at the point of interconnection of the renewable energy resource with the transmission system, adjusted for inflation after 2020." Accordingly, the portfolio RCT presented in the 2019 Plan is no longer applicable to the 2020 plan year.

PNM's projected RPS requirements and the corresponding portfolio procurement costs and net compliance costs for 2020 and 2021 are shown in Table 1.

In summary, Table 1 shows the following:

• RPS Requirement: PNM's projected Net RPS Goal, after taking into account

adjustments for voluntary tariff sales is 1,671,822 MWh-RECs in 2020 and 1,644,067 MWh-

RECs in 2021.

• <u>RPS Compliance:</u> PNM is projected to be short of the RPS requirements in 2020,

but expects to meet the requirements in 2021.

• Resource Diversity: Although not required under the recent amendments to the

REA, PNM's renewable portfolio is diverse in terms of its resources.

RPS Requirement	2020
Annual Retail Sales (MWh)	8,805,689
(-) Voluntary Tariff Sales (MWh)	446,579
Net Annual Retail Sales (MWh)	8,359,110
RPS (%)	20%
RPS (MWh)	1,671,822
RPS Compliance & Diversity	2020
Portfolio RECs	1,384,657
REC Bank from Prior Year	218,554
Portfolio RECs plus REC Bank	1,603,212
Portfolio REC Position	(68,611)
Portfolio End of Year REC Bank	0
Portfolio Percent of Annual Sales (%)	18.2%
Portfolio Percent of RPS Goal (%)	91%
Wind Diversity (%)	64%
Solar Diversity (%)	24%
Other Diversity (%)	5%
DG Diversity (%)	7%
Portfolio Cost	2020
Portfolio Net Cost (\$)	\$29,131,923

# PNM 2020 RPS Plan- Table 1

#### **IV. EXISTING RENEWABLE ENERGY RESOURCES**

PNM's existing renewable energy portfolio consists of the following previously approved resources shown below. The costs associated with the resources include the cost of registering RECs with WREGIS of \$0.010 per MWh-REC.

#### **Existing Wind:**

• <u>New Mexico Wind Energy Center</u> ("NMWEC"): This is a 200 MW wind generation facility located in eastern New Mexico that is owned and operated by NextEra Energy Resources. Under a 25-year PPA, PNM purchases all of the energy and MWh-RECs produced by NMWEC, which on average has been about 515,000 MWh-RECs per year. The NMWEC was declared in-service in October 2003. As part of the approvals in Case No. 17-00129-UT, the NMWEC was re-powered and the term of the PPA was extended to 2045. A portion of the NMWEC output is used to supply energy and MWh-RECs for the Sky Blue program ("PNM Sky Blue") that PNM offers pursuant to Rule 572.18. MWh-RECs used for PNM Sky Blue sales are not used for RPS compliance, consistent with Rule 572.10(A). The projected number of NMWEC MWh-RECs available for RPS compliance, excluding those MWh-RECs retired for PNM Sky Blue, is 604,393 MWh-RECs in 2020 and 604,377 MWh-RECs in 2021. The gross cost for NMWEC generation and MWh-RECs is projected to be \$16.5 million in 2020 and 2021.

• <u>Red Mesa Wind Energy Center:</u> This is a 102 MW wind facility located in Cibola County, about 50 miles west of Albuquerque. PNM has a 20-year PPA to procure energy and MWh-RECs from this facility. Purchases under the PPA began in January 1, 2015. The energy is delivered to PNM at the Red Mesa station on the Kermac-West Mesa transmission line. Annual

production is expected to be 208,223 MWh in both 2020 and 2021 and the gross cost is projected to be \$6.4 million in 2020 and \$6.5 million in 2021.

#### Existing Solar:

Table 2 summarizes the PNM-Owned solar facilities previously approved by the NMPRC and included in the Plan. PNM anticipates that the generation from PNM's solar facilities will total 386,988 MWh in 2020 and 384,468 MWh in 2021. While the cost of the 2015 solar facilities is collected through base rates, rather than Rider 36, the Commission authorized PNM to use the MWh-RECs for RPS compliance. While the cost of the facilities themselves are recovered in base rates, not through Rider 36, the cost of registering and retiring the associated MWh-RECs in WREGIS is included the 2020 Rider 36 rate.

Year Constructed	Facility Size in MW	NMPRC Case Reference	Generation For RPS Co		Gross in \$ M	
			2020	2021	2020	2021
2006 or earlier	0.03 <sup>a</sup>	05-00356-UT	112	111	-\$0.0 <sup>b</sup>	-\$0.0 <sup>b</sup>
2011	22.5°	10-00077-UT	47,461	47,220	\$3.9	\$4.5
2013	20 <sup>d</sup>	12-00131-UT	46,295	46,063	\$4.0	\$4.0
2014	23	13-00183-UT	60,346	60,044	\$4.3	\$4.3
2015	40	14-00158-UT	92,775	92,080	\$0.0	\$0.0
2019	50	17-00129-UT	140,000	138,950	\$9.4	\$9.3
Totals						
			386,988	384,468	\$21.6	\$22.0

	<b>PNM</b>	2020	RPS	Plan-	Table 2
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a. MWH-RECs from these facilities are weighted at 3-to-1 for RPS compliance purposes.

b. Compliance cost each year is a savings of approximately \$1,000.

c. Includes a 0.5 MW solar generation/storage facility.

d. Excludes a 1.5 MW solar facility dedicated to supplying PNM's Sky Blue Program.

#### **Existing "Other":**

• <u>Geothermal</u>: The Dale Burgett Geothermal Facility (also known as the Lightning Dock geothermal facility) generates electricity using geothermal resources and is located in the Animas Valley in Hidalgo County, about 20 miles southwest of Lordsburg, New Mexico. PNM purchases the energy and associated MWh-RECs from this facility under a PPA with a term of 20 years. The plant went into service in January 2014. Based on projections by the plant operator, the amount of energy and MWh-RECs to be delivered to PNM from this facility is 77,000 MWh-RECs in both 2020 and 2021. The projected gross cost for MWh-RECs from this facility is approximately \$7.2 million in 2020 and \$7.4 million in 2021.

#### **Existing Distributed Generation:**

PNM purchases MWh-RECs generated by customer-sited DG solar energy systems under several Customer Solar Purchase Programs as described in Table 3. These include the Small Photovoltaic ("PV") REC Purchase Program ("Small PV Program"), Large Photovoltaic REC Purchase Program ("Large PV Program"), Solar REC Incentive Programs ("SIP"), the CSPP, and Capacity Reservation Program. In this plan, PNM requests approval of a capacity reservation program for solar DG facilities larger than 100 kW in 2020.

PNM projects that customer-sited solar DG facilities collectively will generate 108,053 MWh-RECs in 2020 and 107,168 MWh-RECs in 2021, for an annual gross cost of \$7.2 million in 2020 and \$6.6 million in 2021.

The current status of PNM's solar MWh-REC purchase programs is shown in Table 3:

# PNM 2020 RPS Plan- Table 3

PROGRAM: <u>Program Start:</u> <u>Term:</u> <u>Project Size:</u> <u>Participation:</u> <u>Installed Capacity:</u> <u>Program Status:</u>	<b>SMALL PV REC PURCHASE PROGRAM</b> Initially approved in Case No. 05-00356-UT. Implemented as of March 1, 2006. 12 years; first year contracts began expiring in 2018 Solar systems sized up to $10 \text{ kW}_{AC}$ 743 participants 3,404 kW <sub>AC</sub> Closed to new participants per the Final Order Partially Adopting Recommended Decision in Case No. 10-00037-UT, issued on August 31, 2010. The first 295 customers rolled off this rate after the termination date of 12/31/2018.
PROGRAM: <u>Program Start:</u> <u>Term:</u> <u>Project Size:</u> <u>Participation:</u> <u>Installed Capacity:</u> <u>Program Status:</u>	<ul> <li>LARGE PV REC PURCHASE PROGRAM</li> <li>Initially approved in Case No. 08-00221-UT. Implemented as of March 1, 2009.</li> <li>20 years; first year contracts begin expiring in 2029</li> <li>Solar systems sized above 10 kW<sub>AC</sub> up to 1 MW<sub>AC</sub></li> <li>71 participants</li> <li>7,990 kW<sub>AC</sub></li> <li>Closed to new participants per the Final Order Partially</li> <li>Adopting Recommended Decision in Case No. 10-00037-UT, issued on August 31, 2010.</li> </ul>
PROGRAM: <u>Program Start:</u> <u>Term:</u> <u>Term:</u> <u>Project Size:</u> <u>Participation:</u> <u>Installed Capacity:</u> <u>Program Status:</u>	<ul> <li>SOLAR REC INCENTIVE PROGRAM (INCLUDES INTERIM SIP) Initially approved in Case No. 10-00037-UT. Implemented as of November 6, 2010.</li> <li>12 years for systems up to 10kW<sub>AC</sub>; first year contracts begin expiring in 2022</li> <li>20 years for systems sized above 10kW<sub>AC</sub> up to 1 MW<sub>AC</sub>; first year contracts begin expiring in 2030</li> <li>Solar systems sized up to 1 MW<sub>AC</sub></li> <li>1,829 participants</li> <li>18,988 kW<sub>AC</sub></li> <li>Closed to new participants per the Final Order 11-00265 UT.</li> </ul>
PROGRAM: <u>Program Start:</u> <u>Term:</u> <u>Project Size:</u> <u>Participation:</u> <u>Installed Capacity:</u> <u>Program Status:</u>	CUSTOMER SOLAR REC PURCHASE PROGRAM Initially approved in Case No. 12-00131-UT. Implemented as of January 1, 2013. 8 years; first year contracts begin expiring in 2021 Solar systems sized up to 100 kW <sub>AC</sub> . 2,445 participants 13,151 kW <sub>AC</sub> Closed to new participants.

#### SOLAR REC PURCHASE PROGRAM (CASE NO 13-00390-UT STIPULATION) PROGRAM:

Program Start:	Initially approved in Case No. 13-00390-UT Stipulation.
Project Size:	Solar systems sized up to $10 \text{ kW}_{AC}$ (Small) and sized above 10
$kW_{AC}$ to 100 $kW_{AC}$ .	
Contract Term:	8 years. First contracts start to expire 1/1/2025
Participation:	265 participants
Installed Capacity:	2,496 kW <sub>AC</sub>
Pending:	25 applications are currently pending (as of 12/31/18)
Program Status:	3 year program, applications will be accepted through 2019.

# **PROGRAM:**

ROGRAM:	CAPACITY RESERVATION PROGRAM
Program Start:	Initially approved in Case No. 11-00265-UT.
Project Size:	Solar systems sized above 100 kW <sub>AC</sub> up to 1 MW <sub>AC</sub> .
Contract Term:	Until December 31, 2020.

# **2012 Capacity Reservation**

Program Start:	Approved in Case No. 11-00265-UT for calendar year 2012.
Participation:	0 participants
Installed Capacity:	0 kW <sub>AC</sub>
Pending:	0 applications are pending
Program Status:	Closed to new participants.

# **2013** Capacity Reservation

Program Start:	Approved in Case No. 12-00131-UT for calendar year 2013.
Participation:	1 participant
Installed Capacity:	$147 \text{ kW}_{AC}$
Program Status:	Closed to new participants.

# **2014 Capacity Reservation**

Program Start:	Approved in Case No. 13-00183-UT for calendar year 2014.
Participation:	4 participants
Installed Capacity:	1,336 kW <sub>AC</sub>
Pending:	0 applications are pending project completion and
	interconnection
Program Status:	Closed to new participants.

#### **2015 Capacity Reservation**

Program Start:	Approved in Case No. 14-00158-UT for calendar year 2015.
Participation:	6 participants
Installed Capacity:	1,243 kW <sub>AC</sub>
Pending:	0 applications are pending project completion and
	interconnection
Program Status:	Closed to new participants.

#### **2016 Capacity Reservation**

Program Start:	Approved in Case No. 15-00166-UT for calendar year 2016.
Participation:	7 participants
Installed Capacity:	854 kW <sub>AC</sub>
Pending:	0 applications are pending project completion and
	interconnection
Program Status:	Closed to new participants.

There was no 2017 Capacity Reservation Program per the Final Order in Case No. 16-00148-UT, due to RCT constraints.

#### **2018 Capacity Reservation**

Program Start:	Approved in Case No. 17-00129-UT for calendar year 2018.
Participation:	5 participants
Installed Capacity:	861 kW <sub>AC</sub>
Pending:	4 applications are pending project completion and
	interconnection (as of 12/31/18)
Program Status:	Closed to new participants.

#### 2019 Capacity Reservation (YTD)

Program Start:	Approved in Case No. 18-00158-UT for calendar year 2019.
Participation:	0 participants
Installed Capacity:	0 kW <sub>AC</sub>
Pending:	7 applications are pending project completion and
	interconnection (as of 5/17/19)
Program Status:	Closed to new participants.

#### V. NEW PROCUREMENTS

As a part of the 2020 Plan, PNM proposes a new procurement, a PPA with La Joya Wind

LLC for the output from the 140 MW La Joya II wind farm in Torrance County at a purchase price of \$17.48 MWh. PNM also proposes to continue two DG programs, for systems up to 100 kW and for systems above 100 kW and up to 1 MW, that were approved by the Commission in previous PNM cases.

#### PUBLIC SERVICE COMPANY OF NEW MEXICO RENEWABLE ENERGY ACT PLAN FOR 2020

#### **VI. RENEWABLE RIDER RATE FOR 2020**

In Case No. 12-00007-UT the Commission authorized PNM to implement Rider 36 to recover the costs of renewable resources approved by the Commission for RPS compliance, including the costs of WREGIS registration. In Case No. 15-00261-UT the Commission authorized PNM to continue using Rider 36. The Rider 36 rate is adjusted annually, effective each January 1<sup>st</sup> to account for new Commission-approved procurements, changes in estimated revenue requirements for previously-approved procurements and projections of kWh sales, and is "reconciled" or "trued-up" in a filing, made by February 28<sup>th</sup> annually, to account for actual revenue requirements and sales during the prior year and updated projections for the then current year. Costs that are recovered in base rates or through PNM's FPPCAC are not included in the Rider 36 revenue requirement, nor are revenue requirements for any facilities that are not yet in service.

PNM projects that the revenue requirement to be recovered during 2019 through Rider 36, including WREGIS fees, will be \$58,935,081. To recover these costs, PNM is requesting approval of a Rider 36 rate to be effective January 1, 2020 of \$0.0070504 per kWh.

RPS Requirement	2020	2021	L
Annual Retail Sales (MWh) <sup>1</sup>	8,805,689	9,098,400	1
(-) Voluntary Tariff Sales (MWh) <sup>2</sup>	446,579	878,062	2
Net Annual Retail Sales (MWh)	8,359,110	8,220,337	З
RPS (%)	20%	20%	4
RPS (MWh)	1,671,822	1,644,067	5
RPS Compliance & Diversity	2020	2021	6
Portfolio RECs	1,384,657	1,918,398	7
REC Bank from Prior Year <sup>3</sup>	218,554	0	8
Portfolio RECs plus REC Bank <sup>4</sup>	1,603,212	1,918,398	9
Portfolio REC Position <sup>5</sup>	(68,611)	274,331	1
Portfolio End of Year REC Bank <sup>6</sup>	0	205,720	1
Portfolio Percent of Annual Sales (%)	18.2%	20.0%	1
Portfolio Percent of RPS Goal (%)	91%	100%	_1
Wind Diversity (%)	64%	65%	1
Solar Diversity (%)	24%	23%	1
5 Other Diversity (%)	5%	5%	
DG Diversity (%)	7%	7%	1
Portfolio Cost	2020	2021	1
Portfolio Net Cost (\$) <sup>7</sup>	\$29,131,923	\$25,513,254	

#### <u>Notes</u>

<sup>1</sup> Includes annual retail sales and impacts due to energy efficiency and distributed generation

<sup>2</sup> Includes contribution to production sales to Data Center, Sky Blue and Solar Direct voluntary programs

<sup>3</sup> Excess RECs from 2019 used for 2020 compliance

<sup>4</sup> Line 7 + Line 8

<sup>5</sup> Line 9 minus Line 5

<sup>6</sup> Line 10 from prior year + Line 10 on-year

<sup>7</sup> Portfolio Net Cost is procurement cost plus avoided costs.

#### **PNM Exhibit SG-3**

2020	MWh RECs	Gross Cost \$/MWh-REC	Gross WREGIS Cost \$/MWh-REC	Gross Cost \$	Net Avoided Energy \$/MWh-REC	Net Cost \$/MWh-REC	Total Annual Net Cost \$	% RECS	% Cos
Utility Wind	NE03	\$/NIVIVII-ICEC	\$HMAN-ICEC	4	\$/NINAL-UFC		4	70 RE03	70 005
New Mexico Wind Energy Center <sup>1</sup>	604,393	\$27.25	\$0.010	\$16,475,752	(\$25.18)	\$2.08	\$1,259,486		
Red Mesa	208,223	\$30.83	\$0.005	\$6,419,710	(\$25.18)	\$5.65	\$1,177,464		
La Joya II	<u>0</u>			\$0	(+===+=)		<u>\$0</u>	1	
Total Utility Wind	812,616			\$22,895,462			\$2,436,950	50.7%	8.4%
Distributed Generation									
Small PV RECs	9,971	\$59.09	\$0.010	\$589,243	\$0	\$59.10	\$589,243		
Large PV RECs	15,881	\$150.00	\$0.010	\$2,382,307	\$0	\$150.01	\$2,382,307		
SIP RECs \$0.14 - \$0.05	36,936	\$85.37	\$0.010	\$3,153,565	\$0	\$85.38	\$3,153,565		
2012 DG Capacity Reservation	1,002	\$20.00	\$0.010	\$20,048	\$0	\$20.01	\$20,048		
2013 DG Capacity Reservation	4,382	\$20.00	\$0.010	\$87,681	\$0	\$20.01	\$87,681		
2014 DG Capacity Reservation	3,021	\$20.00	\$0.010	\$60,442	\$0	\$20.01	\$60,442		
2015 DG Capacity Reservation	552	\$20.00	\$0.010	\$11,054	\$0	\$20.01	\$11,054		
2016 DG Capacity Reservation	1,013	\$14.55	\$0.010	\$14,742	\$0	\$14.56	\$14,742		
2018 DG Capacity Reservation	217	\$2.50	\$0.010	\$544	\$0	\$2.51	\$544		
2019 DG Capacity Reservation	218	\$2.50	\$0.010	\$54 <b>7</b>	\$0	\$2.51	\$547	1	
2020 DG Capacity Reservation	1,918	\$2.50	\$0.010	\$4,814	\$0	\$2.51	\$4,814		
2021 DG Capacity Reservation	0 25,493	\$0 \$2.4.07	\$0.010 \$0.010	\$0	\$0 \$0	\$0.01 \$34.68	\$0		
CSPP RECs	25,493 7,450	\$34.67 \$2.50	\$0.010	\$884,101	\$0 \$0	\$34.68 \$2.51	\$884,101		
CSPP Extension RECs Total Distributed Generation	<u>7,450</u> 108,053	\$2.50	\$0.010	\$ <u>18,699</u> <b>\$7,227,787</b>	φU	φ2.5	<u>\$18,699</u>	6.7%	24.8%
Total Distributed Generation	108,055			\$7,227,787			\$7,227,787	0.7%	24.8%
Utility Solar									
Algodones/Aztec @3:1	112	\$0	\$0.010	\$1	(\$8.39)	(\$8.38)	(\$938)		
2011 PNM Solar PV 22.5 MW	47,461	\$83.04	\$0.010	\$3,941,665	(\$25.18)	\$57.88	\$2,746,794		
2013 PNM Solar PV 20 MW <sup>1</sup>	46,295	\$86.01	\$0.010	\$3,982,178	(\$25.18)	\$60.84	\$2,816,660		
2014 PNM Solar PV 23 MW	60,346	\$71.02	\$0.010	\$4,286,080	(\$25.18)	\$45.85	\$2,766,808		
2015 PNM Solar PV 40 MW	92, <b>7</b> 75	\$0	\$0.010	\$928	\$0	\$0.01	\$928		
2019 PNM Solar PV 50 MW	140,000	\$67	\$0.010	<u>\$9,373,657</u>	(\$25.18)	\$41.78	<u>\$5,849,001</u>	1	
Total Utility Solar	386,988			\$21,584,509			\$14,179,253	24.1%	48.7%
U <b>tility "Other"</b> Dale Burgett Geothermal PPA	77.000	\$93.51	\$0.005	\$7,200,318	(\$25.18)	\$68.33	\$5,261,757		
÷		\$55.51	40.000		(\$23.10)	<b>400.00</b>		4.00/	40 40/
Total Utility "Other"	77,000			\$7,200,318			\$5,261,757	4.8%	18.1%
REC Bank for RPS									
2019 Vintage RECs	218,554	-	\$0.005	\$ <u>1,093</u>	-	\$0.01	\$ <u>1,093</u>		
RECs Used for RPS	218,554			\$1,093			\$1,093	13.6%	0.0%
Total 2020 Resources <sup>2</sup>	1,603,212			\$58,934,252			\$29,131,923		
2020 Net Cost (\$)							\$29,131,923	100.0%	100.0%
Average Net Cost (\$/MWh-REC)							\$18.17		
Average Gross Cost (\$/MWh-REC)							\$36.76		
RPS Compliance Goal (%)							20.0%		
2020 RPS Compliance (%)							19.2%		
Votes:									

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#### PNM Exhibit SG-3

2021	RECs MWh	Gross Cost \$/MWh-REC	Gross WREGIS Cost \$/MWh-REC	Gross Cost \$	Net Avoided Energy \$/MWh-REC	Net Net Cost \$/MWh-REC	Total Annual Net Cost \$	% RECS	% Cos
Utility Wind	<u></u>								
New Mexico Wind Energy Center <sup>1</sup>	604,377	\$27.25	\$0.010	\$16,475,31 <b>7</b>	(\$25.00)	\$2.26	\$1,364,344		
Red Mesa	208,223	\$31.44	\$0.005	\$6,548,083	(\$25.00)	\$6.44	\$1,341,975		
La Joya II	537,163	\$17.48	\$0.005	\$9,392,295	(\$25.00)	(\$7.52)	(\$4,038,156)		
Total Utility Wind	1,349,763			\$32,415,695			(\$1,331,837)	78.8%	-5.2%
Distributed Generation									
Small PV RECs	0	\$0	\$0.010	\$0	\$0	\$0.01	\$0		
Large PV RECs	15,802	\$150.00	\$0.010	\$2,370,396	\$0	\$150.01	\$2,370,396		
SIP RECs \$0,14 - \$0.05	36,751	\$85.3 <b>7</b>	\$0.010	\$3,137,797	\$0	\$85.38	\$3,137,797		
2012 DG Capacity Reservation	99 <b>7</b>	\$20.00	\$0.010	\$19,948	\$0	\$20.01	\$19,948		
2013 DG Capacity Reservation	4,360	\$20.00	\$0.010	\$87,242	\$0	\$20.01	\$87,242		
2014 DG Capacity Reservation	3,005	\$20.00	\$0.010	\$60,139	\$0	\$20.01	\$60,139		
2015 DG Capacity Reservation	550	\$20.00	\$0.010	\$10,999	\$0	\$20.01	\$10,999		
2016 DG Capacity Reservation	1,008	\$14.55	\$0.010	\$14,668	\$0	\$14.56	\$14,668		
2018 DG Capacity Reservation	216	\$2.50	\$0.010	\$541	\$0	\$2.51	\$541		
2019 DG Capacity Reservation	217	\$2.50	\$0.010	\$544	\$0	\$2.51	\$544		
2020 DG Capacity Reservation	3,816	\$2.50	\$0.010	\$9,579	\$0	\$2,51	\$9,579		
2021 DG Capacity Reservation	1,918	\$2.50	\$0.010	\$4,814	\$0	\$2.51	\$4,814		
CSPP RECS	25,366	\$34.67	\$0.010	\$879,680	\$0	\$34.68	\$879,680		
CSPP Extension RECs	<u>13,163</u>	\$2.50	\$0.010	\$ <u>33,038</u>	\$0	\$2.51	\$33,038		
Total Distributed Generation	107,168			\$6,629,387			\$6,629,387	6.3%	26.0%
Utility Solar									
Algodones/Aztec @3:1	111	\$0	\$0.010	\$1	(\$8.33)	(\$8.32)	(\$922)		
2011 PNM Solar PV 22.5 MW	47,220	\$95.58	\$0.010	\$4,513,944	(\$25.00)	\$70,59	\$3,333,316		
2013 PNM Solar PV 20 MW <sup>1</sup>	46,063	\$86.01	\$0.010	\$3,962,267	(\$25.00)	\$61.02	\$2,810,571		
2014 PNM Solar PV 23 MW	60,044	\$71.02	\$0.010	\$4,264,650	(\$25.00)	\$46.02	\$2,763,395		
2015 PNM Solar PV 40 MW	92,080	\$0	\$0.010	\$921	\$0	\$0.01	\$921		
2019 PNM Solar PV 50 MW	138,950	\$67	\$0.010	\$9,303,355	(\$25.00)	\$41.95	\$5,829,249		
Total Utility Solar	384,468			\$22,045,137			\$14,736,530	22.4%	57.8%
Utility "Other"					<i>(</i> )		/ //-		
Dale Burgett Geothermal PPA	77,000	\$95.84	\$0.005	\$ <u>7,380,316</u>	(\$25.00)	\$70.85	\$ <u>5,455,119</u>		
Total Utility "Other"	77,000			\$7,380,316			\$5,455,119	4.5%	21.4%
REC Bank for RPS	(005 700)		<b>TO OOF</b>	(64,000)		<b>T</b> O 04	(04.000)		
2021 Vintage RECs	<u>(205,720)</u>		\$0.005	(\$1,029)		\$0.01	( <u>\$1,029</u> )		
RECs Used for RPS	(205,720)			(\$1,029)			(\$1,029)	-12.0%	0.0%
Total 2021 Resources	1,712,678			\$68,494,590			\$25,513,254		
2021 Net Cost (\$)							\$25,513,254	100.0%	100.0%
Average Net Cost (\$/MWh-REC) Average Gross Cost (\$/MWh-REC)							\$14.90 \$39.99		
RPS Compliance Goal (%)							20.0%		
2021 RPS Compliance (%) Notes:							20.8%		

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PNM Exhibit SG-3 Page 3 of 3

#### **BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

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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.

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Case No. 19-00\_\_\_-UT

#### **AFFIDAVIT**

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

SHANE GUTIERREZ, Engineer IV in Public Service Company of New Mexico's

Planning and Resources Department, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing Direct Testimony of Shane Gutierrez and it is true and correct based on my personal knowledge and belief.

SIGNED this 24 day of May, 2019.

ar SHANE GUTIERREZ

SUBSCRIBED AND SWORN to before me this  $\underline{\partial 4_{+}h}$  day of May, 2019.

NOTARY PUBLIC IN AND FOR THE STATE OF NEW MEXICO



 $GCG \ \# \ 525516$ 

#### NMPRC CASE NO. 19-00\_\_\_\_-UT INDEX TO THE DIRECT TESTIMONY OF THOMAS G. FALLGREN

#### WITNESS FOR <u>PUBLIC SERVICE COMPANY OF NEW MEXICO</u>

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AFFIDAVIT

1		I. INTRODUCTION AND PURPOSE
2	Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.
3	А.	My name is Thomas G. Fallgren. I am Vice President of Generation for Public
4		Service Company of New Mexico ("PNM" or "Company"). My business address
5		is Public Service Company of New Mexico, 2401 Aztec Road NE, Albuquerque,
6		New Mexico 87107.
7		
8	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND
9		PROFESSIONAL QUALIFICATIONS.
10	A.	I have overseen PNM's generation group since November 2016, first in the role of
11		Managing Director and since May 2017 as Vice President of Generation. From
12		July 2013 to November 2016 I was the Plant Manager for the San Juan
13		Generating Station. Before I came to PNM, I worked for various subsidiaries of
14		Xcel Energy as Plant Manager for the Tolk/Plant X Complex, a two site complex
15		consisting of two coal-fired units rated at 1,100 MW and four-unit natural gas-
16		fired steam plants rated at 442 MW, and the Black Dog Generating Facility, a
17		now-retired coal-fired generating station and a one-on-one combined cycle gas
18		plant. Prior to that I served in several management positions at the Sherburne
19		County Generating Station, a three unit 2,238 MW coal-fired facility. I also have
20		thirteen years of experience at the Monticello nuclear generating facility, where I
21		was previously qualified as a Senior Reactor Operator. I have been a registered
22		engineer in the State of Minnesota since 1994. I graduated with a Bachelor of

1		Mechanical Engineering degree with High Distinction from the University of
2		Minnesota. A copy of my Educational and Professional Summary is attached as
3		PNM Exhibit TGF-1.
4		
5	Q.	HAVE YOU PREVIOUSLY TESTIFIED IN PROCEEDINGS BEFORE
6		THE NEW MEXICO PUBLIC REGULATION COMMISSION
7		("COMMISSION")?
8	A.	Yes. Cases in which I have testified before the Commission are identified in PNM
9		Exhibit TGF-1.
10		
11	Q.	ARE YOU SPONSORING ANY OTHER EXHIBITS?
12	А.	Yes, I am sponsoring the Power Purchase Agreement ("PPA") for the La Joya
13		Wind Facility, Phase 2 ("La Joya II") provided as PNM Exhibit TGF-2. I am also
14		sponsoring PNM Exhibit TGF-3, which summarizes the renewable bids that PNM
15		considered in the selection of the La Joya II PPA.
16		
17	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
18	A.	My testimony addresses several matters:
19		1. I describe the approvals requested in this case and identify the other
20		witnesses who are presenting direct testimony on behalf of PNM;
21		2. I provide an overview of PNM's Renewable Energy Act Plan for 2020
22		("2020 Plan" or "Plan");

1		3. I provide an overview of the changes to the Renewable Energy Act,
2		NMSA 1978, §§ 62-16-1 to -10 ("REA"), that have been enacted since
3		PNM filed its last REA plan, in 2018;
4		4. I describe the proposed La Joya II procurement and explain why it is in the
5		public interest and should be approved for compliance with the 2021
6		Renewable Portfolio Standard ("RPS") requirements;
7		5. I describe the variances from Commission rules and orders PNM is
8		seeking in this case; and
9		6. I respond to certain reporting requirements PNM agreed to in Case No.
10		18-00158-UT with regard to the Lightning Dock Geothermal Facility
11		("Lightning Dock").
12		
13	Q.	WHAT COMMISSION APPROVALS ARE PNM REQUESTING IN THIS
14		CASE?
15	А.	PNM is requesting the following:
16		1. Approval of PNM's 2020 Plan, which includes one new procurement: 140
17		MW of wind energy, at a price of \$17.48/ MWh, pursuant to the PPA with
18		La Joya Wind LLC ("La Joya Wind"), a subsidiary of Avangrid
19		Renewables, LLC ("Avangrid");
20		2. Approval of an extension of PNM's distributed generation ("DG")
21		programs;
22		2 Approval of the 2020 conscitu reconvertion program for color DG facilities
		3. Approval of the 2020 capacity reservation program for solar DG facilities

1		4. Approval to reset the rate for PNM's Renewable Energy Rider, Rider No.
2		36 ("Rider 36"), effective January 1, 2020, for recovery of RPS
3		procurement costs anticipated to be incurred during 2020, including costs
4		for registering and retiring renewable energy certificates ("RECs") in the
5		Western Renewable Energy Generation Information System ("WREGIS"),
6		and a new rate design for Rider 36;
7		5. Approval to modify PNM's Fuel and Purchased Power Cost Adjustment
8		Clause, Rider No. 23 ("FPPCAC"), to address recent amendments to the
9		REA; and
10		6. Approval of certain variances from Commission rules.
11		
11 12	Q.	PLEASE INTRODUCE THE OTHER PNM WITNESSES WHO ARE
	Q.	PLEASE INTRODUCE THE OTHER PNM WITNESSES WHO ARE PRESENTING DIRECT TESTIMONY IN THIS CASE.
12	Q. A.	
12 13		PRESENTING DIRECT TESTIMONY IN THIS CASE.
12 13 14		PRESENTING DIRECT TESTIMONY IN THIS CASE. The following witnesses are filing direct testimony on behalf of PNM:
12 13 14 15		<ul> <li>PRESENTING DIRECT TESTIMONY IN THIS CASE.</li> <li>The following witnesses are filing direct testimony on behalf of PNM:</li> <li>Mr. Shane Gutierrez, Engineer IV, provides the RPS projections for the</li> </ul>
12 13 14 15 16		<ul> <li>PRESENTING DIRECT TESTIMONY IN THIS CASE.</li> <li>The following witnesses are filing direct testimony on behalf of PNM:</li> <li>Mr. Shane Gutierrez, Engineer IV, provides the RPS projections for the 2020 and 2021 plan years, and explains how these projections have</li> </ul>
12 13 14 15 16 17		<ul> <li>PRESENTING DIRECT TESTIMONY IN THIS CASE.</li> <li>The following witnesses are filing direct testimony on behalf of PNM:</li> <li>Mr. Shane Gutierrez, Engineer IV, provides the RPS projections for the 2020 and 2021 plan years, and explains how these projections have changed from previous PNM renewable plans as a result of the recent</li> </ul>
12 13 14 15 16 17 18		<ul> <li>PRESENTING DIRECT TESTIMONY IN THIS CASE.</li> <li>The following witnesses are filing direct testimony on behalf of PNM:</li> <li>Mr. Shane Gutierrez, Engineer IV, provides the RPS projections for the 2020 and 2021 plan years, and explains how these projections have changed from previous PNM renewable plans as a result of the recent amendments to the REA. Mr. Gutierrez explains the shortfall PNM</li> </ul>

1		• Mr. Anthony Bueno, Manager, Retail Renewable Energy, presents PNM's
2		proposed changes to the small DG programs and the Capacity Reservation
3		Program for solar DG facilities larger than 100 kW;
4		• Mr. Thomas S. Baker, Manager, Cost of Service, presents the revenue
5		requirements that supports PNM's proposed new rate for Rider 36.
6		• Mr. Michael J. Settlage, Lead Pricing Analyst, presents PNM's proposed
7		new rate for Rider 36, to be effective as of January 1, 2020, and explains
8		the changes in the Rider 36 rate design resulting from the recent
9		amendments to the REA.
10		• Ms. Stephanie Meeks, Manager, Utility Margin, explains the relationship
11		between Rider 36 and PNM's FPPCAC, and presents PNM's proposed
12		changes to its FPPCAC Rider No. 23 as a result of the recent amendments
13		to the REA.
14		
15		II. EFFECT OF RECENT REA AMENDMENTS ON PNM'S 2020 PLAN
16	Q.	PLEASE DESCRIBE THE RECENT AMENDMENTS TO THE REA.
17	A.	On March 22, 2019, the Governor signed Senate Bill 489, also referred to as the
18		Energy Transition Act or ETA, into law. The ETA amends the REA in two
19		significant respects: 1) it increases the RPS beginning in 2025; and 2) eliminates
20		the large customer adjustment and the exemption for certain governmental
21		customers. As Mr. Gutierrez explains in his direct testimony, elimination of the
22		large customer cap and exemption has the effect of increasing PNM's RPS

1		requirement for 2020. Mr. Settlage addresses how the elimination of the large
2		customer cap and exemption affects the Rider 36 rate design. Ms. Meeks
3		addresses how the elimination of the large customer cap and exemption affects the
4		FPPCAC.
5		
6	Q.	IS PNM FILING ITS 2020 PLAN UNDER THE ETA?
7	A.	Yes. Because the ETA will be in effect on January 1, 2020, when PNM
8		implements the 2020 Plan, PNM is filing the Plan under the ETA. However,
9		should the Commission find that NMAC 17.9.572 ("Rule 572"), and not the ETA
10		applies to the 2020 Plan, PNM requests a variance from Rule 572. I address this
11		request for a variance in more detail below. However, I want to note here that,
12		even if the Commission determines that the ETA does not apply to PNM's RPS
13		compliance in 2020, the Commission should still approve the new wind
14		procurement because it is necessary to meet the RPS in 2021. Due to the amount
15		of time necessary to construct La Joya II, the procurement must be approved in
16		this case regardless of whether the ETA applies to the 2020 plan year.
17		
18	<b>Q</b> .	HOW SPECIFICALLY DOES THE ETA AFFECT THE RPS?

