BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE PUBLIC SERVICE COMPANY OF NEW MEXICO'S REVISED RENEWABLE ENERGY PORTFOLIO PROCUREMENT PLAN FOR 2012, Case No. 11-00265-UT

PUBLIC SERVICE COMPANY OF NEW MEXICO,

Petitioner

DIRECT TESTIMONY

OF

RANDALL SADEWIC

ON BEHALF OF

THE RENEWABLE ENERGY INDUSTRIES ASSOCIATION OF NEW MEXICO

OCTOBER 3, 2011
Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Randall Sadewic. I am the President and a member of the Board of Directors of Positive Energy, Inc. My business address is 3201 Calle Marie, Santa Fe, New Mexico 87507.

Q. PLEASE DESCRIBE POSITIVE ENERGY INC.'S BUSINESS.

A. Positive Energy, Inc. is a 100% employee-owned New Mexico business founded in 1997 that designs, installs and services roof-mounted and ground-mounted, grid-tied and off-grid solar photovoltaic ("PV") systems for residential and commercial users of electricity (including government agencies and schools) in New Mexico. Positive Energy has offices in Santa Fe, Albuquerque, Las Cruces and Taos, New Mexico and currently employs 46 full-time-equivalent persons, including 18 installers and 12 PV installers certified by the North American Board of Certified Energy Practitioners ("NABCEP"). Eleven of our employees are graduates of the Renewable Energy Program at San Juan College located in Farmington, New Mexico.

Since 1997, Positive Energy has installed over 500 grid-tied and off-grid PV systems in New Mexico, including systems on two of our offices. As of March 2011, Positive Energy had installed over three megawatts of PV system capacity in this State. Positive Energy installed over 550 kW of Schott modules assembled here in New Mexico and about two MW of racking systems purchased from companies located in New Mexico. In addition to the employment and related business it creates in New Mexico, Positive Energy offers dozens of classes and presentations each year for community members and
professionals in New Mexico that emphasize energy efficiency and conservation first and
the use of renewable energy to offset the remainder of the electricity needs of residential,
commercial and government users of electric power.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
PROFESSIONAL EXPERIENCE.
A. My educational background and professional experience are set out in Exhibit RS-1.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE
COMMISSION?
A. Yes. I provided testimony on behalf of the Coalition for Clean Affordable Energy
addressing the 2005 renewable energy procurement plan submitted to the Commission by
Public Service Company of New Mexico ("PNM"). I also participated for REIA in many
of the settlement discussions in Commission Case No. 10-00037-UT that resulted in the
Stipulation proposed by PNM and other parties in that case that was not approved by the
Commission. I did not provide testimony in that case. However, my participation in
those settlement discussions provided me with an understanding of the “levelized cost”
method and “avoided costs” PNM used to justify the reasonableness of the cost of the
new 45 MW of “PNM-owned” PV systems and the “Solar Demo with Batteries” Project
proposed by PNM as part of that Stipulation in that case, which I address later in this
testimony.

Q. ON WHOSE BEHALF ARE YOU PROVIDING THIS TESTIMONY?
A. I am providing this testimony on behalf of REIA.

Q. IS POSITIVE ENERGY, INC. A MEMBER OF REIA?

A. Yes.

Q. PLEASE DESCRIBE REIA, ITS CURRENT MEMBERSHIP AND ITS INTERESTS IN THIS CASE.

A. REIA is a non-profit corporation registered in New Mexico whose voluntary members are businesses and individuals actively engaged in the renewable energy business throughout New Mexico, including PNM’s service territory. REIA’s mission is to represent the interests of its members and promote the renewable energy industry and growth of green jobs in New Mexico by increasing public and government awareness of the economic development, environmental and other “avoided cost” benefits of renewable energy to residents, businesses, governmental agencies (including schools) and utilities in New Mexico. To the extent it has the financial resources to do so, REIA carries out this mission by participating in governmental proceedings, such as this case before the Commission, which may affect its members, New Mexico’s renewable energy industry and access to renewable energy by residential customers, businesses and government agency consumers of energy in New Mexico.

Photography, King Sun Solar, Inc., LUZ Energy Corp., Positive Energy, Inc., Rio Grande Solar, LLC, Sacred Power Corp., Inc., SolarWorld Americas, LLC and UNIRAC-a HILTI Group Company. I estimate these companies employ over 600 employees in New Mexico. These are the types of small businesses that I believe represent the bedrock of economic development in this state.

Q. WHY ARE YOU PROVIDING TESTIMONY FOR REIA IN THIS CASE?
A. After reviewing PNM’s the proposed Plan and supporting testimony filed on July 1, 2011, REIA determined that the outcome of this case will affect REIA and its members, economic development in New Mexico and access by PNM’s residential, commercial and governmental customers to solar distributed generation (“DG”) systems and PNM’s procurement of utility-scale solar and other renewable energy resources in 2012 and 2013 and subsequent years. As I indicated earlier, REIA is a non-profit organization that depends on voluntary membership and contributions from its members to fulfill its mission. REIA asked me to provide testimony for it in this case concerning certain aspects of PNM’s 2012 Plan due to my experience since 1997 in the PV business and market in New Mexico and my past involvement in and monitoring of prior PNM renewable energy procurement plan (“Plan”) matters and cases, noted earlier.

Q. ARE YOU BEING PAID BY REIA TO PROVIDE THIS TESTIMONY?
A. No. I am volunteering my time to provide this testimony because of Positive Energy’s commitment as a member of REIA, the importance of the outcome of this case to REIA and all of its members, and because of my own personal commitment to promote energy
self-sufficiency by New Mexicans, a sustainable energy infrastructure and reduced
carbon emissions through the use of solar PV systems and other renewable energy
technologies in New Mexico.

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. I address in this testimony the following matters and issues raised by PNM’s proposed
2012 Plan and supporting testimony: (1) PNM’s decision to not propose a mechanism in
that Plan to address the continuing availability of reasonable Renewable Energy
Certificate (“REC”) incentives in its Solar Incentive Program (“SIP”) for projects under
100 kW-ac; (2) REIA’s proposal to address that problem in PNM’s 2012 Plan and
justification for its proposal; and (3) problems with the methods PNM used to calculate
the Reasonable Cost Threshold (“RCT”) in this case and PNM’s resulting “Adjustments
for the RCT” and “Projected Net RPS Requirements (MWh)” and “Effective RPS as a
Percentage” amounts shown on Table 1 of its Plan.

PNM’S SIP AND “FUTURE DG SOLAR PROCUREMENTS” PROPOSALS

Q. PLEASE DESCRIBE THE PNM SIP ESTABLISHED BY THECOMMISSION.

A. In Case No. 10-00037-UT addressing PNM’s Revised 2010 Plan, the Commission
established the following tiered REC price incentives for five different program category
sizes or “tranches” and capacity (kW-ac) allocations for PNM’s SIP shown on PNM’s
“1st Revised Rate No. 32” filing with the Commission, provided as Exhibit RS-2:

<table>
<thead>
<tr>
<th>Size &amp; Total Capacity</th>
<th>Price and Capacity “Steps”</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10 kW (4.15 MW total)</td>
<td>$0.12 declining 1¢ per 0.593 MW to $0.06/kWh</td>
</tr>
<tr>
<td>&gt;10 to 100 kW (4.05 MW total)</td>
<td>$0.14 declining 1¢ per 0.45 MW to $0.06/kWh</td>
</tr>
</tbody>
</table>
1. 100 to 250 kW (4.48 MW total) $0.12 declining 1¢ per 0.56 MW to $0.06/kWh
2. >250 to 1 MW (4.05 MW total) $0.14 declining 2¢ per 1.25 MW to $0.06/kWh
3. Large 1 MW (8.0 MW total) $0.11 declining 2¢ per 2.5 & 1.5 MW to $0.05/kWh

Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF THE CURRENT LEVELS OF PARTICIPATION IN PNM’S SIP.

A. PNM states on its web site as of the date of this testimony that it has reached the following REC “price steps” in each of the SIP size tranches:

- 0 to 10 kW @ $0.08/kWh (3rd to last step)
- >10 to 100 kW @ $0.07/kWh (2nd to last step)
- >100 to 250kW @ $0.06/kWh (last step)
- >250 to 1MW @ $0.06/kWh (last step)
- Large 1 MW @ $0.07/kWh (2nd to last step)

Q. DOES THIS SIP INFORMATION ON PNM’S WEB SITE TELL YOU OR THE COMMISSION HOW MUCH ADDITIONAL SOLAR DG CAPACITY PNM HAS ACTUALLY INTERCONNECTED WITH ITS UTILITY SYSTEM UNDER ITS SIP TO DATE OR WILL ACTUALLY INTERCONNECT UNDER ITS SIP BY THE END OF 2012?

A. No. It is my understanding from PNM’s Rate No. 32 and other filings with the Commission implementing the SIP that, under this Program, PNM closes each “capacity step” and “price step” within each system size tranche and opens the next capacity step offering the next lower REC incentive “price step” available after that capacity step is fully subscribed, meaning that PNM has received completed applications for systems with rated capacities sufficient to “fill” a capacity step. PNM’s standard “Application” forms for its SIP state that applicants for the 0 to 10 kW tranche must complete construction of those “small” facilities within nine months of receiving PNM’s notice that
the facility has passed PNM’s technical screening procedure, and applicants for “large”
systems with rated capacities greater than 10 kW must complete construction of those
facilities within twelve months of PNM’s “Screening Passed Date.”

Therefore, under this SIP subscription procedure, even if a specific capacity and price
step within a particular system size tranche of the SIP is fully subscribed, PNM will not
actually interconnect all of those systems and their associated capacity and the total
capacity allocated by the Commission for each size tranche unless construction of all of
those systems is completed within the applicable required time deadline. Projects applied
for under the SIP may be withdrawn by the applicant. If an applicant withdraws an
application or fails to complete the facility applied for, the applicant can submit a new
application for participation in the SIP, but only at whatever price step, if any, is available
or “open” at that time.

Q. HAS PNM PROVIDED ANY INFORMATION ABOUT APPLICANT FAILURES
TO COMPLETE FACILITIES AS REQUIRED OR WITHDRAWALS OF
APPLICATIONS UNDER ITS SIP?

A. Yes. In response to discovery by REIA, PNM reported that, as of September 21, 2011
when it responded, PNM had received eight applications for the 0 to 10 kW tranche of
the SIP with a total rated capacity of 30.92 kW-ac that did not qualify for the price step
initially applied for because the facilities were not completed within nine months of

---

1 PNM’s “3rd Revised Sample Form No. 79” (“Small Solar” Application), p. 3) and “1st Revised Sample Form No.
86” (“Large Solar” Application), p. 3).
PNM’s Notice of Completed Screening.² PNM reported that ten applications for the 0 to 10 kW tranche of the SIP with a total rated capacity of 31.44 kW-ac were withdrawn and had not been re-submitted to PNM as of that date.³ PNM also reported that one application for the 1 MW tranche for a project “with an inverter rated at 1 MW and a panel capacity of 706 kW initially reserved a REC price of $0.11 per kWh but was subsequently cancelled and the applicant re-applied to participate in that 1 MW tranche for a facility with “a rated panel capacity of 857 kW at the next lower REC price step of $0.09 per kWh.”⁴

PNM reported that “[t]here were no projects in program categories over 10 kW-ac that failed to be completed within 12 months.”⁵ Due to PNM’s facility screening process and the later (than application) “Screening Passed Dates” for facilities with a rated capacity of 100 kW-ac or greater, however, it appears that only two of the 33 projects applied for in the 100 to 250 kW size category have been completed to date, none of the ten projects in the 250 to 1 MW size category or of the eight projects in the 1 MW size category have been completed to date, and PNM currently does not know at this time if or when those solar DG systems will be completed within that 12-month SIP deadline.

Q. DOES PNM’S 2012 PLAN PROJECT HOW MANY OF THE APPLICANTS TO ITS SIP WILL COMPLETE AND INTERCONNECT THEIR SYSTEMS DURING THE REMAINDER OF 2011 AND DURING 2012?

² Exhibit RS-3 (PNM Response to REIA 1-9.a).
³ Id., PNM Response to REIA 1-9.c.
⁴ Id., PNM Response to REIA 1-9.b.
⁵ Id., PNM Response to REIA 1-0.a.
A. Yes. At page 4, PNM’s 2012 Plan states that “PNM projects that approximately 95% of
the applicants will interconnect under this program during the remainder of 2011 and
during 2012, installing about 15,000 kW-ac of new DG capacity.” However, I did not
find any information in PNM’s supporting testimony explaining PNM’s basis for those
projections.

Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF PNM’S PLAN TO
ADDRESS TRANCHEs OF THE SIP THAT ARE ALREADY FULLY
SUBSCRIBED OR MAY BECOME FULLY SUSCRIBED.

A. PNM witness Cynthia Bothwell describes this part of PNM’s 2012 Plan at pages 25-26 of
her Direct Testimony. She states there:

Due to the success of PNM’s recent RFP and the ability of PNM to obtain lower prices
for DG projects than through a fixed program price, PNM proposes to address DG for
projects 100 kW-ac and above through a competitive bid process. In each year when
PNM has money available under the RCT, PNM will conduct an all renewable
competitive RFP bid process in the spring and bring before the Commission for approval
in its July Renewable Procurement Plan filing those projects that meet the RPS and
diversity requirements that are least cost. PNM will set aside an additional amount of DG
at the lowest reasonable cost (or highest accepted bid price) for which PNM could have
procured different resources offered in response to the RFP. The amount PNM will
propose to set aside for solar DG will be based on factors including price, diversity,
portfolio composition, RCT limitations, and any requirements of the REA and Rule 572.
The set aside amount and price will be brought before the Commission for review and
approval in the renewable energy portfolio procurement plan filed by PNM on July 1 of
the year prior to when the SIP expansion is requested. PNM net metered customers are
not required to participate in a PNM REC incentive program for their on-site usage and
non-participants will retain their RECs for their own purposes. PNM has included in this
plan a proposed expansion for 2012 that follows this process.

Q. WHAT IS PNM’S PROPOSAL FOR EXPANSION OF THE SIP IN 2012 FOR
PROJECTS 100 KW-ac UP TO 1 MW?
A. As described by Ms. Bothwell at page 9 of her Direct Testimony, PNM proposes to set aside 2 MW-ac of additional capacity for net-metered solar DG projects greater than 100 kW-ac at a price of $0.02 per kWh. Ms. Bothwell states further there that this “additional capacity amount and the $0.02/kWh are consistent with PNM’s competitive bid methodology.

Apparently, that statement is based on Ms. Bothwell’s earlier testimony (at pages 5-9) indicating that, in response to a PNM RFP to procure RECs with or without energy issued on April 6, 2011, the City of Santa Fe proposed to sell PNM a total of 1,800 MWh of RECS, without energy over a 5-year period from the City’s “hydro project” at a price of $20/MWh, which was lower than the cost per MWh of the other responsive proposals PNM received for RECs bundled with wind, solar and biomass renewable energy shown on Table B in her testimony.

Q. WHAT IS PNM’S PROPOSAL IN ITS PLAN FOR ADDRESSING THE TWO TRANCHES OF THE SIP THAT INCLUDE PROJECTS UNDER 100 KW-ac?

A. At page 26 of her Direct Testimony, Ms. Bothwell states:

PNM is not proposing a mechanism to address tranches that include projects under 100 kW-ac. At this time, those tranches are not expected to be filled in the next year. PNM will provide notification to the Commission, with a plan to address these smaller sizes, as these near filling as required by the Final Order in Case No. 10-00037-UT.

Q. IN YOUR OPINION, IS IT REASONABLE OR IN THE PUBLIC INTEREST FOR THE COMMISSION TO APPROVE PNM’S PROPOSAL TO NOT INCLUDE IN ITS 2012 PLAN ANY MECHANISM TO ADDRESS EXTENSION OF THE TWO TRANCHES OF ITS SIP FOR PROJECTS UNDER 100 KW-ac BASED ON PNM’S EXPECTATION THAT THOSE TRANCHES WILL NOT BE FULLY SUBSCRIBED “IN THE NEXT YEAR”?
A. No. In my opinion, the PNM proposal is not appropriate given certain provisions in paragraph 41 of the Commission’s Final Order Partially Adopting Recommended Decision in Case No. 10-00037-UT and some of the findings stated in the New Mexico Renewable Energy Act (“REA”).

Q. PLEASE EXPLAIN WHY.

A. First, as I pointed out earlier, PNM currently reports that two of its three largest system tranches in the SIP are already almost fully subscribed, applications for the SIP’s “Small Solar” 0 to 10 kW tranche already have reached halfway through the third-to-last capacity at the $0.08 per kWh price step, and applications for the SIP’s >10 kW to 100 kW tranche already have reached the next-to-last capacity and $0.07 per kWh price step. Considering these current SIP participation levels and the fact that PNM did not file tariffs that began implementing the SIP until October 7, 2010, it certainly appears very possible, if not likely, that either or both of those SIP tranches for smaller solar systems will reach its next-to-last capacity and price step before, or within a very short time after, the Commission issues a final order in this case, and could become fully subscribed well before PNM is required to submit its next (2013) renewable energy portfolio procurement plan on July 1, 2012. Considering these current SIP participation levels and this real possibility, I don’t think it is reasonable for PNM, interested parties or the Commission to defer addressing if and how to extend those tranches of the SIP until PNM provides the notification to the Commission, Staff and certain parties required by the Final Order in Case No. 10-00037-UT referred to by Ms. Bothwell in her testimony.

---

6 See PNM Advice Notice Nos. 405 & 406 re: Case No. 10-00037-UT, filed October 7, 2010; see also PNM Advice Notice Nos. 408 & 409, filed December 1, 2010 (updating PNM’s tariffs to allow “Third-Party Owners of solar facilities at PNM retail customer locations to participate in the SIP” and otherwise revising PNM’s standard form REC purchase agreements under the SIP).
Q. WHY NOT?

A. Paragraph 41 of the Commission’s Final Order Partially Adopting Recommended Decision described that notification procedure, in part, as follows:

Because the new pricing scheme will end when the specified MW maximums are reached, PNM should be required to provide a written notice to the Commission, Staff and the parties to this case that the cumulative number of MWs of DG systems participating in this revised program has reached the cumulative MW for the next-to-last tranche for any category of DG.... PNM should provide that notice as soon as practicable, but in any event by no later than ten days after that cumulative number of MWs has been achieved. Within 45 days after PNM has provided the required notice, PNM shall, and any interested party may, file proposals with the Commission regarding whether and under what terms and conditions the program should be continued. If PNM has reason to believe based on actual participation trends in a particular program that waiting until the next-to-the-last tranche has been consumed will not provide sufficient time for the Commission to take appropriate action as described herein, the company shall provide sooner notice. (my emphasis added)

In my opinion, the actual participation trends in PNM’s SIP in general and in its 0 to 10 kW and >10 to 100 kW tranches to date described earlier provide sufficient reason for PNM, interested parties and the Commission to believe at this time that waiting until PNM provides notice that the next-to-the-last capacity and price step of either of those tranches has been fully applied for, and providing 45 days thereafter for parties to “file proposals with the Commission regarding whether and under what terms and conditions” those tranches should be continued, will not provide sufficient time for the Commission to take “appropriate action” regarding those matters.

Q. PLEASE EXPLAIN WHY YOU BELIEVE THAT COMMISSION NOTICE AND 45-DAY PROPOSAL PROCEDURE WILL NOT PROVIDE SUFFICIENT TIME FOR THE COMMISSION TO TAKE APPROPRIATE ACTION REGARDING THOSE SIP MATTERS?
A. There are several reasons. First, I believe that once PNM reports on its web site that it
has reached the next-to-last capacity and price step in either or both of those smaller system
tranches, or provides the notice required by the Final Order in Case No. 10-00037-UT,
awareness of that fact, and the likelihood that either or both of those tranches may quickly close
to further participation, may cause the rate of applications for the remaining capacity to
accelerate compared to prior SIP application rates. If that occurs, one scenario is that those
tranches may close even before the 45-day period for PNM and interested parties to submit
proposals regarding addressing “whether and under what terms and conditions” those tranches
should be continued. I believe it also is possible that, when customers learn that only one, last
capacity step (for 0.593 MW in the 0 to 10 kW tranche or for 0.45 MW in the > 10 to 100 MW tranche) remains available and is about to be filled, they may not consider it worth the time and
investment to apply to the program. And, with all of the other matters the Commission has the
responsibility to address, even if either or both of those tranches is not filled and closed to further
participation within that 45-day period, there is no way of knowing at this time what further
proceedings the Commission would need to conduct, or how long thereafter it would take for the
Commission to address those matters. For example, would a public hearing and the filing of
further testimony addressing facts relevant to different proposals or legal briefing addressing
those facts be required?

If either of those SIP smaller system tranches becomes fully subscribed by completed
applications, PNM will stop offering REC purchase agreements to further applicants for systems
within those size ranges unless and until the Commission approves extending the tranche or
tranches that have filled. If that occurs and the Commission is not able to determine for at least
two months (which, I assume, would be the shortest time period in which the Commission could
address these matters) or longer if, and under what conditions, those SIP tranches should be
continued, I believe that delay will have a substantial negative impact on the solar DG market
and associated employment and business activity in this State.

Q. PLEASE EXPLAIN WHY YOU BELIEVE THAT SORT OF DELAY WILL
HAVE A SUBSTANTIAL NEGATIVE IMPACT ON THE SOLAR DG MARKET AND
ASSOCIATED EMPLOYMENT AND BUSINESS ACTIVITY IN NEW MEXICO.

A. Over the past few years, the solar energy industry in New Mexico has demonstrated job
growth and has had a large, positive economic impact in this State. For example, in 2010, New
Mexico was ranked 12th nationally for grid connected installations, up from 17th nationally in
2009.

It is currently estimated that, for every Megawatt (MW) of installed solar power, approximately
35 people are employed, which includes jobs in both manufacturing and installation.\(^7\) Applied to
the 16 MW of applications for the SIP reported by PNM in its 2012 Plan (p. 4), that translates to
approximately 560 directly employed in solar work. Solar businesses often hire entry-level solar
installers with a construction background and provide on-the-job, short term training, with career
advancement opportunities. The recognized certification for solar electric installations in the
solar sector is the NABCEP. The potential for employment growth in the solar industry also has
resulted in an increase in programs at community colleges in New Mexico that connect courses
and certifications to their existing construction programs.

Positive Energy is a prime example of this job growth in New Mexico’s solar industry. Positive Energy has grown from four employees in 2005 to over 46 full-time equivalent employees in 2011. Virtually all of our growth in employees has come from areas served by utilities that offer REC programs. Similar job growth has occurred for a number of other New Mexico companies entering the solar industry.

