

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,)
) No. 11-00265-UT
)
PUBLIC SERVICE COMPANY OF NEW MEXICO,)
)
)
Petitioner,)
)
)**

**NEW MEXICO INDEPENDENT POWER PRODUCERS
BRIEF-IN-CHIEF**

HOLLAND & HART LLP
Robert J. Sutphin, Jr.
Post Office Box 2208
Santa Fe, NM 87504-2208
505-988-4421
505-988-6043 (fax)
rsutphin@hollandhart.com

Attorneys for NMIPP

TABLE OF CONTENTS

I.	INTRODUCTION & SUMMARY OF ARGUMENT	1
II.	PNM’S RCT METHODOLOGY DOES NOT COMPLY WITH THE PURPOSES OF THE COMMISSION’S RULES.	2
III.	PROJECTED 2012 REVENUES – NOT 2010 REVENUES – SHOULD BE USED AS THE DENOMINATOR OF THE RCT CALCULATION.	6
A.	The REA Favors Use of a Plan Year Rate.	6
B.	PNM’s “Dramatic” Rate Increase Presents a “Unique Situation.”	6
C.	Both Sets of PNM’s 2012 Forecasted Revenues Greatly Exceed PNM’s 2010 Revenues.	7
D.	Forecasts Are Standard Practice, And Are Especially Appropriate In the RCT Calculation –Which is A Forecast.	8
E.	PNM Offers No Real Justification For Using Out-of-Date Revenues.	8
IV.	RENEWABLE ENERGY SHOULD BE CREDITED WITH AVOIDED CAPACITY COSTS IN THE RCT CALCULATION.	9
A.	Including Avoided Capacity Costs in the RCT Calculation is Consistent With the REA and Commission Approval of Other Utilities’ Plans Including Such Costs.	10
B.	PNM Has Previously Recognized that Avoided Costs Should Be Included In the RCT Calculation.	11
C.	PNM Relies on Renewables for Its Reserve Requirement, Yet Fails to Recognize That Renewables Provide Avoided Capacity Benefits.	12
D.	Renewable Resources, Once Adjusted by Their Capacity Contribution to Meeting PNM’s Peak Demand, Should Be Treated As Firm Resources that Offset Conventional Generation Additions.	13
E.	Conventional Generation Resources, Like Natural Gas Generation Facilities, Are Considered “Dispatchable” And “Firm,” But All Generation Resources Are Unavailable Some Percentage Of The Time, Due To Maintenance Or Other Issues.	14

F.	The Value Of Avoided Capacity Costs Should Be Typical Of National Best Practices Or Ideally Should Be Calculated Through A Detailed System-Specific Reliability Study, Such As An Effective Load Carrying Capacity (“ELCC”) Study.	14
G.	Due To Commission-Required Reserve Margins, Utilities Will Always Have Excess Capacity In The Short Term. It Is Not Reasonable To Only Consider Specific Generation Additions In The Current Plan Year For This Reason, But Planned Additions Should Also Be Considered.	16
	CONCLUSION	17

I. INTRODUCTION & SUMMARY OF ARGUMENT

New Mexico Independent Power Producers (“NMIPP”) is an association that advocates for the development of new utility-scale independent power production in New Mexico through open wholesale competition in order to deliver clean, reliable, and cost-competitive electricity while stimulating economic development in New Mexico. In its July 1, 2011 Renewable Energy Portfolio Procurement Plan for 2012 (“Plan”), PNM asserts that it is not required to purchase additional renewable energy in 2012 because its costs for its existing purchases of renewable generation will exceed its Reasonable Cost Threshold (“RCT”). *See generally*, Plan.

PNM’s RCT calculations are flawed. NMIPP’s calculations, made in accordance with utility industry best practices, indicate that PNM should be able to meet its full renewable energy procurement goals under the Renewable Portfolio Standard (“RPS”) established by the Renewable Energy Act (“REA”). Accordingly, NMIPP challenges two key aspects of PNM’s proposed RCT calculation:

1. Projected revenues for 2012 should be used as the denominator of the RCT calculation, in contrast with the 2010 actual revenues proposed by PNM.
2. Renewable energy should be credited with avoided capacity costs as it tangibly offsets conventional generation, even during peak periods.

