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 )
) Case No. 11-00265-UT

PUBLIC SERVICE COMPANY OF )
NEW MEXICO )
Petitioner. )

DIRECT TESTIMONY OF
CRAIG D. O’HARE
ON BEHALF OF
THE COUNTY OF SANTA FE

3 October 2011
Q. Please state your name, title, the name of your employer and your business address.
A. My name is Craig D. O’Hare. I am employed by the County of Santa Fe as the Energy Programs Specialist. The business address is P.O. Box 276, Santa Fe, New Mexico 87507.

Q. Please describe your professional experience.
A. I have been in my current position since April of this year. As Energy Programs Specialist, I am responsible for promoting renewable energy and energy efficiency-related economic development in the residential and commercial sectors. From 2003 through 2010, I was the Special Assistant for Clean Energy in the New Mexico Energy, Minerals and Natural Resources Department. In that capacity, I promoted clean energy-related economic development and job creation by working on state legislation, engaging in the NMPRC rule-making and policy development processes, working with renewable energy developers and contributing to clean energy program development. From 1996 to 2002, I was the Water Programs Administrator for the City of Santa Fe water utility and was involved with various aspects of water conservation, drought emergency management, and long-range planning and watershed management. Immediately prior to my employment with the City water utility, the City had acquired the utility from PNM. I was involved with the gradual transition of shifting utility operations from PNM to the City during my tenure as Water Programs Administrator.

Q. Please describe your educational background.
A. I received a Bachelors of Arts degree in Business Economics and a Bachelors of Arts degree in Geography from the University of California at Santa Barbara.

Q. Have you previously testified before the NMPRC?
A. No.

Q. On whose behalf are you submitting the testimony?
A. The Board of County Commissioners of Santa Fe County. The Board adopted County
Resolution No. 2011-132 directing County staff to intervene in this case.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain why the County does not support PNM’s 2012
Renewable Energy Portfolio Procurement Plan (REPP) both with respect to PNM’s plan for the total
amount in megawatt-hours (MWhs) of renewable energy it intends to procure and with respect to its
intentions for continuing distributed generation solar incentive payments.

Q. Please describe Santa Fe County’s interest in this proceeding.

A. Like other communities in the state and the nation, Santa Fe County’s economy and employment
rate has been negatively affected by the economic recession and its continuing lingering effects. One
economic area of particular concern is the poor state of the residential and commercial construction
industry in the County. The County recognizes that promoting energy efficiency and renewable energy
renovations at existing commercial and residential buildings can serve to revitalize at least a portion of
the building-related industry economy. In November of last year, the County adopted its “Sustainable
Growth Management Plan”, which among other clean energy objectives, established a policy to “Create
a Viable Green Energy Economy”. PNM’s Renewable Energy Certificate (REC) incentive payments in
the past few years have proven to be an important incentive in stimulating customer-scale solar energy
development in the County. The County is concerned that a substantial reduction or temporary cessation
of those incentives will have a negative impact on the continued growth and vitality of the renewable
energy-related economy in the County.

Q. What particular aspects of PNM’s 2012 REPP is the County concerned about?

A. Santa Fe County is primarily concerned about the Plan in three areas: 1) That PNM plans to
utilize over 40% less renewable energy in its portfolio for 2012 and 2013 than is called for by the
Renewable Energy Act. This will reduce the amount of renewable energy development that would be stimulated in Santa Fe County as well as other counties throughout PNM’s service territory. PNM claims that it can’t procure more renewable energy than is in the Plan because it will exceed the Renewable Cost Threshold (RCT). However, the RCT methodology and assumptions used by PNM may be called into question, especially when one looks at how the other two investor-owned utilities (IOUs) in the state have approached calculation of the RCT. 2) The proposed reduction of the Solar Incentive Program payment for photovoltaic projects sized greater than 100 kilowatts (kw) is too great, too soon, and may serve to further hamper continued project development. 3) The plan ignores the reality that the SIP “tranches” are likely to be fully-subscribed (and therefore, at least temporarily eliminated) for the 0-10kw and 10-100 kw system sizes before the Commission is able to decide if and how they should be continued and PNM can implement a Commission decision to accomplish that, and before PNM is required to file its next REPP on July 1, 2012. If that happens, that is likely to have an adverse impact on the continued development of residential and commercial-scale solar projects in the County.

