A New Role For States In The Administration of Regional Electricity Markets

David O’Connor
Commissioner
Massachusetts Division of Energy Resources

Harvard Electricity Policy Group
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Major Points

• In a region with a capacity market, the “installed capacity requirement” (ICR) reflects a complex balancing of benefits and costs that is vitally important to its ratepayers.

• States within a region should play a major role in crafting its annual ICR because ratepayers will be paying too much (if its too large) and risking blackouts (if its too small).

• To effectively influence the ICR determination, states must create an institution to analyze and formulate unified positions on the issues imbedded in the ICR determination and negotiate or litigate for their adoption.
ICR Should Reflect Ratepayer Preferences, But Those Are Hard To Identify

• Ratepayers have a unique, but indeterminate, “tolerance for risk” of power outages.

• Similarly, ratepayers have a unique, but indeterminate, “willingness to pay” for installed capacity
  – Previously, public officials could only estimate that ratepayers place no value on “installed capacity”
  – New capacity markets (e.g. in NE) provide an opportunity to calibrate and articulate ratepayers’ actual “willingness to pay”

• In any event, state energy officials, appointed by Governors, are best situated to estimate consumers’ willingness to pay to ensure reliability of the regional power supply
The “Capacity Dispute” in NE
Urgently Needed A Better Resolution Process

• ISO-NE, Market Participants and States disagree on the “need” for a capacity product
  – ISO insists generators must have more assured revenue stream and wants to end “reliability contracts”
  – States refuse to pay more for capacity when the “product” may not be available when needed
  – Market participants disagree among themselves on these same points

• ISO-NE’s several initial attempts at negotiating a settlement failed
  – The states did not agree among themselves and engaged in negotiation in fits and starts

• ISO-NE asked FERC to impose a solution
Massachusetts Electricity Rates Are High Relative To Rest Of U.S.

Massachusetts 7th Most Expensive Residential Rates

2003 Average Residential Electric Costs
Cents per KWHR

- indicates most expensive KWHR costs; more than 10.00 cents per KWHR

Massachusetts 4th Most Expensive Commercial & Industrial (C&I) Rates

2003 Average Industrial Electric Costs
Cents per KWHR

- indicates most expensive KWHR costs; more than 10.00 cents per KWHR
ISO-NE Projects Capacity Shortage
For New England In 2008

1) Analysis assumes no imports of electricity in capacity figures
2) Analysis assumes no growth in generation capacity. An ISO-NE April 2005 report projects that MW capacity in NE is likely to be ~1300 MW higher based on historical trends. ISO-NE is anticipated to publish updated expected capacity growth figures in early May 2006.
3) 2100 MW line in graph represents ISO-NE projected unplanned generation outages in MW at any given hour during summer months
4) 1700 MW difference between 2100 MW line and 3800 MW line graph represents ISO-NE MW capacity reserve target for NE during summer months in event of an extremely high load demand scenario and/or MW outages surpass 2100 MW level
5) 90/10 case projection indicates ISO-NE’s regression model projects a 10% probability of actual demand in a given year exceeding the 90/10 demand level. 50/50 case indicates a 50% probability, etc.
FERC Would Impose A Revised Capacity Market On NE To Ensure Reliability

• The Commission found that without capacity payments, developers would not find it profitable to build new plants, or continue to operate old ones.

• However, litigation delayed resolution of capacity reforms for years.

• In the face of an imminent FERC order, states used the full weight of their congressional influence to obtain a final attempt at settlement.

• In March of this year, a FERC judge recommended approval of settlement agreed to by ISO-NE, many market participants and some states.
The Settlement Proposes
A “Forward Capacity Market” (FCM)

• ISO-NE projects demand for power 3 years in advance.

• Auctions secure one year contracts for “capacity,” sufficient to meet that demand, with reserves, starting in 2010.

• Supply and demand resources are eligible to contribute.

• Resources are paid if available; penalized for failure to perform.

• Revenues are netted against those earned in energy markets.