As shown herein, evidence tendered in this proceeding, including the testimony of independent experts, the statements of PNM under cross-examination, and documentary evidence submitted by the parties demonstrate both the error of PNM’s RCT calculation and the correctness of NMIPP’s RCT calculation.

Moreover, if adopted by the Commission, NMIPP's approach would assist in standardizing the RCT methodology in New Mexico, reduce the need for annual litigation of this issue, improve stability in the renewable energy market, and bring economic development and environmental benefits to New Mexico. For these reasons, NMIPP respectfully requests the Commission to adopt its methodology, not only for purposes of PNM's 2012 Plan, but for future plans as well.

Finally, NMIPP recognizes that other parties have challenged PNM's failure to utilize levelized costs in the RCT calculation. While NMIPP can support the use of such levelized costs, levelized costs would need to be used consistently in the calculation from year to year. The Commission's decision on this issue, however, does not affect, and should not distract from the two significant flaws in PNM's RCT calculation, as addressed herein.

II. PNM'S RCT METHODOLOGY DOES NOT COMPLY WITH THE PURPOSES OF THE COMMISSION'S RULES.

The Renewable Energy Act ("REA") states that the Commission shall take into account the following in setting the RCT:

1. the price of renewable energy at the point of sale to the public utility;
2. the transmission and interconnection costs required for the delivery of renewable energy to retail customers;
3. the impact of the cost for renewable energy on overall retail customer rates;
4. the 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; and
5. other factors, including public benefits, that the commission deems relevant....

NMSA 1978, § 62-16-4 (C). The Commission's rules do not prescribe how the RCT calculation is to be performed, and the Commission has approved a variety of approaches

to the RCT calculation in prior plan filings. The Commission's rules establishing the RCT, however, do state their purpose: "to implement the Renewable Energy Act . . . and to bring significant economic development and environmental benefits to New Mexico." 17.9.572.6 NMAC. *See also* NMSA 1978, § 62-16-2 (Legislature finds that "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"). Thus, the RCT methodology utilized by PNM must, first, comply with these clearly-stated, and liberally construed purposes. 17.9.572.8 NMAC.

PNM's RCT methodology does not comply with the clearly-stated purposes of the Commission's rules. PNM, itself, describes its methodology as "conservative," and one which employs a "very strict definition." Tr. 10/20, 70:16-71:10; *see also* Tr. 10/24, 129:1-7 (Staff describing PNM's methodology as "overly restrictive."). Indeed, PNM's economist argues that PNM's RPS actually has a *negative* economic impact on New Mexico. Blank Reb., at p.21-22 (PNM Ex. 7).

PNM's proposed RCT methodology consists of the following:

the sum of the following costs:

- a. Forecasted RPS costs in 2012 and 2013, including costs for both bundled and REC purchases;
- b. Integration costs;
- c. Billing system costs; and
- d. WREGIS costs for tracking and verifying RPS purchases;

less:

- e. The avoided fuel costs and avoided line losses from bundled RPS purchases (but not from REC purchases);

Equaling a net costs total (the numerator of the fraction);

divided by:

f. actual 2010 revenues (the denominator of the fraction);

Equaling RPS costs as a percentage of 2010 utility revenues.

Beach Dir. at p.6 (NMIPP Ex. 1). PNM's methodology then compares this percentage to its RCT percentage in 2012 (2.25%) to determine if its renewable procurement exceeds its calculated RCT limit. *Id.* Applying this methodology to 2012, PNM projects \$20.3 million in net RPS costs in 2012 (2.55% of 2010 revenues) from PNM's existing renewable resources, or \$41 per MWh of renewable power. *Id.* Using PNM's approach, the RCT limit in 2012 would be 2.25% of 2010 revenues of \$797.3 million, or \$17.9 million. *Id.* Because this is less than the costs of PNM's existing renewable contracts, the utility proposes no incremental RPS purchases in 2012. *Id.*

PNM's utilization of a flawed RCT methodology resulting in no additional RPS purchases in 2012, fails to fully incorporate the stated purposes of the REA and this Commission's rules. NMIPP's RCT methodology, on the other hand, is consistent with the methodology utilized by El Paso Electric, (*see* Docket No. 11-00263-UT) and observes the stated purposes of the REA and the Commission's rules.

