

## THE END OF PRETEND

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I'm sure you've already read PNM'S 218 page "2011-2030 Electric Integrated Resource Plan" – hasn't everyone? It was filed with the NM Public Regulatory Commission last July. Formal protests to the plan were filed soon afterwards, and the PRC has already issued a formal "decision" on part of the plan.

Here's the link to PNM's plan for the next 20 years:

[http://www.swenergy.org/news/news/documents/file/PNM\\_IRP\\_2011-2030\\_July\\_2011.pdf](http://www.swenergy.org/news/news/documents/file/PNM_IRP_2011-2030_July_2011.pdf)

Here's the link to the formal protest from the CCAE, Sierra Club et al:

<http://nmsierraclub.org/sites/default/files/Protest%20PNM%20IRP%208-17-11%20FINAL.pdf>

All of this is fascinating, but the real reason you might be interested is that the IRP clearly lays out PNM's vision for your energy future. Inquiring minds want to know what's in store.

Those NMSEA members with an executive mind-set need only digest the IRP's 2-page "Executive Summary". Here are the four "Themes and Observations" from page 1:

\* "Existing baseload resources [that means coal & nuclear] are least cost even when considering environmental compliance uncertainty."

\* "Natural gas, in combination with energy efficiency and load management, is the least cost future resource additions."

\* "Renewable resources are added to meet regulatory requirements, but increase cost and degrade system operation."

\*" Environmental rules and regulations add significant costs to customers."

Now you only need one more sentence from the executive summary to be able to come to the same conclusions that PNM has reached in the remaining 216 pages:

"The most cost effective resource portfolio meets Renewable Energy Act (REA) RPS [Renewable Portfolio Standard] requirements up to the established cost limits."

If you executives want to skip the amusing details (complete with ref page numbers), then jump down to the "Bottom Line" section below – the rest of you might enjoy trying to think like PNM.

### FASCINATING CONCLUSIONS

PNM's overriding objective - to meet electric demands in the "most cost effective way" - leads PNM to conclude that:

- 1) "The most cost-effective resource portfolio includes all existing resources since they are least cost". (pg 3) [This obviously includes all PNM coal & nuclear powered generating plants, as well as all existing gas fired plants – even the oldest & least efficient & most polluting.]
- 2) "Environmental regulations may increase costs for capital investments and/or resource operations; paying these costs and continuing to operate the existing facilities represents the overall least-cost risk mitigation strategy. The cost of other alternatives would be much greater to PNM customers." (pg 10)
- 3) "Since renewable resources were not least cost alternatives, they are included in the portfolio to meet regulatory requirements". (pg 3)
- 4) Coal, nuclear & natural gas resources are firm, dispatchable and reliable. Renewable resources are non-firm, unpredictable, intermittent and unreliable. (throughout)
- 5) "renewable technologies are not cost effective additions to the system, since they cannot economically compete against dispatchable, full capacity value resources such as gas turbines." (pg 145)
- 6) "Energy efficiency is a least-cost resource". (pg 6) The IRP states that early studies of residential smart meters have shown energy savings of 5 – 20%, however "PNM believes that smart grid meters would not be implemented in the short term for its service territory." (pg 112)
- 7) "New Mexico's abundant supply of solar irradiance makes this a potentially attractive energy resource for PNM." (pg 88) However, the IRP includes a detailed state map supporting PNM's argument that "Solar radiation potential is the greatest in the SW region of NM, but the value of solar generation is the highest in the north." (pg 89) [What's a utility to do?]
- 8) "Renewable additions in the action plan period were added exclusively for compliance with RPS mandates and in accordance with Rule 572 [cost cap] in its current form. If Rule 572 is modified, PNM will pursue renewable additions that are compliant with the modifications." (pg 15) [It should be noted that PNM is pushing to reduce the current cost cap % and/or reduce the RPS mandate %].
- 9) PNM plans to add additional natural gas facilities to meet demand growth. The report states that modern combined-cycle gas plants have greater fuel efficiency and operational flexibility and lower pollution and CO2 outputs than the older combustion gas plants. PNM plans to add ZERO combined-cycle plants in the future, because they are more expensive to build than combustion gas plants. (pg 108)
- 10) The IRP acknowledges that wind & PV require little or no water, have no fuel costs, and emit no pollution or CO2. However, PNM claims it would need to add additional natural gas powered plants to backup these

“unreliable” sources, so there is, in fact, significant pollution and CO2 directly associated with these RE resources. (pg 7)