Q. Does Santa Fe County believe that no other person or party can adequately represent Santa Fe County’s interests concerning PNM’s 2012 Plan?

A. Yes. Santa Fe County is the only local government entity that intervened in this case. In that capacity, Santa Fe County’s interests and concerns in this case are, therefore, broader, more comprehensive and more long-term than PNM’s or the other parties’ in this case. For instance, Santa Fe County is not only concerned about how PNM’s plan will affect the “ratepayers” or the “electric consumers” within the County but, also, the “citizens” within the County as well.

Q. But aren’t the “ratepayers” and the “citizens” in Santa Fe County essentially the same entities?
A. Yes and no. They are the same individuals, but a “citizen” wears many “hats” only one of which is being an electric utility “ratepayer”. With the ratepayer hat on, a citizen may only be narrowly concerned about obtaining reliable electric service and keeping rates as low as possible. But with its other “hats” on, the citizen may be concerned about a whole host of other issues related to the generation and delivery of electricity to his or her door step: the impacts the electric generation has on the local and regional environment, the impacts air and water pollution from electric generation have on public health, the degree to which the electric generation contributes to potentially catastrophic global climate disruption, the degree to which the electric generation creates jobs and contributes to the local or regional economy, the degree to which their electric utility payments stay within the local or regional economy, etc. Some Santa Fe County citizens are PNM “shareholders”, and, therefore, the County’s interest includes that consideration as well. As a “citizen” with a whole host of concerns and desired societal outcomes affected by electric generation, he or she may be willing to accept slightly higher electric rates in the near term as a tradeoff in order to help promote those desired societal outcomes (e.g. job creation and economic development, less pollution, mitigating climate disruption, etc.) and/or to keep rates lower in the long-term. Santa Fe County may be the only intervener in the case that is looking after the “citizen” as well as the “ratepayer”.

Q. The Attorney General is the other governmental entity that has intervened in the case. Are Santa County’s interests different than the Attorney General’s?

A. Since I haven’t reviewed any testimony or positions by the AG in this case so far, it’s not clear to me what the AG’s interests in this case are. So far as I can tell based on my past participation in renewable energy procurement plan cases before the Commission, it appears to me that the office of the AG has focused primarily on protecting today’s residential customers from having to pay unreasonable amounts for public utilities like PNM to satisfy their obligations under the New Mexico Renewable
Energy Act. In contrast, as I explained earlier, Santa Fe County’s interests in this case are broader and include not only consideration of the near-term bill impacts of a utility’s renewable energy procurement plan, but also its effects on utility customers and businesses in terms of jobs and economic development and longer-term bill impacts.

Q. But isn’t PRC’s statutory responsibility, in the various cases it handles, to simply balance the ratepayer or “consumer” interest with the utility stockholder or “investor” interest? The broader citizen or “public” interest is not supposed to be considered when the PRC is making a decision. Correct?

A. No. Both the New Mexico Public Utility Act (PUA) and the NM Public Regulation Commission Act (PRCA) clearly state that the PRC must balance the interests of consumers, the interests of utility investors, and the public interest. The PUA states that, “It is the declared policy of the state that the public interest, the interest of consumers, and the interest of investors require the regulation and supervision of public utilities…” (NMSA 62-3-1). The PUA also states that, “the development and expansion of public utilities’ business directly affects the development, growth and expansion of the general welfare, business and industry of the state.” This citation clearly recognizes the PRC’s proper role of regulating the investor-owned utilities for economic development purposes. The PUA states that “The utility division shall represent the public interest in utility matters before the commission… In order to represent the public interest, the utility division shall fulfill its responsibility to balance the public interest, the consumer interest and the investor interest.” (NMSA 8-8-12) Santa Fe County has structured its testimony based on the notion that “public interest” can be reasonably argued to include considerations such as: economic development and job creation, local, regional and global environmental impacts, public health impacts and potential rate impacts well into the future.
Q. You mention, above, that Santa Fe County’s interests and concerns are “...more long term than PNM’s or other parties’ in this case”. You also note immediately above that Santa Fe County’s testimony has been prepared with particular concern for the “long term” public interest. Why do you make a point of emphasizing long term interests and concerns?

