Revenue Decoupling: New York’s Experience & Future Directions

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Revenue Decoupling Mechanisms

- What is an RDM?
- New York’s past experience with decoupling
- Alternatives to decoupling
  - project by project lost revenue recovery
  - third party administration of demand side programs
  - command and control
- Pros and Cons of fully cost based rates
  - New directions for New York
  - Observations
Revenue Decoupling Mechanisms (RDM)

What is an RDM?

- Eliminates the linkage between electricity sales and utility revenues and profits.

- Existing utility delivery rate designs are, in most cases, “not optimal”, in that they do not collect all fixed costs through fixed charges and all variable costs through variable charges.

- Sets an allowed revenue or revenue per customer target and reconciles actual differences in a subsequent period, through a bill credit or surcharge.

- Implemented to remove any remaining delivery rate disincentives against a utility’s promotion of energy efficiency, and behind-the-meter renewable technologies, and other forms of distributed generation.

NYS Past Experience with RDM

- Mechanisms implemented for several utilities in early 1990’s (prior to restructuring)

  - O&R, NMPC, Con Edison

  - Post broad-based RDM, ten year planned DSM expenditure increases, on avg., 370%  

  - At four non-RDM utilities, ten year planned DSM expenditures significantly exceeded 370%  

    • (net-lost revenue recovery based on measured results)

  - DSM Incentives and State Energy Efficiency Goals may have been primary driver of increases
NYS Past Experience with RDM (cont’d)

• Concerns raised regarding RDMs
  – Skewed price signals (“bundled” rates)
  – Large utility accruals
  – Customer bill volatility
  – Reduced incentives for economic development

• Actual Impacts
  – Revenue reconciliations ranged from a 0.2% annual decrease at O&R to a 2% increase (capped) at NMPC
  – Isolated effect on utility behavior difficult to determine
  – Utility concerns regarding impending competition and rising rates eventually dampened enthusiasm regarding DSM

Problems less likely to be realized today because:

• Substantial progress made since the 1990’s in moving fixed costs out of volumetric delivery charges
  – Reduced unrealized revenues and smaller true-ups

• After restructuring, revenue decoupling would apply to delivery revenues only
  – Market price signals for commodity would be unaffected

• Decoupling can be targeted to specific classes

• More frequent true-ups enabled by improved metering technology
Alternatives to Revenue Decoupling

• Project specific lost revenue recovery
  – Petition for recovery of verified net lost revenues resulting from utility-sponsored energy efficiency programs
  – Such mechanisms can be complex

• Third party administration
  – NYSERDA and the System Benefit's Charge since 1998
  – But, utilities have dismantled DSM delivery infrastructure

Alternatives to Revenue Decoupling (cont)

“Command and Control”

– United Nations: “Cuba has solved its energy crisis without sacrificing its environment”

– “Fidel Castro leads sweeping new energy revolution”
  • Overhaul of antiquated energy grid
  • Adoption of renewable fuels
  • Government led conservation drives
Alternatives to Revenue Decoupling (cont)

- Cost Based Delivery Rates
  - Movement towards fully cost-based rates can provide improved price signals and significantly reduce utility disincentives to promote conservation programs.
    - Increased recovery of fixed delivery system costs through fixed rather than volumetric charges
  - But, fully cost based delivery rates raise serious issues regarding equity impacts and customer incentives to conserve energy

Bill Impacts of Fully Cost-Based Rate Design
National Grid - SC1 – Residential Rates

<table>
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<tr>
<th>kWh Usage</th>
<th>Bills under current rates</th>
<th>Bills with all fixed costs in customer charge</th>
<th>$ Increase</th>
<th>% Increase</th>
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<tr>
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<td>$183.44</td>
<td>($36.95)</td>
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New York’s Preferred Approach: Combined Strategy

• Combination of:
  – Revenue Decoupling for mass-market customer classes
  – Fully cost-based (hourly) rates for larger commercial and industrial customers

• Increase the frequency of true-ups

• RDM, in tandem with cost-based rate methodologies, enables rate structures that:
  – Provide appropriate price signals,
  – Helps to promote and expand energy efficiency and other behind-the-meter initiatives, while
  – Mitigating significant customer bill impacts.

Commission Decoupling Order (Case 03-E-0640, Issued April 20, 2007)

• Electric and Gas utilities required to develop true-up based revenue decoupling mechanisms
  – To be designed and implemented in individual utility rate cases, involving all interested parties
  – In existing cases, supplemental procedural phases should be established
Reasons for Recent Actions

• Complements New York’s new 15 X 15 Energy Efficiency Initiative
  – Reduce 2015 electricity sales by 15% from currently projected levels
• Need to “re-engage” utilities in the delivery of energy efficiency programs – in conjunction with NYSERDA
• Sets the stage for consideration of future utility programs, and any associated incentives