

BEFORE THE NEW MEXICO PUBLIC SERVICE COMMISSION

**IN THE MATTER OF THE COMMISSION'S)
DETERMINATION OF THE REASONABLE)
COST THRESHOLD FOR RENEWABLE) CASE NO. 04-00253-UT
ENERGY)
_____)**

DIRECT TESTIMONY OF JAMES D. COTTON

ON BEHALF OF

THE NEW MEXICO ATTORNEY GENERAL

PATRICIA A. MADRID

**Jeffrey Taylor
Assistant Attorney General**

**Post Office Drawer 1508
Santa Fe, New Mexico 87504-1508
(505) 827-7484**

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11. STATEMENT OF QUALIFICATIONS

2 **Q. Please state your name and business address.**

3 A. My name is James D. Cotton and my business address is P.O. Box 810, One
4 North Main Street, Georgetown, Connecticut, 06829.

5

6 **Q. What is your occupation?**

7 A. I am a Principal of The Columbia Group, Inc., a financial consulting firm that
8 specializes in utility regulation. In this capacity, I analyze rate filings and testify in
9 utility proceedings. I also undertake special projects in the areas of finance, utility
10 regulation, and other utility related topics.

11 Since 1976, I have testified on regulatory and financial matters in over 100 utility
12 rate proceedings before state commissions in the states of New Mexico, Arizona,
13 California, Connecticut, Delaware, Kansas, Maine, Maryland, Massachusetts, New
14 Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Utah, Vermont
15 and Virginia. (See Appendix A.) In New Mexico, I submitted testimony in the
16 following utility proceedings:

17 PNM Gas – Case No. 03-000-17 UT
18 PNM Electric – Case No. 3137 (Merchant Plant Filing)
19 El Paso Electric Co. – Case No. 3170 (Electric Restructuring)
20 PNM Gas – Case No. 2762
21 Zia Natural Gas – Case No. 2745

1 **II. PURPOSE OF TESTIMONY**

2 **Q. What is the purpose of your testimony in this proceeding?**

3 A. The purpose of my testimony is to discuss several of the major provisions of the
4 New Mexico Renewable Energy Act (“Act”), particularly the provisions concerning
5 the “reasonable cost threshold” (“RCT”) for renewable energy, and to recommend a
6 reasonable cost threshold for the four New Mexico electric utilities. I will also briefly
7 summarize and comment on the various positions of the four utilities that have filed
8 testimony in this proceeding; Public Service of New Mexico (“PNM”), El Paso
9 Electric Company (“EPE”), Southwestern Public Service Company (“SPS”) and
10 Texas-New Mexico Power Company (“TNMP”). I will briefly discuss whether the
11 testimonies of each of the utilities correctly address the establishment of a reasonable
12 cost threshold. To the extent necessary, I will be commenting on other aspects of the
13 Act and other regulatory aspects of the “reasonable cost threshold.”

14

15 **III. SUMMARY OF CONCLUSIONS**

16 **Q. Please summarize your conclusions.**

17 A. I have concluded, based on my review of the Act and the testimonies filed by the
18 parties, as follows:

- 1 1. The RCT for each utility company should be the lower of its actual total cost
2 per kWh for the renewable energy, or its existing per kWh cost of service for
3 fuel and purchased power;
- 4 2. Renewable energy may be available for a lower cost than other existing
5 sources of generation, and therefore no increase in rates for renewable energy
6 would be warranted;
- 7 3. Renewable energy sources should be added to the energy mix as they become
8 cost competitive with existing sources of generation, otherwise the New
9 Mexico Public Regulation Commission (“NMPRC” or “Commission”) could
10 be creating a stranded cost burden to be borne by future ratepayers;
- 11 4. There is no justification for charging ratepayers a premium for renewable
12 energy on the basis of societal benefits, as these have not been documented by
13 PNM, EPE, SPS or TNMP, they may be offset by societal detriments, and the
14 expected benefits may not occur in New Mexico;
- 15 5. It may be appropriate to revisit the economics of renewable energy every few
16 years to ensure the RCT is controlling costs to consumers;
- 17 6. The proposals for the RCT by each of the utility companies in this proceeding
18 should be rejected as their proposals concerning the actual value of the RCT
19 lack specificity.