A. Because, there are often trade-offs between near-term and long-term consumer and public interest impacts from a host of PRC decisions. By near-term, I mean generally five to ten years at the most, and often, just for the next year or two. Yet, the electric generation facilities that are developed by a utility, be they traditional fossil fuel-powered or renewable energy-derived, are likely to be a part of a utility’s system for thirty years or even longer. These facilities will, therefore, have both an impact on the public interest (air quality, public health, climate disruption, job creation, etc.) and the ratepayer interest over a very long period of time. There’s nothing in statute to suggest that the PRC should only be concerned about the ratepayer or public interest in the short term. Santa Fe County therefore believes that the PRC needs to consider and balance the interests between “today’s” ratepayers and citizens and “tomorrow’s” ratepayers and citizens. Myopic decisions that only look at the impacts on today’s customers and citizens may cause substantial negative impacts on tomorrow’s citizens and customers (e.g. 20 to 30 plus years from now.)

Q. Could you provide examples of this need for PRC to conduct “inter-temporal” balancing of consumers’ interests and the public interest?

A. Electric generation facilities are generally capitalized (and, therefore, the debt service is incorporated in rates) in approximately a 20 year period, yet they tend to continue to operate for many years thereafter. Yet traditional fossil fueled-electric generation facilities have much different capital and operating cost characteristics than utility-scale renewable energy facilities. Utility-scale solar or wind facilities often have higher capital costs per megawatt of capacity than natural gas or coal facilities,
and, therefore have a greater impact on rates in the 20 year period in which the ratepayer is paying off the capital costs. Yet, renewable energy facilities generally have much lower operating costs because their “fuel”, wind and the sun, is free. Once a renewable energy facility has been capitalized (i.e. paid for by the ratepayers), the cost of continued operation is much lower than for, say a combined cycle natural gas plant. Fossil-fuel facilities are likely to have greater and greater operating costs as the price of fossil-fuel energy sources increases over time and as air quality emission requirements continue to become more stringent. Thus, utility-scale renewable energy projects may reduce consumers’ costs in the longer term, acting as a hedge against fossil fuel energy price increases. While computationally not easy, Santa Fe County believes that it is appropriate for the PRC to consider these longer range financial benefits and costs when conducting cost-benefit comparisons between renewable and traditional generation resources and balancing all of the interests over the immediate and long-term. This is the concept behind the “Integrated Resource Planning” requirement included in the NM Efficient Use of Energy Act.

Q. You mentioned that the first of three areas the County is concerned about in PNM’s Plan is that PNM won’t be complying with the overall RPS 10% requirement due to PNM’s “questionable” calculation of the RCT. Would you please explain?

A. First, it needs to be made clear by just how great an amount PNM does not intend to comply with the RPS’ 10% renewable energy requirement. Table 1 on page 6 of PNM’s filing helps provide this clarity. When the “Adjustments for Large Customers” is taken into the consideration, the effective RPS requirement is reduced from 10% to approximately 9.5%. This reduction is fair and reasonable and consistent with statute. But then when PNM applies its RCT calculation, it reduces its planned renewable energy portfolio amount down to 5.6% in 2012 and 5.7% in 2013. That’s greater than a 40% reduction from the minimum RPS requirement in the REA! While it’s impossible to emphatically
conclude that the NM State Legislature never intended for their inclusion of a RCT provision in the REA to be used to justify slashing the RPS requirement nearly in half, it does raise significant issues regarding both the PRC's subsequent interpretation and implementation of the RCT statutory language and PNM's specific methodology and assumptions used in calculating the RCT.

Q. What concerns does Santa Fe County have about the PRC's "interpretation and implementation of the RCT statutory language" and the specific methodology PNM used to calculate the cost of its renewable energy procurement and apply the RCT in this case?