A. Prior to the ETA, the REA provided that renewable energy shall comprise no less
 than twenty percent of each public utility's retail sales by 2020 and did not
 provide an increased RPS beyond 2020. The ETA establishes the following
 increased RPS requirements for public utilities in New Mexico:

1		• No later than January 1, 2025, renewable energy shall comprise no less
2		than forty percent of each public utility's total retail sales to New Mexico
3		customers;
4		• No later than January 1, 2030, renewable energy shall comprise no less
5		than fifty percent of each public utility's total retail sales to New Mexico
6		customers;
7		• No later than January 1, 2040, renewable energy shall comprise no less
8		than eighty percent of all retail sales of electricity in New Mexico,
9		provided that compliance with this standard until December 31, 2047,
10		shall not require the public utility to displace zero carbon resources in the
11		utility's generation portfolio on the effective date of the ETA; and
12		• No later than January 1, 2045, zero carbon resources shall supply one
13		hundred percent of all retail sales of electricity in New Mexico.
14		
15	Q.	WHAT OTHER CHANGES TO THE REA AFFECT PNM'S PLAN?
16	A.	As I mentioned above, the elimination of the large customer cap and exemption
17		for certain governmental customers is the second major change to the REA; Mr.
18		Gutierrez and Mr. Settlage address the impact of this elimination on PNM's 2020
19		RPS Plan in their testimonies.
20		
21		The ETA also changed the definition of "reasonable cost threshold" or RCT.
22		Section 28(E) of the ETA defines the RCT as "an average annual levelized cost of
23		sixty (\$60.00) per megawatt-hour at the point of interconnection of the renewable

1		energy resources with the transmission system, adjusted for inflation after 2020."	
2		This is in contrast to Rule 572, which calculates the RCT on a whole portfolio	
3		basis.	
4			
5		Additionally, the ETA added the requirement that the renewable energy for which	
6		the utility plans to retire RECs for RPS compliance be delivered to the public	
7		utility and assigned to the public utility's New Mexico customers, and eliminated	
8		diversity requirements for RPS resources.	
9			
10	Q.	IS PNM REQUESTING VARIANCES FROM COMMISSION RULES	
11		AND PRIOR COMMISSION ORDERS AS A PART OF THIS FILING?	
12	А.	Yes. PNM is requesting variances from certain requirements of Rule 572 and the	
13		Final Order in Case No. 14-00158-UT that are inconsistent with recently adopted	
14		amendments to the REA. PNM is also requesting a variance from the data filing	
15		requirements of 17.9.530 NMAC ("Rule 530"). Please see Section V below for	
16		further discussion of the requested variances.	
17			
18		III. ELEMENTS OF THE 2020 PLAN	
19	Q.	PLEASE DESCRIBE PNM'S 2020 PLAN.	
20	А.	The 2020 Plan, which describes how the Company intends to meet the RPS	
21		requirement in 2020, is attached to Mr. Gutierrez's Direct Testimony. In PNM's	
22		last RPS case, Case 18-00158-UT, PNM projected meeting the RPS in 2020.	

1	However, as Mr. Gutierrez shows, due to the changes in the RPS calculation
2	resulting from the elimination of the large customer cap and exemptions, PNM
3	projects that it will not be able to meet the RPS in 2020. Approval of the La Joya
4	II PPA will allow PNM to meet the RPS in 2021.
5	
6	PNM's 2020 Plan projects to be short of the 2020 RPS requirement by 68,611
7	RECs. Of course, the actual surplus or deficit of RECs will depend on actual
8	generation levels at PNM's various renewable facilities, actual retail sales, and
9	participation in PNM's voluntary renewable energy programs. As shown by Mr.
10	Gutierrez, PNM is projecting that it will have more than sufficient RECs
11	generated from existing resources, with the addition of the 140 MW of La Joya II,
12	to meet the RPS requirements for 2021. PNM plans to retire excess RECs
13	generated in 2021 to "make up" its 2020 compliance.
14	
15	The Plan also proposes a change in the Rider 36 rate effective January 1, 2020.
16	This change reflects the recovery of the costs of renewable procurements during
17	2020, as well as the costs associated with the registration and retirement of RECs
18	through WREGIS. The costs that make up the Rider 36 rate are discussed in Mr.
19	Baker's Direct Testimony, and the derivation of the new Rider 36 rate is
20	explained by Mr. Settlage.
21	

1		IV. LA JOYA II PROCUREMENT
2	Q.	PLEASE DESCRIBE THE LA JOYA II FACILITY.
3	А.	La Joya II is a new 140 MW wind facility that will be located 18 miles east of
4		Estancia, New Mexico in Torrance County. A site map is included in Exhibit A-2
5		to the PPA and additional site descriptions are provided in Exhibit A-1 to the PPA
6		(provided as PNM Exhibit TGF-2). Construction is anticipated to begin upon
7		Commission approval of the procurement in this case. The Expected Commercial
8		Operation Date ("COD") for the facility is December 31, 2020.
9		
10	Q.	WHO WILL CONSTRUCT AND OWN LA JOYA II?
11	A.	La Joya Wind, which is a wholly owned subsidiary of Avangrid. Avangrid owns
12		and operates 7.1 gigawatts of electricity capacity, primarily through wind power,
13		including a power purchase agreement with PNM for 166 MW of wind energy
14		from La Joya I.
15		
16	Q.	PLEASE DESCRIBE THE TERM OF THE LA JOYA II PPA INCLUDING
17		ANY OPTIONS TO EXTEND.
18	А.	The term of the PPA is twenty years with no option to extend.
19		

1	Q.	WHAT IS THE NAMEPLATE CAPACITY OF LA JOYA II AND THE		
2		AMOUNT OF ENERGY PNM WILL PURCHASE UNDER THE PPA?		
3	А.	The nameplate capacity of the La Joya II facility is 140 MW and the project is		
4		expected to produce between 530,000 and 550,000 MWh of energy per year.		
5		Under Section 3.1 of the PPA, PNM is required to purchase net energy generated		
6		by the facility and delivered to PNM beginning on the COD.		
7				
8	Q.	PLEASE DESCRIBE THE PRICE PNM WILL PAY UNDER THE LA		
9		JOYA II PPA.		
10	A.	Under the terms of the agreement, PNM will pay \$17.48/MWh for the twenty-		
11		year term if COD occurs on or before December 31, 2020.		
12				
13	Q.	DOES THE PPA OBLIGATE PNM TO PAY ANY FIXED OR VARIABLE		
14		ADMINISTRATIVE COSTS, TRANSACTIONAL, OPERATION AND		
15		MAINTENANCE COSTS, OR ANY COSTS OTHER THAN FOR		
16		DELIVERED ENERGY?		
17	A.	No.		
18				
19	Q.	HOW ARE CURTAILMENTS HANDLED UNDER THE PPA?		
20	А.	PNM has the right to curtail wind production under the PPA for economic and for		
21		reliability reasons. Any curtailments for economic reasons would require PNM to		
22		make payment for the energy that would have been delivered (Deemed Energy) at		
23		the contract price of \$17.48 /MWh plus the Production Tax Credit ("PTC")		

1		compensation amount. These curtailment rights are discussed in Article 4 of the
2		PPA.
3		
4	Q.	ARE THERE CONDITIONS PRECEDENT TO THE PPA TAKING
5		EFFECT?
6	A.	Yes, as discussed in Article 6 of the PPA, there are three conditions precedent.
7		
8		First, the PPA is subject to the approval of the Board of Directors of PNM. This
9		approval was obtained on April 6, 2019.
10		
11		Second, the PPA is subject to Commission approval. The pricing terms in the
12		PPA are subject to change based on the date the Commission approves the
13		procurement. If the Commission approves the procurement by February 15, 2020,
14		the purchase price will be \$17.48/MWh; if the Commission approves the
15		procurement after February 15, 2020 but on or before September 1, 2020, the
16		price increases to \$20.67/MWh due to the fact that the COD date would move
17		into 2021 thereby reducing part of the PTCs available for this project; and if no
18		Commission approval is received after September 1, 2020, the PPA does not
19		provide a price term but the parties would meet to discuss possible options,
20		including termination of the PPA.
21		
22		Third, the PPA is subject to available transmission capability on the PNM system.
23		The La Joya II PPA requires the use of the BB2 transmission line, for which PNM

requested and received a certificate of public convenience and necessity in Case
 No. 18-00243-UT.

3

# 4 Q. PLEASE DESCRIBE THE PPA PROVISIONS RELATING TO DEFAULT 5 AND NON-PERFORMANCE.

Default by La Joya Wind is addressed in Article 12 of the PPA, including the cure 6 Α. 7 period for each type of default and the remedies. A default becomes an Event of 8 Default if not cured within the applicable cure period, or immediately if no cure 9 period is specified. Potential Events of Default by La Joya Wind under the PPA 10 include: (1) the dissolution, or liquidation or abandonment of the facility; (2) 11 assignment of the PPA except as permitted in the PPA; (3) bankruptcy or 12 insolvency; (4) the sale of energy by La Joya II to a third-party or diversion by La Joya II of any energy, RECs or ancillary services; (5) fraud, waste, tampering 13 14 with PNM facilities or other material misrepresentation or misconduct under the 15 PPA; (6) failure to make any payment when due; (7) failure to register with 16 WREGIS and failure to transfer RECs; (8) failure to maintain security, and (9) 17 failure to maintain the interconnection to the PNM system.

18

Upon the occurrence of an Event of Default by La Joya Wind, PNM may collect
damages incurred prior to the termination date as a result of the Event of Default,
as well as terminate the PPA and receive a termination payment. Such damages
would include the cost of replacement energy for the renewable energy that La
Joya II failed to deliver under the terms of the PPA.

2 Article 12 also defines Events of Default related to non-performance of the La Joya II facility. Performance-related Events of Default include: (1) failure to 3 achieve the COD on or prior to the Guaranteed Start Date;<sup>1</sup> (2) the failure of the 4 facility to maintain, after the first anniversary of the COD, an availability 5 percentage of at least seventy-five percent (75%) over two consecutive 6 7 Commercial Operation Years; and (3) the failure of the facility to maintain an 8 availability percentage of ninety percent (90%) over any Commercial Operation 9 Year. 10 11 La Joya Wind is liable for liquidated damages for non-performance. Article 3.7 12 provides that, if the COD has not occurred by the Expected Commercial 13 Operation Date, La Joya Wind will pay PNM liquidated damages in an amount equal to two hundred dollars (\$200) per day for each MW of capacity that is 14 delayed. These delay liquidated damages are capped at thirty-five thousand 15 16 dollars (\$35,000) per MW of capacity that is delayed. La Joya Wind also must 17 pay liquidated damages if it has not caused all delayed capacity to achieve 18 Commercial Operation by the Guaranteed Start Date in the amount of three hundred fifty thousand dollars (\$350,000) per MW of delayed capacity. 19

<sup>20</sup> 

<sup>&</sup>lt;sup>1</sup> Guaranteed Start Date is defined as one hundred eighty days after the Expected Commercial Operation Date. La Joya II PPA, § 3.1.

1	Q.	ARE THERE ANY APPROVALS OR PERMITS REQUIRED TO
2		CONSTRUCT AND OPERATE THE LA JOYA II FACILITY?
3	А.	Yes. The required permits, which La Joya Wind is responsible for obtaining, are
4		listed in Exhibit E to the La Joya II PPA which is attached as PNM Exhibit TGF-
5		2.
6		
7	Q.	DOES THE PPA PROVIDE FOR PNM ACQUIRING OWNERSHIP OF
8		THE LA JOYA II FACILITY DURING OR AFTER THE TERM OF THE
9		AGREEMENT?
10	A.	No. PNM has no purchase option under the La Joya II PPA.
11		
12	Q.	HOW WILL THE ENERGY FROM LA JOYA II BE INTERCONNECTED
13		ON PNM'S SYSTEM?
14	А.	The La Joya II facility will be interconnected to a new station, the Avangrid-
15		Torrance 345 kV station, which will loop in the existing Avangrid El Cabo station
16		that is currently interconnected to PNM's Clines Corners 345 kV station. Energy
17		from La Joya II will be transmitted to the PNM load centers utilizing the BB2
18		transmission line that is expected to be in-service by November 2020.
19		
20	Q.	HOW WILL PNM ACQUIRE TRANSMISSION SERVICE TO DELIVER
21		LA JOYA II ENERGY TO RETAIL CUSTOMERS?
22	A.	Because the La Joya II energy is a retail resource, its energy is delivered as part
23		of PNM's retail network transmission service. Similar to the La Joya I PPA, the

1		transmission service is re-designated to retail network transmission service from			
2		point-to-point service under Avangrid's Transmission Service Agreement			
3		("TSA"), which provide for a specific receipt and delivery from Clines Corners			
4		station to Four Corners switchyard. PNM will take delivery of the renewable			
5		energy at Clines Corners station and Avangrid's TSAs will be modified to reflect			
6		this retail delivery once the BB2 Line is in service.			
7					
8	Q.	WHAT ARE THE TRANSMISSION COSTS TO RECEIVE THE POWER			
9		FROM THE LA JOYA II FACILITY?			
10	А.	The BB2 project, which will cost approximately \$85 million, is the only			
11		transmission system network upgrade needed to bring the power from La Joya II			
12		to PNM's customers. The Commission issued a CCN for the BB2 Project in Case			
13		No. 18-00243-UT.			
14					
15	Q.	HOW WILL THE LA JOYA II PROCUREMENT IMPACT			
16		<b>RATEMAKING TREATMENT FOR THE BB2 PROJECT?</b>			
17	А.	The La Joya II procurement will be reflected in the allocation of the network			
18		transmission system between the retail and wholesale transmission jurisdictions.			
19		In Case No. 18-00243-UT the Commission ordered that "PNM should not be			
20		allowed to recover any cost of the Proposed BB2 Project from retail ratepayers			
21		other than Facebook unless and until otherwise ordered by the Commission," and			
22		ordered a direct reimbursement from Facebook that does not properly reflect use			
23		of the transmission capacity for a retail system resource. Recommended			

1	Decision, Finding of Fact and Conclusion of Law 8; Recommended Decision at
2	11. The Commission's formula for calculating the direct cost assignment was
3	based on the premise that the BB2 project was solely necessary to bring the power
4	from the 166 MW La Joya I wind facility to a single PNM retail customer. PNM
5	entered into the La Joya I PPA pursuant to its Special Service Agreement with a
6	Facebook, Inc. subsidiary, Greater Kudu, LLC ("GKL"). The Commission
7	approved the La Joya I PPA as a retail system resource in Case No. 18-00009-UT.
8	
9	Because the La Joya II PPA, like the La Joya I PPA, is a retail resource and will
10	be delivered through PNM's retail network transmission service, the transmission
11	costs will be included in the jurisdictional allocation of the transmission system
12	between the retail and wholesale jurisdictions. If the Commission does not amend
13	the direct reimbursement ratemaking treatment in Case 18-00243-UT, retail
14	customers other than GKL, who will receive all the benefits of the La Joya II
15	PPA, will not pay any of the related transmission costs. In essence, unless
16	modified, the ratemaking treatment ordered in Case No. 18-00243-UT would
17	result in retail customers beside GKL receiving a substantial transmission cost
18	subsidy.
19	

Q. HOW WILL PNM RECOVER THE COSTS OF THE TRANSMISSION
UPGRADES NECESSARY TO BRING LA JOYA II'S POWER TO PNM'S
CUSTOMERS IN LIGHT OF THE RATEMAKING TREATMENT
ORDERED IN CASE NO. 18-00243-UT?

1 A. The retail transmission cost will be recovered in base rates as part of a general 2 rate case. The ratemaking treatment ordered in Case No. 18-00243-UT would 3 need to be modified so that the costs of the BB2 Project are recovered as part of 4 the transmission system allocations between retail and wholesale jurisdictions. 5 Otherwise, retail customers would not be paying the proper amount for delivery 6 of retail energy. This is because the Federal Energy Regulatory Commission 7 ("FERC") allocates network upgrade costs, such as the costs of the BB2 project, 8 to transmission customers based on their usage of the entire PNM transmission 9 system.

10

11

#### **Q**. HOW DID PNM SELECT THE LA JOYA II PPA?

12 A. Due to the short duration of time to solicit and procure additional renewables to meet the RPS after passage of the ETA, PNM utilized the bids in response to the 13 14 October 2017 all resource request for proposals ("RFP") for San Juan Generating 15 Station replacement resources. This all resource RFP provided for renewables 16 introduced early to allow for utilization of the available Investment Tax Credits or 17 the Production Tax Credits. These bids were reviewed for renewable resources 18 that could provide Commercial Operation Date prior to Dec 2020, allowing PNM 19 to meet the RPS in 2021. PNM Exhibit TGF-3 summarizes the renewable bids 20 PNM received. Since the resource needs for the RPS are to supply renewable 21 energy credits, these resources can be compared directly based on total evaluated 22 delivered energy cost. La Joya Wind bid two options that would have enabled 23 PNM to meet the RPS in 2021, a 160 MW project and a 140 MW wind resource.

1		The 160 MW project was not selected as the curtailment hours associated with
2		this project were anticipated to be higher, requiring PNM customers to pay for
3		additional energy that was not delivered for useful credit. In addition, the 140
4		MW La Joya II option provided the necessary deficit of energy required to
5		achieve the new RPS requirements.
6		
7	Q.	HOW DOES THE COST OF THE LA JOYA II PPA COMPARE TO THE
/	v٠	
8	ų.	COST OF RECENTLY ADDED PNM RENEWABLES?
	<u>д</u> . А.	
8	_	COST OF RECENTLY ADDED PNM RENEWABLES?
8 9	_	<b>COST OF RECENTLY ADDED PNM RENEWABLES?</b> The cost of the La Joya II PPA is lower than recently added renewable resources.

12

13

# PNM Table TGF-1 — PNM Resources Comparison

Capacity	Resource	Cost	Case
	Туре		
50 MW	Solar	\$29.98/MWhr	18-00009-UT
50 MW	Wind	\$28.12/MWhr	18-00009-UT
166 MW	Wind	\$27.92/MWhr	18-00009- UT
140 MW	Wind	\$17.48/MWhr	Current Case

1	Q.	DOES THE LA JOYA II PPA EXCEED THE REASONABLE COST	
2		THRESHOLD AS DEFINED BY THE ETA?	
3	А.	No. As defined by the ETA, the RCT is as "an average annual levelized cost of	
4		sixty (\$60.00) per megawatt-hour at the point of interconnection of the renewable	
5		energy resources with the transmission system, adjusted for inflation after 2020."	
6		The cost of the proposed PPA is well below the RCT.	
7			
8		V. REQUESTED VARIANCES	
9	Q.	PLEASE DESCRIBE PNM'S REQUESTED VARIANCES FROM	
10		SECTIONS OF COMMISSION RULE 572.	
11	А.	As discussed above, some sections of the current version of Rule 572 are	
12		inconsistent with recent amendments to the REA contained in the ETA. Should	
13		the Commission find that those sections of Rule 572, and not the ETA, apply to	
14		this case, PNM requests a variance from the following sections:	
15		• Sections 9.572.7(C), 9.572.12, and 9.572.14(C) NMAC, which provide a	
16		calculation of the RCT that is inconsistent with the RCT described at	
17		Sections 28(E) and 29(E) of the ETA, equal to "an average annual	
18		levelized cost of sixty dollars (\$60.00)" per MWh;	
19		• Sections 9.572.7(G) and 9.572.11 NMAC, which require utilities to	
20		diversify the types of renewable energy resources in their portfolios	
21		consistent with Section of the 62-16-4(A)(4) of the REA. Section 29 of	
22		the ETA deletes the diversity mandate from the REA;	

1	• Sections 9.572.7(L) and (M), 9.572.12, and 9.572	.16 NMAC, which
2	2 provide for adjustments to the RPS and RCT	for certain exempt
3	3 governmental and large capped non-governmental c	ustomers consistent
4	4 with Section $62-16-4(A)(2)$ and (3) of the REA. Sec	ction 29 of the ETA
5	5 deletes the provisions of the REA relating to exempt	customers and large
6	6 capped customers; and	
7	• Section 9.572.17(C)(2) NMAC, which provides that	RECs used for RPS
8	8 compliance "do not require physical delivery of	the electric energy
9	9 represented by the certificate to a public utility," con	sistent with Section
10	0 62-16-5(B)(1) of the REA. Section 29(A) of the	e ETA amends this
11	1 requirement, and provides that a "public utility shall	meet the renewable
12	2 portfolio standard requirements as demonstrated	by its retirement of
13	3 renewable energy certificates; provided that the as	ssociated renewable
14	4 energy is delivered to the public utility and assigned t	to the public utility's

16

15

#### 17 Q. WHY IS PNM REQUESTING A VARIANCE FROM THESE SECTIONS?

New Mexico customers."

A. PNM is requesting a variance so that the amendments to the REA contained in the ETA will apply to this case. The variance is necessary only if the Commission finds that the ETA does not otherwise apply. Because REA plans are filed yearly, if the variance is not granted, then the requirements described in the ETA would not apply to PNM's REA compliance until 2021. To avoid this lengthy delay in implementing the legislature's amendments to the ETA, the

Commission should apply the ETA to this case and grant any necessary variances
to do so.
As I explained above, the Commission should approve the La Joya II wind
procurement regardless of whether the recent amendments to the REA apply to
this case because the procurement is necessary to meet the 2021 RPS. If the
Commission decides that the ETA does not apply to this case, the effect will be

8 that the changes to Rider 36 and the FPPCAC required by the ETA, which are
9 described in Mr. Settlage's and Ms. Meeks's testimonies, would not take effect
10 until 2021.

11

# Q. PLEASE EXPLAIN PNM'S REQUEST FOR A VARIANCE FROM THE REQUIREMENT TO PURCHASE MAKE-UP RECS FOR ANY SHORTFALL IN MEETING THE RPS.

15 Pursuant to Paragraph 7 of the Stipulation approved by the Commission in Case A. 16 No. 14-00158-UT, PNM is required to annually calculate the prior year's RPS and 17 RCT for the Annual Renewable Energy Portfolio Report. If there are insufficient 18 RECs to meet the applicable RPS quantity requirement (without regard to 19 diversity), PNM is required to acquire additional stand-alone RECs. These RECs 20 are to be procured at the lowest price available through a solicitation of offers, 21 without the need for an RFP, at a price not to exceed the cost of stand-alone RECs 22 of the same type most recently approved by the Commission. This procurement is

1		not required if it would cause PNM to exceed the RCT during the period for
2		which the REC procurement would apply.
3		
4		PNM is requesting a permanent variance from this requirement due to Section 29
5		of the ETA, which revises Section 62-16-4 of the REA. The relevant portion of
6		Section 29 states:
7 8 9 10 11 12 13		A public utility shall meet the renewable portfolio standard requirements, as provided in this section, to include the renewable energy in in its electric energy supply portfolio as demonstrated by its retirement of renewable energy certificates; provided that the associated renewable energy is delivered to the public utility and assigned to the public utility's New Mexico customers.
14		The requirement that RECs retired for RPS compliance be associated with
15		renewable energy delivered to PNM customers severely limits PNM's ability to
16		purchase market RECs to make-up for any possible shortfalls and makes this
17		requirement impractical. PNM is not aware of any unbundled RECs it could
18		procure that would satisfy this requirement.
19		
20	Q.	IS PNM REQUESTING A VARIANCE FROM MEETING THE 2020 RPS?
21	A.	PNM is requesting a variance from the requirement in Rule 572.10(B) that PNM
22		meet a 20% RPS in 2020. As described above, due to the limited amount of time
23		PNM had to acquire new resources after passage of the ETA, PNM is unable to
24		comply with the 20% RPS in 2020 due to the new method of calculating the RPS
25		described in the ETA. PNM plans to make up its 2020 RPS shortfall through
26		excess RECs generated in 2021 and beyond.

1	Q.	WHY IS PNM REQUESTING A VARIANCE FROM THE DATA FILING
2		<b>REQUIREMENTS OF RULE 530?</b>
3	А.	Rule 530 requires the filing of extensive data schedules that are unnecessary for
4		review and approval of the Rider 36 rate PNM seeks approval of here. PNM is
5		requesting that the Commission grant a variance from the data filing requirements
6		of Rule 530 to the extent that it is required. The Commission has granted similar
7		variances from Rule 530 in the past. E.g., Order Granting Variances, Case No.
8		12-00007-UT (February 3, 2012).
9		
$10 \\ 11$		VI. LIGHTNING DOCK REPORTING REQUIREMENTS PURSUANT TO THE CASE NO. 18-00158-UT FINAL ORDER
12	Q.	PLEASE DESCRIBE PNM'S REPORTING REQUIREMENTS RELATED
13		TO LIGHTNING DOCK'S DALE BURGETT GEOTHERMAL
14		FACILITY?
15	A.	
16		In Case No. 18-00158-UT, the Commission approved PNM's 2019 RPS Plan,
		In Case No. 18-00158-UT, the Commission approved PNM's 2019 RPS Plan, including an agreement between PNM and the Commission's Utility Division
17		
17 18		including an agreement between PNM and the Commission's Utility Division
		including an agreement between PNM and the Commission's Utility Division Staff to make certain reports with regard to Lightning Dock in future REA plan
18		including an agreement between PNM and the Commission's Utility Division Staff to make certain reports with regard to Lightning Dock in future REA plan filings. These reporting requirements are to:
18 19		<ul> <li>including an agreement between PNM and the Commission's Utility Division</li> <li>Staff to make certain reports with regard to Lightning Dock in future REA plan</li> <li>filings. These reporting requirements are to:</li> <li>State the annual energy output by the Dale Burgett facility for the prior</li> </ul>
18 19 20		<ul> <li>including an agreement between PNM and the Commission's Utility Division</li> <li>Staff to make certain reports with regard to Lightning Dock in future REA plan</li> <li>filings. These reporting requirements are to:</li> <li>State the annual energy output by the Dale Burgett facility for the prior calendar year and the first three months of the following year;</li> </ul>

1		• Report any seller Events of Default in the prior calendar year and up until
2		the filing date of the testimony;
3		• Report any future bankruptcy proceeding related to the Lightning Dock
4		procurement during the prior calendar year and up until the filing date of
5		the testimony; and
6		• Report about changes, if any, to PNM's credit analysis of Lightning Dock
7		and Cyrq Energy and, if no credit analysis was performed that year,
8		include a simple explanation of why no new credit analysis was required.
9		
10		Mr. Gutierrez addresses the first reporting requirement in his direct testimony; I
11		address the remaining requirements below.
12		
13	Q.	HAS THERE BEEN ANY CHANGE OR SUPPLEMENT, INCLUDING
14		ASSIGNMENTS, OF THE PPA OR THE CONSENT AGREEMENT
15		SINCE JUNE 4, 2018, THE DATE PNM ENTERED INTO THE CONSENT
16		AGREEMENT?
17	А.	No.
18		
19	Q.	WERE THERE ANY LIGHTNING DOCK EVENTS OF DEFAULT IN
20		THE PRIOR CALENDAR YEAR AND TO DATE IN 2019?
21	А.	No.
22		

1	Q.	HAVE THERE BEEN ANY BANKRUPTCY PROCEEDINGS RELATED	
2		TO THE LIGHTNING DOCK PROCUREMENT IN THE PRIOR	
3		CALENDAR YEAR AND TO DATE IN 2019?	
4	А.	No.	
5			
6	Q.	HAVE THERE BEEN ANY CHANGES TO PNM'S CREDIT ANALYSIS	
7		OF LIGHTNING DOCK OR CYRQ ENERGY?	
8	А.	No. PNM has not performed a new credit analysis of Lightning Dock or Cyrq	
9		Energy as there have been no identified events, operational concerns, or other	
10		issues that indicate potential changes in the previous credit analysis.	
11			
12		VII. CONCLUSION	
13	Q.	PLEASE SUMMARIZE THE REASONS WHY PNM'S 2020 PLAN IS IN	
14		THE PUBLIC INTEREST AND SHOULD BE APPROVED.	
15	А.	The 2020 Plan is in the public interest because it satisfies the policy goals	
16		established in the REA, as amended by the ETA, and Rule 572. The addition of	
17		140 MW of La Joya II is required to meet the changed method of calculating the	
18		RPS is within the RCT and would be the lowest cost renewable resource on	
19			
17		PNM's system. All the existing renewable resources used to meet PNM's RPS	
20		PNM's system. All the existing renewable resources used to meet PNM's RPS are located in New Mexico and all of the current resources have been previously	

and therefore

GCG#525562

#### THOMAS G. FALLGREN

#### EDUCATIONAL AND PROFESSIONAL SUMMARY

Address:Public Service Company of New Mexico<br/>Aztec Facility (Z120)<br/>2401 Aztec Road NE, Building A<br/>Albuquerque, New Mexico 87107

**Position:** Vice President, PNM Generation, May 2017 to present

#### **Previous Positions:**

#### **PNM**

Managing Director Generation – Nov 2016 to May 2017

#### PNM

Director - Plant Manager San Juan Generating Station - July 2013 to November 2016

Xcel Energy, Southwestern Public Service (SPS) Director – Plant Manager Tolk/Plant X Complex - April 2011 to July 2013

Xcel Energy, Northern States Power (NSP) Director – Plant Manager Black Dog Generating Facility - May 2008 to April 2011

Xcel Energy, Northern States Power (NSP) – Sherburne County Generating Facility 1996-2008 Operations Manager Engineering & Technical Services Manager Scheduling Administrator/Outage Manager

Xcel Energy, Northern States Power (NSP) – Monticello Nuclear Generating Plant 1984- 1996
 Held Senior Reactor Operator (SRO) license/certification 1989 - 1996
 Supt Maintenance Engineering
 Maintenance Engineer
 Operations Instructor
 System Operations Engineer

#### **Professional Affiliation:**

Registered Engineer, State of Minnesota since 1994

#### **Education:**

University of Minnesota, Bachelor of Mechanical Engineering - High Distinction

#### **Testimony/Affidavits:**

NMPRC Case No. 19-00158-UT	PNM Solar Direct
NMPRC Case No. 18-00261-UT	PNM's EIM Application
NMPRC Case No. 18-00269-UT	PNM's Application Facebook PPA-2
NMPRC Case No. 18-00009-UT	PNM's Application Facebook PPA
NMPRC Case No. 17-00174-UT	PNM's 2017 Integrated Resource Plan
NMPRC Case No. 13-00390-UT	PNM's BART 2018 Filing

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EXECUTION VERSION Contract No. 1056775

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#### POWER PURCHASE AGREEMENT

#### LA JOYA WIND FACILITY, PHASE 2

by and between

#### PUBLIC SERVICE COMPANY OF NEW MEXICO

and

#### LA JOYA WIND, LLC

Dated as of May 31, 2019

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Exhibit L Sample Monthly Update

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## POWER PURCHASE AGREEMENT-LA JOYA WIND FACILITY, PHASE 2

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This Power Purchase Agreement – La Joya Wind Facility, Phase 2, as may be amended from time to time, is entered into this  $31^{st}$  day of May, 2019 ("Execution Date"), by and between Public Service Company of New Mexico, a New Mexico corporation ("PNM" or "Buyer"), whose principal place of business is 414 Silver Avenue SW, Albuquerque, NM 87158, and La Joya Wind, LLC, an Oregon limited liability company ("Seller"), whose principal place of business is 1125 NW Couch Street, Suite 700, Portland, Oregon 97209. Buyer and Seller may be referred to in this PPA individually as a "Party" and collectively as the "Parties."

WHEREAS, Buyer is a public utility that owns and operates electric generation, transmission, and distribution facilities and is subject to the laws of the State of New Mexico and the rules and regulations of the New Mexico Public Regulation Commission; and

WHEREAS, Seller desires to develop, design, construct, own and operate the second phase to a wind energy electric generating facility with an expected total maximum power output of approximately 140 MW installed capacity ("**Project**"), as further defined herein and in <u>Exhibit A</u>; and

WHEREAS, Seller desires to generate, sell and deliver to Buyer the Energy generated by the Project and any and all associated Renewable Energy Certificates and other Environmental Attributes, and Buyer agrees to buy the same from Seller, in accordance with the terms and conditions set forth in this PPA,

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the sufficiency and adequacy of which are hereby acknowledged, the Parties agree to the following:

#### ARTICLE 1

## Definitions and Rules of Interpretation

1.1 <u>Definitions</u>. The following terms shall have the meanings set forth herein.

"Abandonment" means (a) a cessation of work and operations at the Project for more than sixty (60) Days by Seller or Seller's contractors but only if such cessation is not caused by a Force Majeure, or (b) the relinquishment of possession and control of the Project (or any material portion thereof) by Seller, other than a transfer permitted under this PPA.

"AC" means alternating electric current.

"Accounting Standards" has the meaning set forth in Section 22.18.

"Additional Consents" means the approvals, consents, authorizations or other requirements not listed in the definition of Governmental Approvals in this PPA that are required from any Governmental Authority with respect to the Project.

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"Affiliate" of any named Person or entity means any other person or entity that controls, is under the control of, or is under common control with, the named entity. The term "control" (including the terms "controls," "under the control of" and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person or entity, whether through ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests of any class of voting securities, by contract, or otherwise.

"After Tax Basis" means, with respect to any payment received or deemed to have been received by a Party, the amount of such payment ("Base Payment") supplemented by a further payment ("Additional Payment") to such Party so that the sum of the Base Payment plus the Additional Payment shall, after deduction of the amount of all Taxes (including any federal, state or local income taxes) required to be paid by such Party in respect of the receipt or accrual of the Base Payment and the Additional Payment (taking into account any current or previous credits or deductions arising from the underlying event giving rise to the Base Payment and the Additional Payment), be equal to the amount required to be received. Such calculations shall be made on the assumption that the recipient is subject to federal income taxation at the highest applicable statutory rate applicable to corporations for the relevant period or periods, and state and local taxes at the highest rates applicable to corporations with respect to such Base Payment and Additional Payment, and shall take into account the deductibility (for federal income tax purposes) of state and local income taxes.

"AGC" stands for "Automatic Generation Control" and means energy management system equipment that automatically adjusts the generation quantity of the Project, including communication circuits to communicate Project operating information to Buyer's representatives on a real-time basis for the purpose of telemetering, supervisory control/data acquisition and voice communications.

"Ancillary Services" means operating reserves, regulation, black-start capability, reactive supply, voltage control, frequency response, other products associated with electric generation and Energy that the Project is capable of providing and all other beneficial outputs of the Project not required for the operation of the Project.