1IV.DISCUSSION OF THE ISSUES

2 **Q. What is the significance of the RCT?**

3 A. The Act provides the RCT as the level above which a public utility shall not be
4 required to add renewable energy to its portfolio (§62-16-4(C)). The existence of this
5 cost-based threshold itself is extremely important as it establishes the fact that
6 renewable energy should only be incorporated into the generation mix as it makes
7 economic sense to do so. I firmly believe that the decision to add renewable energy
8 must have a cost based component and that utility customers should be protected
9 from rate increases associated with uneconomical procurements of renewable energy.

10 In establishing the RCT, the Commission is to take into account, per the Act:

- 11 (1) The price of renewable energy at the point of sale to the public utility;
- 12 (2) The transmission and interconnection costs required for the delivery of
13 renewable energy to retail customers;
- 14 (3) The impact of the cost for renewable energy on overall retail customer rates;
- 15 (4) The overall diversity, reliability, availability, dispatch flexibility, cost per
16 kilowatt-hour and life cycle cost on a net present value basis of renewable
17 energy resources available from suppliers; and
- 18 (5) Other factors, including public benefits, the commission deems relevant.

19

1 **Q. How do you interpret the five factors listed above?**

2 A. I view the factors as a logical checklist of items it is appropriate to consider when
3 making any important purchase decision. The price of the goods or services is the
4 starting point for a purchase decision. Next, consideration must be given to any
5 additional costs, either one-time or ongoing, that may be necessary in order to derive
6 the expected benefit from the goods or services. The sum of the purchase price and
7 any additional costs represents the total outlay required in order to make use of the
8 goods or services. After the total cost is determined, the potential benefits of the
9 purchase are assessed, including its usefulness, value, reliability, etc. Finally it is
10 appropriate when assessing a utility purchase to consider how a purchase decision
11 may impact the public interest.

12

13 **Q. Can you comment on how each of these factors should be considered when**
14 **establishing the RCT?**

15 A. Yes. First, as a guiding principle, it is apparent to me that these factors should be
16 considered before any procurement plans are approved by the Commission. Any
17 plans approved should be subject to the requirement that costs under such plans
18 cannot exceed the RCT. It should be incumbent upon the utility companies and the
19 Commission to be satisfied that the plans they choose to undertake or approve will

1 indeed meet that requirement. The risk of excess costs should remain with the utility
2 as assurance that costs will be managed. Because the Act provides for the RCT, it is
3 apparent that a decision to proceed with the use of renewable energy is conditional
4 upon renewable energy being reasonably priced to the public.

5

6 **Q. What do you conclude is a reasonable price or cost for renewable energy?**

7 A. The reasonable cost for a utility company to pay to acquire renewable energy and
8 the reasonable price to charge the public is less than or equal to the lower of the
9 actual total cost per kWh for the renewable energy, or the existing per kWh cost of
10 service for fuel and purchased power. The RCT proposals filed by PNM, EPE, SPS
11 and TNMP do not justify an increase in the cost of service in order to obtain
12 renewable energy.

13

14 **Q. How do you define the cost of a renewable source of energy that should then**
15 **be compared with the existing cost of service?**

16 A. The cost of the renewable energy includes all costs necessary to secure that source
17 of energy, including the purchase price, incremental T&D and incremental O&M, if
18 applicable, all offset by the margins received from the resale of that energy or the sale

1 of Renewable Energy Certificates (“RECs”) in other jurisdictions that are associated
2 with that same energy.

3

4 **Q. Why do you conclude that it is inappropriate to increase the cost of service**
5 **for renewable energy?**

6 A. First, it is wasteful and unnecessary to allow an increase in the cost of service. It
7 does not appear from the filings I have reviewed that renewable energy is more
8 expensive than the embedded cost of service. Therefore, it makes no sense to
9 incorporate a premium in rates for costs that do not appear to exist. Certainly a
10 regulated utility company should not be allowed to profit from its fuel or purchased
11 power expense, as fuel and purchased power costs have always been a simple pass-
12 through or collection of actual costs in rates. Second, the increases that have recently
13 occurred in fossil fuel prices, and that are projected to continue, will make renewable
14 energy more competitive in the future. Third, the advantages to the consumer from
15 renewable energy appear to be insufficient to justify the payment of a premium price.