A. Based on prior cases, it seems that some have interpreted the RCT as nothing more than a limit on rate impacts on today's ratepayers only. And yet, rate impacts on customers include both short-term and longer term impacts, and they are only one of five statutory criteria the PRC is directed to consider in establishing and applying the RCT. (NMSA 62-16-4.C.3). One of the other RCT criteria directs the PRC to take into account, "... the cost per kilowatt-hour and life-cycle cost on a net present value basis of renewable resources..." (NMSA 62-16-4.C.4). Yet PNM chose to ignore the "life cycle cost" directive and instead used the "annual revenue requirement of each renewable procurement" (Bothwell, pg. 11, line 18). This results in concentrating the cost impacts in the years 2012 and 2013, rather than spreading them out over the expected life of the facilities. PNM justifies this approach by arguing that it's the same methodology it used in Case No. 10-00373-UT. I'd call this a "two wrongs make a right" rationale. The REA is clear that the Commission must consider the costs of renewable energy on a "life cycle" basis, suggesting that a "levelized cost of energy" (LCOE) methodology, similar to what PNM and the other IOUs in New Mexico recommended in Case No. 08-00198-UT, should be used by PNM in this case. Indeed, LCOE is the methodology used by the El Paso Electric Company in its currently pending renewable energy procurement plan case (No. 11-000263-UT). It's also worth noting that, in their recent renewable energy plan cases, both of the state's other two IOUs, EPE and Southwestern
Public Service Company, did not find the RCT to be a constraint preventing them from fully complying with the minimum 10% RPS established by the Legislature in the REA. In fact, EPE’s LCOE analyses showed negative RCT values for both 2012 and 2013 – meaning that the renewable energy procurements proposed by EPE actually benefit ratepayers when their levelized costs are reasonably compared to the levelized cost of EPE procuring comparable non-renewable, fossil fueled generation resources. The costs of procuring renewable energy, and thus the impacts on consumers, are essentially the same for all three of the state’s IOUs. Therefore, it makes little sense, from a public policy or regulatory perspective, that PNM’s customers and residents of New Mexico should not receive the full benefits of the minimum 10% RPS requirements in the REA that customers of the State’s other two IOUs receive, simply because PNM has discovered a different method of calculating its renewable energy costs that it can use as a tool to reduce its RPS obligation.

Q. **Is there anything else in the RCT statutory language that is relevant to this discussion?**

A. Yes, in interpreting and establishing the RCT, the statute also directs the PRC to take into account, “…other factors, including public benefits, the commission deems relevant…” (NMSA 62-16-4.C.5). As stated previously, Santa Fe County suggests that economic benefit and job creation are valid elements of “public benefit” that the PRC should be taking into consideration. The fact that the PRC has established “Economic Development Rates” (19.9.590 NMAC) is a clear indication that the Commission recognizes its proper role in using its regulatory authority over energy utility monopolies to stimulate economic development in the state. PNM is planning to reduce its renewable energy obligation by approximately 348,000 mwhs per year due to its RCT calculation (PNM, page 6, Table 1). At a 25% capacity factor, this translates to approximately 159 megawatts of renewable energy projects that won’t get developed in the state due to PNM’s particular methodology and assumptions used to calculate the RCT. That means that the significant job creation (direct, indirect, and induced) and
associated economic development from $350-500 million of capital investment in the state won’t occur as well.

Q. **Is there anything else you’d like to address with respect to renewable energy’s contribution to job creation and economic development in the state?**

A. Yes. According to a New Mexico Green Chamber of Commerce document, New Mexico has 35,800 private sector green economy jobs, now constituting 5.9% of all private sector employment. Fully 15% of those jobs are in renewable energy. Green occupations in New Mexico, on average, pay 15% higher wages than do other occupations. The renewable sector, alone, could create 66,000 new jobs in the state by developing New Mexico’s 27,000 MWs of renewable energy potential. Renewable energy incentives (such as the IOU's performance-based solar incentives) and standards were primarily established in the state beginning in 2002. Between 1998 and 2007, clean energy economy jobs grew by over 50% whereas the overall job growth rate was 1.9%, according to a report by the Pew Charitable Trust. Santa Fe County recognizes the enormous job creation that has already been stimulated in the County by renewable incentives and requirements and recognizes the continued importance of those policies to continue to promote a vibrant solar industry in the County and the state. It is for this reason that the County’s testimony in this case highlights the importance of including job creation and economic as a component of the “public interest” that needs to be considered in implementing the REA.