PNM is the largest provider of retail electric utility service in New Mexico. Due the substantial up-front cost to customers interested in installing solar systems at their homes and businesses and the current challenging economic and financing conditions in New Mexico as elsewhere, Positive Energy’s ability to retain and continue to hire employees, invest in equipment, lease space and make longer term business commitments is significantly affected by the continuing availability and certainty of REC incentives offered by PNM and the other investor-owned electric public utilities in New Mexico under DG programs approved by the Commission.

PNM’s RCT claims in its 2012 Plan in this case, which I will address later, have already created a lot of concern by Positive Energy, other members of REIA, and in the New Mexico solar industry generally about whether reasonable REC incentives will continue to be offered by PNM for PV systems 100 kW and smaller over the next two to three years when, I believe, reasonable REC incentives will continue to be necessary to make installation of those systems financially viable to residential customers, small businesses and government agencies in New Mexico. These concerns naturally make businesses like ours, that need to plan ahead, more cautious about their hiring, investments and operation plans.
If the Commission does not address continuation of the 0 to 10 kW and \( \geq \) 10 to 100 kW tranches of the SIP in this case, that will only generate more uncertainty and concerns about this in PNM’s service area for Positive Energy and other providers of PV DG systems and their local suppliers, making our businesses more hesitant to retain existing employees or to hire more people, and make greater investments in our businesses. For example, in Positive Energy’s case, if the Commission does not extend these tranches of the SIP for a reasonable time period with reasonable REC incentives, we would have to consider downsizing our staff and operations to manage the business risks resulting from this continuing uncertainty about these tranches of PNM’s SIP. I believe other providers of PV systems would face similar business decisions if this sort of delay by the Commission occurs.

Q. **ARE THERE ANY OTHER REASONS WHY YOU BELIEVE THE COMMISSION SHOULD ADDRESS IN THIS CASE WHETHER AND UNDER WHAT CIRCUMSTANCES THE 0 TO 10 KW AND \( \geq \) 10 TO 100 KW TRANCHES OF THE SIP SHOULD BE CONTINUED IF EITHER OF THEM BECOME FULLY SUBSCRIBED?**

A. Yes. It is difficult for me to understand how the Commission will be able to reasonably determine whether and under what circumstances either or both of these SIP tranches for smaller-sized solar DG systems should be continued or extended without also considering evidence regarding PNM’s projections of the future additional incremental costs of any such SIP tranche extensions so as to ensure that those costs would not cause PNM to exceed the applicable RCT in the following two years. To conduct that analysis, I believe the Commission also would need to consider evidence concerning PNM’s projections of the future additional incremental costs of its other procurements from its previously approved programs and resources and from
any proposed new renewable energy resources. In other words, I believe that under Rule 572, and as the Commission appears to have done in prior PNM renewable energy procurement plan cases, the Commission should not consider the costs of any proposed new renewable energy resource procurements or changes to previously approved Commission procurement programs in a vacuum, but should do so in the context of PNM’s overall renewable energy procurement plan and associated costs.

Q. PLEASE CONTINUE.

A. PNM’s proposal to defer consideration of these SIP tranche closure matters until after it files the notifications required by the Final Order in Case No. 10-00373-UT also raises a very serious and problematic resource issue for interested parties like REIA that we ask the Commission to consider. REIA does not have the considerable financial resources PNM has (much or most of which presumably are recovered by PNM from its customers in its electric service rates) to participate in PNM’s annual renewable energy proceedings. Commission Rule 572 requires that PNM and the other two investor-owner electric public utilities operating in New Mexico file annual renewable energy procurement plans on July 1 of each year.

The Commission’s rejection of the initial 2011 Plan PNM filed on July 1, 2010 resulted in the extension of that case and Commission consideration of PNM’s Revised 2011 Plan until June 2, 2011 when it issued its Final Order in Case No. 10-00373-UT, shortly before PNM filed its 2012 Plan in this case.⁸ Requiring interested parties that have intervened in this case to wait to address these important SIP matters until after PNM provides the notifications required by the

⁸ REIA participated in Case No. 10-00373-UT. It is my understanding that, due various motions for rehearing and clarification filed by PNM, Staff and other parties after that Final Order was issued, that PNM Revised 2011 Plan case still has not been fully completed to date.
Commission's Final Order in Case No. 10-0037-UT in yet another, distinct Commission process or proceeding between PNM's annual renewable energy procurement plan cases will impose an additional resource burden on parties like REIA, whose limited financial resources to participate in Commission cases are already badly strained. I don't believe that would be reasonable or in the public interest.

Q. WOULD YOUR OPINION IN THIS REGARD BE ANY DIFFERENT IF THE 0 TO 10 KW AND >10 TO 100 KW TRANCHES OF THE SIP DO NOT BECOME FULLY SUBSCRIBED BEFORE PNM IS REQUIRED TO FILE ITS NEXT (2013) RENEWABLE ENERGY PROCUREMENT PLAN ON JULY 1, 2012 AS MS. BOTHWELL TESTIFIES PNM EXPECTS?

A. No. Even if that PNM expectation proves accurate, I presume PNM and all interested parties would be expected to address the anticipated closures of those SIP tranches in the Commission proceeding docketed to address that 2013 PNM Plan. Based on the history of these PNM renewable energy procurement plan cases, I would not expect the Commission to finally resolve those tranche closure matters until sometime in December of 2012 when the maximum time allowed by the REA for Commission review of that plans expires. That too would create a very long time gap and period of uncertainty concerning the continuation of these SIP tranches for smaller solar DG systems.

For all of these reasons, I believe that, consistent with the language in paragraph 41 of the Commission Final Order quoted earlier, all interested parties and the Commission should address these SIP tranche closure matters at this time in this case.
Q. PLEASE DESCRIBE REIA’S PROPOSAL FOR EXTENDING THE 0 TO10 KW AND >10 TO 100 KW TRANCHES OF THE SIP.

A. In order to address the concerns and prevent the problems with the closure of either or both of these SIP tranches I have described, REIA recommends that the Commission determine in this case that, if and when either of those tranches becomes fully subscribed, they should be extended and modified as follows for any further applications. For an initial “Tier 1” period of six months from the date on which PNM determines the tranche has been fully subscribed, REIA recommends that the price for RECs offered should be reduced to $0.055 per kWh. That would be $0.055 per kWh less than the lowest price step in those tranches under PNM’s current SIP.

REIA proposes that the price for RECs offered thereafter should be reduced by an additional $0.005 per kWh every six months thereafter for a period of two years. REIA proposes that, at the end of that two-year period, the price for RECs offered from solar DG systems of those sizes should be reduced to $0.03 per kWh until otherwise ordered by the Commission.

The following table summarizes this REIA proposal:

<table>
<thead>
<tr>
<th>Tier</th>
<th>Period</th>
<th>REC Price per kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 months from tranche closure</td>
<td>$0.055</td>
</tr>
<tr>
<td>2</td>
<td>6 months from Tier 1 closure</td>
<td>$0.050</td>
</tr>
<tr>
<td>3</td>
<td>6 months from Tier 2 closure</td>
<td>$0.045</td>
</tr>
<tr>
<td>4</td>
<td>6 months from Tier 3 closure</td>
<td>$0.040</td>
</tr>
<tr>
<td>5</td>
<td>Until otherwise ordered by PRC</td>
<td>$0.03</td>
</tr>
</tbody>
</table>
REIA also proposes that, instead the fixed contract lengths of 12 or 20-years in the current SIP, all new REC contracts offered by PNM during this extension of these tranches of the SIP should have a common termination date of December 31, 2020. REIA proposes that the Commission order that all other terms and conditions set forth in PNM’s current SIP tariffs on file with the Commission, including the most recent standard PNM Application and REC Purchase Contract forms applicable to the SIP approved by the Commission, should remain unchanged. Thus, for example, as provided in PNM’s current standard Application forms for the SIP and noted earlier, applicants for participation in the “Small” system 0 to 10 kW tranche would continue to be required to complete construction of the solar facility applied for within nine months from PNM’s “Screening Passed Date.” Applicants for participation in the >10 to 100 kW tranche of the SIP would continue to be required to complete construction of the solar facility applied for within twelve months from PNM’s “Screening Passed Date.”

Q. WHY DO YOU BELIEVE COMMISSION APPROVAL OF THIS REIA PROPOSAL FOR EXTENDING THE 0 TO10 KW AND >10 TO 100 KW TRANCES OF THE SIP IN THIS CASE IS REASONABLE AND IN THE PUBLIC INTEREST?

A. There are a number of reasons. First, by approving this extension of these two SIP tranches when they become fully subscribed in this case, the Commission will act in a timely way to appropriately prevent the sort of automatic closure of these tranches to further customer applications for smaller solar DG systems in this size range for an indefinite time period that I described earlier. This extension of these SIP tranches will prevent the negative impacts those closures would have on businesses that provide solar DG systems in PNM’s service area and on related jobs and economic development in New Mexico that I also described earlier.
I believe this result of REIA’s proposal would be consistent with the finding in section 2 of the REA that “the use of renewable energy by public utilities subject to Commission oversight in accordance with the REA can bring significant economic benefits to New Mexico.” As I explained earlier, the continuing availability of reasonable REC incentives that will allow PNM customers interested in installing solar DG systems in the 100 kW and below size range to recover some of the considerable up-front costs of those systems will allow solar installation businesses like Positive Energy to continue to bring economic benefits to New Mexico in the form of good jobs for New Mexicans and business transactions with related businesses.

Another finding in Section 2 of the REA is that “the generation of electricity through the use of renewable energy presents opportunities to promote energy self-sufficiency, preserve the state’s natural resources and pursue an improved environment in New Mexico.” I believe Commission approval of this REIA proposal also would be consistent with that finding. REIA’s proposal would promote energy self-sufficiency by more of PNM’s residential and small business customers and help reduce PNM’s future dependence on fossil-fueled generation resources, such as coal and natural gas, that produce CO2 emissions and consume large amounts of water in New Mexico where water resources are scarce.

I would also note that section 2 of the REA states that “a public utility should have incentives to go beyond the minimum requirements of the renewable portfolio standard.” Commission approval of REIA’s proposal also would be consistent with that finding by the Legislature. In this respect, I address later in this testimony why I believe PNM’s calculation of the projected
annual incremental costs of its proposed 2012 Plan for the purpose of applying the Commission’s
RCT and reducing its RPS are not reasonable and should be rejected by the Commission.

Q. ARE THERE ANY OTHER REASONS WHY YOU BELIEVE COMMISSION
APPROVAL OF REIA’S PROPOSAL FOR EXTENDING THE 0 TO 10 KW AND >10 TO
100 KW TRANCHE OF THE SIP IN THIS CASE IS REASONABLE AND IN THE
PUBLIC INTEREST?

A. Yes. I believe three features of the tiered, declining REC pricing structure in REIA’s
proposal reasonably address the Commission’s goal of ensuring that PNM’s customers do not
pay unreasonable amounts for RECs from these systems. First, as I pointed out earlier, the prices
offered for RECs from systems in this size range will immediately drop by ½ cent per kWh for a
six-month period from the lowest ($0.06) price offered in those tranches in PNM’s existing SIP,
and will continue to decline by ½ cent per kWh during each subsequent six month period for two
years before dropping to $0.03 per kWh until the Commission determines otherwise. This
decreasing REC price structure is consistent with the fact that, though some PV system installation
costs in New Mexico (for example, copper, steel and labor costs) have recently increased, PV
module costs, which constitute a substantial portion of the total installation cost of PV systems,
have been declining over the past 30 years and currently are expected to continue to decline in
the future.

Second, the common termination date of December 31, 2020 proposed for all new REC purchase
contracts PNM would be required to offer to participants in these two extended tranches of the
SIP would effectively reduce the lengths of those contracts on a monthly basis, as compared to
the currently fixed, 12-year contract periods for participants in the 0 to 10 kW tranche of the SIP
and the fixed 20-year contract periods for participants in the > 10 to 100 kW tranche of the SIP
established by the Commission in Case No. 10-00037-UT. For example, if either of those
tranches becomes fully subscribed on December 31, 2011, the longest REC purchase contract
PNM would be required to offer a subsequent participant in those tranches (i.e., that submitted a
completed application to PNM on January 2, 2012) would be nine years. If either of those
tranches becomes fully subscribed on March 31, 2011, the longest REC purchase contract PNM
would be required to offer a subsequent participant in those tranches (i.e., that submitted a
completed application to PNM on April 1, 2012) would be eight years and nine months, and so
forth, with the maximum contract length declining each month.

This “common termination date” feature for all contracts by participants in the SIP tranche
extensions proposed by REIA is similar to the common termination date element in the tiered
pricing structure for El Paso Electric Company’s (“EPE”) “Small and Medium System REC
Purchase Programs” for solar and wind DG systems sized 100 kW or less proposed in a
settlement Stipulation presented to the Commission and currently being considered in EPE’s
pending renewable energy procurement case (No. 11-00263-UT).9

This feature would further reduce the total cost to customers of extending these tranches of the
SIP as proposed by REIA. This total cost reduction would result even as compared to other fixed
REC purchase contract lengths previously approved by the Commission for EPE and Southwest
Public Service Co. (“SPS”), such as the fixed 12-year REC contracts for SPS’ “Small Solar DG

---

9 A copy of the Stipulation filed in pending Commission Case No. 11-00263-UT concerning EPE’s 2011 renewable
ergy portfolio procurement plan is provided as Exhibit RS-4.
Program" and the 10-year REC contracts for SPS' "Medium Solar Program" for applications received on and after January 1, 2011 approved by the Commission in Case No. 10-00196-UT.\(^\text{10}\)

Further, as I also noted earlier, REIA's tiered pricing proposal for these two SIP tranche extensions is time period-triggered and limited rather than capacity-triggered and limited. This tiered pricing structure also is similar to the tiered pricing structure for "Small and Medium System REC Purchase Programs" for solar and wind DG systems sized 100 kW or less proposed in the Stipulation currently before the Commission in Case No. 11-00263-UT).

This time period-triggered pricing structure would provide several cost reduction benefits to PNM's customers compared to the capacity-triggered pricing structure in the existing SIP. It will reduce the cost per kWh for RECs during each successive six-month period regardless of how much additional capacity is applied for during any of those periods and how much of that capacity is actually interconnected with PNM's grid.

This price structure will provide more advance notice to PNM's customers of the REC price that will be available at the time they are deciding whether to invest in a solar DG system in this size range. In contrast to a capacity-limited SIP tranche approach, it also will prevent the potential scenario where one applicant could apply for a relatively large amount of capacity within a tranche that effectively prevents other customers from participating in the SIP, but does not install that system capacity within the 9 or 12-month construction completion period required in PNM's SIP tariffs. Retaining the existing 9-month or 12-month construction completion

---

\(^{10}\) July 1, 2011 prepared Direct Testimony of Ruth Sakya on behalf of SPS in Case No. 11-00264-UT, pp. 15-16.
requirements in PNM’s SIP will continue to prevent applicants from prematurely locking in
higher REC prices by submitting applications for either of these tranches before they have truly
decided to proceed with installation of a solar DG system.

Q. IS REIA PROPOSING ANY CHANGES AT THIS TIME TO PNM’S PROPOSAL
FOR EXPANSION OF THE SIP IN 2012 FOR PROJECTS 100 KW-ac UP TO 1 MW?
A. No.

Q. WHY NOT?
A. As shown on PNM’s current Rate No. 32, the Commission approved a total capacity of
17.48 MW-ac for solar DG systems sized greater than 100 kW-ac for the SIP in Case No. 10-
00037-UT. Though a substantially lower number of system applications in those size tranches is
expected to fill those tranches, due to the estimated kWh production from those systems and the
20-year REC contracts established by the Commission for participants in those tranches, the
annual and total costs of those REC procurements in 2012 and subsequent years is expected to be
substantially greater than the annual and total costs of PNM’s REC procurements from the two
smallest size tranches of the SIP that REIA’s proposal addresses.\textsuperscript{11} REIA believes the
installation of greater numbers of smaller solar DG systems in the 100 kW or lower size range
generates more economic development benefits in New Mexico in terms of local value-added
labor, engineering services, and components than the installation of a substantially lower number
of solar DG systems sized larger than 100 kW. Also, most of the PV installations by REIA’s

\textsuperscript{11} See, e.g., Commission’s illustrative SIP “step cost” estimates in Ex. 2 to Final Order Partially Adopting
Recommending Decision in Case No. 10-00037-UT.
members are in this smaller size range. We therefore leave it to other parties to address PNM’s proposal for expansion of the SIP for projects 100 kW and larger.

PNM’s RCT CALCULATIONS AND RPS “ADJUSTMENTS”

Q. EARLIER YOU INDICATED THAT REIA QUESTIONS THE METHODS PNM USED TO CALCULATE THE RCT AND PNM’S RESULTING “ADJUSTMENTS FOR THE RCT,” PROJECTED “NET RPS REQUIREMENTS” AND “EFFECTIVE RPS AS A PERCENTAGE” AMOUNTS SHOWN ON TABLE 1 OF ITS 2012 PLAN. PLEASE ADDRESS THOSE REIA CONCERNS.

A. PNM presents RCT calculations in Table 1 of its Plan and Exhibits CDB-2 and CDB-4 to PNM witness Bothwell’s Direct Testimony that significantly reduce not only the Company’s 10% RPS obligations under the REA, but also its 20% solar and other resource diversity obligations under Commission Rule 572, in both 2012 and 2013. As shown on those Exhibits, PNM’s RCT calculations would reduce its RPS obligations (before PNM’s “Adjustments for Large Customers”) by about 39% in each of those years (348,339 MWh in 2012 and 347,295 MWh in 2013). Those RCT “adjustments” produce what PNM calls its “Projected Net RPS Requirement (MWh)” of 494,973 MWh in 2012 and 505186 MWh in 2013 and its “Projected Effective RPS as a Percentage” of 5.6% in 2012 and 5.7 in 2013 (including its “Adjustments for Large Customers”).

REIA is concerned about these PNM RCT calculations and significant RCT reductions to its 10% RPS for a number of reasons. First, they not only result in substantial reductions from the

---

12 Table 1 of PNM’s Plan indicates that PNM’s “Adjustments for Large Customers” to its 10% RPS account for about 4.5% of those RPS reductions (i.e., 41,045 MWh in 2012 and 41,017 MWh in 2012).
minimum 10% RPS established in the REA. Those calculations also provide the basis for
PNM’s claims that it cannot propose any additional solar or other renewable energy

As shown on Table 2 (p. 9) of PNM’s 2012 Plan, PNM also relies on its RCT calculations and
RCT-adjusted “Projected Net RPS” calculations to reduce its “full diversity” obligations under
Rule 572 and “show” the Commission that its “Proposed Portfolio achieves 20% solar diversity
in 2012 and 2013,” and thus satisfies the Commission’s requirement in its Final Order in PNM’s
last procurement plan case (No. 10-00373-UT) that it provide in this case “a well-designed plan
charting a clear course” to achieve 20% solar diversity and 10% “other” compliance by April 5,
2013. As I will discuss shortly, it appears that PNM’s idea of a “well-designed plan” to satisfy
that Commission requirement is its reliance on several methods to calculate its RCT and
reductions to its RPS and full diversity requirements that I believe have problems and are not
reasonable.

Q. DID YOU REVIEW PNM’S RCT CALCULATIONS DESCRIBED BY PNM
WITNESS BOTHWELL AND SHOWN ON EXHIBIT CDB-4 TO HER DIRECT
TESTIMONY?

A. Yes.

Q. IN YOUR OPINION, ARE THOSE CALCULATIONS REASONABLE OR
REASONABLY JUSTIFIED?
A. No. Commission Rule 572.11 provides that the RCT for each public utility is 2.25% in 2012 and 2.50% in 2013 of “all customers’ aggregated overall annual electric charges” in those years. As indicated on page 11 of Ms. Bothwell’s Direct Testimony and her Exhibit CDB-4, to apply the RCT, PNM calculated a percentage determined by (1) its calculation of the costs of the procurements from the different renewable energy resources identified in its 2012 Plan (the numerator), divided by (2) the Company’s actual “Prior Year (2010)” revenues of $797,277,195 (the denominator). There are a number of reasons why I believe those RCT calculations have problems that distort those calculations in ways that reduce PNM’s projected minimum RPS and diversity obligations.

Q. PLEASE ADDRESS THOSE REASONS.

A. I will address the numerator in those PNM RCT calculations first. Ms. Bothwell explains how PNM performed the cost calculations for the procurements shown on her Exhibit CDB-4 at pages 11 to 15 of her Direct Testimony. She states there that “PNM computed the RPS compliance cost based on the annual revenue requirements of each renewable procurement less any annual benefits projected in that year that are considered avoided fuel costs.”

At page 12 of her testimony, Ms. Bothwell explains that Tables 4 and 5 of her Exhibit CDB-4 “show calculations using total projected procurement costs on an actual annual basis, which is the total projected increase in annual revenue requirements without consideration for rate case cycles using actual costs and avoided costs.” (my emphasis added) In other words, as I understand the language in that explanation that I’ve emphasized, the “revenue requirements” method PNM used to calculate those costs does not consider whether PNM will actually recover
those costs from its customers in the 2012 Plan year or in 2013. There are several reasons why I believe those procurement cost calculation methods described by Ms. Bothwell have problems and are not reasonably justified.

Q. PLEASE CONTINUE.

A. Section 4.C of the REA (NMSA § 62-16-4.C) and Commission Rule 572.11.B addressing the RCT provide that, when establishing or modifying the RCT, the Commission must “take into account” five different “factors,” including “the impact of the cost for renewable energy on retail customer rates” and “overall diversity, reliability, availability, dispatch flexibility, cost per kilowatt-hour and life cycle cost on a net present value basis of renewable energy resources available from suppliers.” PNM’s “revenue requirements” method for calculating its procurement costs is inconsistent with those two factors.

First, PNM’s “revenue requirements” method and RCT analysis ignores the fact that PNM will not actually recover all of the 2012 or 2013 revenue requirements calculated and shown on Ms. Bothwell’s Exhibit CDB-4 in those years of her RCT analysis.