16

17 **Q. Why do you conclude that the benefits to consumers from renewable energy**
18 **use do not justify a premium price?**

1 A. The specific benefits themselves are not well documented in New Mexico and, if
2 they exist, they are not necessarily linked to the consumers who would bear the price
3 increase. Additionally, some detriments are also associated with renewable energy
4 and these serve to offset the benefits. For example, one of the purported benefits of
5 wind energy is the reduction in emissions. However, it is my understanding that the
6 use of wind to date has not resulted in any decrease in the emissions from existing
7 New Mexico generating plants. Rather the plants continue to burn coal for the sale of
8 energy in out-of-state markets. Also, wind farms require considerable land area, are
9 considered unsightly by some, and can be a hazard to bird life, while they produce
10 energy that is not reliable, schedulable or dispatchable. No testimony has been offered
11 in these hearings quantifying the relative value of the hoped-for decrease in emissions
12 versus these detriments. It is not clear exactly where the air is made cleaner,
13 depending on the avoided source(s) of generation and the prevailing winds from that
14 site. Thus, a ratepayer in PNM's service territory may actually pay a premium to
15 make air cleaner in another state or country. Obviously if a utility meets its
16 Renewable Portfolio Standard ("RPS") by purchasing RECs from a source outside
17 New Mexico, then no local benefit will be enjoyed by its ratepayers even though they
18 would be forced to pay a higher price. Ratepayers should not be asked to pay a
19 premium based on a benefit that has not been quantified.

1 There may be no advantages in air pollution emissions in the case of
2 generation plants that rely on the combustion of biomass sources such as PNM's
3 proposed plan utilizing wood chips as a fuel source. In addition the energy expended
4 in harvesting and transporting this fuel source also creates noise and air pollution and
5 is rather energy intensive itself. Finally, the burden of energy prices that are higher
6 than they need to be certainly dampens the local economies.

7

8 **Q. Do the ratepayers perceive a benefit from the use of renewable fuels?**

9 A. I can only rely upon the experience of the voluntary program and have
10 concluded that, if given the choice, few customers choose to participate in green
11 energy at a premium price. Clearly the ratepayers are not perceiving a benefit
12 sufficient to justify higher rates. I do not believe it is appropriate in these
13 circumstances to force higher costs upon ratepayers. I believe that renewable energy
14 should be used when and if its use is cost justified.

15

16 **Q. Can you comment on the Act's requirement to consider the "overall diversity,
17 reliability, availability, dispatch flexibility, cost per kilowatt-hour and life cycle
18 cost on a net present value basis of renewable energy resources"?**

1 A. Yes. It is important to keep in mind just what ratepayers are being asked to pay for
2 when plans for renewable portfolios are discussed. There are several characteristics
3 listed above: diversity, reliability, availability, dispatch flexibility and life cycle costs.
4 We have seen very little testimony from the parties that provides data useful in
5 determining the costs associated with their proposed sources of energy. Much of the
6 testimony relates to the RECs weighting of the kWh value of wind, biomass and
7 solar. No mention is made of the fact that this weighting implies that biomass at two
8 times wind credits, and solar at three times wind credits, are considerably less
9 economic than wind energy at this point in time.

10 In addition, the reliability, availability and dispatch flexibility of wind and
11 solar power are significant issues for ratemaking. Even if these energy sources are
12 available at the same cost as existing generation they are much less useful than
13 existing sources. Wind and solar power are not always available and they cannot be
14 scheduled or dispatched when needed. Unfortunately, the evidence I have seen
15 indicates that wind power in New Mexico seems to hold little promise of shaving
16 peak requirements, as wind tends to be most plentiful during spring days and summer
17 evenings. (See PNM's response to AG 2-7.) No specific testimony regarding the
18 availability of solar power has been offered but it is also clear that it is intermittent
19 and cannot therefore be deemed a reliable source of supply at this time.

20

1 **Q. How soon do you believe solar and biomass facilities could become cost**
2 **competitive with other fuel sources?**

3 A. It is difficult to know, but if they keep pace with the advancements in wind
4 technology then dramatic improvements could be forthcoming in the relatively short
5 term. According to the American Energy Wind Association (“AWEA”), “The cost of
6 wind energy...has dropped 80% since 1980 and the decline continues as the wind
7 energy industry matures.”¹ FPL Energy, the owner and operator of the New Mexico
8 Wind Energy Center (“NMWEC”) from which PNM procures its wind power, agrees,
9 stating “The cost of wind has decreased significantly from 30 cents per kilowatt-hour
10 (kwh) in the 1980s to FPL Energy’s cost today of less than 4 cents per kwh.”² The
11 usefulness of solar and biomass, in terms of production estimates, “hinge on many
12 unknown components, including future cost reductions and technology innovations
13 that will make these resources more competitive”³ Therefore, I believe that it is
14 reasonable to revisit the economics of alternative resources in a few years to
15 determine whether they have become cost competitive with the then existing sources
16 of supply utilized by each utility.