NMIPP proposes the following RCT methodology:

the sum of the following costs:

1. Forecasted RPS costs in upcoming calendar year. The RPS costs will include costs for both bundled and REC purchases;
2. Integration costs;
3. Incremental billing system costs, beyond those now included in rates, that PNM has shown to be necessary and prudent to implement PNM's Commission-approved REP Plan; and
4. WREGIS costs for tracking and verifying RPS purchases.

less these avoided costs:

5. Avoided fuel costs;
6. Avoided line losses; and

7. Avoided capacity costs from bundled RPS purchases (but not from REC or DG purchases).

Equaling a net costs total (the numerator of the fraction);

divided by:

8. best available forecast of revenues in the future year for which the RCT is being established (the denominator of the fraction).

Beach Dir. at pp.3-4 (NMIPP Ex. 1). The resulting net costs for renewables would be divided by the best available forecast of revenues in the future year for which the RCT is being established (i.e. 2012), in order to determine the rate impact for that year. *Id.* When applied to PNM's 2012 costs for existing renewables, this approach shows that PNM's costs for existing renewables in 2012 will be 1.60%, below the 2.25% RCT limit for the Plan year. *Id.* The testimony of PNM's Ms. Cynthia D. Bothwell includes data on the costs of the purchases that PNM could make in 2012 but for the RCT constraint. PNM Ex. 8. Based on these costs, plus accounting for avoided capacity costs and using forecasted 2012 revenues in the denominator of the RCT calculation, PNM will be able to meet its full 10% RPS obligation in 2012 using both wind RECs and diversity resource (i.e. solar) additions, while remaining below the RCT limit.

The two principal differences between PNM's and NMIPP's methodologies are: (1) NMIPP's use of actual projected Plan year (2012) revenues vs. PNM's use of revenues from two years prior to the Plan (2010); and (2) NMIPP's inclusion of avoided capacity costs vs. PNM's rejection of utilizing such costs despite its recognition that renewables provide capacity value to the PNM system in 2012 and 2013. Each of these two principal differences is discussed in turn below.

III. PROJECTED 2012 REVENUES – NOT 2010 REVENUES – SHOULD BE USED AS THE DENOMINATOR OF THE RCT CALCULATION.

A. The REA Favors Use of a Plan Year Rate.

There is no basis in the REA or the Commission’s rules for PNM’s utilization of historic – two-year old – revenues in its RCT calculation. To the contrary, the REA suggests a use of plan year rates. *See generally* NMSA 1978, § 62-16-1 et. seq.; 17.9.572 NMAC. The third statutory factor that must be considered in establishing a RCT is “the impact of the cost of renewable energy on overall retail customer rates.” NMSA 1978, § 62-16-4 (C). The RCT thus seeks to measure RPS costs in 2012 as a percentage of 2012 rates. Beach Dir. at p.7 (NMIPP Ex. 1).

As applied to PNM’s RCT calculation, actual 2010 revenues have little relevance to PNM’s 2012 rates. *Id.* PNM admits that its RCT calculation must be based on the “best approximation of actual bill impacts” for the Plan year. Tr. 10/20, 81:8-11; *see also* Tr. 10/20, 107:16-17 . And, in a rate case, PNM concedes that it would not use expenses and revenues from different years. Tr. 10/20, 105:1-7. Accordingly, PNM’s reliance on historical 2010 revenues for 2012 rates is not the best estimate of “overall retail customer rates” as required by the REA. Beach Dir. at pp.7, 15 (NMIPP Ex. 1).

B. PNM’s “Dramatic” Rate Increase Presents a “Unique Situation.”¹

PNM’s utilization of historic revenues for a subsequent plan year is especially inappropriate in light of its recent “dramatic” rate increase which, according to Staff, was a rate increase “more significant . . . tha[n] I can remember.” Tr. 10/24, 228:24-229:3.

