BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE COMPANY OF NEW MEXICO'S RENEWABLE ENERGY ACT PLAN FOR 2018 AND PROPOSED 2018 RIDER RATE UNDER RATE RIDER NO. 36	)	Case No. 17-00129-UT
PUBLIC SERVICE COMPANY OF NEW MEXICO,	)	
PETITIONER	)	

RECOMMENDED DECISION

October 17, 2017

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Carolyn R. Glick, Hearing Examiner for the New Mexico Public Regulation Commission, submits this Recommended Decision to the Commission under 1.2.2.29(D)(4) and 1.2.2.37(B) NMAC. The Hearing Examiner recommends that the Commission adopt this Recommended Decision in its Final Order.

II. STATEMENT OF THE CASE

On June 1, 2017, Public Service Company of New Mexico (PNM) filed its Application for Approval of its Renewable Energy Act Plan for 2018. The Application requests approval for the following:

1. Procure the increased output from upgrades to the New Mexico Wind Energy Center, which is projected to result in 80,000 additional megawatt hours (MWh) in 2019 and 105,000 MWh in 2020 and beyond without an increase in the per MWh purchase price;
2. Procure the increased output from upgrades to the Dale Burgett geothermal facility, which is projected to result in 55,000 MWh in 2019 and 77,000 MWh in 2020 and beyond at a decreased per MWh price;
3. Procure 50 megawatts (MW) of solar facilities under a turnkey agreement with Affordable Solar to begin serving customers in 2019 and expected to generate 140,000 MWh in 2020 at an estimated cost of $72,861,898;
4. A variance from the Rule 17.9.572.11 "other" diversity requirement in 2018;
5. A Capacity Reservation Program of 2 MW_{AC} of capacity at a purchase price of $0.0025 per kilowatt hour (kWh) of renewable energy certificates (RECs) for distributed generation systems sized over 100 kW_{AC} and up to 1 MW_{AC};
6. A not-to-exceed price of $3.00 per MWh/REC for any RECs that PNM may need to procure in 2019 to make up for any deficiency in the number of RECs available to meet the 2018 Renewable Portfolio Standard (RPS);

7. Reset the rate for PNM's Renewable Energy Rider at $0.0062269 per kWh effective January 1, 2018, an increase from the $0.0054419 current rate; and
8. To the extent necessary, a variance from the data filing requirements of 17.9.530 NMAC

On June 14, 2017, the Commission initiated this proceeding and designated the undersigned to preside over it. The Commission extended the review period to the maximum of 180 days or November 28, 2017.

The following parties filed Motions for Leave to Intervene:

- New Mexico Industrial Energy Consumers (NMIEC)
- Bernalillo County
- Albuquerque Bernalillo County Water Utility Authority (ABCWUA)
- New Energy Economy (NEE)
- Western Resource Advocates (WRA)
- City of Albuquerque
- Coalition for Clean Affordable Energy (CCAE)
- Interwest Energy Alliance

PNM filed an Affidavit of Publication showing that the Notice to Customers was published in the *Albuquerque Journal* on June 30, 2017; the *Alamogordo Daily News* on June 30, 2017; the *Las Cruces Sun News* on July 7, 2017; and the *Union County Leader* on July 7, 2017. The Affidavit of Publication also shows that PNM completed sending the Notice to its customers via bill insert or email by August 1, 2017.

A public hearing was held on September 18th, 20th, 21st and 22nd, 2017. Oral public comments were received. The following witnesses testified:

For PNM:

- Patrick O'Connell, Director, Planning & Resources for PNM
- Gary Barnard, Director of Strategic Energy Planning & Development, PNMR Services Co.

- Shane Gutierrez, Engineer IV in PNM's Planning & Resources Department
- Henry Monroy, Director, Cost of Service and Audit Services, PNMR Services Co.
- Scott Vogt, Manager of Pricing & Business Analytics for PNM
- Susan Taylor, Manager of Utility Margin for PNM

For WRA:

- David Effross, Senior Energy Policy Advisor for WRA

For NEE:

- Nicholas Muller, former Executive Director of Colorado Independent Energy Association

For Staff:

- John Reynolds, Staff Economics Bureau Chief
- Heidi Pitts, Staff Economist

Other Witness:

- Nicholas Goodman, CEO of CYRQ Energy and Lightning Dock Geothermal.

Mr. Goodman did not prefile testimony but appeared at the hearing to make public comment. Tr. 242-46. After Mr. Goodman gave public comment, WRA's counsel suggested that Mr. Goodman be sworn in so that his statements could be relied on as evidence. Staff counsel did not object as long as she was allowed to cross examine Mr. Goodman. *Id.* at 258-59. After being sworn in, Mr. Goodman testified and was cross examined and examined by the Hearing Examiner. Tr. 262-339. His testimony under oath is evidence.

The Hearing Examiner admitted the following exhibits into evidence:

PNM Exhibits:

1 Direct Testimony of Patrick O'Connell

2 July 7, 2017 Supplemental Testimony of Patrick O'Connell

3 Rebuttal Testimony of Patrick O'Connell

4 Direct Testimony of Gary Barnard

5 July 7, 2017 Supplemental Testimony of Gary Barnard

6 Rebuttal Testimony of Gary Barnard

7 Direct Testimony of Shane Gutierrez

8 July 7, 2017 Supplemental Testimony of Shane Gutierrez

9 September 13, 2017 Supplemental Testimony of Shane Gutierrez

10 PNM Exhibit SG-2 Corrected Alternative 1

11 PNM Exhibit SG-2 Corrected Alternative 2

12 Corrections to Shane Gutierrez Prefiled Testimonies

13 Direct Testimony of Kyle Sanders (adopted by Henry Monroy)

14 Résumé of Henry Monroy

15 PNM Response to September 21, 2017 Bench Request

16 Direct Testimony of Scott Vogt

17 Corrections to Scott Vogt Prefiled Testimony

18 Direct Testimony of Susan Taylor

19 July 7, 2017 Supplemental Testimony of Susan Taylor

20 PNM Exhibit SAT-1 Supplemental

21 Corrections to Susan Taylor Prefiled Testimonies

22 May 23, 2017 *Utility Dive* article

23 January 10, 2017 *Utility Dive* article

NEE Exhibits:

1 Case No. 14-00158-UT, Pages of Patrick O'Connell's Testimony in Support of Stipulation

2 Case No. 08-00305-UT, Pages of Cynthia Bothwell's Direct Testimony in Support of Stipulation

4 Page showing partial results of 2016 PNM RFP

5 Case No. 14-00158-UT, Affidavit of Patrick O'Connell

6 Pages from June 2017 Investor Meetings Powerpoint

7 PNM Responses to NEE Discovery Requests

8 Case No. 16-00191-UT, Pages of PNM's Supplemental Response to Commission Second Bench Request Order

10 Case No. 16-00191-UT, page of Gerard Ortiz's Direct Testimony

11 PNM Responses to NEE Discovery Requests

12 Case No. 16-00191-UT, PNM's Response to Commission Third Bench Request Order

13 PNM Responses to NEE Discovery Requests

15 Xcel Energy 2017 RFP announcement

17 Direct Testimony of Nicholas Muller

CCAE Exhibits:

1 PNM Response to CCAE Discovery Request 1-2

2 PNM Response to CCAE Discovery Request 3-1

WRA Exhibits:

1 Rebuttal Testimony of David Effross

NMIEC Exhibits:

2 DOE Staff Report to Secretary on Electricity Markets and Reliability

3 PNM Response to NMIEC Discovery Requests

Staff Exhibits:

1 March 16, 2017 *Utility Dive* article

2 DOE 2016 Wind Technologies Market Report

3 Disclosure Statement for Debtors' Third Amended Joint Chapter 11 Plan

4 Exhibit JJR-3 (Bench Request)

6 E-mail from Nick Goodman & LDG Confirmation Plan

7 Direct Testimony of John Reynolds

8 Supplemental Exhibit to Reynolds Direct

9 Case No. 17-00221-UT, Application for Location Approval

10 Direct Testimony of Heidi Pitts

Commission Exhibits:

1 Amended & Restated Geothermal Power Purchase & Sale Agreement

2 Energy.gov printout on Production Tax Credit

3 Energy.gov printout on Investment Tax Credit

NEE sought admission of NEE Exhibit 9, which was portions of PNM's Notification of Class I Transaction, filed on April 28, 2017. The Hearing Examiner granted PNM's request to take administrative notice of the entire document, and it was admitted into evidence but not made an exhibit because of its length. Tr. 370-71.

On October 2, 2017, NMIEC filed a Motion for Partial Dismissal and Brief in Support. The Hearing Examiner ordered that responses to NMIEC's Motion could be filed as part of Initial Posthearing Briefs.

PNM filed Suggested Corrections to the Transcript of Proceedings, which are unopposed.

Initial Posthearing Briefs were filed by NMIEC, WRA/CCAE (jointly), PNM, ABCWUA, NEE and Staff.

Posthearing Response Briefs were filed by NMIEC, WRA/CCAE (jointly), PNM, ABCWUA, NEE and the Interwest Energy Alliance.

III. SUMMARY OF (1) PNM'S 2018 PLAN AND CONTESTED ISSUES; (2) PARTIES' RECOMMENDATIONS; AND (3) HEARING EXAMINER'S RECOMMENDATIONS

A. SUMMARY OF PNM'S UNCONTESTED 2018 PLAN AND HEARING EXAMINER'S RECOMMENDATION TO APPROVE THE 2018 PLAN WITH TWO MODIFICATIONS

This summary incorporates the Hearing Examiner's two recommended modifications to PNM's 2018 Plan. In its application, PNM requests Commission approval for its 2018 Renewable Energy Act Procurement Plan. PNM does not propose any new procurements in

2018, and no party opposes PNM's 2018 renewable energy portfolio mix. The Hearing Examiner recommends approval of the 2018 Plan with two exceptions: (1) recalculate the Renewable Portfolio Standard requirement to reflect using gross cost to calculate the Large Customer Adjustment (which PNM does not oppose); and (2) completely terminate PNM's Dale Burgett geothermal procurement effective January 1, 2018.

The RPS requirement is 15% for 2018 and 2019, and PNM expects to exceed that requirement in both years. Overall, PNM projects that it will meet its diversity percentage requirements for all resource types in both 2018 and 2019 with one exception: the "other" diversity requirement.

In both 2018 and 2019, PNM's portfolio costs are well within the 3% RCT limit. PNM's projected gross cost to comply with the RPS is $42,303,904 in 2018 and $43,974,188 in 2019. In 2018, the projected portfolio RCT is 2.3%, while in 2019 it is 2.0%. PNM proposes to increase the current Renewable Energy Rider (Rider No. 36) rate to $0.0060571 per kWh effective January 1, 2018.

B. Request for Variance From "Other" Diversity Requirement in 2018

PNM requests a variance from the "other" diversity requirement in 2018. This request is unopposed, and the Hearing Examiner recommends granting it. Staff recommends that the Commission revisit the necessity of the "other" diversity requirement in light of the severe challenges in meeting the requirement economically.

C. Contested Issue: Correction of Large Capped Customers' Double Receipt of Avoided Fuel Cost Savings

In PNM's last general rate case, the Commission ordered PNM in this case to address methods for eliminating a remaining cost misallocation involving Large Capped Customers (LCCs) which results in LCCs receiving the monetary benefit of avoided fuel cost savings twice. PNM identified three methods, and recommended one method, to eliminate the cost

misallocation. All three methods would result in LCCs paying more, but in different amounts. LCCs would pay more under all methods because each method removes the double counting of the avoided fuel cost benefit. The Hearing Examiner recommends adopting PNM's Proposed Method. This would result in LCCs paying $356,766 more toward the RPS in 2018. Adopting this method would require the Commission to overrule its decision in Case No. 15-00166-UT to use net cost, rather than gross cost, to calculate the Large Customer Adjustment. It would also result in PNM procuring a lower number of Renewable Energy Certificates (RECs) on a going forward basis. WRA and CCAE recommend that the Commission not adopt PNM's Proposed Method, but one of the other two methods, which would result in LCCs paying either $1,080,380 or $791,237 more.

D. CONTESTED ISSUE: NMIEC'S MOTION FOR PARTIAL DISMISSAL

NMIEC argues that the Commission has no jurisdiction to correct the double counting of avoided fuel savings to LCCs because eliminating that problem would materially change Method A, the adoption of which NMIEC appealed and is pending in the New Mexico Supreme Court. WRA and CCAE oppose NMIEC's Motion for Partial Dismissal. The Hearing Examiner recommends rejecting NMIEC's Motion because eliminating the double counting will not materially change Method A.

E. CONTESTED ISSUE: CALCULATION OF RENEWABLE COST THRESHOLD

No party objects to PNM's calculation of the Renewable Cost Threshold (RCT) for Plan Year 2018. However, WRA and CCAE ask the Commission to order PNM in future cases to include avoided capacity costs from all renewable energy resources in PNM's renewable energy portfolio, not just renewable energy resources added in the plan year. NMIEC asks the Commission to order PNM in future cases to separately identify costs of backup generation and load following caused by renewable energy. The Hearing Examiner recommends rejecting both WRA/CCAE's and NMIEC's arguments.

F. CONTESTED ISSUES: PNM'S PROPOSED PROCUREMENTS FOR 2019 AND 2020

PNM seeks approval of three procurements that it would use toward compliance with the RPS in 2019 and 2020.

Staff recommends that the Commission disapprove all three procurements and require PNM to consider all reasonable options in a new RFP process that is "open and transparent to all bidders and the public." Staff's Initial Posthearing Brief at 19.

1. NEW MEXICO WIND ENERGY CENTER

PNM seeks approval of an amended procurement of wind energy and RECs from the New Mexico Wind Energy Center (NMIEC) through a "repowering" of the Facility that would increase production by about 105,000 MWhs annually. Under the Amended PPA, the term would be extended from 2028 to 2045 and the $27.25 per MWh/REC price would not change. Staff and ABCWUA oppose this procurement for valid reasons: Staff presented solid evidence that wind energy technologies are rapidly changing and prices are decreasing. NMIEC, WRA and CCAE recommend approving the procurement. This was a difficult call: on balance, the Hearing Examiner recommends approving this proposed increased procurement because (1) the NMWEC is a relatively low cost existing renewable energy resource and its avoided fuel cost exceeds its procurement cost, reducing the RCT; (2) sufficient existing transmission capacity exists to support the increased procurement; and (3) approving the amended procurement will not foreclose other wind energy procurements in the future.

2. DALE BURGETT GEOTHERMAL FACILITY

PNM seeks approval of an amended procurement of geothermal energy and RECs from the Dale Burgett Geothermal Facility. Under the Amended PPA, the Facility would be repowered, the term would be extended from 2033 to 2042 and the 2018 per MWh/REC price would decrease from $108.64 to $89. However, the Amended PPA, like the original PPA, has an annual price escalation clause, and in the last year of the amended term, the per MWh/REC

price would be $160.98. Lightning Dock, which operates the Facility, filed a petition for bankruptcy this year, and PNM had the opportunity to terminate the PPA upon Lightning Dock's filing of the bankruptcy petition. Instead, PNM entered into the Amended PPA, which is designed to give Lightning Dock an opportunity to salvage the project. The Amended PPA supercedes the previous version of the PPA, and if the amended procurement is not approved, PNM would no longer have a contract with Lightning Dock. In any event, if the amended procurement is not approved, PNM would have the right to terminate the procurement because of Lightning Dock's filing for bankruptcy. Staff opposes the amended procurement. ABCWUA, WRA and CCAE support it. NMIEC recommends that "the Commission give serious consideration to approving the amendment to the Dale Burgett geothermal PPA[.]" The Hearing Examiner recommends rejecting this proposed procurement and ordering PNM to terminate its agreement with Lightning Dock effective January 1, 2018, for the following reasons: (1) PNM did not consider alternatives when it had the opportunity to terminate its PPA with Lightning Dock. In fact, PNM received a credible geothermal bid in 2016 which it chose not to pursue; (2) if the amended procurement is approved and the price of geothermal energy decreases, ratepayers would not get that benefit because PNM is tied into the contract for an additional eight years and 2 ½ months; and (3) the high cost of the procurement is not justified by the Commission's "other" diversity requirement. The 2020 cost of the procurement would be $7,199,933. The 2042 cost of the procurement would be $12,395,199. The total cost of the procurement from 2019 through 2042, in today's dollars, would be $98,210,806.

3. *AFFORDABLE SOLAR PROJECT*

PNM seeks approval of 50 megawatts of solar photovoltaic facilities. The Project is a turnkey project, meaning that Affordable Solar would construct the facilities and transfer ownership to PNM. The levelized bid cost was $44.63/MWh. The Affordable Solar Project was proposed in response to PNM's 2017 Request for Proposals (RFP). PNM received only six bids in response to the RFP. Two of the bids were for PPA proposals which did not meet the RFP

requirements. Staff, NEE and ABCWUA oppose approval of this procurement for valid reasons. WRA and CCAE support the procurement. This was not a difficult call: the Hearing Examiner recommends rejecting this proposed procurement and ordering PNM to immediately issue a new RFP that gives bidders 90 days to respond to the RFP and offers access to PNM-controlled sites to PPA bidders if PNM offers access to those sites to turnkey bidders. The Hearing Examiner agrees with the opponents that PNM failed to show, as required, that the Affordable Solar Project is PNM's most cost effective solar resource procurement among available alternatives because the 2017 RFP process did not give PPA bidders a fair opportunity to participate and compete. I found that allowing bidders only 31 days to respond to the RFP was insufficient and that the provision in the RFP allowing turnkey bidders, but not PPA bidders, to use PNM-controlled sites was unfair and uncompetitive.

IV. THE RENEWABLE ENERGY ACT AND RULE 572

The Renewable Energy Act (REA) requires a public utility to include renewable energy in its electric energy supply portfolio and to meet the REA's renewable portfolio standard (RPS). The RPS is the percentage of retail sales by a public utility to electric consumers in New Mexico that must be supplied by renewable energy. Under the REA, for public utilities other than rural electric cooperatives and municipalities, the RPS currently is 15% and increases to 20% on January 1, 2020. NMSA 1978, § 62-16-4(A)(1). However, a public utility is not required to add renewable energy to its electric supply portfolio above the reasonable cost threshold (RCT) established by the Commission, which is 3% of plan year total revenues. *Id.*, § 62-16-4(C); 17.9.572.12 NMAC. A public utility demonstrates compliance with the RPS through retirement of renewable energy certificates (RECs). 17.9.572.17 NMAC.

A public utility's renewable portfolio "shall be diversified as to the type of renewable energy resource, taking into consideration the overall reliability, availability, dispatch flexibility and cost of the various renewable energy resources made available by suppliers and generators."

Id., § 62-16-4(A)(4). The PRC, through 17.9.572 NMAC (Rule 572), has defined a fully diversified renewable energy portfolio as one in which (1) at least 30% of the RPS requirement is met using wind energy; (2) at least 20% is met using solar energy; (3) at least 5% is met using other renewable technologies such as biomass, geothermal or landfill gas; and (4) at least 3% is met using distributed generation. 17.9.572.7(G) NMAC.

A public utility must file annually a renewable energy portfolio procurement plan that includes, among other things, the utility's determination of the plan year and next plan year RPS and RCT. The plan year is presented for Commission approval and the next plan year is presented for informational purposes. 17.9.572.14 NMAC.

At the same time that a public utility files its annual renewable energy portfolio procurement plan, it must file a renewable energy portfolio report on its renewable energy generation or purchases of renewable energy during the prior plan year. 17.9.572.19 NMAC.

V. PNM'S EXISTING RENEWABLE ENERGY RESOURCES AND THEIR COSTS

A. WIND RESOURCES

The majority of PNM's renewable energy portfolio comes from wind energy, which totals 302 MW: 63% projected for 2018 and 53% for 2019. Pitts Direct at 9.