17

¹ www.awea.org - Wind Energy Fact Sheet.

² www.fplenergy.com - “A Leader in Clean Energy” tear sheet.

³ PNM Exhibit (AG1-11), p.6.

1 **Q. Doesn't the Act require the utility companies to construct a diversified**
2 **renewable energy portfolio?**

3 A. Yes, it does, but subject to the all-important requirement that the portfolio must
4 meet the RCT. I view the RCT as an umbrella under which all components of the plan
5 must fit. Therefore, to the extent that the use of any renewable resource increases the
6 existing cost of service it should not be approved.

7
8 **Q. Please comment on the diversification value of the various renewable**
9 **resources.**

10 A. I do not believe diversification should be a major priority until such time as there
11 is an economic incentive, in the form of an opportunity to meet or reduce the existing
12 cost of service that justifies the pursuit of biomass, solar power or other sources. By
13 definition, renewable energy does not have a finite supply and therefore dependence
14 on one form of renewable energy versus another does not pose the same difficulties as
15 reliance on one hydrocarbon versus another. Indeed, it has been estimated in
16 *Renewable Energy Atlas of the West*, provided by PNM in response to AG1-11, that
17 good wind areas in the western states could supply "five times the region's current
18 electricity consumption. This emission-free resource is already being harnessed
19 across the region but at a fraction of its potential."⁴ This report determines that the

⁴ Id., p.8.

1 high cost of solar, estimated at 25-30 cents per kWh, should tend to limit its use to
2 areas of very high cost or to off-grid applications.⁵ The same report regarding
3 biomass states: “An arid state, New Mexico has less potential for agricultural or forest
4 wastes for biomass electricity production than many other western states”⁶. EPE
5 states in response to AG 1-6 “there are numerous risks associated with attempting to
6 permit, build, and operate new generating plants with developing technology.”

7 I conclude from these facts that 2006-2008 may be too early to enforce the
8 diversification requirement in the Act. While the Act requires that the renewable
9 portfolio “shall be diversified as to the type of renewable energy resource, taking into
10 consideration the overall reliability, availability, dispatch flexibility and cost of the
11 various renewable energy resources...” (See §4.A.(4).) I conclude from the filings I
12 have reviewed that the consideration of the factors listed alone leads to the conclusion
13 that diversification should not yet carry great weight in the discussion of renewable
14 portfolios at this time. In any event, I believe all renewable portfolios are constrained
15 by the RCT, and that there are not yet renewable resources available, other than wind,
16 that meet my recommended RCT.

17

1⁵ Id., p.14.

2⁶ Id., p.54.

1 **Q. Please summarize your position regarding the costs of renewable energy in**
2 **rates to consumers.**

3 A. There has been no showing in the RCT filings of PNM, EPE, SPS or TNMP, that
4 justify any rate increases to consumers in 2006-2008. Therefore, I believe the RCT
5 should be established for each utility such that its cost of service is either unaffected
6 or reduced by the incorporation of renewable energy in its generation mix. It is never
7 appropriate to simply allow an increase in rates when the ratepayer receives no
8 benefits. This is clearly the case in plans that rely exclusively on the use of RECs.
9 Such plans represent a tax on the ratepayers that is burdensome, unfair and
10 unnecessary.

11 **V. SUMMARY AND COMMENT ON THE POSITION OF THE NEW MEXICO**
12 **ELECTRIC UTILITIES**

13 **A. Public Service Company of New Mexico (“PNM”)**

14 **Q. Please summarize the testimony or position of PNM regarding the reasonable**
15 **cost threshold (“RCT”) for renewable energy.**

16 A. PNM’s Witness D’Antonio states on page 3 of his testimony that each utility may
17 need a unique RCT based on its unique needs and rate structure. At page 4 he
18 proposes an RCT for PNM “that allows system average retail rates to increase up to
19 2% on average over the period 2006 through 2015.” This recommendation appears to

1 be premised on PNM's proposed renewable energy plan that will be the subject of
2 hearings in another case, but there is no specific evidence to support such an increase
3 in this case.