Q. HOW CAN YOU OR THE COMMISSION KNOW THAT TO BE A “FACT”?

A. On July 28, 2011, the Commission issued its Final Order Partially Approving Certification of Stipulation” in Case No. 10-00086-UT approving increases to PNM’s rates and revenues. That Order approved paragraph 27 of a settlement Stipulation in that case addressing a PNM “Renewable Energy Rate Rider,” which included the following provisions:
27) Instead of recovering renewable procurement costs in base rates, PNM will apply to
the Commission for authorization to implement a rate rider effective July 1, 2012 to
recover such costs ("Renewable Rider"). The Signatories will not oppose approval of the
Renewable Rider for collection of such costs that are consistent with PNM’s
Commission-approved renewable energy procurement plans and agree to use their best
efforts to expedite the Commission’s review of PNM’s request for the Renewable Rider.
The Signatories further agree that the following terms and conditions shall apply to the
Renewable Rider:

***
b) The Renewable Rider shall not collect costs for renewable procurements currently
being recovered either through PNM’s existing base rates or FPPCAC or that were
included in PNM’s test year cost of service in this case, namely: New Mexico Wind
Energy Center costs which are recovered through the FPPCAC, the regulatory asset and
amortization for the biomass assessment and the 25 kW photovoltaic (“PV”) facility at
Algodones, New Mexico, the regulatory asset and amortization for RECs purchased
through December 31, 2009 under PNM’s small and large PV programs and for RECs
purchased from SPS in 2010. Costs recovered through the Renewable Rider shall not
also be recovered through the Additions Rider.

***
g) The Renewable Rider shall be adjusted annually to account for new Commission-
approved procurements and changes in revenue requirements related to amortization,
depreciation, ADIT, property taxes and other relevant factors.

h) The Renewable Rider shall be collected as a billing surcharge pursuant to Stipulation
paragraph 32(j).13

As I understand these provisions in that Stipulation, the earliest PNM will be able to begin
recovering any of the “annual” revenue requirements it calculated for any of the procurements
shown on Ms. Bothwell’s Exhibit CDB-4 on a monthly “percent of bill basis” will be July 1,
2012. So, in terms of PNM’s RCT analysis of the “rate impacts” on its customers, PNM will not
be able to recover more than about half (six months) of those “annual” costs in 2012. And,
according to that Stipulation language, to the extent PNM already is recovering the
approximately $2.6 million “annual” revenue requirements calculated for its previously-
approved NMWEC wind procurements shown on Ms. Bothwell’s Exhibit CDB-4 from

13 February 3, 2011 Stipulation in Case No. 10-00086-UT, pp. 15-17. Paragraph 32(j) of that Stipulation provides:
“Revenue to be recovered through the Renewable Rider and the Additions Rider will be allocated based on each rate
class’s contribution to total base revenues, including FPPCAC. These Riders will be billed on a percent of bill
basis.” Id., p. 21.
customers through its monthly fuel and purchased power adjustment rider ("FPPCAC"), those

costs will not result in any additional actual "rate impact" on PNM’s customers in 2012 or 2013.

PNM’s procurement cost calculations also are inconsistent with an important part of the second
RCT criteria in the REA and Rule 572.11.B I quoted earlier, namely that the Commission must
"take into account" the "life cycle cost on a net present value basis of renewable energy
resources available from suppliers."

Q. PLEASE EXPLAIN WHY.

A. To reasonably "take into account" the "life cycle cost on a net present value basis" of the
renewable energy resources described in PNM’s Plan, all costs and benefits reasonably expected
over the useful lives of those resources should be considered. PNM’s method for calculating its
procurement costs does not do that for several reasons.

First, it is my understanding that in the Integrated Resource Plans it files with the Commission,
PNM, like the two other electric utilities in New Mexico, uses a "levelized" cost approach and
model to reasonably estimate and project those "life cycle" costs and benefits for the purpose of
selecting both non-renewable and renewable generation resources on a "least cost" basis. More
to the point in this case, as early as 2008, in Commission Case No. 08-198-UT docketed to
address a "standardized methodology for determining renewable energy costs for the purpose
of" Rule 572.11, PNM recommended to the Commission that "[t]he cost to be used in evaluating
the overall rate impact of a renewable energy resource in comparison to the reasonable cost
threshold set forth shall be the net levelized cost of the renewable energy at the point of delivery
to the utility, which is defined as the levelized cost of the renewable resource less the levelized
cost of a least-cost resource with similar purpose and size.”

As REIA summarized in its briefs in Case No. 10-00373-UT, PNM, as well as EPE and SPS,
continued thereafter to support Commission adoption in that rulemaking docket of a
“consensus”-developed “levelized” method for determining the cost of their proposed renewable
energy procurements in comparison with the Commission’s RCT in that rulemaking
proceeding. As REIA also showed in those briefs, PNM relied on a “levelized” approach for
determining and justifying the reasonableness of the costs of its proposed renewable energy
procurements in the following previous renewable energy procurement plan cases: PNM’s 2009
Plan Case, No. 08-221-UT; PNM’s initial 2010 Plan, Case No. 09-260-UT; and PNM’s
Revised 2010 Plan, Case No. 10-00037-UT.

PNM’s levelized cost calculations on Ms. Bothwell’s Exhibit CDB-6 supporting the Stipulation
proposed (but rejected by the Commission) in Case No. 10-00037-UT, provided by PNM in
discovery in this case as “PNM Exhibit REIA 1-4” and here as Exhibit RS-6, shows two things
that demonstrate problems with PNM’s non-levelized procurement cost calculations in this case.

Q. WHAT DOES EXHIBIT RS-6 SHOW?

---

14 Exhibit A to Notice of Inquiry in Case No. 08-00198-UT (copy provided as Exhibit RS-5)
15 See Commission records in Case No. 08-198-UT.
16 Bothwell Rebuttal Testimony, PNM Ex. 4, Ex. CDB-7R.
17 PNM Ex. 1 (Bothwell Direct), Exs. CDB-5 and 6.
18 PNM Ex. 1 (Darnell Direct), pp., 9, 45; PNM Ex. 2 (Darnell Rebuttal), pp. 10-11; PNM Ex. 5 (Bothwell Direct),
p. 5(corrected) and Exs. CDB-6, Tables 6, 7a (corrected) and 7.b.
A. That Exhibit shows very clearly that PNM relied on a levelized cost calculation method to justify to the Commission the reasonableness of the cost of its proposal to procure a “Solar Demo with Batteries” project and the 22 MW of *utility-owned* PV facilities (rather than procure a utility-scale PV resource with that capacity using a purchased power agreement) subsequently approved by the Commission in that case and reflected in Ms. Bothwell’s Exhibit CDB-4 in this case. It also shows that, when calculating the levelized costs of those *utility-owned* solar resources, PNM considered not only avoided fuel and line loss costs, but also avoided capacity and CO2 costs. In this case, however, as I pointed out earlier, PNM considered only avoided fuel and line loss costs in its non-levelized calculations of the annual costs of its projected procurements from the 22 MW of PV facilities and “Solar Demo with Batteries” project approved by the Commission in Case No. 10-00037-UT.

Q. WHY DO YOU BELIEVE THAT INFORMATION ON EXHIBIT RS-6 SHOWS THAT PNM’S NON-LEVELIZED PROCUREMENT COST CALCULATIONS ARE A PROBLEM?

A. As shown Tables 4 and 5 of Ms. Bothwell’s Exhibit CDB-4, PNM’s non-levelized calculations of the “annual” costs of procurements from its “Solar Demo with Batteries” and “22 MW of PNM-owned PV” constitute a very substantial 38.4% ($7,809,025) of the “Total Annual Resource Cost” of PNM’s proposed Plan in 2012 ($20,326,463) and 35.5% of the “Total Annual Resource Cost” ($20,028,520) of PNM’s proposed Plan in 2013 ($7,111,030). PNM’s non-levelized calculations that exclude avoided capacity costs and other avoided costs of its procurements from those previously approved utility-owned resource calculations therefore
constitute a significant part of and basis for PNM’s RCT constraint and RCT-driven RPS reduction claims in this case.

As shown on Exhibit RS-6, when levelized and avoided fuel, line loss, capacity and CO2 costs are taken into account, the net “RCT cost” per MWh of these PNM utility-owned solar resources is substantially lower ($356.62 for “Solar Demo with Batteries” and $66.64 for “PNM Owned PV 22 MW”) than calculated on Ms. Bothwell’s Exhibit CDB-4 ($480.14 for “Solar Demo with Batteries” and $142.27 for “PNM Owned PV 22 MW” in 2012; $455.07 for “Solar Demo with Batteries” and $129.00 for “PNM Owned PV 22 MW” in 2013).

I believe it is inconsistent and thus a problem for PNM to have used a levelized cost method that considered all of the avoided costs of renewable energy procurements as it did in Case No. 10-00037-UT (after recommending Commission adoption of that method in its rulemaking proceeding in Case No. 08-198-UT and relying on that method in its 2009 and initial 2010 Plan cases) and then, after receiving Commission approval of those procurements, to use a different “revenue requirements” method that excludes avoided capacity costs and other avoided costs to calculate the annual cost of its procurements from those resources in this case.

Q. YOU NOTED EARLIER THAT PNM’S LEVELIZED COST CALCULATIONS ON EXHIBIT RS-6 ADDRESSED A STIPULATION IN CASE NO. 10-00037-UT THAT WAS REJECTED BY THE COMMISSION. IS IT FAIR TO SAY THAT THE “AVOIDED COST” CALCULATIONS SHOWN ON THAT EXHIBIT WERE
DISPUTED BY PARTIES THAT OPPOSED THAT STIPULATION AND WERE
NEVER APPROVED BY THE COMMISSION IN THAT CASE?

A. Certainly. It is my understanding that the Commission did not address the reasonableness
of those avoided cost calculations when it rejected the Stipulation in that case. The point I make
here is simply that one of the reasons why PNM’s procurement costs calculations in this case are
so high is PNM’s decision to not take into account any avoided costs for its utility-owned
renewable resource procurements other than for avoided fuel and line losses, as stated by Ms.
Bothwell.

Q. DID PNM RELY ON THE SAME “REVENUE REQUIREMENTS” METHOD IN
ITS LAST (REVISED 2011) PLAN CASE NO. 10-00373-UT THAT IT RELIES ON IN
THIS CASE?

A. Yes. In response to discovery by REIA requesting levelized PNM cost calculations in
this case, PNM stated the following in support of its objection to providing that information:

In preparing PNM’s Revised Renewable Energy Portfolio Procurement Plan for 2011
(Revised 2011) Plan, Case No. 10-00373-UT, PNM had conducted resource cost
calculations and RCT calculations using the levelized methodology set forth in Case No.
10-00037-UT, but had not presented it in its filing; therefore, PNM was able to provide
that information to you [REIA] with relatively additional effort. In the present case, no
levelized RCT calculations have been prepared. Consequently, the burden to provide
such information in this case is much greater than in the last case.\(^{19}\)

Q. DID PNM PROVIDE REIA WITH ANY LEVELIZED COST CALCULATIONS
IN CASE NO. 10-00373-UT REGARDING ITS REVISED 2011 PLAN?

A. Yes. As indicated in the PNM discovery response I just quoted, in response to discovery
in Case No. 10-00373-UT, PNM provided the levelized cost calculations shown on “PNM

\(^{19}\) Exhibit RS-7 (PNM follow-up response to REIA Discovery Request 1-3, ¶ 1).
NMPRC Case No. 11-00265-UT
Direct Testimony of Randall Sadewic for REIA

Exhibit REIA 1-8” that REIA introduced and was admitted into the record as REIA Exhibit 7 in that case. A copy of that Exhibit is provided as Exhibit RS-8.

Q. WHAT DOES EXHIBIT RS-8 SHOW?
A. It shows that, using the particular “levelized cost” method PNM used to calculate the procurement costs for 2011 and 2012 shown on that Exhibit, the “Incremental Revenue Requirements” per MWh-REC” cost for PNM’s previously approved “Solar Demo with Batteries” Project and “PNM Owned PV 22 MW” were substantially lower than the “Incremental Revenue Requirements” per MWh-REC” costs of those resources in 2012 and 2013 shown on Ms. Bothwell’s Exhibit CDB-4 in this case. The “levelized” cost data calculated by PNM shown on Exhibit RS-8 also show higher levelized cost calculations per MWh-REC for those utility-owned solar resources than the “RCT cost”” per MWh cata shown on Ms. Bothwell’s Exhibit CDB-6 (Exhibit RS-6) that PNM used and asked the Commission to rely on in its Revised 2010 Plan in Case No. 10-0037-UT.

A. I believe so. I am informed by REIA’s attorney that, in response to follow-up discovery by REIA regarding its Discovery Request 1-4 in this case, one of PNM’s attorneys (Ms. Lucy Bettis) informed him that the reason for that cost calculation difference is that Ms. Bothwell
included only avoided fuel and line loss costs in her calculations of the annual costs of those utility-owned resources in Case No. 10-00373-UT (addressing PNM’s Revised 2011 Plan) shown on Exhibit RS-8, whereas, as noted earlier, PNM included additional avoided capacity and CO2 costs in its calculations of the RCT costs of those utility-owned resources proposed in the Stipulation presented in Case No. 10-00037-UT addressing PNM’s Revised 2010 Plan.

Q. HAS REIA ASKED PNM TO PROVIDE LEVELIZED COST CALCULATIONS FOR THE UTILITY-OWNED SOLAR AND OTHER RENEWABLE ENERGY PROCUREMENTS DESCRIBED IN ITS 2012 PLAN IN ORDER TO TRY TO DETERMINE THE TOTAL COST IMPACT OF PNM’S USE OF ITS PROPOSED METHOD, INSTEAD OF A “LEVELIZED COST” METHOD THAT TAKES INTO ACCOUNT AVOIDED CAPACITY AND OTHER AVOIDED COSTS, TO CALCULATE THE ANNUAL COSTS OF THOSE RESOURCES IN THIS CASE?

A. Yes. As shown on Exhibit RS-3, REIA asked PNM to provide this RCT cost calculation information as well as PNM’s projected 2012 and 2013 revenues based on the recent rate increase it was granted in REIA Discovery Requests 1-3, 1-4, 1-6 and 1-7, to which PNM objected on relevance and “burdensome” grounds. I am informed by REIA’s attorney that, in response to his further attempts to obtain that information from PNM without having to file a motion to compel that discovery, one of PNM’s attorneys (Ms. Bettis) agreed by email on September 29 that, without waiving its objections, PNM would provide more information responding to those requests before close of business on September 30.
I am informed by REIA’s attorney that, as of close of business on September 30, he had not
received any further information responding to this discovery request from PNM. REIA and I
therefore would respectfully ask that Commission allow me to briefly supplement this testimony
to address that information if PNM does provide it and, after reviewing it, I believe that would be
helpful to the Commission’s deliberations in this case.

Q. ARE THERE ANY OTHER REASONS WHY YOU BELIEVE PNM’S USE OF
THIS SORT OF “REVENUE REQUIREMENTS” METHOD, RATHER THAN A
“LEVELIZED COST” METHOD REFLECTING APPROPRIATE AVOIDED COSTS
TO CALCULATE IT PROCUREMENT COSTS IN THIS CASE IS A PROBLEM?

A. Yes. It is my understanding that EPE has used and continues to use a levelized cost
method that takes into account avoided capacity costs to calculate the annual costs of the
renewable energy procurements described in its renewable energy procurement plans. For
example, EPE used a levelized cost method that considered avoided capacity costs to calculate
the annual 2012 and 2013 costs of its 2011 plan in Case No. 11-00263-UT, currently before the
Commission. And, as I noted earlier, SPS supported Commission approval of a “standardized”
levelized cost calculation method for all public utilities in the Commission’s Case No. 08-198-
UT rulemaking proceeding before the Commission closed that docket without issuing a final
order addressing that subject.

---

20 Prepared Direct Testimony of Evan Evans in Case No. 11-00263-UT at pp. 7-8 and Exhibit EDE-1 provided as
Exhibit RS-9 (explaining that “[t]hat the incremental cost of the bundled renewable resources was calculated as the
levelized cost of the renewable resource less the levelized capacity cost of a comparable non-renewable technology,
less associated non-fuel fixed and variable costs, and less the levelized fuel-related cost for the non-renewable
technology.”).
Q. DO YOU HAVE ANY OTHER CONCERNS OR OBSERVATIONS ABOUT THE REASONABLENESS OF PNM’S USE OF THE “REVENUE REQUIREMENTS” METHOD FOR CALCULATING ITS ANNUAL RENEWABLE ENERGY PROCUREMENT COSTS DESCRIBED BY MS. BOTHWELL?

A. Yes. At page 15 of her Direct Testimony, Ms. Bothwell states that PNM’s calculations on those Exhibits do not apply any “avoided fuel and avoided losses” or any other avoided costs to what she calls the “REC-only” purchases identified on those Exhibits, including “REC-only purchases from net-metered DG facilities at PNM retail customer premises.” Ms. Bothwell claims that “avoided costs do not apply” to PNM’s procurements of RECs from its Commission-approved DG programs “[b]ecause no energy is included in a REC-only purchase.” She also claims there that “[a]lthough at this time the benefits to these [net-metered DG] customers are greater than the avoided system costs, PNM has not included this additional cost as a renewable compliance cost.”

Based on those assertions, the “net revenue requirements” of the DG procurements identified on Ms. Bothwell’s Exhibit CDB-4 do not take into account any avoided fuel, line loss or capacity costs. I believe those assertions are not justified because they are inconsistent with testimony by another PNM witness in PNM’s recent general rate case (No. 10-00086-UT) and the Commission’s Final Order and approval of paragraphs 13 and 30 of the Stipulation in that case.

Q. PLEASE EXPLAIN THE INCONSISTENCIES TO WHICH YOU ARE REFERRING,
A. To support a New Interconnect Customer ("NIC") rate rider proposed with its initial Application in that recently decided rate case, PNM filed prepared testimony by James Mayhew acknowledging that non-utility-owned DG facilities that interconnect with its system do provide not only "[s]hort-term benefits" that "include lower fuel and purchased power costs and reduced [energy] losses," but also "[l]ong-term benefits" that "include capacity savings for generation and cost deferral savings for transmission," which he calculated to be $.001119/kWh during the next three years.\(^2\) Mr. Mayhew also stated there that, in addition to those avoided system cost benefits, "[i]f the energy from the distributed generation at the time of peak, there is some potential reduction in the cost of PNM’s demand response programs" that he quantified in his Exhibit JAM-20 to his testimony.\(^2\) He also stated there that the NIC rate rider PNM initially proposed in that case to recover the cost of "ancillary and standby services to new interconnected customers as provided for in HB 181" would not duplicate recovery of those costs through any of PNM’s other proposed rates in violation of that 2010 amendment to the Public Utility Act.\(^2\)

In that PNM rate case, intervener Interstate Renewable Energy Council submitted testimony by R. Thomas Beach supporting PNM’s withdrawal of its NIC rate rider as provided in paragraphs 12 and 30 of the Stipulation proposed showing that Mr. Mayhew’s DG cost savings estimates for the next three years were incorrectly calculated and, were not only greater than those PNM’s estimates, but greater than the “fixed” NIC costs Mr. Mayhew had calculated.\(^2\) The Commission’s Final Order in that case approved PNM’s withdrawal of its proposed NIC Rider as

\(^2\) Case No. 10-00086-UT, June 1, 2010 Prepared Direct Testimony of James Mayhew, pp. 92-93 and Ex. JAM-20 (Copy provided as Exhibit RS-10).
\(^2\) Id., p. 93.
\(^2\) Id., pp. 90, 95.
\(^2\) Case No. 10-00086-UT, Prepared Direct Testimony of R. Thomas Beach in Support of Stipulation (¶¶ 13 & 30 only), admitted as “IREC Exhibit 1.”
provided in the Stipulation without quantifying the “fixed” costs or avoided cost benefits of net-metered solar DG systems interconnected with PNM, and without determining if those costs exceed those avoided cost benefits.

Based on what transpired in that PNM rate case, I believe there is no reasonable basis or support for Ms. Bothwell’s assertion that “at this time the benefits to these customers are greater than the avoided system costs.” Ms. Bothwell presents no proof of that in this case.

For that reason, I also believe there is no reasonable basis for Ms. Bothwell’s general and very broad assertion that, when calculating the revenue requirements associated with PNM’s annual procurements of REC’s from its net-metered DG customers, no avoided cost benefits should ever be considered. And, because PNM withdrew its NIC rate rider in its rate case and its witness sponsoring that rider stated it would not duplicate recovery of any “fixed” NIC costs that would be recovered from PNM’s customers under its other proposed rates, I don’t believe there is any reasonable basis or justification for Ms. Bothwell to characterize those “costs” as “the resulting non-participant ratepayer cost of a net-metered solar REC customer.”

Q. YOU SAID EARLIER THAT YOU ALSO BELIEVE PNM’S CALCULATION OF THE “DENOMINATOR” FOR THE RCT CALCULATIONS SHOWN ON MS. BOTHWELL’S EXHIBIT CDB-4 IS NOT REASONABLE OR REASONABLY JUSTIFIED. PLEASE ADDRESS THAT RCT “DENOMINATOR” ISSUE.

A. As shown on that Exhibit and noted earlier, PNM used its actual 2010 revenues of $797,277,195 as the denominator for its RCT analysis. Shortly after PNM filed its 2012 Plan,
however, the Commission issued its Final Order in Case No. 10-0086-UT granting PNM an annual revenue increase of approximately $72.1 million, which PNM began implementing in August of this year.”25 These higher current PNM rates will be in effect throughout 2012 and 2013.

As also noted, Rule 572.11.B states that the RCT is a specified percentage “of all customers’ aggregated overall annual electric charges” for the particular years addressed in a utility’s renewable energy procurement plan. It may be reasonable for a utility to use its “prior year’s revenues” for its future, projected RCT calculation denominator when there is no more reasonable rate basis for the utility to use to project that amount.

In this case, however, where the Commission approved a substantial rate increase for PNM soon after its initial RCT calculation and well before the hearing in this case, I do not believe it is reasonable for PNM to do so because that 2010 data does not reflect the most recent known and reliable information PNM (and the Commission) has for projecting PNM’s “aggregated overall annual electric charges” in 2012 and 2013 and applying the RCT. In my opinion, PNM’s reliance on stale 2010 revenue figures to calculate the denominator for its RCT analysis is particularly unreasonable in this case where its effect is to limit its projections of the RCT “headroom” it has in 2012 and 2013 for procuring additional amounts of renewable energy and to support instead the substantial reductions to its 10% RPS and full diversity requirements that PNM is claiming.

25 August 11, 2011 PNM Advice Notice Nos. 425 & 49, Compliance Filing in Case No. 10-00086-UT.
Q. HOW DO YOU BELIEVE PNM AND THE COMMISSION SHOULD CALCULATE PNM’S “AGGREGATED OVERALL ANNUAL ELECTRIC CHARGES” IN 2012 AND 2013 IN A REASONABLE MANNER THAT IS MOST CONSISTENT WITH RULE 572.11 FOR THE PURPOSE OF APPLYING THE COMMISSION’S RCT IN THIS CASE?