Q. **Could you elaborate on the specific methodology and assumptions PNM uses that you believe make the RCT calculation unreasonably high?**

A. PNM’s RCT calculations are unreasonably biased toward creating an unusually high RCT calculation in three primary areas: 1) use of an annual actual “revenue requirements” approach, rather than a Levelized Cost of Energy methodology, 2) Use of a generation avoided cost assumption that only considers fuel and line losses and ignores life-cycle system capacity and other avoided cost benefits
to PNM and its customers. 3) Use of a substantially understated projection of its “aggregated overall annual electric charges “in 2012 and 2013 (the denominator in the RCT calculation). I believe that using more reasonable methods to calculate these three components of the RCT is likely to show that PNM can and should be required to procure more renewable energy in its 2012 REPP without exceeding its RCT in 2012 or 2013 and without the sort of reductions to its 10% RPS obligations that PNM is claiming in this case. The current SPS and EPE REPP cases suggest as much.

Q. With respect to the first component of PNM’s RCT calculation that you mention, the use of a revenue requirements approach focusing only on 2012 and 2013, is there anything more you’d like to add?

A. Yes. I’d just like to clarify and reiterate that PRC’s RCT rule says that “…the commission will take into account: … the cost per kilowatt-hour and life cycle cost on a net present value basis of renewable energy resources…” (17.9.572.11 NMAC). PNM did not provide the renewable energy costs on life cycle cost basis in their REPP, so it’s impossible for the Commission to take it “into account”.

Q. But PNM’s revenue requirements methodology focuses on actual costs incurred in the 2012 and 2013 plan years, and therefore, in theory, the actual rate impacts for those years. Isn’t that what the RCT is supposed to be arriving at – the actual ratepayer impacts for the plan years in question?

A. No. There is nothing in statute or rule to suggest that’s all the RCT is supposed to be. As I’ve stated before, only one of the five RCT criteria in both statute and rule is “(3) the impact of the cost for renewable energy on retail rates;…” (17.9.572.11.B.3). And that citation does not specifically state that only the impact on retail rates for the plan year(s) shall be considered when implementing the RCT. What are the retail rate impacts of the plan 5 years from now, 10 years from now, 20 years from now?
These are RCT-relevant considerations because the proposed renewable energy facilities (and the alternative traditional generation facilities whose costs they are being compared against) will be in operation 20 plus years from now.

Q. Are you suggesting or implying that Santa Fe County doesn’t care about the RPS rate impacts on its citizens in 2012 and 2013?

A. No. What I am suggesting is that Santa Fe County is concerned about the rate/bill impacts on its citizens not only in the near term, but in the longer term as well. Our concern is that a myopic-based decision limiting the amount of renewable energy in PNM’s portfolio may seem to keep customers’ bills lower in the immediate term (2012, 2013) but result in significantly higher bills in the longer term. It’s akin to the following example. A homeowner needs a new garden hose and goes down to the local hardware store to buy one. There’s a $6 garden hose that will last one year and a $15 garden hose that will last 10 years. A myopic “immediate costs” concerned homeowner will select the $6 garden hose each year, rationalizing that he/she is “saving” $9. But of course, over the course of 10 years, the homeowner is actually spending $45 more than if he/she had purchased the $15 garden hose.

Furthermore, Santa Fe County feels that a small affect on retail rates today to help stimulate utility and customer-scale renewable energy development in the County is an appropriate use of ratepayer funds just as the state solar energy income tax credit is an appropriate use of taxpayer funds to the same effect.

Q. What about the second component you mention in PNM’s RCT calculations, that PNM does not reasonably take into account the avoided capacity cost benefits of renewable energy procurements when computing the cost of those procurements?