Months before its 2012 Plan was filed, PNM had proposed a stipulation in its General Rate Case containing a 2012 Phase 2 revenue requirement of \$900.8 million.

¹ Tr. 10/24, 228:24-229:3.

See Stipulation in Case No. 10-00086-UT, filed February 3, 2011, Exhibit 1, at p. 2 of 5. Notwithstanding that it had proposed such a “dramatic” rate increase months in advance of filing its Plan on July 1, PNM’s Plan utilized historic 2010 revenues. *See generally* Plan. This resulted in PNM understating its 2012 forecasted revenues by \$129.1 million, and hence understating the 2012 RCT by \$2.9 million. Beach Dir. at p.16 (NMIPP Ex. 1).

C. Both Sets of PNM’s 2012 Forecasted Revenues Greatly Exceed PNM’s 2010 Revenues.

The above figures regarding the forecasted 2012 revenues and understatement of the 2012 RCT are derived from PNM’s forecast of 2012 revenues provided in discovery in this case. *See id.*; *id.* at RTB-2 (stating forecasted revenues of \$926.4 million). While PNM’s counsel characterized its discovery responses as a “back of the envelope calculation,” (Tr. 10/24, 21:4-6) there is no provision in the Commission’s procedural rules allowing PNM to so flippantly approach its discovery obligations. *See* 1.2.2.25(A) (“The Commission favors prompt and complete disclosure and exchange of information[.]”); 1.2.2.25(C) (“Discovery in commission proceedings shall be governed by the New Mexico rules of civil procedure for the district court[.]”).

At the hearing on this matter, the Hearing Examiner ordered PNM to produce accurate 2012-13 rate projections, utilizing its recently approved rates, along with supporting documents and/or work papers showing the basis for the calculations. Tr. 10/25, 65:3-7, 67:4-16. PNM produced some figures (stating forecasted revenues of \$899.9 million), but PNM did not produce any supporting documents or workpapers. *See* Public Service Company of New Mexico’s Response to Hearing Examiner’s Bench Request, filed November 10, 2011. Moreover, the parties were not given either an

opportunity to reply or an opportunity to cross examine the evidence or the witness offering such evidence. 1.2.2.35(K) NMAC. As a result, the 2012 revenue figures provided November 10 are less reliable than the figures provided in discovery.

Nonetheless, whether the Commission relies on the 2012 revenue figures PNM provided in discovery (RTB-2) or on the figures PNM provided November 10, it is clear that PNM's 2010 revenues grossly understates its plan year revenues.

D. Forecasts Are Standard Practice, And Are Especially Appropriate In the RCT Calculation –Which is A Forecast.

PNM concedes that its RCT methodology should be based on the “best estimates [it] has of what is going to happen in the future[.]” Tr. 10/25, 247:18-23. PNM regularly forecasts its future revenues for various planning and regulatory purposes, including presentations to investors and rating agencies. Beach Dir. at p.15 (NMIPP Ex. 1). Tr. 10/24, 10:22-11:9. Such forecasting is standard practice. In proceedings before the Commission, PNM regularly forecasts its future rates, taking into account known and measurable changes. Tr. 10/24, 12:16-18.

Moreover, the RCT calculation itself is a calculation of forecasted numbers. The quantities of renewable generation are forecasts; the costs of renewable are forecasts. Beach Dir. at p.15. As a result, the overall RPS requirements and RPS costs are forecasts. *Id.* The use of forecasted revenues is therefore not foreign to the RCT calculation. The use of forecasted revenues is – in the words of PNM – the “best estimates [it] has of what is going to happen in the future.” Tr. 10/25, 247:18-23.

E. PNM Offers No Real Justification For Using Out-of-Date Revenues.

PNM's only justification for utilizing significantly understated 2010 revenues is that to use actual projected revenues is “inconsistent” with using the large customer rates

in effect at the time of the filing for purposes of calculating the reduction required by 17.9.572.10 NMAC. *See, e.g.*, Tr. 10/20, 103:5-21. While the Commission’s rules require PNM to utilize “rates in effect on the day of the procurement plan filing” for purposes of calculating the large customer reduction (*see* 17.9.572.10 NMAC(C)(D)) there is no such requirement to use such rates to calculate the RCT. *See, generally*, 17.9.572.10 NMAC. Had the Commission intended the “consistency” PNM advocates, it would be stated in the rules – it is not.