A. In my opinion, the most reasonable way to calculate that RCT “denominator” in this case is to apply PNM’s current, higher rates to the “Projected Retail Sales (MWh)” of 8,843,583 MWh in 2012 and 8,934,983 MWh in 2013 shown on Table 1 of PNM’s 2012 Plan and on Exhibit CDB-2 (“Table 2”) to Ms. Bothwell’s Direct Testimony.

Q. HAS PNM PROVIDED THAT PROJECTED REVENUE CALCULATION IN THIS CASE?

A. Not exactly. As shown on Exhibit RS-3, REIA asked PNM for that information in its Discovery Request 1-3(a) and PNM initially objected to providing it on the grounds that it was not relevant and “would impose a substantial of time and expense on PNM that is not outweighed by the likely benefit of the information to the recipient.” For the reasons explained earlier, I (and REIA) believe this information is not only relevant, but would benefit all parties and the Commission when assessing the reasonableness of PNM’s RCT claims in this case. For that reason, REIA asked its attorney to continue pursing this request with PNM.

As shown on Exhibit RS-7 (¶ 1), in a follow-up response to that REIA discovery request, PNM asserted that “[t]he ‘Projected Retail Sales’ volumes sown in Exhibit CDB-2, Table 2 were not
prepared on the basis of individual rate classes. Consequently, an exact calculation as requested
cannot be made without a substantial investment of time and resources.”

As shown there, however, PNM stated that “an approximation of projected revenues and the
RCT revenue cap could be calculated” by applying the $72.1 million revenue increase approved
in Case No. 10-00086-UT and factoring in PNM’s higher projected retail sales volumes (shown
on Table 1 of PNM’s Plan and Ms. Bothwell’s Exhibit CDB-2, which take into account PNM’s
estimates of reduced customer electric usage as a result of “approved and projected energy
efficiency”) of 8,843,593 MWh in 2012 and 8,934,983 MWh in 2013. As shown there, that
results in projected annual PNM revenues of $926.4 million in 2012 and $936.0 million in 2013,
as compared to the $797,277,195 PNM used for the denominator of its RCT calculations for both
of those years.

Based on those PNM projected revenue “approximations,” PNM would have an RCT “revenue
cap” of $20.3 million in 2012, or about $0.5 million greater than the $20.3 million cost for the
“Total Annual Resources” in 2012 shown on Table 4 of Ms. Bothwell’s Exhibit CDB-4. Based
on those PNM “approximations,” PNM would have an RCT “revenue cap” of $23.4 million in
2013, or about $3.3 million greater than the $20.02 million cost for the “Total Annual
Resources” in 2013 shown on Table 5 of that Exhibit.

This shows that, even if the Commission were to accept PNM’s non-levelized procurement cost
calculations without considering avoided capacity costs as reasonable for applying the RCT in
this case, the annual costs of PNM’s 2012 Plan would be less—rather than more—than its annual
RCT revenue caps as shown on Ms. Bothwell’s Exhibit CDB-4. I believe this denominator change alone to PNM’s RCT calculation and analysis would allow PNM to implement the extensions of the SIP REIA is recommending without exceeding its RCT in 2012 or 2013.

Q. DO YOU KNOW IF THOSE PNM PROJECTED REVENUE “APPROXIMATIONS” INCLUDE REASONABLE PROJECTIONS OF REVENUES FROM PNM ENERGY EFFICIENCY RATE RIDER CHARGES TO ITS CUSTOMERS IN 2012 AND 2013?

A. No. In its follow-up responses to this discovery request by REIA, PNM did not provide any further information about what revenue sources were included or excluded from the “approximations.” Rule 572.11.B refers to “all customers’ aggregated overall annual electric “electric charges.” I therefore believe reasonable projections of PNM’s revenues from its Energy Efficiency rate rider should be included for the purpose of calculating the denominator of PNM’s RCT analysis in this and future renewable energy procurement plan cases.

Q. YOU SAID EARLIER THAT PNM RELIED ON ITS “REVENUE REQUIREMENTS” METHOD WITHOUT CONSIDERING AVOIDED CAPACITY COSTS FOR CALCULATING ITS PROCUREMENT COSTS IN ITS LAST (REVISED 2011) PLAN CASE NO. 10-00373-UT? DID REIA INTERVENE AND OBJECT TO PNM’S USE OF THAT COST CALCULATION METHOD FOR APPLYING THE RCT IN THAT CASE?

A. Yes. REIA intervened in that case and, though it did not have the resources to provide a witness in that proceeding, its attorney cross-examined Ms. Bothwell about PNM’s use of that:
cost calculation method at the hearing and REIA very strenuously objected to PNM’s reliance on
that method in its briefs and its Exceptions to the Recommended Decision in that case.

Q. TO YOUR AND REIA’S KNOWLEDGE, DID THE COMMISSION, ASSESS OR
DETERMINE THE REASONABLENESS OF PNM’S USE OF ITS “REVENUE
REQUIREMENTS” METHOD TO CALCULATE ITS REVISED 2011 PLAN
PROCUREMENT COSTS IN CASE NO. 10-00373-UT.

A. I don’t believe so. Paragraph 6 of the Commission’s June 2, 2011 Final Order in that
case acknowledged that four of REIA’s five exceptions that related to the Recommended
Decision’s “conclusion that adoption of an approved methodology for calculating the reasonable
cost threshold is not necessary to the resolution of this case.” Addressing those exceptions, that
paragraph of that Order simply stated: “The Commission recognizes that there is a need for
additional guidance with respect to calculation of the RCT and that there may be a need to
address the RCT in connection with PNM’s plan.”

Q. DO YOU AND REIA HAVE ANY FURTHER CONCERNS OR OBSERVATIONS
REGARDING THE REASONABLENESS OF PNM’S RCT CALCULATIONS IN THIS
CASE?

A. Yes. We are also concerned that, if the Commission accepts PNM’s RCT calculation
methods in this case, they will not only result in the reductions of its 10% RPS and full diversity
requirements in 2012 and 2013 claimed by PNM here, but also will provide a precedent and
basis for PNM to assert similar RCT and RPS reduction claims in future renewable energy
procurement plan cases, with the result that PNM also will not satisfy its greater minimum 15%
RPS requirement under the REA and greater full diversity requirements under Rule 572
beginning in 2015, and its even greater minimum 20% RPS requirement under the REA and
greater full diversity requirements under Rule 572 beginning in 2020. For this reason, I believe
it is very important for the Commission to carefully consider both the near-term (2012-2013) and
longer term impacts of the methods PNM is relying on to perform its RCT calculations and
analysis in this case when determining the reasonableness of those methods.

Q. PLEASE SUMMARIZE REIA’S POSTION CONCERNING PNM’S PROPOSED
2012 PLAN.

A. For the reasons addressed here, REIA respectfully urges the Commission to:
(1) approve REIA’s proposal for extending the 0 to10 kW and >10 to 100 kW tranches of
PNM’s SIP in this case;
(2) reject the method PNM used to determine the annual costs of the renewable energy
procurements from the utility-owned resources previously approved by the Commission
and use and approve a “levelized cost” method, similar to the method that EPE currently
uses, that reasonably considers the avoided capacity and other “avoided costs” of those
procurements to perform those calculations and apply the Commission’s RCT; and
(3) use, and direct that PNM use, the $926.4 million and $936.0 million projected
revenue “approximations” for 2012 and 2013 provided by PNM in discovery and shown
on Exhibit RS-7 to reasonably project PNM’s aggregated overall electric charges in 2012
and 2013 as the “denominator” of PNM’s RCT analysis in this case unless PNM provides
more accurate revenue projections for those years, using the rates recently approved by
the Commission in Case No. 10-00086-UT, prior to closure of the record in this case.
Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.
EXHIBIT RS-1
Personal Development & Related Experience

**June, 2004 to Present**, co-owner and President of Positive Energy providing photovoltaic energy consulting, design, and installation services in New Mexico.
- Consulting and designed over 1 MegaWatt of installed grid-tied photovoltaic systems for homes, businesses, governments and PNM in New Mexico.
- Installed about 100 kilowatts of grid-tied photovoltaic systems.
- Task force member of NM Renewable Energy Industry Association involved in drafting permitting and inspection guideline standards for the state of New Mexico.
- Provided home energy consultation as part of grid-tied design services and performed home energy audits to over 30 homes.
- Co-instructed six, New Mexico Solar Energy Association PV design and installation courses including design and installation of over six kilowatts of grid-tied installations.
- Developed and updated curriculum for grid-tied photovoltaic class for NMSEA starting in May, 2006.
- CID Certified Photovoltaic Instructor, October, 2007.
- Taught energy efficiency at Ecoversity, April, 2006.
- Presented NMSEA’s Renewable Energy “Sunucher” program with working displays to over 700, K-12 students and Native Americans.
- Frequent speaker and advocate on renewable energy and energy efficient topics to adults in New Mexico.

**April, 2003 to May, 2004** student of San Juan College (SJC) and community member.
- Completed the one year Certificate Program in Renewable Energy.
- Developed curriculum and taught senior citizens on Home Efficiency and Weatherization at SJC.
- Taught students from K-12 on the basics of renewable energy, and to the citizens of the Town of Ignacio, Colorado.
- Performed energy audits at the Homeless Shelter and the Safe House, Durango, CO, and to Farmington community households.
- Completed two, two week training programs covering photovoltaics and wind power at Solar Energy International.
- Published an article “Taking action on Global Warming” in the Japan Times, Sept. 2003.

**September 2000 to April 2004**, associate member of Lead International, a global network of individuals and organizations committed to sustainable development based in London with over 1,000 members in 35 developing countries. Key activities include:
- Participated in training sessions and site visits on community capacity building and leadership in Pakistan with 200 associates.
Randy S. Sadewic

- Initiated a two week field trip with a Chinese associate through rural China to study the application of passive and active solar energy for agriculture and evaluate the role of local and national governments.
- Graduate as a LEAD fellow in April, 2004 in London

1999 to 2003, worked as General Manager and Finance Manager of Cascade Microtech Japan, a field sales and service office based in Tokyo, Japan with 20 Japanese employees. Responsible for activities of the field office including: sales, customer service and administration.

1986 to 1999, worked as Chief Financial Officer of Cascade Microtech, based in Beaverton, Oregon, a worldwide market leader in providing advanced microelectronic probing tools for testing semiconductor chips. Key participant in growing the business from 12 employees to over 250 employees in 14 years serving US, Europe and Asia.

1983 to 1985 worked as Accounting Manager and then Controller of Metheus, a startup company manufacturing hardware and software for the emerging computer-aided engineering market.


Other Education, Technical & Managerial Development
Advanced PV Design and Installation, BEW Engineering, California, Dec. 2005
Japanese national proficiency exam, level three (four levels starting at level four)
Dale Carnegie and Communispond Public Speaking programs
Building Market Focused Organizations program adopted by Hewlett-Packard
American Electronics Association-Stanford Business School Finance and International Finance programs
Total Quality Leadership program based on the book “Fifth Discipline” by Peter Senge
BS majoring in accounting, University of Oregon
Member of Accounting Honorary

Personal Affiliations
Board Vice-President of NMSEA since 2008, prior to that advisory board member since 2005
Organized training on The Natural Step concept of sustainability developed in Sweden in NM, Feb, 2008
Former Board member of Friends of Trees, Portland, Oregon not-for-profit community organization.
Former Chairman of American Electronics Association Oregon Finance Committee
Ham Radio General License, call sign KB7 URI
EXHIBIT RS-2
SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

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

1. Standard Small Solar REC Purchase Agreement for Participation in PNM’s Solar REC Incentive Program,
2. Standard Large Solar REC Purchase Agreement for Participation in PNM’s Solar REC Incentive Program,
3. Standard Small Solar REC Purchase Agreement for Participation by Third-Party Owner in PNM’s Solar REC Incentive Program, or
4. Standard Large Solar REC Purchase Agreement for Participation by Third-Party Owner in PNM’s Solar REC Incentive Program.

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

This rate will apply to:

1. Customers with Solar Facilities less than or equal to 100 kW$_{AC}$ who submitted applications to PNM after August 31, 2010,
2. Customers with Solar Facilities larger than 100 kW$_{AC}$ who submitted applications after August 27, 2010,
3. Customers with applications for Solar Facilities larger than 100 kW$_{AC}$ that were pending with PNM as of August 27, 2010, unless grandfathered by the Commission into PNM’s Large PV REC Purchase Program, and

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

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

Company or PNM is Public Service Company of New Mexico.

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

Large Solar Facility is a solar PV or solar thermal facility generating electricity that is sized greater than 10 kW$_{AC}$ up to and including 1,000 kW$_{AC}$ (or 1 MW$_{AC}$) based on the rated capacity of the inverter.
PUBLIC SERVICE COMPANY OF NEW MEXICO
ELECTRIC SERVICES

1ST REVISED RATE NO. 32
CANCELING ORIGINAL RATE NO. 32

SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

NMPPRC or Commission is the New Mexico Public Regulation Commission or a successor agency exercising jurisdiction over the subject matter of this Rate Number 32.

Small Solar Facility is a solar PV or solar thermal facility that is sized at 10 kWAC or smaller based on the rated capacity of the inverter.

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

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

TERMS OF SERVICE:

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

1. Have a Solar Facility inverter capacity no greater than 1 MWAC, which for Third-Party Owners must be sized to supply no more than one hundred twenty percent (120%) in kWh of the average annual consumption of electricity by Customer at the location of the Solar Facility.

2. Submit a complete application.
   * For Small Solar Facilities: A complete application shall include Application Form, Non-Refundable Application Fee, One-Line Electric Diagram, Site-Map and Inverter Specification Sheet as described in the application
   * For Large Solar Facilities: A complete application shall include Application Form, Application Fee, One-Line and Three-Line Electric Diagram which must be stamped by a professional engineer licensed to practice in the state of New Mexico if the generating facility is larger than 50 kWAC, Site-Map and Inverter Specification Sheet as described in the application;

3. Receive from PNM a Notice of Completion of Application and REC Reservation, which shall include the REC price that PNM will pay for RECs generated by the Solar Facility provided that the Solar Facility is interconnected within the time frame set forth in Section 4 below, consistent with the originally proposed design and capacity;

4. Interconnect the Solar Facility within 12 months for Large Solar Facilities or within 9 months for Small Solar Facilities of being notified by PNM, through a Notice of Completion of Technical Screening, that the Solar Facility has passed PNM's technical screening. Except as provided in Section 5 below, the price for RECs generated by a Solar Facility that fails to interconnect within the applicable time period will be the REC price for the price step shown in Table 1 that is open at the time of interconnection;

5. If, after PNM issues a Notice of Completion of Application and REC Reservation for a Solar Facility, capacity is added to the Solar Facility above the capacity and design stated in that completed application, a new application must be submitted. The REC price for the entire output of the Solar Facility described in the new application (i.e., the

Advisory Notice No. 498
Gerard T. Ortiz
Executive Director, NM Retail Regulatory Services

GG9#504314
SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

originally installed capacity and the additional capacity), will be the REC price in the price step open on the date PNM provides its Notice of Completion of Application and REC Reservation for that new application.

REC Price:

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

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

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

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

Solar REC Purchases:

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

* For Small Solar Facilities, PNM will purchase all RECs associated with the entire amount of electricity generated by the Solar Facility as metered by PNM.
* For Large Solar Facilities, PNM will only purchase RECs associated with the amount of electricity generated by the Solar Facility that is consumed each month on Customer's premises as metered by PNM.
REALLOCATION OF CAPACITY: Capacity within a price step shown in Table 1 shall be committed to a proposed Solar Facility at the time the application is determined by PNM to be complete. A proposed Large Solar System must be interconnected within 12 months, and a proposed Small Solar Facility must be interconnected within 9 months from the date shown on PNM’s Notice of Completion of Technical Screening to the Applicant that the proposed Solar Facility has passed the screening process.

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

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

TERMS OF PAYMENT:

For Customer-owned Solar Facilities:

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

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

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

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

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

Advisory Notice No. 409
Gerard T. Ortiz
Executive Director, NM Retail Regulatory Services
GCG#504314
For Third-Party Owned Solar Facilities:

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

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

* For Small Solar Facilities: PNM shall purchase all RECs generated. Solar REC purchase payments that total in excess of $20 will be paid on a monthly basis. If the amount due for the Solar RECs is less than $20 the amount will be carried forward to the following month until such time as the balance due exceeds $20, at which time the total balance due will be paid directly to Third-Party Owner.

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

[Signature]

Advisory Notice No. 504314

Gerald T. Ortiz
Executive Director, NM Retail Regulatory Services
## TABLE 1: PRICES FOR RECS FROM SMALL AND LARGE SOLAR FACILITIES

<table>
<thead>
<tr>
<th>Line Number</th>
<th>Program Category</th>
<th>Installed Capacity</th>
<th>Price Step Size in MWAC</th>
<th>Cumulative MWAC</th>
<th>REC Price per kWh for this Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Small Solar – 0 to 10 kW</td>
<td></td>
<td>0.593</td>
<td>0.59</td>
<td>$0.120000</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>0.593</td>
<td>1.19</td>
<td>$0.110000</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>0.593</td>
<td>1.78</td>
<td>$0.100000</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>0.593</td>
<td>2.37</td>
<td>$0.090000</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>0.593</td>
<td>2.97</td>
<td>$0.080000</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>0.593</td>
<td>3.56</td>
<td>$0.070000</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>0.593</td>
<td>4.15</td>
<td>$0.060000</td>
</tr>
<tr>
<td>8</td>
<td>&gt; 10 kW to 100 kW</td>
<td></td>
<td>0.45</td>
<td>0.45</td>
<td>$0.140000</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>0.45</td>
<td>0.90</td>
<td>$0.130000</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td>0.45</td>
<td>1.35</td>
<td>$0.120000</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>0.45</td>
<td>1.80</td>
<td>$0.110000</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td>0.45</td>
<td>2.25</td>
<td>$0.100000</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td>0.45</td>
<td>2.70</td>
<td>$0.090000</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td>0.45</td>
<td>3.15</td>
<td>$0.080000</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>0.45</td>
<td>3.60</td>
<td>$0.070000</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td>0.45</td>
<td>4.05</td>
<td>$0.060000</td>
</tr>
<tr>
<td>17</td>
<td>&gt;100 kW to 250 kW</td>
<td></td>
<td>0.56</td>
<td>0.56</td>
<td>$0.130000</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>0.56</td>
<td>1.12</td>
<td>$0.120000</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>0.56</td>
<td>1.68</td>
<td>$0.110000</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>0.56</td>
<td>2.24</td>
<td>$0.100000</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>0.56</td>
<td>2.80</td>
<td>$0.090000</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td>0.56</td>
<td>3.36</td>
<td>$0.080000</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td>0.56</td>
<td>3.92</td>
<td>$0.070000</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>0.56</td>
<td>4.48</td>
<td>$0.060000</td>
</tr>
<tr>
<td>25</td>
<td>&gt;250 kW to 1 MW</td>
<td></td>
<td>1.25</td>
<td>1.25</td>
<td>$0.120000</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td>1.25</td>
<td>2.50</td>
<td>$0.100000</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td>1.25</td>
<td>3.75</td>
<td>$0.080000</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td>1.25</td>
<td>5.00</td>
<td>$0.060000</td>
</tr>
<tr>
<td>29</td>
<td>Large 1 MW</td>
<td></td>
<td>2.5</td>
<td>2.50</td>
<td>$0.110000</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td>2.5</td>
<td>5.00</td>
<td>$0.090000</td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td>1.5</td>
<td>6.50</td>
<td>$0.070000</td>
</tr>
<tr>
<td>32</td>
<td></td>
<td></td>
<td>1.5</td>
<td>8.00</td>
<td>$0.050000</td>
</tr>
</tbody>
</table>

Advisory Notice No. 408
Gerard T. Ortiz
Executive Director, NM Retail Regulatory Services
GCG#504314
PUBLIC SERVICE COMPANY OF NEW MEXICO
ELECTRIC SERVICES

1ST REVISED RATE NO. 32
CANCELING ORIGINAL RATE NO. 32

SOLAR RENEWABLE ENERGY CERTIFICATE PURCHASE PROGRAMS

Page 7 of 7

TABLE 2

EXAMPLE OF CALCULATION TO DETERMINE WEIGHTED AVERAGE PRICE FOR RECS FROM A SMALL SOLAR FACILITY WITH CAPACITY THAT FALLS INTO TWO DIFFERENT PRICE STEPS

<table>
<thead>
<tr>
<th>Program Category - Small Solar 0 to 10 kW&lt;sub&gt;AC&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Capacity in first step</td>
</tr>
<tr>
<td>Available Capacity in step</td>
</tr>
<tr>
<td>REC price in first step</td>
</tr>
<tr>
<td>REC price in next step</td>
</tr>
<tr>
<td>Project Rated Capacity</td>
</tr>
<tr>
<td>Calculation of REC Price</td>
</tr>
<tr>
<td>REC price</td>
</tr>
</tbody>
</table>

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

EXAMPLE OF CALCULATION TO DETERMINE WEIGHTED AVERAGE PRICE FOR RECS FROM A LARGE SOLAR FACILITY WITH CAPACITY THAT FALLS INTO TWO DIFFERENT PRICE STEPS

<table>
<thead>
<tr>
<th>Program Category &gt;10 kW&lt;sub&gt;AC&lt;/sub&gt; to 100 kW&lt;sub&gt;AC&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Capacity in first step</td>
</tr>
<tr>
<td>Available Capacity in step</td>
</tr>
<tr>
<td>REC price in this step</td>
</tr>
<tr>
<td>Price in next step</td>
</tr>
<tr>
<td>Next project</td>
</tr>
<tr>
<td>Calculation of REC Price</td>
</tr>
<tr>
<td>REC price</td>
</tr>
</tbody>
</table>
BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE
COMPANY OF NEW MEXICO'S
RENEWABLE ENERGY PORTFOLIO
PROCUREMENT PLAN FOR 2012

PUBLIC SERVICE COMPANY OF NEW MEXICO

Petitioner.

Case No. 11-00265-UT

PUBLIC SERVICE COMPANY OF NEW MEXICO'S OBJECTIONS AND RESPONSES TO REIA'S FIRST SET OF INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS

Public Service Company of New Mexico ("PNM") hereby responds to REIA's First Set of Interrogatories and Requests for Production of Documents ("Requests").

GENERAL OBJECTION

PNM objects to REIA's instructions and directions to the extent they seek to supplement or modify the requirements of 1.2.2.25 NMAC, et seq. or the Rules of Civil Procedure for the District Courts of New Mexico.