"Applicable Law" means all applicable laws, statutes, treaties, codes, ordinances, regulations, certificates, orders, licenses and permits of any Governmental Authority, now in effect or hereafter enacted, amendments to any of the foregoing, interpretations of any of the foregoing by a Governmental Authority having jurisdiction over this PPA and matters related thereto, the Parties or the Project, and all applicable judicial, administrative, arbitration and regulatory decrees, judgments, injunctions, writs, orders, awards or like actions (including those relating to human health, safety, the natural environment or otherwise).

"Availability Damages" has the meaning set forth in Exhibit I.

"Available Hours" has the meaning set forth in Exhibit I.

"BAA Cap" has the meaning set forth in the definition of Reliability Curtailment.

"Back-Up Metering" has the meaning set forth in Section 5.3(D).

Incontraction in the

"Balancing Area" or "BA" has the meaning given by NERC in its Glossary of Terms Used in NERC Reliability Standards, as may be amended from time to time.

"Balancing Area Authority" or "BAA" has the meaning given by NERC in its Glossary of Terms Used in NERC Reliability Standards, as may be amended from time to time. As of the Effective Date, the Wholesale Power Marketing Group at PNM is the BAA for the PNM BA, as such entity may be replaced from time to time.

"Bankruptcy Code" means the United States Bankruptcy Code, 11 U.S.C. § 101 et seq., as amended from time to time.

"Business Day" means any calendar Day that is not a Saturday, a Sunday, or a state and/or federal recognized holiday where banks in Albuquerque, New Mexico, are permitted or authorized to close.

"Buyer" has the meaning set forth in the Preamble.

"Buyer Costs" means brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred and documented by Buyer either in terminating any arrangement pursuant to which it has hedged its obligations under this PPA or entering into new arrangements which replace this PPA; and all reasonable attorneys' fees and expenses incurred by Buyer in connection with the termination of this PPA, to the extent such costs are not already accounted for under Replacement Energy Costs.

"Buyer Curtailment" has the meaning set forth in Section 4.1(B).

"Buyer Delivery Term Security" has the meaning set forth in Section 19.2."

"Buyer Guarantor" means any Person that has a long-term credit rating of such Person's long-term senior unsecured debt, or long-term corporate or issuer rating that is at least "Baa3" or higher by Moody's and "BBB-" or higher by S&P.

"Buyer Settlement Amount" means the present value of the Replacement Energy Costs and Buyer Costs, on the one hand, netted against the Contract Value, on the other. If the Replacement Energy Costs and Buyer Costs exceed the Contract Value, then the Buyer Settlement Amount shall be an amount Seller owes to Buyer. If the Contract Value exceeds the Replacement Energy Costs and Buyer Costs, then the Buyer Settlement Amount shall be Zero Dollars (\$0).

"Buyer Termination Payment" means the aggregate of the Buyer Settlement Amount (if any) plus any and all other amounts then owed from Seller to Buyer less any amounts owed from Buyer to Seller.

"Capacity Shortfall Damages" has the meaning set forth in Section 3.8.

"Catastrophic Failure" means failure of the Project's main transformer, main circuit breaker, or medium voltage switchgear, provided such failure is not due to Seller's failure to maintain and operate the equipment in accordance with Prudent Utility Practice.

"CCN" has the meaning set forth in Section 17.4.

"CCN Approval" has the meaning set forth in Section 17.4.

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"CCN End Date" has the meaning set forth in Section 17.4.

"Change of Control" means any circumstance in which Ultimate Parent ceases to own, directly or indirectly through one or more intermediate entities, at least fifty percent (50%) of the outstanding equity or voting interests in Seller.

"Code" means the U.S. Internal Revenue Code of 1986, including applicable rules and regulations promulgated thereunder, as amended from time to time.

"Commercial Operation" means that (a) Wind Turbines with an aggregate capacity of at least ninety percent (90%) of the Guaranteed Capacity have been constructed, commissioned, tested and proven capable of delivering Energy on a sustained basis without experiencing any abnormal or unsafe operating conditions on any interconnected system, (b) Seller has obtained all required consents and Governmental Approvals, (c) Seller has obtained all necessary rights under the Interconnection Agreement for the interconnection and delivery of Energy to the Point of Delivery and is not in breach of the Interconnection Agreement, (d) Seller has satisfactorily completed other testing as reasonably requested by Buyer or otherwise in accordance with Interconnection Agreement requirements and industry standards, (e) Seller has obtained required insurance coverage, (f) Buyer has received an officer's certificate from Seller that the Project has been completed in all material respects (except for Delayed Capacity and punch list items that do not materially and adversely affect the ability of the Project to operate as intended), and (g) Seller has delivered to Buyer the Seller Delivery Term Security.

"Commercial Operation Date" or "COD" means the date on which Buyer accepts from Seller (a) a written notification to Buyer that the Commercial Operation has commenced, (b) a certification from an officer of Seller, substantially in the form attached hereto as <u>Exhibit K</u>, and (c) Seller shall have delivered the Seller Delivery Term Security to Buyer in accordance with the relevant provisions of Article 19.

"Commercial Operation Year" means a period of twelve (12) consecutive Months. The first Commercial Operation Year shall commence on the Commercial Operation Date and end on the last Day of the Month that is twelve (12) full Months after the Commercial Operation Date, and each subsequent Commercial Operation Year shall be each twelve (12) Month period thereafter.

"Confidential Information" has the meaning set forth in Section 22.14(C).

"Contract Value" means the present values of the Energy Output, for each Commercial Operation Year (or portion thereof) in the then remaining term, determined without reference to the early termination, of (a) the quantity of Energy and RECs expected to be produced during such Commercial Operation Year (or portion thereof) times (b) the Energy Output Payment Rate for such Commercial Operation Year. All elements of the foregoing calculations shall be determined in a commercially reasonable manner. The present values of the monthly payments from their payment dates in the foregoing calculations shall be determined using a discount

factor equal to the current yield for direct obligations of the United States Treasury with a maturity that is closest to, but not less than, the remaining Term of this PPA.

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"Day" means a calendar day and includes Saturdays, Sundays and holidays; if a payment falls due on a Day that is not a Business Day, the payment will be due on the next Business Day thereafter.

"DC" means direct current.

"Deemed Energy" means the amount of Energy that was not delivered to Buyer by Seller but would have been so delivered but for a Buyer Curtailment or a Reliability Curtailment for oversupply situations in excess of the BAA Cap calculated on five (5) minute blocks as follows: Deemed Energy (MWh) shall be calculated using (I) the Wind Turbine manufacturer's power curve as provided in the Wind Turbine supply agreement, and (II) wind data (wind speed, ambient temperature, barometric pressure, air density) determined by the computer monitoring system for each Wind Turbine that is part of the Project adjusted to account for electrical losses in delivering Energy to the Point of Delivery. The calculation of Deemed Energy will consider all or a portion of the Wind Turbines taken out of service due to the curtailment but excluding any Wind Turbines taken out of service or operating at a reduced capacity for other reasons, and adjusted to account for electrical losses in delivering Energy to the Point of Delivery. Buyer shall have the right to review and approve Seller's calculations and data utilized to develop the calculations of Deemed Energy. Deemed Energy results shall be trued up to correct for consistently biased calculation error based on assessment of normal operations periods before and after any given curtailment event. Other calculation methods for Deemed Energy may be used by Seller with consent of Buyer, and such consent shall not be unreasonably withheld if Seller's proposed method is consistent with Prudent Utility Practices.

"Default Rate" has the meaning set forth in Section 9.4.

"Defaulting Party" means the Party with respect to which an Event of Default under Article 12 has occurred.

"Delay Damages" has the meaning set forth in Section 3.7.

"Delayed Capacity" has the meaning set forth in Section 3.7.

"Delivery Term" has the meaning set forth in Section 7.1.

"Disclosing Party" has the meaning set forth in Section 22.14(A).

"Dispute Notice" has the meaning set forth in Section 13.8(A).

"Disputing Party" has the meaning set forth in Section 9.5(A).

"Dollars" means the lawful currency of the United States of America.

"Downgrade Event" shall mean that the long-term credit rating of a Person's long-term senior unsecured debt, or long-term corporate or issuer rating, is not "Baa3" or higher by

Moody's and "BBB-" or higher by S&P.

"Early Termination Date" has the meaning set forth in Section 12.4.

"Electric Interconnection Point" means the physical point at which electrical interconnection is made between the Project and the Transmission Provider's Transmission System.

"Electric Metering Device(s)" means all metering and data processing equipment used to measure, record, or transmit data relating to the Energy Output generated by the Project. Electric Metering Devices include the metering current transformers and the metering voltage transformers.

"Emergency Condition" means (a) a condition or situation that presents an imminent physical threat of danger to life, health or property, and/or could reasonably be expected in the opinion of the Transmission Provider to cause a significant disruption to the Transmission Provider's Transmission System or otherwise be required in accordance with the requirements of the Reliability Organization (or its successor) and/or NERC/WECC, or (b) any system condition not consistent with Prudent Utility Practices; provided that an Emergency Condition shall not include any emergency caused by Seller's breach of its Interconnection Agreement with the Transmission Provider.

"Energy" means three-phase, 60-cycle alternating current electric energy, expressed in units of kWh or MWh, generated by the Project and delivered to Buyer at a nominal voltage at the Point of Delivery, as measured by Electric Metering Devices, net of auxiliary loads and station electrical uses and appropriate line losses.

"Energy Output" means Metered Output, Environmental Attributes (including RECs) and Ancillary Services generated by the Project.

"Energy Output Payment Rate" means the price to be paid by Buyer to Seller for the Energy Output, as set forth in this PPA.

"Environmental Attributes" means all attributes, aspects, characteristics, claims, credits, benefits, reductions, offsets or allowances of an environmental or other nature that are created or otherwise arise from the Project's generation of electricity from renewable energy resources in contrast with the generation of electricity using nuclear or fossil fuels or other traditional resources. Forms of such attributes include any and all environmental air quality credits, green credits, including carbon credits, emissions reduction credits, certificates, tags, offsets, allowances, or similar products or rights, howsoever entitled, (i) resulting from the avoidance of the emission of any gas, chemical, or other substance, including mercury, nitrogen oxide, sulfur dioxide, carbon dioxide, carbon monoxide, particulate matter or similar pollutants or contaminants of air, water or soil, gas, chemical, or other substance, and (ii) attributable to the generation, purchase, sale or use of Energy. Environmental Attributes include those currently existing or arising during the Term under local, state, regional, federal, or international legislation or regulation relevant to the avoidance of any emission described above under any governmental, regulatory or voluntary program, including the United Nations Framework Convention on Climate Change and related Kyoto Protocol or other programs, laws or

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regulations. Environmental Attributes include the reporting rights related to any such attributes, aspects, characteristics, claims, credits, benefits, reductions, offsets or allowances, including the right of a Person to report the ownership thereof in compliance with federal or state law, if applicable, or otherwise to a federal or state agency or any other Person. Environmental Attributes specifically exclude (i) Tax Benefits, (ii) depreciation deductions and depreciation benefits, and other tax benefits arising from ownership or operation of the Project; and (iii) any Energy, reliability or other power attributes from the Project.

"Environmental Contamination" means the introduction or presence of Hazardous Materials at such levels, quantities or location, or of such form or character, as to constitute a violation of federal, state or local laws or regulations, and present a material risk under federal, state or local laws and regulations that a Site will not be available or usable, whether in whole or in part, for the purposes contemplated by this PPA.

"Environmental Curtailment" means any curtailment of the Project by Seller pursuant to (a) Applicable Law; or (b) any voluntary curtailment as determined by Seller in its sole discretion pursuant to environmental guidance, subject to the limitations in Section 4.1(D).

"Event of Default" means a Seller Event of Default as set forth in Section 12.1 or a Buyer Event of Default as set forth in Section 12.2.

"Execution Date" has the meaning set forth in the Preamble.

"Expected Commercial Operation Date" has the meaning set forth in Section 3.1.

"Federal Power Act" means the Federal Power Act, as amended, 16 U.S.C. § 791a et

"FERC" means the Federal Energy Regulatory Commission or any successor agency.

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"Force Majeure Event" has the meaning set forth in Section 14.1.

"GAAP" has the meaning set forth in Section 22.18.

"Governmental Approval" means any authorization, consent, permission, approval (including an NMPRC Approval), license, ruling, permit, exemption, variance, order, judgment, instruction, condition, direction, directive, decree, declaration of or regulation by any Governmental Authority relating to the construction, development, ownership, occupation, startup, testing, operation or maintenance of the Project or to the execution, delivery or performance of this PPA or the procurement pursuant to this PPA of renewable energy and Renewable Energy Certificates and shall also mean, where and as applicable and the context so dictates, any and all authorization, consent, permission, approval, license, ruling, permit, exemption, variance, order, judgment, instruction, condition, direction, directive, decree, declaration of or regulation with regard to any Non-Governmental Compliance Obligations.

"Governmental Authority" means any federal, state, local or municipal governmental body; any governmental, quasi-governmental, regulatory or administrative agency, commission, body or other authority exercising or entitled to exercise any administrative, executive, judicial,

legislative, policy, regulatory or taxing authority or power; or any court or governmental tribunal.

"Governmental Charges" means any Taxes, charges or costs that are assessed or levied by any Governmental Authority or other Person, including local, state or federal regulatory or taxing authorities that would affect the sale and purchase of Energy Output contemplated by this PPA, either directly or indirectly.

"Guaranteed Availability Percentage" has the meaning set forth in Exhibit I.

"Guaranteed Capacity" has the meaning set forth in Section 3.1.

"Guaranteed Start Date" has the meaning set forth in Section 3.1.

"Hazardous Materials" means any substance, material, gas, or particulate matter that is regulated by any local Governmental Authority, any applicable state, or the United States of America as an environmental pollutant or dangerous to public health, public welfare, or the natural environment including, without limitation, protection of non-human forms of life, land, water, groundwater, and air, including any material or substance that is (i) defined as "toxic," "polluting," "hazardous waste," "hazardous material," "hazardous substance," "extremely hazardous waste," "solid waste" or "restricted hazardous waste" under any provision of local, state, or federal law; (ii) petroleum, including any fraction, derivative or additive; (iii) asbestos; (iv) polychlorinated biphenyls; (v) radioactive material; (vi) designated as a "hazardous substance" pursuant to the Clean Water Act, 33 U.S.C. § 1251 *et seq.*; (vii) defined as a "hazardous substance" pursuant to the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq.*; (vii) defined as a "hazardous substance" under the Toxic Substances Control Act, 15 U.S.C. § 2601 *et seq.*; or (x) defined as a "pesticide" under the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 *et seq.* 

"House Energy" has the meaning set forth in Section 1.4.

"Installed Capacity" means, as of a given point in time, the aggregate nameplate capacity of all Wind Turbines installed and commissioned at the Project.

"Interconnection Agreement" means the separate agreement between Seller and the Transmission Provider for interconnection of the Project to the Transmission Provider's Transmission System, as such agreement may be amended from time to time.

"Interconnection Facilities" means the Transmission Provider's Interconnection Facilities and Seller's Interconnection Facilities.

"Issuer Minimum Requirements" has the meaning set forth in Section 19.3.

"kW" means one or more kilowatts AC of electricity, as the context requires.

"kWh" means kilowatt hour AC.

"Lender(s)" means any and all Persons, including Affiliates of Seller, (a) lending money or extending credit (including any financing lease, monetization of tax benefits, back-leverage or paygo financing, Tax Equity Financing or credit derivative arrangement) to Seller or to an Affiliate of Seller: (i) for the construction, interim or permanent financing or refinancing of the Project; (ii) for working capital or other ordinary business requirements of the Project (including the maintenance, repair, replacement or improvement of the Project); (iii) for any development financing, bridge financing, credit support, credit enhancement or interest rate protection in connection with the Project; (iv) for any capital improvement or replacement related to the Project; or (v) for the purchase of the Project and the related rights from Seller; (b) participating as a Tax Equity Investor in the Project; or (c) any lessor under a lease finance arrangement relating to the Project.

"Letter of Credit" means an irrevocable, unconditional, transferable standby letter of credit for the benefit of the receiving Party, issued by an entity meeting the Issuer Minimum Requirements.

"Local Provider" has the meaning set forth in Section 1.4.

"Losses" has the meaning set forth in Section 20.1(A).

"Metered Output" means the Energy made available from the Project at the Point of Delivery, as measured by the Electric Metering Devices.

"Month" means a calendar month.

"Monthly Billing Period" means the period during any particular Month in which Energy Output has been generated by Seller for Buyer and delivered to the Point of Delivery for sale to Buyer, whether or not occurring prior to or subsequent to the Commercial Operation Date.

"Moody's" means Moody's Investor Services, Inc. and any successor thereto.

"Mountain Prevailing Time" or "MPT" means the time in effect in the Mountain Time Zone of the United States of America, whether Mountain Standard Time or Mountain Daylight Savings Time.

"MW" means megawatt or one thousand (1,000) kW AC.

"MWh" means megawatt hours AC.

"National Control Center" means Seller's representative(s) responsible for dispatch of the Project.

"NERC" means the North American Electric Reliability Corporation or any successor organization.

"NMPRC" means the New Mexico Public Regulation Commission or any successor agency.

"NMPRC Approval" has the meaning set forth in Section 17.3(B).

"NMPTCs" means any state or local production tax credit or investment tax credit determined by reference to renewable electric energy produced from renewable energy resources in effect in the state of New Mexico.

"Non-Defaulting Party" means the Party other than the Defaulting Party with respect to an Event of Default that has occurred under Article 12.

"Non-Governmental Compliance Obligations" means all necessary filings, applications, accreditations, registrations and/or other requirements including deposits, fees, accounts, and/or other obligations with WREGIS, NERC, WECC, and all other applicable agencies, self-regulatory organizations and industry committees to which the Party is required to have membership and/or submit to jurisdiction in the performance of this PPA.

"O&M Records" has the meaning set forth in Section 13.4(A).

"OATT" means Open Access Transmission Tariff.

"Operating Parameters" has the meaning set forth in Section 10.4(A).

"Operating Procedures" means those procedures, if any, developed pursuant to Section 10.5.

"Operating Records" means all agreements associated with the Project, operating logs, and environmental permits, plans, and studies, whether in printed or electronic format, that Seller uses or maintains for the operation of the Project.

"Organized Market" means any wholesale electricity market that uses a bid-based approach to achieve an economic dispatch of energy, including, but not limited to, an Independent System Operator, Regional Transmission Operator, or Western Energy Imbalance Market.

"Outage Notice" has the meaning set forth in Section 7.6(A).

"Party" or "Parties" has the meaning set forth in the Preamble and includes any permitted assignee of a Party.

"Person" means any natural person, corporation, limited liability company, general partnership, limited partnership, proprietorship, other business organization, trust, union, association or Governmental Authority.

"PNM" has the meaning set forth in the Preamble.

"Point of Delivery" means the electric system point at the PNM Transmission System at which Seller makes available to Buyer and delivers to Buyer the Energy Output being provided by Seller to Buyer under this PPA. The Point of Delivery shall be specified in Section 3.1 and <u>Exhibit B</u> to this PPA.

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"PPA" or "Power Purchase Agreement" means this Power Purchase Agreement between Seller and Buyer, including the Exhibits and Schedules attached hereto, as the same may be amended from time to time in accordance with the provisions hereof.

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"Production Tax Credits" or "PTCs" means the tax credits applicable to electricity produced from certain renewable resources pursuant to Section 45 of the Code (as amended from time to time), or such substantially equivalent federal tax benefit that provides Seller with a tax credit based on Energy production from any portion of the Project.

"Project" means Seller's approximately 140 MW wind installed capacity energy generation facility located in Torrance County, New Mexico which will produce the Energy Output made available to Buyer under this PPA, including one or more of Seller's Wind Turbines and Seller's Interconnection Facilities, as identified and described in Article 3 and <u>Exhibit A</u> to this PPA, including all of the following (and any additions, modifications or replacements), the purpose of which is to produce and/or store electricity and deliver such electricity to the Electric Interconnection Point: Seller's equipment, buildings, all of the conversion and/or generation facilities necessary to connect to the Electric Interconnection Point, protective and associated equipment, improvements, and other tangible assets, contract rights, easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation, and maintenance of the electric generating facilities that produce the Energy Output subject to this PPA.

"Project Manager" has the meaning set forth in Section 10.1(D).

"Projected Schedule" has the meaning set forth in Section 7.5(A).

"Promotional Materials" has the meaning set forth in Section 22.15.

"Prudent Utility Practice(s)" means the practices, methods, and acts (including the practices, methods, and acts engaged in or approved by a significant portion of the electric power generation industry, WECC and/or NERC) that, at a particular time, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with law, regulation, permits, codes, standards, reliability, safety, environmental protection, economy, and expedition. With respect to the Project, Prudent Utility Practice(s) includes taking reasonable steps to ensure that:

(A) equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Project's needs;

(B) sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Project properly, efficiently, and in coordination with Buyer and are capable of responding to reasonably foreseeable Emergency Conditions whether caused by events on or off the Sites;

(C) preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long-term and safe operation, and are performed by knowledgeable,

trained, and experienced personnel utilizing proper equipment and tools;

(D) appropriate monitoring and testing are performed to ensure equipment is functioning as designed;

(E) equipment is not operated in a reckless manner, or in a manner unsafe to workers, the general public, or the interconnected system or contrary to environmental laws, permits or regulations or without regard to defined limitations, such as flood conditions, safety inspection requirements, operating voltage, current, volt-ampere reactive ("VAr") loading, frequency, rotational speed, polarity, synchronization, and/or control system limits;

(F) equipment and components meet or exceed the standard of durability that is generally used for electric generation operations in the region and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Sites and under both normal and Emergency Conditions; and

(G) equipment, components, and processes are appropriately permitted with any local, state, or federal Governmental Authority and are operated and maintained in accordance with applicable permit and regulatory requirements.

"PTC Compensation Amount" means an amount equal to the Production Tax Credit calculated on an After Tax Basis associated with Deemed Energy.

"Qualified Operator" is (a) a Person that has at least three (3) years' experience with operating at least five hundred (500) MW of wind generation, or (b) any other Person reasonably acceptable to Buyer.

"Receiving Party" has the meaning set forth in Section 22.14(A).

"Receiving Party's Representatives" has the meaning set forth in Section 22.14(B).

"Recording" has the meaning set forth in Section 22.19.

"Regulatory End Date" has the meaning set forth in Section 17.3(B)(4).

"Reliability Curtailment" means any curtailment of the Project associated with an oversupply of generation on Buyer or the Transmission Provider's Transmission System during a period of time when generating facilities connected to the Transmission Provider's Transmission System are interrupted or reduced in an equitable and non-discriminatory manner. Reliability Curtailments shall be capped on a calendar year basis at Twenty-Five Thousand Three Hundred (25,300) MWh ("BAA Cap"), after which Buyer shall compensate Seller in an amount equal to the product of (i) the Energy Output Payment Rate plus the PTC Compensation Amount, multiplied by (ii) the Deemed Energy in excess of the BAA Cap that would have been delivered but for such Reliability Curtailment. If any of the conditions set forth in this definition are applicable, Buyer shall be rebuttably presumed not to be curtailing for economic reasons.

"Reliability Organization" means the entity that fulfills the duties of the Reliability

Coordinator, or its successor, as defined by NERC, and as delegated by WECC, for its Reliability Coordinator Area in the Western Interconnection.

"Renewable Energy Certificate" or "REC" means a certificate evidencing ownership of an Environmental Attribute. For purposes of this PPA and registration with WREGIS, RECs are accumulated on a MWh basis with one (1) REC for each MWh of renewable energy generated. RECs include all Environmental Attributes associated with the generated energy. "RECs" excludes (i) any local, state or federal investment tax credit, production tax credit, depreciation deductions or other tax benefit to Seller based on ownership of, or Energy production from, any portion of the Project, including the Tax Benefits, and (ii) depreciation and other tax benefits arising from ownership or operation of the Project unrelated to its status as a generator of renewable or environmentally clean energy.

"Replacement Energy Costs" means the actual costs incurred by Buyer following an Event of Default that are reasonable and necessary to replace Energy Output (which includes RECs, Environmental Attributes and Ancillary Services as defined herein) which Seller, in accordance with this PPA, would have generated at the Project and delivered to Buyer, but failed to so provide pursuant to this PPA. Buyer shall not have to enter into a replacement contract to establish the Replacement Energy Costs. If Buyer does not enter into a replacement contract, then the Replacement Energy Costs will be based on the market price for Energy, Environmental Attributes (including RECs) and Ancillary Services delivered to Buyer's system, as reasonably determined by Buyer. In calculating such amounts, Buyer will comply with the requirements set forth in Section 12.4(A) in establishing the market price. Replacement Energy Costs for an Event of Default also include (i) the reasonable amounts paid or incurred by Buyer for transmission or distribution of replacement Energy Output and any associated transmission or distribution costs, (ii) the reasonable amounts paid or incurred by Buyer for the purchase of RECs associated with the replacement Energy Output, and (iii) Buyer's expenses, including reasonable attorneys' fees, suffered as a result of Seller's failure to perform under this PPA.

"S&P" means Standard & Poor's Corporation and any successor thereto.

"Scheduled Maintenance Outage" means a time during which ten (10) MW or more of the Installed Capacity is shut down or its output reduced to undergo scheduled maintenance in accordance with this PPA, or as otherwise agreed by Seller and Buyer.

"SEC" has the meaning set forth in Section 22.18.

"Security" means, with respect to Seller, Seller Development Security or Seller Delivery Term Security or both, as applicable, and with respect to Buyer, Buyer Delivery Term Security.

"Seller" has the meaning set forth in the Preamble.

"Seller Excused Hours" means those hours during which Seller is unable to schedule or deliver Energy to Buyer as a result of: (a) a Scheduled Maintenance Outage, (b) a Transmission Provider Curtailment, (c) a Reliability Curtailment, (d) a Buyer Curtailment, (e) a Force Majeure Event, (f) a Catastrophic Failure, (g) Environmental Curtailments, or (h) any failure by Buyer to perform a material obligation under this PPA (other than due to a breach by Seller of its obligations under this PPA).

"Seller Forced Outage" means an unplanned reduction, interruption or suspension of all or a portion of Energy deliveries from the Project to the Point of Delivery in an amount of at least five (5) MWs not associated with Seller Excused Hours.

"Seller Guarantor" means (a) Avangrid, Inc. or its successor, or (b) any Person that has a long-term credit rating of such Person's long-term senior unsecured debt, or long-term corporate or issuer rating that is at least "Baa3" or higher by Moody's and "BBB-" or higher by S&P.

"Seller Guaranty" means a guaranty in substantially the form attached as Exhibit J.

"Seller Permitted Transfer" means any of the following: (a) a Change of Control of Seller's Ultimate Parent Company; (b) the direct or indirect transfer of shares of, or equity interests in, Seller to a Tax Equity Investor; or c) a transfer of: (i) all or substantially all of the assets of Seller or Seller's Ultimate Parent Company in a single transaction; (ii) all or substantially all of Seller's or Seller's Ultimate Parent Company's renewable energy generation portfolio in a single transaction; or (iii) all or substantially all of Seller's or Seller's Ultimate Parent Company's wind generation portfolio in a single transaction; *provided*, that in the case of each of (b) or (c), following such transfer (A) the entity that operates the Project is (or contracts with) a Qualified Operator, and (B) that such transfer does not have a material adverse effect on the Seller's credit characteristics and Seller maintains the applicable Seller Security requirements.

Seller Termination Payment" means the aggregate of all amounts then owed from Buyer to Seller, less any amounts owed from Seller to Buyer. The Seller Termination Payment will be based on a comparison of the net present value of the payments that can reasonably be expected to be applicable in the market under a replacement contract covering the same products (i.e., Energy Output) to the net present value of the then remaining payments under this PPA, plus Seller's reasonable transactional costs of entering into a new supply or sales arrangement. Any such calculations will be based on reasonable assumptions as to future Project operations, differences between a replacement contract and this PPA, discount rate and similar considerations.

"Seller's Financial Statements" has the meaning set forth in Section 22.18(B).

"Seller's Interconnection Facilities" means the equipment between the high side disconnect of the main step-up transformer and the Electric Interconnection Point, including all related relaying protection, metering and physical structures as well as all transmission facilities required to access the Transmission Provider's Transmission System at the Electric Interconnection Point, along with any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of such facilities. On the low side of the step-up transformer, "Seller's Interconnection Facilities" includes Seller's metering, relays, and load control equipment as provided for in the Interconnection Agreement. This equipment is located within the Project and is conceptually depicted in Exhibit B to this PPA.

"Site" means the parcel or parcels of real property on which the Project will be

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constructed and located, including any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of the Project. The Site for the Project is more specifically described in Section 3.3 and Exhibit  $\underline{C}$  to this PPA. For the avoidance of doubt, this PPA is Site specific.

"System Control Center" or "SCC" means Buyer's representative(s) responsible for dispatch of Buyer's generating units and communication with Seller's National Control Center.

"Tax Benefits" means (a) federal and state production tax credits (including PTCs but excluding NMPTCs), investment tax credits and any other tax credits which are or will be generated by the Project and (b) any cash payments or outright grants of money relating in any way to such tax credits or the Project.

"Tax Equity Financing" means, with respect to Seller or an upstream equity owner of Seller, any transaction or series of transactions (including, without limitation, any transaction of the type described in this definition that utilizes a lease or inverted lease structure) resulting in a portion of the membership interests in Seller or an upstream equity owner, as applicable, being issued or otherwise provided to another Person (a "Tax Equity Investor") in exchange for capital contributions to Seller or such upstream equity owner, as applicable, or the Project being sold to and leased by Seller from a Tax Equity Investor, in either case for the purpose of raising a portion of the funds needed to finance the construction of the Project by monetizing the Tax credits, depreciation and other Tax Benefits associated with the Project.

"Tax Equity Investor" has the meaning set forth in the definition of Tax Equity Financing.

"Taxes" means all applicable taxes, including gross receipts, sales, use and related fees, levies, licenses or charges imposed by any Governmental Authority, other than taxes, levies, licenses or charges based upon net income or net worth as set forth in more detail in Section 9.7.

"Term" means the period during which this PPA shall remain in full force and effect, and which is further defined in Article 2.

"Termination Payment" means the Buyer Termination Payment or the Seller Termination Payment, as applicable.

"Test Energy" means any and all Energy Output generated by the Project and delivered to Buyer during the Test Period.

"Test Period" means the period commencing on the day the Project is energized, operates in parallel with the Transmission Provider's Transmission System and delivers metered Energy to the Point of Delivery and ending on the Commercial Operation Date; provided, however, except with respect to a Force Majeure Event, in no event shall the Test Period be longer than ninety (90) Days.

"TP Forced Outage" means an unplanned component failure or other condition that requires all or a substantial portion of the Transmission Provider's Interconnection Facilities or Transmission Provider's Transmission System to be removed from service immediately.

"TP Maintenance Outage" means the removal of all or a substantial portion of the Transmission Provider's Interconnection Facilities or Transmission Provider's Transmission System from service to perform work on specific components that can be deferred, but that nevertheless requires all or a substantial portion of the Transmission Provider's Interconnection Facilities or Transmission Provider's Transmission System to be removed from service before the next TP Planned Outage. TP Maintenance Outages may occur anytime during the Commercial Operation Year, have flexible start dates, and may or may not have predetermined durations.

"TP Planned Outage" means the removal of the Transmission Provider's Interconnection Facilities or Transmission Provider's Transmission System from service to perform repairs that are scheduled in advance and have a predetermined duration.

"TP Reliability Curtailment" means any curtailment by the Transmission Provider in accordance with NERC/WECC operating policies and criteria and the OATT of Energy Output deliveries for reliability reasons, but not including any Buyer Curtailment.

"Transmission Agreements" means the agreements entered into between Seller's Affiliate Avangrid Renewables, LLC and Transmission Provider, pursuant to Transmission Provider's FERC-approved OATT, to facilitate, pursuant to <u>Exhibit H</u>, Buyer's transmission service to enable delivery of the Project Energy over the Transmission Provider's Transmission System. Transmission Agreements are more fully described in <u>Exhibit H</u>.

"Transmission Provider" means Buyer, Buyer's designated agent, or a third party acting in its capacity owning, controlling, or operating facilities used for the transmission of electric energy in interstate commerce and providing transmission service under the OATT and any successor entity, if applicable.

"Transmission Provider Curtailment" means curtailments of Energy from the Project directed by the Transmission Provider resulting from (a) a TP Forced Outage that is not the result of a Force Majeure Event, (b) a TP Maintenance Outage, (c) a TP Planned Outage, (d) a TP Reliability Curtailment, (e) an Emergency Condition, (f) safety or equipment failure situations, or (g) a BAA curtailment required to meet NERC/WECC criteria or as directed by the Reliability Organization, excluding curtailments that are directly caused by an oversupply situation as described in the definition of Reliability Curtailment.

"Transmission Provider's Interconnection Facilities" means the facilities necessary to connect the Transmission Provider's Transmission System to the Electric Interconnection Point, including breakers, bus work, bus relays, and associated equipment installed by the Transmission Provider for the direct purpose of physically and electrically interconnecting the Project, along with any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of such facilities. Arrangements for the installation and operation of the Transmission Provider's Interconnection Facilities shall be governed by the Interconnection Agreement.

"Transmission Provider's Transmission System" means the contiguously interconnected electric transmission and sub-transmission facilities over which the Transmission

Provider has rights (by ownership or contract) to provide bulk transmission of capacity and energy from the Electric Interconnection Point.

"Ultimate Parent" means Avangrid Renewables, LLC.

"WECC" means the Western Electricity Coordinating Council, a NERC regional electric reliability council, or any successor organization.

"Wind Turbine" means a single wind turbine generating system, including the nacelle, rotor, tower, pad, and controller system, installed as part of the Project.

"WREGIS" means the Western Renewable Energy Generation Information System or any successor system.

"WREGIS Certificates" has the same meaning as "Certificate" as defined by WREGIS in the WREGIS Operating Rules.

"WREGIS Operating Rules" means the rules that describe the operations of WREGIS, as may be amended, which are currently available at <u>www.wregis.org</u>.

"WREGIS Qualified Reporting Entity" as defined by WREGIS Operating Rules means an individual or organization providing renewable generation data to create WREGIS certificates that has met the established WREGIS guidelines provided in WREGIS Operating Rules.

1.2 <u>Rules of Construction</u>.

(A) The masculine shall include the feminine and neuter.

(B) References to "Articles," "Sections," "Exhibits" or "Schedules" shall be to articles, sections, exhibits, or schedules of this PPA unless otherwise stated.

(C) The Exhibits and Schedules attached hereto are incorporated in and are intended to be a part of this PPA; *provided*, that in the event of a conflict between the terms of any Exhibit or Schedule and the terms of this PPA, the terms of this PPA shall take precedence.

(D) This PPA was negotiated and prepared by both Parties with the advice and participation of counsel. The Parties have agreed to the wording of this PPA and none of the provisions hereof shall be construed against one Party on the ground that such Party is the author of this PPA or any part hereof.

(E) The Parties shall act reasonably and in accordance with the principles of good faith and fair dealing in the performance of this PPA. Unless expressly provided otherwise in this PPA, (i) where the PPA requires the consent, approval, or similar action by a Party, such consent, approval or similar action shall not be unreasonably withheld, conditioned or delayed, and (ii) wherever the PPA gives a Party a right to determine, require, specify or take similar action with respect to a matter, such determination, requirement, specification or similar action shall be reasonable.

