

Energy Efficiency and Revenue Decoupling Issues in New York State

Michael J. Scott Deputy Director, Gas Water and Safety Office of Electric, Gas and Water New York State Department of Public Service Michael_Scott@dps.state.ny.us

June 2-5, 2008 Zagreb, Croatia



Energy Efficiency









Energy Efficiency

- In early 2007, New York's Governor:
 - identified a goal of reducing the State's projected electric load 15%, by 2015
 - stated that improved efficiency in the State's natural gas use was also desirable
- On May 16, 2007, the New York PSC initiated the Energy Efficiency Portfolio Standard Proceeding (EEPS) with the following goals:
 - To reduce customer bills;
 - To mitigate increasingly volatile fuel prices;
 - To lower wholesale electricity prices;
 - To prevent stress on the State's delivery system; and
 - To reduce fossil fuel related emissions.









EEPS Process

- A procedural conference was held on 6/4/07, followed by a set of data requests to parties from Staff and the ALJs regarding aspects of existing energy load and efficiency programs
- On July 19-20, 2007, a forum was held regarding the scope of the proceeding and fundamental approaches





EEPS Process (Continued)

- On August 24, 2007, a collaborative process was established by the ALJs featuring working groups in different subject areas:
 - Working Group 1 Overall structure including roles of parties
 - Working Group 2 Inventory of efficiency programs including market transformation, end-use and peak load management
 - Working Group 3 Establish targets and benchmarks, including for natural gas, and address measurement and verification
 - Working Group 4 Address emerging technologies









EEPS Process (Continued)

- Staff filed a preliminary proposal on August 28, 2007, which featured Fast Track programs
 - Intended as programs that could be ramped up quickly to begin efficiency improvements as quickly as possible
- Other parties also submitted proposals, and a collaborative meeting was held on 9/17/07
- Parties were then asked to comment on Staff's Fast Track proposal
- The Working Groups submitted reports on their issues on December 5, 2007









EEPS Process (Continued)

- On March 20, 2007, the ALJs issued a Ruling in which it was determined that a Fast Track proposal would be presented to the Commission, including information from Staff and other parties
- At the May 21 session, the ALJs and Senior Staff presented to the Commission a Fast Track proposal, which the Commission will consider and rule on at the June 18 session









Pending Issues

- Whether the Commission will order the utilities to develop efficiency programs that incorporate a predetermined set of Fast Track programs
- What guidance the Commission will provide to the utilities on what metrics will be used to judge efficiency programs
- Issues such as measurement and verification, program evaluation, and what entities will provide overall program administration
- Issues regarding future energy efficiency programs



Determining a Gas Savings Goal

- The Commission identified development of a natural gas target similar to "15 by 15" as a product of the EEPS
- Staff commissioned an update of a statewide natural gas efficiency potential study first completed in 2006
- Establishing a gas savings goal will need to consider how much it will cost to achieve and how that cost will be recovered









Individual Gas Utility Efficiency Programs

- Meanwhile, gas efficiency programs have been adopted for several utilities as a part of their individual company rate case
 - The two KeySpan companies imported successful programs from their New England affiliates
 - Total program cost = \$30 million
 - Con Edison's program is administered by the State's efficiency agency, the New York State Energy Research and Development Authority (NYSERDA)
 - Total program cost = \$14 million (proposed to increase to \$17 million)



Individual Gas Utility Efficiency Programs

- NFG's program features a low income program as well as equipment rebate programs for residential and commercial/industrial customers
 - Total program cost = \$10.8 million
- National Grid's program is limited to low income customers
 - Total program cost = \$5 million
- All of these programs could change as a result of discussions in ongoing collaboratives with interested parties; also National Grid just filed a major revision to their program



Next Steps for Gas Efficiency

- The ongoing individual company collaboratives will recommend program plans for the coming year
- The EEPS will likely determine programs statewide among all gas utilities, including those who do not currently have programs
- The EEPS will address the establishment of a statewide target for natural gas efficiency and how it is apportioned to each of the gas utilities, as well as the costs to ratepayers