In summary, PNM must be required to utilize actual forecasted 2012 revenues as the denominator in the RCT calculation. As shown above, the REA favors the use of projected 2012 revenues, and forecasted revenues – which are standard industry practice – are regularly utilized for regulatory (and other) purposes by PNM. PNM fails to offer any meaningful justification for using understated, out-of-date 2010 revenues, and fails to recognize the import of its “dramatic” August 2011 rate increase on the RCT calculations. PNM’s position is therefore contrary to the clearly-stated purpose of the REA and the Commission’s rules.

IV. RENEWABLE ENERGY SHOULD BE CREDITED WITH AVOIDED CAPACITY COSTS IN THE RCT CALCULATION.

There is no debate that renewable energy contributes tangibly and usefully to system reliability and thus offsets the need to add new conventional generation resources, avoiding costs and saving ratepayers money. Beach Dir. at p.17 (NMIPP Ex. 1). These contributions to system reliability exist both in the present, for 2012 and 2013, as well as the long-term. *Id.* at 17-20. Furthermore, nowhere does PNM dispute the avoided capacity costs presented by NMIPP, taken directly from PNM’s 2009 energy efficiency filing. Beach Dir. at pp.17-20 (NMIPP Ex. 1).

The only debate is whether PNM must recognize these quantifiable benefits in its RCT calculation. PNM's RCT calculation fails to account for these avoided capacity costs. Rather, PNM's proposal loads renewable costs into the "short-term" but defers avoided capacity costs into the "long-term," resulting in short-term plans and RCT calculations that continually fail to account for the life-cycle benefits of renewable energy, contrary to the language of the REA, and resulting in a sub-optimal renewable energy additions.

A. Including Avoided Capacity Costs in the RCT Calculation is Consistent With the REA and The Practice of Other Utilities.

The REA states that the RCT calculation should consider the contribution of renewables to system reliability. NMSA 1978, § 62-16-4(C)(4); *see also*, 17.9.572.11 NMAC (same). In this regard, renewable power provides avoided capacity benefits that also reduce ratepayer costs. Beach Dir. at p.17 (NMIPP Ex. 1). Electric systems are reliable because they have adequate generating capacity to meet peak needs. *Id.* As recognized by PNM (discussed below), renewables can and do provide such capacity. *Id.* Renewables thus reduce ratepayer costs not only by displacing fuel and reducing line losses, but also because PNM does not have to procure another source of capacity to provide a reliable electric system. *Id.*

The Commission has expressed its support of including avoided capacity costs by approving other utilities' applications, which included such costs. Utilities – other than PNM – include avoided capacity costs in their RCT calculations. For instance, in El Paso Electric's most recent plan, El Paso Electric used "all-in" costs of a combined-cycle and a combustion turbine as the measure of the long-term costs avoided by bundled renewable purchases. *Id.*; *see also* Case # 11-00263-UT. The utility's "all-in" avoided costs

included both avoided energy and avoided capacity costs. Beach Dir. at p.17 (NMIPP Ex. 1).

Thus, the REA, this Commission's previous decisions, and other electric utilities' applications, all recognize the existence, and benefits, of avoided capacity costs. PNM too has recognized the same.

B. PNM Has Previously Recognized that Avoided Costs Should Be Included In the RCT Calculation.

In Cases Nos. 09-260-UT and 10-00037-UT, PNM (Ms. Cynthia Boswell) quantified the avoided capacity cost benefit of solar resources being proposed by PNM. *See* REIA Ex. 9 (Bothwell Dir., p. 14 and Ex. CDB-6, Case No. 09-260-UT); REIA Ex. 10 (Bothwell Reb. pp. 8-9, Case No. 10-00037-UT). More specifically, PNM testified that the avoided capacity cost benefit of the solar resources at issue was \$30.41 per MWh. *Id.* PNM's calculations were "customized to PNM and New Mexico conditions." *Id.* Moreover, PNM testified that the benefit "begins at the in-service date of the new renewable resource." *Id.*, REIA Ex. 9. PNM stated that its avoided capacity calculation was "not inconsistent with the rule amendments proposed in Commission Case No. 08-00198-UT and the methodologies used and approved for the other utilities in New Mexico." *Id.* REIA Ex. 10.