PNM objects to REIA's Requests to the extent they seek information protected from disclosure by the attorney-client privilege or the work product doctrine. Rules 1-026 and 11-503 NMRA 2000; 1.2.2.25.C NMAC.

In responding to these Requests, PNM reserves all evidentiary objections to any responses or documents that may be offered in evidence in this proceeding.

PNM responds to these Requests subject to, and without waiving, these objections.
compliance.” State all components of “the resulting non-participant ratepayer cost of a net metered solar REC customer” referred to there;

e. referring to the statement by Ms. Bothwell quoted in subsection d above, state if PNM has calculated “the resulting non-participant ratepayer cost” in 2012 or 2013 of the net metered solar REC customers interconnected to PNM’s system and, if so, provide those calculations and supporting workpapers showing all assumptions and inputs;

f. referring to the statement by Ms. Bothwell quoted in subsection d above, state if and explain how PNM will be able to recover any of “the resulting non-participant ratepayer cost” incurred in 2012 or 2013 referred to from any of its “non-participant” ratepayers in accordance with the PNM rates approved by the Commission in Case No. 10-00086-UT.

RESPONDENT: Cynthia Bothwell

RESPONSE:

a. A REC-only purchase excludes procurement of the associated energy. PNM’s calculation of renewable compliance costs for the purchase of DG RECs from retail customers is based on the REC costs and excludes any costs related to the provision of net metering services to the customer such as integration costs and avoided costs, because, as stated in the testimony on page 15, lines 7-8, integration costs and avoided costs are adjustments that are associated with movement of energy. See also PNM’s response to REIA 1-1a, 1-1c and 1-1e.

b. Yes, production of renewable energy from net metered customers does provide some avoided system costs, so long at the DG system is maintained and continues to produce energy, however, these avoided costs do not exceed the costs that the net metered customer imposes on other customers by avoidance of payment for some of the fixed costs associated with providing reliable service to the customer. See also PNM’s response to REIA 1-1a, 1-1c and 1-1e.

c. PNM has not specifically calculated values at customer premises for 2012 and 2013; however, the benefits would be comparable to those of avoided fuel and losses associated with the PNM solar projects that are located on distribution lines including the projects labeled Algodones, Aztec, and PNM owned PV 22 MW, shown on Exhibit CDB-4, Tables 4 and 5 of Ms. Bothwell’s Direct.

d. By non-participant ratepayer, the testimony is referring to a retail customer who is not receiving net-metering services. A non-participant customer will pay for the DG RECs being procured for RPS compliance and incur additional costs due to the fixed cost responsibility being shifted to other ratepayers by the net metered customer. See also PNM’s response to REIA 1-1c.

e. No, PNM has not calculated these costs.

f. To the extent that non-participant ratepayer costs were included in the rates approved in Case No. 10-00086-UT, those costs will be recovered from those customers.

REIA 1-3: PNM’s Projected RCT calculations for 2012 and 2013 shown on Tables 4 and 5 of Ex. CDB-4 to Ms. Bothwell’s Direct Testimony indicate that they are based in part on PNM’s “Prior Year Revenues” in 2010. Please (a) state PNM’s projected revenues in 2012 and 2013
using the PNM rates approved by the Commission in Case No. 10-00086-UT and the same "Projected Retail Sales" volumes shown on Ex. CDB-2, Table 2 to that testimony and (b) provide the projected RCT calculations for 2012 and 2013 and other information shown on Tables 4 and 5 of Ex. CDB-4 to Ms. Bothwell’s Direct Testimony using the projected revenues stated in response to (a) above, the same format and all other assumptions and projections used and shown on those Tables.

OBJECTION:

a. PNM objects to this Request to the extent that it seeks projections of revenues using the rates approved by the Commission in Case No. 10-00086-UT on the grounds that the information requested is not relevant to the subject matter of this proceeding nor reasonable calculated to lead to the discovery of admissible evidence and is therefore outside the scope of permissible discovery. PNM further objects to this Request on the grounds that it has not performed the requested calculation and analyses, the creation of which would impose a substantial burden of time and expense on PNM that is not outweighed by the likely benefit of the information to the recipient. NMAC 1.2.2.25.C; NMRA 1-026(B)(2).

b. PNM objects to this Request on the grounds that it seeks information which is not relevant to the subject matter of this proceeding or reasonable calculated to lead to the discovery of admissible evidence and is therefore outside the scope of permissible discovery. PNM further objects to this Request on the grounds that it has not performed the requested calculation and analyses, the creation of which would impose a substantial burden of time and expense on PNM that is not outweighed by the likely benefit of the information to the recipient. NMAC 1.2.2.25.C; NMRA 1-026(B)(2).

REIA 1-4: Please provide the levelized cost in 2012 and 2013 for each of the utility-owned solar resources identified on Tables 4 and 5 of Ex. CDB-4 to Ms. Bothwell’s Direct Testimony (i.e., Algodones/Aztec, Solar Demo with Batteries and PNM-owned PV 22 MW) using the “levelized” method of calculating the cost of renewable energy procurements used by PNM to calculate the RCT in support of the Stipulation proposed in PNM’s Revised 2010 Plan case (#10-00037-UT).

RESPONDENT: Cynthia Bothwell
RESPONSE/OBJECTION:
PNM objects to this Request on the grounds that it seeks certain cost data determined in accordance with a method of calculation that has never been adopted by the Commission, therefore the information requested is not relevant to the subject matter of this proceeding nor reasonable calculated to lead to the discovery of admissible evidence and is outside the scope of permissible discovery. NMAC 1.2.2.25.C; NMRA 1-026. Without waiving the foregoing objection, PNM states the requested information is provided by the Direct Testimony of Ms. Bothwell filed in Case No. 10-00037-UT, at page 29, which is attached to these responses as PNM Exhibit REIA 1-4.
substantial burden of time and expense on PNM that is not outweighed by the likely benefit of the information to the recipient. NMAC 1.2.2.25.C; NMRA 1-026(B)(2). Without waiving the foregoing objection, PNM states the requested information is similar to that provided by the Direct Testimony of Ms. Bothwell filed in Case No. 10-00037-UT, at page 29 which is attached to these responses as PNM Exhibit REIA 1-4 but should be modified to take into account the modifications identified in the response to REIA 1-5b.

REIA 1-6: Using the same format as Ex. CDB-4 (Tables 4 & 5) to Ms. Bothwell’s Direct Testimony, please provide projected RCT calculations for 2012 and 2013 using the “levelized” method that PNM used to calculate the RCT in support of the proposed Stipulation in PNM’s Revised 2010 Plan case (#10-00037-UT), PNM’s projected revenues in 2012 and 2013 using the PNM rates approved by the Commission in Case No. 10-00086-UT, and using the “Projected Retail Sales” volumes shown on Ex. CDB-2, Table 2 to that testimony.

OBSJECTION:
PNM objects to this Request on the grounds that it seeks data and analyses that are not relevant to the subject matter of this proceeding or reasonable calculated to lead to the discovery of admissible evidence and is therefore outside the scope of permissible discovery. PNM further objects to this Request on the grounds that PNM has not performed the requested calculation and analyses, the creation of which would impose a substantial burden of time and expense on PNM that is not outweighed by the likely benefit of the information to the recipient. NMAC 1.2.2.25.B; NMRA 1-026(B)(2).

REIA 1-7: Using the same format as Ex. CDB-4 (Tables 4 & 5) to Ms. Bothwell’s Direct Testimony, please provide projected RCT calculations for 2012 and 2013 using the “levelized” method of calculating the cost of renewable energy procurements proposed by PNM in the former rulemaking proceeding docketed as Case No. 08-198-UT, PNM’s projected revenues in 2012 and 2013 using the PNM rates approved by the Commission in Case No. 10-00086-UT, and using the “Projected Retail Sales” volumes shown on Ex. CDB-2, Table 2 to that testimony.

OBSJECTION:
PNM objects to this Request on the grounds that it asks PNM to provide projected RCT calculations for 2012 and 2013 using a method of calculating the cost of procurements that has never been adopted by the Commission, therefore the information requested is not relevant to the subject matter of this proceeding or reasonable calculated to lead to the discovery of admissible evidence and is outside the scope of permissible discovery. PNM further objects to this Request on the grounds that PNM has not performed the requested calculation and analyses, the creation of which would impose a substantial burden of time and expense on PNM that is not outweighed by the likely benefit of the information to the recipient. NMAC 1.2.2.25.B; NMRA 1-026(B)(2).

REIA 1-8: Please (a) state all assumptions and inputs other than those shown on Ex. CDB-4 (Tables 4 & 5) to Ms. Bothwell’s Direct Testimony used to calculate the values shown in the
columns of that Exhibit titled "Procurement Revenue Requirements," "Procurement Costs/Savings $/MWh-REC" and "Net Revenue Requirements" and (b) provide workpapers showing PNM’s calculation of the “Net Revenue Requirements” in 2012 and 2013 for each of the Resources identified on those Tables.

**RESPONDENT:** Cynthia Bothwell

**RESPONSE:**

a. PNM’s assumptions and inputs are discussed in Bothwell testimony page 11, line 16 through page 15, line 22.

b. Please see PNM Exhibit REIA 1-8b.

**REIA 1-9:** Please provide the following information concerning participation in PNM’s Solar REC Incentive Program:

a. the number and rated capacity of completed solar facility applications received by PNM for each REC incentive rate/price step within each “program category” size (i.e., 0 to 10 kW, 10 kW to 100 kW, etc.) that did not qualify for the REC price initially applied for because the facility was not completed within the applicable 9 month or 12 month period from the “Screening Passed Date” as provided in PNM’s standard Application forms for that Program;

b. the number and rated capacity of completed solar facility applications received by PNM for each REC incentive rate/price step within each “program category” size (i.e., 0 to 10 kW, 10 kW to 100 kW, etc.) that have applied or re-applied to PNM to participate in that “program category” size at a lower REC incentive rate/price than initially applied for and the lower REC incentive rate/price for which each such application or re-application was accepted by PNM;

c. the number and rated capacity of each completed solar facility application received by PNM for each REC incentive rate/price step within each “program category” size that has been withdrawn by the applicant for any reason and not re-submitted to PNM to date; and

d. the rated capacity of each solar facility and the actual or applicant-projected completion date for each of the solar facility applications in the following Program category sizes:
   i. 100 to 250 kW;
   ii. 250 to 1 MW; and
   iii. Large 1 MW.

**RESPONDENT:** Kumiko Styse

**RESPONSE:**

a. The following table shows the projects and rated capacity that did not qualify for the REC price initially applied for because the facility was not completed within the 9 months from the Notice of Completed Screening. There were no projects in program categories over 10 kW AC that failed to be completed within 12 months.

<table>
<thead>
<tr>
<th>Ref #</th>
<th>Rated Capacity in kW</th>
<th>Category</th>
<th>REC Price</th>
<th>Date of Notice of Completed Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.32</td>
<td>Up to 10kW</td>
<td>.12</td>
<td>11/07/10</td>
</tr>
<tr>
<td></td>
<td>2.95</td>
<td>Up to 10kW</td>
<td>.12</td>
<td>11/03/10</td>
</tr>
<tr>
<td>---</td>
<td>------</td>
<td>------------</td>
<td>-----</td>
<td>----------</td>
</tr>
<tr>
<td>3</td>
<td>1.99</td>
<td>Up to 10kW</td>
<td>.12</td>
<td>11/22/10</td>
</tr>
<tr>
<td>4</td>
<td>5.30</td>
<td>Up to 10kW</td>
<td>.12</td>
<td>11/22/10</td>
</tr>
<tr>
<td>5</td>
<td>3.97</td>
<td>Up to 10kW</td>
<td>.12</td>
<td>11/22/10</td>
</tr>
<tr>
<td>6</td>
<td>1.41</td>
<td>Up to 10kW</td>
<td>.11</td>
<td>12/09/10</td>
</tr>
<tr>
<td>7</td>
<td>6.49</td>
<td>Up to 10kW</td>
<td>.11</td>
<td>12/14/10</td>
</tr>
<tr>
<td>8</td>
<td>6.49</td>
<td>Up to 10kW</td>
<td>.11</td>
<td>12/08/10</td>
</tr>
</tbody>
</table>

b. One project applied to the 1MW category with a inverter rated at 1 MW and a panel capacity of 706 kW. This project reserved a REC price of $.11 per kWh and subsequently cancelled the application. The applicant later re-applied to the program in the 1MW category with a rated panel capacity of 857 kW for a lower REC price of $.09 per kWh.

c. The following table shows cancelled projects by category. Applicants in this category have withdrawn their applications and have not re-submitted an application to PNM to date:

<table>
<thead>
<tr>
<th>Program Category</th>
<th>Rated Capacity in kW&lt;sub&gt;AC&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10 kW</td>
<td>4.60</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>2.12</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>2.14</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>4.14</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>3.44</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>2.74</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>2.20</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>3.81</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>1.58</td>
</tr>
<tr>
<td>0 to 10 kW</td>
<td>4.67</td>
</tr>
</tbody>
</table>

d. The following table shows the rated capacity of each solar facility by category and, if applicable, its actual completion date. Applicants do not provide PNM with their projected completion dates.

i. 100 to 250 kW

<table>
<thead>
<tr>
<th>Ref</th>
<th>Rated Capacity in kW</th>
<th>Actual Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>148.80</td>
<td>1/19/11</td>
</tr>
<tr>
<td>2</td>
<td>152.25</td>
<td>Not available</td>
</tr>
<tr>
<td>3</td>
<td>100.80</td>
<td>Not available</td>
</tr>
<tr>
<td>4</td>
<td>136.05</td>
<td>Not available</td>
</tr>
<tr>
<td>5</td>
<td>136.05</td>
<td>Not available</td>
</tr>
<tr>
<td>6</td>
<td>136.05</td>
<td>Not available</td>
</tr>
<tr>
<td>7</td>
<td>76.28</td>
<td>8/10/11</td>
</tr>
<tr>
<td>8</td>
<td>76.28</td>
<td>Not available</td>
</tr>
<tr>
<td>9</td>
<td>105.30</td>
<td>Not available</td>
</tr>
<tr>
<td>10</td>
<td>122.25</td>
<td>Not available</td>
</tr>
</tbody>
</table>
## ii. 250 to 1MW

<table>
<thead>
<tr>
<th>Ref</th>
<th>Rated Capacity (kW)</th>
<th>Actual Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>440.48</td>
<td>Not available</td>
</tr>
<tr>
<td>2</td>
<td>343.20</td>
<td>Not available</td>
</tr>
<tr>
<td>3</td>
<td>205.95</td>
<td>Not available</td>
</tr>
<tr>
<td>4</td>
<td>345.00</td>
<td>Not available</td>
</tr>
<tr>
<td>5</td>
<td>827.25</td>
<td>Not available</td>
</tr>
<tr>
<td>6</td>
<td>461.16</td>
<td>Not available</td>
</tr>
<tr>
<td>7</td>
<td>547.94</td>
<td>Not available</td>
</tr>
<tr>
<td>8</td>
<td>561.60</td>
<td>Not available</td>
</tr>
<tr>
<td>9</td>
<td>241.95</td>
<td>Not available</td>
</tr>
<tr>
<td>10</td>
<td>403.20</td>
<td>Not available</td>
</tr>
</tbody>
</table>

## iii. 1MW

<table>
<thead>
<tr>
<th>Ref</th>
<th>Rated Capacity (kW)</th>
<th>Actual Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>868.68</td>
<td>Not available</td>
</tr>
<tr>
<td>2</td>
<td>877.50</td>
<td>Not available</td>
</tr>
<tr>
<td>3</td>
<td>813.00</td>
<td>Not available</td>
</tr>
<tr>
<td>4</td>
<td>879.00</td>
<td>Not available</td>
</tr>
<tr>
<td>5</td>
<td>842.25</td>
<td>Not available</td>
</tr>
<tr>
<td>6</td>
<td>856.50</td>
<td>Not available</td>
</tr>
</tbody>
</table>
REIA 1-10: Please provide the following information concerning each of the 9 grandfathered applications for PNM’s Large PV REC Purchase Program “pending project completion and interconnections” referenced on page 4 of PNM’s proposed Plan:

a. rated capacity of system;

b. application approval date;

c. current status of completion and interconnection of the system/project, including estimated completion date, if any, and if PNM conducted a supplemental review of any of those system/projects for technical screening, the current status of each such PNM supplemental review.

RESPONDENT: Kumiko Styess

RESPONSE:

The following table shows the rated capacity of each of the systems associated with the “grandfathered” applications, the current status and whether a supplemental review was conducted for the project. In the Large PV program, there was not an official Application Approval Date since all projects were paid the same REC price, therefore the table shows the Cleared for Construction Date. All projects in the Large PV program were subject to a technical screening and notified if they were cleared for construction.

<table>
<thead>
<tr>
<th>Ref #</th>
<th>Rated Capacity of System in kWac</th>
<th>Cleared for Construction Date</th>
<th>Current Status</th>
<th>Supplemental Review conducted?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>860</td>
<td>September 2010</td>
<td>Interconnected</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>825</td>
<td>June 2010</td>
<td>In process, system expected to interconnect by March 31, 2012</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>825</td>
<td>June 2010</td>
<td>In process, system expected to interconnect by March 31, 2012</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>113</td>
<td>Not cleared for construction</td>
<td>In process, system expected to interconnect by December 31, 2011</td>
<td>Supplemental Review in process. Expected to complete by December 31, 2011</td>
</tr>
<tr>
<td>5</td>
<td>107</td>
<td>October 2010</td>
<td>Interconnected</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>148</td>
<td>October 2010</td>
<td>Interconnected</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>875</td>
<td>September 2010</td>
<td>Interconnected</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>135</td>
<td>August 2010</td>
<td>Interconnected</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>855</td>
<td>April 2010</td>
<td>Interconnected</td>
<td>Yes</td>
</tr>
</tbody>
</table>
EXHIBIT RS-4
BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF EL PASO ELECTRIC COMPANY'S 2011 PROCUREMENT PLAN PURSUANT TO THE RENEWABLE ENERGY ACT AND NMAC 17.9.572.16 Case No. 11-00263-UT

STIPULATION

El Paso Electric Company ("EPE"), the New Mexico Public Regulation Commission's ("Commission" or "NMPRC") Utility Division Staff ("Staff"), Mark Westbrook, and Sunspot Solar Energy Systems, LLC ("Sunspot") (collectively "the Signatories"), through their authorized representatives, in consideration of the mutual promises, obligations and benefits contained herein, stipulate and agree as follows. Sunspot takes no position on the agreement contained in Section 2. The Coalition for Clean Affordable Energy ("CCAE"), the Sierra Club, Western Resource Advocates ("WRA"), SunEdison, LLC, and the New Mexico Attorney General ("NMAG") have either not taken a position on the Stipulation at this time or have not participated.

PREAMBLE

Through this Stipulation the Signatories intend to resolve all issues relating to EPE's 2011 Renewable Energy Procurement Plan ("2011 Plan") filed July 1, 2011. The Signatories agree that the intent and result of this Stipulation serves the public interest because it promotes EPE's compliance with the requirements of the Renewable Energy Act ("REA" or "Act"), NMSA 1978, Section 62-16-1 et seq. and the New Mexico Public Regulation Commission's ("NMPRC" or "Commission") Renewable Energy Rule ("Rule"), 17.9.572 NMAC. This Stipulation resolves the issues raised in this proceeding that otherwise would require additional litigation resources.
Resolution on a stipulated basis of the matters set forth herein will conserve resources and avoid the uncertainties to all parties inherent in litigation. The agreements set forth in this Stipulation reflect good faith negotiations, with reasonable “give and take” on issues by all Signatories, and result in a bargained-for resolution of this case in a manner that fairly benefits the interests of the parties, ratepayers, and EPE.

BACKGROUND OF EPE’S RPS PLAN

EPE filed its Application on July 1, 2011, for approval of its proposed 2011 Plan, pursuant to the REA and the Commission’s Rule. EPE's 2011 Plan to meet its RPS requirements for 2012 and 2013 is largely based on previously-approved procurement plans. Pursuant to the 2011 Plan, EPE will meet the Commission’s resource diversity targets for 2012 and 2013 that are set forth in 17.9.572 NMAC, including the Commission-approved make-up of any 2011 solar diversity amounts. EPE's 2012 total New Mexico retail jurisdictional energy sales are estimated to be 1,757,155 megawatt-hours ("MWh"), resulting in a 10 percent RPS requirement of 175,716 MWh; the 2013 total jurisdictional sales are estimated to be 1,850,163 MWh, and the 10 percent RPS requirement is 185,016 MWh. In 2012 and 2013, EPE estimates it will need to include the following minimum amounts to meet the Rule's diversity requirements at 17.9.572.14 NMAC:

<table>
<thead>
<tr>
<th>Resource</th>
<th>RPS Percentage</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar:</td>
<td>20%</td>
<td>37,765 MWh</td>
<td>37,003</td>
</tr>
<tr>
<td>Wind:</td>
<td>20%</td>
<td>35,143 MWh</td>
<td>37,003</td>
</tr>
<tr>
<td>Biomass/Other:</td>
<td>10%</td>
<td>17,572 MWh</td>
<td>18,502</td>
</tr>
<tr>
<td>Dist. Gen:</td>
<td>1.5%</td>
<td>2,636 MWh</td>
<td>2,775</td>
</tr>
</tbody>
</table>

The solar diversity requirement in 2012 includes the amounts deferred from 2011 (2,622 MWh), pursuant to the Commission’s Final Order in Case No. 10-00200-UT.
EPE will meet its statutory RPS obligations through REC acquisitions under previously approved procurements with: Public Service Company of New Mexico ("PNM") for the purchase of wind RECs; Southwest Environmental Center ("SWEC") for the purchase of solar energy and RECs; Camino Real Landfill Gas to Energy Facility ("CRLEF") for the purchase of biomass energy and RECs; Southwestern Public Service Company ("SPS") for the purchase of wind RECs; NRG for the purchase of solar energy and RECs from a newly constructed 20 MW solar photovoltaic ("PV") facility (referred to previously as the SunTower Project, now known as the Road Runner Project); SunEdison for the purchase of solar energy and RECs from a 24 MW PV project; and NextEra for the purchase of solar energy and RECs from a 5 MW PV project, located in Hatch, New Mexico. EPE also obtains RECs through its Commission-approved incentive programs for customer-installed renewable energy Qualifying Facility ("QF") projects, under the Company's Small System REC program for customer-owned solar and wind renewable generation rated 10 kW or less, and Medium System REC program for customer-owned solar and wind renewable generation rated above 10 kW and up to 100 kW.