A. PNM’s calculations only considered and included the “avoided fuel costs” from a natural gas combined cycle and natural gas combustion turbine plants and line losses, arriving at a reduction of approximately $40-42/mwh (Bothwell, pg. 14, line 11). Whereas in EPE’s current REPP case, I
understand that avoided capacity costs were considered and included, as well as avoided operation (fuel) costs, in EPE’s procurement cost calculations using the Electric Power Research Institute “TAG” figures of $165 per MWh. Whether or not to include an avoided capacity cost in the RCT calculation has a lot to do, again, with whether one is concerned only about costs “today” or whether costs “tomorrow” are of concern. The fact that EPE included avoided capacity costs shows that it is reasonable to do so. If PNM were to use the $165 per mwh figure, more than three times the avoided cost figure it used, the resulting RCT calculations would be dramatically different than what PNM claims in its 2012 Plan.

Q. **What about the third RCT component you mention: PNM’s assumption regarding the overall customer charges (i.e. revenue) the renewable costs are being divided by to arrive at the RCT percentage?**

A. PRC Rule 572 provides that the RCT for 2012 is 2.25% “...of all customers’ aggregated overall annual electric charges...” (17.9.572.11.B, NMAC). But PNM doesn’t use the “aggregated overall annual electric charges” for the 2012 REP plan year. Instead, it uses its charges and revenues from 2010 (Bothwell, Pg. 17, line 5). This substantially understates the RCT’s denominator and therefore, overestimates the RCT impact. For instance, I understand that PNM has indicated in discovery in this case that its retail sales in 2010 were 8,299,183 mwh. In 2012, PNM projects that retail sales will be 8,843,583 mwh (PNM, pg. 6, Table 1). That’s approximately a 6.5% increase in retail sales from 2010 to 2012. Furthermore, the PRC recently approved a 9.2% rate increase for PNM. In their REP, PNM uses 2010 revenues of $797,277,195 (Bothwell, pg. 16, line 5) as the RCT’s denominator. At the very least, for the purpose of reasonably and realistically projecting PNM’s overall aggregated customer electric charges in 2012, PNM’s 2010’s $797 million revenue figure should be increased by 15.7% (6.5+9.2) to approximately $922 million. That more realistic figure would also substantially change PNM’s RCT calculations. And to be complete and consistent with Rule 572.11, PNM’s projection of
its “aggregated overall annual electric charges” in 2012 and 2013 should include projected revenues from its energy efficiency rate riders in those years. And, again, in order to generate a comprehensive, not myopic, cost-benefit analyses that leads to an RCT estimate, there’s nothing in the rule that states that the only relevant “aggregated overall annual electric charges” are those just for REP’s plan year(s) as opposed to considering the annual electric charges over the long-term life of the proposed renewable energy facilities.

Q. In addition to the RCT calculation, the second issue you mentioned about PNM’s plan that is of concern to the County is the proposed REC incentive payments for solar electric projects between 100 kw and 1 MW is size. Would you elaborate on this concern!

A. Yes. The County is concerned that PNM’s proposal to offer a REC incentive of 2 cents per kwh will be insufficient to continue to incentivize more solar projects in the 100kw to 1 MW size range. That size category is the most relevant for governmental and institutional (e.g. public schools) entities that may be interested in photovoltaic projects in the hundreds of kilowatts size range. Since governments cannot take advantage of the 30% federal and 10% state income tax credit, their projects are likely to be the most viable with a power purchase agreement (PPA) structure. In order for such a project to be financially viable for a governmental entity, the PPA price, less the benefit from net metering, needs to be no greater than the retail kwh price the utility charges. Solar businesses I’ve spoken with suggest that translates to needing a REC payment amount of 6 to 7 cents per kwh. For example, a few months ago, Santa Fe County was pursuing solar PPAs for four projects in the 150-250 kw size range and determined that at 6 cents per kwh, projects were not quite financially viable. The County decided to abandon its plans for developing the solar projects. However, had Santa Fe County’s overall budgetary situation been a little better than it is, it’s conceivable that the Commissioners might have gone forward with the PV projects for job creation and “it’s the right thing to do” reasons, even though it would have
cost slightly more than buying the same amount of electricity from PNM. Therefore, the County urges that consideration be given to maintaining the REC incentive for this size category at 6 cents/kwh, with a commensurate one cent per kwh drop in the REC incentive within a defined period of time (e.g. six months) or with certain amount of capacity deployment (1/2 to 1 MW).