4

5 **Q. Do you believe it is appropriate to base an RCT in this proceeding on**
6 **renewable resource plans that are the subject of a separate proceeding?**

7 A. No, I do not. It is not appropriate to anticipate the outcome of those hearings as
8 part of the current proceeding establishing the RCT.

9

10 **Q. What is PNM's methodology to determine the amount of annual increase it**
11 **needs to meet the requirements for adding renewable energy?**

12 A. PNM compares revenue requirements from a base case portfolio without
13 renewables, with revenue requirements of its proposed portfolio that includes wind,
14 solar and biomass renewable resources.

15 **Q. What is the result?**

16 A. The result is, that on average, PNM requires an annual increase in revenue
17 requirements of 1.87% per annum, and in some years, the increases are much greater.
18 For example, in 2009, the annual increase is 2.9%; in 2010, the increase is 3.1%; and
19 in 2011, the increase is 2.8%. Unfortunately, these are very high increases to cost of

1 service. In terms of monetary increases, these increases represent a total of
2 approximately \$115 million. In my opinion, neither the documentation, nor the
3 rationale offered by the PNM witness, justifies charging ratepayers an additional \$115
4 million for this program over the coming years. Moreover, these are average
5 increases, and because there is a statutory cap on increases to industrial customers,
6 the increases to residential and small commercial customers could be greater than I
7 have indicated.

8

9 **Q. What is your conclusion regarding PNM's proposal?**

10 A. It should be rejected for several reasons. First, it is based on cost increases related
11 to a plan that has not yet been approved. Second, there is no evidence to support such
12 an increase, which is based, in part, on market rather than cost-based prices. PNM did
13 not base its recommendation on what cost was reasonable from a consumer's point of
14 view, it merely priced out its version of a very preliminary renewable portfolio, and
15 that is not a sound basis for setting a RCT.

16

17 **Q. Does PNM believe that the RCT should be modified in the future based on**
18 **the actual costs it incurs for renewable energy?**

1 A. Apparently it does. Mr. D'Antonio recommends on page 4 of his testimony that
2 the "RCT should be modified, at a minimum, whenever a utility's implementation of
3 a Commission approved renewable energy procurement plan would cause it to exceed
4 the RCT. The RCT should not be less than the costs that are consistent with
5 procurement plans approved by the Commission."
6

7 **Q. Do you agree that the RCT should be modified to conform to whatever actual
8 costs a utility will incur for renewable energy in the future?**

9 A. Absolutely not. This approach effectively makes the RCT a useless concept. PNM
10 does not know what the costs are for the biomass facility it is contemplating, and it is
11 suggesting it should be given carte blanche to develop such a facility. This is simply
12 not good utility regulation.
13

14 **Q. How did PNM develop its recommendation concerning the RCT?**

15 A. Mr. D'Antonio indicates at page 3 of his testimony that PNM simply used its
16 proposed renewable energy resource portfolio in 2005 to develop its recommendation
17 regarding the RCT. In other words, it developed a mix of resources, determined the
18 rate increase that would be required for this mix, and suggested that rate increase as
19 the standard for the RCT. There is, for example, no explanation whatsoever as to the

1 source of information for biomass cost. This approach indicates to me that little
2 thought was given to what was reasonable from the ratepayer or public point of view,
3 or whether the cost was reasonable based on the underlying value of the resources
4 themselves given their technological characteristics as to reliability, availability,
5 dispatchability, etc. Rather, PNM seems to assume that if a renewable resource is
6 included in its portfolio, then it is reasonable. This approach simply answers the
7 question “What is this going to cost?” rather than “What is a reasonable cost?” I
8 believe it is appropriate to first determine an RCT and then propose plans subject to
9 that limitation.

10 **Q. Do you have other questions and concerns?**

11 A. Yes, I do. At page 6 of Mr. D’Antonio’s testimony, he references the fact that
12 PNM has been banking Renewable Energy Certificates (“RECs”) at a “booked cost of
13 \$5.00 per MWh equivalent or \$0.005 per kWh; PNM has proposed in the 2005 Plan
14 that NMWEC RECs banked in 2005 will be booked at a price determined at the
15 lowest price for NMWEC RECs in the wholesale market with a cap on that price set
16 at the Commission approved tariff rate for renewable energy under PNM’s Sky Blue
17 Program, i.e., \$0.018 per kWh. The proposed use of these REC certificates raises
18 several other issues that need to be addressed when discussing the reasonable cost
19 threshold.