In accordance with its Commission-approved 2010 Plan, EPE currently enters into twelve-year contracts with its customers and provides incentives under its Small System REC program in the amount of $0.12 per kWh for solar RECs and $0.08 per kWh for wind RECs; and provides incentives under its Medium System REC program in the amount of $0.155 per kWh for solar RECs and $0.028 per kWh for wind RECs. In its Final Order in NMPRC Case No. 10-00200-UT, the Commission directed EPE to propose a tiered pricing system in its 2011 Plan.

EPE's 2011 Plan as filed proposed to change the terms and conditions of the Small and Medium System REC programs by reducing the length of contracts to eight years and by implementing a three-tier, incentive pricing structure for both the Small System REC Purchase
Program and the Medium System REC Purchase Program. Under EPE's proposal, the first tier incentive prices would have been applicable for solar and wind systems that participate in either the Small System or the Medium System REC Purchase Program until the combined total of the rated capacity of both programs exceeded 2,000 kW. The second tier incentive prices would have been applicable for all systems that participate in either program until the combined total of the rated capacity of both programs exceeded 2,500 kW. The third tier incentive prices would have been applicable for all systems that participate in either program after the combined total rated capacity of both programs exceeded 2,500 kW. EPE proposed an incentive price for participating Small and Medium System solar generation facilities of $0.10 per kWh for Tier 1; $0.06 per kWh for Tier 2; and $0.02 per kWh for Tier 3. The proposed incentive price for Small System wind generation facilities was $0.06 per kWh for Tier 1; $0.04 per kWh for Tier 2; and $0.02 per kWh for Tier 3. EPE proposed to pay Medium System wind generation participants in Tier 1 $0.024 per kWh; $0.022 per kWh for Tier 2; and $0.020 per kWh for Tier 3.

The changes to the EPE Plan as agreed to by the Signatories, set forth below, stipulate to tiered pricing, remove the capacity limitations for participation in the different tiers, and instead establish participation in the tiers based on six-month application windows for the first four tiers.

SECTION 1. MODIFICATIONS TO SMALL AND MEDIUM SYSTEM REC PURCHASE PROGRAMS

The Signatories agree that EPE shall amend its existing REC Purchase Program for Small and Medium Sized customer-owned QFs as follows:

1.a Beginning January 1, 2012, all new REC Purchase Programs contracts will have a common termination date of December 31, 2020.

1.b EPE shall implement a five-tiered pricing system, with each tier remaining in place for a specified period of time. In order to qualify for participation within a specified tier, program
participants must meet the following requirements before the end of the applicable period for the tier:

i) Submit the completed Application for Sale of Small or Medium System Renewable Energy Certificates, including full payment of the application fee to the Company.

ii) Provide the Company a fully executed Interconnection Agreement.

iii) Provide the Company an affidavit or other document which certifies the generating facilities meet the criteria of a Qualifying Facility contained in the Federal Energy Regulatory Commission’s regulations, 18 C.F.R. Section 292.203, and as defined in 17.9.570 NMAC.

iv) The system must be completely installed and inspected by EPE within 6 months of the end of the Applicable Period for Tiers 1 through 4.

v) For systems participating in Tier 5, the system must be completely installed and inspected within 6 months of EPE’s receipt of a completed application.

vi) EPE will notify the applicant within 10 business days from receipt of application whether the application is complete; if the application is not complete, EPE will provide an explanation of what is needed to complete the application.

vii) The applicant will have 10 business days from receipt of notification that the application is incomplete to complete the application; if not completed within 10 business days, the application will be deemed withdrawn.

Examples: (1) if the applicant in Tier 1 receives notice from EPE that the application is incomplete and does not complete the application with 10 days, the applicant can still re-apply for Tier 1 so long as it submits completed application to EPE prior to end of that the Applicable Tier Period; (2) if applicant in Tier 1 submits application prior to the end of the Applicable Tier Period (e.g., on June 25) and completes the application within 10 business days of receipt of such notice from EPE and that date is after end of that Period (e.g., on July 5), the applicant will still qualify for the Tier 1 price; but (3) if that June 25 applicant does not complete the application within 10 days, the applicant would have to resubmit a completed application for Tier 2 or the currently available Tier.
1.c  EPE’s stipulated five-tiered pricing and periods shall be:

<table>
<thead>
<tr>
<th>Tier</th>
<th>Period</th>
<th>Small System</th>
<th></th>
<th>Medium System</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Solar</td>
<td>Wind</td>
<td>Solar</td>
<td>Wind</td>
</tr>
<tr>
<td>Tier 1</td>
<td>1/1/2012 - 6/30/2012</td>
<td>$ 0.10</td>
<td>$0.06</td>
<td>$ 0.12</td>
<td>$0.024</td>
</tr>
<tr>
<td>Tier 2</td>
<td>7/1/2012 - 12/31/2012</td>
<td>$ 0.08</td>
<td>$0.05</td>
<td>$ 0.09</td>
<td>$0.022</td>
</tr>
<tr>
<td>Tier 3</td>
<td>1/1/2013 – 6/30/2013</td>
<td>$ 0.06</td>
<td>$0.04</td>
<td>$ 0.06</td>
<td>$0.02</td>
</tr>
<tr>
<td>Tier 4</td>
<td>7/1/2013 – 12/31/2013</td>
<td>$ 0.04</td>
<td>$0.03</td>
<td>$ 0.04</td>
<td>$0.02</td>
</tr>
<tr>
<td>Tier 5</td>
<td>1/1/2014 – until otherwise ordered by the Commission</td>
<td>$ 0.02</td>
<td>$0.02</td>
<td>$ 0.02</td>
<td>$0.02</td>
</tr>
</tbody>
</table>

SECTION 2. IMPLEMENTATION OF LARGE SYSTEM REC PURCHASE PROGRAM

The Signatories (with the exception of Sunspot, which takes no position) agree that EPE shall implement a REC Purchase Program for Large System (above 100 kW and up to 1000 kW) customer-owned QFs as follows:

2.a. All renewable technologies as defined by the REA shall qualify for the Large System REC Purchase Program.

2.b. Upon Commission approval of this Stipulation, EPE shall be authorized to purchase RECs from Large System participants at prevailing market prices, provided that the price shall be no more than 90% of the applicable incentive prices paid for solar facilities under the Medium System REC Purchase Program, based on the Tier price in effect at the time the REC purchase proposal is received by EPE.

2.c. EPE may negotiate terms to purchase all or only a portion of the RECs associated with the energy production from a customer’s Large System QF.
2.d. EPE shall not be obligated to purchase RECs from Large Systems if EPE determines that it does not need to apply the RECs towards its RPS or diversity goals within three years of the date the REC purchase proposal is received.

SECTION 3. COST RECOVERY

The as-filed total estimated costs associated with EPE's 2011 Plan to meet its RPS obligations for 2012, including procurements previously approved by the Commission, are approximately $14,224,153; and for 2013, the costs are approximately $15,741,724. As a result of the stipulated pricing for the Small and Medium System REC Purchase Programs, the total estimated costs are projected to increase from the as-filed total estimated costs by approximately $7,486 in 2012 and by approximately $21,634 in 2013. The Signatories agree that EPE shall recover all costs associated with its 2011 Plan, including EPE’s costs to participate in the Western Renewable Energy Generation Information System, referred to as WREGIS, as required by the Commission’s Rule, in accordance with the Commission’s previous orders. The Commission has authorized recovery of energy purchases with associated RECs through EPE’s Fuel and Purchased Power Cost Adjustment Clause. In accordance with previous orders, EPE will defer, with carrying costs, all other costs associated with its 2011 Plan for recovery in a general rate proceeding.

SECTION 4. OTHER PROVISIONS

4.a. The Signatories agree to the admission into the case record of EPE’s pre-filed direct testimonies and exhibits for the limited purpose of showing, together with the testimonies of EPE and parties filed in support of the Stipulation, that the Stipulation constitutes a fair and reasonable compromise of positions by the Signatories on issues presented in this case.

4.b. Without agreeing to a specific methodology for determination of the reasonable cost threshold, the Signatories agree that approval of EPE’s 2011 Plan will result in EPE generating or
procuring renewable energy at or below the reasonable cost threshold under the REA and Rule 17.9.572 NMAC.

4.c. EPE agrees that it will not file to modify incentive prices for its Small and Medium System REC Purchase Programs prior to submission of its 2013 Plan, which is to be filed by July 1, 2013.

4.d. Within 10 days of the issuance of a Final Order approving this Stipulation, EPE shall file a compliance Advice Notice to modify the tariffs and forms for its existing Small and Medium System REC Purchase Programs and to implement tariffs and forms for its new Large System REC Purchase Program. Upon review by Staff for compliance with this Stipulation and the Final Order, the Advice Notice shall have an effective date of January 1, 2012.

SECTION 5. STIPULATION EFFECT

It is recognized and agreed by the Signatories that this Stipulation is made and filed solely in connection with the negotiation, compromise, settlement, and accommodation among the Signatories with respect to the issues raised by EPE’s filed application and direct testimonies for its 2011 Plan and resolves all such issues. It is also recognized and agreed by the signatories that this Stipulation, if approved by the Commission, shall have no precedential effect in any other proceeding except as expressly provided herein. The Signatories further agree:

5.a This Stipulation shall not prejudice, bind, or affect any Signatory, or be viewed as an admission, except to the extent necessary to give effect to or to enforce the terms of the Stipulation or unless otherwise specifically stated herein. It is the resolution of a unique fact situation, except as otherwise stated herein, and its resolution is unique to the circumstances presented.
5.b This Stipulation is subject to the approval of the Commission of the matters Stipulated. The Signatories agree that they will use their best efforts to obtain expeditious approval of this Stipulation by appropriate final order of the Commission in this proceeding. This Stipulation assumes the legality and enforceability of the rates, methodologies and agreements set forth in the Stipulation. Should any rate, methodology, or agreement set forth in this Stipulation be rejected, modified or be directly or indirectly rendered inoperable by either the Commission, a court, or by an act of the New Mexico Legislature, any Signatory who is a party to this case shall have the right to withdraw from the Stipulation and declare it void. However, the Signatories agree to negotiate in good faith to substitute a rate, methodology, or agreement with the same economic effect as that rejected, modified or directly or indirectly rendered inoperable.

5.c. In the event that the Commission does not approve the Stipulation in its entirety without modification, the Stipulation shall be voidable by any Signatory. Signatories shall file a formal statement to void the Stipulation within 30 days of the Commission’s Final Order herein.

5.d. In the event this Stipulation is not approved by the Commission and thereafter implemented, nothing in the Stipulation or negotiations leading up to its execution shall be construed as an admission of a Signatory's position on any issue and shall not be used or offered into evidence in this or any other proceeding consistent with the provisions of Commission procedural rules.

SECTION 6. EXECUTION OF STIPULATION

The Signatories may agree to the terms of this Stipulation through the execution of a separate signature page or through the indication of electronic or telephonic approval.

DATED this 4th day of September, 2011.
El Paso Electric Company

Mark Westbrook, pro se individual

By Electronic Approval
Mark Westbrook
441 El Molino Blvd.
Las Cruces, NM 88005

Stacey Good
Stacey J. Goodwin, Esq.
Law Offices of Randall W. Childress, P.C.
300 Galisteo Street, Suite 205
Santa Fe, NM 87501

NMPRC Utility Division Staff

By Telephonic Approval
Leslie Padilla, Esq.
NMPRC
1120 Paseo de Peralta
Santa Fe, NM 87501

Sunspot Solar Energy Systems, LLC

By Electronic Approval
Bruce C. Throne, Esq.
1440-B South St. Francis Dr.
Santa Fe, NM 87505
BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION
IN THE MATTER OF EL PASO ELECTRIC )
COMPANY’S 2011 PROCUREMENT PLAN )
PURSUANT TO THE RENEWABLE )
ENERGY ACT AND 17.9.572.16 NMAC )
Case No. 11-00263-UT

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of El Paso Electric Company’s Stipulation was mailed first class, postage prepaid, emailed or hand-delivered, on September 14, 2011, to each of the following:

Randall W. Childress, Esq. Evan Evans
Stacey J. Goodwir, Esq. El Paso Electric Company
Law Offices of Randall W. 100 North Stanton
Childress, P.C. El Paso, Texas 79901
300 Galisteo Street, Suite 205 Evan.evans@epelectric.com
Santa Fe, NM 87501 Lorenzo.nieto@epelectric.com
randy@childresslaw.com
Stacey@childresslaw.com

Jeffrey Taylor, Esq.
Office of the Attorney General
P. O. Drawer 1508
Santa Fe, NM 87504-1508
jtaylor@nmag.gov
lmartinez@nmag.gov

Steven S. Michel, Esq. Charles Noble, Esq.
John Curl Attorney for CCAE
Western Resource Advocates 409 East Palace Ave, Unit 2
409 East Palace Avenue, Unit Santa Fe, NM 87501
#2 c-m-k@msn.com
Santa Fe, NM 87501 sricdon@earthlink.net
smichel@westernresources.org Anderson@westernlaw.org
jcurl@westernresources.org davidgriscom@gmail.com
gmichael@westernresources.org david@vw77.com

Bryan Biedsheid, Esq.
Sawtell, Wirth & Biedsheid, PC
708 Paseo de Peralta
Santa Fe, NM 87501
bryan@swbpc.com

Cindy Burda Mark Westbrook
Assistant General Counsel Positive Energy
Sun Edison LLC 441 El Molino Blvd.
12500 Baltimore Avenue Las Cruces, NM 88005
Beltsville, MD 20705 Westrock@positiveenergysolar.com
cburda@sunedison.com

Annie Carmichael
Government Affairs Manager
Interior West
Sun Edison LLC
1515 Wazee Street, Suite 380
Denver, CO 80202
acarmichael@sunedison.com

Gloria D. Smith Mr. Mellow Honek
Sierra Club Sunspot Solar Energy Systems, LLC
85 Second St., 2nd Fl. 642 South Alameda Blvd., Ste. A
San Francisco, CA 94105 Las Cruces, NM 88005
Gloria.smith@sierraclub.com mellow@sunspotenergy.com

David Van Winkle
1807 Second Street, Unit 45
Santa Fe, NM 87505
Dated this 14th day of September, 2011.

[Signature]

Stacey J. Goodwin
EXHIBIT RS-5
BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF AN INQUIRY INTO )
A STANDARDIZED METHODOLOGY FOR )
DETERMINING RENEWABLE )
ENERGY COSTS FOR THE PURPOSE OF )
7.9.572.11 NMAC )

Case No. 08-00198-UT

NOTICE OF INQUIRY

NOTICE IS HEREBY GIVEN that the New Mexico Public Regulation Commission, ("Commission"), on its own motion, is commencing an inquiry into determining a standardized methodology for determining the cost of renewable energy resources for the purposes of applying the Reasonable Cost Threshold ("RCT") under 17.9.572.11 NMAC.

THE COMMISSION FINDS AND CONCLUDES:

1. On June 12, 2008, the Commission issued in Case No. 08-00084-UT, a Final Order ("Final Order") amending 17.9.572.11 NMAC by: 1) increasing the RCTs for renewable energy portfolios by .25% per year from January 1, 2012 and until January 1, 2015, at which time the RCTs will be three percent the utility’s customers’ aggregated overall annual electric charges; and 2) eliminating the technology specific RCTs as unnecessary.

2. In addition to amending 17.9.572.11 NMAC, the Commission in the Final Order took note of the comments of Public Service Company of New Mexico ("PNM") supporting a further amendment of that rule that would establish a detailed methodology for levelizing renewable energy resource costs for the purposes of applying the RCT to a utility's renewable energy portfolio. The specific language of PNM's proposed rule
implementing its levelized methodology is attached here to as Exhibit A. A number of other parties filed comments opposing or recommending modifications to PNM's levelized methodology. Southwestern Public Service ("SPS"), in its initial comments, asserted that the methodology for computing the renewable energy costs should be deferred to a technical workshop where interested parties could work together to produce consensus rule language. At the suggestion of Chairman Marks, who presided over the public hearing in Case No. 08-00084-UT on May 21, 2008, a number of parties held an informal telephonic workshop on May 19, 2008, to determine whether the parties could reach on a consensus on PNM's levelized methodology. At the public comment hearing, a PNM representative advised Chairman Marks that while an agreement had not been reached, all of the parties were interested in continuing their discussions. The PNM representative further recommended that the Commission issue an Order approving a final rule on the RCT and requesting the parties to continue discussions on PNM's levelization methodology with the goal of reporting back to the Commission by August 1, 2008.

3. The parties' suggestion that they be encouraged to continue to work toward a consensus rule is well taken and should be adopted by the Commission. Accordingly, the Commission is directing Commission Staff to organize and lead informal workshops among all interested parties, and to file a report ("Report") with the Commission by no later than August 1, 2008, stating the status of those workshops and whether the parties were able to agree on a consensus approach for determining renewable energy costs for purposes of comparison with the RCT. If the parties agree on a consensus approach by August 1, 2008, the Report shall state when one or more parties plan to file a petition with the Commission requesting the Commission to approve the

*Notice of Inquiry*
*Case No. 08-00198-UT*
*Page 2*
consensus approach. If the parties are not able to agree on a consensus approach by August 1, 2008, the Report shall contain the parties' assessment of whether and when a consensus might be reached, and any recommendations they may have on any action the Commission should take to establish a standardized methodology for determining renewable energy costs for the purposes of applying the RCT.

**IT IS THEREFORE ORDERED:**

A. A Notice of Inquiry is hereby commenced on establishing a standardized methodology for determining the cost of renewable energy resources for the purpose of applying the RCTs set forth in 17.9.572.11 NMAC.

B. Staff is directed to organize and lead informal workshops among all interested parties for the purposes of developing a consensus on an appropriate standardized methodology for determining renewable energy costs. Staff shall notify and invite, at a minimum, all of the parties in Case No. 08-00084-UT that participated in the informal telephonic workshop held in that case. Staff shall file, by no later than August 1, 2008, the Report described in Paragraph 3 of this Order.

C. Any party that did not participate in the telephonic workshop in Case No. 08-00084-UT, but that wishes to participate in the workshop to be held in this case should notify Mr. Roy Stephenson at (505) 827-6960 by no later than 10 days after the date this order.

D. A copy of this Order shall be served on all persons on the service list for Case No. 08-00084-UT.

E. This Order is effective immediately.
ISSUED under the Seal of the Commission at Santa Fe, New Mexico, this 26th
day of June 2008.

NEW MEXICO PUBLIC REGULATION COMMISSION

JASON MARKS, CHAIRMAN

EXCUSED

SANDY JONES, VICE CHAIRMAN

DAVID W. KING, COMMISSIONER

TELEPHONICALLY APPROVED

BEN R. LUJAN, COMMISSIONER

TELEPHONICALLY APPROVED

CAROL K. SLOAN, COMMISSIONER

Notice of Inquiry
Case No. 08-00198-UT
Page 4
COST LEVELIZATION METHODOLOGY

The NOPR at Paragraph 6 on page 2 summarizes PNM’s proposed methodology for comparing the levelized costs of a renewable energy project to traditional energy and capacity supplies, including the examples set forth in PNM’s proposal. Essentially, such a methodology identifies the incremental cost, if any, that would result from the procurement of energy from the renewable energy project, whether a self-build or a purchased power agreement.

In response to the NOPR’s request for specific language to include in Rule 572, PNM provides below its recommendation of specific language that could be included as a new section in either NOPR Alternative A or NOPR Alternative B:

In evaluating the cost of a renewable energy resource for comparison with the overall reasonable cost threshold set forth in NMAC 17.9.572.11, each public utility shall take into account the following:

(1) The cost to be used in evaluating the overall rate impact of a renewable energy resource in comparison to the reasonable cost threshold shall be the net levelized cost of the renewable energy at the point of delivery to the utility, which is defined as the levelized cost of the renewable resource less the levelized cost of a least-cost resource with similar purpose and size. Levelized costs shall be calculated using the utility’s weighted average cost of capital (“WACC”) authorized in the utility’s most recent general rate case.

EXHIBIT

A
(2) The net levelized cost shall be calculated over a thirty-year period, or if the renewable resource is to be acquired through a purchased power agreement, the net levelized cost shall be calculated over the contract term of the purchased power agreement. A utility may use another appropriate length of time for calculating the net levelized cost, but the utility may be required to justify such alternative methodology.

(3) For purposes of calculating the net levelized cost, the calculation of the levelized cost for a utility self-build resource shall take into account projected capital costs and operating and maintenance ("O&M") costs.

a) Capital costs may include projected plant investment for construction, interest charged on funds borrowed to finance the construction, and projected capital outlays after the plant has started operating to ensure continued operation over time or to accommodate any projected plant expansion.

b) O&M costs may include projected fixed and variable O&M costs, including taxes, insurance and fuel costs.

(4) For purposes of calculating the net levelized cost, the calculation of the levelized cost for a resource acquired through a purchased power agreement shall be based on the payments to be made by the utility under the purchased power agreement including any capacity payments, variable energy related costs, and other costs or projected costs that may be incurred pursuant to the purchased power agreement.