(F) Use of the words "include" or "including" or similar words shall be interpreted as "including but not limited to" or "including, without limitation."

(G) Use of the words "tax" or "taxes" shall be interpreted to include taxes, tax specific fees, surcharges, and the like.

1.3 <u>Interpretation with Interconnection Agreement</u>. Each Party conducts its operations in a manner intended to comply with FERC Standards of Conduct for Transmission Providers, requiring the separation of its transmission and merchant functions.

(A) The Parties acknowledge and agree that the Interconnection Agreement shall be a separate and free-standing contract and that the terms of this PPA are not binding upon the Transmission Provider.

(B) Notwithstanding any other provision in this PPA, nothing in the Interconnection Agreement shall alter or modify Seller's or Buyer's rights, duties and obligations under this PPA. This PPA shall not be construed to create any rights between Seller and the Transmission Provider.

(C) Seller expressly recognizes that, for purposes of this PPA, the Transmission Provider shall be deemed to be a separate entity and separate contracting party whether or not the Interconnection Agreement is entered into with Buyer, an Affiliate of Buyer, or a third party.

(D) To the extent there is any inconsistency between the technical requirements in this PPA and the Interconnection Agreement, the Interconnection Agreement will control.

1.4 <u>Interpretation of Arrangements for Electric Supply to the Project</u>. This PPA does not provide for the supply of retail electric power or natural gas to the Project, for any purpose ("House Energy"). Seller shall contract with the local utility in whose retail service territory the Project is located ("Local Provider") for the supply of House Energy.

(A) Seller's arrangements for the supply of House Energy to the Project shall be separate and free-standing arrangements. The terms of this PPA are not binding upon the Local Provider. For purposes of this PPA, the Local Provider shall be deemed to be a separate entity and separate contracting party, whether or not the Local Provider is Buyer or an Affiliate of Buyer.

(B) Notwithstanding any other provision in this PPA, nothing in Seller's arrangements for the supply of House Energy to the Project shall alter or modify Seller's or Buyer's rights, duties and obligations under this PPA. This PPA shall not be construed to create any rights between Seller and Buyer in Buyer's capacity as the Local Provider.

(C) Seller shall have the right to consume energy concurrently generated by the Project for House Energy and to co-locate additional facilities designed to supply House Energy; provided, however, that excess energy produced from such facility shall not be delivered by Seller to Buyer under this PPA. House Energy shall be real time measured by

either (i) separate Electric Metering Devices for Metered Output and House Energy or (ii) a single Electric Metering Device that separately measures Metered Output and House Energy. Each meter will have bi-directional kWh pulse accumulators and will be recorded separately for delivered and received power.

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# ARTICLE 2

## Term and Termination

2.1 Execution Date and Term. This PPA shall become effective on the Execution Date, subject to conditions precedent set forth herein, and shall end at 11:59 p.m. Mountain Prevailing Time on the date that is the last Day of the twentieth (20<sup>th</sup>) Commercial Operation Year, subject to the early termination provisions set forth herein. Applicable provisions of this PPA shall continue in effect after termination, including early termination, to the extent necessary to enforce or complete the duties, obligations or responsibilities of the Parties arising prior to termination.

## ARTICLE 3

## Project Description

3.1 <u>Commercial Terms</u>. The following commercial terms apply to the transaction contemplated by this PPA, each term as more fully set forth in this PPA:

Buyer: Public Service Company of New Mexico	Seller: La Joya Wind, LLC	
Project: La Joya Wind Facility, Phase 2		
Point of Delivery: Clines Corners 345 kV		
<b>Contract Term:</b> 20 Commercial Operation Years	Guaranteed Capacity (MWs): 140 MW at the Point of Delivery, subject to Section 3.2	
Product Type: Bundled Energy, Ancillary Services and RECs	<b>Energy Output Payment Rate:</b> 17.48/MWh, or, subject to Section 17.3(B)(3), \$20.67/MWh	
Day(s) of week: Monday through Sunday, including NERC holidays	Hours: Hour Ending 0100 – Hour Ending 2400, Monday through Sunday Mountain Prevailing Time ("MPT")	
Guaranteed Start Date: One hundred eighty (180) Days after the Expected Commercial Operation Date		
Expected Commercial Operation Date: December 31, 2020, subject to extensions as set forth in Section 3.6 and Section 17.3.		

### COMMERCIAL TERMS

3.2 <u>Project</u>. <u>Exhibit A</u> provides a detailed description of the Project, including identification of the major equipment and components that will make up the Project. Seller shall

provide advance written notice to Buyer at the earliest practicable time of any proposed material changes in the Project. The Parties agree that Seller may make a one-time adjustment to the Guaranteed Capacity based on final Wind Turbine selection for the Project; *provided* that such adjustment will not exceed plus or minus 2.5 MW in total and *further provided* that the turbine selected by Seller satisfies the definition of Wind Turbine. Seller will provide notice of adjustment of the Guaranteed Capacity within five (5) Business Days after execution of the Wind Turbine supply contract for the Project.

3.3 <u>Location</u>. A scaled map that identifies the Site, the location of the Electric Interconnection Point, the location of the Point of Delivery, and the location of the Interconnection Facilities is included in <u>Exhibit A</u> to this PPA. <u>Exhibit A</u> also contains a preliminary indication of the location of the Wind Turbines at the Site. Seller will provide notice to Buyer of the final proposed location of the Wind Turbines at the Site no later than thirty (30) Days prior to the initial Site construction mobilization and commencement of civil infrastructure work by Seller's contractors at the Site. Seller shall provide advance written notice to Buyer at the earliest practicable time of any other proposed location changes.

3.4 <u>General Design of the Project</u>. Seller shall construct the Project in accordance with Prudent Utility Practices and in accordance with the terms and conditions of the Interconnection Agreement. Seller shall maintain the Project according to Prudent Utility Practices, this PPA and the Interconnection Agreement. The Project shall at all times:

(A) have the required panel space and 125V DC battery-supplied voltage to accommodate metering, generator telemetering equipment and communications equipment;

(B) be equipped for and capable of AGC by Buyer;

(C) use communication circuits from Seller's National Control Center to Buyer's System Control Center for the purpose of telemetering, supervisory control/data acquisition, and voice and other communications as required for AGC by Buyer;

(D) supply Energy with harmonic distortion in compliance with the requirements of the Interconnection Agreement and Prudent Utility Practices;

(E) deliver Energy to Buyer, at the frequency specified by Transmission Provider;

(F) be capable of being remotely dispatched by Buyer's System Control Center; and

(G) be capable of immediate disconnection from the Buyer's system in the event of an Emergency Condition.

The Parties acknowledge and agree that (i) the La Joya Wind Facility and the La Joya Wind Facility, Phase 2 will be separately metered on the high side of the 34.5 kV/345 kV transformer; and (ii) the gen-tie and the Torrance switching station between the Project and the Point of Delivery are shared facilities among the Project and other projects as illustrated in Exhibit B.

3.5 <u>Expected Commercial Operation Date</u>. Subject to the extensions as specifically set forth herein, the Commercial Operation Date shall occur no later than the Expected Commercial Operation Date.

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3.6 <u>Extension Due to Force Majeure</u>. The Expected Commercial Operation Date and related damages provisions under Section 3.7 shall be extended:

(A) By a number of Days, up to a maximum of one hundred eighty (180) Days, equal to the duration of any Force Majeure Event that delays construction or commencement of operation of the Project. Seller will give written notice to Buyer describing any such Force Majeure Event within five (5) Business Days after the occurrence of the Force Majeure Event. The number of Days of such extension is calculated from the date on which the Force Majeure Event begins. If a Force Majeure Event will delay the Commercial Operation Date for more than one hundred eighty (180) Days, then Buyer will have the right to terminate this PPA without liability of either Party;

(B) on a day-for-day basis, up to a maximum of ninety (90) Days, until all of the interconnection facilities, transmission upgrades, and new transmission facilities, if any, described in the Interconnection Agreement and Transmission Agreements and required to connect the Project to the Transmission Provider's Transmission System and deliver Energy from the Project have been completed and placed into operation, except to the extent any delay in such completion and placement into operations was the result of Seller's failure to complete its obligations under the Interconnection Agreement or Transmission Agreements needed to ensure timely completion and operation of such facilities.

Seller shall diligently pursue the development and construction of the Project using commercially reasonable efforts consistent with Prudent Utility Practice on or before the Guaranteed Start Date. Seller will be solely responsible for, and the Energy Output Payment Rate will not be adjusted, to accommodate increased costs or any failure to obtain any Tax Benefits, associated with (i) interconnection of the Project pursuant to the Interconnection Agreement and Transmission Agreement; or (ii) delays affecting Seller's eligibility, in whole or in part, for the Tax Benefits.

3.7 <u>Delay Damages</u>. If the Commercial Operation Date has not occurred by the Expected Commercial Operation Date as such date may be extended pursuant to Section 3.6, Seller will use commercially reasonable efforts to continue construction of the Project and shall pay liquidated damages ("**Delay Damages**") to Buyer in an amount equal to Two Hundred Dollars (\$200) per Day per each MW of Delayed Capacity for each Day after the Expected Commercial Operation Date until the earlier of (i) the Commercial Operation Date, and (ii) the Guaranteed Start Date. "**Delayed Capacity**" is an amount equal to the difference between the Guaranteed Capacity and the Installed Capacity. In no event shall the aggregate Delay Damages exceed Thirty-Five Thousand Dollars (\$35,000) per MW of Delayed Capacity.

3.8 <u>Capacity Shortfall</u>. If the Commercial Operation Date is declared before the full Guaranteed Capacity of the Project has been constructed, commissioned and tested, Seller shall use commercially reasonable efforts to cause the remaining portion of the Guaranteed Capacity to achieve Commercial Operation. If Seller has not caused all Delayed Capacity to achieve

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Commercial Operation on or before the Guaranteed Start Date, then no later than twenty (20) Days after the Guaranteed Start Date, Seller shall pay to Buyer liquidated damages in the amount of Three Hundred Fifty Thousand Dollars (\$350,000) per MW of Delayed Capacity ("Capacity Shortfall Damages"), in which case the Guaranteed Capacity will be reduced in an amount equal to the Delayed Capacity for which Capacity Shortfall Damages were timely paid pursuant to this Section 3.8.

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3.9 <u>Test Energy</u>. Not less than thirty (30) Days prior to the date upon which Seller expects to begin delivering Test Energy, Seller shall give written notice to Buyer of such expected deliveries. During the Test Period, Buyer agrees to accept and purchase all Test Energy generated at the Project and delivered by Seller to Buyer at the Point of Delivery at a rate equal to fifty percent (50%) of the Energy Output Payment Rate. Seller shall notify Buyer, to the extent practicable, fifteen (15) Days prior to the initial delivery of Test Energy to Buyer.

3.10 <u>Notice of Commercial Operation</u>. Not less than sixty (60) days prior to the date upon which Seller expects to achieve the Commercial Operation Date, Seller shall give written notice to Buyer of such expected Commercial Operation Date; provided that such Commercial Operation Date shall not be more than ninety (90) Days prior to the Expected Commercial Operation Date. In the event that Seller should determine that the Expected Commercial Operation Date for the Project is not feasible or is impossible to achieve, Seller shall promptly notify Buyer and shall advise Buyer of the new proposed Commercial Operation Date; provided, however, such new Commercial Operation Date shall not be later than the Guaranteed Start Date.

## ARTICLE 4

### AGC; Curtailment

## 4.1 AGC: Curtailment.

(A) Prior to the Commercial Operation Date, Seller, at its sole cost and expense, shall install AGC at the Project and shall maintain such AGC throughout the Delivery Term. Beginning on the Commercial Operation Date, Buyer shall have the right to curtail the Project by use of the AGC system to effectuate its curtailment rights pursuant to this Section 4.1(B) through Section 4.1(D). Seller shall ensure that, throughout the Delivery Term, the SCADA signal is capable of functioning within the margin of error specified in the control system manufacturer's energy set point margin of error. Seller shall ensure that the Project's AGC Remote/Local status is in "Remote" set-point control during normal operations.

(B) Seller shall reduce Energy Output from the Project to the extent of a Buyer Curtailment, which includes (i) any curtailment requested by Buyer with the intended purpose of achieving economic savings by not purchasing energy from the Project, and (ii) any curtailment that results from Buyer's economic bidding (each a "Buyer Curtailment). Buyer Curtailment shall also apply in the event Buyer or the Project enters an Organized Market pursuant to Section 4.1(C) below, and the Project is curtailed as a result of Buyer's submission of an economic bid offer into such Organized Market. Such Buyer Curtailment rights do not provide the Buyer with any rights to direct the operation of the Project. For a Buyer Curtailment, Buyer shall pay Seller for Deemed Energy in accordance with Section 8.1(A).

(C) <u>Organized Market</u>. In the event Buyer moves into an Organized Market, Buyer agrees to designate the Project as a participating resource and as the scheduling coordinator for the Project, submit an economic bid curve for the available capacity of the project. If Buyer is unable to enter into an organized market by April 30, 2021, then the BAA Cap will be reduced by 10,000 MWh until Buyer enters an Organized Market at which time the BAA Cap will revert to the amount identified in the Reliability Curtailment definition.

(D) Seller shall reduce Energy Output from the Project during and to the extent of any Reliability Curtailment, Transmission Provider Curtailment, Environmental Curtailment, or Buyer Curtailment. In the event an Environmental Curtailment exceeds seven (7) Days, Seller shall notify Buyer of such curtailment and the Parties shall mutually agree to a method to comply with environmental guidance causing the curtailment.

(E) With the exception of a Buyer Curtailment and any Reliability Curtailment for oversupply situations in excess of the BAA Cap, Buyer shall not be required to pay Seller for any curtailed Energy during any curtailments allowed by Seller under this Section 4.1(D).

(F) Seller has the right to reasonably request records from Buyer related to Reliability Curtailment for this Project. To the extent that it is determined pursuant to the audit process that Buyer has curtailed the Project for reasons other than as provided in Reliability Curtailment and the curtailment is determined to be a Buyer Curtailment, such Buyer Curtailment will be compensated in accordance with Section 4.1(B).

#### ARTICLE 5

#### Delivery and Metering

#### 5.1 Delivery Arrangements.

(A) Seller shall deliver the Energy to the Point of Delivery, including diligently negotiating and executing an Interconnection Agreement with the Transmission Provider, or, in the alternative, diligently negotiating and executing any such changes to an executed Interconnection Agreement as are necessary to accommodate the characteristics of the Project. Seller shall be responsible for the costs of interconnection and costs required to deliver the Energy Output from the Project to Buyer at the Point of Delivery.

(B) Buyer shall be responsible for costs required to deliver the Energy Output from and beyond the Point of Delivery.

(C) Seller, or its Affiliate Avangrid Renewables, LLC, shall effect with the Transmission Provider a reduction in the Transmission Agreements in an amount equal to the Guaranteed Capacity, subject to Transmission Provider's OATT and in accordance with Exhibit H, such reduction to be effective prior to or commensurate with the Guaranteed Start Date to the extent possible. In accordance with Exhibit H, Buyer shall be responsible for transmission service and costs required to deliver the Energy Output from and beyond the Point of Delivery; provided that any failure to obtain the CCN Approval shall not be a breach by Buyer of its obligations set forth in this Section 5.1(C).

(D) On a Day-ahead basis and no later than 4:00 a.m. MPT, Seller, or Seller's agent, shall make available to Buyer a 24-hour forecast of the Metered Output to be delivered to Buyer. In addition, Seller, or Seller's agent, shall establish and maintain (including any future technological improvements developed by Seller, or an agent of Seller) an interface with Buyer via a web-based file transfer protocol for the purpose of transferring to Buyer real-time forecasting data related to the Project (or any alternative transfer mechanism mutually agreed to by the Parties).

(E) Buyer shall be responsible for all necessary transmission service arrangements, including scheduling arrangements, if any, to take Metered Output at the Point of Delivery and deliver it to points beyond.

5.2 <u>Availability Reporting</u>. Seller shall be responsible for providing accurate and timely updates on the current availability of the Project to Buyer's SCC.

#### 5.3 Electric Metering Devices.

(A) Seller shall ensure that the Energy sold and delivered pursuant to this PPA shall be metered and accounted for separately from any electric generation facility that utilizes the same Electric Interconnection Point.

(B) The following provisions of this Section shall govern Electric Metering Devices except to the extent the Interconnection Agreement modifies or otherwise conflicts with these provisions, in which case the Interconnection Agreement shall govern.

All Electric Metering Devices used to measure the Energy made available (C) to Buyer by Seller under this PPA and to monitor and coordinate operation of the Project shall be owned, installed, and maintained in accordance with the Interconnection Agreement at no cost to Buyer under this PPA. The Energy will be adjusted to reflect all incremental losses caused by the interconnection of the Project based upon a loss calculation and allocation mutually agreed to in writing by the Parties as soon as reasonably practicable after the Execution Date. In no event shall Buyer pay for any Energy not delivered to Buyer as a result of the loss allocation methodology. If Electric Metering Devices are not installed at the Point of Delivery, meters or meter readings will be adjusted to reflect losses from the Electric Metering Devices to the Point of Delivery based initially on the amount specified by the manufacturer for expected losses, provided that the Parties may revise this loss adjustment based on actual experience. Seller shall provide or arrange with the Transmission Provider to provide Buyer reasonable access to all Electric Metering Devices for all purposes necessary to perform under this PPA and shall provide Buyer the reasonable opportunity to be present at any time when such Electric Metering Devices are to be inspected and tested or adjusted. Buyer shall also have the right to conduct its own tests of the Electric Metering Devices in Buyer's reasonable discretion no more than once per Commercial Operation Year. Seller shall provide Buyer with all authorizations necessary to have access to the Electric Metering Devices, including obtaining any consent or other agreement from the Transmission Provider necessary to allow Buyer such access.

(D) Either Buyer or Seller may elect to install and maintain, at its own

expense, backup metering devices ("Back-Up Metering") in addition to the Electric Metering Devices, which installation and maintenance shall be performed in a manner acceptable to the Parties. Within thirty (30) days after the execution of this PPA, Buyer shall notify Seller of its desire to install Back-Up Metering. Buyer and Seller will work together on the logistics of installing Back-Up Metering. The installing Party, at its own expense, shall inspect and test Back-Up Metering upon installation and at least annually thereafter. The installing Party shall provide the other Party with reasonable advance notice of, and permit a representative of the other Party to witness and verify, such inspections and tests, provided, however, that such Party shall not unreasonably interfere with or disrupt the activities of the installing Party and shall comply with all applicable safety standards. Upon written request, the installing Party shall perform additional inspections or tests of Back-Up Metering and shall permit a qualified representative of the requesting Party to inspect or witness the testing of Back-Up Metering, provided, however, that the requesting Party shall not unreasonably interfere with or disrupt the activities of the installing Party and shall comply with all applicable safety standards. The actual expense of any such requested additional inspection or testing shall be borne by the Party requesting the test, unless, upon such inspection or testing, Back-Up Metering is found to register inaccurately by more than the allowable limits established in this Article, in which event the expense of the requested additional inspection or testing shall be borne by the installing Party. If requested in writing, the installing Party shall provide copies of any inspection or testing reports to the requesting Party.

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(E) If any Electric Metering Devices, or Back-Up Metering, are found to be defective or inaccurate outside the bounds of the selected device's manufacturer's performance standards, they shall be adjusted, repaired, replaced, and/or recalibrated as near as practicable to a condition of one percent (1.0%) or less error by the Party owning such defective or inaccurate device and at that Party's expense.

5.4 <u>Adjustment for Inaccurate Meters</u>. If an Electric Metering Device, or Back-Up Metering, fails to register, or if the measurement made by an Electric Metering Device, or Back-Up Metering, is found upon testing to be inaccurate by more than one percent (1.0%), an adjustment shall be made correcting all measurements by the inaccurate or defective Electric Metering Device, or Back-Up Metering, for both the amount of the inaccuracy and the period of the inaccuracy, in the following manner:

(A) In the event that the Electric Metering Device is found to be defective or inaccurate, the Parties shall use Back-up Metering, if installed, to determine the amount of such inaccuracy, *provided, however*, that Back-Up Metering has been tested and maintained in accordance with the provisions of this Article. If Back-Up Metering is installed on the low side of Seller's step-up transformer, the Back-Up Metering data shall be adjusted for losses in the same manner as for the Electric Metering Devices. In the event that Back-Up Metering is not installed, or Back-Up Metering is also found to be inaccurate by more than one percent (1.0%), the Parties shall estimate the amount of the necessary adjustment on the basis of deliveries of Metered Output from the Project to the Point of Delivery during periods of similar operating conditions when the Electric Metering Device was registering accurately. The adjustment shall be made for the period during which inaccurate measurements were made.

(B) In the event that the Parties cannot agree on the actual period during which

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the inaccurate measurements were made, the period during which the measurements are to be adjusted shall be the shorter of (i) the last one-half of the period from the last previous test of the Electric Metering Device to the test that found the Electric Metering Device to be defective or inaccurate, or (ii) the one hundred eighty (180) Days immediately preceding the test that found the Electric Metering Device to be defective or inaccurate.

(C) To the extent that the adjustment period covers a period of deliveries for which payment has already been made by Buyer, Buyer shall use the corrected measurements as determined in accordance with this Article to recompute the amount due for the period of the inaccuracy and shall subtract the previous payments by Buyer for this period from such recomputed amount. If the difference is a positive number, the difference shall be paid by Buyer to Seller; if the difference is a negative number, that difference shall be paid by Seller to Buyer, or at the discretion of Buyer, may take the form of an offset to payments due Seller by Buyer. Payment of such difference by the owing Party shall be made not later than thirty (30) Days after the owing Party receives notice of the amount due.

#### ARTICLE 6

#### **Conditions Precedent**

6.1 <u>Conditions Precedent</u>. The obligations of the Parties under this PPA are subject to satisfaction of the following conditions precedent:

(A) Subject to Section 17.3, receipt of NMPRC Approval;

(B) Receipt of approval of the Boards of Directors of Buyer and its parent company, as required; and

(C) Subject to Section 17.4, receipt of CCN Approval.

#### **ARTICLE 7**

#### Sale and Purchase of Energy Output

7.1 <u>Sale and Purchase of Energy Output</u>. In accordance with and subject to the terms and conditions of this PPA, commencing on the Commercial Operation Date and continuing through the end of the Term ("Delivery Term"), Seller shall sell and deliver to Buyer, and Buyer shall purchase and receive from Seller, all right, title and interest in and to the Energy Output made available by Seller at the Point of Delivery in accordance with Article 5; *provided, however*, that Buyer shall not be required to receive and purchase Energy Output when and to the extent that (a) a Party's performance is excused by a Force Majeure Event, (b) a Transmission Provider Curtailment is continuing, (c) a Reliability Curtailment is continuing, (d) a Seller Forced Outage is continuing, (e) an Environmental Curtailment is continuing, (f) a Buyer Curtailment is continuing, or (g) Seller's performance is excused during Seller Excused Hours.

7.2 <u>Title and Risk of Loss</u>. As between Seller and Buyer, Seller shall be deemed to be in control of the Energy Output from the Project up to delivery and receipt at the Point of Delivery, and Buyer shall be deemed to be in control of such Energy Output from and after delivery and receipt at the Point of Delivery. Title and risk of loss related to the Energy Output shall transfer from Seller to Buyer at the Point of Delivery.

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7.3 Future Environmental Attributes. The Parties acknowledge and agree that (a) additional Environmental Attributes may be recognized by a Governmental Authority after the Execution Date; (b) in accordance with the terms of this PPA all right and title to such additional Environmental Attributes is included in the Energy Output Payment Rate as Energy Output, and (c) such additional Environmental Attributes shall pass to Buyer in accordance with Section 7.2 of this PPA. Seller will provide such additional Environmental Attributes only to the extent that the qualification for, certification of, tracking of or disposition of such additional Environmental Attributes does not (A) require modifications to the Project (or the design thereof) or upgrades or other modifications to any interconnection or transmission facilities, (B) require Seller to reduce or restrict Seller's flexibility in offering, bidding, planning and scheduling the generation of Energy from the Project, (C) result in a reduction in the Available Hours, or (D) interfere with the qualification, certification, tracking or other disposition of any RECs or other Environmental Attributes other than those associated with the of the Project. If in order for Buyer to receive the benefit of any additional Environmental Attributes Seller must incur any third-party costs not otherwise provided for in this PPA, such costs shall, if Seller incurs such costs at Buyer's request, be reimbursed promptly to Seller by Buyer. Seller shall deliver a good faith estimate of such additional costs to Buyer prior to incurring such costs, and following receipt of such estimate, Buyer shall notify Seller of its continued election to have Seller incur such costs to be reimbursed by Buyer; provided that, if the additional costs exceed Seller's good faith estimate by more than ten percent (10%), Buyer shall have the right to notify Seller of its election to have Seller cease incurring the additional costs. For the avoidance of doubt, Buyer shall remain liable to Seller for all costs incurred prior to Seller's receipt of Buyer's notice. The Parties agree to negotiate in good faith further agreements and documentation necessary to effectuate the transfer of such additional Environmental Attributes.

7.4 Future Ancillary Services. The Parties acknowledge and agree that (a) the Project does not generate Ancillary Services as of the Execution Date but the Project may generate Ancillary Services after the Execution Date; (b) in accordance with the terms of this PPA all right and title to such future Ancillary Services are included in the Energy Output Payment Rate and (c) such future Ancillary Services shall pass to Buyer in accordance with Section 7.2 of this PPA. Seller will provide such future Ancillary Services only to the extent that the qualification for, certification of, tracking of or disposition of such future Ancillary Services does not (A) require modifications to the Project (or the design thereof) or upgrades or other modifications to any interconnection or transmission facilities, (B) require Seller to reduce or restrict Seller's flexibility in offering, bidding, planning and scheduling the generation of Energy from the Project, (C) result in a reduction in the Available Hours, or (D) interfere with the qualification, certification, tracking or other disposition of any RECs or other Environmental Attributes. If in order for Buyer to receive the benefit of any future Ancillary Services Seller must incur any third-party costs not otherwise provided for in this PPA, such costs shall, if Seller incurs such costs at Buyer's request, be reimbursed promptly to Seller by Buyer. Seller shall deliver a good faith estimate of such additional costs to Buyer prior to incurring such costs, and following receipt of such estimate, Buyer shall notify Seller of its continued election to have Seller incur such costs to be reimbursed by Buyer; provided that, if the additional costs exceed Seller's good faith estimate by more than ten percent (10%), Buyer shall have the right to notify Seller of its election to have Seller cease incurring the additional costs. For the avoidance of doubt, Buyer shall remain liable to Seller for all costs incurred prior to Seller's receipt of Buyer's notice. The Parties agree to negotiate in good faith further agreements and documentation necessary to

effectuate the transfer of such additional Ancillary Services.

## 7.5 <u>Scheduling</u>.

Buyer shall arrange all scheduling services necessary to ensure (A) compliance with NERC/WECC operating policies and criteria, Transmission Provider OATT requirements, and any other applicable guidelines. Prior to the implementation and applicability to the Project of any energy market, to the extent scheduling is required now or in the future, Buyer shall schedule all Metered Output in accordance with NERC/WECC operating polices and criteria, Transmission Provider OATT requirements and any other applicable guidelines in a manner maximizing Metered Output from the Project based on the then-most-current forecast of energy provided by Seller, except for Transmission Provider Curtailments, Reliability Curtailments, Seller Forced Outages, Scheduled Maintenance Outages, Force Majeure Events, Buyer Curtailments, and Environmental Curtailments. At least thirty (30) Days prior to the anticipated Commercial Operation Date, Seller shall provide Buyer with a good faith estimate of the quantity of Energy Output it expects to generate for the remainder of that Commercial Operation Year. By July 1 of each succeeding Commercial Operation Year, Seller shall provide Buyer with a good faith estimate of the hourly quantities of Energy Output that Seller expects to generate in the following Commercial Operation Year ("Projected Schedule"). Seller shall also provide estimates of the daily quantity of Energy to be delivered to Buyer. Seller shall configure the ramp rate for the Project such that it will not generate energy at a rate that increases greater than ten (10) MW per minute.

(B) If at any point during the Delivery Term, (i) an alternative market design is implemented in which the Project will or can participate in an energy market, or (ii) if either the Project, the Electric Interconnection Point or Buyer no longer reside in the same market ((i) and (ii) a "Market Event") and such Market Event materially changes the interconnection and delivery requirements in this PPA, the Parties shall cooperate in good faith to facilitate the delivery of Energy Output from the Point of Delivery to Buyer, at the least possible cost to the Parties, consistent with this PPA to the extent possible.

(C) Seller shall provide, or cause its operation and maintenance contractor to provide to Buyer its good faith, non-binding estimates of the daily quantity of Energy Output to be delivered by Seller to the Point of Delivery for each week (Sunday through Saturday) by 4:00 p.m. MPT on the date falling at least three (3) Days prior to the beginning of that week.

(D) Unless otherwise specified by superseding policies or procedures of NERC/WECC, including the WECC pre-scheduling calendar, and SCC as applicable, Seller shall, by 6:00 a.m. MPT on each Day, submit a good faith estimate of the hourly quantities of Energy Output to be delivered for Buyer at the Point of Delivery for the next three (3) subsequent Days.

(E) If, at any time following submission of a good faith estimate as described in Section 7.4(C) and (D) above, Seller becomes aware of any material change that alters the values previously provided to Buyer, Seller shall promptly notify Buyer of such change or predicted change.

## 7.6 Forced Outages.

Buyer and Seller shall promptly advise one another of events that may (A) form the basis for a declaration of the existence or termination of Buyer Curtailment, Transmission Provider Curtailment, Reliability Curtailments, Seller Excused Hours or a Seller Forced Outage. Buyer or Seller (as appropriate) shall at the earliest practicable date provide the other Party written notice ("Outage Notice") of the declaration of the existence of a Buyer Curtailment, Transmission Provider Curtailment, Reliability Curtailment, Seller Excused Hours or a Seller Forced Outage. Seller shall provide such notice as applicable to Buyer's System Control Center, and Buyer shall provide such notice as applicable to Seller's National Control Center. An Outage Notice provided by either Party shall contain information regarding the beginning date and time of the event, the expected end date and time of such event, and the expected Metered Output, if any, that would be available for delivery and purchase at the Point of Delivery during such event. Buyer or Seller (as appropriate) shall keep the other Party informed of any developments that will affect either the duration of such event or the availability of the Project during or after the end of such event. In addition, Seller shall comply with all then-current Buyer, NERC and WECC generating unit outage reporting requirements, as they may be revised from time-to-time.

(B) Within fifteen (15) Business Days after the end of the Month, Seller shall prepare, maintain and deliver to Buyer an operations log showing all turbine outage events and associated reasons. This shall include all outages due to Scheduled Maintenance, deratings and Seller Forced outages that occurred during the month. Upon request, Buyer may request SCADA data showing hourly turbine availability status codes for all turbines for the month.

7.7 <u>Availability Guarantee</u>. Seller guarantees that the Project will achieve the Guaranteed Availability Percentage during each Commercial Operation Year. Seller shall pay Availability Damages in accordance with Seller's obligations under the provisions of <u>Exhibit I</u> if the Plant fails to meet the Guaranteed Availability Percentage in any Commercial Operation Year after the Commercial Operation Date.

#### ARTICLE 8

#### Payment Calculations

8.1 <u>Billing Components</u>. The total due from Buyer to Seller for each Monthly Billing Period during the Term shall be paid in accordance with the invoicing procedures set forth in Section 9.1. Charges will consist of the following, and, other than charges for Test Energy, will begin on the Commercial Operation Date:

(A) Monthly Energy Output Payment. Subject to the provisions of this PPA, Buyer shall accept and pay for Energy Output generated at the Project and delivered by Seller to Buyer. Buyer shall pay Seller an amount equal to the sum of (1) the product of (a) the amount of Energy Output (MWh) delivered for Buyer to the Point of Delivery from the Project multiplied by (b) the Energy Output Payment Rate plus (2) the product of (i) Deemed Energy resulting from any Buyer Curtailment and any curtailments in excess of the BAA Cap multiplied by (ii) the Energy Output Payment Rate plus the PTC Compensation Amount. For the avoidance of doubt, the Energy Output Payment Rate also compensates Seller for the

associated Environmental Attributes, RECs and Ancillary Services, in any Monthly Billing Period. Nothing herein confers on Buyer the right to, and Buyer may not, direct Seller to reduce the Energy Output of the Project for the provision of Ancillary Services.

(B) If NMPTCs become available in connection with the Energy Output, Seller shall use commercially reasonable efforts to become eligible for and to obtain any such credits.

(C) In the event that Seller becomes eligible to receive any NMPTCs with respect to the Project, the value of such NMPTCs will be shared between the Parties. No later than thirty (30) Days after Seller's receipt of any NMPTCs, Seller will remit to Buyer a payment equal to fifty percent (50%) of the value of such NMPTCs.

8.2 <u>Payment Support Requirement</u>. Each Party shall use commercially reasonable efforts to defend, before any Governmental Authority, all terms and conditions of this PPA consistent with Applicable Law.

8.3 <u>Survival on Termination</u>. The provisions of this Article 8 shall survive the repudiation, termination or expiration of this PPA for so long as may be necessary to give effect to any outstanding payment obligations of the Parties due and payable prior to any such repudiation, termination or expiration.

# ARTICLE 9

## Billing and Payment Procedures

## 9.1 Statements and Payment of Electricity Payments.

(A) Seller shall read or have read on its behalf the Electric Metering Devices at the Point(s) of Delivery at 11:59 p.m. MPT on the last Day of each Month, unless otherwise mutually agreed by the Parties.

(B) Payments due shall be determined and adjusted in accordance with Article 8. From and after the start of the Test Period, Buyer shall pay to Seller, monthly in arrears, payments in accordance with the provisions of clause (C) below.

(C) On or before the tenth (10th) Day of each Month following the Month in which the Commercial Operation Date occurs, Seller shall prepare an invoice showing the amount payable by Buyer pursuant to Article 8 of this PPA (in Dollars) payable to Seller for the preceding Month (and with respect to the first billing Month, any preceding Month including and following the Test Period). Each such invoice shall show information and calculations, in reasonable detail. Charges for partial months shall be prorated.

(D) Beginning with the first Month in the Test Period until an invoice is required to be prepared pursuant to clause (C) above, Seller shall prepare an invoice showing the charges for Test Energy payable to Seller for the preceding Month.

(E) Buyer shall, subject to Sections 9.5 and 9.9, pay all invoices within twenty (20) Days after the date Buyer receives Seller's invoice. If Buyer should dispute a portion of the

charges set forth on any invoice, it shall nonetheless pay all amounts not in dispute by the applicable due date.

(F) If banks in the State of New Mexico are permitted to close on any date on which any payment by Buyer would otherwise have been due, then Buyer shall make such payment on the Business Day that immediately follows such payment date.

(G) All payments specified in this Section 9.1 shall be made to an account designated by Seller and notified to Buyer.

9.2 <u>Miscellaneous Payments</u>. Any amounts due to either Seller or Buyer under this PPA, other than those specified in Section 9.1 above, shall be paid within thirty (30) Days following receipt by the other Party of an itemized invoice from the Party to whom such amounts are due setting forth, in reasonable detail, the basis for such payment.