Q. The 3rd item you mentioned the County is concerned about is the fact that PNM’s Plan essentially ignores the likelihood that, at the reported participation rates, the 0-10 kw and 10-100kw size “tranches” of the SIP will soon be filled and simply proposes that the Commission address that possibility after this case is over. Would you elaborate on this concern?

A. As of 27 September 2011, PNM’s web site indicates that the 0-10 kw size category is at the second to the last REC incentive rate: 8 cents/kwh. The 10-100kw category is at the next-to-the last REC rate of 7 cents/kwh. Given that these REC incentives were not readily apparent to consumers until the fall of 2010, it’s very clear just how quickly the “uptake” of the decreasing REC incentive payments has occurred. The 0-10 kw size range went from 12 cents/kwh to 8 cents in about a year. The 10-100 kw category went from 14 cents/kwh to 7 cents, also in about a year. Clearly, any reasonable person would conclude that both size categories are likely to reach and exhaust the lowest REC payment amount, 6 cents/kwh, sometime during next calendar year, and, very likely, quite early in 2012. And yet, “PNM is not submitting a proposal regarding continuation of the SIP program for solar systems less than 100kw in this case, as those categories are not close to achieving full subscription at this time.” (PNM, pg. 16, paragraph 1.) It seems to the County that PNM can not be sure at this time how long it will take before either or both of these SIP “tranches” are filled. I would suggest that a strong argument could be made, given how quickly the higher REC incentive rates have been “consumed”, that they will be filled very quickly, perhaps within the next six months. In my opinion, PNM’s use of the phrase “at this time” misses the point. PNM has filed a 2012 Renewable Energy Portfolio Procurement Plan. By
definition, plans are designed to be forward looking, account for recognizable trends, and propose actions or decisions that preempt the need for last minute reactive actions at a later time. PNM should have addressed the REC incentive issue for less than 100kw systems in their Plan. In fact, the Commission’s Final Order addressing PNM’s Revised 2010 REP Plan stated that, “If PNM has reason to believe based on actual participation trends 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.” (Case No. 10-00037-UT, Final Order, pg. 17, paragraph 41.), The Commission presumably included that directive to ensure that it would have sufficient time to consider whether those tranches of the SIP should be continued before PNM closes them to further applicants. For these reasons, the County believes the Commission should address this SIP matter in these proceedings.

Q. **What are the County’s concerns regarding if the REC incentive payments for the less than 100 kw projects go from 6 cents/kwh to non-existent overnight?**

A. Such abrupt termination of the REC payments could have a severe impact on the roof-top solar businesses in Santa Fe County. It’s as if the customer-scale solar industry has been climbing a mountain of increased business activity, including expanding their operations and hiring, during the period of REC incentives and then the demand for their product “drops off a cliff” when the REC payments terminate – resulting in staff layoffs and other disruptions. Indeed, even PNM recognizes this type of economic disruption concern. When discussing continued utilization of the remaining REC incentive tranches for 100kw to 1MW-sized systems, PNM acknowledges that, “Abrupt termination could harm economic development of this sector of the economy in PNM’s service area.” (Ortiz, pg. 14, lines 5-6). If the economic harm is true for the larger size categories, it’s equally true for the smaller size categories as well.
Q. Does Santa Fe County have a suggestion for continuation of the REC incentives for the less than 100kw systems, once the final 6 cent/kwh tranche is exhausted?

A. Yes, although the County is open to a variety of potential options and is interested in the proposals of other intervening entities. Santa Fe County thinks it would be reasonable to resume the REC incentives at a 5.5 cents/kwh level with the incentive decreasing by ½ cent per kwh either every six months or, as before, with every 0.5 to 0.6 MW of deployment. The REC incentive could terminate at say, a 3 to 4 cents/kwh level. Santa Fe County believes REC incentives for systems in these two SIP tranche sizes should continue for at least another two to three years.