1. NEW MEXICO WIND ENERGY CENTER

PNM has a 25-year purchased power agreement (PPA) to purchase all of the energy and RECs produced by the New Mexico Wind Energy Center (NMWEC), a 200 MW wind generation facility in Quay County, New Mexico, owned and operated by NextEra Energy Resources. Between 2013 and 2016, the NMWEC generated between 496,552 MWhs and 404,766 MWhs annually. A portion of the NMWEC output supplies energy and RECs for the Sky Blue Program that PNM offers under Rule 572.18, which are not used for RPS compliance. Gutierrez Direct at 11; Exh. JJR-1 to Reynolds Direct.

2. *Red Mesa Wind Energy Center*

PNM has a 20-year PPA to purchase all of the energy and RECs produced by the Red Mesa Wind Energy Center, a 102 MW facility in Cibola County, New Mexico. Energy production from this facility is expected to be 208,223 in 2018, 2019 and 2020. Gutierrez Direct at 12.

B. Solar Resources

PNM's utility-scale solar resources are all PNM-owned. They total 107 MW of generation:[1]

Year Constructed	Facility Size (MW)	Case Reference	2018: Generation for RPS Compliance (MWh)	2019: Generation for RPS Compliance (MWh)
2006 or earlier[2]	0.03	05-00356-UT	128	126
2011	22.5	10-00077-UT	47,182	46,942
2013	20	12-00131-UT	44,015	43,854
2014	23	13-00183-UT	54,216	53,945
2015	38.1	14-00158-UT	110,107	114,538
Totals	103.6		255,647	259,406

Case No. 16-00148-UT, Certification of Stipulation at 13; Gutierrez Direct 12-14.

C. "Other" Resources

PNM's only "other" resource is its 20-year PPA to purchase all of the energy and RECs produced by the Dale Burgett Geothermal Facility (formerly known as Lightning Dock) in the Animas Valley in Hidalgo County, New Mexico. The Facility generates electricity from geothermal resources. Gutierrez Direct at 14.

[1] PNM allocates the energy produced from 1.5 MW of these Facilities to PNM's Sky Blue Program. Energy produced from 1.9 MW of the Facilities was allocated to PNM's FERC customers in 2017.
[2] Algodones site and Aztec building

D. DISTRIBUTED GENERATION

Under Commission-approved programs, PNM has numerous REC-only purchase contracts with PNM customers who interconnect solar PV systems to their homes, commercial buildings or other customer facilities. PNM acquires some or all of the RECs associated with energy generated from customer-sited solar PV facilities. These programs include the Small PV REC Purchase Program, the Large PV REC Purchase Program, the Solar REC Incentive Programs, the Capacity Reservation Program and the Customer Solar REC Purchase Program.

E. 2018 PER KWH PROCUREMENT COST OF RENEWABLE ENERGY RESOURCES IN PNM'S PORTFOLIO

The following table shows the 2018 per kWh procurement cost of renewable energy resources in PNM's portfolio:

2018	
Resource	**Procurement Cost $/kWh**
Utility Wind	
NM Wind Energy Center	2.72¢
Red Mesa	2.96¢
Distributed Generation	
Small PV RECs[3]	6.54¢
Large PV RECs[4]	15.00¢
SIP RECs $0.14 - $0.05[5]	8.07¢
2012 DG Capacity Reservation	2.00¢
2013 DG Capacity Reservation	2.00¢
2014 DG Capacity Reservation	2.00¢
2015 DG Capacity Reservation	2.00¢
2016 DG Capacity Reservation	2.00¢
2017 DG Capacity Reservation	2.00¢
2018 DG Capacity Reservation	.025¢
CSPP RECs[6]	3.60¢
Case No. 13-00390-UT Stipulation[7]	.025¢

[3] This Small PV Program is closed to new applicants. PNM's 2nd Revised Rate No. 24.
[4] This Large PV Program is closed to new applicants. PNM's 1st Revised Rate No. 31.
[5] The SIP is the Solar REC Incentive Program, which replaced the Small and Large PV Programs. Case No. 10-00037-UT, Final Order Partially Adopting Recommended Decision at 17 (8-31-10).
[6] The CSPP is the Customer Solar REC Purchase Program, approved in Case No. 12-00131-UT. It was developed for systems with a capacity rating of 100 kW_{AC} or lower to replace the fully subscribed categories of 100 kW_{AC} and lower in the SIP. Case No. 12-00131-UT, Recommended Decision at 38 (11-7-12), adopted in relevant part by Final Order (12-11-12).
[7] Under the Stipulation approved in Case No. 13-00390-UT, the Signatories agreed to support PNM's procurement of RECs from up to 3 MW_{AC} per year of new customer-owned solar DG, up to 100 kW_{AC} in

Utility Solar	
Algodones/Aztec @ 3:1	0¢
PNM Solar PV 22.5 MW	9.68¢
2013 PNM Solar PV 20 MW	10.85¢
2014 PNM Solar PV 23 MW	9.93¢
2015 PNM Solar PV 40 MW	0.00¢
Utility "Other"	
Dale Burgett Geothermal PPA	8.9¢
(Proposed PNM Solar PV 50 MW for 2020)	6.19¢

Exh. SG-2 Corrected, pp. 5, 7, to Gutierrez Direct.

VI. CORRECTION OF LARGE CAPPED CUSTOMERS' DOUBLE RECEIPT OF AVOIDED FUEL COST SAVINGS

To meet the REA's renewable portfolio standard (RPS) requirement, a public utility must include a specified amount of renewable energy resources in its electric energy supply portfolio. For 2018, the RPS is 15% of a public utility's "plan year total retail energy sales" to electric consumers in New Mexico. NMSA 1978, § 62-16-3(G); 17.9.572.7(F) NMAC.

Rule 17.9.572 (Rule 572) defines "plan year total retail energy sales" as a utility's projected weather adjusted retail energy sales, measured in kilowatt-hours (kWh), adjusted for projected energy efficiency reductions and adjusted further by reductions in energy sales to:

(1) large nongovernmental customers who qualify under Section 62-16-4(A)(2) of the REA; and

(2) customers exempted under Section 62-16-4(A)(3) of the REA.

An Exempt Customer is one who owns renewable energy generation and certifies that it will spend 2.5% of a year's projected electricity charges to continue to develop within 24 months customer-owned renewable energy generation. NMSA 1978, § 62-16-4(A)(3).

size per system during 2017, 2018 and 2019. In Case No. 16-00148-UT, the Commission approved extension of the CSPP of 3 MW_{AC} per year starting in 2017 and ending in 2019 at a price of $0.0025 per kWh of RECs for PV systems up to 100 kW_{AC} in size. Case No. 16-00148-UT, Recommended Decision at 16-18 (10-21-16), adopted by Final Order Adopting Recommended Decision (11-23-16).

A large nongovernmental customer (Large Capped Customer or LCC) is one who consumes more than 10 million kWh annually. Under the REA, the kWh of renewable energy procured for LCCs is limited so that "the additional cost of the renewable portfolio standard" to such customers does not exceed a specified amount (the Large Customer Cap). The Large Customer Cap in 2011 was the lower of 2% of a customer's annual electric charges or $99,000. Starting in 2012, the Large Customer Cap is adjusted for inflation using the consumer price index-urban published by the Bureau of Labor Statistics. NMSA 1978, § 62-16-4(A)(2). In 2018 and 2019, the Large Customer Cap is the lower of 2% of a customer's annual electric charges or $110,804 in 2018 and $112,466 in 2019. Gutierrez Direct at 17.

Remaining customers who are neither Exempt Customers nor LCCs are "Other Customers."

In PNM's last general rate case — Case No. 15-00261-UT — the Commission corrected a fuel cost misallocation that occurred because, while Exempt Customers are exempt from paying for renewable energy procured by PNM, and LCCs are capped in their payment for renewable energy procured by PNM, they received offsetting fuel savings based on the total amount they would pay for renewable energy if they were not exempt or capped. The Commission adopted PNM's proposed "Method A" to correct this fuel cost misallocation, which required PNM to break the Fuel and Purchased Power Cost Adjustment Clause (FPPCAC) charge into two parts:

1. One FPPCAC charge applies to the estimated percentage of a customer's electricity use generated by non-renewable energy
2. The other FPPCAC charge applies to the estimated percentage of a customer's electricity use generated by renewable energy — this FPPCAC factor is zero because no fuel use is associated with use of renewable energy. The charge on this line of a customer's bill will always be zero.

Case No. 15-261, Corrected Recommended Decision at 58 (8-15-16), adopted in relevant part by Final Order Partially Adopting Corrected Recommended Decision (9-28-16). The adoption of

Method A resulted in LCCs and Exempt Customers paying more in fuel costs because LCCs are billed a higher percentage of their energy use at the higher non-renewable FPPCAC factor and Exempt Customers are billed for 100% of their energy use at the higher non-renewable FPPCAC factor. *Id.* at 59.

Under Rule 572, the Cap and Exemption effectively reduce the RPS requirement because the RPS percentage is multiplied by a reduced level of projected sales. In Case No. 15-00166-UT, the Commission approved calculating the RPS requirement by subtracting all projected Large Customer sales, in MWh, from total projected sales, multiplying the result by 15%, and then adding back "Eligible Large Customer Sales" in MWh. "Eligible Large Customer Sales" are sales up to the Cap. The adding back of Eligible Large Customer Sales is the "Large Customer Adjustment." The Large Customer Adjustment represents the maximum number of MWhs/RECs that PNM can procure for LCCs. Case No. 15-00166-UT, Recommended Decision at 10-12 (10-20-15), as corrected by Errata Notice (10-23-15), adopted in relevant part by Final Order Superceding Vacated Final Order Issued on November 18, 2015 (2-3-16).

The cap on LCC procurement is based on a LCC's annual bill, so each Large Customer's cap is a dollar amount, which PNM refers to as a "hard cap." Taylor Direct at 8. However, a utility's RPS requirement is measured in MWhs/RECs. Therefore, to make the Large Customer Adjustment, the sum of the dollar caps for each LCC must be converted into MWhs/RECs by dividing that sum by the per MWh/REC cost of acquiring renewable energy. In Case No. 15-00166-UT, the Commission addressed whether to use "compliance cost" or "procurement cost" as the per MWh/REC cost in converting the total dollar cap on Large Customer procurement to MWhs/RECs. Compliance cost is the net cost of acquiring renewable energy — the purchase price less avoided fuel costs from displaced energy. Procurement cost is the gross cost of acquiring renewable energy — the unadjusted purchase price, not netted for avoided fuel costs. Because the meanings of the terms "compliance cost" and "procurement cost" have proven to be elusive, this Recommended Decision substitutes the term "net cost" for "compliance cost" and

"gross cost" for "procurement cost." PNM had been using gross cost as the per MWh/REC cost to calculate the Large Customer Adjustment. The Commission held that net cost, not gross cost, shall be used as the per MWh/REC cost in calculating the Large Customer Adjustment. Case No. 15-00166, Recommended Decision at 18.

What was not realized in Case No. 15-00166-UT is that using net cost as the per MWh/REC cost creates an inconsistency because while PNM uses net cost to determine the amount of MWhs/RECs acquired for LCCs, the amount collected from LCCs is less than the cost of acquiring them. Tr. 831 (Taylor). The result of this inconsistency is that the amount collected from LCCs does not cover the cost of all of the MWhs/RECs of renewable energy purchased for those customers. *Id.* at 792-93, 830 (Taylor). For example, PNM projects that in 2018, the per MWh/REC gross cost will be $39.58 and the per MWh/REC net cost will be $18.84. It projects that in 2018 it will collect a capped total of $981,426 from LCCs. Therefore, the amount of MWhs/RECs that PNM will acquire for LCCs is 52,097, based on a net cost of $18.84 per MWh/REC. However, the total $981,426 collected from LCCs will pay the cost of only 24,798 MWhs/RECs based on a gross cost of $39.58 per MWh/REC. The cost of the other 27,298 MWhs/RECs procured for LCCs, in the amount of $1,080,380, would be collected from Other Customers, effectively increasing the RPS requirement for Other Customers from 15% to 15.4%. Taylor Direct at 3-4. This "cost misallocation" is equal to the difference between the gross and net cost of the MWhs/RECs procured for LCCs, which is the amount of avoided fuel savings attributable to those MWhs/RECs. Tr. 831 (Taylor).

This inconsistency was brought to the attention of the Commission by WRA witness Douglas Howe in Case No. 15-00261-UT, and the Commission adopted Dr. Howe's recommendation to address and correct the inconsistency in PNM's next renewable energy portfolio procurement plan case — this case. Case No. 15-00261-UT, Corrected Recommended Decision at 62-64. The Commission referred to the inconsistency as a fuel cost misallocation, but as PNM witness Susan Taylor said in this case, the problem is not related to the allocation of

fuel costs and should be referred to as a "cost misallocation" rather than a "fuel cost misallocation." Ms. Taylor said that the source of the cost misallocation is calculation of the Large Customer Adjustment. Taylor Direct at 2.

Ms. Taylor explained that LCCs are receiving the benefit of avoided fuel cost savings twice because, while the amount they pay under the Renewable Rider is the net cost of MWhs/RECs procured for them, the amount of avoided fuel savings they receive under the FPPCAC is based on the gross cost. Using 2018 as an example, LCCs would receive avoided fuel cost savings through the FPPCAC for the 52,097 MWhs/RECs acquired for them rather than the 24,798 MWhs/RECs they actually pay for. Taylor Direct at 8; Tr. 801, 819-20 (Taylor). Ms. Taylor testified that the cost misallocation should be corrected in some manner. Tr. 820.

In response to the Commission's directive in Case No. 15-00261-UT, PNM identified three possible methods for correcting the cost misallocation: (1) PNM's Proposed Method; (2) the "Dr. Howe" Method; and (3) the WRA Alternative Method. In response to a Bench Request, PNM addressed a fourth possible method. Because Ms. Taylor considers the Fourth Method to be the same as the Dr. Howe Method, *id.* at 798, this Recommended Decision does not discuss the Fourth Method.

PNM's Proposed Method would correct the cost misallocation by going back to using gross cost as the per MWh/REC cost in calculating the Large Customer Adjustment. If gross cost rather than net cost is used, PNM would procure only 24,798 MWhs/RECs for LCCs in 2018, equal to the projected $981,426 to be recovered from LCCs divided by the $39.58 per MWh/REC projected gross cost. PNM's RPS requirement therefore would decrease. *Id.* at 821 (Taylor). PNM says this method would be the simplest to implement because it does not require adjustment of the Renewable Energy Rider rate applied to LCCs or PNM's FPPCAC. It would reduce the 2018 RPS by 27,298 MWh, which would reduce the net RPS from 13.3% to 12.9%. Taylor Direct 5-6. PNM's Proposed Method, if adopted, would increase the estimated percentage of a LCC's electricity use generated by non-renewable energy to which the FPPCAC

applies. This Method would eliminate double counting of the avoided fuel cost benefit because LCCs would only receive avoided fuel cost savings for the 24,798 MWhs/RECs they actually pay for.

A second method discussed, but not recommended, by PNM is the method that Dr. Howe suggested in Case No. 15-00261-UT. This method would continue to use net cost as the per MWh/REC cost in calculating the Large Customer Adjustment. It would increase the Renewable Energy Rider rate charged to LCCs to recover an additional amount equal to the extra avoided fuel cost savings they receive and reduce the Renewable Energy Rider rate charged to Other Customers commensurately. This Method would eliminate double-counting of the avoided fuel cost benefit by recovering the extra amount of the avoided fuel cost benefit from LCCs through the Renewable Energy Rider. The 2% of bill amount collected from LCCs would be a net amount. Tr. 800, 822 (Taylor).

A third method discussed, but not recommended, by PNM is the method suggested by WRA in its Brief in Chief in Case No. 15-00261-UT as an alternative to Dr. Howe's recommended method. This method would change the estimated percentage of LCCs' electricity use generated by non-renewable energy used in determining the FPPCAC charges from 3.92% to 0%. LCCs would pay only a single FPPCAC rate which allocates no avoided fuel cost savings to LCCs. Taylor Direct at 11-12. This method would eliminate the double-counting of the avoided fuel cost benefit by eliminating avoided fuel cost savings from the FPPCAC for LCCs. Tr. 802 (Taylor).

The following table shows each alternative's impact on the Large Customer Adjustment, the FPPCAC percentage of renewables and the amount collected from LCCs under the Renewable Energy Rider:

	Current	PNM Recommended	Dr. Howe	WRA Alternative
Large Customer Adjustment (MWhs/RECs)	52,097	24,798	52,097	52,097
$ Increase to Large Capped Customers		$356,766	$1,080,380	$791,237

Taylor Direct at 13.

LCCs would pay more under all methods because each method removes the double counting of the avoided fuel cost benefit. The amount of this increase is least under PNM's Proposed Method because it would decrease the amount of MWhs/RECs purchased for LCCs, so the amount of the avoided fuel cost benefit to be eliminated would be smaller. LCCs would pay $356,766 more in 2018 under PNM's Proposed Method because their allocated percentage of renewable energy consumed would decrease and more of their energy consumed would be subject to the FPPCAC. Tr. 796-97 (Taylor).

LCCs would pay the most under Dr. Howe's Method because it would not change the amount of RECs being procured for LCCs. LCCs would pay $1,080,380 more in 2018 under Dr. Howe's Method, and the increased amount would be collected through the Renewable Energy Rider.

Under WRA's Alternative Method, the amount of RECs being procured for LCCs would not change, as with Dr. Howe's Method. However, the amount of the increase to LCCs under the WRA Alternative Method -- $791,237 — would be less than under Dr. Howe's Method because of a difference in the way the cost of fuel is calculated. The increase under Dr. Howe's Method is equal to the avoided fuel cost, which would be recovered under the Renewable Energy Rider. The increase under WRA's Alternative Method is equal to the average cost of fuel, which would be recovered through the FPPCAC. Today, the avoided cost of fuel is higher than the average

cost of fuel because calculation of the avoided cost of fuel is based on eliminating the highest system cost. *Id.* at 813-14 (Taylor).

PNM says that adopting Dr. Howe's method would require using "a forecasted, theoretical fuel cost savings" to determine the amount of additional revenue to be collected from LCCs, which appears to PNM to be contrary to the Commission's Final Order in Case No. 15-00166-UT in which the Commission said, "When formulating rates, it is improper to account for so-called 'costs' that are not actually incurred, whether as costs or 'benefits.'" Taylor Direct at 10 (citing Final Order Superseding Vacated Order of Nov. 18, 2015 at 10-11, ¶ 24). Ms. Taylor explained:

> The problem with that methodology . . . is that actual avoided fuel costs cannot be empirically calculated. And that's what bothers me, quite frankly . . . is we can't validate that the avoided cost that we use to create the rates and charge the customer can be validated in actuals.

Tr. at 822-23. This is because PNM cannot know with hindsight what it would have cost to run its system without renewables "because you do not know all the decisions that would have been made had you not had renewables on the system and you had a different load and you had different resources." Tr. at 823.

Also, adopting Dr. Howe's method would result in LCCs being charged a Renewable Energy Rider rate more than the statutory 2% cap even though the total net charge to LCCs would not be more than 2% because of the offsetting avoided fuel savings. PNM refers to this as a "soft cap." Taylor Direct at 10.

PNM witness Taylor said that WRA's Alternative Method is relatively straightforward and easy to implement because it does not require a calculation of avoided fuel costs. PNM would adjust its FPPCAC so that all avoided fuel savings from renewable energy would flow to Other Customers. However, PNM says that WRA's Alternative Method appears inconsistent with the Commission's Final Order in Case No. 15-00261-UT, which requires PNM to charge customers separate FPPCAC rates for non-renewable energy and renewable energy. *Id.* at 12.