9.3 <u>Currency and Method of Payment</u>. Notwithstanding anything contained in this PPA, all payments to be made by either Seller or Buyer under this PPA shall be made in Dollars in immediately available cleared funds by wire transfer into the relevant account specified in this PPA or, if no account is specified, into the account designated by the receiving Party.

9.4 <u>Default Interest</u>. Except where payment is the subject of a bona fide dispute (in which case it shall be treated under Section 9.5 below), or where otherwise waived by the Party entitled to interest, if any payment due from Buyer to Seller or from Seller to Buyer under this PPA is not paid when due, then, in addition to such unpaid amount, interest shall be due and payable thereon. Applicable interest shall be calculated at a rate equal to the ninety (90) Day highest grade commercial paper rate as published in *The Wall Street Journal* on the first Business Day of each Month ("Default Rate"), as in effect from time to time and shall continue to accrue from the date on which such payment became overdue to and until the date such payment is made in full (both dates inclusive).

9.5 Disputed Items.

(A) Either Party ("**Disputing Party**") may dispute in good faith the accuracy of a reading of the Electric Metering Devices and/or the accuracy of an invoice. Where a reading or bill is the subject of a dispute in good faith, the Disputing Party shall give written notice to the other Party within ten (10) Days after the delivery of the invoice or statement by the other Party, together with details of its reasons for such dispute. The Disputing Party shall make payment of any undisputed amounts to the other Party by the due date for payment specified in such invoice. The Parties shall use all reasonable efforts to resolve the dispute in accordance with Section 13.8. Any amount or adjustment with respect to a meter reading subsequently agreed to by the Parties or determined to be due shall be made (in each case in settlement of a dispute) by a credit or additional charge on the next bill rendered (as the case may be).

(B) All amounts paid as a result of the settlement of a dispute shall be paid with interest thereon at the Default Rate from the Day on which such payment originally fell due to and until the date such payment is made in full (both dates inclusive), unless otherwise

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waived by the Party entitled to such interest.

9.6 <u>Statement Errors</u>. In the event that either Party becomes aware of any error in any statement, such Party shall, immediately upon discovery of the error, notify in writing the other Party of the error and shall rectify such error (whether such error was in the form of an underpayment or overpayment) within thirty (30) Days of such notification. Provided that the other Party is satisfied (in its sole and reasonable discretion) that the aforementioned notification requirements have been complied with in good faith by the Party who has made the error, no interest shall be payable in respect of any amount that was erroneously overpaid or underpaid.

9.7 <u>Taxes</u>.

(A) All Energy delivered by Seller to Buyer hereunder shall be sales for resale, with Buyer reselling such Energy. Buyer shall obtain and provide Seller an appropriate New Mexico Nontaxable Transaction Certificate prior to the date any sales under this PPA occur. The Parties further acknowledge their understanding that no gross receipts Tax is applicable to the sale or delivery of Energy Output hereunder; however, in the event any such Tax is or becomes applicable, Buyer shall reimburse Seller for such Tax. During the Delivery Term, Seller and Buyer each covenant that it will take all actions required and refrain from taking any actions which are prohibited, which such action or inaction would cause the Energy delivered hereunder to Buyer to not qualify for a New Mexico Type 2 or equivalent Nontaxable Transaction Certificate.

Seller shall be responsible and shall pay when due all income, gross **(B)** receipts, compensating, use, valued added, employment, ad valorem, personal real property or other similar Taxes, including any associated interest and penalty assessments and any and all franchise fees or similar fees assessed against Seller or the Project due to the construction, ownership, leasing, operation or maintenance of the Project, or any components or appurtenances thereof, including all Taxes, fees, allowances, trading credits and other offsets and impositions for wastes and emissions (including carbon-based compounds, oxides of nitrogen and sulfur, mercury and other Hazardous Materials) produced by the Project. If Buyer is assessed any Taxes or associated fees as a result of the improvement of a Site due to the existence of the Project on the Site, Buyer shall immediately notify Seller. Buyer and Seller shall cooperate in contesting such assessment. If, after resolution of the matter, Taxes are imposed on Buyer as a result of the improvement of the Site due to the existence of the Project on the Site, Seller shall reimburse Buyer for such Taxes. Seller shall not be obligated to pay or reimburse Buyer for Taxes imposed on or measured by the Buyer's overall revenues or income. Seller's prices under Section 8 are inclusive of such Taxes, allowances and credits during the Term.

(C) If a Party is required to remit or pay Taxes that are the other Party's responsibility hereunder, such Party shall promptly reimburse the other for such Taxes. Consistent with Applicable Law, the Parties shall use all reasonable efforts to administer this PPA and implement the provisions in this PPA in a manner that will minimize Taxes due and payable by all Parties.

(D) The Parties shall provide each other, upon written request, with copies of

any documentation respecting this PPA or the Project that may be reasonably necessary in the ordinary course of any inter-governmental, state, local, municipal or other political subdivision tax audit inquiry or investigation.

(E) Consistent with Applicable Law, the Parties shall cooperate to minimize Taxes; however, no Party shall be obligated to incur any extraordinary financial burden to reduce Taxes for which the other Party is responsible hereunder.

9.8 <u>Setoff and Payment Adjustments</u>. Except as otherwise expressly provided for in this PPA, including Section 9.9 below, all payments between the Parties under this PPA shall be made free of any restriction or condition and without deduction or withholding on account of any other amount, whether by way of setoff or otherwise.

## 9.9 Netting.

(A) A Party at any time may offset against any and all amounts that may be due and owed to the other Party under this PPA, including damages and other payments that are owed by a Party to the other Party pursuant to this PPA. Undisputed and non-offset portions of amounts invoiced under this PPA shall be paid on or before the due date or shall be subject to the late payment interest charges set forth in Section 9.4.

(B) If Seller and Buyer net their obligations to each other under this PPA, then such amounts will be aggregated, and Seller and Buyer will discharge their obligations to pay through netting of payments on a current accounting basis. If the amounts owed by Buyer or Seller to the other are equal on a current accounting basis, neither shall be required to make payment under this PPA.

9.10 <u>Survival on Termination</u>. The provisions of this Article 9 shall survive the repudiation, termination or expiration of this PPA for so long as may be necessary to give effect to any outstanding payment obligations of the Parties that became due and payable prior to any such repudiation, termination or expiration.

## ARTICLE 10

# Operations and Maintenance

#### 10.1 Construction of the Project.

(A) Seller will diligently pursue the development and construction of the Project using commercially reasonable efforts consistent with Prudent Utility Practices and in compliance with the terms and conditions of the Interconnection Agreement, the PPA and other applicable requirements and standards. Seller will be solely responsible for, and the Energy Output Payment Rate will not be adjusted to accommodate, increased costs or any failure to obtain any Tax Benefits. On and after the Execution Date through the start of construction, Seller will provide Buyer monthly development and construction updates.

(B) On and after the start of construction and through the Commercial Operation Date, Seller will provide Buyer monthly construction updates in substantially the same form as Exhibit L. If Seller becomes aware of any critical milestone that will not be

achieved by the required date, Seller must provide Buyer written notice and a recovery plan to eliminate any delay in the construction schedule. In no event will Seller's failure to complete one or more critical milestones by the established dates change, delay or otherwise affect the requirement to achieve Commercial Operation by the Guaranteed Start Date. Buyer shall have the right to monitor the construction, commissioning, start-up, testing and operations of the Project and to be present during the commissioning, start-up and testing of the Project.

(C) Seller may not make modifications, alterations, expansions, or other changes to the Project, without the prior written consent of Buyer, that would be expected to materially alter the Guaranteed Capacity, performance or availability of the Project or materially and adversely impact the capabilities of the Project, except as required by Prudent Utility Practices or Applicable Law.

(D) Seller shall designate (by a written notice delivered to Buyer by the Execution Date) a Project Manager reasonably acceptable to Buyer who shall have full responsibility for the performance of the construction, commissioning, start-up and testing by Seller and shall act as a single point of contact in all matters on behalf of Seller ("Project Manager"). Seller may designate a new Project Manager from time to time by a written notice delivered to Buyer, subject to Buyer's consent, which consent shall not be unreasonably denied or delayed. Seller's Project Manager shall be deemed to have full authority to act on behalf of Seller, and written notices given by Buyer to the Project Manager shall be deemed as having been given to Seller.

(E) Other than the rights and obligations of Buyer specified in this PPA and any documents ancillary hereto, neither this PPA nor any such ancillary document shall be interpreted to create in favor of Buyer, and Buyer specifically disclaims, any right, title or interest in any part of the Project.

## 10.2 Commissioning Tests.

(A) Seller shall give Buyer at least sixty (60) Days' prior notice of the approximate test date and of the proposed tests scheduled relating to the commissioning of the Project ("Commissioning Tests") as described in Exhibit F. Representatives of Buyer shall have the right to be present at all such testing. Seller shall promptly notify Buyer of any changes to the test date or the date of any Commissioning Tests relating to the Project in order that Buyer may arrange for its respective representatives to attend.

# 10.3 Access to and Inspection of the Project.

(A) Seller shall provide Buyer and its authorized agents, employees and inspectors reasonable access to the Project with at least 24 hours' prior notice and approval by Seller, including the SCADA room and Seller's Interconnection Facilities, for the purposes set forth herein. Buyer acknowledges that such access does not provide Buyer with the right to direct or modify the operation of the Project in any way and further acknowledges that any exercise by Buyer of its rights under this Section 10.3(A) shall be at its own risk and expense; provided, however, that Buyer shall comply with all of Seller's applicable safety and health rules and requirements and shall conduct itself in a manner that will not unreasonably interfere with the

Project's operations.

(B) No inspections of the Project, whether by Buyer or otherwise, and no acceptance or approval given under this PPA, shall relieve Seller of or reduce its obligation to maintain the Project and operate the same in accordance with this PPA and Prudent Utility Practices. In no event shall any statement, representation, or lack thereof by Buyer, either express or implied, relieve Seller of its exclusive responsibility for the Project. Any inspection of Seller's property or equipment by Buyer, or any review by Buyer or consent by Buyer to Seller's plans, shall not be construed as endorsing the design, fitness or operation of the Project equipment nor as a warranty or guarantee.

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10.4 Operating Parameters.

(A) Seller shall operate or procure the operation of the Project in accordance with Prudent Utility Practices ("**Operating Parameters**"), subject only to Emergency Conditions and Force Majeure Events; provided that, during the Term of this PPA, Seller shall: (i) have the sole responsibility to, and shall at its sole expense, operate and maintain the Project in accordance with all requirements set forth in this PPA, and (ii) comply with reasonable requirements of Buyer regarding day-to-day or hour-by-hour communications with Buyer. Subject to compliance with the Operating Parameters, Seller agrees to operate the Project in such a manner that Energy Output delivered by Seller will meet all requirements for voltage level, harmonics, power factor, VArs, Ancillary Services and other electrical specifications required by the Transmission Provider.

(B) Seller shall operate the Project such that all system protective equipment is in service whenever the Project is connected to, or is operated in parallel with, the Transmission Provider's Transmission System, except for normal testing and repair. Seller shall provide adequate system protection and control devices to ensure safe and protected operation of all energized equipment during normal testing and repair. The Project's protective equipment shall meet Institute of Electrical and Electronic Engineers and all other industry standards. Seller shall have qualified independent, third party personnel test, calibrate and certify in writing the proper functioning of all protective equipment, in accordance with NERC PRC standards and Prudent Utility Practices. Seller shall perform a unit functional trip test after each overhaul of the Project's major equipment and shall provide results to Buyer in writing prior to returning the equipment to service. All of the foregoing shall be conducted in accordance with Prudent Utility Practices.

10.5 <u>Operating Procedures</u>. Not later than thirty (30) days before the Commercial Operation Date, an operating committee consisting of Seller and Buyer representatives shall develop mutually agreeable written Operating Procedures for integration of the Project into Buyer's system. Operating Procedures shall include, but not be limited to, methods of day-to-day communications; metering, telemetering, telecommunications, reporting of meteorological data from on-site meteorological towers (wind speed, wind direction, ambient temperature,

barometric pressure, air density), data reporting from each wind turbine (including ten (10) second intervals of turbine generation, wind speed, turbine availability, wind direction, and ambient temperature), and data acquisition procedures, curtailment record keeping; key personnel lists for Seller and Buyer, including an appointed authorized representative for each

Party; clearances and switching practices; operations and maintenance scheduling and reporting; scheduling and forecasting practices; daily capacity and Energy Output reports; unit operations log; Seller Forced Outage and planned outage reporting, and such other matters as may be mutually agreed upon by the Parties. Seller must staff, operate, maintain and control the Project at all times consistent with the Operating Procedures, this PPA, Prudent Utility Practice, Applicable Laws and required permits. The Operating Procedures also will require Seller to take all measures necessary to remediate or otherwise correct any breach of environmental protection regulations as required under Applicable Law. Personnel of Seller capable of starting, running, and stopping the Project must be continuously available, either at the Project or capable of being at the Project within one (1) hour, and must be continuously available by phone. Seller will make qualified personnel available twenty-four (24) hours per day, seven (7) days per week to perform scheduling and receive and give communications relating to the operation and dispatch of the Project. Buyer will use commercially reasonable efforts to notify Seller twenty-four (24) hours in advance of potentially critical start-ups.

## 10.6 Project Maintenance.

Seller shall maintain all Project equipment or cause the same to be (A) maintained at all times in accordance with Prudent Utility Practices and otherwise in accordance with this PPA. At least sixty (60) Days before the Commercial Operation Date, Seller will provide Buyer a notice of Scheduled Maintenance Outages for the Project for the first Commercial Operation Year within the Term. Thereafter, no later than November 1 of each Commercial Operation Year, Seller shall provide Buyer with a non-binding notice of the annual Scheduled Maintenance Outages for the following Commercial Operation Year and a notice of estimated long-term Scheduled Maintenance Outages for the next four (4) Commercial Operation Years. Each notice of Scheduled Maintenance Outages must identify each planned interruption and/or reduction of the Project's generation, including the duration of such event. Each annual Scheduled Maintenance Outage for the Commercial Operation Year will be subject to approval by Buyer. Buyer may, within fifteen (15) Days after receipt of the schedule, request reasonable modifications to the schedule. Seller may not schedule any Scheduled Maintenance Outage for any reason at any time during May 1<sup>st</sup> through September 1<sup>st</sup>, December, or January without the prior written approval of Buyer, which approval may be withheld or granted in Buyer's sole discretion. Buyer may request Seller to defer or reschedule any Scheduled Maintenance Outage up to one (1) week before commencement of the outage, or as otherwise mutually agreed by the Parties. Seller may not make any changes to any annual maintenance schedule approved by Buyer without Buyer's prior written approval. Seller must give Buyer no less than ninety (90) days' advance notice of any proposed change in the annual maintenance schedule.

(B) Seller shall be responsible (at its own cost and expense) for timely obtaining, maintaining, and complying with all agreements, arrangements and permits necessary for delivery of the Metered Output to the Point of Delivery. Upon the reasonable, written request of Buyer, Seller shall make available to Buyer copies of any environmental permits, plan, and/or studies related to the Project.

10.7 <u>Sales to Third Parties</u>. As of the start of the Test Period, Seller shall not sell or divert Energy Output to a third Person.

# ARTICLE 11 RECs and Environmental Attributes

## 11.1 Sale of RECs and Environmental Attributes.

Other than as specified in Sections 11.1(D) and 11.1(E) below, effective (A) from the date on which the Project first delivers Energy for sale to Buyer at the Point of Delivery, Seller shall transfer to Buyer, free and clear of all claims, liens, security interests and encumbrances, of any kind, nature and description, all right, title and interest in and to RECs and Environmental Attributes associated with the generation of Energy. Seller shall make the RECs available to Buyer immediately to the fullest extent permitted by Applicable Law within five (5) business days after REC creation in WREGIS. Seller shall be liable for Buyer's commercially reasonable costs to replace the RECs if Seller fails to deliver RECs within ten (10) Business Days after written notice from Buyer of such failure; provided however, that if Seller is unable to transfer such RECs to Buyer due to a WREGIS system error preventing such transfer, then Seller shall promptly provide written notice to Buyer of the system error and shall transfer such RECs to Buyer as soon as practicable upon resolution of the WREGIS system error. The RECs and Environmental Attributes transferred under this PPA shall be bundled with the associated Energy, and Buyer shall pay Seller for the bundled RECs and Environmental Attributes and Energy as set forth in this PPA.

(B) Seller and Buyer shall execute all documents and instruments necessary to effect transfer of the RECs and Environmental Attributes to Buyer or its respective designee(s).

(C) Ownership by Buyer of Environmental Attributes and RECs shall include any Environmental Attributes and RECs that are reserved or "banked" throughout the Term of this PPA, but not used, sold, assigned or otherwise transferred during the Term of this PPA. Buyer may, to the extent permitted by Applicable Law and this PPA, assign its rights, title and interest in and to any RECs and Environmental Attributes associated with the Project to one or more third parties under any transaction permitted by Applicable Law.

(D) Except as otherwise provided in Section 8.1, Tax Benefits in effect on the Execution Date of this PPA or any successor or other provision providing for a federal, state and/or local tax credit determined by reference to renewable electric energy produced from renewable energy resources shall be owned by Seller.

(E) Seller shall, at its sole expense in accordance with the timelines and provisions specified in the WREGIS Operating Rules, take all actions and execute all documents or instruments necessary to ensure that the Project is registered as a generating unit in WREGIS for the purpose of tracking all Renewable Energy Certificates corresponding to all Metered Output, and that all associated WREGIS Certificates are issued and tracked and transferred in a timely manner to Buyer. Seller shall comply with all Applicable Laws and WREGIS Operating Rules, regarding the certification and transfer of such WREGIS Certificates to Buyer and Buyer shall be given sole title to all such WREGIS Certificates. Seller shall be responsible for all expenses associated with registering the Project with WREGIS, establishing and maintaining Seller's WREGIS account, paying WREGIS Certificate issuance and transfer fees, and transferring WREGIS Certificates from Seller's

WREGIS account to Buyer's WREGIS account.

(F) Seller shall register the Project, as necessary, so that the Project is compliant with reporting requirements related to RECs and Environmental Attributes and certification requirements under any applicable federal, state or regional program or Applicable Law.

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(G) Prior to commencement of the Test Period, Seller shall provide written documentation to Buyer evidencing that the RECs generated by the Project will be reported to WREGIS using a WREGIS Qualified Reporting Entity, as that term is defined by WREGIS.

(H) Neither Seller nor Buyer will have any liability to the other for any act, omission, misrepresentation, or breach (other than an act or omission due to the failure to pay fees, charges or expenses by the responsible Party), by an entity that certifies the characteristics or delivery of a REC, or the qualification of the Project as a renewable energy facility, under Applicable Law. The certifying entity may include a Governmental Authority, WREGIS or other generation information system, an independent auditor or other third party.

## ARTICLE 12

#### **Default and Remedies**

12.1 Events of Default of Seller.

(A) Any of the following events shall constitute an Event of Default of Seller upon its occurrence and no cure period shall be applicable, unless expressly set forth in this Section 12.1(A):

(1) Seller's dissolution or liquidation;

(2) Seller's assignment of this PPA (or any of its rights hereunder) for the benefit of creditors, except as permitted pursuant to Article 18;

(3) Seller's filing of a petition in voluntary bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the United States or under any insolvency law of any state, or Seller voluntarily taking advantage of any such law by answer or otherwise;

(4) The sale by Seller to a third party, or diversion by Seller for any use, of Energy, RECs or Ancillary Services committed to Buyer by Seller;

(5) Seller's actual fraud, waste, tampering with Buyer-owned facilities or other material misrepresentation or misconduct in connection with this PPA or the operation of the Project;

(6) The failure of Seller Guarantor to make, when due, any payment required, unless remedied within 10 Business Days of receipt of notice of such failure;

(7) Subsequent to REC creation in WREGIS Seller's failure to transfer

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RECs in accordance with the terms of this PPA for three (3) consecutive months or an aggregate of six (6) months during the Term;

(8) Seller's failure to make any payment due to Buyer under or in connection with this PPA (subject to Seller's rights with respect to disputed payments under Article 9 and net of outstanding damages and any other rights of offset that Seller may have pursuant to this PPA); unless remedied within ten (10) days of receipt of notice of such failure; or

(9) Other than due to a Force Majeure Event under Section 3.6(A), Seller's failure to achieve the Commercial Operation Date for the Project on or prior to the Guaranteed Start Date.

(B) Any of the following events shall constitute an Event of Default of Seller upon the failure of Seller to cure within thirty (30) Days after the date of written notice from Buyer to Seller:

(1) The failure of Seller to maintain Security in accordance with Article 19;

(2) Seller's Abandonment of construction or operation of the Project;

(3) Except to the extent arising from the acts or omissions of the Transmission Provider or Buyer, Seller is not able to deliver Energy to the Point of Delivery as a result of the Project not maintaining its interconnection with the Transmission Provider's Interconnection Facilities or otherwise fails to maintain in effect any agreements required to deliver Energy to the Point of Delivery;

(4) Seller's failure to comply with any other material obligation under this PPA, which would result in a material adverse impact on Buyer;

(5) The Project fails, after the first anniversary of the Commercial Operation Date, to maintain an Actual Availability Percentage of at least seventy-five percent (75%) as determined over two (2) successive Commercial Operation Years during the Term; or

(6) Seller fails to register the Project within WREGIS in accordance with the terms of this PPA.

(C) Any of the following events shall constitute an Event of Default of Seller upon the failure of Seller to cure within sixty (60) Days after the date of written notice from Buyer to Seller:

(1) Seller's assignment of this PPA, or any Change of Control of Seller, or Seller's sale or transfer of its interest, or any part thereof, in the Project, except as permitted in accordance with Article 18;

(2) Any representation or warranty made by Seller in this PPA shall

prove to have been false or misleading in any material respect when made or ceases to remain true during the Term if such cessation would reasonably be expected to result in a material adverse impact on Buyer; or

(3) The filing of an involuntary case in bankruptcy or any proceeding under any other insolvency law against Seller as debtor or its parent or any Affiliate that could materially impact Seller's ability to perform its obligations hereunder; *provided*, *however*, that Seller does not obtain a stay or dismissal of the filing within the cure period.

12.2 Events of Default of Buyer.

(A) Any of the following shall constitute an Event of Default of Buyer upon its occurrence, and no cure period shall be applicable unless expressly set forth in this Section 12.2(A):

(1) Buyer's dissolution or liquidation provided that division of Buyer into multiple entities shall not constitute dissolution or liquidation;

(2) Buyer's assignment of this PPA (or any of its rights hereunder) for the benefit of creditors; or

(3) Buyer's filing of a voluntary petition in bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the United States or under any insolvency law of any State, or Buyer voluntarily taking advantage of any such law by answer or otherwise;

(4) The failure of a Buyer Guarantor, if any, to make, when due, any payment required, unless remedied within ten (10) Business Days of receipt of notice of such failure; or

(5) Buyer's failure to make any payment due hereunder (subject to Buyer's rights with respect to disputed payments under Article 9 and net of outstanding damages and any other rights of offset that Buyer may have pursuant to this PPA), unless remedied within ten (10) days of receipt of notice of such failure.

(B) The following shall constitute an Event of Default of Buyer upon the failure of Buyer to cure within thirty (30) Days after the date of written notice from Seller to Buyer:

(1) Buyer's failure to comply with any other material obligation under this PPA, which would result in a material adverse impact on Seller.

(C) Any of the following shall constitute an Event of Default of Buyer upon the failure of Buyer to cure within sixty (60) Days after the date of written notice from Seller to Buyer:

(1) The filing of an involuntary case in bankruptcy or any proceeding

under any other insolvency law against Buyer; *provided, however*, that Buyer does not obtain a stay or dismissal of the filing within the cure period;

(2) Buyer's assignment of this PPA, except as permitted in accordance with Article 18; or

(3) Any representation or warranty made by Buyer in this PPA shall prove to have been false or misleading in any material respect when made or ceases to remain true during the Term if such cessation would reasonably be expected to result in a material adverse impact on Seller.

#### 12.3 Damages Prior to Termination.

(A) Upon the occurrence of an Event of Default, and subject in each case to the limitation on damages set forth in Section 12.7, the Non-Defaulting Party shall have the right to (i) collect damages accruing prior to the Early Termination Date of this PPA from the Defaulting Party as set forth in Section 12.3(B), (ii) exercise its rights pursuant to Section 12.5, (iii) suspend performance, (iv) with respect to a Seller Event of Default, exercise its rights pursuant to Section 12.10 with respect to any Security, and (v) exercise its rights to terminate this PPA pursuant to Section 12.4.

(B) For all Events of Default, the Non-Defaulting Party shall be entitled to receive from the Defaulting Party all of the damages incurred by the Non-Defaulting Party in connection with such Event of Default prior to the Early Termination Date; provided, that if an Event of Default has occurred and has continued uncured for a period of one hundred eighty (180) Days, the Non-Defaulting Party shall be required to either waive its right to collect further damages on account of such Event of Default or elect to terminate this PPA as provided for in Section 12.4; provided further, that if such Event of Default is due to the insolvency or bankruptcy of the Defaulting Party, then there shall be no waiver of the Non-Defaulting Party's rights.

(1) If Seller is the Defaulting Party, the Parties agree that the damages recoverable by Buyer hereunder on account of an Event of Default of Seller shall include an amount of cover damages equal to Replacement Energy Costs minus the product of (x) the quantity of Energy Output so replaced and (y) the Energy Output Payment Rate. Further, Seller acknowledges and agrees that in addition to the foregoing, Seller shall be obligated to pay Buyer any such damages associated with replacement of Energy Output notwithstanding the availability or prices of electric energy from other fuel sources, such as natural gas. Seller also shall be obligated to pay Buyer any penalties levied by any Governmental Authority in connection with Seller's failure to deliver to Buyer any RECs and any Environmental Attributes pursuant to this PPA. Seller acknowledges that Buyer entered into this PPA for the procurement of Energy Output, which includes RECs and Environmental Attributes.

(2) If Buyer is the defaulting Party, the Parties agree that the damages recoverable by Seller hereunder on account of an Event of Default of Buyer shall include an amount of cover damages equal to (A) the Energy Output Payment Rate,

multiplied by (B) the quantity of energy that would have been produced by the Project plus (C) the PTC Compensation Amount during the period in which Seller would otherwise receive the PTC Compensation Amount, minus (D) the proceeds realized by Seller from the sale, if any, to a third Person of Energy Output not taken or purchased by Buyer as required under this PPA; provided that such PTC Compensation Amount shall not apply unless Seller has used commercially reasonable efforts to mitigate such damages as required under Section 12.9, plus any proceeds from the sale of related Environmental Attributes. Seller's cover damages for an Event of Default also include (i) the reasonable amounts paid or incurred by Seller for transmission or distribution of Energy Output and any associated transmission or distribution costs, and (ii) Seller's expenses, including reasonable attorneys' fees, suffered as a result of Buyer's failure to perform under this PPA. For the avoidance of doubt, Seller shall use commercially reasonable efforts to mitigate such damages as required under Section 12.9.

12.4 Termination. Upon the occurrence of an Event of Default, the Non-Defaulting Party shall have the right to declare a date, which shall be between fifteen (15) and sixty (60) Days after the notice thereof, upon which this PPA shall terminate ("Early Termination Date"). Upon the effective designation of an Early Termination Date, the Non-Defaulting Party will have the right to immediately suspend performance under this PPA, except that Seller may not suspend performance of its obligation to post and maintain Seller Development Security and Seller Delivery Term Security in accordance with Article 19. Neither Party shall have the right to terminate this PPA except as provided for upon the occurrence of an Event of Default as described above or as may be otherwise explicitly provided for in this PPA. Upon the termination of this PPA under this Section 12.4 for an Event of Default, the Non-Defaulting Party shall be entitled to receive the Termination Payment from the Defaulting Party, subject to the limitation on damages set forth in Section 12.7. As soon as practicable after the Early Termination Date, the Non-Defaulting Party shall (a) calculate the Termination Payment, and (b) give notice to the Defaulting Party of the amount of the Termination Payment. The notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within ten (10) Business Days after such notice is effective. If Buyer is the Defaulting Party, the Termination Payment will equal the Seller Termination Payment. If Seller is the Defaulting Party, the Termination Payment will equal the Buyer Termination Payment, provided, however, for an Event of Default by Seller pursuant to Section 12.1(A)(9), the Buyer Termination Payment will be an amount equal to the Seller Development Security, plus any Delay Damages already paid or owing to Buyer, and neither Party shall have liability for damages for failure to deliver or purchase Energy Output after the effective date of such termination, including Replacement Energy Costs.

(A) In the event that Seller is the Defaulting Party and Buyer declares an Early Termination Date, as soon as practicable after notice of the Early Termination Date, Buyer shall calculate the Buyer Termination Payment in a commercially reasonable manner as of the Early Termination Date in accordance with this Section 12.4(A). The notice shall include a written statement explaining in reasonable detail the calculation of such amount. In calculating such amount, Buyer shall use information from third parties who may include dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. Buyer shall not have to enter into a replacement contract to establish a

Buyer Termination Payment. Any dispute between the Parties with respect to the Buyer Termination Payment calculation shall be subject to the dispute resolution provisions set forth in Section 13.8.

(B) In the event that Buyer is the Defaulting Party and Seller declares an Early Termination Date, as soon as practicable after notice of the Early Termination Date, Seller shall deliver written notice to Buyer of the amount of the Seller Termination Payment. Seller shall calculate the Seller Termination Payment in a commercially reasonable manner as of the Early Termination Date in accordance with this Section 12.4(B). The notice shall include a written statement explaining in reasonable detail the calculation of such amount. In calculating such amount, Seller shall use information from third parties who may include dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. Seller shall not have to enter into a replacement contract to establish a Seller Termination Payment. Any dispute between the Parties with respect to the Seller Termination Payment calculation shall be subject to the dispute resolution provisions set forth in Section 13.8.

12.5 <u>Specific Performance</u>. In addition to the other remedies specified in this Article 12, each Party shall be entitled to seek a decree compelling specific performance with respect to, and shall be entitled, without the necessity of filing any bond, to seek the restraint by injunction of, any actual or threatened breach of any material performance obligation of the other Party under this PPA.

12.6 <u>Remedies Cumulative</u>. Subject to limitations on damages set forth in Section 12.7, each right or remedy of the Parties provided for in this PPA shall be cumulative of and shall be in addition to every other right or remedy provided for in this PPA, and the exercise, or the beginning of the exercise, by a Party of any one or more of the rights or remedies provided for herein shall not preclude the simultaneous or later exercise by such Party of any or all other rights or remedies provided for herein.

12.7 <u>Waiver and Exclusion of Other Damages</u>. The Parties confirm that the express remedies and measures of damages provided in this PPA satisfy its essential purposes. If no remedy or measure of damages is expressly herein provided, the obligor's liability shall be limited to direct, actual damages only. Neither Party shall be liable to the other Party for consequential, incidental, punitive, exemplary or indirect damages, lost profits or other business interruption damages by statute, in tort or contract (except to the extent expressly provided herein). To the extent any damages are required to be paid hereunder are deemed liquidated, the Parties acknowledge that the damages are difficult or impossible to determine, that otherwise obtaining an adequate remedy is inconvenient, and that the liquidated damages constitute a reasonable approximation of the harm or loss.

12.8 Payment of Amounts Due to Buyer. Without limiting any other provisions of this Article 12 and at any time before or after termination of this PPA, Buyer may send Seller an invoice for such damages or other amounts as are due to Buyer at such time from Seller under this PPA, and such invoice shall be payable in the manner, and in accordance with the applicable provisions, set forth in Article 9, including the provision for late payment charges.

12.9 <u>Duty to Mitigate</u>. Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance of this PPA.

12.10 <u>Security Rights</u>. Upon or at any time after the occurrence and during the continuation of an Event of Default enumerated in Section 12.1 or an Early Termination Date affecting Seller, Buyer may exercise any of the rights and remedies with respect to any Security, including any ancillary rights and remedies under Applicable Law then in effect. Buyer shall apply the proceeds of the Security realized upon the exercise of any such rights or remedies to reduce Seller's obligations under this PPA, subject to Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

#### ARTICLE 13

### Contract Administration and Notices

13.1 Notices in Writing. Notices required by this PPA shall be addressed to the other Party at the addresses noted in Exhibit D as either Party updates them from time to time by written notice to the other Party. Any notice, request, consent, or other communication required or authorized under this PPA to be given by one Party to the other Party shall be in writing. It shall either be hand delivered or mailed via overnight service with signature required upon receipt, to the representative of said other Party. If delivered, the notice, request, consent or other communication shall be simultaneously sent by facsimile or other electronic means. Any such notice, request, consent, or other communication shall be deemed to have been received by the close of the Business Day on which it was hand delivered or transmitted electronically (unless hand delivered or transmitted after such close in which case it shall be deemed received at the close of the next Business Day). Real-time or routine communications concerning operation of the Project shall be exempt from this Section.

13.2 <u>Representative for Notices</u>. Each Party shall maintain a designated representative to receive notices, who shall be identified on <u>Exhibit D</u> to this PPA. Either Party may, by written notice to the other Party, change the representative or the address to which such notices and communications are to be sent.

13.3 <u>Authority of Representatives</u>. The Parties' representatives designated above shall have authority to act for their respective principals in all technical matters relating to performance of this PPA and to attempt to resolve disputes or potential disputes. However, in their capacity as representatives, they shall not have the authority to amend or modify any provision of this PPA.

13.4 <u>Records</u>. Seller and Buyer shall each keep and maintain complete and accurate records and all other data required by each of them for the purposes of proper administration of this PPA, including but not limited to books and records necessary for billing and payments and such records as may be required by any Governmental Authority or pursuant to Applicable Law. All records of Seller and Buyer pertaining to the operation of the Project or this PPA as specified herein or otherwise shall be maintained at the Project or in an office of Seller or Buyer, as applicable, in such format as may be required by Applicable Law and/or any Governmental Approval. Each Party shall have the right at its sole cost and expense, upon reasonable prior

written notice to the other Party, during normal business hours, to examine and/or make copies of the records and data of such other Party relating to this PPA (including all records and data relating to or substantiating any charges paid by or to such other Party, MWh generated, Seller's operating procedures, and Operating Records). All records required hereunder shall be maintained in accordance with, and for the applicable time periods required by, Applicable Law and the Party's retention policies, but in no event less than five (5) years after the final payment is made under this PPA. Seller shall provide Buyer copies of Operating Records upon Buyer's request.

(A) Operating and Maintenance Records. Seller shall maintain an accurate and up-to-date operating log, in electronic format, at the Project that will include, without limitation, power production records for each hour; dispatch and scheduled Energy production; changes in operating status; planned outages, deratings and curtailments; any unusual conditions found during inspections; environmental records; meteorological data; maintenance; any other operating or maintenance records as may be required by state or federal regulatory authorities and WECC and any other information required under Prudent Utility Practice or any Project agreement (in the prescribed format); and Buyer and Seller Forced Outages ("O&M Records").

(B) Billing and Payment Records. To facilitate payment and verification, Seller and Buyer shall keep all books and records necessary for billing and payments in accordance with the provisions of Article 9 and grant the other Party reasonable access to those records.

(C) Project Development Records and Data Submissions. Seller shall submit or cause to be submitted to Buyer the following documents on or before the dates specified below:

(1) No later than thirty (30) Days after the Execution Date and ending on the Commercial Operation Date, (i) monthly construction progress reports in such form as may be agreed to by Buyer in accordance with Section 10.1(A) and 10.1(B), and (ii) reports, when and as Seller becomes aware, of any new condition or event that may have a material adverse effect on the timely completion of the Project.