(5) For any renewable energy certificates that are acquired separately from their associated energy, the rate impact comparison with the reasonable cost threshold shall be based on their projected full purchase costs.
(6) The calculation of the net levelized cost shall include applicable incremental transmission, transmission-related and system costs, if identifiable, that would be incurred as a consequence of the renewable energy or comparative generation project.
BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF AN INQUIRY INTO
A STANDARDIZED METHODOLOGY FOR
DETERMINING RENEWABLE
ENERGY COSTS FOR THE PURPOSE OF
7.9.572.11 NMAC

Case No. 08-00198-UT

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Notice of Inquiry issued on June 26, 2008, was mailed on June 27, 2008, by first-class, postage prepaid, to the following parties:

Michael D. Fletcher
Columbus Electric Cooperative, Inc.
P.O. Box 631
Deming, NM 88031-0631

Roger Hill
Sandia National Laboratories
MS 0708, PO Box 5800
Albuquerque, NM 87185-0708

Charles T. Pinson
Central Valley Electric Cooperative, Inc.
P.O. Box 230
Artesia, NM 88211-0230

Jerry Mascarfas
Jemez Mountains Electric Cooperative, Inc.
P.O. Box 128
Española, NM 87532

Craig O'Hare,
Sp. Asst. for Renewable Energy
1220 S. St. Francis Drive
Santa Fe, NM 87505

Richard Shirley
Continental Divide Electric Cooperative, Inc.
P.O. Box 1087
Grants, NM 87020

Luis A. Reyes
Kit Carson Electric Cooperative, Inc.
P.O. Box 587
Taos, NM 87571

Jason B. Keyes, Esq.
Wilson Sonsini Goodrich & Rosati
701 Fifth Avenue, Suite 5100
Seattle, WA 98104-7036

Gary Hurse
Lea County Electric Cooperative, Inc.
P.O. Drawer 1447
Lovingston, NM 88260

Mora-San Miguel Electric Coop., Inc.
P.O. Box 240
Mora, NM 87732

Bill Althouse
903 W Alameda, Ste 129
Santa Fe, NM 87501

Jean Valentine
12 Canby Lane
Peralta, NM 87042

Carroll Waggoner
Otero County Electric Cooperative, Inc.
P.O. Box 227
Cloudcroft, NM 88317

Michael Curtis
NAVAPACHE ELECTRIC COOP
1878 W White Mountain Blvd.
Lakeside, AZ 85929

Jerry W. Partin
Roosevelt County Electric Coop., Inc.
P.O. Box 389
Portales, NM 88130

Ben Luce
Coalition for Clean Affordable Energy
1807 2nd Street, Suite 45
Santa Fe, NM 87505

Polo Pineda
Socorro Electric Cooperative, Inc.
P.O. Box 369
Socorro, NM 87801

Steve Gee
Sierra Electric Cooperative, Inc.
P.O. Box W
Elephant Butte, NM 87935

Jeff Taylor, Esq.
Assistant Attorney General
P.O. Drawer 1508
Santa Fe, NM 87504-1508

Jeffrey L. Fornaciari, Esq.
Hinkle, Cox, Eaton, Coffield & Hensley, P.L.L.C., Ltd. Co.
P.O. Box 2068
Santa Fe, NM 87504-2068

Ty Bradley
Southwestern Electric Cooperative, Inc.
P.O. Box 369
Clayton, NM 88415

Leslie Lawner, Esq.
The Modrall Firm
PO Box 2168
500 4th St, NW, Ste 1000
Albuquerque, NM 87103-2168

Barbara Brazil
Intel Corporation

Lance Allgood
Executive Director

Department of Public Utilities
EXHIBIT RS-6
Table 6: Levelized Resource Costs Used in RCT Calculations

<table>
<thead>
<tr>
<th>Project</th>
<th>Capacity (MW)</th>
<th>Levelized Cost of Energy (USD/kWh)</th>
<th>Levelized Capital Cost (USD/kWh)</th>
<th>Levelized O&amp;M Cost (USD/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project A</td>
<td>100</td>
<td>0.05</td>
<td>0.10</td>
<td>0.02</td>
</tr>
<tr>
<td>Project B</td>
<td>200</td>
<td>0.04</td>
<td>0.12</td>
<td>0.03</td>
</tr>
<tr>
<td>Project C</td>
<td>300</td>
<td>0.03</td>
<td>0.15</td>
<td>0.04</td>
</tr>
</tbody>
</table>

EXHIBIT CDB-6
using the PNM rates approved by the Commission in Case No. 10-00086-UT and the same “Projected Retail Sales” volumes shown on Ex. CDB-2, Table 2 to that testimony and (b) provide the projected RCT calculations for 2012 and 2013 and other information shown on Tables 4 and 5 of Ex. CDB-4 to Ms. Bothwell’s Direct Testimony using the projected revenues stated in response to (a) above, the same format and all other assumptions and projections used and shown on those Tables.

**OBJECTION:**

a. PNM objects to this Request to the extent that it seeks projections of revenues using the rates approved by the Commission in Case No. 10-00086-UT on the grounds that the information requested is not relevant to the subject matter of this proceeding nor reasonable calculated to lead to the discovery of admissible evidence and is therefore outside the scope of permissible discovery. PNM further objects to this Request on the grounds that it has not performed the requested calculation and analyses, the creation of which would impose a substantial burden of time and expense on PNM that is not outweighed by the likely benefit of the information to the recipient. NMAC 1.2.2.25.C; NMRA 1-026(B)(2).

b. PNM objects to this Request on the grounds that it seeks information which is not relevant to the subject matter of this proceeding or reasonable calculated to lead to the discovery of admissible evidence and is therefore outside the scope of permissible discovery. PNM further objects to this Request on the grounds that it has not performed the requested calculation and analyses, the creation of which would impose a substantial burden of time and expense on PNM that is not outweighed by the likely benefit of the information to the recipient. NMAC 1.2.2.25.C; NMRA 1-026(B)(2).

**REIA 1-4:** Please provide the levelized cost in 2012 and 2013 for each of the utility-owned solar resources identified on Tables 4 and 5 of Ex. CDB-4 to Ms. Bothwell’s Direct Testimony (i.e., Algodones/Aztec, Solar Demo with Batteries and PNM-owned PV 22 MW) using the “levelized” method of calculating the cost of renewable energy procurements used by PNM to calculate the RCT in support of the Stipulation proposed in PNM’s Revised 2010 Plan case (#10-00037-UT).

**RESPONDENT: Cynthia Bothwell**

**RESPONSE/OBJECTION:**

PNM objects to this Request on the grounds that it seeks certain cost data determined in accordance with a method of calculation that has never been adopted by the Commission, therefore the information requested is not relevant to the subject matter of this proceeding nor reasonable calculated to lead to the discovery of admissible evidence and is outside the scope of permissible discovery. NMAC 1.2.2.25.C; NMRA 1-026. Without waiving the foregoing objection, PNM states the requested information is provided by the Direct Testimony of Ms. Bothwell filed in Case No. 10-00037-UT, at page 29, which is attached to these responses as PNM Exhibit REIA 1-4.
EXHIBIT RS-7
1. PNM’s Objection to REIA 1-3 on Relevance and Burdensome Grounds:

The “Projected Retail Sales” volumes shown in Exhibit CDB-2, Table 2 were not prepared on the basis of individual rate classes. Consequently, an exact calculation as requested cannot be made without a substantial investment of time and resources.

The revenue shown for 2010 in Tables 4 and 5 of Exhibit CDB-4 are $797.3 million, as well as the applicable RCT percentages. The revenue increase approved in Case No. 10-00086-UT was $72.1 million. Reported retail sales for 2010 were 8,299,183 MWh (from PNM’s Renewable Energy Procurement Report for 2010). Using such information, in conjunction with the information shown in Exhibit CDB-4, an approximation of projected revenues and the RCT revenue cap could be calculated as follows:

Illustrative Calculation

$797.3 million + $72.1 million = $869.4 million

2012 Factor = 8,843,583/8,299,183 = 1.0656
2012 Revenues = 1.0656*869.4 million = $926.4 million
RCT = $926.4 million * 2.25% = $20.8 million

2013 Factor = 8,934,983/8,299,183 = 1.0766
2013 Revenue = 1.0766*869.4 million = $936.0 million
RCT = $936.0 million * 2.5% = $23.4 million

2. PNM’s Objection to REIA 1-4 on Relevance and “Outside the Scope of Case” Grounds:

In preparing PNM’s Revised Renewable Energy Portfolio Procurement Plan for 2011 (Revised 2011 Plan), Case No. 10-00373-UT, PNM had conducted resource cost calculations and RCT calculations using the levelized methodology set forth in Case No. 10-00037-UT, but had not presented it in its filing; therefore, PNM was able to provide that information to you with relatively minimal additional effort. In the present case, no levelized RCT calculations have been prepared. Consequently, the burden to provide such information in this case is much greater than in the last case.

The levelized cost for a project over its projected 20 or 30 year life, is the levelized cost over that period – it does not change from year to year; it would change only if the methodology for calculating the cost is changed or if the assumed values for the key variables used in the calculation changed. PNM has not changed the cost levelization methodology, or the assumptions thereto, set forth in Case No. 10-00037-UT;
PNM is simply no longer using that methodology for purposes of comparing renewable energy resource costs to the RCT.

Using the methodology and assumptions set forth in Case No. 10-00037-UT would result in the same levelized costs as shown in PNM Exhibit REIA-4 for 2010-2011 or 2012-2013 – i.e., it is the cost levelized over the life of that resource.

5. PNM’s Response to REIA 1-8(b):

PNM believes that PNM Exhibit REIA 1-8b is fully responsive to the Interrogatory. However, in light of the further detail requested in your September 22 email, PNM is providing additional information concerning the revenue requirements associated with the 22 MW of solar PV projects authorized in Case No. 10-00037-UT; this information is set forth in the excel files attached with PNM’s responding email.

As for carrying charges, pages 6 and 7 of PNM Exhibit REIA 1-8b show the amount of carrying charges in the fourth from left column based on the Carrying Charge Rate of 8.64% as documented on the third line up from the bottom.

6. PNM’s Response to REIA 1-12:

There are no additional responsive work papers. The procurement volume of 4,680 MWh assumed a $0.02 per kWh price and an annual expenditure of approximately $100,000.
EXHIBIT RS-8
PUBLIC SERVICE COMPANY OF NEW MEXICO’S OBJECTIONS AND RESPONSES TO REIA’S FIRST SET OF INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS

Public Service Company of New Mexico ("PNM") hereby responds to REIA’s First Set of Interrogatories and Requests for Production of Documents ("Requests").

GENERAL OBJECTION

PNM objects to Staff’s instructions and directions to the extent they seek to supplement or modify the requirements of 17.1.2.28 NMAC, et seq. or the Rules of Civil Procedure for the District Courts of New Mexico.

PNM objects to the Staff’s Requests to the extent they seek information protected from disclosure by the attorney-client privilege or the work product doctrine. Rules 1-026 and 11-503 NMRA 2000; 1.2.28.C NMAC.

In responding to these Requests, PNM reserves all evidentiary objections to any responses or documents that may be offered in evidence in this proceeding.

PNM responds to these Requests subject to, and without waiving, these objections.
RESPONSE:
PNM's is aware the RCT methodology EPE and SPS have used in some plans incorporates some aspects of a "levelized" approach to calculating the RCT; however, PNM is not aware that the Commission specifically approved an RCT methodology in those cases.

* In a recent SPS case in which the RCT methodology was an issue, the Hearing Examiner stated in the Findings and Conclusions that "...the Commission does not determine which RCT methodology is appropriate in this case." (Case No. 10-00015-UT, Recommended Decision, Findings and Conclusions, Paragraph 6, page 53.)

* In Case No. 10-00200-UT addressing EPE's 2010 renewable energy plan, Hearing Examiner stated that a "...decision determining which methodology to be applied is unnecessary in this proceeding." (Case No. 10-00200-UT, Recommended Decision, page 23.)

REIA 1-8: Please provide projected RCT calculations for 2011 and 2012 using the same "levelized" approach to calculate the RCT used by PNM to calculate the RCT in PNM's Revised 2010 Plan case (#10-00037-UT).

RESPONDENT: Cindy Bothwell

RESPONSE:
PNM objects to this Interrogatory on the grounds that it calls for calculations that have not been performed. NMAC 1.2.25.B; NMRA 1-026(B)(2) Without waiving this objection, PNM responds that all of the information needed to calculate the requested adjustments to Table 2 is provided in the executable worksheet Corrected PNM Exhibit ABCWUA 1-6b.

REIA 1-9: [Reference PNM Ex. ABCWUA 1-6.b and PNM Response to ABCWUA 1-2]
Please provide the following information concerning these PNM discovery responses:

a. [PNM Ex. ABCWUA 1-6.b, first page, Solar Incentive Program ("SIP") estimates] provide actual kWhs provided by each system size component of PNM's SIP as of year-end 2010 (note: this PNM Exhibit appears to provide "estimates" only and PNM's Response to ABCWUA 1-2 provides installed SIP capacity but not production data as of 1/1/2011);

b. provide actual kWhs provided by each system size component of PNM's SIP as of March 1, 2011;

c. state the solar facility completion deadline date for each of the "pending applications" for systems greater than 10 kW AC capacity indicated in PNM's Response to ABCWUA 1-2, broken down by SIP system size category;

d. [PNM Ex. ABCWUA 1-6.b, second page entitled "PNM Solar RECs-45 MW"] explain what the "45 MW" refers to and how the figures on this page relate to any of PNM's RPS or RCT calculations in its "Corrected" Plan filing;

e. [PNM Ex. ABCWUA 1-6.b, page entitled "Project Actual Revenue Requirements"] explain how the projected annual revenue requirements for "PV-22MW" and "Battery 500 kW" for 2011 and 2012 relate to any of the RCT calculations for those elements of PNM's Plan shown on Exhibit CDB-5 to Ms. Bothwell's Direct Testimony.
Revised Table 4: Projected RCT Calculation for 2011 using Levelized Costs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind - NMWEC</td>
<td>346,476</td>
<td>$ 27.25</td>
<td>$(23.81)</td>
<td>$ 3.45</td>
<td>$ 1,193,611</td>
</tr>
<tr>
<td>Algodones/Aztec</td>
<td>149</td>
<td>$ 191.54</td>
<td>$(14.82)</td>
<td>$ 176.72</td>
<td>$ 26,331</td>
</tr>
<tr>
<td>Small PV RECs @ 3:1</td>
<td>11,408</td>
<td>$ 43.33</td>
<td>$ 3.75</td>
<td>$ 47.08</td>
<td>$ 537,092</td>
</tr>
<tr>
<td>Small PV RECs @ 1:1</td>
<td>3,447</td>
<td>$ 130.00</td>
<td>$ 11.25</td>
<td>$ 141.25</td>
<td>$ 486,943</td>
</tr>
<tr>
<td>Large PV RECs @ 1:1</td>
<td>13,082</td>
<td>$ 150.00</td>
<td>$ 12.98</td>
<td>$ 162.98</td>
<td>$ 2,131,980</td>
</tr>
<tr>
<td>Biogas (RECs)</td>
<td>-</td>
<td>$ 10.02</td>
<td>$ 0.88</td>
<td>$ 10.90</td>
<td>-</td>
</tr>
</tbody>
</table>

2010 Plan Approved

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SIP DG 2011 @ $0.14</td>
<td>1,028</td>
<td>$ 140.00</td>
<td>$ 12.11</td>
<td>$ 152.11</td>
<td>$ 156,440</td>
</tr>
<tr>
<td>SIP DG 2011 @ $0.13</td>
<td>1,998</td>
<td>$ 130.00</td>
<td>$ 11.25</td>
<td>$ 141.25</td>
<td>$ 282,162</td>
</tr>
<tr>
<td>SIP DG 2011 @ $0.12</td>
<td>5,539</td>
<td>$ 120.00</td>
<td>$ 10.38</td>
<td>$ 130.38</td>
<td>$ 722,194</td>
</tr>
<tr>
<td>SIP DG 2011 @ $0.11</td>
<td>1,460</td>
<td>$ 110.00</td>
<td>$ 9.52</td>
<td>$ 119.52</td>
<td>$ 174,453</td>
</tr>
<tr>
<td>SIP DG 2011 @ $0.10</td>
<td>1,746</td>
<td>$ 100.00</td>
<td>$ 8.66</td>
<td>$ 108.66</td>
<td>$ 189,704</td>
</tr>
<tr>
<td>SIP DG 2011 @ $0.09</td>
<td>71</td>
<td>$ 90.00</td>
<td>$ 7.79</td>
<td>$ 97.79</td>
<td>$ 6,968</td>
</tr>
<tr>
<td>Solar Demo with Batteries</td>
<td>639</td>
<td>$ 474.37</td>
<td>$(55.11)</td>
<td>$ 419.26</td>
<td>$ 267,905</td>
</tr>
<tr>
<td>PNM Owned PV 22 MW</td>
<td>11,993</td>
<td>$ 174.31</td>
<td>$(55.11)</td>
<td>$ 119.19</td>
<td>$ 1,429,509</td>
</tr>
</tbody>
</table>

Proposed 2011 Plan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SPS 2008 REC Purchase</td>
<td>250,000</td>
<td>$ 16.00</td>
<td>$ 1.39</td>
<td>$ 17.39</td>
<td>$ 4,348,100</td>
</tr>
<tr>
<td>Second RFP Bidder A</td>
<td>11,516</td>
<td>$ 7.84</td>
<td>$ 0.69</td>
<td>$ 8.53</td>
<td>$ 98,190</td>
</tr>
<tr>
<td>Second RFP Bidder B</td>
<td>76,720</td>
<td>$ 5.99</td>
<td>$ 0.53</td>
<td>$ 6.52</td>
<td>$ 500,025</td>
</tr>
<tr>
<td>Second RFP Bidder C</td>
<td>47,318</td>
<td>$ 4.72</td>
<td>$ 0.42</td>
<td>$ 5.14</td>
<td>$ 243,202</td>
</tr>
</tbody>
</table>

Billing System Upgrade $ 144,533
WREGIS Annual Fee $ 1,500

Total Annual Resources $ 784,590
Prior Year Revenues (2009) $ 12,794,809
New Resource RCT Impact $ 733,257,515
Portfolio RCT Impact 0.71%
RCT Limitation 2.0%
Revised Table 5: Projected RCT Calculation for 2012 using Levelized Costs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind - NMWEC</td>
<td>512,800</td>
<td>$27.25</td>
<td>$(23.81)</td>
<td>$3.45</td>
<td>$1,766,596</td>
</tr>
<tr>
<td>Algodones/Aztec</td>
<td>147</td>
<td>$191.54</td>
<td>$(14.82)</td>
<td>$176.72</td>
<td>$25,978</td>
</tr>
<tr>
<td>Small PV REC @ 3:1</td>
<td>11,408</td>
<td>$43.33</td>
<td>$3.75</td>
<td>$47.08</td>
<td>$537,092</td>
</tr>
<tr>
<td>Small PV REC @ 1:1</td>
<td>3,460</td>
<td>$130.00</td>
<td>$11.25</td>
<td>$141.25</td>
<td>$488,772</td>
</tr>
<tr>
<td>Large PV REC @ 1:1</td>
<td>13,826</td>
<td>$150.00</td>
<td>$12.98</td>
<td>$162.98</td>
<td>$2,253,302</td>
</tr>
<tr>
<td>Biogas (REC)</td>
<td>12,644</td>
<td>$10.02</td>
<td>$0.88</td>
<td>$10.90</td>
<td>$137,857</td>
</tr>
<tr>
<td><strong>2010 Plan Approved</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIP DG 2012 @ $0.14</td>
<td>1,066</td>
<td>$140.00</td>
<td>$12.11</td>
<td>$152.11</td>
<td>$162,090</td>
</tr>
<tr>
<td>SIP DG 2012 @ $0.13</td>
<td>2,437</td>
<td>$130.00</td>
<td>$11.25</td>
<td>$141.25</td>
<td>$344,218</td>
</tr>
<tr>
<td>SIP DG 2012 @ $0.12</td>
<td>6,530</td>
<td>$120.00</td>
<td>$10.38</td>
<td>$130.38</td>
<td>$851,392</td>
</tr>
<tr>
<td>SIP DG 2012 @ $0.11</td>
<td>2,438</td>
<td>$110.00</td>
<td>$9.52</td>
<td>$119.52</td>
<td>$291,421</td>
</tr>
<tr>
<td>SIP DG 2012 @ $0.10</td>
<td>4,029</td>
<td>$100.00</td>
<td>$8.66</td>
<td>$108.66</td>
<td>$437,823</td>
</tr>
<tr>
<td>SIP DG 2012 @ $0.09</td>
<td>886</td>
<td>$90.00</td>
<td>$7.79</td>
<td>$97.79</td>
<td>$86,656</td>
</tr>
<tr>
<td>SIP DG 2012 @ $0.08</td>
<td>758</td>
<td>$80.00</td>
<td>$6.93</td>
<td>$86.93</td>
<td>$65,886</td>
</tr>
<tr>
<td>SIP DG 2012 @ $0.07</td>
<td>100</td>
<td>$70.00</td>
<td>$6.06</td>
<td>$76.06</td>
<td>$7,580</td>
</tr>
<tr>
<td>Solar Demo with Batteries</td>
<td>1,086</td>
<td>$474.37</td>
<td>$(55.11)</td>
<td>$419.26</td>
<td>$455,312</td>
</tr>
<tr>
<td>PNM Owned PV 22 MW</td>
<td>39,025</td>
<td>$174.31</td>
<td>$(55.11)</td>
<td>$119.19</td>
<td>$4,651,467</td>
</tr>
</tbody>
</table>

**Proposed**

| Billing System Upgrade          | $144,533 |
| WREGIS Annual Fee               | $1,500   |

**Total Annual Resources** 612,640 $ 12,709,473

Prior Year Revenues (2009) $733,257,515

**Portfolio RCT Impact** 1.73%

**RCT Limitation** 2.25%
EXHIBIT RS-9
DIRECT TESTIMONY

OF

EVAN D. EVANS

JULY 1, 2011
IMPACT TO CUSTOMERS?

A. Yes, although EPE is not seeking approval of new resources that require a calculation of the RCT. To evaluate the impact of EPE's procurement actions, EPE has added the total incremental cost (in $/kWh) of EPE's 2011 Plan to total billing for New Mexico retail customers for 2012 and 2013, and compared that amount to the calculated billing prior to the inclusion of the renewable resource acquisition costs. This is shown is Exhibit EDE-2. The same process was applied to evaluate the impact to large, nongovernmental customers. Exhibit EDE-3 shows the percentage impact to those customers' charges. As stated below, Exhibits EDE-2 and EDE-3 demonstrate that EPE's 2011 Plan costs are well within the statutory and Commission-established limits.

Q. HOW DID EPE CALCULATE THE INCREMENTAL COSTS OF THE RENEWABLE RESOURCES?

A. The incremental cost included the entire cost of the unbundled RECs plus the incremental cost of the bundled renewable resources. The incremental cost of the bundled renewable resources was calculated as the levelized cost of the renewable resource less the levelized capacity cost of a comparable non-renewable technology, less associated non-fuel fixed and variable costs, and less the levelized fuel-related cost for the non-renewable technology. Because no RCT methodology has been adopted by the Commission, EPE has applied the same methodology used in its last two procurement proceedings, NMPRC Case Nos. 09-00259-UT and 10-00200-UT,
consistent with the methodology developed from workshops in NMPRC Case
No. 08-00198-UT, Inquiry into a Standard Methodology for Determining Renewable
Energy Costs for the Purpose of 17.9.572.11 NMAC.

Q. PLEASE DESCRIBE THE COSTS OF THE NON-RENEWABLE
TECHNOLOGY ALTERNATIVES THAT WERE USED IN THE
CALCULATION.

A. The calculation of the costs for non-renewable technology alternatives for biomass
generation applications was based on the costs and operating characteristics for a
2-on-1 combined cycle from the EPRI Technical Assessment Guide and the Energy
Information Administration's ("EIA") March 2011 Annual Energy Outlook price
forecast for natural gas delivered to electric generation facilities. The forecasted
levelized cost of this generation is $107.64 per MWh.