As WRA witness Howe explained in Case No. 15-00261-UT, a benefit of Method A was that it would "clarify the costs and benefits of renewable energy: Customers would see explicitly the fuel costs of the conventional resources that serve them, and the zero fuel cost of the renewable energy that serves them." Case No. 15-00261-UT, Corrected Recommended Decision at 60. If WRA's Alternative Method is adopted, LCCs' bills would reflect zero use of renewable energy, which is not accurate. Tr. 836 (Taylor).

PNM acknowledges that its recommended method is inconsistent with the Commission's ruling in Case No. 15-00166-UT that net cost, not gross cost, be used as the per MWh/REC cost in calculating the Large Customer Adjustment. Taylor Direct at 7-8. The Commission in Case No. 15-00166-UT said that whether to use net cost or gross cost depends in part on the meaning of "additional cost" in Section 62-16-4(A)(2) of the REA. That Section states that the kWhs of renewable energy procured for a LCC shall be limited so that "the additional cost" of the RPS to each customer does not exceed the lower of 2% of that customer's annual electric charges or $110,804. The Commission said that interpreting "additional cost" to mean "gross cost" would render the word "additional" unnecessary. The Commission also said that Rule 572.12 requires using net cost to calculate the Large Customer Adjustment because it says that a public utility "shall calculate the large customer adjustment consistent with the methodology for the reasonable cost threshold[,]" and the RCT is determined by applying a traditional revenue requirements impact approach. Additionally, the Commission said that using net cost to calculate the Large Customer Adjustment is consistent with the purpose of the REA to encourage renewable energy development. Case No. 15-00166-UT, Recommended Decision at 18-19.

WRA and CCAE support adopting either Dr. Howe's Method or the WRA Alternative Method, which are consistent with the Commission's ruling in Case No. 15-00166-UT that the LCC applies to the "additional" or net cost of renewable energy rather than the gross cost. WRA/CCAE's Initial Posthearing Brief at 20.

The PRC may change its policy through an adjudication so long as it does not do so arbitrarily and capriciously. *Mountain States Tel. & Tel. Co. v. New Mexico State Corp. Comm'n*, 1986-NMSC-019, ¶ 26, 104 N.M. 36. A departure from precedent is not arbitrary and capricious if it is preceded by notice and it is supported by reasonable justification. *Id.*

Reasonable justification supports overruling the Commission's decision in Case No. 15-00166-UT. The Commission found in that case that it was reasonable to interpret "additional cost" in Section 62-16-4(A)(2) as net cost. That interpretation was reasonable at the time. With hindsight, however, it is more reasonable to interpret "additional cost" in Section 62-16-4(A)(2) as gross cost.

The legislative intent of the Large Customer Cap is to reduce a utility's *procurement* of MWhs/RECs: Section 62-16-4(A)(2) states that the RPS shall be reduced, as necessary, to provide for "specific *procurement* requirements" for LCCs so that the kWh of renewable energy "*procured* for these customers" is limited so that the additional cost of the RPS to these customers does not exceed a percentage of the customer's annual electric charges or a dollar amount. (Emphasis added). The next sentence refers to these caps as "*procurement* limit criteria[.]" NMIEC's Initial Posthearing Brief at 8-9. When PNM procures MWhs/RECs, it procures them at their gross cost; it does not procure them at gross cost less avoided fuel.

The directive in Rule 572.12 that a public utility calculate the large customer adjustment consistent with the methodology for the RCT seems inconsistent with the REA's treatment of the Large Customer Cap and the RCT. The Large Customer Cap is a bill impact protective device for LCCs. The RCT, on the other hand, is not a cap on each customer's bill. Case No. 12-00007-UT, Final Order at 2, ¶ 2 (8-14-12).

Using Dr. Howe's Method would be inconsistent with the purpose of the Large Customer Cap, which is to limit the bill impact to LCCs by capping their cost of compliance with the RPS as a percentage of their electric charges or a dollar amount, either of which is a gross amount. NMSA 1978, § 62-16-4(A)(2). Adopting Dr. Howe's Method would effectively interpret the

statutory cap to be a net cap, which it is not. As Ms. Taylor said, it is also inconsistent with the Commission's directive in Case No. 15-00166-UT that in ratemaking it is improper to account for costs not actually incurred as costs or benefits.

WRA's Alternative Method is inconsistent with the purpose of the Commission's adoption of Method A: to inform customers that renewable energy has a zero fuel cost.

The double counting of avoided fuel cost benefits for LCCs should be eliminated by overruling the Commission's decision in Case No. 15-00166-UT and using gross cost to calculate the Large Customer Adjustment.

VII. NMIEC'S MOTION FOR PARTIAL DISMISSAL

After the hearing, NMIEC filed a Motion for Partial Dismissal of "all issues related to the Method A fuel allocation methodology from this case" because Method A is the subject of an appeal in the New Mexico Supreme Court.

As explained in Section VI, the Commission adopted Method A in its Final Order in Case No. 15-00261-UT to correct a fuel cost misallocation. PNM appealed the Final Order and NMIEC cross appealed, contesting the Commission's adoption of Method A. NMIEC has argued on appeal that the Large Customer Cap and exemptions were intended to be firm limits on large customers' rates and that eliminating the fuel cost misallocation subjects Exempt and LCCs to an additional charge. In its Motion for Partial Dismissal, NMIEC argues that the alternatives identified by PNM to eliminate the remaining cost misallocation "are a material change to Method A[,]" and because the legality of Method A is on appeal, "the Commission has lost any jurisdiction to make these fundamental changes to that allocator." Motion for Partial Dismissal at 7.

NMIEC relies on *Kelly Inn No. 102, Inc. v. Kapnison*, for the general proposition that a court loses jurisdiction of a case upon the filing of a notice of appeal except for the purposes of perfecting the appeal or of passing upon a motion directed to the judgment pending at the time.

1992-NMSC-005, ¶ 32, 113 N.M. 231. A related general proposition is that "a pending appeal does *not* divest the trial court of jurisdiction to take further action when the action *will not affect the judgment on appeal*[.]" *Id.* at ¶ 33 (emphasis in original).

NMIEC's Motion for Partial Dismissal should be denied because correcting the remaining cost misallocation in this case will not affect the Commission's decision in Case No. 15-00261-UT to adopt Method A. The key component of Method A that resulted in Exempt and LCCs paying more is its breaking up of the FPPCAC into two components: one that applies to electricity use generated by renewable energy and one that applies to electricity use generated by non-renewable energy. Contrary to NMIEC's argument, the fact that correction of the remaining cost misallocation would result in LCCs paying more does not mean that correction of the remaining cost misallocation would change Method A. WRA/CCAE's Initial Posthearing Brief at 23. PNM's Proposed Method, which the Hearing Examiner has recommended adopting, changes the method of calculating the Large Customer Adjustment. Ms. Taylor testified that if PNM's Proposed Method is adopted:

> You would still be Method A. Method A doesn't change. It does not have any impact on Method A, except the percentage would change. . . . So nothing changes with Method A. It's just how you apply Method A to the different customers. So in PNM's proposal, I think currently or at least in the forecast for 2018 is about 3.5% under the current, and it would drop down to – I don't know – like, 1.7%. So you would be paying more additional fuel and the same 2% cap that you're paying today in the renewable rate rider. . . . Nothing would change there other than the percentage would change.

Tr. 797-98. The "percentage" referred to by Ms. Taylor is the estimated percentage of a customer's electricity use generated by renewable energy, to which an FPPCAC factor of zero is applied because no fuel use is associated with use of renewable energy. The change in this percentage that would result from adoption of PNM's Proposed Method does not change the key component of Method A: breaking the FPPCAC into two components. PNM's Initial Posthearing Brief at 27-28.

VIII. PNM'S 2018 RENEWABLE ENERGY PORTFOLIO PROCUREMENT PLAN

The "plan year" for which PNM seeks approval in this case is calendar year 2018. PNM seeks approval of no new renewable energy procurements to include in its 2018 Plan. Staff believes that PNM's 2018 renewable energy portfolio is a diverse mix of renewable energy resources at reasonable cost and supports it, Pitts Direct at 12, 29, and no party opposes it. The Hearing Examiner recommends approval of PNM's 2018 Plan with two exceptions: (1) use gross cost rather than net cost to calculate the Large Customer Adjustment (which PNM does not oppose); and (2) completely terminate PNM's Dale Burgett geothermal procurement effective January 1, 2018.

A. CALCULATION OF THE RENEWABLE PORTFOLIO STANDARD

This discussion of calculation of the Renewable Portfolio Standard (RPS) reflects the RPS calculations from Exhibit A to this Recommended Decision, which is Exhibit SG-2 (HE October 11, 2017 Email), which incorporates (1) the Hearing Examiner's recommendation from Section VI that gross cost, rather than net cost, be used to calculate the Large Customer Adjustment; (2) the Hearing Examiner's recommendations from Section IX that PNM's proposed amended NMWEC procurement be approved and its proposed amended Dale Burgett procurement and Affordable Solar Project be disapproved; and (3) the Hearing Examiner's recommendation from Section IX that PNM terminate its PPA with Dale Burgett effective January 1, 2018.[8]

[8] PNM prepared several versions of Exhibit SG-2 to reflect different scenarios. Exhibit SG-2 Corrected, filed on July 7, 2017 and part of PNM Exhibit 7, reflects (1) using net cost to calculate the Large Customer Adjustment; and (2) approval of PNM's proposed amended NMWEC and Dale Burgett procurements and the Affordable Solar Project. Exhibit SG-2 (September 13, 2017 Supplemental), which is part of PNM Exhibit 9, reflects (1) using net cost to calculate the Large Customer Adjustment; (2) disapproval of PNM's proposed amended NMWEC and Dale Burgett procurements and the Affordable Solar Project; and (3) continued procurements from Dale Burgett without the repowering. Exhibit SG-2 (September 13, 2017 Supplemental – Alternative 1), which is PNM Exhibit 10, reflects (1) using net cost to calculate the Large Customer Adjustment; (2) disapproval of PNM's proposed amended NMWEC and Dale Burgett procurements and the Affordable Solar Project; and (3) termination of the Dale Burgett procurement effective January 1, 2018. Exhibit SG-2 (September 13, 2017 Supplemental – Alternative 2), which is

PNM used projected 2018 and 2019 retail energy sales to determine the annual RPS requirements. Total projected energy sales were then reduced by projected sales to Large Capped Customers (LCCs) and Exempt Customers. PNM projects that it will have 27 LCCs in 2018 and 1029. Exh. A to this Recommended Decision at 2-3. PNM projects that it will have two Exempt Customers in 2018 and 2019: ABCWUA and the University of New Mexico (UNM). Both ABCWUA and UNM certified to the New Mexico State Auditor that they were Exempt Customers in 2017. Gutierrez Direct at 3, 19.

The resulting annual MWh sales, which are defined by Rule 572 as "plan year total retail energy sales," were multiplied by 15% in 2018 and 2019 to determine the RPS requirements for Other Customers. Projected capped MWh sales to Large Capped Customers were added to this amount to determine the total RPS requirement:

Line	RPS Requirement	2018	2019	2020
1	Annual Sales - All Customers (MWh)	8,102,251	8,292,897	8,462,860
2	(-) Exempt Customer Sales (MWh)	244,707	242,045	239,465
3	(-) Large Capped Customer Sales (MWh)	1,033,326	1,292,374	1,523,370
4	Net Annual Sales - Other Customers (MWh)	6,824,218	6,758,478	6,700,025
5	RPS - Other Customers (%)	15%	15%	20%
6	RPS - Other Customers (MWh)	1,023,633	1,013,772	1,340,005
7	(+) Large Customer Adjustment (MWh)	25,175	26,944	28,093
8	Net RPS Goal - All Customers (MWh)	1,048,808	1,040,716	1,368,098
9	Net RPS Goal - All Customers (%)	12.9%	12.5%	16.2%

Exh. A to Recommended Decision at 1.

The total RPS requirement, or "net RPS," is less than 15% because of the allowed downward adjustments for Exempt and LCCs. Pitts Direct at 7.

PNM Exhibit 11, reflects (1) using net cost to calculate the Large Customer Adjustment; (2) disapproval of PNM's proposed amended NMWEC and Dale Burgett procurements and the Affordable Solar Project; and (3) minimal Dale Burgett procurements in 2018-2020.

PNM then compared the total RPS requirement to the projected number of renewable energy certificates (REC) retirements from its existing renewable energy resources and found that, for 2018 and 2019, no additional procurements are necessary:

	RPS Compliance	2018	2019	2020
10	Portfolio RECs for Compliance - All Customers	1,085,147	1,169,117	1,192,773
11	REC Surplus/(Deficit) - All Customers	36,340	128,401	(175,325)
12	Portfolio Percent of Annual Sales - All Customers (%)	13.4%	14.1%	14.1%
13	Portfolio Percent of Net RPS Goal - All Customers (%)	103.5%	112.3%	87.2%

Exhibit A to Recommended Decision at 1.

B. REQUEST FOR VARIANCE FROM "OTHER" DIVERSITY REQUIREMENT

This discussion of PNM's projected compliance with the diversity requirements reflects the RPS calculations from Exhibit A to this Recommended Decision, which is Exhibit SG-2 (HE October 11, 2017 Email), which incorporates (1) the Hearing Examiner's recommendation from Section VI that gross cost, rather than net cost, be used to calculate the Large Customer Adjustment; (2) the Hearing Examiner's recommendations from Section IX that PNM's proposed amended NMWEC procurement be approved and its proposed amended Dale Burgett procurement and Affordable Solar Project be disapproved; and (3) the Hearing Examiner's recommendation from Section IX that PNM terminate its PPA with Dale Burgett effective January 1, 2018.

The following table shows, for 2018 and 2019, for each type of renewable energy resource, the percentage diversity requirement and the amount and percentage that PNM expects to achieve.

Type of Resource	% Diversity Requirement	2018 - MWh Expected to be Achieved	2018 - % Expected to be Achieved	2019 - MWh Expected to be Achieved	2019 - % Expected to be Achieved
Wind	30%	695,651	62.9%	693,754	62.0%
Solar	20%	260,621	34.1%	259,027	35.0%
Other	5%	0	0%	0	0%

Type of Resource	% Diversity Requirement	2018 - MWh Expected to be Achieved	2018 - % Expected to be Achieved	2019 - MWh Expected to be Achieved	2019 - % Expected to be Achieved
DG	3%	128,875	3.0%	136,336	3.0%

Exh. A to Recommended Decision at 1, rows 14-17 & at 5 & 6, column A.

As shown in the table, PNM expects to meet or exceed, in 2018 and 2019, the diversity requirements for wind, solar and DG. PNM does not expect to meet the "other" diversity requirement in 2018 or 2019 if the Dale Burgett procurement is terminated. If the Commission approves PNM's request to amend its PPA with Lightning Dock to increase the output, PNM expects to meet the other diversity requirement in 2019. Exh. SG-2 Corrected at 1, row 16.

PNM was granted a variance from the "other" diversity requirement in Case Nos. 11-00265-UT and 12-00131-UT.[9] Southwestern Public Service Company and El Paso Electric Company have been granted numerous variances from the "other" diversity requirement.[10]

Staff supports PNM's request for a variance from the "other" diversity requirement in 2018. In fact, Staff recommends that the Commission revisit the necessity of the "other" diversity requirement in light of the severe challenges in meeting the requirement economically. Reynolds Direct at 18. Staff further recommends that the Commission direct PNM to address the "other" diversity requirement in its 2019 renewable energy portfolio procurement plan filing

[9] Case No. 12-00131-UT, Recommended Decision at 68, ¶ I (11-15-12), adopted by Final Order (12-11-12); Case No. 11-00265-UT, Recommended Decision at 47, ¶ F (12-7-11), adopted in relevant part by Final Order (12-22-11).

[10] Case No. 16-00109-UT, Recommended Decision at 34, ¶ F (10-26-16), adopted by Final Order (11-23-16) (EPE); Case No. 15-00117-UT, Recommended Decision at 26, ¶ E (9-15-15), adopted in relevant part by Final Order Adopting Recommended Decision with a Modification (10-7-15) (EPE); Case No. 14-00121-UT, Corrected Recommended Decision at 36, ¶ E (9-24-14), adopted in relevant part by Final Order Partially Adopting Recommended Decision (10-22-14) (EPE); Case No. 13-00223-UT, Recommended Decision at 35, ¶ E (10-23-13), adopted in relevant part by Final Order Partially Adopting Recommended Decision (11-20-13) (EPE); Case No. 12-00217-UT, Recommended Decision at 35, ¶ E (11-27-12), adopted by Final Order (12-11-12) (EPE); Case No. 10-00200-UT, Order Granting Variance (2-9-12) (EPE); Case No. 13-00222-UT, Recommended Decision at 37, ¶ G (11-25-13), adopted in relevant part by Final Order Partially Adopting Recommended Decision (12-18-13) (SPS); Case No. 12-00219-UT, Recommended Decision at 29, ¶ E (11-27-12), adopted by Final Order (12-18-12) (SPS); Case No. 11-00264-UT, Certification of Stipulation at 48, ¶ G (12-9-11), adopted by Final Order (12-20-11) (SPS); Case No. 10-00196-UT, Recommended Decision at 36, ¶ D (11-23-10), adopted by Final Order (12-23-10).

and require PNM to show that any proposed "other" resources are necessary and economic based on a contemporaneous RFP. Staff's Initial Posthearing Brief at 20-21.

PNM's request for a variance from the "other" diversity requirement in 2018 should be granted.

C. CALCULATION OF THE RENEWABLE COST THRESHOLD

No party objects to PNM's calculation of the RCT for the 2018 Plan Year. WRA/CCAE ask the Commission to order PNM in future cases to include in its RCT calculation, avoided capacity costs from all renewable energy resources in PNM's renewable energy portfolio, not just renewable energy resources added in the plan year. NMIEC asks the Commission to order PNM in future cases to separately identify costs of backup generation and load following caused by renewable energy.

1. AVOIDED CAPACITY COSTS

Under Sections 62-16-2(A)(6) and 62-16-4(B) of the REA and Rule 572, when the cost of renewable energy needed to comply with the RPS would exceed the Renewable Cost Threshold (RCT), a public utility is not required to incur that cost. The PRC has set the RCT at 3% of "*plan year total revenues.*" 17.9.572.12(A) & (B) NMAC.

Rule 572 gives specific directions for calculating the RCT. It states that a public utility is not required to add renewable energy to its portfolio when its "*annual renewable energy plan revenue requirement*" is above the RCT. Therefore, the purpose of the RCT calculation is to project whether the cost of a utility's procurements will be more than 3% of its plan year total revenues. It requires two calculations: (1) the plan year revenue requirement; and (2) plan year revenues.

For RCT purposes, Rule 572.14(C) states that a utility's plan year revenue requirement is determined using a traditional revenue requirement impact approach for all renewable resources procured to satisfy a utility's RPS, including previously authorized regulatory assets, excluding normalizations, annualizations, and out of period adjustments. Revenue requirement

adjustments shall include net avoided fuel and purchased power costs, cost savings resulting from environmental credits (if not already included in the net avoided fuel costs) pursuant to compliance rules in effect during the plan year, and cost savings or increases for capacity, generation, transmission, or distribution, operation and maintenance expense, back-up and load following generation, off-system sales opportunity impacts, or other facilities and improvements or functions that may be required and that can be shown to result in actual reductions or increases in plan year revenue requirements to be collected from ratepayers. 17.9.572.14(C)(1) NMAC. Avoided fuel costs are expected or modeled fuel savings that result from the procurement of renewable resources in the plan year. 17.9.572.14(C)(2) NMAC.