(2) No later than thirty (30) Days prior to the start of the Test Period, (i) evidence demonstrating that Seller has obtained all Governmental Approvals then required to be obtained for the ownership, operation and maintenance of, and the supply of Energy Output from, the Project in accordance with this PPA, and (ii) a list identifying the remaining Governmental Approvals for which Seller is responsible under the terms of this PPA, which Governmental Approvals are not yet required for the operation and maintenance of, and the supply of Energy Output from, the Project, together with a plan for obtaining such Governmental Approvals and an estimate of the time within which such Governmental Approvals will be obtained by Seller; provided, however, that the plan for obtaining any outstanding Governmental Approvals from any Governmental Authority that address environmental, health and safety matters shall be reasonably acceptable to Buyer.

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(3) As soon as available, but not later than sixty (60) Days following the Commercial Operation Date for the Project, two (2) copies of all results of Commissioning Tests performed on the Wind Turbines.

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(4) Upon request by Buyer, one (1) signed and sealed copy of all asbuilt drawings for the Project, including the civil and architectural works.

(5) The receipt of the above schedules, data, certificates and reports by Buyer shall not be construed as an endorsement by Buyer of the design of the Project, does not constitute a warranty by Buyer as to the safety, durability or reliability of the Project, otherwise relieve Seller of any of its obligations or potential liabilities under the Project contracts or, except with respect to the obligations of Buyer to maintain the confidentiality of documents and information received by it, impose any obligation or liability on Buyer.

13.5 <u>Provision of Real-Time Data</u>. Upon request by Buyer, Seller shall provide realtime electronic access to Buyer of all meteorological and other related data collected at the Project and corresponding unit availability data.

13.6 Examination of Records. Buyer may review operating procedures, equipment manuals, Operating Records and data kept by Seller relating to transactions under and administration of this PPA, at any time during the period the records are required to be maintained, from time to time upon request and during normal business hours. Buyer shall have the right, upon reasonable notice and at its sole expense (unless Seller has defaulted under this PPA, in which case Seller will bear the expense), to examine the records of Seller to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this PPA. If any such examination reveals any inaccuracy in any invoice, the necessary adjustments in such invoice and any underpayment by Buyer will be paid, and any overpayment by Buyer will be reimbursed by Seller, promptly in accordance with payment provisions in this PPA.

13.7 <u>Exhibits</u>. Either Party may change the information for its notice addresses in <u>Exhibit D</u> at any time without the approval of the other Party. <u>Exhibit A</u>, <u>Exhibit B</u> and <u>Exhibit E</u> may be changed at any time with the mutual consent of both Parties.

13.8 <u>Resolution of Issues</u>.

(A) Negotiations. The Parties agree that it is in the best interest of both Parties to attempt to resolve disputes that arise under this PPA in a quick and inexpensive manner. To that end, the Parties commit to use commercially reasonable efforts to resolve disputes informally. For all disputes that arise under this PPA, the Parties immediately, through their designated representatives, shall negotiate with one another in good faith in order to reach resolution of the dispute. Such negotiation shall commence within five (5) Days of the date of the letter from one Party representative to the other Party representative notifying that Party of the nature of the dispute. In the event that the Parties' representatives cannot agree to a resolution of the dispute within thirty (30) Days after the commencement of negotiations, written notice of the dispute ("Dispute Notice"), together with a statement describing the

issues or claims, shall be delivered, within five (5) Business Days after the expiration of such thirty (30) Day period, by each of the Parties' representatives to its respective senior officer or official (such senior officer or official to be selected by each of the Party representatives in his or her sole discretion, provided such senior officer or official has authority to bind the respective Party). Within five (5) Business Days after receipt of the Dispute Notice, the senior officers or officials for both Parties shall negotiate in good faith to resolve the dispute, *provided* that the failure to deliver such Dispute Notice shall not prejudice either Party's right to submit such dispute to litigation. In the event that the senior officers or officials cannot resolve such dispute within thirty (30) Days after the matter was submitted to them, either Party may seek legal and equitable remedies.

# ARTICLE 14

#### Force Majeure

## 14.1 Definition.

(A) Neither Party will be considered to be in default in respect to any obligation hereunder if delays in or failure of performance is due to a Force Majeure Event, except for the obligation to pay monies due. A "Force Majeure Event" shall mean an event or circumstance that arises after the Effective Date that is not reasonably foreseeable, is beyond the reasonable control of and is not caused by the negligence or lack of due diligence of the affected Party or its contractors or suppliers and adversely affects the performance by that Party of its obligations under or pursuant to this PPA. Such events or circumstances may include, but are not limited to: actions or inactions of civil or military authority (including courts and governmental or administrative agencies), acts of God, war, riot or insurrection, terrorism, blockades, embargoes, sabotage (including arson and vandalism), epidemics, explosions and fires not originating in the Project and those not caused by its failure to operate the Project in accordance with Prudent Utility Practices, hurricanes, floods, strikes, lockouts or other labor disputes (not caused by the failure of the affected Party to comply with the terms of a collective bargaining agreement).

(B) Except for a Catastrophic Failure of equipment which shall be expressly included in the definition of Force Majeure Event, equipment breakdown or the inability of Seller to use equipment due to its design, construction, operation, maintenance, the inability of Seller to meet regulatory standards, or failure by Seller to obtain on a timely basis and maintain a necessary permit or other regulatory approval shall not be considered a Force Majeure Event, unless Seller can demonstrate that the event was not reasonably foreseeable, was beyond Seller's reasonable control, and was not caused by the negligence or lack of due diligence by Seller or its agents.

(C) Notwithstanding the foregoing, the term Force Majeure Event does <u>not</u> include (i) inability by Seller to procure equipment for the Project or any component parts therefor, for any reason (the risk of which is assumed by Seller); (ii) any other acts or omissions of any third party, including any vendor, materialman, customer, or supplier of Seller, or any full or partial curtailment in the Energy Output of the Project caused by or arising from the acts or omissions of such third parties, unless such acts or omissions are themselves excused by reason of a Force Majeure Event as the definition is applied to such

third party, and such event constitutes a Force Majeure Event, as the definition is applied to Seller; (iii) any delay caused by the processing of Buyer's interconnection request; (iv) any full or partial curtailment in the electric output of the Project that is caused by or arises from a mechanical or equipment breakdown, or other mishaps, events or conditions, attributable to normal wear and tear; (v) failure to abide by Prudent Utility Practices; (vi) changes in market conditions, actions of Governmental Authorities or other events or circumstances that affect the cost of equipment, labor, materials or supplies, or that affect demand or price for power or any of Seller's or Buyer's products; (vii) except as set forth in (A) above, any labor strikes, slowdowns or stoppages, or other labor disruptions against Seller or Seller's contractors or subcontractors; or (viii) weather events or sudden actions of the natural elements within twenty (20) year normal weather patterns, including lightning strikes, but excluding unusually severe events, such as tornadoes, and floods.

(D) In no event will any delay or failure of performance caused by a Force Majeure Event extend this PPA beyond its stated Term. Notwithstanding any other provision in this PPA to the contrary, in the event that any delay or failure of performance caused by a Force Majeure Event affecting Seller continues for an uninterrupted period of one hundred eighty (180) Days from its inception (with respect to Force Majeure Events occurring prior to COD) or three hundred sixty-five (365) Days from its inception (with respect to Force Majeure Events related to Catastrophic Failures occurring after COD), either Party (or Buyer as provided in Section 3.6) may, at any time following the end of such period, terminate this PPA upon written notice to the affected Party, without further obligation by either Party except as to costs and balances incurred prior to the effective date of such termination.

(E) Except as otherwise provided in this PPA, each Party shall be excused from performance when non-performance was caused, directly or indirectly, by a Force Majeure Event but only and to the extent thereof, and existence of a condition of Force Majeure Event shall not relieve the Parties of certain obligations under this PPA (including payment obligations) to the extent that such performance of such obligations is not precluded by the condition of Force Majeure Event.

14.2 Notification Obligations. In the event of any delay or nonperformance resulting from a Force Majeure Event, the Party claiming that a Force Majeure Event has occurred shall notify the other Party as soon as reasonably practicable by telephone and/or email, and in writing as soon as reasonably practicable but in no case later than ten (10) Business Days thereafter; provided that failure to provide notice within ten (10) Business Days only waives the Force Majeure Event as to periods prior to when the notice is given of such occurrence, of the nature, cause, date of commencement thereof and the anticipated duration, and shall indicate whether any deadlines or date(s) imposed hereunder may be affected thereby. The suspension of performance shall be of no greater scope and of no greater duration than is necessary. A Party claiming that a Force Majeure Event has occurred shall be entitled to relief therefor unless and until it has delivered a notice therefor as required in this Section. The Party claiming that a Force Majeure Event has occurred shall notify the other Party of the cessation of the Force Majeure Event or of the conclusion of the affected Party's cure for the Force Majeure Event, in either case as soon as reasonably practicable.

14.3 <u>Duty to Mitigate</u>. The Party claiming that a Force Majeure Event has occurred

shall use its commercially reasonable efforts to cure the cause(s) preventing its performance of this PPA and shall provide to the other Party weekly progress reports describing actions taken to end the Force Majeure Event; *provided, however*, that the settlement of strikes, lockouts and other labor disputes shall be entirely within the discretion of the affected Party, and such Party shall not be required to settle such strikes, lockouts or other labor disputes by acceding to demands which such Party deems to be unreasonable.

14.4 <u>Delay Caused by Force Majeure Event</u>. Upon the occurrence and during the continuance of a Force Majeure Event and the effects thereof, to the extent that a Force Majeure Event affects the ability of either Buyer or the Transmission Provider to accept Energy Output from the Project or to deliver Energy Output from the Project, then the hours during which the Force Majeure Event occurs shall be excluded from the payment calculations as set forth in Section 8.1.

#### **ARTICLE 15**

## Representations, Warranties and Covenants

15.1 <u>Seller's Representations, Warranties and Covenants</u>. Seller hereby represents and warrants as follows:

(A) Seller is a limited liability company duly organized, validly existing and in good standing under the laws of the state of Oregon. Seller is qualified to do business in each other jurisdiction where the failure to so qualify would have a material adverse effect on the business or financial condition of Seller; and Seller has all requisite power and authority to conduct its business, to own its properties, and to execute, deliver, and perform its obligations under this PPA.

(B) The execution, delivery, and performance of its obligations under this PPA by Seller have been duly authorized by all necessary corporate action, and do not and will not:

(1) require any consent or approval by any governing body of Seller, other than that which has been obtained and is in full force and effect;

(2) violate any Applicable Law, or violate any provision in any formation documents of Seller, the violation of which could have a material adverse effect on the ability of Seller to perform its obligations under this PPA;

(3) result in a breach or constitute a default under Seller's formation documents or bylaws, or under any agreement relating to the management or affairs of Seller or any indenture or loan or credit agreement, or any other agreement, lease, or instrument to which Seller is a party or by which Seller or its properties or assets may be bound or affected, the breach or default of which could reasonably be expected to have a material adverse effect on the ability of Seller to perform its obligations under this PPA; or

(4) result in, or require the creation or imposition of any mortgage, deed of trust, pledge, lien, security interest, or other charge or encumbrance of any nature (other than as may be contemplated by this PPA) upon or with respect to any of

the assets or properties of Seller now owned or hereafter acquired, the creation or imposition of which could reasonably be expected to have a material adverse effect on the ability of Seller to perform its obligations under this PPA.

(C) The obligations of Seller under this PPA are valid and binding obligations of Seller.

(D) The execution and performance of this PPA will not conflict with or constitute a breach or default under any contract or agreement of any kind to which Seller is a party or any judgment, order, statute, or regulation that is applicable to Seller or the Project.

(E) To the knowledge of Seller, and except for those permits, consents, approvals, licenses and authorizations identified in <u>Exhibit E</u>, which Seller anticipates will be obtained by Seller in the ordinary course of business, all Governmental Approvals necessary for Seller's execution, delivery and performance of this PPA have been duly obtained and are in full force and effect.

(F) Seller shall comply with all Applicable Laws in effect or that may be enacted during the Term.

(G) Seller shall disclose to Buyer the extent of, and as soon as it is known to Seller, any violation of any Applicable Laws arising out of the construction of the Project, the presence of Environmental Contamination at the Project (actual or alleged), or the existence of any past or present enforcement, legal, or regulatory action or proceeding relating to such Environmental Contamination.

(H) To the full extent authorized by FERC regulations and the FERC standards of conduct, Seller hereby authorizes Buyer to contact and obtain information concerning the Project and Interconnection Facilities directly from the Transmission Provider.

(I) Seller has or shall obtain sufficient water necessary for uninterrupted operation of the Project.

(J) Seller has and/or will have upon the generation of Energy Output good and marketable title to the RECs and Environmental Attributes;

(K) Seller has not sold, delivered or transferred the RECs or Environmental Attributes to any other Person, in whole or in part;

(L) All right, title and interest in and to the RECs and Environmental Attributes are free and clear of any liens, Taxes, claims, security interests or other encumbrances except for any right or interest by any entity claiming through Buyer;

(M) Each REC and Environmental Attribute complies with the requirements set forth in the New Mexico Renewable Energy Act, NMSA 1978, § 62-16-1 *et seq.*, and Title 17.9.572 NMAC;

(N) Upon the execution thereof, Seller shall provide a true and correct copy of

the Interconnection Agreement to Buyer. On and after the execution of the Interconnection Agreement, Seller shall provide copies of any material amendments to the Interconnection Agreement to Buyer; and

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(O) Seller has stated that Seller will enter into a Joinder Agreement for joint ownership of the gen-tie, Torrance switching station and other shared facilities illustrated in <u>Exhibit B</u> and become a party to the Co-tenancy, Common Facilities and Easement Agreement dated April 23, 2018, with El Cabo Wind LLC and subsequent project owners. Seller warrants and represents that Buyer shall not be subject to the terms of the Co-tenancy, Common Facilities and Easement Agreement or any shared facilities agreement(s), as they may be amended from time to time, governing the ownership and use of shared facilities, and that Buyer is not responsible for any costs or liabilities associated with the construction or operation of such shared facilities.

15.2 <u>Buyer's Representations, Warranties and Covenants</u>. Buyer hereby represents and warrants as follows:

(A) Buyer is a corporation duly organized, validly existing and in good standing under the laws of the State of New Mexico and is qualified in each other jurisdiction where the failure to so qualify would have a material adverse effect upon the business or financial condition of Buyer. Buyer has all requisite power and authority to conduct its business, to own its properties, and to execute, deliver, and perform its obligations under this PPA.

(B) The execution, delivery, and performance of its obligations under this PPA by Buyer have been duly authorized by all necessary corporate action, and do not and will not:

(1) require any consent or approval of Buyer's shareholders, members, managers and/or directors;

(2) violate any Applicable Law, or violate any provision in any corporate documents of Buyer, the violation of which could have a material adverse effect on the ability of Buyer to perform its obligations under this PPA;

(3) result in a breach or constitute a default under Buyer's corporate charter or bylaws, or under any agreement relating to the management or affairs of Buyer, or any indenture or loan or credit agreement, or any other agreement, lease, or instrument to which Buyer is a party or by which Buyer or its properties or assets may be bound or affected, the breach or default of which could reasonably be expected to have a material adverse effect on the ability of Buyer to perform its obligations under this PPA; or

(4) result in, or require the creation or imposition of, any mortgage, deed of trust, pledge, lien, security interest, or other charge or encumbrance of any nature (other than as may be contemplated by this PPA) upon or with respect to any of the assets or properties of Buyer now owned or hereafter acquired, the creation or imposition of which could reasonably be expected to have a material adverse effect on the ability of Buyer to perform its obligations under this PPA.

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(C) This PPA is a valid and binding obligation of Buyer, subject to the contingencies identified in Article 6.

(D) The execution and performance of this PPA will not conflict with or constitute a breach or default under any contract or agreement of any kind to which Buyer is a party or any judgment, order, statute, or regulation that is applicable to Buyer.

(E) To the knowledge of Buyer, and except for the NMPRC Approval(s) and CCN Approval identified in Sections 6.1 and 17.3, all required Governmental Approvals necessary for Buyer's execution, delivery and performance of this PPA have been duly obtained and are in full force and effect.

## ARTICLE 16 Insurance

#### 16.1 Evidence of Insurance.

(A) Seller shall, at least thirty (30) Days prior to the commencement of any work on the Project, and thereafter, on or before June 30 of each Commercial Operation Year provide Buyer with insurance certificates evidencing the insurance coverages required to be maintained by Seller in accordance with <u>Exhibit G</u> and this Article 16 along with endorsements required below in Section 16.3, and a list of any other endorsements to the policy that limit the coverage provided by the ISO form with regard to this Project. All such insurance shall be primary insurance. All policies shall be written with insurers rated at least A- VII by A.M. Best or that Buyer, in its reasonable discretion, deems acceptable (such acceptance shall not be unreasonably withheld or delayed by Buyer). Seller's liability under this PPA shall not be limited to the amount of insurance coverage required herein.

### 16.2 Term and Modification of Insurance.

(A) All liability insurance required under this PPA shall cover occurrences during the Term of this PPA. In the event that any insurance as required herein is commercially available only on a "claims-made" basis, such insurance shall provide for a retroactive date not later than the Effective Date and such insurance shall be maintained by Seller, with a retroactive date not later than the retroactive date required above, for a minimum of three (3) calendar years after the Term.

(B) Seller may self-insure either all or any portion of the foregoing coverages so long as there is no material decrease in its net worth or means that renders the same insufficient for purposes of self-insurance. If at any time during the Term Buyer, in its reasonable discretion, determines that it will no longer accept self-insurance from Seller, Buyer shall provide notice to Seller and Seller shall obtain the insurance coverages required by <u>Exhibit G</u> within sixty (60) Days.

(C) Buyer shall have the right, at times deemed appropriate to Buyer during the Term of this PPA, to request Seller to modify the insurance minimum limits specified in Exhibit G in order to maintain reasonable coverage amounts. Seller shall make commercially reasonable efforts to comply with such request.

## 16.3 Endorsements and Other Requirements.

(A) Seller shall provide endorsements evidencing that the insurers shall provide Buyer thirty (30) Days' prior written notice of non-renewal or cancellation of insurance (except that such notice shall be ten (10) Days for non-payment of premiums) and endorsements that waive all rights of subrogation against Buyer and its Affiliates, officers, directors, agents, subcontractors and employees.

(B) Seller shall provide endorsements providing that the insurance required under this PPA is primary and non-contributory with respect to other insurance carried by Buyer.

(C) Seller shall provide endorsements providing that the liability insurance required pursuant to paragraphs (B), (C) and (D) of <u>Exhibit G</u> names Buyer and its Affiliates, officers, directors, and employees as additional insureds for both ongoing and completed operations but only to the extent Buyer (or other additional insured) is vicariously liable for the negligence, acts or omissions of Seller. The liability insurance required pursuant to paragraphs (B) and (D) of <u>Exhibit G</u> shall include a standard ISO or an equivalent separation of insureds clause and will not include a cross-suit exclusion applicable to claims brought by or against an additional insured.

#### ARTICLE 17

## Legal and Regulatory Compliance and Governmental Approval

17.1 <u>Applicable Laws</u>. Each Party shall at all times comply with all Applicable Laws. Each Party shall promptly notify the other Party of any material investigations, notices of alleged violations or findings of violation of Applicable Law from any Governmental Authority, including any audit, notification, inspection or inquiry that has been commenced by any Governmental Authority in respect of a potential violation of Applicable Law with regard to the Project or this PPA. Seller shall give all required notices, shall timely procure and maintain all Seller required permits, and shall timely pay all charges and fees in connection therewith. Seller shall make available to Buyer, upon reasonable request, any personnel or records relating to the Project or this PPA to the extent Buyer requires the same to fulfill any regulatory reporting requirements, or for purposes of litigation or regulatory proceedings, including but not limited to, litigation or proceedings before the NMPRC, FERC, or other regulatory bodies. The Parties shall treat information disclosed pursuant to this Section 17.1 in confidence in accordance with Section 22.14, unless such information is public information.

17.2 <u>Governmental Approvals</u>. Each Party shall timely and lawfully procure and maintain in good standing, at its own cost and expense, all Governmental Approvals and Additional Consents and shall timely and properly pay its respective charges and fees in connection therewith.

17.3 <u>NMPRC Approval; FERC Approval</u>. The obligations of the Parties hereunder, including Buyer's obligation to purchase Energy Output at the rates specified in Article 8, shall be conditioned upon the receipt of any Governmental Approvals required by Applicable Law in connection with the execution and performance of this PPA, including but not limited to receipt

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of FERC approval of this PPA, if applicable, and a final order or other regulatory determination from the NMPRC that Buyer may procure renewable energy and associated RECs pursuant to this PPA and may recover the cost of such procurement. In particular, but without limitation:

(A) Buyer agrees to use commercially reasonable efforts to request and obtain NMPRC Approval of this PPA, and Seller agrees to cooperate with and assist Buyer in these efforts as Buyer may reasonably request.

(B) NMPRC Approval shall be considered received when the NMPRC issues a final written order that is not contested or is no longer subject to appeal or further proceedings on remand (i) approving this PPA, or (ii) approving this PPA in part or subject to conditions or substantial modifications, *provided* that each of Seller and Buyer agrees, subject to its reasonable discretion, to accept those conditions, modifications or such partial approval of this PPA as sufficient, and further provided that NMPRC Approval of this PPA shall not be contingent upon other approvals requested or contained in PNM's Application to the NMPRC or the NMPRC's final written order on PNM's Application in the docket in which PNM applies for approval of this PPA or any other order or determination by the NMPRC (collectively, "NMPRC Approval").

(1) If the NMPRC disapproves this PPA, then this PPA shall automatically terminate ten (10) Days after the date of such action by the NMPRC and be of no further force or effect, with no further obligation or liability of either Party to the other Party or to any other Person.

(2) If any NMPRC Approval is issued as described in clause (B)(ii) above, then the Parties shall meet and confer no later than fifteen (15) Days after the date of the NMPRC Approval order regarding whether Buyer or Seller will elect to amend this PPA to address any conditions or substantial modifications or not to accept any partial or conditioned approval or substantial modification of this PPA. If the Parties are unable to mutually agree on any amendments to this PPA to address such NMPRC Approval order, then this PPA shall automatically terminate ten (10) Days after the date on which the parties conferred and be of no further force or effect, with no further obligation or liability of either Party to the other Party or to any other Person, unless Buyer and Seller mutually agree in writing within such ten (10) Day period that this PPA remain in effect.

(3) If the NMPRC has not, for any reason, entered an order upon the request for approval by February 15, 2020 ("Regulatory Extension Date"), then the Parties shall meet and confer no later than fifteen (15) Days after the Regulatory Extension Date regarding whether the Parties will elect to (i) extend the date by which NMPRC Approval is required to the Regulatory End Date in Section 17.3(B)(4) below, and (ii) extend the COD to an agreed date in 2021, in which case the Energy Output Payment Rate shall be increased to \$20.67/MWh for the remainder of the Term. If the Parties are unable to mutually agree on such extensions for NMPRC Approval and the COD, then Seller shall have the right in its sole discretion to terminate this PPA with no further obligation or liability of either Party to the other Party or to any other Person.

(4) If the NMPRC has not, for any reason, entered an order upon the request for approval by September 1, 2020 ("Regulatory End Date"), then the Parties shall meet and confer no later than fifteen (15) Days after the Regulatory End Date regarding a potential extension of the Regulatory End Date. If the Parties are unable to mutually agree to an extension of the Regulatory End Date, then this PPA shall automatically terminate ten (10) Days after the date on which the Parties conferred and be of no further force or effect, with no further obligation or liability of either Party to the other Party or to any other Person, unless Buyer and Seller mutually agree in writing within such ten (10) Day period that this PPA remain in effect.

17.4 <u>CCN Approval</u>. The obligations of the Parties hereunder, including Buyer's obligation to purchase Energy Output at the rates specified in Article 8, shall be conditioned upon the receipt of final, non-appealable order or other final, binding regulatory determination from NMPRC approving Buyer's application for a Certificate of Public Convenience and Necessity in NMPRC Case No. 18-00243 for the transmission upgrades required to obtain transmission service on and after the Point of Delivery for the Project ("CCN"). In particular, but without limitation:

(A) Buyer agrees to use commercially reasonable efforts to request and obtain CCN Approval, and Seller agrees to cooperate with and assist Buyer in these efforts as Buyer may reasonably request.

(B) CCN Approval shall be considered received when the NMPRC issues a final, non-appealable order or other final, binding regulatory determination from the NMPRC either (i) approving Buyer's application for a CCN, or (ii) approving the CCN in part or subject to conditions or substantial modifications, provided that each of Seller and Buyer agrees, subject to its reasonable discretion, to accept those conditions, modifications or such partial approval as sufficient (collectively "CCN Approval").

(1) If the NMPRC denies the CCN, then this PPA shall automatically terminate ten (10) Days after the date of such action by the NMPRC and be of no further force or effect except as set forth below.

(2) If CCN Approval is issued as described in clause 17.4(B)(ii) above, then the Parties shall meet and confer no later than fifteen (15) Days after the date of the CCN Approval order regarding whether Buyer and Seller will elect to amend this PPA to address any conditions or substantial modifications or not to accept any partial or conditioned approval or substantial modification of this PPA. If the Parties are unable to mutually agree on any amendments to this PPA to address such CCN Approval order, then this PPA shall automatically terminate ten (10) Days after the date on which the parties conferred and be of no further force or effect except as set forth below.

(3) If the NMPRC has not, for any reason, entered an order upon the request for CCN Approval by June 30, 2019 ("CCN End Date"), then the Parties shall meet and confer no later than fifteen (15) Days after the CCN End Date regarding a potential extension of the CCN End Date. If the Parties are unable to mutually agree to an extension of the CCN End Date, then this PPA shall automatically terminate ten (10)

Days after the date on which the Parties conferred and be of no further force or effect, with no further obligation or liability of either Party to the other Party or to any other Person, unless Buyer and Seller mutually agree in writing within such ten (10) Day period that this PPA remain in effect.

(4) Notwithstanding receipt of CCN Approval as set forth in this Section 17.4, if Buyer has not obtained CCN Approval as that term is defined in the Power Purchase Agreement—Wind Facilities ("PPA 1") by and between Buyer and Avangrid Renewables, LLC dated December 20, 2017 and PPA 1 has terminated accordingly pursuant to Section 17.4 of PPA 1 ("PPA 1 CCN Termination"), then the Parties shall meet and confer no later than fifteen (15) Days after the date of the PPA 1 CCN Termination, or other date inutually agreed to by the Parties, regarding whether Buyer and Seller will amend this PPA. If the Parties are unable to mutually agree to an amendment to this PPA, then this PPA shall automatically terminate ten (10) Days after the date on which the Parties conferred and be of no further force or effect, with no further obligation or liability of either Party to the other Party or to any other Person.

17.5 <u>Compliance with Reliability Standards</u>. To the extent that new reliability standards applicable to the operation and maintenance of the Project are promulgated by the WECC, NERC, FERC, or NMPRC, or any successor agencies, any and all costs incurred as a result of actions required for compliance with the new reliability standards shall be borne by Seller. To the extent that Seller contributes in whole or in part to actions that result in monetary penalties being assessed to Buyer by WECC, NERC, FERC or any successor agency, for lack of compliance with reliability standards related to the operation and maintenance of the Project, Seller shall reimburse Buyer for its share of monetary penalties.

17.6 <u>Compliance Information</u>. Each Party shall, for the purpose of gathering information and/or providing oral or written reports, testimony, affidavits or other submissions relevant to any Governmental Approvals, Non-Governmental Compliance Obligations, Additional Consents, Applicable Laws or in connection with any litigation, arbitration or administrative proceeding before any authority of competent jurisdiction: (i) deliver or cause to be delivered to the other Party any necessary or required certificates of its officers, accountants, engineers or agents; and/or (ii) make available necessary personnel with knowledge as to such matters.

17.7 Seller Termination Right. On or before June 30, 2019, Seller shall have the right in its sole discretion to terminate this PPA for any reason upon written notice to Buyer with no further obligation or liability of either Party to the other Party or to any other Person.

## ARTICLE 18

#### Assignment and Other Transfer Restrictions

18.1 <u>No Assignment Without Consent</u>. Except as permitted in this Article 18, neither Party shall sell, transfer, or assign this PPA, in whole or in part, and Seller shall not sell, transfer or assign the Project, in whole or in part, without the prior written consent of the other Party, which consent shall not be unreasonably withheld, delayed or conditioned and so long as any proposed assignee satisfies the conditions set forth in this Article 18.

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(A) Buyer's consent shall not be required for: (i) any assignment or transfer of this PPA by Seller to an Affiliate of Seller; or (ii) any assignment or transfer of this PPA by Seller to a Person succeeding to all or substantially all of the assets of Seller, *provided* that in the case of any assignment or transfer pursuant to clauses (i) or (ii) above, such assignee (a) shall have agreed in writing to be bound by the terms and conditions hereof and furnished a copy of the assignment or transfer document to Buyer; (b) is a Qualified Operator or retains, prior to the date of such transfer, a Qualified Operator to operate the Project (or otherwise agrees not to interfere with the existing Qualified Operator for the Project); (c) delivers evidence reasonably satisfactory to Buyer that such assignee's (or assignee's guarantor's, if such assignee is providing a guaranty) creditworthiness is equal to or better than that of Seller (or Seller's Guarantor, if Seller is providing a Guaranty), but in no event less than BBB- by S&P and Baa3 by Moody's; and (d) shall have complied with the obligations of the assigning Party to provide Seller Development Security or Seller Delivery Term Security, as applicable, in accordance with Article 19 of this PPA.

(B) Seller's consent shall not be required for any assignment of this PPA by Buyer to any Affiliate or in connection with certain corporate events involving Buyer or its parent corporation, including, but not limited to, mergers, reorganizations, consolidations, and asset and/or stock sales, *provided* that such assignee delivers evidence reasonably satisfactory to Seller that such assignee's creditworthiness is equal to or better than that of Buyer, but in no event less than BBB- by S&P and Baa3 by Moody's; and *further provided* that such assignee delivers evidence reasonably satisfactory to Seller that such assignee has NMPRC Approval of this PPA as and if required by NMPRC regulations.

18.2 <u>Conditions on Transfers</u>. If the rights and interests of a Party in this PPA shall be sold, transferred or assigned to an Affiliate, upon satisfaction of the conditions set forth in this Article 18, and upon the Affiliate's agreement in writing to be bound by and to assume the terms and conditions hereof and any and all obligations to the non-assigning Party arising or accruing hereunder from and after the date of such assumption, and provided that the assigning Party is not then in default of its obligations under this PPA or that any then-existing default is cured no later than the date of assignment, then the assigning Party shall be released and discharged from the terms and conditions hereof and each such obligation hereunder from and after such date, and non-assigning Party shall continue this PPA with the Affiliate as if such Person had been named under this PPA; *provided, however*, that the assigning Party shall not be released and discharged from and shall remain liable for any and all obligations to the other Party arising or accruing hereunder prior to such assumption.

## 18.3 Intentionally Omitted.

18.4 <u>Change of Control</u>. Except for a Seller Permitted Transfer, any Change of Control of Seller, whether voluntary or by operation of law, shall require the prior written consent of Buyer, which shall not be unreasonably withheld, conditioned or delayed.

18.5 <u>Transfer Without Consent Is Null and Void</u>. Any Change of Control or sale, transfer, or assignment of any interest in the Project or in this PPA made without fulfilling the requirements of this PPA shall be null and void and shall constitute an Event of Default pursuant to Article 12.

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18.6 <u>Subcontracting</u>. Seller may subcontract its duties or obligations under this PPA without the prior written consent of Buyer; *provided*, that no such subcontract shall relieve Seller of any of its duties or obligations hereunder. All subcontractors required by law to be qualified to do business in the State of New Mexico shall be so qualified. Seller shall be solely responsible for the engagement, supervision, management, satisfactory performance of the subcontractors or unsatisfactory performance.

## 18.7 Assignment to Lenders.

(A) Cooperation. In connection with any assignment of this PPA by Seller to its Lenders, as soon as reasonably practicable after reasonable request from Seller or any Lender, Buyer will cooperate reasonably with Seller and Lender to agree upon and enter into a consent and agreement, or, if applicable, an estoppel certificate, an estoppel and consent agreement, or similar instrument, all in a form acceptable to Buyer including exclusions, assumptions and caveats typical for such documents or necessary for the accuracy or delivery thereof, providing for, among other things, (i) an option, but not an obligation, for the Lenders to cure any monetary Event of Default of Seller within thirty (30) Days of the expiration of the cure period provided therefor in Section 12.1, and cure any non-monetary Event of Default of Seller within sixty (60) Days of the expiration of the cure period provided therefor in Section 12.1, prior to Buyer terminating this PPA; (ii) Buyer providing written notice to Lenders of any Events of Default of Seller; and (iii) Buyer not terminating this PPA if Lenders need to foreclose on the Project prior to curing any Event of Default of Seller giving rise to such termination, but only to the extent that the period required for such foreclosure and cure does not exceed one hundred eighty (180) Days from receipt by Lenders of written notice of such Event of Default of Seller; provided that, in all cases, (a) Buyer will have no obligation to alter or modify the terms of this PPA or provide any consent or enter into any agreement that has a material adverse effect on Buyer, and (b) Seller will be responsible for Buyer's reasonable costs (including, but not limited to, attorneys' fees) associated with Buyer's review, negotiation, execution and delivery of any documents in connection with such assignment. Nothing in this Section 18.7 shall impair Buyer's right to receive all of the damages arising out of or relating to Seller's default, including damages accruing prior to termination as set forth in Section 12.3 of this PPA.

(B) <u>Financing Liens</u>. Either Party may, without the other Party's consent, transfer, sell, pledge, encumber or assign this PPA or the revenues or proceeds therefrom in connection with any financing, provided that such a collateral assignment by Seller does not place any limitation on Buyer's rights or expand Buyer's liability, risks or obligations under this PPA; and <u>further provided</u> that Seller shall not be relieved of any of its obligations or liability under this PPA and that the Lender in any such collateral assignment acknowledges and agrees that the Project shall be operated and maintained by a Qualified Operator. Promptly after making any such encumbrance, Seller shall notify Buyer in writing of the name, address, and telephone and facsimile numbers of each Lender, collateral agent or trustee, as applicable, to which Seller's interest under this PPA has been encumbered. Such notice shall include the names of the account managers or other representatives of the Lenders to whom all written and telephonic communications may be addressed. After giving Buyer such initial notice, Seller shall promptly give Buyer notice of any change in the information provided in the initial notice or any revised notice.

# ARTICLE 19 Credit and Security Requirements

19.1 <u>Seller Security</u>. Seller shall post and maintain, at its sole cost and expense, security equal to Seventy-Five Thousand Dollars (\$75,000) per MW multiplied by the Guaranteed Capacity ("Seller Development Security") within thirty (30) Days after receipt of NMPRC Approval. Not later than the Commercial Operation Date, and as a condition thereto, Seller shall post and maintain, at its sole cost and expense, security equal to Fifty Thousand Dollars (\$50,000) per MW multiplied by the Guaranteed Capacity (the "Seller Delivery Term Security"). Seller shall replenish Seller Delivery Term Security to such required amount within fifteen (15) Days after any draw by Buyer. Buyer will return the Seller Development Security to Seller in full if Commercial Operation occurs on or before the Guaranteed Start Date, provided Seller has paid in full any Delay Damages or Capacity Shortfall Damages. In the event that no amounts are due and owing by Seller to Buyer under this PPA and provided no claims are then outstanding, Seller's Delivery Term Security shall be released to Seller upon the earlier of (i) termination of this PPA in accordance with its terms; and (ii) on the fifteenth (15th) Business Day after the expiration of the Term.