1 First, while the Act contemplates that a utility can recoup its costs, PNM
2 needs to show that it has not in fact already recovered the costs represented by its
3 “banked” RECs. It appears that PNM has sold significant wind resources to
4 customers or other utilities, including the sale of RECs. If PNM sold the wind energy,
5 it may very well have made an absolute profit on the transaction and therefore no
6 residual costs exist that need to be recouped from New Mexico ratepayers. If PNM
7 consumed the energy itself, then it presumably displaced other sources of generation
8 and very likely was able to displace fuel of equal or greater cost. (PNM’s analysis
9 implies wind displaces its average fuel cost.) The revenues from all of PNM’s wind
10 sales transactions should offset any costs it seeks to recoup from ratepayers. Further,
11 cost recoupment should certainly not be based on the market value of RECs as
12 proposed by PNM, as ratemaking for regulated utilities is cost based. These concerns
13 should be raised in the Transition Plan proceedings.

14

15 **Q. Are you convinced that PNM’s wind energy contract would increase its cost**
16 **of service?**

17 A. No, I am not. PNM expects to receive 594,206,411 kWhs of wind energy per its
18 response to AG 2-4(b), and estimates that if it sells 25% of its RECs in the wholesale
19 market it would receive between \$742,758 and \$1,782,619 in each of the next five

1 years. It has entered into contracts with the Salt River Project to sell 50 MW of wind
2 capacity to the Salt River Project at the Dow Jones Palo Verde On-Peak Index, plus
3 \$1/ MWh. In addition, the associated RECs are priced at \$12 / MWh. It does not
4 appear that PNM has given any credit to these transactions under its proposal to
5 charge higher rates to ratepayers based on its unrecouped costs. I believe that a proper
6 accounting of all of PNM's wind energy costs may demonstrate that its wind energy
7 contract would actually decrease its cost of service.

8

9 **B. Southwestern Public Service Company ("SPS")**

10 **Q. Please summarize SPS's testimony with regard to the determination of a**
11 **Reasonable Cost Threshold for renewable energy.**

12 A. SPS offers two RCTs based on whether or not the U.S. Congress would extend
13 production tax credits ("PTCs") that expired on December 31, 2003, as these tax
14 credits have served as a price support for wind energy transactions in the last decade.
15 Wind energy is below SPS's avoided cost if the PTC is available. SPS proposes
16 establishing three separate thresholds for each type of renewable energy, wind, solar
17 and biomass, as the three have different values when complying with Rule 573. SPS
18 begins with the current market value for wind energy as its recommended RCT. It
19 then calculates how this cost compares to its avoided costs and uses that difference to

1 calculate how much higher the threshold should be for solar and biomass, by
2 multiplying the difference times the weightings put forth in the Act for each
3 renewable. Thus if wind energy at an RCT of \$49 (without the PTC) is \$13.54 higher
4 than a base cost of \$35.46, then biomass should be 2 x \$13.54 higher than the base
5 cost, or \$ 62.54 total. Solar at three times \$13.54 above the base cost would then have
6 a threshold of \$76.08.

7 Based on recent information, the PTC appears to have been extended (See
8 Appendix B). If the PTC is renewed then SPS determined that the market price of
9 wind energy would actually be cheaper than its existing costs; but rather than set an
10 RCT reflecting this fact, it elected to set the threshold at its existing cost of service.
11 However for other renewables it started with the market price of wind energy (with
12 PTC) of \$29 and added the avoided cost for wind from its scenario without PTCs, i.e.,
13 \$13.54, to arrive at an RCT for biomass of \$42.54/ MWh. The solar threshold was set
14 at \$56.08, based on \$29 plus 2 x \$13.54.

15

16 **Q. Please comment on SPS's approach to setting the RCT.**

17 A. My general comment would be that this method does not approach the RCT from
18 the point of view of a consumer, or ask what is in fact a reasonable cost. Rather it
19 assumes that renewables will be purchased, including the most expensive renewables,

1 and calculates how high the threshold must be set in order to allow for the purchases.
2 This approach assumes that the RCT has no real meaning and that it won't act as a
3 consumer protection.