PNM did not include any avoided capacity costs in calculating its 2018 plan year revenue requirement. PNM's reasoning is "[s]ince no new renewable capacity is proposed in the plan year, no capacity cost is being avoided." Gutierrez Direct at 20. In other words, PNM interprets Rule 572.14(C)(1) to require including avoided capacity costs only if a renewable energy resource is being added in the plan year. Tr. 191-93 (O'Connell). PNM does not interpret Rule 572.14(C)(1) as requiring including avoided capacity costs from all of the renewable energy resources in PNM's renewable energy portfolio. *Id.* at 635 (Gutierrez). For 2019 and 2020, PNM performed a Strategist simulation with and without the 50 MW of proposed solar generation and the NMWEC repower project. The results showed that no new capacity was avoided when these procurements were removed from PNM's portfolio. Therefore, PNM also did not reduce its plan year revenue requirement by avoided capacity costs in 2019 or 2020. Gutierrez Direct at 20.

PNM relies on the language in Rule 572.14(C) that says that revenue requirement adjustments shall include, among other things, cost savings for capacity "that can be shown to result in actual reductions or increases in plan year revenue requirements to be collected from ratepayers." Another reason for PNM's interpretation is a practical one: it is difficult to estimate avoided capacity costs assuming that all renewable energy procurements are removed

because doing so ignores that the past was different and that different actions likely would have been taken. PNM says that the RCT calculates costs going forward. Mr. O'Connell said that the fact that PNM has never reached the RCT not including avoided capacity costs in the plan year revenue requirement gives him comfort with using PNM's interpretation. Tr. 192-94.

WRA and CCAE argue that Rule 572 does not limit avoided capacity costs to those that are avoided by renewable generation added in the plan year. WRA/CCAE's Initial Posthearing Brief at 15-19. In response to a discovery request from CCAE, PNM calculated that if it removed all of its renewable energy resources contributing to RPS compliance from its system, it would add 41 MW of natural gas peaking capacity in 2018, with a 2018 revenue requirement of $8,801,682, to meet its planning and operating reserve requirements. CCAE Exh. 1; Tr. 188-89 (O'Connell). CCAE argues that Rule 572 requires PNM to offset its 2018 plan year revenue requirement by savings from not adding 41 MW of capacity. CCAE says that nothing in Rule 572 says that avoided capacity is avoided capacity only from renewable energy resources added in the plan year, not from renewable energy resources added in the past. Tr. 636 (Noble).

PNM's interpretation of Rule 572.14(C)(1) is correct. Before its amendment in 2014, Rule 572.14(C)(1) read:

> Revenue requirement adjustments shall only include avoided fuel and purchased power costs, environmental credits pursuant to compliance rules in effect during the plan year, and costs for capacity, transmission, or distribution that can be shown to result in actual reductions in costs to ratepayers.

Case No. 11-00218-UT, Order Adopting Rule 17.9.572 NMAC as Issued on December 18, 2012, Exh. A (5-1-13). In 2014, Rule 572.14(C)(1) was amended and, specifically, the last part of the Section was amended to state ". . . that can be shown to result in actual reductions or increases *in plan year revenue requirements* to be collected from ratepayers." Case No. 13-00152-UT, Revised Final Order on Rehearing Amending Rule 17.9.572 NMAC; Renewable Energy for Electric Utilities, Exh. One (4-16-14) (emphasis added). The addition of the words "in plan year revenue requirements" shows the Commission's intent that avoided capacity is capacity avoided

from renewable energy resources added in the plan year. *See State v. Rowell*, 1995-NMSC-079, ¶ 20, 121 N.M. 111 (legislature's amendment to statute indicated intent to restrict the single-larceny doctrine).

Additionally, in its Order amending Rule 572, the Commission expressly rejected the argument that WRA and CCAE raise in this case. The Commission explained that the commenters "tended to be in two camps" and one group "particularly asserted that benefits such as avoided capacity cannot be measured or *are not achieved in the plan year*." *Id.* at 7, ¶ 27 (emphasis added). The Commission rejected this argument, stating that the RCT calculation incorporates the costs and benefits "*of adding* renewable energy to the supply portfolio[.]" *Id.* (emphasis added).

Moreover, in a recent El Paso Electric Company case, the Commission rejected the argument that "some measure of capacity savings related to renewable resources that EPE acquired in the past should be counted against the costs of renewables in the future." It found, to the contrary, that capacity savings achieved through renewable energy resources should be counted only when the renewable resources obviate the need for acquisition of short-term capacity in the plan year. Case No. 16-00109-UT, Recommended Decision at 20 (10-26-16), adopted by Order Adopting Recommended Decision at 4-8 (11-23-16).

WRA and CCAE's argument that Rule 572 does not limit avoided capacity costs to those that are avoided by renewable generation added in the plan year is rejected.

2. *BACKUP AND LOAD FOLLOWING COSTS*

Rule 572.14(C)(1) says that, for RCT purposes, the plan year revenue requirement shall be determined by applying a traditional revenue requirements impact approach and that adjustments shall include "cost savings or increases for . . . back-up and load following generation[.]" The Commission has said that "if back-up or back-up generation costs exist, they should be included in the RCT calculation[.]" Case No. 13-00152-UT, Revised Final Order on Rehearing Amending Rule 17.9.572 NMAC: Renewable Energy for Electric Utilities at 10, ¶ 33

(4-16-14). Backup generation is generation capacity that is raised or lowered as necessary to follow moment-by-moment changes in load. Load following is the actual changes in power output in response to changing demand. Tr. 27, 43 (O'Connell).

All PNM generation resources require backup generation and load following. *Id.* at 728, 737 (Taylor). Variable renewable energy resources, in particular, require backup generation and load following because of their intermittency. For example, if wind speed decreases, wind energy production drops; if clouds float over a solar panel, solar energy production drops. *Id.* at 26, 29, 37 (O'Connell). PNM's operating reserves automatically respond and increase production. *Id.* at 734 (Taylor). PNM maintains the amount of reserves necessary to handle intra-hour load fluctuations. *Id.* at 773 (Taylor).

All of PNM's conventional units, excluding the Palo Verde Nuclear Generating Station units, provide backup or load following capabilities. PNM operates its system as a whole to meet system requirements, including load following and backup generation, and does not assign specific generating units to specific tasks. Therefore, according to PNM, it is not possible to specifically identify costs associated with backup generation and load following. NMIEC Exh. 3 at 4-5. PNM does not track how its resources are dispatched, so is unable to state what percentage of time or output PNM's generation units are used for load following for variable renewable energy resources: that information does not exist. Tr. 42, 46 (O'Connell); 658 (Gutierrez); 730 (Taylor).

PNM agrees that there are backup costs related to using renewable energy. *Id.* at 829 (Taylor). PNM says that it captured backup and load following costs in calculating the RCT by using computer software called AURORA to compare system costs with and without renewable energy resources. This comparison, according to PNM, captures costs of backup generation and load following by including both costs of contingency and regulation reserves. NMIEC Exh. 3 at 9; Tr. 830 (Taylor). More specifically, AURORA used annual energy production curves for each of the resources to derive hourly production costs to meet anticipated demand, with and without

renewable energy resources. The cost difference is the cost avoided due to the renewable resources on PNM's system.

The following table shows the avoided costs used in PNM's calculations of the RCT:

	2018	2019	2020
Avoided Cost	$26.65	$28.70	$33.67

Taylor Direct at 15. PNM says that these avoided cost values incorporate the costs and cost savings identified in Rule 572.14(C)(1), such as avoided generation or purchased power costs, backup, load following, regulation costs and off-system sales opportunity impacts. PNM says that costs of integrating renewable energy into its system, while not separately identified, are embedded in the avoided costs because "AURORA captures dispatchable resource starts, ramping rates and costs, and changes in ancillary service requirements on an hourly basis[.]" *Id.* at 15-16. Ancillary service requirements for modeling purposes are contingency and regulation reserves. Changes in these requirements are measured from hour to hour. NMIEC Exh. 3 at 9.

Aurora determines detailed production costs on an hourly basis and not an intra-hourly basis. Aurora does not identify changes in individual cost components of the system operation cost, so load following costs cannot be specifically identified. Tr. 650-54 (Gutierrez); 732-33, 771 (Taylor). PNM has no software program that segregates load following costs from other costs. *Id.* at 730 (Taylor). So, for example, PNM has not quantified how much these cycling costs add to its O&M expenses. *Id.* at 752 (Taylor). While there is a cost associated with ramping up the backup generation, Aurora does not identify this specific cost. *Id.* at 735-36 (Taylor).

NMIEC argues that PNM should separately identify costs of backup generation and load following caused by renewable energy. NMIEC further argues that because PNM has not separately identified these costs, PNM's calculation of the Renewable Energy Rider rate is incorrect and PNM has violated the caps for Exempt and LCCs. NMIEC asks the Commission to

require PNM, in its next general rate case and next renewable energy portfolio procurement plan filing, to:

1. accurately calculate, based on historical data, the percentage of hours in a year that each of its generation units (1) is being held in reserve in anticipation for the need to provide backup and load following generation services; and (2) is actually being used to provide those services;
2. remove a corresponding percentage of those units' annual capital costs from PNM's base rates and include those costs in its RCT calculation; and
3. make the same calculations and adjustments for the units' operation and maintenance expenses.

NMIEC's Posthearing Response Brief at 11-12.

NMIEC's argument should be rejected because the evidence indicates that PNM does not have the information necessary to make the recommended calculations and adjustments. NMIEC made the same argument in its Exceptions to the Recommended Decision in PNM's 2017 renewable energy portfolio procurement plan case, and the Commission rejected it. Case No. 16-00148-UT, Final Order Adopting Recommended Decision at 8, ¶ 17 (11-23-16).

3. RESULTING RCT

This discussion of calculation of the RCT reflects the RCT calculations from Exhibit A to this Recommended Decision, which is Exhibit SG-2 (HE October 11, 2017 Email), which incorporates (1) the Hearing Examiner's recommendation from Section VI that gross cost, rather than net cost, be used to calculate the Large Customer Adjustment; (2) the Hearing Examiner's recommendations from Section IX that PNM's proposed amended NMWEC procurement be approved and its proposed amended Dale Burgett procurement and Affordable Solar Project be disapproved; and (3) the Hearing Examiner's recommendation from Section IX that PNM terminate its PPA with Dale Burgett effective January 1, 2018.

To determine the RCT for Other Customers, PNM first calculated its renewable energy plan revenue requirement by determining the estimated net portfolio cost for Other Customers, which is $18,877,401 in 2018 and $16,947,769 in 2019. Next, PNM calculated its plan year total revenues for Other Customers, which are $813,687,291 in 2018 and $812,723,407 in 2019. Multiplying plan year total revenues by 3% yields the RCT for Other Customers in dollars, which is $24,410,619 in 2018 and $24,381,702 in 2019. For Other Customers, PNM's projected renewable plan revenue requirement is 2.3% of its plan year revenues in 2018 and 2.0% in 2019. Exh. A to Recommended Decision at 1, rows 18-29.

D. RENEWABLE ENERGY RIDER

This discussion of calculation of the Renewable Energy Rider reflects the calculations from Exhibit B to this Recommended Decision, which incorporates (1) the Hearing Examiner's recommendation from Section VI that gross cost, rather than net cost, be used to calculate the Large Customer Adjustment; (2) the Hearing Examiner's recommendations from Section IX that PNM's proposed amended NMWEC procurement be approved and its proposed amended Dale Burgett procurement and Affordable Solar Project be disapproved; and (3) the Hearing Examiner's recommendation from Section IX that PNM terminate its PPA with Dale Burgett effective January 1, 2018.

In Case No. 12-00007-UT, the Commission approved PNM's use of a rate rider — Rate Rider No. 36 — to recover the costs of renewable resources approved by the Commission for PNM to meet the RPS. The Rate Rider collects PNM's RPS revenue requirements on a per kWh basis. The Commission required an annual true-up, initiated by PNM's filing of an advice notice annually no later than February 28. A hearing is not required prior to annual adjustments to the Rider so long as a hearing is held in PNM's annual renewable energy portfolio procurement plan case. Case No. 12-00007-UT, Recommended Decision at 53-54, ¶ H (6-19-12), as corrected by Errata Notice, adopted by Final Order (8-14-12), as corrected by Errata Notice (8-24-12), as clarified by Order on Rehearing (10-9-12).

The current effective version of Rate Rider No. 36 is 11th Revised Rate Rider No. 36, under which the Rate Rider rate is $0.0054419/kWh. Pitts Direct at 23.

In its Advice Notice No. 541 filed with PNM's Application, PNM proposed a revised Rate Rider rate of $0.0062188/kWh to be effective January 1, 2018. Later, PNM filed an Errata Notice revising the proposed Rate Rider rate to $0.0062267/kWh. Sanders Direct at 3.

The Rider would apply to all PNM customers except the two Exempt Customers and the two LCCs that are capped by the 2018 Large Customer dollar cap of $110,804. These two LCCs would be billed a fixed monthly amount equal to one-twelfth of the annual dollar cap. For the other LCCs who are subject to the 2% of revenue cap and who are manually billed, PNM will apply a 2% of revenue cap monthly to the Rider 36 rate charges. For the other LCCs who are subject to the 2% of revenue cap but are not manually billed, PNM will apply the Rate Rider rate to all kWh consumed by them during the year and, after the end of the year, PNM will reconcile each customer's payments under the Rate Rider against each's 2% statutory cap and refund any excess payments. Vogt Direct at 3-4; Tr. 716-17 (Vogt).

Staff recommends that PNM's proposed 12th Revised Rate Rider No. 36 as stated in Advice Notice No. 541 (before it was revised) be rejected and that PNM be ordered to file a compliance advice notice following issuance of a final order. Pitts Direct at 6, 24.

The Renewable Energy Rider rate resulting from the Hearing Examiner's recommendations is $0.0060571 per kWh. The current Renewable Rider rate is based upon a 2017 revenue requirement of $42,678,210, derived from a February 2017 reconciliation of 2016 expenditures and collections. Tr. 717-18 (Vogt). For an average PNM residential customer consuming 600 kWh month, the current Rider charge is $3.27. If the Hearing Examiner's recommended Rider rate is approved, this monthly charge would increase by 36¢, to $3.63. Exh. C to Recommended Decision.

E. PNM'S 2018 SOLAR REC INCENTIVE PROGRAM (SIP)

In Case No. 11-00265-UT, the Commission approved a Capacity Set-Aside step in PNM's Solar REC Incentive Program (SIP). Under the Capacity Set Aside step, PNM reserves capacity in its annual renewable energy portfolio procurement plan for DG facilities sized greater than 100 kW up to and including 1,000 kW, at a price equal to the competitive price established by PNM's most recent Request for Proposal (RFP) process. In Case No. 11-00265-UT, the Commission decided not to approve continuation of any DG programs with tranches that are time-limited rather than capacity-limited because capacity-limited programs allow the Commission to review the reasonableness of procurement costs and any impact on the RCT in a way that time-limited DG programs do not. In PNM's 2017 renewable energy portfolio procurement plan case, the Commission approved PNM not offering the capacity reservation program because PNM had already exceeded the 2017 RCT calculation in its procurements. In that case, the Commission said that "PNM will be required to offer the program in 2018 if RCT headroom is available in subsequent years." Pitts Direct at 19-20.

PNM seeks approval for 2018 of a capacity reservation of 2 MW_{AC} at a price of $0.0025 per kWh of RECs for customer-sited DG solar photovoltaic systems sized over 100 kW_{AC} and up to 1 MW_{AC}. PNM's most recent RFP that obtained pricing for future REC purchases was issued in January 2016. The lowest cost solar, REC-only bid resulting from that RFP was $.00254/kWh. O'Connell Direct at 15-16.

Staff supports PNM's request for two reasons. First, PNM has sufficient anticipated headroom under the 2018 RCT to offer the program. Second, the proposed REC purchase price of $0.0025/kWh is much less than the REC purchase price of $0.02/kWh approved in PNM's 2016 renewable energy procurement plan case. Pitts Direct at 21-22.

PNM's request for approval for 2018 of a capacity reservation of 2 MW_{AC} at a price of $0.0025 per kWh of RECs for customer-sited DG solar photovoltaic systems sized over 100 kW_{AC} and up to 1 MW_{AC} should be granted.

F. 2018 NOT TO EXCEED PRICE FOR ADDITIONAL RECS

The Stipulation approved in Case No. 14-00158-UT required PNM, beginning in 2014, to annually calculate the RPS and RCT for "the prior plan year" based on actual results. As soon as practicable after each calculation, PNM shall acquire and retire additional stand-alone RECs if needed for overall RPS quantity compliance (not diversity compliance) in the prior plan year. PNM must acquire the RECs at the lowest available price through a solicitation of offers without the need for a request for proposals, at a price not to exceed the cost of stand-alone RECs of the same type most recently approved by the Commission, provided that the procurement does not cause PNM to exceed the RCT during the period for which the REC procurement would apply. PNM shall specify the not-to-exceed price in its plan application beginning in 2015 for the 2016 plan year.

In Case No. 14-00158-UT, the Commission set a not-to-exceed price of $3.00 per MWh/REC for additional RECs as may be required for plan years 2013, 2014 and 2015. In Case Nos. 15-00166-UT and 16-00148-UT, the Commission approved a not-to-exceed price of $3.00 per MWh/REC for additional RECs as may be required for plan years 2016 and 2017, respectively.

To make up for a shortfall of REC retirements in 2016, PNM seeks to recover $12,536 through its 2018 Renewable Rate Rider for 2016 compliance REC purchases. PNM purchased 13,127 MWhs of RECs from Golden Spread Electric Cooperative at $0.95 per MWh/REC. Monroy Direct at 9; Tr. 708 (Monroy).

In this case, PNM proposes to continue the not-to-exceed price of $3.00 per MWh/REC for the 2018 plan year. However, PNM does not expect that additional purchases for the 2018 plan year will be required. O'Connell Direct at 17. Staff supports PNM's request for authority to procure unbundled RECs at a not-to-exceed price of $3.00 per MWh/REC to the extent that an actual shortage of RECs exists in 2018. Pitts Direct at 13-14.

PNM's request for approval of a not-to-exceed price of $3.00 per MWh/REC for the 2018 plan year should be granted.

IX. PROPOSED PROCUREMENTS FOR 2019 AND 2020

A. NEW MEXICO WIND ENERGY CENTER

1. DESCRIPTION OF ORIGINAL PROCUREMENT AND PROPOSED PROCUREMENT

PNM has an existing 25-year purchased power agreement (PPA), which took effect in October 2003 and expires in 2028, to purchase all of the energy and RECs produced from the New Mexico Wind Energy Center (NMWEC), a 200 MW wind generation facility in eastern New Mexico, owned and operated by NextEra Energy Resources. The purchase price is $27.25 per MWh/REC. Annual production varies and, since 2013, has ranged from 404,766 MWhs in 2015 to 496,552 MWhs in 2016. Production dropped from 545,321 MWhs in 2012 to 490,539 MWhs in 2013. Exh. JJR-1 to Reynolds Direct. PNM uses NMWEC's output toward RPS compliance and its voluntary renewable energy program, the Sky Blue Program. Barnard Direct at 7-8.

PNM seeks approval of an amended procurement with the NMWEC based on an Amended purchased power agreement (PPA) that PNM entered into with the NMWEC in May 2017. Exh. GBB-3 to Barnard Direct. The parties and the Hearing Examiner often referred to this Commission approving or disapproving the Amended PPA. In a renewable energy portfolio procurement plan case, the Commission doesn't expressly approve or disapprove contracts; rather, the Commission approves, modifies or rejects a plan. NMSA 1978, § 62-16-4(E) & (F). Tr. 138, 142 (O'Connell). Modification of a plan, however, can cause rejection of a contract that is the basis for a procurement.

The Amended PPA extends the term to 2045 and increases NMWEC's production by about 105,000 MWhs/RECs annually through NextEra's "repowering" of the Facility. NextEra would repower NMWEC by upgrading older wind turbine equipment, including blades and gearboxes, with newer more efficient turbine equipment on all of the Facility's turbines. The

repower project would not require altering towers, pad mount transformers or foundations. Upgrades could be completed on one to several wind turbines at a time, making the impact on project output negligible. The purchase price would remain fixed at $27.25 per MWh/REC for the term of the PPA. Barnard Direct at 8.