Q. What about after those two to three years? Does Santa Fe County believe the REC incentives should continue in perpetuity or even for another 5 to 10 years?

A. No. Santa Fe County believes that the REC incentives may only be needed for another two to three years based on the reality that PV prices are projected to continue to decline and the cost of traditional sources of electricity continue to increase. I believe the REC incentive, just like the federal and state solar income tax incentives, should be considered "bridging incentives". They’re needed as solar continues to be somewhat more expensive than traditional solar power to provide sufficient time to “cross the bridge” to being financially viable on their own: what some refer to as when solar reaches “grid parity” with traditional sources of electricity. Once solar photovoltaics have crossed the bridge to financial viability, the incentives are no longer needed. That’s why both the federal and state solar income tax credits have sunset clauses for a little later this decade.

Q. Did you conduct a technical analyses to arrive at your recommended REC incentive amounts or your suggestion that the REC incentives may be needed for another 2 to 3 years?

A. No I did not. My recommendations are based on my professional judgment given my experience in the discipline and knowledge of the solar industry, particularly from discussions with many solar
industry professionals. As I’ve suggested above, I’m very willing to adjust my recommendations based on the testimony from the industry.

Q. Doesn’t the rapid uptake of the REC incentive payments during the last couple of years indicate or at least suggest that we’ve already reached “grid parity” and that there’s no longer a need for the REC incentives?

A. No, not all. Communicating the realities of a declining REC incentive environment, one where the incentives may go away entirely at some undetermined point in time, has likely created a sort of “feeding frenzy” amongst the solar-interested, solar-buying public. The observed significant PV project development associated with an “act now or miss out” message should not be misinterpreted as solar having completely “arrived” to being cost-effective without incentives. Clearly, today’s cost figures for solar, while significantly lower than they were just three years ago, indicate that solar has not yet reached grid parity with 9 to 10 cent/kwh retail electric rates.

Q. How does your suggestion that PNM should have used a RCT methodology and assumptions more along the lines that EPE did relate to your discussion of recommended REC incentives for 0-100kw and 100kw-1MW photovoltaic projects?

A. PNM’s RCT methodology results in PNM concluding that it cannot meet the RPS’s 10% renewable energy requirement by approximately 348,000 mwh for each of the years 2012 and 2013. As I’ve suggested, PNM’s approach to calculating the RCT is not reasonable given RCT language in statute and how the other IOUs have approached the RCT. But if PNM’s RCT calculation ends up being supported by the Commission and PNM, in turn, receives a waiver to its RPS obligation, there will not be any ability to adopt the REC incentive recommendations I’ve discussed. If, however, PNM is required to recalculate its RCT based on using a LCOE approach and making other appropriate adjustments to key assumptions, it’s quite possible that the RCT will not exceed the rule’s 2.25 percent
limit. This would mean that an additional 348,000 mwh of renewable energy (the equivalent of about 159 megawatts of newly installed projects) could be procured. This would, therefore, leave plenty of “head room” to accommodate the distributed generation REC incentive recommendations I’ve offered.

Q. Does this conclude your direct testimony in this case?

A. Yes, it does.
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 CRAIG D. O’HARE

STATE OF NEW MEXICO )
COUNTY OF SANTA FE )

CRAIG D. O’HARE, Energy Programs Specialist, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing Direct Testimony of Craig D. O’Hare and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 3rd day of October, 2011.

CRAIG D. O’HARE

SUBSCRIBED AND SWORN to before me this 3rd day of October, 2011.

Nicole Medina
Notary Public in and for the State of New Mexico

My Commission Expires: 2/13/2013

[Official Seal]
Nicole Medina
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 2/13/2013
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

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of Direct Testimony of Craig D. O'Hare on Behalf of the County of Santa Fe was e-mailed and/or mailed first class, postage prepaid on October 3, 2011 to the following:

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