19.2 <u>Buyer Security.</u> Buyer shall not be required to post security except due to the occurrence of a Downgrade Event of Buyer. Not later than thirty (30) Days after the occurrence of such a Downgrade Event, Buyer shall post and maintain, at its sole cost and expense, security equal to Fifty Thousand Dollars (\$50,000) per MW multiplied by the Guaranteed Capacity ("Buyer Delivery Term Security") in accordance with this Article 19. Buyer shall replenish the Buyer Delivery Term Security to such required amount within fifteen (15) Days after any draw by Seller. In the event that no amounts are due and owing by Buyer to Seller under this PPA and provided no claims are then outstanding, Buyer Delivery Term Security shall be released to Buyer upon the earlier of (i) termination of this PPA in accordance with its terms; and (ii) on the fifteenth (15th) Business Day after the expiration of the Term.

19.3 Form of Security. The following are deemed acceptable methods for posting Security, which methods may be used in any combination, in the discretion of the Party for which it is posted: (a) cash, (b) a Letter of Credit in form reasonably acceptable to the Party for which it is posted issued by a U.S. bank or a U.S. branch of a foreign bank with credit ratings by both S&P and Moody's of at least A- and A3, respectively and at least Ten Billion Dollars (\$10,000,000,000) in U.S.-based assets ("Issuer Minimum Requirements"), (c) a Guaranty from a Guarantor, or (d) other security as may be reasonably acceptable to the Party for which it is posted. If at any time there shall occur a Downgrade Event with respect to a Party's Guarantor, then the other Party may require such posting Party to post a Letter of Credit or cash in a pledged collateral account in an amount equal to the then-applicable amount of any outstanding Guaranty comprising the Security. Upon receipt of the Letter of Credit or cash, the Guaranty shall be returned promptly to the other Party. Notwithstanding the foregoing, a Party's obligation to provide a Letter of Credit in lieu of a Guaranty under this Section 19.3 shall be suspended during any period that (x) Guarantor is no longer experiencing a Downgrade Event and (y) the Guaranty is reinstated by Guarantor in accordance with the requirements of this Section 19.3. Any Letter of Credit provided hereunder shall state that it shall renew automatically for successive one-year or shorter periods unless the Party for which the Security is posted receives written notice from the issuing bank at least sixty (60) Days prior to the expiration date stated in the Letter of Credit

that the issuing bank elects not to extend the Letter of Credit. If the Party for which the Security is posted receives notice from the issuing bank that the Letter of Credit will not be extended, the Posting Party must provide a substitute Letter of Credit from an alternative bank satisfying the Issuer Minimum Requirements or alternative acceptable Security. The receipt of the substitute Letter of Credit or other acceptable Security must be effective on or before the expiration date of the expiring Letter of Credit and delivered to the Party for which the Security is posted at least thirty (30) Days before the expiration date of the original Letter of Credit. If the posting Party fails to supply a substitute Letter of Credit or other acceptable Security as required, then the Party for which the Security is posted will have the right to draw on the total amount of the expiring Letter of Credit. If (a) the credit rating of the issuer bank of a Letter of Credit falls below the Issuer Minimum Requirements, (b) the issuer bank fails to honor a properly documented request to draw on such Letter of Credit or disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, such Letter of Credit, or (c) the issuer of the outstanding Letter of Credit fails to comply with or perform its obligations under such Letter of Credit and such failure shall be continuing after the lapse of any applicable grace period permitted under such Letter of Credit, then Seller shall have fifteen (15) Days (or such longer period as the Party for which the Security is posted in its sole discretion may permit in writing) following written notice from Buyer to obtain a suitable Letter of Credit from another bank that meets the Issuer Minimum Requirements.

19.4 <u>Grant of Security Interest</u>. To the extent that a Party posts cash to secure its obligations under this PPA, the other Party hereby grants to the posting Party a present and continuing security interest in, and lien on (and right of setoff against), and collateral assignment of, all cash collateral provided by the posting Party to the other Party as collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of the Party for which the Security is posted. The posting Party agrees to take such action as reasonably required to perfect in favor of the Party for which the Security is posted a first priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof.

19.5 <u>Use of Security</u>. In addition to any other remedy available to it, the Party for which the Security is posted in its sole discretion may draw from, offset against or make demand under such security to recover any amounts owing to it arising out of this PPA, including any damages due to the Party for which the Security is posted and any amount for which the same Party is entitled to indemnification under this PPA. The Party for which the Security is posted may draw from, offset against or make demand under all or any part of the amounts due to it from any form of Security provided to the Party for which the Security is posted and from all such forms, in any sequence and at any time before or after termination of this PPA, as the Party for which the Security is posted may select until such time as the Security is exhausted.

#### **ARTICLE 20**

#### Indemnity; Insurance Proceeds

20.1 Indemnification.

(A) Subject to the provisions of Article 12, and to the fullest extent permitted by law, Seller shall defend, save harmless and indemnify on an After Tax Basis the Buyer, its

Affiliates, and their respective directors, officers, employees, agents, subcontractors, or anyone directly or indirectly employed by any of them or anyone for whose acts any one of them may be liable, from and against all third-party claims, demands, losses, liabilities and expenses, including reasonable attorneys' fees, for personal injury, death or damage to real property and tangible personal property of any third party (collectively, "Losses") to the extent arising out of, resulting from, or caused by the negligence or willful misconduct of Seller, its Affiliates, directors, officers, employees, agents, subcontractors, or anyone directly or indirectly employed by any of them or anyone for whose acts any one of them may be liable; *provided* that, the waiver of consequential damages set forth in Section 12.7 shall not apply with respect to claims made by third parties.

(B) Subject to the provisions of Article 12, and to the fullest extent permitted by law, Buyer shall defend, save harmless and indemnify on an After Tax Basis the Seller, its Affiliates, and their respective directors, officers, employees, agents, subcontractors, or anyone directly or indirectly employed by any of them or anyone for whose acts any one of them may be liable, from and against all Losses to the extent arising out of, resulting from, or caused by the negligence or willful misconduct of Buyer, its Affiliates, directors, officers, employees, agents, subcontractors, or anyone directly or indirectly employed by any of them or anyone for whose acts any one of them may be liable; *provided* that, the waiver of consequential damages set forth in the third paragraph of Section 12.7 shall not apply with respect to claims made by third parties.

Notice of Claims; Procedure. The indemnitee shall, with reasonable promptness 20.2 after obtaining knowledge thereof, provide the indemnitor with written notice of the proceedings, claims, demands or assessments that may be subject to indemnification, which notice shall include a statement of the basis of the claim for indemnification, including a summary of the facts or circumstances that form the basis for the claim, a good faith estimate of the amount of Losses and copies of any pleadings or demands from the third party. Indemnitor shall have thirty (30) Days after its receipt of the claim notice to notify indemnitee in writing whether or not indemnitor agrees that the claim is subject to this Article 20 and, if so, whether indemnitor elects to undertake, conduct and control, through counsel of its choosing acceptable to indemnitee and at indemnitor's sole risk and expense, the settlement or defense of the claim. If within thirty (30) Days after its receipt of the claim notice, indemnitor notifies indemnitee that it elects to undertake the settlement or defense of the claim, indemnitee shall cooperate with indemnitor in connection therewith including by making available to indemnitor all relevant information and the testimony of employees and agents material to the defense of the claim. Indemnitor shall reimburse indemnitee for reasonable out-of-pocket costs incurred in connection with such cooperation. So long as indemnitor is contesting the claim in good faith and with diligence, indemnitee shall not pay or settle the claim. Notwithstanding the foregoing, indemnitee shall have the right to pay or settle any claim at any time without the consent of indemnitor; provided that, in such event it waives any right to indemnification therefor. If indemnitor does not provide a responsive notice within the thirty (30) Day period set forth in this Section 20.2, or otherwise fails to assume or diligently prosecute the defense of any claim in accordance with this Section 20.2, the indemnitee shall have the absolute right to control the defense of such claim, and the fees and expenses of such defense, including reasonable attorneys' fees of the indemnitee's counsel and any amount determined to be owed by the indemnitee pursuant to such claim shall be borne by the indemnitor; provided that, the

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indemnitor shall be entitled, at its sole expense, to participate in (but not control) such defense. Subject to the foregoing, (a) the indemnitor shall control the settlement of all claims as required under the insurance policies set forth in Article 16, as applicable, as to which it has assured the defense; *provided, however*, that (i) such settlement shall include dismissal with prejudice of the claim and an explicit and unconditional release from all indemnitees; and (ii) the indemnitor shall not conclude any settlement without the prior approval of the indemnitee, which approval shall not be unreasonably withheld, conditioned or delayed; and (b) except as provided in the preceding sentence concerning the indemnitor's failure to assume or to diligently prosecute the defense of any claim, no indemnite seeking reimbursement pursuant to the foregoing indemnity shall, without the prior written consent of the indemnitor, settle, compromise, consent to the entry of any judgment or otherwise seek to terminate any action, claim suit, investigation or proceeding for which indemnity is afforded hereunder unless the indemnitee waives any right to indemnification therefor or reasonably believes that the matter in question involves potential criminal liability.

20.3 <u>Survival of Obligations</u>. Cancellation, expiration, or earlier termination of this PPA shall not relieve the Parties of obligations that by their nature should survive such cancellation, expiration, or termination, prior to the term of the applicable statute of limitations, including warranties, and remedies which obligation shall survive for the period of the applicable statute(s) of limitation.

20.4 <u>Insurance Proceeds</u>. In the event that an indemnifying Party is obligated to indemnify the indemnified Party under this Article 20, the amount owing to the indemnified Party will be the amount of the indemnified Party's Loss net of any insurance proceeds received by the indemnified Party following a reasonable effort by such Party to obtain such insurance proceeds.

## ARTICLE 21

#### Governmental Charges

Allocation of Governmental Charges. Seller shall pay or cause to be paid all 21.1Governmental Charges on or with respect to the Project or on or with respect to the sale and making available to Buyer of Energy Output that are imposed on the making available of Energy Output arising prior to the Point of Delivery or prior to the transfer of the Environmental Attributes pursuant to Article 11. Buyer shall pay or cause to be paid all Governmental Charges (other than any Governmental Charges for which Seller is liable under this Section 21.1) on or with respect to the taking and purchase by Buyer of Energy Output that are imposed at and from the taking of Energy Output by Buyer at the Point of Delivery or at and after the transfer of the Environmental Attributes pursuant to Article 11. If a Party is required to remit or pay Governmental Charges that are the other Party's responsibility hereunder, such Party shall promptly reimburse the other for such Governmental Charges. Both Parties shall use reasonable efforts to administer this PPA and implement the provisions in accordance with their intent to minimize Governmental Charges, so long as no Party is materially adversely affected by such efforts. Nothing herein shall obligate or cause a Party to pay or be liable to pay any Governmental Charge for which it is exempt under Applicable Law. In the event any sale of Energy Output hereunder is exempt from or not subject to any particular Governmental Charge, Buyer shall provide Seller with all reasonably requested documentation within thirty (30) Days

after requested by Seller to evidence such exemption or exclusion.

# ARTICLE 22

# Miscellaneous

22.1 <u>Waiver</u>. Subject to the provisions of Section 13.8, the failure of either Party to enforce or insist upon compliance with or strict performance of any of the terms or conditions of this PPA, or to take advantage of any of its rights thereunder, shall not constitute a waiver or relinquishment of any such terms, conditions, or rights, but the same shall be and remain at all times in full force and effect.

22.2 <u>Fines and Penalties</u>. Seller shall pay when due all fees, fines, penalties or costs incurred by Seller or its agents, employees or contractors for noncompliance by Seller, its employees, or subcontractors with any provision of this PPA, or any contractual obligation, permit or requirements of law except for such fines, penalties and costs that are being actively contested in good faith and with due diligence by Seller and for which adequate financial reserves have been set aside to pay such fines, penalties or costs in the event of an adverse determination. Buyer shall pay when due all fees, fines, penalties or costs incurred by Buyer or its agents, employees or contractors for noncompliance by Buyer, its employees, or subcontractors with any provision of this PPA, or any contractual obligation, permit or requirements of law except for such fines, penalties and costs that are being actively contested in good faith and with due diligence by Buyer.

22.3 <u>Standard of Review</u>. Absent the agreement of all Parties to the proposed change, the standard of review for changes to this PPA whether proposed by a Party, a non-party, or the Federal Energy Regulatory Commission acting sua sponte shall be the "public interest" standard of review set forth in *United Gas Pipe Line v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956).

22.4 <u>Disclaimer of Certain Third Party Beneficiary Rights</u>. In executing this PPA, Buyer does not, nor should it be construed to, extend its credit or financial support for the benefit of any third parties lending money to or having other transactions with Seller. Nothing in this PPA shall be construed to create any duty to, or standard of care with reference to, or any liability to, any Person not a party to this PPA.

22.5 <u>Relationship of the Parties</u>.

(A) This PPA shall not be interpreted to create an association, joint venture, or partnership between the Parties or to impose any partnership obligation or liability upon either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as an agent or representative of, the other Party.

(B) Seller shall be solely liable for the payment of all wages, Taxes, and other costs related to the employment of Persons to perform such services, including all federal, state, and local income, social security, payroll, and employment taxes and statutorily mandated workers' compensation coverage. None of the Persons employed by Seller shall be considered employees of Buyer for any purpose; nor shall Seller represent to any Person that he or she is or shall become a Buyer employee.

22.6 Equal Employment Opportunity Compliance Certification. Seller acknowledges that, as a government contractor, Buyer is subject to various federal laws, executive orders, and regulations regarding equal employment opportunity and affirmative action. These laws may also be applicable to Seller as a subcontractor to Buyer. To the extent such laws are applicable to Seller, all applicable equal opportunity and affirmative action clauses shall be deemed to be incorporated herein as required by federal laws, executive orders, and regulations, including 41 C.F.R. § 60-1.4(a)(1)-(7).

22.7 <u>Survival of Obligations</u>. Cancellation, expiration, or earlier termination of this PPA shall not relieve the Parties of obligations that by their nature should survive such cancellation, expiration, or termination, prior to the term of the applicable statute of limitations, including warranties, and remedies which obligation shall survive for the period of the applicable statute(s) of limitation.

22.8 Severability. In the event any of the terms, covenants, or conditions of this PPA, its Exhibits or Schedules, or the application of any such terms, covenants, or conditions, shall be held invalid, illegal, or unenforceable by any court or administrative body having jurisdiction, all other terms, covenants, and conditions of the PPA and their application not adversely affected thereby shall remain in force and effect; *provided, however*, that Buyer and Seller shall negotiate in good faith to attempt to implement an equitable adjustment in the provisions of this PPA with a view toward effecting the purposes of this PPA by replacing the provision that is held invalid, illegal, or unenforceable with a valid provision the economic effect of which comes as close as possible to that of the provision that has been found to be invalid, illegal or unenforceable.

22.9 <u>Complete Agreement: Amendments</u>. The terms and provisions contained in this PPA constitute the entire agreement between Buyer and Seller with respect to the Project and shall supersede all previous communications, representations, or agreements, either oral or written, between Buyer and Seller with respect to the sale of Energy Output from the Project. Subject to approval by any Governmental Authority with jurisdiction over this PPA, this PPA may be amended, changed, modified, or altered, *provided* that such amendment, change, modification, or alteration shall be in writing and signed by both Parties hereto, and *provided*, *further*, that the Exhibits and Schedules attached hereto may be changed according to the provisions of Section 13.7.

22.10 <u>Binding Effect</u>. This PPA, as it may be amended from time to time pursuant to this Article, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors-in-interest, legal representatives, and assigns permitted hereunder.

22.11 <u>Headings</u>. Captions and headings used in this PPA are for ease of reference only and do not constitute a part of this PPA.

22.12 <u>Counterparts</u>. This PPA or any supplement, modification, amendment or restatement hereof may be executed in two or more counterpart copies of the entire document or of signature pages to the document, each of which may have been executed by one or more of the signatories hereto and thereto and deliveries by mail, courier, telecopy or other electronic means, but all of which taken together shall constitute a single agreement, and each executed

counterpart shall have the same force and effect as an original instrument.

22.13 <u>Governing Law</u>. The interpretation and performance of this PPA and each of its provisions shall be governed and construed in accordance with the laws of the State of New Mexico notwithstanding its conflict of laws rules or any principles that would trigger the application of any other law.

## 22.14 Confidentiality.

(A) For purposes of this Section 22.14, "Disclosing Party" refers to the Party disclosing information to the other Party, and the term "Receiving Party" refers to the Party receiving information from the other Party.

Other than in connection with this PPA, the Receiving Party will not use (B) the Confidential Information (as defined in clause (C) below) and will keep the Confidential Information confidential. The Confidential Information may be disclosed to the Receiving Party or its Affiliates and any of their directors, officers, employees, financial advisers, potential lenders, legal counsel and accountants (collectively, "Receiving Party's Representatives"), but only if such Receiving Party's Representatives need to know the Confidential Information in connection with this PPA. The Receiving Party shall not disclose the Confidential Information to any Person other than as permitted hereby and shall safeguard the Confidential Information from unauthorized disclosure using the same degree of care as it takes to preserve its own confidential information (but in any event no less than a reasonable degree of care). Subject of Section 22.14(E) to the extent the Disclosing Party is required to submit Confidential Information to a Governmental Authority or is required to submit Confidential Information pursuant to any other legal process, the Disclosing Party shall use commercially reasonable efforts to ensure that such Confidential Information is not made public.

(C) As used in this Section 22.14, "Confidential Information" means all information that is furnished in connection with this PPA to the Receiving Party or its Receiving Party's Representatives by the Disclosing Party, or to which the Receiving Party or its Receiving Party's Representatives have access by virtue of this PPA (in each case, whether such information is furnished or made accessible in writing, orally, visually or by any other (including electronic) means), or which concerns this PPA, the Disclosing Party or the Disclosing Party's stockholders, members, affiliates or subsidiaries, and which is designated by the Disclosing Party at the time of its disclosure, or promptly thereafter, as "confidential" (whether by stamping any such written material or by memorializing in writing the confidential nature of any such oral or visual information). Any such information furnished to the Receiving Party or its Receiving Party's Representatives by a director, officer, employee, Affiliate, stockholder, consultant, agent or representative of the Disclosing Party will be deemed furnished by the Disclosing Party for the purpose of this PPA. Notwithstanding the foregoing, the following will not constitute Confidential Information for purposes of this PPA:

(1) information that is or becomes generally available to the public other than as a result of a disclosure or other act by the Receiving Party or its Receiving Party's Representatives;

(2) information that can be shown by the Receiving Party to have been already known to the Receiving Party on a non-confidential basis before being furnished to the Receiving Party by the Disclosing Party;

(3) information that becomes available to the Receiving Party on a non-confidential basis from a source other than the Disclosing Party or a representative of the Disclosing Party if to the knowledge of the Receiving Party such source was not subject to any prohibition against transmitting the information to the Receiving Party; and

(4) information developed by the Parties during the negotiation of this PPA that relates solely to this PPA (as opposed to confidential business or operating information of either Party), which information shall be deemed proprietary to both Parties, each of whom shall be free to use such information, as they would any information already known to the Parties before negotiation of this PPA.

(D) The Confidential Information will remain the property of the Disclosing Party. Any Confidential Information that is reduced to writing, except for that portion of the Confidential Information that may be found in analyses, compilations, studies or other documents prepared by or for the Receiving Party in connection with this PPA, will be returned to the Disclosing Party immediately upon its request after expiration or termination of this PPA, unless such Confidential Information has been destroyed by the Receiving Party, and no copies will be retained by the Receiving Party or its Receiving Party's Representatives, unless the Parties agree otherwise. That portion of the Confidential Information that may be found in analyses, compilations, studies or other documents prepared by or for the Receiving Party, oral or visual Confidential Information, and written Confidential Information not so required to be returned will be held by the Receiving Party and kept subject to the terms of this PPA, or destroyed.

(E) In any proceeding before any applicable Governmental Authority, or pursuant to any other legal or regulatory process, each Party shall be entitled to disclose Confidential Information. In such event, the Party making the disclosure in the proceeding shall use commercially reasonable efforts to limit the scope of any disclosure of Confidential Information and to make such disclosure of Confidential Information subject to a protective order or other similar procedure; *provided, however*, Seller acknowledges and agrees that Buyer may disclose this PPA and related documents, without seeking a protective order or similar process, in any proceeding before the NMPRC or pursuant to any other regulatory process under NMPRC jurisdiction.

## 22.15 Marketing Rights; Press Releases and Media Contact; Access.

Seller hereby grants to Buyer the right to advertise, market, and promote to the general public the benefits of this PPA and the RECs that are generated under this PPA and delivered to Buyer during the Term, including, but not limited to, the exclusive right, in any such advertising, marketing or promotional material, to associate itself with any claimed or actual environmental or sociological benefits arising from this PPA and the creation, sale or retirement of such RECs (all such materials, in whatever media, whether print, electronic, broadcast or

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otherwise, that are associated with such advertising, marketing or promotional purposes are the "**Promotional Materials**"). Seller shall obtain and grant to Buyer an irrevocable, royalty free, worldwide license to use and distribute its Promotional Materials, including using the name, description and images of the Project. Seller will make available to Buyer a basic description of the Project, and any press releases or statements that Seller produces regarding the Project. Upon sufficient advance written notice, Seller will grant to Buyer or its designee reasonable access to the Project for the purposes of furthering the creation, production and dissemination of Promotional Materials. Notwithstanding the foregoing, either Party shall be permitted to disclose the following terms with respect to this PPA:

. . . . . . . . . . . .

- (1) Party names;
- (2) Renewable resource type;
- (3) Term;
- (4) Project location;
- (5) Guaranteed Capacity;
- (6) Commercial Operation Date; and
- (7) Point of Delivery.

22.16 <u>Right to Mortgage</u>. Buyer shall have the right to mortgage, create or provide for a security interest, or convey in trust, all or a part of its interest in this PPA, under deeds of trust, mortgages, indentures or security agreements, as security for its present or future bonds or other obligations or securities, without consent of Seller; *provided*, that Buyer shall not be relieved of any of its obligations or liability under this PPA. Seller shall cooperate reasonably with Buyer to execute, or arrange for the delivery of, those normal, reasonable and customary documents, and to provide such other normal, reasonable and customary representations or warranties, all in a form reasonably acceptable to Seller, as may be necessary to assist Buyer in consummating such transactions.

22.17 Forward Contract and Master Netting Agreement. Notwithstanding any other provision of this PPA, the Parties acknowledge that this PPA is a forward contract and master netting agreement within the meaning of the safe harbor provisions of the Bankruptcy Code. Accordingly, the Parties agree, notwithstanding any other provision in this PPA, that this PPA may be terminated and remedies exercised hereunder by either Party upon the commencement of a proceeding by the other Party under any chapter of the Bankruptcy Code, and that the automatic stay of Section 362(a) of the Bankruptcy Code shall not apply to such termination or to the exercise of the remedies set forth herein.

22.18 <u>Accounting Matters</u>. The Parties agree that Generally Accepted Accounting Principles in the United States of America ("GAAP") and the rules of the United States Securities and Exchange Commission ("SEC") require Buyer to evaluate if Buyer must consolidate Seller's financial information. The Parties shall determine, through consultation with their respective independent registered public accounting firms, whether this PPA (i) will

La Joya Wind Facility, Phase 2 PPA

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be considered a finance lease under Accounting Standards Codification 842 - Leases, or (ii) require consolidation of Seller's financial information with Buyer's financial statements pursuant to Accounting Standards Codification 810-10 - Consolidation (including any subsequent amendments to these sections or future guidance issued by accounting profession governance bodies or SEC that affects Buyer's accounting treatment for the PPA, jointly the "Accounting Standards"). Seller agrees to provide Buyer with information Buyer reasonably believes is necessary for Buyer to make the foregoing determinations. If, as a result of the Parties' review (or subsequent reviews as Buyer deems necessary), and consultations with their respective independent registered public accounting firms, Buyer, in its reasonable discretion, determines that such consolidation is required for a given period, then the Parties agree to the following provisions for such period:

(A) Within fifteen (15) Days following the end of each calendar quarter, including the fourth quarter of the calendar year, Seller shall deliver to Buyer: (i) an unaudited year-to-date statement of income, (ii) an unaudited year-to-date statement of cash flows, (iii) an unaudited balance sheet as of the end of such calendar quarter, and (iv) related supporting schedules that are prepared by the Seller's Guarantor, or if Seller has not provided a Seller Guaranty to satisfy its Security requirements pursuant to Article 19, then Seller, in order to allow the Seller's parent to complete its quarterly filings with the SEC, shall deliver to Buyer any other information reasonably requested by Buyer to comply with the consolidation requirements of GAAP. If audited financial statements are deemed necessary by Buyer's external auditors to complete an audit of Buyer's consolidated financial statements, Buyer agrees to provide notice to Seller no later than sixty (60) Days before the end of the calendar year, and Seller agrees to provide audited financial statements within thirty (30) Days of each calendar year end thereafter.

(B) The financial statements to be delivered by Seller in accordance with Section 22.18(A) ("Seller's Financial Statements") shall be prepared in accordance with GAAP and fairly present in all material respects the consolidated financial position, results of operations, and cash flows of Seller. Seller shall maintain a system of internal accounting controls sufficient to provide reasonable assurance that the financial statements of Seller or Seller Guarantor, as applicable, are prepared in conformity with GAAP. If audited financial statements are prepared for the Seller, Seller shall provide such statements to Buyer within five (5) Business Days after those statements are issued.

(C) Upon reasonable notice from Buyer, during normal business hours and mutually agreed terms and dates, Seller shall allow Buyer access to Seller's records and personnel, so that Buyer and Buyer's independent registered public accounting firm can conduct financial statement reviews and audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). All reasonable expenses for the foregoing that are incremental to Seller's normal operating expenses shall be borne by Buyer.

(D) Once during each calendar quarter, Buyer and Seller shall meet (either in person or by conference call) at a mutually agreed upon date and time to conduct due diligence and Form 8K disclosure review and discuss Seller's internal control over financial reporting.

(E) Buyer shall treat Seller's financial statements or other financial

La Joya Wind Facility, Phase 2 PPA

information provided under the terms of this Section in confidence in accordance with Section 22.14 and, accordingly, shall: (i) utilize such Seller financial information only for purposes of preparing, reviewing, auditing or certifying Buyer's or any Affiliate's financial statements (including any required disclosures in the financial statement presentation and notes), for making regulatory, tax or other filings required by Applicable Law in which Buyer is required to demonstrate or certify its or any Affiliate's financial condition or to obtain credit ratings; (ii) make such Seller financial information available only to its or its Affiliates' officers, directors, employees or auditors who are responsible for preparing, reviewing, auditing or certifying Buyer's or any Affiliate's financial statements, to the SEC and the Public Company Accounting Oversight Board (United States) in connection with any oversight of Buver's or any Affiliate's financial statements and to those Persons who are entitled to receive Confidential Information in accordance with Section 22.14; (iii) not disclose any of Seller's financial information provided under the terms of this Section 22.18 to the extent that such information is not required by the Accounting Standards or Applicable Law; (iv) limit submission of Seller's financial information provided under the terms of this Section 22.18 to that information that reflects Seller's operations of the Project; provided, such limited submission is not contrary to the Accounting Standards or other Applicable Law; and (v) use reasonable efforts to disclose to and consult with Seller with respect to any information respecting Seller or the Project that Buyer intends to submit pursuant to this Section 22.18 and use good faith efforts to incorporate any of Seller's comments thereto in any such submission. Notwithstanding the foregoing, if Buyer discloses information, based on the advice of its counsel that it is legally required to be disclosed, Buyer may make such disclosure without being in violation of this Section.

22.19 <u>Telephone Recording</u>. Each Party to this PPA acknowledges and agrees to the taping or electronic recording ("**Recording**") of conversations between the Parties with respect to all scheduling and dispatch issues, whether by one or the other or both Parties, and that the Recordings will be retained in confidence, secured from improper access, and may be submitted in evidence in any suit, action or proceedings relating to this PPA. Each Party waives any further notice of that monitoring or Recording and agrees to notify its personnel of the monitoring or Recording and to obtain any necessary consent of those personnel.

[Signature page(s) follow]

La Joya Wind Facility, Phase 2 PPA

IN WITNESS WHEREOF, the Parties have caused this PPA to be duly executed as of the date first above written. This PPA shall not become effective as to either Party unless and until executed by both Parties.

PUBLIC SERVICE COMPANY OF NEW MEXICO

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Huomas Fallgrus/31/2019 —18745E858C2C4B9...

Name Thomas Fallgren

Title Vice President-PNM Generation

#### LA JOYA WIND, LLC

By	Steve Erump	5/31/2019
Name	Steve Krump	
Title	Authorized Rep	resentative
By (	—Docusigned by: Lawa Brane —4ACF42F559DA47C	5/31/2019

Name \_\_\_\_\_ Beane

Title Authorized Representative



[Signature Page to La Joya Wind Facility, Phase 2 Power Purchase Agreement]

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# EXHIBIT A

# (to Power Purchase Agreement)

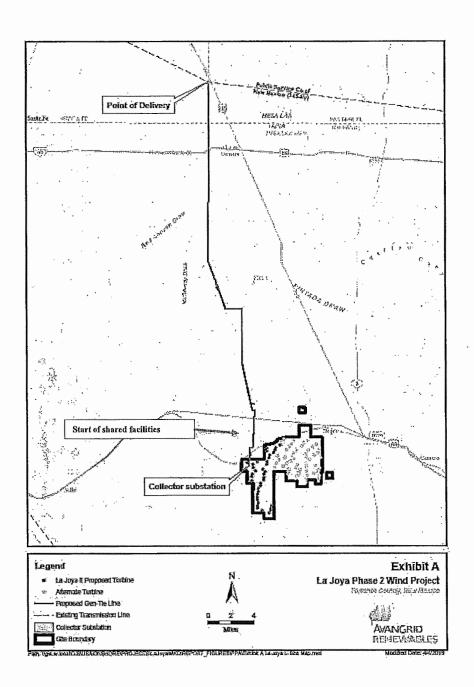
#### DESCRIPTION OF SELLER'S GENERATION FACILITIES AND SITE MAP

1. Name of Seller's Project: La Joya Wind Facility, Phase 2

Location: La Joya Wind Facility, Phase 2 is located 18 miles east of Estancia, NM. Lat 34.9148. Long -105.7929

- 2. Owner (if different from Seller): La Joya Wind, LLC
- 3. Operator: Avangrid Renewables, LLC
- 4. Equipment/Fuel:
  - a. Type of facility and conversion equipment (e.g., Solar PV; Solar Thermal; Wind; Biomass (including Fuel)): Wind
  - b. Total number of units at the Project: 53
  - c. Total nameplate capacity: 142.05 MW
  - d. Additional technology-specific information: Project includes:
    - Thirty-eight (38) 2.625 MW wind turbines with 114 meter rotors atop 93 meter towers and
    - Fifteen (15) 2.82 MW wind turbines with 127 meter rotors atop 89 meter towers.
- 5. Site Map: Attach a scaled map that complies with the requirements of Section 3.3 of the PPA.

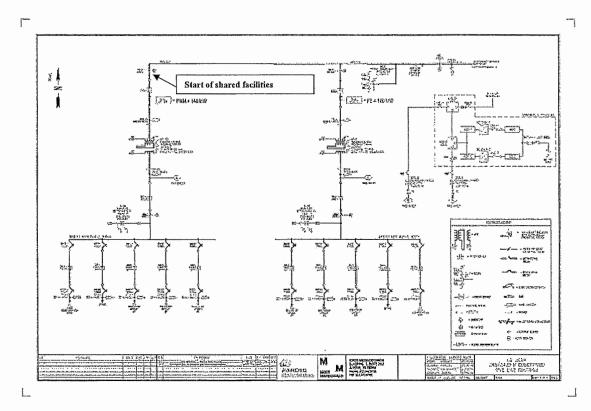
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#### EXHIBIT B (to Power Purchase Agreement)

# ONE-LINE DIAGRAM OF PROJECT AND INTERCONNECTION FACILITIES .

See attached one-line diagrams of the Project, which indicates the Interconnection Facilities, the Point of Delivery and ownership and location of meters. Seller shall provide any necessary updates upon execution of the Interconnection Agreement. Point of Delivery is PNM Clines Corners 345 kV substation.