The amendments include two operational improvements: Automated generation control (AGC) and ramp-up limits. AGC would allow the output of the Facility to vary automatically, which maintains supply and demand balance on the system. Limiting the ramp up to 10 MW per minute would make increases in energy supplied when weather fronts roll through more manageable by allowing time for PNM to ramp down other facilities. PNM must continuously maintain system supply and demand balance within a narrow range to comply with reliability standards. O'Connell Direct 9-10.

Repowering the NMWEC would increase the Facility's blade lengths/rotor diameters and turbine capacities, two factors identified by a *Utility Dive* article as lowering costs. Tr. 162 (O'Connell).[11] The rotor diameters would be increased from 70 to 83 meters. However, 83 meters is 23% less than the 2016 average rotor diameter of 108 meters. *Id.* at 165 (O'Connell); Staff Exh. 2; O'Connell Rebuttal at 6. The pole height of the existing facility limits the rotor diameter. Tr. 870, 879 (Reynolds).

The NMWEC procurement is PNM's lowest cost resource in its renewable energy portfolio: the NMWEC procurement actually reduces PNM's cost of RPS compliance because its avoided fuel savings are more than its procurement cost. O'Connell Rebuttal at 8. PNM witness O'Connell said that extending the term of the PPA to 2045 and increasing output without changing the per MWh/REC price would benefit PNM customers by increasing the amount of low-cost renewable energy available from the NMWEC. O'Connell Direct at 9.

[11] Increasing generator power produces more MWhs from a turbine. Increasing blade length increases leverage, allowing the rotor to be turned harder. Tr. 162 (O'Connell).

If the amended procurement is approved, (i) PNM does not project increased output in 2018; (ii) PNM projects 80,000 MWhs of additional output from the NMWEC in 2019; and (iii) PNM projects 105,000 MWhs additional output in 2020. Exh. SG-2 Corrected at pp. 6-7, row 24, to Gutierrez Direct. These additional MWhs are not necessary for PNM to meet its 2019 RPS because PNM projects generating 128,401 surplus MWhs/RECs in 2019. Exh. A to Recommended Decision at 1, row 11. The additional MWhs are also not necessary for PNM to meet the wind diversity requirement in 2019 or 2020. *Id.*, rows 14 & 15. However, PNM says that "there is a critical need for the procurements in 2018 to be available for RPS compliance in 2020[.]" O'Connell Rebuttal at 3.

2. STAFF'S POSITION

Staff opposes PNM's request for approval to repower the NMWEC and extend the term of the PPA "given the absence of a clear demonstration that the repowering is economic, competitive or in the public interest." Staff argues that PNM presented no evidence that it considered alternatives to repowering the NMWEC to increase its supply of wind energy or even why it chose to negotiate the NMWEC repowering. While PNM conducted an RFP in early 2016 for renewable energy resources which yielded six proposals to supply wind energy through PPAs, PNM presented no analysis to support the economic basis for repowering the NMWEC. Reynolds Direct at 9-10. Staff also argues that ratepayers would finance the cost of the repowering through the extension of the term of the PPA. Staff's Initial Posthearing Brief at 18-19.

Staff presented evidence of significant opportunities in New Mexico to develop wind generation that might be competitive alternatives to repowering the NMWEC. In his prefiled testimony, Staff witness Reynolds said he was aware of four major independent wind farm projects on the drawing board for eastern New Mexico.[12] After he filed his testimony, Mr.

[12] The project developers are Invenergy, Mesa Canyons Wind, Enchanted Wind, Pattern Energy Group and Avangrid Renewables. Tr. 855-56 (Reynolds).

Reynolds became aware of another project. Tr. 856. Mesa Canyons Wind LLC, a developer of one of the projects and a subsidiary of Clean Line Energy Partners LLC, filed an application in September 2017 seeking location approval for 1,000 MW of wind facilities in Lincoln County, New Mexico. Case No. 17-00221-UT, Application (9-8-17). The Application says that the Project plans to interconnect with the Western Spirit Clean Line transmission line, a transmission project being developed by Clean Line Energy that would deliver up to 1,000 MW of wind energy from east-central New Mexico to the Albuquerque area and to load centers farther west. Mr. Reynolds recalled that the output from the project is uncommitted. Tr. 889.

Since last year, Staff has met with several independent developers interested in learning about the Commission and any necessary approvals that would be needed for projects to go forward. Staff has also been approached by a number of independent transmission developers interested primarily in providing the infrastructure necessary to export wind energy westward. Mr. Reynolds learned about the growing demand for wind energy from western states, the strength of wind resources in eastern New Mexico, the federal production tax credits, and the improvements in wind generation technology that encourage swift development and appear to make these projects viable. He pointed to Southwestern Public Service Company's recent application seeking approvals to develop major utility-owned wind projects in Texas and New Mexico. Reynolds Direct at 6-7. Mr. Reynolds did not know whether any of the transmission projects that he is aware of are intended to connect to PNM's system. Tr. 863.

Staff relied on the following statements in a March 16, 2017 article from *Utility Dive*, titled "Utility wind rush set to strengthen as low prices allow resource to spread across nation:"

- "It's a buyer's market for utilities in wind right now[.]"
- "[P]ower purchase agreement [PPA] prices are now in many places competitive with fossil fuel generation[.]"
- "[T]he steady decline in PPA prices is allowing utilities in new regions of the U.S. to take advantage of the wind boom."

- "Texas has 52% of current construction activity, while 15% is in the Midwest, and 13% is in Colorado and New Mexico, according to [the American Energy Wind Association]."
- "In the windy regions of the U.S. interior, the average PPA price for wind in 2015 was just above $20/MWh, according to Lawrence Berkeley National Laboratory data, a precipitous drop from the $55/MWh average in 2009."
- "New advances in turbine technologies are expected to continue driving down costs[.]"
- "Amazon's project was made possible by lower costs that come from increased tower height, blade length, generator power, and siting precision[.]"

Staff Exh. 1.

Mr. Reynolds summarized, "Given the keen interest in wind energy development in New Mexico, PNM should provide a clearer demonstration that its proposal is economic and competitive." Reynolds Direct at 9-10.

Mr. Reynolds summarized:

> [T]his repowering is like putting a brand new engine in a Model T. Yes, the Model T would run better. It probably will run longer than it would have. But is a Model T with a new engine better than a brand new car?

Tr. 870-71.

Staff says that approval of the repowering is not time critical for RPS compliance in 2018 or 2019. Staff recommends that PNM present a NMWEC repowering proposal in its next year's renewable energy procurement plan filing, supported by the results of a concurrent RFP and testimony "which makes a clear showing about the economic and competitive basis to support any additional procurement of wind energy be it from a repowered NMWEC or from an alternative provider to the extent PNM finds such a procurement to be necessary and economic." Reynolds Direct at 10.

3. ABCWUA's Position

ABCWUA supports Staff and recommends that the Commission deny the amended procurement from the NMWEC because of rapid changes in technology and rapidly declining

prices for wind energy. What ABCWUA views as "particularly disturbing" about the proposed amended procurement is the decline in NMWEC's output. ABCWUA's Initial Posthearing Brief at 5. A repowered NMWEC would generate roughly the energy it was projected to generate when it was originally approved. Reynolds Direct at 8-9. ABCWUA says that declines in NMWEC production call into question Mr. O'Connell's testimony that repowering the Facility would generate more than the 515,000 MWh that PNM is committed to take from the Facility until 2028. ABCWUA argues that the amended procurement would require ratepayers to pay (through an extended PPA term, higher prices than are likely to exist in a few years and technology that will likely be obsolete in a few years) for upgrades that are required to restore the Facility's ability to produce 515,000 MWhs/year. ABCWUA asserts that the cost of upgrades should be borne by FPL NM, not ratepayers. ABCWUA's Initial Posthearing Brief at 5.

4. WRA AND CCAE'S POSITION

WRA and CCAE support PNM and urge the Commission to approve the NMWEC repowering. They argue:

> There is no basis for making the choice to keep old technology for ten years with hopes that there will be lower costs, better technology and adequate transmission in the future. The basis for making the choice that NMWEC should be repowered now is that there is certainty with regard to the immediate benefits of the repowering.

WRA/CCAE's Initial Posthearing Brief at 10-11.

5. NMIEC'S POSITION

NMIEC supports PNM and urges the Commission to approve the NMWEC repowering. According to NMIEC, the choice is clear: the NMWEC repowering is a reasonable alternative to continuing the status quo and missing an opportunity to update the NMWEC with the latest generation technology. NMIEC's Initial Posthearing Brief at 17.

6. *PNM's Response*

PNM described the NMWEC repowering as a "bird in the hand is worth two in the bush," representing an opportunity to harvest the benefit of technology advances that have happened so far without adding transmission and raising rates. Tr. 166-68 (O'Connell).

PNM argues that the following evidence demonstrates that its proposed NMWEC procurement is the lowest cost wind resource available to PNM:

- the NMWEC procurement is PNM's lowest-cost wind procurement, and the NMWEC wind price is the lowest price that PNM has ever received for a wind bid, Tr. 155 (O'Connell);
- the NMWEC repowering is less expensive than any of the wind energy PPA bids submitted in response to the 2016 RFP, *id.* at 210 (O'Connell);
- the only comparable prices for wind energy are for projects in eastern New Mexico and those prices typically don't include transmission costs, O'Connell Rebuttal at 5, 7-8.

PNM also argues that repowering the NMWEC presents a unique opportunity "that's only available at NMWEC." Tr. 173 (O'Connell).

PNM agrees that New Mexico has "world class wind," but says that it cannot expect to procure wind energy for less than 2.75¢/kWh because "the world class wind is not located where our customers live and work." *Id.* at 161 (O'Connell). Mr. O'Connell said that the cost of improving PNM's transmission system to transport such wind is high. *Id.* PNM does not rule out the possibility of adding transmission lines in the future and says that approval of the NMWEC repowering doesn't preclude PNM from pursuing other wind energy procurements. *Id.* at 167 (O'Connell).

PNM says that there is sufficient capacity in the transmission line that transports NMWEC energy to transmit the additional energy. Transmitting wind energy from a different facility that is behind a different gate would require more transmission capacity. *Id.* at 907-08 (O'Connell).

The *Utility Dive* article relied on by Staff supports PNM's assertion that transmission constraints can affect the availability of cheap wind energy. It says: "Just as transmission capacity can be a wind enabler, the lack of it can be an impediment to deployment." Staff Exh. 1 at 10. However, the article also says that according to the American Energy Wind Association, "[t]he premium for transmission is approximately 10%, which is 'a relatively low factor in the overall cost.'" *Id.* at 6.

PNM argues that the amended procurement must be approved in this case because it is contingent on NextEra's ability to obtain a Production Tax Credit (PTC). PNM's Initial Posthearing Brief at 7. The PTC is a tax credit that reduces the federal income taxes of qualified taxpaying owners of renewable energy projects based on electrical output on a per kWh basis. The duration of the credit is 10 years after the date the facility is placed in service. For wind facilities commencing construction in 2016, the credit was $0.023/kWh. The value of the credit steps down in 2017, 2018 and 2019 by 20% annually. For wind facilities commencing construction in 2017, the credit is $0.0184/kWh. For wind facilities commencing construction in 2018, the credit is $0.0138/kWh. O'Connell Rebuttal at 5.

PNM's argument lacks credibility because:

1. the amount of the PTC has already been reduced by 20%. As Mr. Reynolds said, "So if the production tax credit was the key element, then PNM should have made this proposal a year ago." Tr. 870.

2. Mr. O'Connell expects that construction for the repowering will not begin until 2018. *Id.* at 178. However, construction must begin by December 31, 2017 for NextEra to claim the 2017 PTC. PNM's Initial Posthearing Brief at 7. If construction does not begin until 2018, the PTC decreases by another 20%. Commission Exh. 2.

3. NextEra would still be able to claim the PTC if construction doesn't begin until 2019, although at a reduced amount.

7. ANALYSIS/HEARING EXAMINER'S RECOMMENDATION

Arguments both pro and con of the NMWEC repowering have merit. On balance, the amended NMWEC procurement should be approved based on the following unique circumstances: (1) NMWEC is a relatively low cost existing renewable energy resource and its avoided fuel cost exceeds its procurement cost, reducing the RCT, PNM's Initial Posthearing Brief at 6; (2) sufficient existing transmission capacity exists to support the increased procurement; and (3) approving the amended procurement will not foreclose other wind energy procurements in the future. Staff is correct that dollars committed into the 2040s are unavailable for projects that are superior in terms of cost and performance. Staff's Initial Posthearing Brief at 19. However, because PNM is not up against the RCT and the RPS increases in 2020, approving the NMWEC repowering does not foreclose future wind energy procurements. WRA/CCAE's Initial Posthearing Brief at 11.

B. DALE BURGETT GEOTHERMAL FACILITY

1. DESCRIPTION OF ORIGINAL PROCUREMENT AND PROPOSED PROCUREMENT

The Dale Burgett geothermal facility is about 20 miles southwest of Lordsburg and generates electricity using geothermal resources. PNM purchases the entire output and associated RECs from this Facility under a purchased power agreement (PPA) executed in 2012 with Lightning Dock Geothermal HI-01, LLC (Lightning Dock), approved in Case No. 12-00131-UT. Barnard Direct at 9. The initial term of the Dale Burgett PPA was 20 years — through 2033. Case No. 12-00131-UT, Recommended Decision at 37 (11-15-12), adopted in relevant part by Final Order (12-11-12).

The version of the Dale Burgett PPA that was in effect between June 17, 2014 and March 9, 2017 was the Amended and Restated Geothermal Power Purchase and Sale Agreement (PPA). Commission Exh. 1. Under that PPA, PNM was to pay Lightning Dock $108.65 per MWh/REC in 2018, and the price escalated at an annual rate of 2.75%. *Id.*; Staff Exh. 4.

PNM seeks approval of a revised procurement from Lightning Dock, which replaces the previous terms of the Dale Burgett procurement. The revised procurement is based on an Amended PPA executed by PNM and Lightning Dock in May 2017. The Amended PPA, among other things:

1. Extends the term of the PPA by slightly more than eight years, from 2033 to 2042;[13]
2. Reduces the 2018 per MWh/REC price from $108.64 to $89;
3. Decreases the annual price escalation rate from 2.75% to 2.5%;
4. Increases the energy purchase amount from 72,000 to 77,000 MWh annually;
5. Requires Lightning Dock to "repower" the facility with utility grade equipment[14];
6. Permanently eliminates PNM's right to terminate the Amended PPA based on Lightning Dock's filing of a bankruptcy petition;
7. Terminates PNM's right to terminate the Amended PPA as a result of minimum output defaults until the repowering is complete;
8. Requires Commission approval of the Amended PPA before January 31, 2018; and
9. Requires that the repowering be completed within 18 months of Commission approval of the Amended PPA.

Staff Exh. 8 at 15-16.

While the 2018 price under the Amended PPA is $89/MWh, the price escalates annually at 2.5%. In 2042 — the last year of the Amended PPA — the price would be $160.98/MWh. Under the Amended PPA, the total procurement cost in 2020 for 77,000 MWh would be $7,199,933. PNM Exh. 15.

PNM witness Gary Barnard negotiated the terms of the Amended PPA. PNM witness Patrick O'Connell recommended that PNM enter into the Amended PPA to comply with the

[13] PNM's Posthearing Response Brief at 3 n.1.
[14] "Repower" means "to replace the existing plant with a single utility grade turbine and generator (along with ancillary equipment) regularly used at other binary geothermal plants in the United States." Exh. GBB-4, ¶¶ 6(b), 12(f).

Commission's "other" diversity requirement. He explained that his recommendation was that "because resources that are necessary to comply with the rule are rare and difficult to come by, we should sign this modified purchase agreement." Tr. 146. Mr. O'Connell made clear that PNM is proposing the amended Dale Burgett procurement only to meet the "other" diversity requirement. *Id.* at 173. When asked, "Absent the 'other' diversity requirement, would PNM be in favor of continuing to procure MWhs/RECs from Lightning Dock?" Mr. O'Connell answered, "I don't believe so, because as we talked about this afternoon, that is an expensive source of electricity." *Id.* at 214. PNM expects that it will not meet the "other" diversity requirement in 2018 through 2020 if the Commission does not approve the Dale Burgett procurement. *Id.* at 682 (Gutierrez).

Lightning Dock represents that the proposed amendment would allow it to make necessary technological improvements and expand the Facility to increase production to allow PNM to meet its diversity target for "other" resources in 2020. Based on Lightning Dock's representations, PNM expects the Facility's production to increase to 55,000 MWh in 2019 and 77,000 MWh in 2020. Barnard Direct at 9-10. PNM witness O'Connell said that customers would benefit from approval of the Amendment because the Amendment would increase output and reduce the price, which would help PNM to cost-effectively acquire a resource to comply with the "other" diversity requirement. O'Connell Direct at 10.

If the amended procurement is not approved, it appears that the Dale Burgett procurement would end and PNM would receive no more MWhs/RECs from Lightning Dock starting in 2018. If the amended procurement is not approved and the previous version of the Dale Burgett PPA were continued (which does not appear to be an option), PNM expects delivery of only 13,000 MWhs in each of 2018 and 2019, at a total procurement cost of $1,412,413 in 2018 and $1,451,252 in 2019. PNM Exh. 11 at pp. 5-6, row 22. Under this scenario, PNM would not meet the "other" diversity requirement in either year. *Id.* at p.1, row 16 (1.2%).

If the amended Dale Burgett procurement is approved, PNM expects delivery of (i) 13,000 MWhs in 2018 at an $89/MWh price, for a total 2018 procurement cost of $1,157,065; (ii) 55,000 MWhs in 2019 at a $91.23/MWh price, for a total 2019 procurement cost of $5,017,650; and (iii) 77,000 MWhs in 2020 at a $93.51/MWh price, for a total 2020 procurement cost of $7,200,318. Exh. SG-2 Corrected at 5-7, row 22. If the amended Dale Burgett procurement is approved and the expected MWhs/RECs are delivered, the total cost of the Dale Burgett procurement, from 2019 through 2042, in today's dollars (NPV), would be $98,210,806. PNM Exh. 15.

2. HISTORY OF LIGHTNING DOCK AND FILING OF BANKRUPTCY

Lightning Dock began providing energy and RECs to PNM in mid-2014. The Dale Burgett Facility was originally projected to generate 80,000 MWhs/RECs annually based on a 10 MW rated capacity. Reynolds Direct at 11. PNM admits that production at Dale Burgett has fallen short of projections for several years. Barnard Direct at 9. Actual generation at the Dale Burgett Facility has significantly underperformed PNM's projections in each of PNM's annual procurement plan filings. The following table compares actual plan year production from Lightning Dock with the previous year's projection:

	Plan Year Projection (MWh)	**Plan Year Actual (MWh)**	**% Actual of Projected**
2014	41,231	8,736	21%
2015	60,000	10,449	17%
2016	58,750	13,921	24%

Exh. JJR-2 to Reynolds Direct. PNM witness Barnard acknowledged that Lightning Dock is not reliable in terms of producing the projected output. Tr. 481. When all four units are running, Lightning Dock's gross and net capacities are about 4 MW and 2.8 MW, respectively. *Id.* at 294 (Goodman).

The existing Lightning Dock Plant was conceived as a two-phase project: an initial 4 MW plant (Phase 1) followed by an 8 MW expansion (Phase 2), which was never completed.