Thus, notwithstanding its testimony in this case that renewable generation resources do not result in any avoided capacity benefits until some undetermined point in the future (Tr. 10/21/11, 40:3-23; 10/25/11, 79:14-80:7), PNM has previously recognized – as do all other parties to this proceeding – that avoided capacity benefits begin when renewable resources are placed into service. *See also* RS-10 (Direct Testimony of PNM's

James Mayhew in Case 10-00086-UT stating that long term benefits of distributive generation facilities include capacity savings).

C. PNM Relies on Renewables for Its Reserve Requirement, Yet Fails to Recognize That Renewables Provide Avoided Capacity Benefits.

PNM is required to maintain a “firm reserve margin” of 13% of its “base scenario” forecast of peak demand on its system. Tr. 10/25, 93:14-19. PNM’s recently-filed Load and Resources Table (contained in its July 2011 Integrated Resources Plan) indicates that PNM will not meet this “firm reserve margin” requirement beginning in 2013. NMIPP Ex. 3; Tr. 10/25, 100:25-101:4.

PNM testified in this matter that it was relying on peak capacity from its “non-firm” renewables to meet its minimum reserve capacity required by the Commission, for both 2012 and 2013. Tr. 10/25, 101:5-21; 102:3-18; 104:18-24; *see also* Tr.10/25, 88:11-18 (PNM stating that it includes solar and wind resources in its IRP). Without these renewables, PNM could not meet its requirements. *Id.*; *id.* at 101:22-102:2. PNM further admitted that in order to meet its firm reserve margin in 2012 and 2013, it was relying on investments in those resources made prior to 2012 and 2013. *Id.* at 106:20-107:22.

PNM thus recognizes that investments prior to the Plan year, such as the investments PNM made in the utility-owned solar resources, have capacity benefits in subsequent years. It is logically inconsistent for renewable energy to be relied on as a firm resource to meet demand requirements, while simultaneously excluding the associated avoided capacity from the RCT calculation.

D. Renewable Resources, Once Adjusted by Their Capacity Contribution to Meeting PNM's Peak Demand, Should Be Treated As Firm Resources that Offset Conventional Generation Additions.

In the absence of perfect certainty, it is not reasonable to assume that the value of the avoided capacity costs associated with renewable energy is zero. The best available projections and estimates of the capacity contribution of these resources to meeting peak demand should be used, and then these renewable energy resources should be treated as firm for that capacity contribution. When properly treated as firm resources, these resources offset the need for conventional generation additions. As Expert Witness Thomas Beach explained:

[PNM is] applying a 55-percent factor to the solar. And in my opinion, that takes into account the fact that solar is intermittent. And one solar -- you know, a megawatt of solar really provides 550 kW of firm capacity. So I believe -- I believe the adjustments that they've made to those numbers are such that they should treat them as firm capacity, and -- and other utilities in other states certainly treat them as firm capacity.

Tr. 10/24, 43:15-24.

In addition, while care should be taken to ensure that the average cost of renewable energy to rate payers should not exceed the RCT, any slight over or under expense in a given year can be reconciled and addressed in the subsequent year of the program. Meeting the multiple requirements established by the legislature in the REA is most likely achieved by an accurate RCT rather than an excessively conservative one, as proposed by PNM. Tr. 10/20, 70:16-71:10. As acknowledged by PNM, this practice has already been used by SPS and approved by the Commission. Tr. 10/20, 98:1-7.

Expert Witness Thomas Beach explained "You know, it [the RCT] certainly should be as accurate as possible. It would also be, you know, harmful to proceed with an RCT calculation with a substantially understated rate." Tr. 10/24, 15:9-12.