4 Certainly it is difficult to consider as "reasonable" a cost of \$76.08/ MWh for
5 solar power (SPS's estimate based on no PTC), more than twice the current cost of
6 service for SPS. These numbers should shock the Commission into revisiting the
7 description and purpose of the RCT in the Act. SPS helpfully provides relevant
8 passages of the Act on page 3 Witness Hatcher's testimony, as follows:

9 "In Section 2.A.5 of the act, the legislature stated:

10 Public utilities should not be required to acquire energy
11 generated by renewable energy resources that could result
12 in costs above a reasonable cost threshold.

13 Similarly, in Section 2 B. of the Act, the legislature stated that one of the purposes of
14 the Act was to:

15 Protect public utilities and their ratepayers from renewable
16 energy costs that are above a reasonable cost threshold.

17 These legislative findings and stated purposes lead the legislature to enact Section 4.B
18 of the Act, which provides as follows:

19 If a public utility finds that, in any given year, the cost of
20 renewable energy that would need to be procured or
21 generated for purposes of compliance with the renewable
22 portfolio standard would be greater than the reasonable cost
23 threshold established by the Commission pursuant to this

1 section, the public utility shall not be required to incur that
2 cost...”

3 It is clear to me from the foregoing that the RCT was to serve as a protection
4 to ratepayers. Therefore, it is appropriate to establish the threshold based on the point
5 of view of a ratepayer and not as an afterthought. It is not reasonable to set the RCT
6 at a level that simply flows thorough to ratepayers all the costs of developing
7 technologies that are uneconomical alternatives to existing generation choices.
8 Because the value received by a consumer of a kWh of renewable energy, once
9 problems of reliability, dispatchability and scheduling have been surmounted, is the
10 same as that of a non-renewable kWh, I see no basis for charging a premium for the
11 renewable kWh. As I mentioned previously, the perceived environmental benefits
12 may be offset by other societal detriments, and are therefore not a justification for
13 higher rates. I do not believe it is reasonable to set different RCTs for different
14 sources of renewable energy, as they all yield the same value to the consumer. This is
15 especially true for SPS as there is a renewable alternative, wind energy, that lowers
16 rather than increases its cost of energy.

17

18 **Q. Please discuss SPS’s use of an RCT for wind energy that is greater than the**
19 **current market price of wind energy.**

1 A. This provision of SPS’s testimony is most puzzling to me. Witness Hatcher states
2 on page 9 of his testimony, that the “levelized market price for a wind energy
3 resource” is approximately \$29 per MWh (assuming PTC), but because this amount is
4 below the Company’s Avoided Costs, the use of the \$29 figure is “not fair to wind
5 resources,” and therefore he proposes to use a higher figure of \$35.46. This comment
6 certainly does not include a consumer perspective.

7

8 **Q. Have you reviewed the testimony of Southwest Public Service (“SPS) witness,**
9 **David T. Hudson?**

1 A. Yes, I have. Witness Hudson testifies that the Caprock Wind Farm (“Caprock”)
2 will be constructed as a 60 MW wind farm. Therefore, according to Witness Hudson,
3 at page 5, SPS’s long-term marginal costs of production should be reduced by about
4 \$35 million over the life of the Caprock contract. While that might indicate that SPS
5 should have no problem meeting a reasonable cost threshold standard of the lower of
6 the actual total cost per kWh for the renewable energy, or its existing per kWh cost of
7 service for fuel and purchased power or cost, I would like more specific assurances in
8 these hearings from SPS to the NMPRC that this indeed will be the case in the
9 2006-2008 timeframe.

10

11 **Q. Did SPS consider the impact of its proposal in retail rates to customers?**

12 A. Mr. Hatcher simply answers “yes” to this question on page 10 of his testimony, but
13 he provides no evidence as to what the rate impact actually is. I have concluded that
14 there is no justification in the testimony for charging rates for biomass and solar that
15 are 47% and 93% higher than the expected price of wind energy at \$29 per MWh. Mr.
16 Hatcher also claims to have considered reliability, availability, dispatch flexibility and
17 public benefits but he offers no testimony in these areas.