Lightning Dock entered into agreements whereby Kaishan[15] agreed to provide equipment for Phase 1. Staff Exh. 3 at 10. Phase 1 encountered multiple equipment failures over the course of its first 12 months, including five turbine failures and dozens of liquid pump failures. Nevertheless, Lightning Dock entered into another agreement whereby Kaishan agreed to provide equipment for Phase 2 along with $25 million of Phase 2 financing. Equipment failures continued, however, with Lightning Dock experiencing 11 turbine failures of Phase 1 equipment by March 2017. Lightning Dock suffered significant operating losses, substantially depleted the proceeds of the Kaishan notes and caused defaults under the minimum output provisions of the PPA. After learning that Kaishan intended to foreclose its liens and security interests, Lightning Dock, on March 14, 2017, filed a petition for bankruptcy relief.[16] In its petition, Lightning Dock alleged fraud and espionage by Kaishan. Staff Exh. 8 at 4-13. Mr. Goodman, CEO of Lightning Dock and CYRQ Energy (Lightning Dock's parent company), said that Lightning Dock filed for bankruptcy primarily to resolve its dispute with Kaishan, not financial insolvency. Tr. 264.

Before filing the petition for bankruptcy relief, Lightning Dock decided, to rectify its situation, to "repower" the plant with utility grade power generation equipment. Lightning Dock selected a repowering proposal from a Mitsubishi affiliate.

The previous version of the PPA between Lightning Dock and PNM contained a "termination upon bankruptcy provision," which gave PNM the right to terminate the PPA if Lightning Dock filed for bankruptcy. Over the course of about eight weeks leading up to its filing of the bankruptcy petition, Lightning Dock negotiated with PNM with regard to the conditions under which PNM would forbear from exercising its termination rights either as a result of a Lightning Dock bankruptcy filing or as a result of Lightning Dock's inability to satisfy the minimum output requirements of the PPA. The negotiations culminated shortly before

[15] Kaishan refers to Kaishan Holding Group Co., Ltd. together with its affiliates.
[16] Los Lobos Renewable Power, LLC, which owns 100% of the membership interests in Lightning Dock, also filed for bankruptcy.

Lightning Dock filed its bankruptcy petition and PNM's execution of Amendment No. 1 to the Amended and Restated Geothermal Power Purchase and Sale Agreement. Staff Exh. 8 at 13-15.

The Amendment says that, to address operations below projected levels, Lightning Dock desires to repower the Facility, which it will effectuate through a filing and prosecution of a case to be commenced within 10 days business days from the Execution Date under the United States Bankruptcy Code. It further says that because Lightning Dock's filing of a Chapter 11 Backruptcy petition would constitute an Event of Default under the PPA giving PNM a right to terminate the PPA, PNM and Lightning Dock have agreed to amend the PPA to reduce the price and to effectuate a limited modification of PNM's termination rights. Exh. GBB-4 at 1.

The Bankruptcy Court approved a plan that was being executed at the time of the hearing in this case. The plan incorporates a settlement between Lightning Dock and Kaishan. Lightning Dock agreed to pay Kaishan $8 million, and Kaishan agreed to terminate its contracts with Lightning Dock and remove its nonoperational equipment. Under the plan, all other creditors would be paid 100 cents on a dollar. Mr. Goodman expects that CYRQ Energy will invest up to $50 million to build a new 10 MW power plant to be provided by Mitsubishi, a manufacturer of geothermal equipment. Lightning Dock would issue a promissory note to CYRQ Energy in an amount up to $50 million at a 5% interest rate and a 10-year term. Tr. 264-68, 287-88 (Goodman); Staff Exh. 6. The cost of equipment for the new plant is $32 million. Additional costs for items such as installation, pipelines and wells are being finalized. Tr. 323 (Goodman).

Lightning Dock said, "PNM's willingness to enter into an amendment provides a limited window of opportunity to salvage the project and preserve the economic benefit it confers upon New Mexico." Staff Exh. 8 at 15. Lightning Dock does not have its own employees. Rather, operation and maintenance expenses are provided to Lightning Dock by its affiliate, Raser Technologies Operating Company (Raser Operating). As of March 14, 2017, Raser Operating employed seven full-time employees at the plant location. Staff Exh. 3 at 10.

The Amended PPA supercedes the PPA. The Bankruptcy Court has approved the Amended PPA and because of that action, if the Commission does not approve the Amended PPA, PNM will not have a contractual relationship with Lightning Dock. Additionally, if the Commission does not approve the amended procurement, PNM will have the right to terminate the Amended PPA under its terms. Tr. 14-16 (Phillips).

When asked what would happen if the Commission does not approve the amended Dale Burgett procurement, Mr. Goodman said it is not clear. He said that the Amended PPA "was a staple or lynchpin" to the bankruptcy plan, and Commission approval of the Amended PPA is incorporated into the bankruptcy plan. He believes that if the Amended PPA is terminated and Lightning Dock cannot find a buyer to replace PNM, the project will be shut down. When asked whether he considered asking PNM to seek Commission approval of the Amended PPA before Lightning Dock filed the bankruptcy petition, Mr. Goodman said, "Our understanding was that it was brought as part of their renewable energy plan. That was the proper way to bring the amendment." *Id.* at 268-69, 302, 313.

Without the repowering, Lightning Dock could continue to produce energy after Kaishan removes its nonoperational equipment from the site, but it would operate at a loss. The gross capacity would be about 4 MW. If the Commission does not approve the amended procurement, Lightning Dock would only continue operating if it is still able to build the new plant. *Id.* at 313, 335 (Goodman).

The amount of the reduction in price under the Amended PPA is not tied to the bankruptcy savings to Lightning Dock, nor to any other benchmark. PNM negotiated for a lower price and Lightning Dock agreed to the lowest price it could accept to meet its investors' requirements. *Id.* at 518 (Barnard). The reduction in price was Lightning Dock's concession "to get the opportunity to build a new plant." Mr. Goodman views the Amended PPA as "starting over." *Id.* at 270-71, 295 (Goodman). Mr. Goodman described the negotiations with PNM as difficult because Lightning Dock "didn't have a lot of credibility." *Id.* at 286.

Costs of a geothermal plant are heavily weighted toward early expenses. *Id.* at 305 (Goodman). Mr. Goodman nevertheless said that the price escalation rate in the Amended PPA is necessary for Lightning Dock to recover its costs. He said that the starting price — $89/MWh — is well below Lightning Dock's ability to recover its costs. He also said that the price escalation rate mirrors the price escalation in costs for labor, materials, insurance and royalties, which he said escalate from 1% to 4% or 5% annually. Mr. Goodman said that if the price escalation rate were eliminated from the Amended PPA, "we would need to make an adjustment somewhere else in the pricing." *Id.* at 305-06.

CYRQ Energy operates four other geothermal plants which sell energy under PPAs. Its plant in Utah sells energy into Southern California at about $105/MWh, and the PPA has a price escalation rate of 2.5% or 2.75%. A newer plant in Nevada sells energy into Sacramento at about $100/MWh, and the PPA also has a price escalation rate. Two older plants in Nevada sell energy to NV Energy under a 30-year PPA with a price de-escalation rate. The current rate is $65/MWh. That 30-year PPA is ending and CYRQ Energy is seeking regulatory approval in Utah of a new PPA at an average price of about $104/MW and with a price escalation rate. *Id.* at 275-76, 300-01 (Goodman).

3. *Staff's Position*

Staff believes that PNM did not adequately disclose to the Commission the problems with the Dale Burgett procurement. *Id.* at 881 (Reynolds). Mr. Reynolds said that PNM should have disclosed to the Commission that Lightning Dock had filed bankruptcy and that PNM had the opportunity to terminate the PPA. *Id.* at 885 (Reynolds). As Mr. Reynolds pointed out, in the text of its prefiled direct testimonies seeking approval of the amended Dale Burgett procurement, PNM did not mention that Lightning Dock had filed for bankruptcy. It was necessary to look at the Amended PPA, attached as an exhibit to Mr. Barnard's testimony, to get that information, *id.* at 885-86, and it was Staff witness Reynolds who brought the bankruptcy to the Commission's attention in his Direct Testimony.

Staff opposes PNM's request for approval of the amended Dale Burgett procurement given the circumstances that led to it — Lightning Dock's imminent filing of a bankruptcy petition — and because the potential near-term benefits are uncertain and insufficient to offset the risk of extending the term by over eight years. Mr. Reynolds said that the Amendment shifts risk from Lightning Dock to PNM because of Lightning Dock's inability to perform at the level required by the original PPA. Additionally, Staff opposes approval of the Amendment because PNM did not provide an analysis to support "the significant risk of the additional purchase from 2034 to 2042 from a seller in the midst of a bankruptcy filing." If the Commission approves the amended procurement, Staff recommends that the Commission order an inquiry into PNM's actions with respect to its oversight of Dale Burgett and whether PNM exercised appropriate due diligence to ensure performance by Lightning Dock. Reynolds Direct at 15-16.

If the Commission does not approve the amended procurement, Staff does not recommend that the Commission order PNM to terminate its procurement with Lightning Dock. Staff believes that Lightning Dock and PNM should both "live up to their deal" and that the previous version of the Amended PPA should continue through 2033. Tr. 882-84 (Reynolds). However, Staff says that whether to terminate the procurement should be decided by PNM management. *Id.* at 902. Staff acknowledges that if PNM has the opportunity to end the Lightning Dock procurement, "it would be the best deal for PNM to get out of the PPA" and "[t]hat would be a better deal for ratepayers." *Id.* at 884 (Reynolds).

Staff's recommendation, however, does not appear to be a viable option. Mr. O'Connell testified that if the Commission does not approve the amended procurement from Lightning Dock, "PNM's reasonable course of action" would be to terminate the PPA, Tr. 213, and that "PNM should terminate the PPA," *id.* at 149-50.

4. ABCWUA's Position

ABCWUA initially supported denial of the amended Dale Burgett procurement primarily because of concerns related to Lightning Dock's bankruptcy filing, the underperformance of the

Facility and the *de minimus* impact of not approving the procurement on PNM's compliance with the RPS. However, based on Mr. Goodman's oral testimony, ABCWUA now supports the amended procurement. Mr. Goodman allayed ABCWUA's concerns about Lightning Dock's financial stability and the underperformance of the Facility. Additionally, ABCWUA cites to testimony that if the Dale Burgett repowering is successful, it could lead to development of other geothermal projects in New Mexico. ABCWUA's Initial Posthearing Brief at 3.

5. WRA/CCAE's Position

WRA and CCAE support approval of the amended Dale Burgett procurement. They argue that approval would "simply" enable production of geothermal power at levels originally approved by the Commission at a lower price. WRA/CCAE's Initial Posthearing Brief at 12. They say that the REA was enacted to drive development of new technologies that from a pure cost standpoint might not otherwise be developed. They say that the Commission, in keeping with the "other" diversity requirement, "directed that projects like Lightning Dock should be developed." *Id.* at 13-14.

6. NMIEC's Position

NMIEC recommends "that the Commission give serious consideration to approving the amendment to the Dale Burgett geothermal PPA rather than simply granting PNM a variance to the diversity requirement." NMIEC's Initial Posthearing Brief at 16. NMIEC says that if the Commission determines that a variance from the "other" diversity requirement is not appropriate, the Dale Burgett procurement "presents a unique opportunity to develop an alternate renewable technology that has base load type capacity that other renewable resources lack." *Id.* at 15. NMIEC, like ABCWUA, says that its concerns regarding the viability of the Facility were allayed by Mr. Goodman. *Id.*

7. PNM's Response

PNM admits that it possessed the contractual right to terminate the PPA when Lightning Dock filed bankruptcy, but says that it "believed that to act on that contractual right to terminate

the remaining 15 years of the Commission-approved PPA would not have been in the best interests of its customers or in the public interest[,]" for four reasons. PNM's Initial Posthearing Brief at 9. First, PNM says that it is required by law to obtain 5% of its renewable power from "other" renewable energy resources. *Id.* at 10. Second, PNM says that there was no benefit to terminating the PPA because "no additional financial risk or liability would be assumed with Amendment No. 1." *Id.* PNM argues that approving the amended Dale Burgett procurement would not shift risk to PNM's customers because PNM would only pay for energy produced by the Facility. PNM says that the only risk to customers from nonperformance is that they would pay for the cost of any "make-up" RECs that PNM might have to procure to meet the RPS. PNM says that this risk is mitigated by PNM's request of a not-to-exceed price for make-up RECs. O'Connell Rebuttal at 10. Third, PNM says that it took advantage of Lightning Dock's filing of bankruptcy to lower the procurement price. PNM's Initial Posthearing Brief at 11. Fourth, PNM says that the Dale Burgett procurement has already been approved and no alternative resources were available to PNM to meet the "other" diversity requirement. *Id.* at 12.

8. *ANALYSIS/HEARING EXAMINER'S RECOMMENDATION*

Mr. Goodman was credible and knowledgeable and was confident that repowering would lead to the Dale Burgett Facility producing the projected energy. His testimony lessened concerns about the viability of the repowering in light of the Facility's poor track record. Nevertheless, for several reasons, the amended Dale Burgett procurement should be rejected and PNM should terminate its procurement of any MWhs/RECs from Lightning Dock.[17]

First, PNM did not consider alternatives to the Dale Burgett repowering. PNM is required to "determine all commercially available resources . . . available, either by ownership or contract, for the procurement plan year that will satisfy the RPS *and diversity requirements*."

[17] WRA/CCAE's argument that the Commission cannot order PNM to terminate its Dale Burgett procurement, *see* WRA/CCAE's Posthearing Response Brief at 3 n.1, lacks merit. PNM's request for approval of the amended procurement put the entire procurement at issue because PNM's counsel said that if the amended procurement is not approved, there is no "existing" PPA in place; rather, PNM would have no contractual relationship with Lightning Dock. Tr. 15.

17.9.572.13(B) NMAC (emphasis added). And, of these resources identified, PNM "shall use the net present value methodology to identify the most effective additional or new renewable resource(s) necessary and available to satisfy *both the annual renewable portfolio standard and the diversity requirements.*" *Id.*, 17.9.572.13(B) (emphasis added). Rule 572.13(C) does not require a selected resource needed to meet a diversity requirement to be the most effective option available. However, PNM witness Barnard said that when PNM procures a resource, the cost of which will be recovered through rates, PNM has a duty to negotiate the lowest reasonable cost and to select the most cost-effective alternative among comparable alternatives. Tr. 487-88. Regardless of whether the Dale Burgett amended procurement is the most cost effective option available, PNM did not consider alternatives as required. PNM received a bid for a geothermal facility in response to its 2016 RFP. Mr. O'Connell described that geothermal bid as "credible" with a "reasonable counterparty." However, that bid was not pursued because PNM already had the Lightning Dock geothermal procurement, and Mr. O'Connell believed it was "better to maintain the resource we have than to take a risk on another resource that may or may not be any better than the resource we have." *Id.* at 147. All things being equal, that reasoning might justify PNM's decision. However, the Commission does not know whether all things were otherwise equal between the two proposals. No specifics about the 2016 bid were moved into evidence: no evidence describes the project or identifies the price of that bid, the term of the PPA or whether the PPA had a price escalation clause. Moreover, the Lightning Dock procurement had a poor track record. Its status as an existing procurement did not relieve PNM of its obligation to consider alternatives when the opportunity arose for PNM to terminate the procurement. PNM has an obligation to use due diligence when it spends ratepayers' money. The Commission's previous approval of the Dale Burgett procurement does not mean that the procurement should be continued when the opportunity for reconsideration of alternatives became available.

The absence of geothermal bids in response to the 2017 RFP, issued March 3, 2017, does not excuse PNM's failure to consider alternatives. The 2017 RFP process did not give PPA bidders a fair opportunity to participate and compete. *See* § IX(C)(9). Additionally, geothermal developers might have decided not to bid, knowing that PNM had a geothermal resource in its portfolio. PNM witness Barnard repeatedly said that project developers keep abreast of the RPS requirements and PNM's needs for renewable energy resources. Had PNM disclosed Lightning Dock's predicament to the Commission in early to mid-2017 and had it become known publicly that PNM had the opportunity to terminate that procurement, other geothermal developers might have bid. Contrary to PNM's assertion, *see* PNM's Posthearing Response Brief at 6, disapproving the amended Dale Burgett procurement will send a message to developers that the Commission encourages bids from all developers for "other" renewable energy resources.

Second, contrary to PNM's assertion, approval of the amended procurement would impose a risk on ratepayers. Because of the price escalation clause in the Amended PPA, PNM customers would assume the risk of price decreases. Tr. 185 (O'Connell). If the price of geothermal energy decreases, customers will not get that benefit because PNM is tied in for an additional 8 years and 2 ½ months beyond the term of the previous version of the PPA. PNM says that this risk is addressed by the RCT, and that it is unlikely that the Dale Burgett procurement would ever cause PNM to exceed the RCT because of the relatively small size of that procurement. O'Connell Rebuttal at 11; Tr. 217 (O'Connell). The RCT, however, is a customer protection mechanism from the total cost of renewable energy procured to meet the RPS. The fact that PNM's total procurements would still be less than the RCT does not justify procuring a single renewable energy resource at any cost.

Third, the high cost of the procurement is not justified by the "other" diversity requirement. Mr. Reynolds is correct that the REA does not require a diversified renewable energy portfolio at any cost. Rather, the REA says that a renewable portfolio:

> Shall be diversified as to the type of renewable energy resource, *taking into consideration* the overall reliability, availability, dispatch flexibility and cost of the various renewable energy resources made available by suppliers and generators[.]

NMSA 1978, § 62-16-4(A)(4) (emphasis added). Consistent with the REA, Commission Rule 572 allows a utility to seek a variance from its diversity requirements. 17.9.572.21 NMAC.

PNM witness O'Connell agreed that even the $89/MWh 2018 price under the Amended PPA is "pretty high." Tr. 152. If that 2018 price is already "pretty high," the 2042 price of $160.98/MWh, which is 81% higher, is excessively high and an unreasonable and unwarranted cost to be paid for by PNM's ratepayers. While the 2018 price may fall within the price of geothermal facilities in the western United States, the price in 2042 well exceeds the current going price. The Amended PPA does not share a typical advantage of PPAs, which is that fixed and variable costs do not increase as use increases, which provides a degree of cost stability. Case No. 08-00305-UT, Certification of Stipulation 49 (3-9-09), adopted by Final Order Approving Certification of Stipulation (5-26-09). The Commission's approval of a previous version of the Dale Burgett PPA with an even higher price — $163.20 — in the final year of its term, PNM's Posthearing Response Brief at 4, does not preclude the Commission's reconsideration of the reasonableness of the price of the procurement under the current and new circumstances.

As Staff aptly observed, "PNM's commitment to this project is baffling. Any meaningful analysis by PNM of the increased risk of a longer term PPA with a financially distressed seller is absent." Staff's Initial Posthearing Brief at 7. "Enough is enough." *Id.* at 8.

C. AFFORDABLE SOLAR PROJECT

1. *DESCRIPTION OF PROJECT*

PNM seeks approval to procure 50 megawatts (MW) of single axis photovoltaic generating facilities to be installed in 2018 and 2019 by Affordable Solar, Inc. at five sites in PNM's service territory (Affordable Solar Project). PNM projects that the Project would be completed between April and December 2019 with each 10 MW mini-project being completed at

two month intervals. The Project is a "turnkey" project, meaning that the contractor (Affordable Solar) would construct the facilities and transfer ownership to PNM on the commercial in-service date. The levelized bid cost is $44.63/MWh. The total capital cost of the Facility is $72,861,898, at an installed cost of $1,457/kW. The second highest scoring turnkey bid produced a levelized cost of $46.80/MWh. Barnard Direct at 2-4; Pitts Direct at 16. The following table shows the per kW installed cost of the Affordable Solar Project compared to PNM's other solar facilities:

Size (MW)	Year Built	Installed Cost ($/kW)
22	2011	$3,991
20	2013	$2,250
23	2014	$2,031
40	2015	$2,018
50	2019	$1,457

Barnard Direct at 6.

The RPS increases from 15% to 20% in 2020, and PNM says that it will need additional MWhs/RECs of renewable energy to meet its projected 2020 RPS requirement. PNM proposes the 50 MW solar project to partially meet the increased RPS requirement. PNM expects that the project would produce 140,000 MWhs/RECs in 2020, its first full year of operation. PNM estimates the annual procurement cost of the project to be $8.7 million in 2020. Gutierrez Direct at 8-9.