• For the initial years, 2006-2010, price for capacity is predetermined.
New FCM May Cost Massachusetts’ Ratepayers $10 Billion Over Next 10 Years

<table>
<thead>
<tr>
<th>Estimated Annual Cost to Massachusetts</th>
<th>Potential Costs Over 5 and 10 Years</th>
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<tbody>
<tr>
<td>$540 - $570 Million per year</td>
<td>$3.3 Billion</td>
</tr>
<tr>
<td>2010 to 2015 (Auction Results):</td>
<td>2010-2015: First 10 Years</td>
</tr>
<tr>
<td>$1.1 to 1.4 Billion per year</td>
<td>$10.3 Billion</td>
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• Note: The transition period payments are expected to be largely offset by reduced RMR payments that would otherwise have been necessary under the old market structure.
Determining ICR Raises Many Questions; The Answers Will Impact Ratepayers

• Demand-Side
  – What is the initial projected demand?
  – Which demand resources will be eligible to bid?
  – How will their performance be verified?
  – How will their bids influence the capacity price?
  – Can their bids be adjusted to respond to supply bids?
  – How will their bids influence final estimated demand?

• Supply Side
  – What is the initial projected ICR?
  – Which supply resources will be eligible to bid?
  – How will their availability be determined?
  – What consequence if they fail to perform?
  – Can their bids be adjusted to respond to demand bids?
  – How will their bids influence final estimated ICR?
“Regional State Committees” Could Enable State Participation in RTO Administration

• FERC Order 2000 contemplated formation of “regional advisory committees” to represent the states.

• April 2003 FERC “White Paper” provided guidance on formation of a “regional state committee” (RSC):
  
  – [A regional state committee] would “provide a forum for state representatives in the decision-making process.” (White Paper at p. 2)
  
  – [The Commission] “will give substantial weight to [regional state] committees on the determination of the method that will be used to allocate costs of existing and new transmission facilities” (White Paper at p. 6)
  
  – …‘the approach to and level of resource adequacy will be decided by the states in the region drawing from a mix of generation, transmission, energy efficiency and demand response. It is important to have a consistent approach throughout the region, which should be developed by the regional state committee.” (White Paper at p. 11)
A Regional State Committee In New England Would Be the Fourth

• Three are already approved and in operation:
  – Organization of MISO states (June 2003)
  – Southwest Power Pool Regional State Committee (April 2004)
  – Organization of PJM states (April 2004)

• New England has submitted two proposals:
  – September 2004
  – January 2005

• Major Issues along the way
  – Section 205 rights?
  – “Deference” by the Commission?
  – Interaction with Other Stakeholders?
  – Budget and staffing?
  – Cost recovery mechanism?
The New England RSC Is Ambitious And Has A Structure To Match

• The mission of New England States Committee on Electricity:
  – “… be to represent the interests of the citizens of the New England region by advocating for policies that will provide electricity at the lowest possible price over the long term, consistent with maintaining reliable service and environmental quality.”
• Its scope is “resource adequacy” and “transmission expansion and planning”
• It will be a non-profit corporation, governed by representatives of each Governor
• Official actions must gain a majority under each of two votes:
  – “one state, one vote” and
  – “weighted vote” (by state’s share of electricity demand)
• With a full-time staff, its budget will grow to $3.2M in year 5
• Funds will be collected by load serving entities from all retail ratepayers
In the Future, An RSC Could Play A Critical Role In Determining ICR

• For example, it could represent the states of the region in negotiations with ISO-NE and Market Participants over the annual ICR.

• If there is no settlement among the three, they could negotiate a single proposal that will be put to a vote:
  – Each of the three would cast a single vote
  – Two out of three votes would earn “deference” at FERC

• All parties would retain rights to litigate at FERC
Summing Up

• A region’s ICR reflects a complex balancing of benefits and costs that is vitally important to its ratepayers.

• The states within a region should equally share responsibility for the annual ICR determination with the RTO and Market Participants.

• To be effective, states must create a “regional” institution that can effectively advance their interests in ICR negotiations and litigations.