E. Conventional Generation Resources, Like Natural Gas Generation Facilities, Are Considered “Dispatchable” And “Firm,” But All Generation Resources Are Unavailable Some Percentage Of The Time, Due To Maintenance Or Other Issues.

Renewable energy resources are different from conventional resources in their degree of availability, which is why they are adjusted by a factor which reflects their dependable contribution to meeting peak demand. But all generation resources are unavailable at some points in time. This does not preclude them from being considered firm and being relied upon to serve load.

As acknowledged by PNM, “If you have gas plant, for instance, it’s dispatchable given that it’s not undergoing maintenance, you can count on bringing it up and having it serve load.” Tr. 10/20, 126:14-17.

F. The Value Of Avoided Capacity Costs Should Be Typical Of National Best Practices Or Ideally Should Be Calculated Through A Detailed System-Specific Reliability Study, Such As An Effective Load Carrying Capacity (“ELCC”) Study.

With overall accuracy of cost estimates being of essential importance, the national best practice used to calculate avoided capacity costs is a system reliability study such as an ELCC study. These studies calculate the specific contribution to system reliability of particular renewable energy resources. Despite the intermittency of renewable energy resources, ELCC studies show that these resources make tangible contributions to system reliability, including during peak periods.

Because the solar output may be lower at the time of the system peak, it is appropriate to -- to discount the capacity that solar provides. I think that it's not correct to just look at the peak hour in order to perform that adjustment. There are much more sophisticated ways to calculate the capacity value of PV resources than simply looking at one system peak hour. That's a very crude way to do it.

There are much more refined techniques that are used by utilities in other parts of the United States and that have been recommended by NERC, for example, for use by utilities in the US. Just looking at -- at solar's contribution in the system peak hour is, in my judgment, a very poor methodology.”

Tr. 10/24, 33:18-324:8 (Expert Beach).

Such studies can assist not only in calculating avoided capacity costs, but proactively in planning and siting renewable energy resources to minimize integration challenges. These studies can ensure that the maximum amount of renewable energy can be deployed, while minimizing system upgrades and reducing the amount of dispatchable conventional generation that is needed to address intermittency.

Furthermore, there are many ways to integrate renewable energy and mitigate intermittency of renewable energy through effective analysis and planning, increasing the reliability of these resources. For example, the geographic distribution of renewable energy resources, even within a region as small as a metropolitan area, can help to mitigate intermittency. The effectiveness of geographic distribution was acknowledged by both Expert Witness Thomas Beach (Tr. 10/24, 87:14-19) and PNM (Tr. 10/25, 260:9-17, 196:1-18).

NMIPP expects New Mexico's utilities to use national best practices in cost analysis and renewable energy planning. PNM should not be allowed to neglect these practices as an excuse for not maximizing renewable energy penetration to meet the legislative goals of the REA. New Mexico's utilities should be required to do everything reasonable and professional to meet all of the goals of the REA.

In the absence of a system specific ELCC study, renewable energy should be credited with avoided costs typical of utilities nationally and consistent with best

practices identified by established utility experts like the Electric Power Research Institute and the North American Electric Reliability Corporation (“NERC”). Generally, the avoided capacity costs will be more similar than different across utilities. As expert witness Thomas Beach explained, “I will agree that the impact of integrating renewables will not be exactly the same from utility to utility. But in my experience, looking at these issues for many different utilities in the US, there are -- the commonalities are greater than the differences. Tr. 10/24, 25:21-26:1.

G. Due To Commission-Required Reserve Margins, Utilities Will Always Have Excess Capacity In The Short Term. It Is Not Reasonable To Only Consider Specific Generation Additions In The Current Plan Year For This Reason, But Planned Additions Should Also Be Considered.