2. CCN REQUIREMENT

Because PNM proposes to procure the 50 MW of solar facilities to comply with the Renewable Energy Act (REA), PNM believes that it is not necessary for the Commission to grant a certificate of public convenience and necessity (CCN) for the new construction. However, PNM acknowledges that the Commission has issued CCNs for resources procured to comply with the REA, and PNM asserts that its prefiled testimonies and exhibits support granting a CCN if required. Application at 4.

A CCN is required before a utility may begin construction or operation of utility-owned plant proposed for compliance with the RPS. Case No. 10-00037-UT, Final Order Partially Adopting Recommended Decision at 24-26, ¶¶ 59-64 (8-31-10); Case No. 12-00131-UT, Recommended Decision at 33 (11-7-12), adopted by Final Order (12-11-12); Case No. 13-00183-UT, Recommended Decision at 42 (11-18-13), adopted by Final Order (12-18-13). However, the standard for approval differs in part from cases in which a utility does not propose a project for compliance with the RPS. In cases in which a utility requests a CCN for generation not to be used toward compliance with the RPS, the "public convenience and necessity" standard requires a utility to show that it needs the additional capacity to be provided by the proposed plant. *E.g.*, Case No. 11-00313-UT, Certification of Stipulation at 11-14, 19 (1-3-12), adopted by Final Order Approving Certification of Stipulation (2-7-12); Case No. 2717, Final Order at 5-8, 10-11 (3-5-97). However, in cases in which a utility requests a CCN for generation to be used to comply with the RPS, the "public convenience and necessity" standard does not require a utility to show that it needs the capacity; rather, the utility must show that adding the generation will enable the utility to comply with the RPS. Case No. 10-00037-UT, Final Order Partially Adopting Recommended Decision at 25, ¶ 63.

The generally-stated burden of proof in a CCN case is to show by a preponderance of the evidence that granting a CCN results in a net benefit to the public. Case No. 13-00390-UT, Final Order at 4, ¶ 6 (12-16-15). Additionally, a utility must show that the resource it proposes is the most cost effective among feasible alternatives. Case No. 15-00205-UT, Order Partially Granting PNM Motion to Vacate and Addressing Joint Motion to Dismiss at 10-11 (12-22-15). A reasonable utility must consider alternatives before going forward with a project, and a new resource will not be approved if a better alternative is available. Case No. 15-00261-UT, Corrected Recommended Decision at 96 (8-15-16), adopted in relevant part by Final Order Partially Adopting Corrected Recommended Decision (9-28-16). In Case No. 2382, the PRC rejected PNM's request for a CCN for the Ojo Line Extension because "PNM's alternatives

analysis [was] not sufficiently reliable to determine whether OLE is in fact the best alternative among those presented by PNM." Recommended Decision at 98 (7-5-95), adopted by Final Order (11-20-95). The PRC said, "Thus even assuming a need on the transmission system for the sake of argument, the Commission remains unconvinced that the public convenience and necessity require or will require the OLE Project as the proper response to such a need." *Id.* at 102. The Commission recognized that it has authority to examine alternatives to needs identified by a utility, that there may be various solutions for such needs, and that it would not be in the public interest for the PRC to grant a CCN for a proposed project that might meet needs but is the worst among a range of alternatives. *Id.* at 49.

In cases in which a utility requests a CCN for renewable energy generation to be used to comply with the RPS, the proposed renewable energy resource need not be the least expensive *when compared with non-renewable energy resources*. This is because, in adopting the REA, the Legislature clearly understood that renewable energy resources might be more expensive than traditional energy resources. Case No. 10-00037-UT, Final Order Partially Adopting Recommended Decision at 21, ¶ 50. However, a utility must demonstrate that, *among comparable renewable energy resources*, the proposed project is the most cost effective. *Id.* at 23, ¶ 57 ("We reserve for future decision in an appropriate case whether to approve any similar PNM-owned utility sited solar program, provided, of course, that PNM demonstrates that its proposed price is the lowest reasonable cost."); Case No. 12-00131-UT, Recommended Decision at 35 (11-15-12) (evidence showed that PNM selected PNM-owned solar facilities pursuant to reasonable RFP process that identified this resource as the lowest reasonable cost solar resource that would enable PNM to meet solar diversity requirement and contribute toward meeting the RPS), adopted by Final Order (12-11-12).

Although there is no Commission requirement that an analysis of alternatives to support a CCN be accomplished through an RFP, the use of RFPs is becoming a reasonable practice to

ensure compliance with the requirement to consider alternatives. Case No. 15-00205-UT, Order Partially Granting PNM Motion to Vacate and Addressing Joint Motion to Dismiss at 11.

3. *THE 2017 RFP*

The Affordable Solar Project was proposed in response to PNM's Request for Proposals for Renewable Energy Resources (2017 RFP), issued on March 3, 2017. The RFP requested bids for renewable energy of any type of qualifying renewable resource and associated renewable energy certificates from purchased power agreements (PPAs), turnkey projects and asset purchases. Barnard Direct at 4. The RFP sought renewable energy and RECs totaling about 145,000 MWhs annually (about the AC output of 50 MW with a 33% capacity factor) although PNM reserved the right to vary the amount purchased in about 10 MW blocks. Exh. GBB-2 at 4 of 28, to Barnard Direct. PPA proposals were restricted to offers for renewable energy from a generating unit "located in or with capability to deliver to PNM's system in either southern or northern New Mexico." *Id.* at 6 of 28.

Before issuing the RFP, PNM obtained site control for six locations suitable for installation of solar facilities up to 10 MW_{AC} to be interconnected to PNM's system. PNM began identifying and acquiring these sites in 2010. Exh. NGM-2 at 9, to Muller Direct. The RFP allowed turnkey proposals to be sited at these "PNM-Designated Sites," but not PPA proposals. PNM predetermined transmission costs related to the PNM-Designated Sites, which it used when evaluating turnkey proposals sited at PNM-Designated Sites. Before issuing the RFP, PNM submitted applications for interconnection of solar facilities at those sites under the Small Generator Interconnection Procedures of the PNM Open Access Transmission Tariff. PNM had received either completed interconnection studies or had developed interconnection estimates for all PNM-Designated Sites. For proposals not using a PNM-Designated Site, expected transmission interconnection was the financial and logistical responsibility of the bidder, and the bidder was required to identify costs of system upgrades and interconnection and the

schedule for transmission service procurement. Exh. GBB-2 at 10 of 28; Exh. NGM-2 at 11, to Muller Direct.

Responses to the RFP were due within 31 days of issuance of the RFP, or April 3, 2017. Barnard Direct at 4. PNM required responses within 31 days so that it could prepare its Application in this case, which was due on June 1, 2017. Exh. NGM-2 at 13, to Muller Direct.

PNM received proposals for solar energy resources from six bidders. PNM received no bids for wind or biomass generation. Four of the six bidders offered multiple turnkey proposals and two bidders offered PPAs. PNM witness Gary Barnard said that neither PPA proposal satisfied the RFP requirements in part because neither had a completed interconnection agreement. "Due to the uncertainty as to whether, and at what cost, either of these projects could actually be constructed and the energy delivered to PNM customers, the PPA bids did not score highly in the evaluation." Barnard Direct at 4-5. Mr. Barnard said that without the transmission cost information, it was not possible to calculate a levelized cost of the PPA bids. NEE Exh. 11 at 15.

PNM says that as a result of the 2017 RFP, the Affordable Solar Project is PNM's most cost effective option among feasible resources for a solar procurement. Tr. 66-68 (O'Connell).

4. NEW ENERGY ECONOMY'S OBJECTION

NEE argues that PNM's request for approval to construct and procure 50 MW of new solar facilities should be denied because PNM has failed to provide direct testimony and evidence satisfying its burden of proving that the cost of the Affordable Solar Project is reasonable or that it is the most cost-effective option among all feasible resource alternatives available to satisfy PNM's claimed 2020 RPS need. A premise of NEE's Motion is that the provision in the RFP that precludes PPA proposals from using PNM-Designated Sites is unreasonably exclusionary and anticompetitive, rendering the results of the RFP process unusable for the purpose of showing that PNM identified and evaluated alternatives.

NEE witness Muller said that the RFP provision that precluded PPA proposals from using PNM-Designated Sites effectively limited competition to turnkey proposals for PNM-owned resources and made it impossible for the Commission to know the long-term costs and potential benefits of PPA proposals for the PNM-Designated Sites or to know whether PNM's proposed turnkey project is the most cost-effective option currently available to PNM among feasible alternatives to meet the 2020 RPS requirement. Muller Direct 7. Mr. Muller said that his conclusions are confirmed by PNM's receipt of only two non-conforming PPA bids in response to the 2017 RFP. Mr. Muller compared the number of bids received by PNM in response to its 2017 RFP (six) with the number of bids received by PNM in response to a 2016 RFP renewables RFP (31). *Id.* at 7-8.

According to Mr. Muller, the industry standard for the amount of time between issuance of an RFP and the deadline for responses, is about 90 days. He said that the 31-day period in the 2017 RFP was "so limiting, and coming right on top of the 2016 RFP where no bids were accepted, that a normal IPP bidder would go, 'This isn't serious. It's a rigged bid.'" Tr. 569. He said that allowing even 60 days rather than 90 days could have encouraged bidders to believe the RFP wasn't rigged. *Id.* He said that 60 days "would be livable for IPPs[.]" *Id.* at 570. By using the term "rigged bid," Mr. Muller meant that "the bid was designed to get ownership of the new generation over into PNM." *Id.* at 588.

Mr. Muller also said that the provision in the RFP that requires PPA bidders to have a transmission agreement with a transmission provider, an interconnection agreement and a completed or near complete large generation interconnection study by the 31-day deadline for submission of proposals unreasonably discriminates against PPA proposals for two reasons. First, he said that it takes more than 31 days, from the time of issuance of an RFP, to complete an interconnection agreement. In fact, PNM witness Barnard said that the LGIA interconnection process can take two years or more. Mr. Muller also said that it would be illogical for an Independent Power Producer (IPP) to submit an application for an

interconnection agreement before the utility has expressed interest in a project. Second, Mr. Muller said that PNM's predetermination of transmission costs for the PNM-Designated Sites gave bidders offering turnkey proposals an advantage over bidders offering PPAs. Muller Direct at 7, 18. Mr. Muller compared the 31-day deadline for responses in the 2017 RFP to the response deadlines in PNM's last two (2013 and 2016) renewables RFPs (54 days and 43 days, respectively) and its most recent (2014) RFP for a non-renewable (80 MW gas peaker) resource (48 days). *Id.* at 22.

Fifty-eight bidders responded to PNM's 2013 RFP; 31 bids were for solar. Tr. 86 (O'Connell); NEE Exh. 1. Thirty-one bidders responded to PNM's 2016 RFP: Twenty-one of those bids were for solar projects. Twelve of the bids were for turnkey projects; nine were for PPAs. The levelized bid cost of each solar PPA bid was less than the lowest levelized bid cost among the turnkey proposals: the levelized cost of the solar PPA bids ranged from $41.63/MWh to $58.05/MWh; the levelized cost of the solar turnkey bids ranged from $62.40/MWh to $79.67/MWh. NEE Exh. 4. PNM did not seek approval to procure any resources bid in response to the 2016 RFP. Tr. 93 (O'Connell).

Like the 2017 RFP, both the 2013 and 2016 RFPs contained provisions that allowed turnkey bidders, but did not allow PPA bidders, to use PNM-Designated Sites. Tr. 93 (O'Connell); NEE Exh. 11 at 21. When asked his opinion on why, then, the 2016 RFP yielded so many more PPA bids than the 2017 RFP, Mr. Muller said that, at the time that the 2016 RFP was issued, "there hadn't been a poke in the eye" from PNM not having accepted any bids from a previous RFP. He surmised that developers were discouraged from submitting bids in response to the 2017 RFP in light of PNM not having accepted any bids from the 2016 RFP and the shortened response time in the 2017 RFP. Mr. Muller concluded, "I've been in the IPP development business for a lot of years. That's how I would see it." Tr. 607-08.

Mr. Muller concluded that PNM failed to meet its burden of proof to show that 50 MW proposal with Affordable Solar is its most economical choice because there is no evidence that

PNM adequately considered other proposals except turnkey proposals using PNM-Designated Sites. Muller Direct at 19, 21. NEE recommends that the Commission order PNM to conduct a reasonable and timely RFP and bid evaluation process that does not include unreasonably exclusionary or anti-competitive provisions or practices. *Id.* at 13, 40. Mr. Muller said that allowing 60 to 90 days to submit a bid in response to an RFP and eliminating the provision that allows turnkey bidders, but not PPA bidders, to use PNM Designated Sites, would be "a pretty good indicator" that the RFP process is fair and open. Mr. Muller recommends that the Commission order an independent evaluator to be involved in the RFP process, but did not say that an independent evaluator is necessary for the process to be fair and open. Tr. 599, 612-13 (Muller).

Mr. Muller identified four possible RFP options:

1. PNM offers its sites to IPP bidders and is reimbursed for all development costs by an IPP; the IPP owns the site and sells power to PNM under a PPA;

2. Build-own-transfer, as is proposed for the Affordable Solar Project;

3. PNM offers its sites to IPP bidders and is reimbursed for all development costs by an IPP; the IPP sells power to PNM under a PPA and PNM maintains ownership of the site (the IPP leases the land from PNM);

4. IPPs develop PPAs on their own sites.

NEE's Initial Posthearing Brief at 5-6.

5. STAFF'S POSITION

Staff opposes approval of the Affordable Solar Project at this time. Dr. Pitts is not convinced that a PNM-owned solar facility is necessary at this time or that the Affordable Solar Project is PNM's most economically viable option. Dr. Pitts testified that "not enough information was provided in the application for a thorough analysis of why a PNM-owned solar project would be a lower cost resource than entering into a PPA contract for any additional renewable energy generation needed in 2020." Pitts Direct at 5; Tr. 937. Staff does not

recommend disapproval of the Affordable Solar Project, but that the Commission withhold approval pending the results of a revised 2018 Plan. Staff's Initial Posthearing Brief at 4, 17. To the extent that Staff recommends that the Commission reject PNM's 2018 Plan, *see id.* at 5, the Commission cannot reject a renewable energy procurement plan unless it is incomplete. NMSA 1978, § 62-16-5(F). If the Commission disagrees with a utility's proposed plan, the Commission's course of action is to modify the plan. *Id.*, § 62-16-5(E); Case No. 10-00037-UT, Recommended Decision at 48.

6. WRA AND CCAE'S POSITION

WRA and CCAE support approval of the Affordable Solar Project. Effross Rebuttal at 2-3, 8; WRA/CCAE's Initial Posthearing Brief at 3. WRA witness David Effross expressed no opinion on whether PNM met its burden to show that the proposed Affordable Solar Project is the most beneficial and cost-effective project among available alternatives. Tr. 248. However, he said that if the Commission determines in the future that PNM did not meet this burden, PNM should not be required to issue a revised RFP, but that the Commission consider a cost disallowance. Issuing a revised RFP, he said, "would simply delay a good, beneficial project for an uncertain outcome." Effross Rebuttal at 6. Mr. Effross expressed doubt that the Commission could ensure a truly fair RFP process because "[u]tilities can be very creative in finding ways to do what they want[.]" He said that the better approach is to provide financial incentives for the behavior sought. *Id.* at 6-7.

WRA and CCAE argue that the 2017 RFP process was fair and that PNM's selection of Affordable Solar was the most economic choice among feasible alternatives. WRA/CCAE's Initial Posthearing Brief at 5-7. WRA and CCAE do not believe that "that PNM is required to provide a site to potential renewable energy developers." *Id.* at 8.

7. ABCWUA'S POSITION

ABCWUA supports NEE's and Staff's positions and recommends that the Commission reject the Affordable Solar Project. ABCWUA agrees with Staff that (i) PNM may have failed to

sufficiently explore a PPA option for solar resources; and that (ii) a solar procurement does not have to be approved in this case. ABCWUA also agrees with NEE "that PNM intentionally restricted its RFP so as to eliminate a PPA option for additional resources." ABCWUA's Initial Posthearing Brief at 8-9.

8. *PNM'S RESPONSE TO OBJECTIONS*

Mr. O'Connell said that a PPA bidder must have a "developed project that could be bid in when PNM does open its RFP windows, and that has happened in the past." Tr. 204. To do that, a developer must be aware of the RPS requirements and where each investor-owned utility stands with respect to meeting the RPS. *Id.* at 206. Mr. O'Connell said that, if a PPA bidder does not have "a project on the shelf,[18]" allowing 90 days to submit bids after an RFP is issued would still be insufficient time for PPA bidders "to get firm information on their transmission costs," so PPA developers will still have to develop projects before an RFP is issued. Therefore, he said, extending the time to submit bids to 90 days would be adding unnecessary time to the RFP process. *Id.* at 104, 202.

Mr. Barnard testified that developers routinely develop solar projects before an RFP is issued, as evidenced by the large number of speculative solar projects in PNM's OASIS queue. The OASIS queue is a website where PNM posts pending interconnection requests to its transmission system. In the past year, interconnection requests for 437.5 MW of solar energy were filed. Barnard Rebuttal at 7-8.

In his Direct Testimony, Mr. Barnard indicated that to meet the 2017 RFP requirements, a PPA bidder had to have a completed interconnection agreement. Barnard Direct at 5. An interconnection agreement is an agreement between the developer and PNM for PNM to interconnect the developer's project to PNM's transmission or distribution system. Developers

[18] "On the shelf" means that a project has been developed sufficiently to allow the developer to supply credible information in a bid of the cost and likelihood of success of a project. Tr. 220-21 (O'Connell).

begin the process to obtain an interconnection agreement by applying to PNM for a transmission or distribution study. To apply for such a study, a developer must have information such as location, a technology, site control and schedule. Barnard Rebuttal at 8; Tr. 201-02. (O'Connell). For a project 10 MW or less in size, the time between applying for a study and obtaining an interconnection agreement is 10 to 12 months. For larger projects, the time can be two or more years. Tr. 397 (Barnard); Barnard Rebuttal at 4. If a developer and PNM execute an interconnection agreement, PNM constructs the interconnection facilities. The cost of interconnection is part of a bid price. Tr. 520-21 (Barnard).

In his Rebuttal Testimony, Mr. Barnard testified that his previous statement that the 2017 RFP required a completed interconnection agreement from a PPA bidder was "incomplete" because it did not recognize that that there are other ways that a bidder might provide evidence of "a feasible transmission path and price certainty." Barnard Rebuttal at 5. A bidder must be willing to guarantee its bid price. Tr. 428 (Barnard).

When asked whether, in light of the amount time required for an interconnection study or agreement, 90 days is even enough time for a PPA bidder to submit a complete response to an RFP if that developer does not have a project "on the shelf," Mr. Muller said, "It might be." He said that if he were an IPP in that situation and he knew other IPPs in New Mexico, he would immediately ask them, "What are the most strategic locations?" He said that in 90 days, an IPP might be able to obtain industry information that would allow it to submit a bid and lock in a price. However, with his experience he said he would already have a project in mind and "gotten into the queue." Tr. 609-10.

PNM witness Barnard said that "it's not feasible" for PNM to offer PNM-Designated Sites to IPPs. Tr. 350. He said that issues arising from having a PPA provider on a PNM-controlled site prevented PNM from offering PNM-Designated Sites to IPPs. One such issue is who is responsible for removing the IPP's equipment from the site if the IPP declares bankruptcy. Another such issue is who is responsible for any environmental cleanup required on the site.

Barnard Rebuttal at 14-15; Tr. 380. Mr. Barnard acknowledged that issues arising from having a PPA provider on a PNM-owned site could be mitigated through appropriate contract provisions and by selling the site to the PPA. Barnard Rebuttal at 15; Tr. 469.