1 **C. El Paso Electric Company (“EPE”)**

2 **Q. Please summarize EPE’S testimony with regard to the determination of a**
3 **Reasonable Cost Threshold for renewable energy.**

4 A. EPE’s proposal regarding the establishment of an RCT is provided in the direct
5 testimony of Company Witness Steven P. Busser. At page 11 of his testimony, Mr.
6 Busser recommends, in summary, that the Commission establish the RCT as a cost
7 cap (“Cap”), above which, pursuant to the Act, a utility would not be obliged to
8 acquire energy generated from renewable energy resources. Mr. Busser further
9 proposes that this Cap be set on a cents per kWh basis for all utilities. Mr. Busser
10 does not quantify what the specific Cap should be, but instead recommends that the
11 Commission make this determination based on what it concludes is a reasonable cost
12 impact to customers. In making its decision, Mr. Busser suggests the Commission
13 weigh customer impact with other considerations, such as encouraging the use of
14 renewable energy resources.

15
16 **Q. Please explain EPE’s rationale for its proposal.**

17 A. At page 10 of his testimony, Mr. Busser points out that the Commission previously
18 acknowledged a limit on what the reasonable impact to rates should be when

1 renewables were to be included in a utility’s energy portfolio and concluded that a
2 rate cap of \$0.001 cent per kWh would be set as the limit.

3

4 **Q. In what context did the Commission previously establish the limit referred to**
5 **by Mr. Busser in his testimony?**

6 A. This limit was an outgrowth of the Final Order on Rehearing in NMPRC Case No.
7 3109, dated September 19, 2000 (“Final Order”). NMPRC Case No. 3109 was a
8 matter pertaining to standard offer service offered by New Mexico public utilities and
9 distribution cooperative utilities pursuant to the Restructuring Act.

10

11 **Q. Has EPE made any other comments with regards to its RCT proposal?**

12 A. Yes. At page 9 of his testimony, Mr. Busser notes that the Act “contemplates that
13 the Commission will set a single threshold, which may be modified from time to time
14 as the Commission determines may be necessary or appropriate.” Mr. Busser states
15 that EPE supports the notion of a single mechanism covering all utilities. Mr. Busser
16 adds, at page 10 of his testimony, that while the mechanism should encourage the use
17 of renewables, the incremental price should be “reasonable.” Lastly, Mr. Busser
18 urges the Commission to set an RCT low enough to encourage competitive pricing
19 among renewable energy providers. In the same vein, he cautions against setting a

1 threshold too high, as it would fail to incentivize renewable providers to maintain
2 lower prices and would subsequently lead to more cost impacts for ratepayers.

3

4 **Q. Please comment on EPE's RCT testimony.**

5 A. I do not believe this testimony has supported any reasonable cost threshold in
6 particular and it has not supported the concept of using a cents per kWh basis for
7 the RCT. The actions the Commission took in the restructuring case four years ago
8 are of no relevance in this proceeding.

9 **D. Texas-New Mexico Power Company ("TNMP")**

10 **Q. Please summarize TNMP's testimony regarding the RCT.**

11 A. Mr. Thompson offers brief testimony for TNMP and advocates individual cost
12 thresholds for each renewable resource, including wind, biomass, geothermal, solar
13 and hydro. In his view individual resource thresholds based on actual costs are
14 preferable to one standard in the areas of promoting of diversity and developing new
15 renewable resources in New Mexico. However he cautions on page two of his
16 testimony that the RCT should not be set so high as to create "large upward impacts
17 on customer rates" or "promote technology that is uneconomical or untested in the
18 market." He then suggests that perhaps one "overall reasonable cost threshold which
19 caps the overall upward impact on rates to customers." Mr. Thompson also believes

1 that the actual costs of the renewable resources should specifically include
2 “transmission congestion costs, transmission construction costs and any tax credits or
3 incentives.” (p.3).

4

5 **Q. Please comment on TNMP’s testimony.**

6 A. I have already indicated that there is no consumer benefit that justifies charging
7 higher rates for progressively less economic fuel choices. Certainly ratepayers should
8 not be charged higher rates simply for promoting diversity or developing new
9 resources. It is not the purpose of regulation to subsidize an unending list of good
10 works at the expense of ratepayers. I do not believe Mr. Thompson’s testimony is
11 useful in the determination of the appropriate RCT as he fails to offer a value for
12 either his proposed individual resource RCTs, or the overall RCT cap.

13

14 **Q. Does this conclude your testimony?**

15 A. Yes, It does.

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APPENDIX A

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APPENDIX B

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11 **APPENDIX C**

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