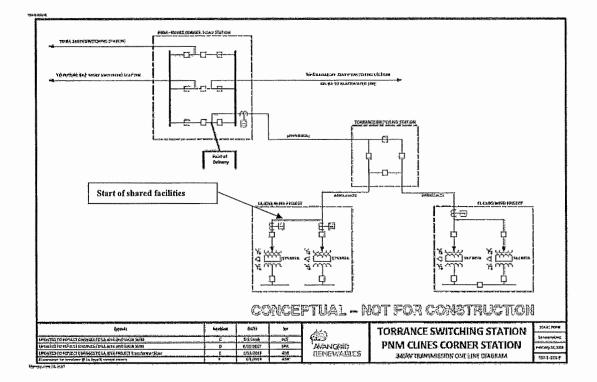


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# EXHIBIT C (to Power Purchase Agreement)

# DESCRIPTION OF SITE

Township/Range	Section	Description	County	State
4N 12E	1	Ali	Torrance	New Mexico
4N 12E	2	E/2	Torrance	New Mexico
4N 12E	12	All	Torrance	New Mexico
4N 12E	13	All	Torrance	New Mexico
4N 12E	24	N/2	Torrance	New Mexico
4N 13E	1	NE/4	Torrance	New Mexico
4N 13E	2	All but part of the SW part (approx 530 acres)	Torrance	New Mexico
4N 13E	3	All but part of the SE part (approx 614 acres)	Torrance	New Mexico
4N 13E	4	All but part of the S part (approx 495 acres)	Torrance	New Mexico
4N 13E	6	All	Torrance	New Mexico
4N 13E	7	All	Torrance	New Mexico
4N 13E	9	NE part (approx 13 acres)	Torrance	New Mexico
4N 13E	10	North part (approx 121 acres)	Torrance	New Mexico
4N 13E	18	All	Torrance	New Mexico
4N 13E	19	All	Torrance	New Mexico
5N13E	4	SW/4	Torrance	New Mexico
5N13E	16	All	Torrance	New Mexico
5N13E	19	S/2; South part of the N/2 (approx 201 acres)	Torrance	New Mexico
5N13E	20	All	Torrance	New Mexico
5N13E	21	All	Torrance	New Mexico
5N13E	22	All	Torrance	New Mexico
5N13E	27	All	Torrance	New Mexico
5N13E	28	All	Torrance	New Mexico
5N13E	29	All	Torrance	New Mexico
5N13E .	30	All	Torrance	New Mexico
5N13E	· . 31	All	Torrance	New Mexico
5N13E	32	All	Torrance	New Mexico
5N13E	33	All	Torrance	New Mexico
5N13E	34	All	Torrance	New Mexico
5N12E	24	South part of the S/2 (approx 218 acres)	Torrance	New Mexico
5N12E	25	All	Torrance	New Mexico
5N12E	34	All	Torrance	New Mexico
5N12E	35	All	Torrance	New Mexico
5N12E	36	All	Torrance	New Mexico

# EXHIBIT D (to Power Purchase Agreement)

# NOTICE ADDRESSES

#### PUBLIC SERVICE COMPANY OF NEW MEXICO

#### Notices:

Delivery Address: Public Service Company of New Mexico 414 Silver Ave. SW Albuquerque, NM 87102

#### Invoices:

Attn: Energy Analysis Phone:(505)541-2585 Fax: (505) 241-2434 Email: PNMEAM@pnmresources.com

#### Scheduling:

Attn: Traders Phone: (505) 855-6226 day-ahead (505)855-6216 real time Fax: (505) 241-4188 Email: zz-WPMTraders@pnm.com

#### **Payments:**

Public Service Company of New Mexico 2401 Aztec Rd. NE, MS Z-160 Albuquerque, NM 87107 Attn: Albuquerque Division Cash

Wire Transfer: Wells Fargo Bank ABA# 121000248 Albuquerque, New Mexico ME Whsle Pwr Depository: 651-537-7916 Attn: EA-Wholesale Power Marketing

# LA JOYA WIND, LLC

All Notices/Invoices: Delivery Address: La Joya Wind, LLC 1125 NW Couch Street #700 Portland, OR 97209

# Invoices:

Attn: Settlements Phone: 503.796.6959 or 503.796-7150 Fax: 503.796.6905 Email: IBR PWR Settlements@avangrid.com

#### Scheduling:

Attn: Juan Cartagena Phone: 503-796-7139 or 503-796-7013 Email: presched.wind@avangrid.com

#### **Payments:**

Attn: Settlements Phone: 503.796.6959 or 503.796-7150 Fax: 503.796.6905 Email: IBR\_PWR\_Settlements@avangrid.com

#### Wire Transfer:

Account Name: La Joya Wind, LLC BNK: JPMorgan Chase Bank, NA, New York, NY ABA: 021000021 ACCT: 816536437

#### **Contract Manager:**

#### **Contract Manager:**

Public Service Company of New Mexico Attention: Kevin Mataczynski 2401 Aztec Rd. NE Albuquerque, NM 87107 Telephone: (505) 241-4147 Fax: (505) 241-2375

# With additional Notice of an Event of Default, termination and other legal

notices to: Public Service Company of New Mexico Attention: Tom Fallgren 2401 Aztec Rd. NE Albuquerque, NM 87107 Telephone: (505) 241-4148 Fax: (505) 241-2375

#### With a copy to:

Public Service Company of New Mexico Attention: Madonna N. Bixby, Senior Corporate Counsel 414 Silver Ave. SW, MS0805 Albuquerque, NM 87102 Telephone: (505) 241-4929 Fax: (505) 241-4318 Attn: Contract Administration Phone: (503) 796-7034 Email: contracts.admin@iberdrolaren.com

# With additional Notice of an Event of Default, termination and other legal notices to:

Attn: Office of the General Council Phone: 503-796-7127 Facsimile: 503-796-6904

# EXHIBIT E (to Power Purchase Agreement)

# SELLER'S REQUIRED GOVERNMENTAL AUTHORITY PERMITS, CONSENTS, APPROVALS, LICENSES AND AUTHORIZATIONS TO BE OBTAINED

Name of Permit or Lease Required	Grantor	Description of Permit or Lease	Current Status (to be filed, pending approval, approved)	Projected Timeframe for Approval
Ground Disturbance Permit	New Mexico State Land Office	Permit required for construction on State Trust Land	Approved	N/A
Right of Entry	New Mexico State Land Office	Permit required to enter on State Trust Land	Approved	N/A
National Pollutant Discharge Elimination System (NPDES)	EPA	Requirement to develop stormwater pollution prevention plan	To be filed	Prior to Construction
FAA Determination of No Hazard	Federal Aviation Administration	Permits required for each turbine locations	Filed	Q2 2019
Torrance County Conditional Use Permit	Torrance County	Permit required to construct and operate La Joya Wind Project	Approved	N/A
CWA Sec. 404 Permit	USACE	Wetland Clearance	N/A	N/A
Cultural Resources Survey on the state land	NMSLO	N/A	To be filed	Prior to Construction

## EXHIBIT F

(to Power Purchase Agreement)

## COMMISSIONING TESTS

- Turbine supplier has provided, and Seller has accepted, all required turbine 1) commissioning certificates.
- Control functional testing, including voltage, power factor and load control.

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2) 3) Communications equipment checks, including end-to-end testing of communication links with Buyer.

## EXHIBIT G

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(to Power Purchase Agreement)

#### INSURANCE COVERAGES

Seller shall obtain and maintain the following insurance coverages, at a minimum:

- A. Workers' Compensation Insurance that complies with statutory limits under workers' compensation laws of any applicable jurisdiction and employer's liability coverage with limits of One Million Dollars (\$1,000,000) per accident, One Million (\$1,000,000) for disease, and One Million (\$1,000,000) for each employee, covering all of Seller's employees, whether full-time, leased, temporary, or casual.
- **B.** Commercial General Liability Insurance, written on a standard ISO occurrence form, or the equivalent, with a combined single limit of One Million Dollars (\$1,000,000) per occurrence. This policy will include coverage for bodily injury liability, broad form property damage liability, blanket contractual, owner's protective, products liability and completed operations.
- **C.** Business Automobile Liability Insurance, or the equivalent, with a limit of One Million Dollars (\$1,000,000) combined single limit per occurrence for bodily injury and property damage with respect to Seller's vehicles whether owned, hired, or non-owned.
- D. Excess or Umbrella Liability. Excess or Umbrella Liability Insurance on a following form basis covering claims in excess of the underlying insurance described in paragraphs (A) (with respect to only Employer's Liability Insurance), (B) and (C) with a limit per occurrence of Twenty Million dollars (\$20,000,000) written on a per project basis.

The amounts of insurance required in the foregoing paragraphs (A), (B), (C) and (D) may be satisfied by purchasing coverage in the amounts specified or by any combination of primary and excess insurance, so long as the total amount of insurance meets the requirements specified above.

E. Property Insurance. During construction and operation, Seller shall provide standard form "All Risk" insurance covering one hundred percent (100%) of the Project cost. For the avoidance of doubt, builders' risk insurance shall qualify as "All Risk" insurance during the construction period. The All-Risk Property insurance shall cover physical loss or damage to the Project including the period during testing and startup. A deductible may be carried, which deductible shall be the absolute responsibility of Seller. All-Risk Property insurance shall include: (i) coverage for fire, flood, wind and storm, tornado and earthquake with respect to facilities similar in construction, location and occupancy to the Project, and each subject to their respective sub-limits; and (ii) Boiler and Machinery insurance covering all objects customarily subject to such insurance, including boilers and engines, in an amount equal to their probable maximum loss.

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# EXHIBIT H

(to Power Purchase Agreement)

#### TRANSMISSION

Buyer shall, as soon as reasonably practicable after the Execution Date, submit a request on the Transmission Provider's OASIS for transmission service for the Project as a network resource. Upon such a time as Buyer is prepared to take receipt of such network service, Seller, or its Affiliate Avangrid Renewables, LLC will make a request to the Transmission Provider to reduce the capacity under its Transmission Agreements by an amount equal to the Guaranteed Capacity. Neither Seller nor its Affiliate Avangrid Renewables, LLC shall be obligated to request the reduction of capacity under its Transmission Agreements until Buyer can take receipt of such network service in order to transmit power from the Point of Delivery.

#### EXHIBIT I

(to Power Purchase Agreement)

#### AVAILABILITY GUARANTEE

#### Section 1. Definitions.

Capitalized terms used in this <u>Exhibit I</u> and not defined herein shall have the meaning assigned in Article 1 of this PPA.

"Actual Availability Percentage" means a percentage calculated as (a) one hundred (100), multiplied by (b) the result of (i) the sum of all Available Hours for all Wind Turbines that were part of the Project at the beginning of the relevant Commercial Operation Year, divided by (ii) the sum of all Period Hours in the relevant Commercial Operation Year for all Wind Turbines that were part of the Project on the Commercial Operation Date.

"Actual Energy Output" means the Energy (in MWh) generated by the Project and delivered to the Point of Delivery.

"Aggregate Availability Damages Cap" has the meaning set forth in Section 2(3) of this Exhibit.

"Annual Availability Damages Cap" has the meaning set forth in Section 2(3) of this Exhibit.

"Annual Report" has the meaning set forth in Section 2(5) of this Exhibit.

"Availability Damages" has the meaning set forth in Section 2(2) of this Exhibit.

"Available Hours" means for each Wind Turbine, for a relevant Commercial Operation Year, an amount of hours equal to (a) the number of Period Hours in such Commercial Operation Year, minus (b) the aggregate Unavailable Hours for such Wind Turbine in such Commercial Operation Year, plus (c) the aggregate Excused Hours for such Wind Turbine in such Commercial Operation Year.

"Excused Hours" means in any Commercial Operation Year, the aggregate Seller Excused Hours for such Commercial Operation Year; *provided* that for purposes of the Availability Guarantee only the first fifty (50) hours of Scheduled Maintenance Hours per Wind Turbine per Commercial Operation Year will be treated as Excused Hours. For the avoidance of doubt, the fifty (50) hour allowance for Scheduled Maintenance Hours shall be applicable to each Wind Turbine regardless if the Scheduled Maintenance Hours are the result of an individual Wind Turbine outage or a system outage that results in multiple Wind Turbines being taken out of service.

"Guaranteed Availability Percentage" has the meaning set forth in Section 2(1) of this Exhibit.

"Period Hours" means eight thousand seven hundred sixty (8,760) hours for any given Commercial Operation Year, or eight thousand seven hundred eighty-four (8,784) hours for a Commercial Operation Year that encompasses a leap year, as may be prorated for any partial Commercial Operation Year.

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"Scheduled Maintenance Hour" means a time during which a Wind Turbine is shut down or its output reduced by any portion of its capacity to undergo scheduled maintenance.

"Unavailable Hours" means those hours a Wind Turbine is not available to operate for any reason including (a) it is in an emergency, stop, service mode or pause state; (b) it is in "run" status and faulted; (c) it is included in Scheduled Maintenance Outages; (d) a Transmission Provider Curtailment, (e) a Reliability Curtailment, (f) a Buyer Curtailment, (g) a Force Majeure Event, (h) a Catastrophic Failure, (i) Environmental Curtailments, (j) any failure by Buyer to perform a material obligation under this PPA (other than due to a breach by Seller of its obligations under this PPA), or (k) it is otherwise not operational or capable of delivering Energy to the Point of Delivery.

"Wind Turbine" means a single wind turbine generating system, including the tower, pad, transformer and controller system, installed as part of the Project.

#### Section 2. Availability Guarantee.

1. <u>Availability Guarantee</u>. Beginning with the second Commercial Operation Year and for every Commercial Operation Year thereafter, Seller guarantees that the Project shall achieve an Actual Availability Percentage for each Commercial Operation Year equal to or greater than ninety percent (90%) (each, a "Guaranteed Availability Percentage").

2. <u>Availability Damages</u>. For any Commercial Operation Year during which Seller fails to meet the Guaranteed Availability Percentage, Seller shall pay Buyer liquidated damages in the amount equal to (x) the Energy Output Payment Rate, multiplied by (y) the Guaranteed Availability Percentage minus the Actual Availability Percentage for such Commercial Operation Year (both expressed as a decimal), multiplied by (z) the Actual Energy Output for such Commercial Operation Year divided by the Actual Availability Percentage (expressed as a decimal), multiplied by the Guaranteed Availability Percentage (expressed as a decimal) (the "Availability Damages"), but in no event in excess of the Annual Availability Damages Cap and the Aggregate Availability Damages Cap. A sample calculation of the Availability Damages that would be owed by Seller under certain stated assumptions is provided as Attachment 1 to this Exhibit I.

3. <u>Damages Cap, Termination and Cure Rights</u>. The total Availability Damages payable by Seller for failure to meet the Guaranteed Availability Percentage in any Commercial Operation Year shall be capped annually at Two Million Seven Hundred Thousand Dollars (\$2,700,000) ("Annual Availability Damages Cap") and in the aggregate at Thirty-Four Million Dollars (\$34,000,000) ("Aggregate Availability Damages Cap) over the Term of the PPA. If at any time Buyer incurs damages in excess of the Aggregate Availability Damages Cap that Seller does not pay when billed by Buyer, Buyer shall have the right to terminate this PPA upon notice to Seller, without further obligation by either Party except as to costs and balances incurred prior

to the date of such termination except with respect to and the right to declare an Event of Default pursuant to Section 12.1(B)(5), as applicable.

#### 4. <u>Sole Remedy</u>.

A. The Parties agree that Buyer's sole and exclusive remedy, and Seller's sole and exclusive liability, for any deficiency in the performance of the Project (including any failure to meet the Guaranteed Availability Percentage) shall be the payment of damages up to the Annual Availability Damages Cap and Aggregate Availability Damages Cap, the right of termination under this Exhibit I and the right to declare an Event of Default pursuant to Section 12.1(B)(5) of the PPA, as applicable, and shall not be subject to the collection of any other damages or any other remedies, including specific performance, and shall not be an Event of Default giving rise to a termination payment obligation except pursuant to Section 12.1(B)(5) of the PPA, as applicable. Notwithstanding the foregoing, Seller's material breach of its obligation to operate and maintain the Project in accordance with Prudent Utility Practice, or Seller's failure to pay Availability Damages when due if not timely cured pursuant to the provisions of Article 12 of the PPA are an Event of Default of Seller for which Buyer may terminate the PPA and seek damages in accordance with Section 12.4 of the PPA.

B. If all or a portion of the failure to achieve the Guaranteed Availability Percentage during an applicable Commercial Operation Year is caused by a Catastrophic Failure resulting in a reduction of Energy production of the Project by at least fifty percent (50%) of the Expected Energy Output for such Commercial Operation Year, then the hours during the first thirteen (13) consecutive months of such Catastrophic Failure will be considered Excused Hours for the for purposes of determining the Actual Availability Percentage under Section 12.1(B)(5), *provided* that such hours will not be excluded for purposes of determining Availability Damages. For the avoidance of doubt, any hours after the first thirteen (13) consecutive months shall not be deemed Excused Hours for any purpose. The damages caps provided in Section 4 will not apply in any year under this Section 4(A).

5. <u>Annual Report</u>. No later than the thirtieth (30th) Day of a Commercial Operation Year, and every Commercial Operation Year thereafter (or thirty Days after the end of the last Commercial Operation Year), Seller shall deliver to Buyer a calculation showing Seller's computation of the Actual Availability Percentage for the previous Commercial Operation Year and the Availability Damages, if any, due to Buyer (the "Annual Report"). Such Annual Report shall include the total amount of Availability Damages paid to Buyer under the PPA and shall provide notice that the Aggregate Availability Damages Cap has been reached, if applicable. If Availability Damages are due from Seller, Seller shall pay such damages no later than fifteen (15) Business Days after providing the Annual Report.

6. <u>Disputes</u>. Disputes as to any calculations under this Exhibit I shall be addressed as provided in Section 13.8 of the PPA.

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#### ATTACHMENT 1 TO EXHIBIT I

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#### EXAMPLE CALCULATION OF AVAILABILITY DAMAGES

#### I. Example of Actual Availability Percentage Calculation

The sample calculation set forth below is based on the following assumed facts:

During the Commercial Operation Year in question, 64 Wind Turbines were part of the Project.

The Wind Turbines had the following operating characteristics:

		Wind	Wind
	Hours	Turbines	Turbine
		Affected	Hours
 Period Hours ("PH")	8,760	64	560,640
Unavailable Hours ("UH")			5,000
Excused Hours ("EH")			1,000

Given these assumed facts, the Available Hours for the Wind Turbines during the Commercial Operation Year would be calculated as follows:

Sum of Available Hours = PH - UH + EH: 556,640 = 560,640 - 5,000 + 1000

#### Actual Energy Availability Percentage

Given these assumed facts, the Actual Availability Percentage for the Project during the Commercial Operation Year in question would be calculated as follows:

- (a) Sum of Available Hours: 556,640 hours
- (b) Sum of Period Hours: 560,640 hours
- (c) Actual Availability Percentage: (Sum of Available Hours/Sum of Period Hours) x 100 = (556,640/560,640) x 100 = 99.3%

#### **II.** Example of Availability Damages

Example of Availability Damages based on the following assumed facts:

- (a) Seller's Guaranteed Availability in Commercial Operation Year 4 = 90%.
- (b) Seller's Actual Availability in Commercial Operation Year 4 = 83%.
- (c) Energy Output Payment Rate = \$17.48
- (d) Actual Energy Output = 208,223 MWh

Given these assumed facts, Seller calculates the Availability Damages due to Buyer as follows:

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Energy Output Payment Rate x (Guaranteed Availability Percentage in Commercial Operation Year 4 — Actual Availability Percentage for Commercial Operation Year 4) x (Actual Energy Output for Commercial Operation Year 4 ÷ Actual Availability Percentage for Commercial Operation Year 4 x Guaranteed Availability Percentage for Commercial Operation Year 4) = Availability Damage:

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 $17.48 \times (.90 - .83) \times (208,223 \div .83 *.9) = 276,269$ 

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## EXHIBIT J (to Power Purchase Agreement)

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#### FORM OF GUARANTY

#### GUARANTY

THIS GUARANTY (this "Guaranty"), dated as of \_\_\_\_\_, \_\_\_\_ (the "Effective Date"), is made by \_\_\_\_\_\_\_ ("Guarantor"), in favor of [INSERT COUNTERPARTY'S NAME IN ALL CAPS] ("Counterparty").

#### **RECITALS:**

A. WHEREAS, Counterparty and Guarantor's indirect, wholly-owned subsidiary [INSERT OBLIGOR'S NAME IN ALL CAPS] ("Obligor") have entered into, or concurrently herewith are entering into, that certain \_\_\_\_\_\_ Agreement dated/made/entered into/effective as of \_\_\_\_\_, 20\_\_ (the "Agreement"); and

**B.** WHEREAS, Guarantor will directly or indirectly benefit from the Agreement between Obligor and Counterparty;

NOW THEREFORE, in consideration of the foregoing premises and as an inducement for Counterparty's execution, delivery and performance of the Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Guarantor hereby agrees for the benefit of Counterparty as follows:

\* \* \*

1. <u>GUARANTY</u>. Subject to the terms and provisions hereof, Guarantor hereby absolutely and irrevocably guarantees the timely payment when due of all obligations owing by Obligor to Counterparty arising pursuant to the Agreement, including with respect to any damages that Obligor owes to Counterparty for failing to perform under the Agreement (collectively, the "**Obligations**"). This Guaranty shall constitute a guarantee of payment and not of collection. The liability of Guarantor under this Guaranty shall be subject to the following limitations:

- (b) The obligation and liability of Guarantor under this Guaranty is specifically limited to payments expressly required to be made under the Agreement (even if such payments are deemed to be damages), as well as costs of collection and enforcement of this Guaranty

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(including attorneys' fees) to the extent reasonably and actually incurred by Counterparty (subject, in all instances, to the limitations imposed by the Maximum Recovery Amount as specified in <u>Section 1(a)</u> above). Except as expressly payable by Obligor pursuant to the Agreement, Guarantor shall not be liable for or obligated to pay any consequential, indirect, incidental, lost profit, special, exemplary, punitive, equitable or tort damages.

#### 2. DEMANDS AND PAYMENT.

- (a) If Obligor fails to pay any Obligation to Counterparty when such Obligation is due and owing under the Agreement (an "Overdue Obligation"), Counterparty may present a written demand to Guarantor calling for Guarantor's payment of such Overdue Obligation pursuant to this Guaranty (a "Payment Demand"). Delay or failure by Counterparty in making a Payment Demand shall in no event affect Guarantor's obligations under this Guaranty.
- (b) A Payment Demand shall be in writing and shall reasonably and briefly specify in what manner and what amount Obligor has failed to pay and explain why such payment is due, with a specific statement that Counterparty is calling upon Guarantor to pay under this Guaranty. Such Payment Demand must be delivered to Guarantor in accordance with <u>Section 9</u> below; and the specific Overdue Obligation(s) addressed by such Payment Demand must remain due and unpaid at the time of such delivery to Guarantor.
- (c) After issuing a Payment Demand in accordance with the requirements specified in <u>Section 2(b)</u> above, Counterparty shall not be required to issue any further notices or make any further demands with respect to the Overdue Obligation(s) specified in that Payment Demand, and Guarantor shall be required to make payment with respect to the Overdue Obligation(s) specified in that Payment Demand within five (5) Business Days after Guarantor receives such demand. As used herein, the term "Business Day" shall mean all weekdays (*i.e.*, Monday through Friday) other than any weekdays during which commercial banks or financial institutions are authorized to be closed to the public in the State of New York.
- 3. **REPRESENTATIONS AND WARRANTIES.** Guarantor represents and warrants that:
- (a) it is a corporation duly organized and validly existing under the laws of the State of \_\_\_\_\_\_\_\_ and has the corporate power and authority to execute, deliver and carry out the terms and provisions of the Guaranty;
- (b) no authorization, approval, consent or order of, or registration or filing with, any court or other governmental body having jurisdiction over Guarantor is required on the part of Guarantor for the execution, delivery and performance of this Guaranty; and
- (c) the execution, delivery and performance of this Guaranty has been duly and validly authorized by all corporate proceedings of Guarantor, and this Guaranty constitutes a valid and legally binding agreement of Guarantor, enforceable against Guarantor in accordance with the terms hereof, except as the enforceability thereof may be limited by the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity.

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4. <u>RESERVATION OF CERTAIN DEFENSES</u>. Without limiting Guarantor's own defenses hereunder, Guarantor reserves to itself and may assert as a defense to enforcement of this Guaranty any defense to enforcement of the Agreement that Obligor may assert that is based on Counterparty's breach of the Agreement or the failure of a material condition precedent to Obligor's performance obligations. Notwithstanding the foregoing, Guarantor agrees that it will remain bound upon this Guaranty notwithstanding any defenses that, pursuant to the laws of suretyship or guaranty, would otherwise relieve a guarantor of its obligations. In furtherance and not limitation of the foregoing, Guarantor expressly waives (if any) based upon the bankruptcy, insolvency, dissolution or liquidation of Obligor or any lack of power or authority of Obligor's obligations under the Agreement. Guarantor further reserves to itself any rights, setoffs or counterclaims that Guarantor may have against Obligor, *provided, however*, that Guarantor agrees such rights, setoffs or counterclaims may only be asserted against Obligor in an independent action, and not as a defense to Guarantor's obligations under this Guaranty.

5. <u>AMENDMENT OF GUARANTY</u>. No term or provision of this Guaranty shall be amended, modified, altered, waived or supplemented except in a writing signed by Guarantor and Counterparty.

6. <u>WAIVERS AND CONSENTS</u>. Guarantor agrees that its obligations under this Guaranty are irrevocable, absolute, independent, unconditional and continuing (subject only to the defenses to enforcement of this Guaranty reserved by Guarantor in *Section 4*) and shall not be affected by any circumstance that constitutes a legal or equitable discharge of a guarantor or surety other than payment in full of the Obligations. In furtherance of the foregoing and without limiting the generality thereof, Guarantor agrees, subject to and in accordance with the other terms and provisions of this Guaranty:

(a) Except for the Payment Demand as required in Section 2 above, Guarantor hereby waives, to the maximum extent permitted by applicable law, (i) notice of acceptance of this Guaranty; (ii) promptness, diligence, presentment, demand, protest, setoff and counterclaim concerning the liabilities of Guarantor; (iii) any right to require that any action or proceeding be brought against Obligor or any other person, or to require that Counterparty seek enforcement of any performance against Obligor or any other person, prior to any action against Guarantor under the terms hereof; (iv) any defense arising by reason of the incapacity, lack of authority or disability of Obligor or based on any illegality, lack of validity or unenforceability of any Obligation; (v) any duty of Counterparty to protect or not impair any security for the Obligations; (vi) any defense based upon an election of remedies by Counterparty; (vii) any rights of subrogation, contribution, reimbursement, indemnification, or other rights of payment or recovery for any payment or performance by it hereunder (and, for the avoidance of doubt, if any amount is paid to Guarantor in violation of this provision, Guarantor shall hold such amount for the benefit of, and promptly pay such amount to, Counterparty); (viii) any defense of waiver, release, res judicata, statute of frauds, fraud (with respect to Obligor), incapacity (with respect to Obligor), minority or usury; and (ix) any other circumstance or any existence of or reliance on any representation by Counterparty that might otherwise constitute a defense available to, or a legal or equitable discharge of, Guarantor or any other guarantor or surety.

(b) No delay by Counterparty in the exercise of (or failure by Counterparty to exercise) any rights hereunder shall operate as a waiver of such rights, a waiver of any other rights or a release of Guarantor from its obligations hereunder (with the understanding, however, that the foregoing shall not be deemed to constitute a waiver by Guarantor of any rights or defenses to which Guarantor may at any time have pursuant to or in connection with any applicable statutes of limitation).

(c) Without notice to or the consent of Guarantor, and without impairing or releasing Guarantor's obligations under this Guaranty, Counterparty may: (i) change the manner, place or terms for payment of all or any of the Obligations (including renewals, extensions or other alterations of the Obligations); (ii) release Obligor or any person (other than Guarantor) from liability for payment of all or any of the Obligations; (iii) receive, substitute, surrender, exchange or release any collateral or other security for this Guaranty or any or all of the Obligations and apply any such collateral or security and direct the order or manner of sale thereof, or exercise any other right or remedy that Counterparty may have against any such collateral or security; or (iv) exercise any other rights available to Counterparty under the Agreement, at law or in equity.

7. **REINSTATEMENT.** Guarantor agrees that this Guaranty shall continue to be effective or shall be reinstated, as the case may be, if all or any part of any payment made hereunder or under the Agreement while this Guaranty is in effect is at any time avoided or rescinded or must otherwise be restored or repaid by Counterparty as a result of the bankruptcy or insolvency of Obligor or Guarantor, or similar proceeding, all as though such payments had not been made.

8. <u>TERMINATION</u>. Subject to reinstatement under <u>Section 7</u>, this Guaranty and the Guarantor's obligations hereunder will terminate automatically and immediately upon the earlier of (i) the termination or expiration of the Agreement, and (ii) 11:59:59 Eastern Prevailing Time of [insert date [\_] years plus six (6) months after expected COD]; provided, however, Guarantor agrees that the obligations and liabilities hereunder shall continue in full force and effect with respect to any Obligations under any Agreement entered into on or prior to the date of such termination.

9. NOTICE. Any Payment Demand, notice, request, instruction, correspondence or other document to be given hereunder (herein collectively called "Notice") by Counterparty to Guarantor, or by Guarantor to Counterparty, as applicable, shall be in writing and may be delivered either by (i) U.S. certified mail with postage prepaid and return receipt requested, or (ii) recognized nationwide courier service with delivery receipt requested, in either case to be delivered to the following address (or to such other U.S. address as may be specified via Notice provided by Guarantor or Counterparty, as applicable, to the other in accordance with the requirements of this <u>Section 9</u>):

<u>TO GUARANTOR</u> :	<u>TO COUNTERPARTY</u> :
Attn: Treasurer	<u>Attn</u> : [●]

[Tel: $[\bullet]$ for use in connection with	[Tel: [•]
courier deliveries]	for use in connection with courier
	deliveries]

Any Notice given in accordance with this <u>Section 9</u> will (i) if delivered during the recipient's normal business hours on any given Business Day, be deemed received by the designated recipient on such date, and (ii) if not delivered during the recipient's normal business hours on any given Business Day, be deemed received by the designated recipient at the start of the recipient's normal business hours on the next Business Day after such delivery.

#### 10. <u>MISCELLANEOUS</u>.

- (a) This Guaranty shall in all respects be governed by, and construed in accordance with, the law of the State of New Mexico, without regard to principles of conflicts of laws thereunder.
- (b) This Guaranty shall be binding upon Guarantor and its successors and permitted assigns and inure to the benefit of and be enforceable by Counterparty and its successors and permitted assigns. Guarantor may not assign this Guaranty in part or in whole without the prior written consent of Counterparty. Counterparty may not assign this Guaranty in part or in whole except (i) with the prior written consent of Guarantor, or (ii) to an assignee of the Agreement in conjunction with an assignment of the Agreement in its entirety accomplished in accordance with the terms thereof.
- (c) This Guaranty embodies the entire agreement and understanding between Guarantor and Counterparty and supersedes all prior agreements and understandings relating to the subject matter hereof.
- (d) The headings in this Guaranty are for purposes of reference only, and shall not affect the meaning hereof. Words importing the singular number hereunder shall include the plural number and vice versa, and any pronouns used herein shall be deemed to cover all genders. The term "person" as used herein means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated association, or government (or any agency or political subdivision thereof).
- (e) Wherever possible, any provision in this Guaranty which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any one jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.
- (f) Counterparty (by its acceptance of this Guaranty) and Guarantor each hereby irrevocably: (i) consents and submits to the exclusive jurisdiction of the United States District Court for the District of New Mexico for the purposes of any suit, action or other proceeding arising out of this Guaranty or the subject matter hereof or any of the transactions contemplated hereby brought by Counterparty, Guarantor or their respective successors

or assigns; and (ii) waives (to the fullest extent permitted by applicable law) and agrees not to assert any claim that it is not personally subject to the jurisdiction of the abovenamed courts, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Guaranty or the subject matter hereof may not be enforced in or by such court.

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(g) COUNTERPARTY (BY ITS ACCEPTANCE OF THIS GUARANTY) AND GUARANTOR EACH HEREBY IRREVOCABLY, INTENTIONALLY AND VOLUNTARILY WAIVES THE RIGHT TO TRIAL BY JURY WITH RESPECT TO ANY LEGAL PROCEEDING BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH, THIS GUARANTY, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN) OR ACTIONS OF ANY PERSON RELATING HERETO. THIS PROVISION IS A MATERIAL INDUCEMENT TO GUARANTOR'S EXECUTION AND DELIVERY OF THIS GUARANTY.

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IN WITNESS WHEREOF, the Guarantor has executed this Guaranty on \_\_\_\_\_\_, 20\_\_, but it is effective as of the Effective Date.

[a]

[•]			
Ву:		 	
Name:	 	 	
Title:			

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## EXHIBIT K

(to Power Purchase Agreement)

#### COMMERCIAL OPERATION FORM OF CERTIFICATION

This certification ("Certification") of Commercial Operation is delivered by \_\_\_\_\_("Seller") to Public Service Company of New Mexico ("Buyer") in accordance with the terms of that certain Power Purchase Agreement dated \_\_\_\_\_\_ ("Agreement") by and between Seller and Buyer. All capitalized terms used in this Certification but not otherwise defined herein shall have the respective meanings assigned to such terms in the Agreement.

Seller hereby certifies and represents to Buyer the following:

(1) Wind Turbines with an aggregate capacity of at least ninety percent (90%) of Guaranteed Capacity have been constructed, commissioned and tested and are capable of delivering Energy on a sustained basis (in accordance with the Wind Turbine manufacturer's requirements and the Commissioning Tests);

(2) Seller has obtained all necessary rights under the Interconnection Agreement for the interconnection and delivery of Energy to the Point of Delivery and is not in breach of the Interconnection Agreement; and

(3) the Project has been completed in all material respects (except for Delayed Capacity and the punch list items that do not materially and adversely affect the ability of the Project to operate as intended).

EXECUTED by SELLER this day of , 20 .

Officer of Seller

Signature:

Name:

Title:

Date: \_\_\_\_\_

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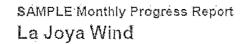
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#### SAMPLE MONTHLY UPDATE



1125 NW Couch St., Suite 700 Portland, OR 97209 Engineering & Construction [DATE]

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(DATE)

# La Joya Wind

**1.0 Brief Generating Facility Description** 

1.1 General

The Generating Facility is owned and operated by Avangrid Renewables LLC with a maximum nameplate capacity of 263 MW.

1.2 Sita

The Generating Facility is located in Torrance County, New Mexico approximately 60 miles southeast of the Alboquerque varying between 6,360 and 6,960 ft, above sea level on a mixture of private and State land, undeveloped and sparsely populated. The area is dominated by shortgrass prairie characterized by rolling rangeland for ranching activities.

1.3 Interconnection The Generating Facility will inferconnect to PNM's 345 KV Cline Corners Substation, located 30 miles. north of the project site, adjacent to Hwy 285. A map is included within this report.

1.4 Site improvements The site of the Generating Facility will be improved to include the following altributes: [ ]

2.0 Planned Changes to Generating Facility Description

2.1 Planned Changes

3.0 Site Plan of Generating Facility

3.1 Site Plan

[project layout map] [vicinity map]

4.0 Progress on Milestone Schedule

4.1 Milestone Schedule Update

4.2 Description of [Alestone Schedule progress in [LCNTH]

ENGINEERING & CONSTRUCTION / 1126 NW Couch St., Portland, OR - USA

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#### PNM 2020 RPS PNM Exhibit TGF-3 Renewables Available Before 2021

Bid	Bid Type	Bid Type Subcategory	Total Project Capacity (MW)	Quoted PPA Price (\$/MWh)	Levelized Total Evaluated Delivered Cost (\$/MWh)	County
1	PPA	Wind	140	\$17.48	\$24.94	Torrance County
2	РРА	Wind	160 into 140 tie	\$16.67 plus curtailments	\$23.25 plus curtailments	Torrance County
3	PPA	Wind & Solar	150	\$18.65	\$25.98	Torrance County
4	PPA	Wind	120	\$17.93	\$26.46	Torrance County
5	PPA	Wind & Solar	130	\$18.44	\$26.81	Torrance County
6	PPA	Wind	140	\$19.92	\$27.4 <b>4</b>	Torrance County
7	PPA	Wind	100	\$17.99	\$28.06	Torrance County
8	PPA	Wind	140	\$24.86	\$29.12	Torrance County
9	PPA	Wind	120	\$24.86	\$29.69	Torrance County
10	PPA	Wind	100	\$24.92	\$30.56	Torrance County
11	PPA	Solar	200	\$27.95	\$31.49	San Juan
12	PPA	Solar	150	\$27.95	\$32.34	San Juan
13	PPA	Solar	100	\$27.95	\$33.82	San Juan
14	PPA	Wind & Solar	130	\$25.37	\$33.91	Torrance County
15	EPC	Solar	100	NA	\$44.15	Sandoval
16	EPC	Solar	40	NA	\$46.01	San Juan
17	EPC	Solar	40	NA	\$47.39	Sandoval
18	EPC	Solar	10	NA	\$80.85	San Juan

PNM Exhibit TGF-3 Page 1 of 1

# **BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

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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.

) ) ss

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Case No. 19-00\_\_\_-UT

# **AFFIDAVIT**

STATE OF NEW MEXICO

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 Direct Testimony of Thomas G. Fallgren and it is true and correct based on my personal knowledge and belief. SIGNED this 31<sup>st</sup> day of May, 2019.

THOMAS G. FALLGREN

SUBSCRIBED AND SWORN to before me this 31<sup>st</sup> day of May, 2019.

NOTARY PUBLIC IN AND FOR THE STATE OF NEW MEXICO

My Commission Expires: bor 121.2 Qm MARKING NEW