PNM witness O'Connell said that if the provision in the RFP that only allows turnkey bids to use PNM-Designated Sites is found unacceptable, then "[t]he result of that rejection would be PNM would not provide sites in future RFPs," Tr. 102, and would not continue to develop sites, *id.* at 207. He did not know whether PNM would continue to make sites available to its affiliates. *Id.* at 208.

Mr. Barnard said that PNM would not pursue PNM-Designated Sites if PNM does not receive a return on the sites because it only makes sense to do so if PNM can earn a return. *Id.* at 395, 402-03, 407. If the Affordable Solar Project is approved, PNM would seek to recover through rates a total return on rate base for the land over 30 years of $6.94 million, or $231,000 annually. *Id.* at 410 (Barnard); NEE Exh. 11 at 28.

According to Mr. O'Connell, the result of not offering PNM-Designated Sites to turnkey bidders is that the RFP process would favor large developers because the RFP process might be too costly for smaller developers. Tr. 101-02, 105-06. He explained, "The larger firm has more capacity to spend money on site development costs." *Id.* at 106.

9. *Analysis/Hearing Examiner's Recommendation*

PNM *has not shown* that the Affordable Solar Project is the most cost effective renewable solar resource procurement among available alternatives, and PNM *cannot show* that the Affordable Solar Project is the most cost effective renewable solar resource procurement among available alternatives because the 2017 RFP process did not give PPA bidders a fair opportunity to participate and compete. ABCWUA's Posthearing Response Brief at 1 ("PNM's RFP was not adequate to provide a fair opportunity to PPA providers.").

Allowing bidders only 31 days to submit a response following issuance of the RFP was insufficient. It would be difficult, and possibly not desirable, to establish a minimum number of

days to respond to an RFP. The evidence showed a wide range of response times among utility RFPs. Nevertheless, it can be said that given the amount of information required to be submitted in response to the 2017 RFP by a bidder not using a PNM-Designated Site, 31 days was not enough time. Over the years 2012-2017, PNM has cut by more than one-half the number of days allowed for bidders to respond to RFPs. NEE's Initial Posthearing Brief at 18.

The provision in the RFP allowing turnkey bidders, but not PPA bidders, to use PNM-Designated Sites was unfair and uncompetitive. It gave turnkey bidders an unfair advantage because they did not need to submit interconnection and distribution or transmission cost information, which can take months or years to establish with the certainty required by PNM.

Against the background of PNM not having sought approval of any of the 31 bids received in response to its 2016 RFP, PPA developers could have viewed the 2017 RFP process as designed to select a bid that would result in PNM ownership of the project. In fact, Mr. Muller said, "I've been in the IPP development business for a lot of years. That's how I would see it." Tr. 607-08. Added to this background is the fact that all of PNM's utility-scale solar resources are either PNM-owned or will be owned by a PNM affiliate. Tr. 60-61 (O'Connell).

Assuming that a utility expects cost of service rate recovery for utility-owned generation, there is an economic incentive to select such projects because they would provide a return to shareholders. *Rulemaking to Address an Emissions Reduction et al.*, No. 13-06023, 2014 WL 4961197, at *4 (Nev. P.U.C. 9-30-14). In PNM's most recently completed rate case, the Commission found that it could not ignore "the apparent role of PNM's self-interest in expanding rate base to benefit shareholders . . . in its decision to move forward on the PV leases without due consideration of alternatives." Case No. 15-00261-UT, Final Order Partially Adopting Corrected Recommended Decision at 38, ¶ 117 (9-28-16). PNM admitted in this case that if PNM or a PNM affiliate owns a resource, the resource is a source of revenue for PNM or the affiliate. If PNM owns the resource, the resource increases rate base, upon which PNM has an opportunity to earn a return, and earnings translate into shareholder dividends. Tr. 61-65

(O'Connell). Rate base growth results in earnings growth, which results in dividend growth. NEE Exh. 6. In the utility resource procurement process a bias exists that favors utility ownership of generation assets over PPAs with third parties. *In re Investigation of Competitive Bidding*, Docket No. UM 1182, 2014 WL 1826055, at *1 (Or. PUC 4-30-14). Therefore, procurements that include utility self-build proposals inevitably pose special regulatory challenges to ensure that the process is designed and implemented to be fair and objective. If PNM were to receive cost of service rate recovery for the site of the Affordable Solar Project, PNM projects the annual revenue requirement associated with the "land" cost component of the Project to be $368,822. Exh. NGM-2, p.28, to Muller Direct.

There is no legal requirement that precluded PNM from including the provision in the RFP that allowed turnkey bidders, but prevented PPA bidders, from using PNM-Designated Sites. However, the existence of that provision is relevant to determining whether PNM has met its burden. PNM provided no reasonable justification for the provision. Muller Direct at 26-31.

PNM's assertion that "it is not feasible" for PNM to offer PNM-controlled sites to PPA bidders is not credible in light of evidence that PNM has in fact transferred PNM-controlled sites to an IPP and an affiliate. First, in Case No. 08-00305-UT, the Commission approved a PPA between PNM and Valencia Power, LLC (Valencia PPA). The Valencia PPA was selected pursuant to an RFP. During negotiations with Valencia, PNM offered Valencia the use of PNM's Valencia site, which was already permitted and zoned, instead of the site and equipment that Valencia had proposed. Valencia accepted this offer, which resulted in price reductions to PNM. Case No. 08-00305-UT, Certification of Stipulation at 48-50 (3-9-09), adopted by Final Order Approving Certification of Stipulation (5-26-09); NEE Exh. 2 at 11; Tr. 114-15 (O'Connell).

Second, in Case No. 16-00191-UT, the Commission approved three PPAs between PNM and PNMR Development and Management Corporation (PNMR-D), a PNM affiliate, for PNM to procure the entire output of energy and RECs generated by three solar energy facilities to be constructed, owned and operated by PNMR-D with a combined capacity of 30 MW. Final Order

at 21 (8-17-16). Each PPA was for a 25-year term. PNM had obtained options to purchase seven sites where solar facilities could be constructed and interconnected to PNM's distribution system. PNM assigned its options to purchase the seven sites to PNMR-D. Tr. 366-67 (Barnard). PNMR-D was able to construct and operate the solar facilities at a lower cost than if PNM were to own the facilities because PNMR-D is not subject to limits placed on PNM by IRS normalization requirements for tax depreciation and investment tax credits. Case No. 16-00191-UT, Final Order at 22-28. No RFP proceeded PNMR-D being selected, and PNMR-D did not submit any bids in response to PNM's 2016 or 2017 RFPs. Tr. 363 (Barnard); NEE Exh. 11 at 14.

PNM's assertion that it would not pursue PNM-controlled sites if PNM cannot earn a return on the sites also is not credible because PNM did not earn a return on the sites that it transferred to PNMR-D: PNM transferred the sites to PNMR-D at cost. Tr. 403-06 (Barnard). PNMR-D made PNM "whole" by reimbursing PNM for the annual option payments PNM had made under the purchase sale agreements. NEE Exh. 12 at 3. The only compensation paid by PNMR-D to PNM for the assignments was reimbursement of reasonable costs and expenses paid or incurred by PNM in connection with the assigned agreements. PNM's Notification of Class 1 Transaction, Attachment B (Assignment Documents) (4-28-17).

Mr. Barnard was asked: if PNM was willing to transfer the PNM Designated Sites to an affiliate at cost, "could PNM indeed have done the same thing with an IPP?" Mr. Barnard answered, "On that basis hypothetically I guess it would be possible." Tr. 406.

This Commission has recognized "the need to place long-term PPAs on an equal footing with utility built power plants in respect to prior Commission approval." Case No. 08-00305-UT, Certification of Stipulation at 47. The Commission's broad power "to regulate and supervise every public utility in respect to its rates and service regulations," NMSA 1978, § 62-6-4(A), includes the authority to regulate provisions in a utility's RFP to ensure that long-term PPAs are placed on equal footing with PNM-owned generation. As the Hawaii Public Utilities Commission said:

> As a general matter, the "primary role" of the commission in a competitive bidding process is to ensure that each competitive bidding process "is fair in its design and implementation so that selection is based on the merits"; that projects selected through a competitive bidding process are consistent with the utility's approved integrated resource plan ("IRP"); that the utility's actions represent prudent practices; and that throughout the process, the utility's interests are aligned with the public interest even where the utility has dual roles as designer and participant.

In the Matter of PUBLIC UTILITIES COMMISSION, No. 2007-0331, Order No. 23699, 2007 WL 3245915, § I(A) (Hawai'i P.U.C. 10-9-07).

The Affordable Solar Project should not be approved because PNM has not met its burden of proving that the Project is the most cost effective renewable solar resource procurement among available alternatives. PNM should be required to issue a new all-renewables RFP by the end of 2017. Bidders should be given 90 days from issuance of the RFP to submit a bid. If PNM offers access to PNM-Designated Sites to turnkey bidders, PNM cannot deny the same access to other bidders, including PPA bidders. PNM should file a report of the results of the RFP in its 2018 renewable energy portfolio procurement plan case, similar in format to the report it filed on the results of its 2016 RFP.[19] To expedite consideration of any projects proposed by PNM as a result of the RFP, PNM should be granted a variance, to the extent necessary, to file its 2018 Renewable Energy Act plan before June 1, 2018. NEE's suggestion that the Commission appoint an independent evaluator to oversee the RFP process should not be adopted at this time: NEE's specific objections to the 2017 RFP process will be addressed under the Hearing Examiner's recommendations.

The Project should not be approved simply because PNM asserts that, if the Commission requires PNM to issue a new RFP, it does not believe that it could procure energy and RECs from a project selected in response to the new RFP in time to comply with the increased 2020 RPS requirement. Tr. 130 (O'Connell). It is possible that PNM could meet the increased 2020 RPS requirement using existing procurements and REC-only purchases. Tr. 214-15 (O'Connell).

[19] Case No. 13-00390-UT, PNM's Verified Report to the NMPRC Regarding the RFP Issued Pursuant to the Modified Stipulation (6-1-16).

And, if the Commission does not approve the Affordable Solar Project, PNM projects that it would still meet the 2020 solar diversity requirement using its existing solar energy resources. Tr. 667 (Gutierrez). In any event, the situation is of PNM's own making, and the Commission will not be pressured into approving a project that was selected pursuant to an unfair process.

Mr. Effross' belief that the Commission could approve the Affordable Solar Project and later disallow costs of the Project, Tr. 251-52, is not correct. The REA states, "Costs that are consistent with commission approval of procurement plans or transitional procurement plans shall be deemed to be reasonable." NMSA 1978, § 62-16-6(A). The result of Commission approval of a procurement plan is "a conclusive presumption of reasonableness for costs that are consistent with the approved plan." Case No. 06-00340-UT, Final Order on Reconsideration at 12, ¶ A (1-15-08).

There was testimony in this case of the benefits of utility-owned generation as compared to PPAs and vice versa. *E.g.*, Effross Rebuttal at 4-5; Tr. 455-56 (Barnard); Barnard Rebuttal at 15; Exh. NGM-4 to Muller Direct. The recommendation to not approve the Affordable Solar Project does not incorporate a finding that PPAs are preferable to utility-owned generation, including turnkey projects. The recommendation does incorporate a finding, already made by this Commission, that PPAs and utility-owned generation should be placed on equal footing in respect to prior Commission approval.

X. REQUEST FOR VARIANCE FROM DATA FILING REQUIREMENTS

PNM requests a variance from the data filing requirements of 17.9.530 NMAC to the extent that it is required. Rule 530 specifies the data that a utility must file in support of new rate schedules. PNM states that Rule 530 requires filing of extensive data schedules that are unnecessary for review and approval of PNM's proposed Renewable Rider Rate. O'Connell Direct at 18. Staff recommends granting the variance, and the Commission has granted such

variances in past cases. Pitts Direct at 29. PNM's request for a variance is reasonable and should be granted.

XI. PREPARATION OF EXHIBITS A, B & C

PNM's RPS and RCT numbers, shown in the various alternative versions of Exhibit SG-2 Corrected, depend on two contested issues in this case: (1) whether to use net or gross cost to calculate the Large Customer Adjustment; (2) whether to approve each of PNM's three proposed procurements: the Affordable Solar Project and the Dale Burgett and NMWEC repowerings. Tr. 670 (Gutierrez). At the hearing, Mr. Gutierrez explained how each page of Exhibit SG-2 would be revised based on a hypothetical of the Commission (1) using gross cost to calculate the Large Customer Adjustment; (2) approving the NMWEC repowering; and (3) disapproving the Lightning Dock and Affordable Solar Project procurements. *Id.* at 673-77. No party objected to the Hearing Examiner directing PNM, after the hearing, to prepare a revised Exhibit SG-2 based on her recommendations, which is Exhibit A to this Recommended Decision. Exhibits B and C to this Recommended Decision are additional revised exhibits that reflect the revised Renewable Energy Rider rate and rate comparisons resulting from the Hearing Examiner's recommendations. The attached Exhibits were prepared by PNM Technical Assistants and verified by Staff witness Pitts.

XII. STRIKING OF PART OF PNM'S INITIAL POSTHEARING BRIEF

At the hearing on September 22, 2017, PNM's counsel asked Staff witness Pitts whether she had read *Utility Dive* that day and whether she knew of "breaking news concerning possible tariffs on solar panels?" Dr. Pitts said, "No, I've been in the hearing." PNM's counsel asked Dr. Pitts no further questions about the article in *Utility Dive*. Tr. 931. Later, after all testimony was heard, WRA's counsel referred to the *Utility Dive* article, stating that PNM's counsel had not moved it into evidence. The Hearing Examiner stopped WRA's counsel, saying that she was

not going to allow admission of the article into evidence because Dr. Pitts had no knowledge of it. WRA's counsel said he understood, but asked to have administrative notice taken of the substance of the article, which was that the International Trade Commission had voted that the import of solar panels from China has caused injury, which could impact future costs of solar panels. The Hearing Examiner denied that request. Tr. 961-62.

In its Table of Authorities in its Initial Posthearing Brief, under the category "Other Authority," PNM cites a *Wall Street Journal* article dated the same date as the *Utility Dive* article, titled "Government Agency Backs Import Protection for U.S. Solar-Panel Industry" and gives a URL citation for the article. The subject of the article is the same subject of the *Utility Dive* article that the Hearing Examiner did not admit into evidence and of which she denied the motion to take administrative notice. PNM relies on the article in the body of its brief for the argument that, "It is possible, perhaps likely, that the cost of solar projects will increase in the future." PNM's Initial Posthearing Brief at 23.

A newspaper article is hearsay and not evidence unless admitted. It is also not a legal authority to be included in a list of authorities. PNM's citation to the *Wall Street Journal* article is improper and should be stricken.

XIII. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. All findings and conclusions in all sections of this Recommended Decision are incorporated by reference as Findings of Fact and Conclusions of Law of the Commission.

2. PNM is a public utility as defined in the Public Utility Act.

3. The PRC has jurisdiction over the parties and the subject matter of this case.

4. Reasonable, proper and adequate notice of this case has been given.

5. PNM's 2018 Plan for Plan Year 2018 is reasonable and should be approved with two exceptions: (1) recalculate the Renewable Portfolio Standard requirement to reflect using

gross cost to calculate the Large Customer Adjustment; and (2) completely terminate PNM's Dale Burgett geothermal procurement effective January 1, 2018.

6. PNM's proposed revised Rider No. 36 rate of $0.0062267/kWh should be rejected.

7. A revised Rider No. 36 rate of $0.0060571/kWh, to be effective for service rendered beginning January 1, 2018, is just and reasonable and should be approved.

8. PNM's suggested corrections to the Transcript are uncontested and should be adopted to the extent that they correct errors in transcription by the court reporters.

XIV. DECRETAL PARAGRAPHS

A. All findings of fact and conclusions of law in all Sections of this Recommended Decision and the Decretal Paragraphs of this Recommended Decision are adopted, approved and ordered by the Commission.

B. PNM's Advice Notice No. 541 is disapproved and cancelled.

C. Within five days of issuance of the Final Order in this case, PNM shall file, under a new Advice Notice, a revised Rider No. 36 rate of $0.0060571/kWh, to be effective for service rendered beginning January 1, 2018.

D. PNM's 2018 Plan, for Plan Year 2018, is approved with two exceptions: (1) recalculate the Renewable Portfolio Standard requirement to reflect using gross cost to calculate the Large Customer Adjustment; and (2) completely terminate PNM's Dale Burgett geothermal procurement effective January 1, 2018.

E. PNM's request for approval of a variance from the "other" diversity requirement in Plan Year 2018 is granted.

F. PNM's request for approval for Plan Year 2018 of a capacity reservation of 2 MW_{AC} at a price of $0.0025/kWh of RECs for customer-sited DG solar photovoltaic systems sized over 100 kW_{AC} and up to 1 MW_{AC} is approved.

G. PNM's request for approval of a not-to-exceed price of $30.00 per MWh/REC for any RECs that PNM may need to procure in Plan Year 2019 to make up for any deficiency in the number of RECs available to meet the 2018 RPS is granted.

H. PNM's request for approval of an amended procurement with the NMWEC, based on the Amended PPA that PNM entered into with the NMWEC in May 2017, is approved.

I. PNM's request for approval of an amended procurement from Lightning Dock, based on an Amended PPA executed by PNM and Lightning Dock in May 2017, is denied.

J. PNM shall terminate its procurement of any MWhs/RECs from Lightning Dock effective January 1, 2018.

K. PNM's request for approval of the Affordable Solar Turnkey Project is denied.

L. PNM shall issue a new all-renewables RFP within ten business days of the date of issuance of a final order in this case. Bidders shall be given 90 days from the date of issuance of the RFP to submit a bid. If PNM offers access to PNM-controlled sites to turnkey bidders, PNM shall not deny the same access to other bidders, including PPA bidders. PNM shall file a report of the results of the RFP in its 2018 renewable energy portfolio procurement plan case, similar in format to the report it filed on the results of its 2016 RFP.[20] To expedite consideration of any projects proposed by PNM as a result of the RFP, PNM is granted a variance, to the extent necessary, to file its 2018 Renewable Energy Act plan before June 1, 2018.

M. PNM's request for approval of a variance from the data filing requirements of 17.9.530 NMAC is granted.

N. NMIEC's Motion for Partial Dismissal is denied.

O. PNM's references to the September 22, 2017 *Wall Street Journal* article on pages iv and 23 of its Initial Posthearing Brief are stricken.

[20] Case No. 13-00390-UT, PNM's Verified Report to the NMPRC Regarding the RFP Issued Pursuant to the Modified Stipulation (6-1-16).

P. PNM's suggested corrections to the Transcript are adopted to the extent that they correct errors in transcription by court reporters.

Q. Any matter not specifically ruled on during the course of this proceeding or in this Order is disposed of consistent with this Order.

R. This Order is effective immediately.

S. This Docket is closed.

Issued at Santa Fe, New Mexico on October 17, 2017.

NEW MEXICO PUBLIC REGULATION COMMISSION

Carolyn R. Glick

Carolyn R. Glick
Hearing Examiner

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE COMPANY OF NEW MEXICO'S APPLICATION FOR APPROVAL OF ITS RENEWABLE ENERGY ACT PLAN FOR 2018 AND PROPOSED 2018 RIDER RATE UNDER RATE RIDER No. 36.	)	**Case No. 17-00129-UT**
PUBLIC SERVICE COMPANY OF NEW MEXICO, APPLICANT	)	

OFFICIAL CERTIFICATE OF SERVICE

I CERTIFY that on this day I sent to the individuals and parties listed below, via email and first class mail where indicated, true and correct copies of the **Recommended Decision of the Hearing Examiner.**

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DATED this 17th day of October 2017.

NEW MEXICO PUBLIC REGULATION COMMISSION

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