Revenue Decoupling









Revenue Decoupling Mechanisms Theory

- To eliminate utility disincentives to promote energy efficiency, mechanisms need to be in place to "decouple" utility sales (deliveries) from the revenues they receive from those sales
- This is done through "revenue decoupling mechanisms"
 - Utility rates are designed to recover both fixed and variable costs
 - Some, but not all, fixed elements of cost are recovered from customers through fixed charges; variable costs are recovered from customers through variable charges
 - Some fixed costs are recovered through variable charges, rather than fixed charges, to reduce the bill impact on smaller use customers



Revenue Decoupling Mechanisms Theory (cont.)

- When customers conserve energy, they pay a lower variable charge and the same fixed charge; since some fixed costs are included in variable rates, the utility does not recover all of their fixed costs when customers conserve energy
- Due to this, the utility experiences a shortfall of revenues and a lower rate of return when customers conserve, resulting in a disincentive for the utility to actively promote energy efficiency program

C

National Association of Regulatory Utility Commissioners



NY PSC RDM order – Case 03-E-0640 & 06-G-0746, Issued April 20, 2007

- The Commission concluded:
 - Benefits from energy efficiency programs are substantial
 - Link between utility sales and revenues could influence utility behavior regarding the active promotion of these programs
 - Rate design changes can reduce utility disincentives but take time to effectuate due to bill impact concerns
 - Properly designed RDMs are therefore needed
 - Utilities directed to propose RDMs in next rate case



Types of Revenue Decoupling Mechanisms

- Weather Normalization Clause
 - Used for nearly all gas companies in New York -
 - A mechanism that shares the risk of above or below normal weather between the ratepayers and shareholders
 - Deadband of 2.2% around normal weather
 - Above this amount, utility credits excess revenues to customers
 - Below this amount utility charges customers for revenue loss

C



Types of Revenue Decoupling Mechanisms (cont.)

- Provide utility with the lost revenues associated with specific energy efficiency program measures
 - Pros protects utility from lost revenues specific to the actual energy efficiency installations that they provide to customers; should remove their disincentive to offer energy efficiency programs
 - Cons does not protect utility from declining revenues due to other customers' energy conservation efforts or other factors; calculation of the specific amount of energy conserved by each energy efficiency installation can be controversial; limits utility participation to formalized programs only



Types of Revenue Decoupling Mechanisms (cont.)

- Compare revenues actually achieved with the amount authorized by the PSC; utility to recover or credit the difference
 - Pros administratively simple to implement; reduces concerns that utility may try to "game" the RDM calculation
 - Cons penalizes company for growing the system; existing customers do not benefit from the growth; new customers may face difficulty in connecting to system









Types of Revenue Decoupling Mechanisms (cont.)

- Compare usage per customer established in rate cases with actual usage per customer and compensate the utility for the difference
 - Pros gives utility protection from all declines in usage associated with energy conservation whether due to specific measures installed by utility or by the customer directly; removes controversy associated with determining specific savings from each energy efficiency measurement
 - Cons usage per customer measurement can give the utility benefits for unintended events (e.g. downturn in economy); increases importance in carefully quantifying accurate forecasts of customers and usage per customer









Other Issues

- Quality/accuracy of the data company may need to collect new data; company has control of data
- Which customer service classifications should the RDM be applied to
- Accuracy of the forecast of customers and usage/customer
- Definition of customer (e.g. point in time, average throughout billing period, customer accounts, bills issued)
- How to treat new customers or customers that switch from one service classification to another
 - adding new customers with higher average use would increase the usage per customer which would minimize RDM surcharges and bias the utility against them



Revenue Decoupling Experience to-date

- Consolidated Edison Electric total delivery revenues are trued up to actual delivery revenues
- National Fuel Gas usage per customer is trued up
- Keyspan NY & LI interim lost revenue recovery mechanism in effect – amount is based on actual energy efficiency installations made by utility and an estimated savings per installation; RDM based on revenue per customer is under discussion
- Consolidated Edison Gas revenue per customer is trued up