

National Energy Plan Mid-Atlantic Implementation

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April 30, 2007

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Historical Perspective

- In the late 1970's and 1980's, I sometimes had the feeling that we were all engaging in the practice of “most cost planning.”
- After the accident at TMI, some nuclear units were cancelled; others moved forward at enormous cost.
- The two Limerick units, originally estimated to cost \$326 million, were eventually completed for \$7 billion.

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Historical Perspective

- When we looked at alternatives to nuclear plants, we primarily compared the costs to large coal plants.
- Based on high avoided cost assumptions, we then compounded our original problems by adding very expensive PURPA contracts.
- By the time electric restructuring came around in 1996, we estimated that our electric utilities had between \$12 billion and \$18 billion in stranded costs, nearly all of which were associated with nuclear plants and above-market PURPA contracts.

Pennsylvania Historical Perspective

- Energy efficiency has not been a major component of Pennsylvania energy planning in the past.
- But things are changing....

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Current Perspective

- Energy efficiency has risen closer to the top of the list of Pennsylvania energy issues.
- There is enormous concern regarding the impact on consumers of the upcoming end of generation rate cap protection.
- Global warming and the need to reduce CO2 emissions changes everything.

Governor Rendell's Energy Independence Plan

- On February 1, 2007, the Governor announced his Energy Independence Strategy to provide a long term energy policy for Pennsylvania:

<http://www.depweb.state.pa.us/energ independent/site/default.asp>

- Energy efficiency would play a key role in several aspects of the Governor's energy strategy.

Governor Rendell's Energy Independence Plan

- Would require electric generation default suppliers to acquire a portfolio of resources at the lowest reasonable long-term cost to consumers, including demand side resources.
- Would require default suppliers to meet increased demand through energy efficiency and other demand-side resources as long as they are less costly than electric generation.

Governor Rendell's Energy Independence Plan

- Would implement a system benefits charge to cover the costs of a number of energy independence programs, including \$244 million for rebates and incentives for home appliances and solar systems.
- “Cool Appliance Swap” program would provide rebates to residential and small business customers to replace inefficient air conditioners and refrigerators.
- “Pennsylvania Sunshine” program would provide production grants and rebates for installation of solar systems in homes and businesses.

PA Public Utility Commission Demand Side Investigation

- In September 2006, the Pennsylvania PUC instituted an investigation into the role of energy efficiency and demand response programs in meeting the needs of electric and natural gas consumers (Docket No. M-00061984).
- Numerous utilities, environmental organizations, and consumer representatives have participated in the Commission's working group process.
- PUC Staff is currently working on a draft document summarizing comments from the participants. The Commission plans to act on the report by May 15, 2007.

PUC Investigation Consumer Coalition

- The Pennsylvania OCA worked with a coalition of consumer and environmental organizations – with assistance from ACEEE – to present a menu of ENERGY STAR programs that we thought could be implemented quickly on a state-wide basis.
- Proposed residential programs:
 - New construction (ENERGY STAR Qualified Homes)
 - Existing homes (Home performance with ENERGY STAR)
 - Residential HVAC (ENERGY STAR qualified central heating and air conditioning equipment and quality installation practices)
 - Cool Roofs: ENERGY STAR qualified reflective roof coatings and roof materials for new and existing homes
 - ENERGY STAR qualified products (lighting, appliances and windows)

Energy Efficiency

- The OCA and the consumer coalition emphasized that efficiency measures are easier to implement and often the most effective approach for residential consumers. This is why ENERGY STAR programs were so strongly endorsed. These programs are well established and are less subject to variable performance among different utilities.
- Advanced metering is not necessary when high quality efficiency measures are used since they produce energy savings on an ongoing basis.
- Efficiency improvements also contribute to peak load reduction but without a need for active real-time response by individual consumers.

Existing Utility Programs

- The OCA also supports direct load control programs by utilities, such as the highly successful Pennsylvania Rural Electric Association program that allows the rural coops to reduce high-cost peak loads through direct control of customers' water heaters.
- This program does not require advanced metering at the home and does not depend on individual customer real time response.

Advanced Metering and Real Time Pricing

- OCA supports installation of advanced metering where it is shown to be cost effective for economic and reliability reasons.
- But we oppose mandatory time of day and other real time pricing for residential customers. These programs are based on unrealistic expectations of consumer behavior and do not take into account the real harm that can result to consumers who have little control over their energy usage patterns.
- In our view, time of day rates and real time pricing should be available to residential consumers but should not be forced upon them.

Decoupling

- In Pennsylvania, decoupling has been advanced solely by natural gas utilities.
- Why is this issue suddenly being raised by natural gas utilities in Pennsylvania and across the Nation?