The calculation of the costs for non-renewable technology alternatives for
solar generation applications was based on the costs and operating characteristics for
a GE LMS100 gas turbine from the EPRI Technical Assessment Guide and the EIA
March 2011 Annual Energy Outlook price forecast for natural gas delivered to
electric generation facilities. The forecasted levelized cost of this generation is
$165.22 per MWh. In addition, due to a variety of factors, including the inability to
dispatch the generation and the fact that solar generation's full capacity is not
available all hours of the day, EPE credits solar generation with 85 % of its rated
capacity for resource planning purposes. Consequently, the forecasted levelized cost
## EL PASO ELECTRIC COMPANY
### Calculated Incremental Cost and Factors for
Renewable Resource Procurement for the 2012 and 2013 Procurement Years

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>Reference</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PNM Wind REC Purchase</td>
<td>Exhibit RA-4</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td>SPS REC Purchase</td>
<td>Exhibit RA-4</td>
<td>720,000</td>
<td>760,000</td>
</tr>
<tr>
<td>3</td>
<td><strong>Total REC Purchases without Energy (Net of No Avoided Costs)</strong></td>
<td>Sum (1 + 2)</td>
<td>$720,000</td>
<td>$760,000</td>
</tr>
<tr>
<td>4</td>
<td>CRLEF Project REC Purchase</td>
<td>Exhibit RA-4</td>
<td>$174,645</td>
<td>$173,678</td>
</tr>
<tr>
<td>5</td>
<td>2011 Levelized Fixed Cost per MWh of Combined Cycle (1)</td>
<td>Workpaper</td>
<td>-</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>MWh Purchased from CRLEF</td>
<td>Exhibit RA-4</td>
<td>11,643</td>
<td>11,579</td>
</tr>
<tr>
<td>7</td>
<td><strong>Total Avoided Fixed Cost of Combined Cycle</strong></td>
<td>Line 5 * Line 6</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>8</td>
<td><strong>Net Incremental CRLEF Costs above Avoided Costs</strong></td>
<td>Line 4 - Line 7</td>
<td>$174,645</td>
<td>$173,678</td>
</tr>
<tr>
<td>9</td>
<td>SWEC Solar Energy Purchases</td>
<td>Exhibit RA-4</td>
<td>$1,474</td>
<td>$1,517</td>
</tr>
<tr>
<td>10</td>
<td>Hatch Solar Energy Purchases</td>
<td>Exhibit RA-4</td>
<td>1,632,799</td>
<td>1,632,783</td>
</tr>
<tr>
<td>11</td>
<td>NRG SunTower Solar Energy Purchases</td>
<td>Exhibit RA-4</td>
<td>6,770,781</td>
<td>6,720,056</td>
</tr>
<tr>
<td>12</td>
<td>SunEdison Solar Energy Purchases</td>
<td>Exhibit RA-4</td>
<td>4,371,331</td>
<td>5,869,119</td>
</tr>
<tr>
<td>13</td>
<td>Small &amp; Medium System REC Purchase Programs - Solar</td>
<td>Workpaper</td>
<td>483,075</td>
<td>508,212</td>
</tr>
<tr>
<td>14</td>
<td><strong>Total Solar Energy Purchases</strong></td>
<td>Sum (9 thru 13)</td>
<td>$13,259,460</td>
<td>$14,731,587</td>
</tr>
<tr>
<td>15</td>
<td>2011 Levelized Avoided Cost per MWh of Combustion Turbine (2)</td>
<td>Workpaper</td>
<td>$165,224</td>
<td>$165,224</td>
</tr>
<tr>
<td>16</td>
<td>MWH Solar Energy Purchases</td>
<td>Exhibit RA-4</td>
<td>111,354</td>
<td>125,838</td>
</tr>
<tr>
<td>17</td>
<td><strong>Total Avoided Cost of Combustion Turbine</strong></td>
<td>Line 15 * Line 16</td>
<td>$18,398,403</td>
<td>$20,791,408</td>
</tr>
<tr>
<td>18</td>
<td><strong>Net Incremental Solar Energy Costs above Avoided Costs</strong></td>
<td>Line 14 - Line 17</td>
<td>$(5,138,943)</td>
<td>$(6,059,721)</td>
</tr>
<tr>
<td>19</td>
<td>Small &amp; Medium System REC Purchase Programs - Wind</td>
<td>Workpaper</td>
<td>$1,325</td>
<td>$1,325</td>
</tr>
<tr>
<td>20</td>
<td><strong>Applicable Avoided Costs</strong></td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td><strong>Net Incremental Wind Energy Costs above Avoided Costs</strong></td>
<td>Line 19 - Line 20</td>
<td>$1,325</td>
<td>$1,325</td>
</tr>
<tr>
<td></td>
<td><strong>Total Annual Incremental Cost of Renewable Procurement</strong></td>
<td>Sum(3, 8, 18 &amp; 21)</td>
<td>$(4,242,974)</td>
<td>$(5,124,719)</td>
</tr>
</tbody>
</table>

**NOTE:**

(1) Levelized Fixed Cost per MWh assumed to be $0 per MWh because this is a purchase from a QF cogeneration facility.

(2) Levelized Cost per MWh of GE LMS100 Combustion Turbine based on EPRI TAG calculation and fuel cost projection from March 2011 EIA Annual Energy Outlook forecast of natural gas prices for delivery to electric generation.
EL PASO ELECTRIC COMPANY
Calculated Incremental Cost and Factors for
Renewable Resource Procurement for the 2012 and 2013 Procurement Years

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Forecasted New Mexico Jurisdictional MWH Sales at Meter (1)</td>
<td>1,757,155</td>
<td>1,850,163</td>
</tr>
<tr>
<td>2</td>
<td>New Mexico System Loss Factor (2)</td>
<td>1.080062</td>
<td>1.080062</td>
</tr>
<tr>
<td>3</td>
<td>Forecasted New Mexico Jurisdictional MWH Sales at Supply</td>
<td>1,897,837</td>
<td>1,998,290</td>
</tr>
<tr>
<td>4</td>
<td>Total Annual Incremental Cost of Renewable Resource Purchases</td>
<td>$(4,242,974)</td>
<td>$(5,124,719)</td>
</tr>
</tbody>
</table>

New Mexico System Incremental Cost Factor for Renewable Resource

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Procurement Applicable to all kWh sales, $/kWh</td>
<td>$(0.00224)</td>
<td>$(0.00256)</td>
</tr>
<tr>
<td>6</td>
<td>Loss adjusted for secondary voltage delivery</td>
<td>$(0.00225)</td>
<td>$(0.00258)</td>
</tr>
<tr>
<td>7</td>
<td>Loss adjusted for primary voltage delivery</td>
<td>$(0.00221)</td>
<td>$(0.00253)</td>
</tr>
<tr>
<td>8</td>
<td>Loss adjusted for transmission voltage delivery</td>
<td>$(0.00211)</td>
<td>$(0.00242)</td>
</tr>
</tbody>
</table>

Notes:
(1) EPE's 2011 Forecast of New Mexico Jurisdiction kWh Sales
(2) EPE's Fifteenth Revised Rate No. 18, NMPRC Case No. 09-00171 UT
BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF NEW MEXICO FOR A REVISION OF ITS RETAIL ELECTRIC RATES PURSUANT TO ADVICE NOTICE NOS. 397 AND 32 (FORMER TNMP SERVICES),

PUBLIC SERVICE COMPANY OF NEW MEXICO, Applicant

Case No. 10-00086-UT

DIRECT TESTIMONY AND EXHIBITS OF

JAMES A. MAYHEW

June 1, 2010
customer fixed costs for residential customers are approximately $13.00/month and
similar costs for small power service customers are nearing $28.00/month. If the
decoupling proposal is not approved, PNM would recommend that the Residential
Service customer charge be increased to $7.00/month and the Small Power Service
customer charge be increased to $12.00/month.

VI. NEW INTERCONNECTED CUSTOMERS

Q.  IS THE COMPANY PROPOSING TARIFFS TO RECOVER THE COSTS OF
ANCILLARY AND STANDBY SERVICES TO NEW INTERCONNECTED
CUSTOMERS AS PROVIDED FOR IN HB 181?
A.  Yes. The Company is proposing Rider 34 in PNM North and Rider 4 in PNM South to
recover the cost of service to new interconnected customers.

Q.  WHAT DO YOU MEAN BY “NEW INTERCONNECTED CUSTOMER”?
A.  PNM’s proposed tariffs define “new interconnected customer” consistently with the
definition contained in Section 2 of HB 181. Thus a “new interconnected customer” is a
utility customer who became interconnected with non-utility distributed generation
facilities after December 31, 2010, or whose REC purchase agreement entered into prior
to January 1, 2011, is no longer effective after December 31, 2010.
Q. HOW HAS THE COMPANY DETERMINED THE COSTS TO BE COLLECTED UNDER THESE RIDERS?

A. PNM is obligated to serve all customers on its system and as such must design its systems to meet that obligation. Therefore, the class allocated fixed costs associated with the service to these customers is no different from all other customers within the same rate class. PNM has a significant portion of its fixed costs recovered through its variable energy rate.

Q. HOW DID PNM DETERMINE THE FIXED COSTS IN THE VARIABLE ENERGY RATE?

A. Using the embedded class cost of service study, PNM calculated the total demand and customer related charges, subtracted the revenue forecasted to be recovered through the customer charges and divided the remaining costs by the forecasted energy. PNM Exhibit JAM-19 shows the development of the fixed costs contained in the variable energy rate. In order to reduce the number of different rates applicable to new interconnected customers, customer classes were combined as appropriate to reflect similar fixed costs per kWh.

Q. WHAT DO THESE COSTS REPRESENT?

A. The fixed costs to be recovered by this Rider reflect the reasonably determinable embedded and incremental costs of PNM to serve these customers and have them interconnected to PNM system. As such they are costs associated with services that are
essential to maintain electric system reliability and are required by, or are a consequence of, interconnecting distributed generation facilities to PNM’s system.

Q. ARE THERE ADDITIONAL COSTS AT THIS TIME ASSOCIATED WITH REGULATION AND FREQUENCY RESPONSE, REGULATION AND VOLTAGE SUPPORT, SPINNING RESERVES AND SUPPLEMENTAL RESERVES?

A. No. The costs for these services are included in the embedded cost study used to calculate the fixed cost recovery associated with this Rider and so they represent the reasonably determinable embedded and incremental costs to serve new interconnected customers during the three-year period after the Rider is proposed to take effect.

Q. ARE THE COSTS TO BE RECOVERED THROUGH THIS RIDER DUPLICATIVE OF COSTS TO BE RECOVERED IN UNDERLYING RATES?

A. No. Although the costs identified for recovery in this Rider are included in the embedded cost study, they will not be recovered in underlying rates due to the reduced usage associated with customers interconnected to non-utility distributed generation facilities.

Q. DO THE NON-UTILITY DISTRIBUTED GENERATION FACILITIES THAT INTERCONNECT TO THE PNM SYSTEM PROVIDE ANY BENEFITS?

A. Yes, they do. Short-term benefits of distributed generation facilities include lower fuel and purchased power costs and reduced losses. Long-term benefits include capacity savings for generation and cost deferral savings for transmission.
Q. HAS PNM CALCULATED THE ANTICIPATED BENEFITS IN THE FIRST THREE YEARS AFTER THIS RIDER GOES INTO EFFECT AS REQUIRED BY HB 181?

A. Yes. PNM calculated the projected fuel and purchased power savings using the avoided energy cost used in the 2009 PNM Energy Efficiency Program Annual Report adjusted for current gas prices. PNM Exhibit JAM-20 summarizes the avoided cost. The average overall system fuel and purchased power rates were reduced $0.00119/kWh.

Q. OTHER THAN THE AVOIDED FUEL COSTS, ARE THERE ANY OTHER BENEFITS ATTRIBUTABLE TO THE NEW INTERCONNECTED CUSTOMERS THAT ARE ACHIEVABLE IN THE THREE YEAR PERIOD AFTER NEW RATES TAKE EFFECT?

A. Yes. If the energy from the distributed generation occurs at the time of peak, there is some potential reduction in the cost of PNM’s demand response programs. As can be seen on the graph in PNM Exhibit JAM-21, solar energy does not peak at the same time as PNM’s peak and therefore has less of an impact on demand response programs. While PNM does not expect distributed generation to fully offset the variable cost of the demand response programs, PNM Exhibit JAM-20 provides the quantification of the impact on the variable costs of the program based on the 2009 PNM Energy Efficiency Program Annual Report. This is the first year PNM has claimed any demand response from the load management programs. This potential benefit has been included in the determination of the avoided costs for the reduction of the fixed cost component of the rate.
Q. HAS PNM QUANTIFIED OTHER SAVINGS DURING THE THREE YEAR PERIOD?

A. No.

Q. DOES THE COMPANY'S DECOUPLING PROPOSAL FOR PNM NORTH RESIDENTIAL AND SMALL POWER CUSTOMERS ELIMINATE THE NEED FOR THIS CHARGE TO THESE CUSTOMERS?

A. No. The charge to new interconnected customers reflects the specific fixed costs that the Company is not recovering from these customers. Absent this charge, the Company has only two ways to recover the fixed costs associated with serving these customers and maintaining system reliability. These two methods are: a) by recovering the lost fixed costs from other customers through increased customer or energy charges; or b) through adding the unrecovered fixed costs to the FCR to the detriment of other customers. In both cases, they represent a subsidy to the new interconnected customers by other customers on the system. The legislation is specifically aimed at preventing this and allowing the utility to collect its costs for serving these customers less reasonably determinable benefits to the system achievable within the three year period during which the Rider is expected to be effective. The Rider that PNM is proposing does this and prevents subsidizing new interconnected customers by the other customers on the system.
Q. IS THE COMPANY DUPLICATING RECOVERY OF THESE COSTS THROUGH THE RATE RIDER AS WELL AS THE FCR?

A. No. PNM is proposing that the net revenues from the Rider be applied to the annual balance for the FCR. In this manner, the revenues from the Rider will either decrease any under recovery or increase any over recovery that will be applied to the small power and residential customers. This approach ensures that no duplication of cost recovery occurs and provides the system benefit of collecting these fixed charges to all customers in the small power and residential classes.

VII. MISCELLANEOUS

Q. DOES THE COST OF SERVICE REFLECT THE TERMS OF STIPULATIONS APPROVED BY THE COMMISSION?

A. Yes, as I have described in my testimony.

Q. PLEASE IDENTIFY HOW PNM HAS COMPLIED WITH THE 2008 RATE CASE ORDER AND RULE REQUIREMENTS WITH RESPECT TO COST OF SERVICE.

A. PNM conducted workshops on cost allocation and rate design methodologies and is filing both an embedded class (530 Schedule K-4 Embedded) and marginal class cost of service (530 Schedule K-4 Marginal) and an elasticity study.
PMN South Customer Class DG Applicability

<table>
<thead>
<tr>
<th>Customer Class</th>
<th>Loss Factor (0.9980)</th>
<th>Loss Factor (1.0396)</th>
<th>Loss Factor (1.0400)</th>
<th>Loss Factor (1.0530)</th>
<th>Loss Factor (1.0680)</th>
<th>Loss Factor (1.0982)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Service - Rate 1</td>
<td>$951.34</td>
<td>$920.00</td>
<td>$951.34</td>
<td>$928.67</td>
<td>$951.34</td>
<td>$920.00</td>
</tr>
<tr>
<td>General Service - Rate 2</td>
<td>$951.34</td>
<td>$920.00</td>
<td>$951.34</td>
<td>$928.67</td>
<td>$951.34</td>
<td>$920.00</td>
</tr>
<tr>
<td>Large Commercial Service - Rate 3</td>
<td>$951.34</td>
<td>$920.00</td>
<td>$951.34</td>
<td>$928.67</td>
<td>$951.34</td>
<td>$920.00</td>
</tr>
<tr>
<td>School Service - Rate 5</td>
<td>$951.34</td>
<td>$920.00</td>
<td>$951.34</td>
<td>$928.67</td>
<td>$951.34</td>
<td>$920.00</td>
</tr>
</tbody>
</table>

PMN North Customer Class DG Applicability

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total System Savings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoided Fixed Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoided Fuel Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoided Energy Loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoided Demand Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DC Savings Assuming 15% Overall Reduction

- Sch 1-4
- Sch 4-11
- Sch 14-30
- Sch 30-14
- Sch 14-30
- Sch 30-14

Avoided Cost Savings by Voltage Level

<table>
<thead>
<tr>
<th>Voltage Level</th>
<th>DC Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sch 1-4</td>
<td>$951.34</td>
</tr>
<tr>
<td>Sch 4-11</td>
<td>$920.00</td>
</tr>
<tr>
<td>Sch 14-30</td>
<td>$951.34</td>
</tr>
<tr>
<td>Sch 30-14</td>
<td>$920.00</td>
</tr>
<tr>
<td>Sch 14-30</td>
<td>$951.34</td>
</tr>
<tr>
<td>Sch 30-14</td>
<td>$920.00</td>
</tr>
</tbody>
</table>
BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE PUBLIC SERVICE COMPANY
OF NEW MEXICO'S REVISED RENEWABLE ENERGY
PORTFOLIO PROCUREMENT PLAN FOR 2012,
) Case No. 11-00265-UT

PUBLIC SERVICE COMPANY OF NEW MEXICO,
) Petitioner,
)

AFFIDAVIT OF RANDALL SADEWIC

STATE OF NEW MEXICO
) ss:
COUNTY OF SANTA FE
)

Randy Sadewic, upon being first duly sworn according to law, under oath, deposes and states: I have read the foregoing Direct Testimony on behalf of the Renewable Energy Industries Association of New Mexico in the above-captioned case and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 1st day of October, 2011.

RANDALL SADEWIC

SUBSCRIBED AND SWORN to before me this 1st day of October, 2011.

NOTARY PUBLIC

My Commission Expires: 1/25/15
BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE
COMPANY OF NEW MEXICO'S
RENEWABLE ENERGY PORTFOLIO
PROCUREMENT PLAN FOR 2012

PUBLIC SERVICE COMPANY OF NEW MEXICO

Petitioner.

Case No. 11-00265-UT

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Direct Testimony of Randall Sadewic on Behalf of the Renewable Energy Industries Association of New Mexico was mailed first-class, postage-paid, or hand-delivered or e-mailed on October 3, 2011 to the following persons:

Benjamin Phillips, Esq.
PNM Resources, Inc.
Alvarado Square, MS-1200
Albuquerque, NM 87158
Ben.phillips@pnmresources.com

Peter J. Gould, Esq.
PO Box 34127
Santa Fe, NM 87594-4127
pgouldlaw@gmail.com

Rebecca Dempsey, Esq
Cuddy & McCarthy, LLP
1701 Old Pecos Trail
Santa Fe, NM 87505
rdempsey@cuddymccarthy.com

Steven S. Michel, Esq.
Western Resource Advocates
409 E. Palace Ave., Unit 2
Santa Fe, NM 87501
smichel@westernresources.org

Marilyn S. Hebert
Assistant County Attorney
P.O. Box 276
Santa Fe, NM 87504-0276
mhebert@co.santa-fe.nm.us

Patrick Greibel, Esq.
Albuquerque Business Law, P.C
1803 Rio Grande Blvd. NW, Suite B
Albuquerque, NM 87104
Patrick@abqbizlaw.com

Charles F. Noble, Esq.
CCAE
409 E. Palace Avenue, Unit 2
Santa Fe, NM 87501
c-m-k@msn.com

Bruce C. Throne, Esq.
Attorney at Law
1440-B South St. Francis Drive
Santa Fe, NM 87505
bthronenalty@newmexico.com

Tom Young
REIA
C/O DPW Solar
4000 B Vassar Drive, NE
Albuquerque, NM 87107
youngt@directpower.com

Jeff Taylor
Assistant Attorney General
Office of the Attorney General
Post Office Box 1508
Santa Fe, NM 87504-1508
JTaylor@nmag.gov

John Curl
Senior Policy Analyst
Western Resource Advocates
409 East Palace Avenue, Unit #2
Santa Fe, NM 87501
jcurl@westernresources.org

Craig O’Hare
Energy Programs Specialist,
Santa Fe County
424 NM 599
P.O. Box 276
Santa Fe, NM 87504-0276
cohare@co.santa-fe.nm.us
Robert H. Clark  
Miller Stratvert P.A.  
P.O. Box 25687  
Albuquerque, NM 87125  
rclark@mstlaw.com

Robert J. Sutphin, Jr.  
Ocean Munds-Dry  
Holland & Hart, LLP  
110 N. Guadalupe St., Suite 1  
Santa Fe, NM 87501  
sutphin@hollandhart.com  
omundsdry@hollandhart.com

Bryan Biedsheid  
Sawtell, Wirth & Biedsheid, P.C.  
708 Paseo de Peralta  
Santa Fe, New Mexico 87501  
bryan@swbpc.com

Hand Deliver To:  
James Brack  
NMPRC – Utility Division  
1120 Paseo De Peralta  
Santa Fe, NM 87501  
Jim.Brack@state.nm.us

Annie Carmichael  
Government Affairs Mgr.  
Sun Edison, LLC  
1515 Wazee Street  
Denver, CO 80202  
acarmichael@sunedison.com

Thomas J. Wander  
Manager, Regulatory Projects   PNMR Services Co.  
Alvarado Square, MS-0810  
Albuquerque, NM 87158  
thomas.wander@pnmresources.com

Hand Deliver To:  
Lee Huffman  
Hearing Examiner  
NMPRC  
1120 Paseo de Peralta  
Santa Fe, NM 87501  
Lee.Huffman@state.nm.us

Hand Deliver To:  
Leslie Padilla, Esq.  
NMPRC  
1120 Paseo de Peralta  
Santa Fe, NM 87501  
Leslie.padilla@state.nm.us

Hand Deliver To:  
Dwight Lamberson  
NMPRC-Utility Division  
1120 Paseo de Peralta  
Santa Fe, NM 87504  
Dwight.Lamberson@state.nm.us

E-Mailed Only to:  
David Griscom  
davidgriscom@gmail.com

Megan Anderson  
anderson@weterrlaw.org

Tom Singer  
tsinger@nrdc.org

David Van Winkle  
david@vw77.com

Don Hancock  
sricdon@earthlink.net

Brendan Miller  
brendan@swrenewables.com

Elisha Leyba-Tercero  
Elisha.Leyba-Tecero@state.nm.us

Dated this 3rd day of October 2011.

By:  
Bruce C. Throne