PNM’s position that additional capacity is not required in 2012 and 2013 and therefore there are no avoided capacity benefits (Tr. 10/20, 75:1-3) is short-sighted and uninformed. Utilities, like PNM, tend to be in an excess capacity situation in the short-term because utilities build out resources ahead of time in anticipation of demand and then let demand catch up with their resources. Tr. 10/24, 36:19-37:8. Thus, in a short-term perspective, utilities are almost always in an excess capacity situation, where the short-term value of capacity is almost always low. *Id.* Renewables, on the other hand, are a long-term resource and have substantial value in the long term. *Id.* This presents a “chicken-and-egg” situation where, looking only at the short term results in undervaluing renewable energy resources, and as a result, the RCT limits adding additional renewable energy resources. *Id.*

Instead, the Commission should look at the long-term benefits in applying the RCT. *Id.* Otherwise, a situation is created where, by only looking at the short-term, renewables which are justified in the long term, will not be added. *Id.*

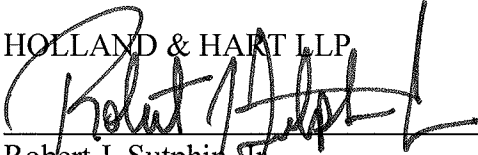
Furthermore, as recognized by PNM, conventional gas capacity can be, and is added by PNM in units as small as 40 MW. Tr. 10/25, 83:14. In plan years 2012 and 2013, cumulative renewable energy resources, after adjustments for capacity factors, will be very comparable to a 40 MW capacity addition. In addition, but for PNM's unilateral choice to purchase RECs without energy, the firm capacity of PNM's existing renewable resources would contribute significantly more capacity in 2012 and 2013. Tr. 10/25, 85:15-86:10.

CONCLUSION

WHEREFORE, NMIPP respectfully requests that the Hearing Examiner in this case include in his Recommended Order:

1. Recommendation that the projected revenues for 2012, as provided in discovery and attached to Expert Beach's direct as Exhibit RTB-2, be utilized as the denominator of the RCT calculation and that the projected revenues for the plan year be used by utilities in subsequent plan filings.
2. Recommendation that renewable energy resources should be credited with avoided capacity costs, by adjusting these resources according to industry standard capacity contribution percentages. Alternatively, a reliability study, such as an Effective Load Carrying Capacity study, should be used to calculate the capacity contributions of renewable resources on PNM's system.

HOLLAND & HART LLP



Robert J. Sutphin, Jr.

Post Office Box 2208

Santa Fe, NM 87504-2208

505-988-4421

rsutphin@hollandhart.com

Attorneys for NMIPP

5320896_1.DOC

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 New Mexico Independent Power Producer's Brief-In-Chief was delivered by electronic mail or hand-delivered on November 18, 2011, to the following persons whose addresses are listed below and emailed to those persons at the email addresses shown below:

Benjamin Phillips, Esq.
Ben.phillips@pnmresources.com

Peter J. Gould, Esq.
pgouldlaw@gmail.com

Rebecca Dempsey, Esq.
rdempsey@cuddymccarthy.com

Steven S. Michel, Esq.
smichel@westernresources.org

Marilyn S. Hebert
mhebert@co.santa-fe.nm.us

Patrick Greibel, Esq.
Patrick@abqbizlaw.com

Charles F. Noble, Esq.
c-m-k@msn.com

Bruce C. Throne, Esq.
bthroneatty@newmexico.com

Tom Young
youngt@directpower.com

Jeff Taylor
JTaylor@nmag.gov

John Curl
jcurl@westernresources.org

Craig O'Hare
cohare@co.santa-fe.nm.us

Robert H. Clark
rclark@mstlaw.com

Bryan Biedscheid
bryan@swbpc.com

David Griscom
davidgriscom@gmail.com

Megan Anderson
anderson@westernlaw.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

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

Annie Carmichael
acarmichael@sunedison.com

Thomas J. Wander
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:

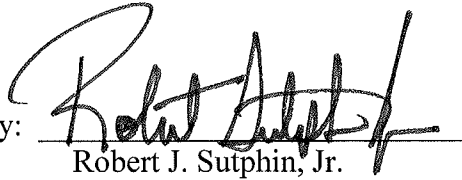
Leslie Padilla, Esq.
NMPRC
1120 Paseo de Peralta
Santa Fe, NM 87501
Leslie.padilla@state.nm.us

Hand Deliver To:

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

Dated this 18th day of November, 2011.

By:


Robert J. Sutphin, Jr.

5321191_1.DOCX