11) In the event of an extended drought, PNM has a back-up plan to secure additional supplies of water in the Four Corners area for their water intensive coal powered plants. (pg 63) The San Juan Generating Plant already uses about twice as much water every year as the City of Santa Fe. The Palo Verde nuclear plant in Phoenix uses just as much water as an equal sized coal plant, but that water use doesn't count because it is treated “reclaimed” water from the municipal system [that would otherwise flow back into the eco-system]. (pg 62) PNM claims that concentrating solar thermal plants [which they're certainly not going to deploy] use MORE water than equal-sized coal or nuclear plants. (pg 62)

12) PNM has a back-up plan to buy Wyoming coal, to be delivered by rail. (pg 92)

13) PNM's position is that the only meaningful impact of environmental upgrades is to increase cost. (pg 135)

14) PNM concludes that if it agreed to retire the San Juan coal-fired plant by 2017, the EPA would still require PNM to install \$850 million [PNM's estimate] in additional pollution controls by 2016, therefore PNM should keep the San Juan Plant. (pg 136)

15) PNM notes that greenhouse gas emissions and climate change are “polarizing issues”. In PNM's opinion the real consequences of greenhouse gas emissions are that “The scope, direction, and cost of emerging policy actions related to global climate change creates uncertainty for the electric utility industry.” (pg 23)

### THE BOTTOM LINE

Ok, so what is PNM telling you via their IRP about their plans for your energy future here in PNM-land?

1) All existing PNM coal, nuclear and natural gas plants, decrepit as they already are, will still be operating 20 years from now. There will be new natural gas plants added to meet demand, and all of those will be the least efficient, most polluting and cheapest natural gas plants available.

2) Air, water and solid waste pollution control mandates increase electricity rates without adding value for PNM. There are no lines in PNM's spreadsheets for health and environmental benefits. PNM will install the minimum amount and lowest quality of air, water and solid waste pollution controls possible.

3) The “smart grid” lives in mañana-land. You can forget about “smart meters”.

4) RE is intermittent and expensive and it degrades PNM's system reliability. PNM will add no additional PV or wind resources unless it has to.

5) Remember the NM RPS requirements for 10% RE by 2011, 15% by 2015 and 20% by 2020? Forget those. It's 2012 - PNM is at 5.5% RE. PNM says it may reach 10% RE by 2020, but only if it's forced to.

6) Permission for residential & third-party PV grid-tie interconnects will be much harder to come by. You can kiss Renewable Energy Credit (REC) payments goodbye.

7) Energy efficiency may play a future role, but only if PNM can figure out how to make money at it.

8) Since the climate change debate is contentious, PNM plans to continue doing nothing about it aside from fighting any attempt to regulate CO2 emissions.

9) Electricity rates? Do you really have to ask?

10) What's good for PNM, is good for all New Mexicans.

### LET'S DO SOMETHING!

So what should NMSEA's next move be? Offer helpful energy efficiency suggestions to PNM? How about serving PNM's Board of Directors a heaping plateful of hot SOLAR CC cookies? Are PNM executives simply misinformed - in desperate need of a few info-filled presentations by NMSEA Gurus and SunChaser Instructors? Let's just politely say that I'm highly skeptical.

The fast-becoming-competitive RE offerings in wind and PV are already changing the rules of the utility game. Large electric utilities in Colorado, Arizona and Utah already realize that fact. NM's Southwestern Public Service Company has currently added more wind power than the RPS requires, and they're adding even more because “wind resources provide significant cost savings to customers”. Other utilities have decided to pull back, squawk, flap their wings and bury their heads in the sand. If just one of a dozen promising Research & Development efforts involving increased PV conversion efficiencies pans out, then things will change even faster – with or without REC payments and tax credits. We're just one energy storage breakthrough away from making the 2011-2030 IRP strategy a classic textbook case of utility mismanagement. But those tipping points ain't quite here yet, so we need to keep on a'hollerin'.

Spread the word about this Master Plan for your future. Support organizations that are actively intervening & lobbying for RE, such as CCAE; the Rio Grande Chapter of the Sierra Club; the Natural Resources Defense Fund; the San Juan Citizens Alliance; the Western Resources Advocates; and New Energy Economy. Send letters & emails to your representatives. And keep in mind that the pending NM PRC decisions and the upcoming PRC district representative elections, not to mention the elections for seats in the NM State Legislature, will be critical to all New Mexicans' REAL renewable energy future.