Natural Gas Sales Are Declining

- According to the American Gas Association, gas consumption per residential customer has been declining at a rate of one percent per year since 1980.

Revenue Stabilization

- Revenue decoupling is a way to ensure against a decline in revenues – and a decline in profit – between base rate cases.
- Revenue decoupling mechanisms can be designed so that they eliminate risks of weather and economic slowdowns as well as risks of declining sales for other reasons.

Conservation Incentive

- Decoupling also can provide an incentive – or more accurately, remove a disincentive – for utility-sponsored conservation and energy efficiency measures.

2006 NFG Proposal

- On May 31, 2006, NFG (National Fuel Gas Distribution Corporation) filed a general base rate increase proposal with the Pennsylvania PUC that included a revenue decoupling mechanism called the Enhanced Energy Efficiency (EEE) Rider.

Customer Response To NFG Decoupling Proposal

- In the 2006 NFG base rate case, more than 1,200 formal customer complaints were filed, most of them in opposition to the Company's revenue decoupling proposal. Hundreds of consumers attended hearings to oppose the proposal.
- Rightly or wrongly, many customers perceived decoupling to be a "penalty" for conservation. That is, the less mcf of gas that they used, the more they had to pay per mcf.
- Ultimately, the NFG rate case was settled and the EEE Rider was withdrawn.

OCA's Concerns With The NFG Decoupling Proposal

- The proposal appeared overly broad. That is, it eliminated all sales risks, not just risks related to Company-supported conservation efforts.
- The reduction in risk that would result from the proposal was not reflected in any reduction in the Company's proposed return on equity.
- The decoupling proposal was not tied to a comprehensive, utility-sponsored conservation program.
- The proposal was inconsistent with other rate design proposals, i.e. a 72% increase in the customer charge increase and an 87% decrease in the distribution tail block, both of which would have reduced the customer's own incentive to conserve.

Can Decoupling Be A Win-Win For The Utility And The Consumer?

- One common complaint about decoupling is that, as the amount of gas sold declines, the price per unit of gas automatically increases. So, a customer who does not change his or her usage sees an increase in their overall monthly bill.
- This is true over time with traditional ratemaking as well. But with a decoupling mechanism, this is done automatically without considering any other countervailing base rate factors.

The New Jersey Model

- A recent settlement in New Jersey – involving two gas utilities, the New Jersey BPU Staff, and the New Jersey Public Advocate Division of Rate Counsel – implements a revenue decoupling mechanism under which it appears that all consumers are either benefited or, at worst, held harmless.

New Jersey Program Highlights

- Any recovery of non-weather-related lost base rate revenues must be offset by reductions in the cost of gas that result from conservation. In other words, even non-participating customers will see no rate increase (and may see a decrease) as a result of the conservation program and decoupling.
- Gas supply savings are generated through anticipated reductions in peak gas consumption, which will lower the utilities' purchased gas costs and be flowed through to customers.
- The NJ decoupling plan is closely tied to a significant increase in utility-sponsored conservation programs. During the pilot program, the costs of the enhanced conservation programs will be fully funded by the utilities.

What's Good For Gas....

- What is striking in Pennsylvania is that the entire impetus for decoupling is coming from natural gas utilities (which have declining sales), whereas virtually no interest in decoupling has been shown by electric utilities (which have increasing sales).
- If the goal is to encourage cost-effective and environmentally beneficial conservation and energy efficiency, it is difficult to see why decoupling should be done only for natural gas, but not electric utilities.

What's Good For Gas....

- For example, depending on how the decoupling mechanism for natural gas companies is structured, we might eliminate the incentive that a natural gas company has to add gas heating customers in new residential developments.
- At the same time, if electric utilities continue to use traditional base ratemaking, the electric utilities may have an incentive to add electric heating customers and keep the additional revenues between base rate cases.
- Does it make sense for Pennsylvania to encourage more electric heating and less natural gas heating?

One Foot On The Brake, One Foot On The Gas Pedal

- Conservation is an important goal, but it is obviously not the only goal of electric and natural gas utilities.
- Another longstanding goal of local electric and gas companies is economic and community development. Traditionally, these goals have been met in part by special rate structures that are designed to increase economic growth and development in the utility's service territory.
- These potentially conflicting goals have been described as requiring a utility to have "one foot on the brake and one foot on the gas pedal."

Conclusions

- Pennsylvania is poised to join the national effort to advance energy efficiency as a cornerstone of our state energy policy.
- The greatest bang for the buck on the demand side for residential customers will likely come from energy efficiency programs, not real time price response.
- The role of decoupling is up in the air, but should only be implemented if it can be shown to benefit customers as well as utilities.