Capacity Procurement Mechanism ("CPM")

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The California structure

- California PUC and local regulatory authorities have resource adequacy ("RA") programs to ensure sufficient capacity is available for reliable grid operation
- RA contracting is done through bilateral contracts - no centralized capacity market
- RA resources may not always be sufficient to meet operational needs - requires ISO to have ability to procure backstop capacity under specified circumstances
- FERC has provided backstop procurement authority to ISO through (previously) ICPM and now CPM
The CPM

- The use of ICPM has been rare, infrequent and unpredictable
- Procurement is for short periods of time, usually one month, and for no longer than 12 months
- Procurement is offered only to existing resources as the need for the backstop capacity is immediate
- Procured at various places on grid as conditions warrant
- Single tariff rate for all capacity at all locations
- Generally procured in small amounts
ISO backstop procurement is very limited

- Triggered to date solely though Exceptional Dispatch ICPM
  - 23 times over the last 25 months for a total of $2.7 million
  - No backstop procurement in past 6 months
- There has never been an ISO procurement to backstop the RA programs or for a Significant Event
- There has not been any procurement through other CPM designations to date

<table>
<thead>
<tr>
<th># of Instances</th>
<th>Procurement Date</th>
<th>Resource Name</th>
<th>MW</th>
<th>Reason</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0</td>
<td>N/A</td>
<td>$0</td>
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<tr>
<td>Procurement to Backstop RA Programs</td>
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<td>Procurement to address Significant Events</td>
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<tr>
<td>Exceptional Dispatch issued to Resources for use of Non-RA Capacity that triggered ICPM Payment</td>
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</tr>
<tr>
<td>23</td>
<td>Mar 31, 2009 – Apr 26, 2011</td>
<td>Various</td>
<td>703</td>
<td>Local transmission outages</td>
<td>$2.7 million</td>
</tr>
</tbody>
</table>
Proposed CPM compensation is appropriate

- Not designed (nor should it be) to incent new generation
- FERC previously ruled that going-forward cost ("GFC") compensation is just and reasonable for limited, short-term backstop procurement
- Participation is voluntary except for Exceptional Dispatch CPM designations
- Price paid is at least $55/kW-year for a minimum term of 30 days
- Unit owners can file for a higher rate if their costs per the formula are greater than $55/kW-year
Proposed CPM compensation is reasonable

- Based on cost of highest cost gas-fired unit studied by the California Energy Commission (“CEC”) - 50 MW small simple cycle (merchant) combustion turbine new entrant; this enables lower cost types of resources to earn additional revenues that can cover fixed costs
- Includes O&M, plus insurance and ad valorem taxes
Proposed CPM compensation is reasonable. (cont’d)

• Provides a 10% cost adder to account for measurement error, hard to quantify or additional costs; thus, CPM pricing mechanism relies on more than just GFC; cost adder provides additional revenues to cover fixed costs
• Resource receives capacity payment and gets to keep all revenues earned through the ISO’s markets
• Resource owner can file at FERC for a higher compensation rate
CPM price is within the range of reasonableness.

- Information below is from California PUC’s “Resource Adequacy Report for 2010” dated April 22, 2011
  - Points to reasonableness of proposed CPM price of $55/kW-year
  - There is no indication that ISO backstop price acts as a cap or floor for RA contracting
FERC precedent

- Supports GFC methodology for short-term procurement such as this
- FERC stated: “ICPM is a mechanism for procuring capacity for short periods to meet system reliability needs, and therefore, is not designed to encourage new investment” – Oct 16, 2008 ICPM Order
- FERC stated in same Order: “Consequently, we find that the CAISO’s proposal to price backstop capacity at the upper end of this range is not unreasonable and provides non-resource adequacy resources with a payment for capacity services that is comparable to the payment received by resource adequacy resources.”
- ISO’s CPM compensation proposal uses same methodology that was filed in ICPM and approved by FERC; it produces a new capacity price that exceeds the pace of inflation
ISO recognizes FERC’s concern that price paid must be adjustable if there is a permanent CPM

- ISO proposes to revise its proposal to include in the tariff a specific provision that CPM price will be updated every two years
  - Will revise pricing using established GFC methodology every two years to coincide with biennial publishing of CEC Comparative Costs of California Central Station Electricity Generation report
  - Will provide updated CPM price to stakeholders for comment and review
There is not an investment problem in California -- the challenge is to get the right capacity.

Also, ISO's DMM has reported that in 2010 1500 MW of conventional thermal generation was completed.
CPM is not an appropriate or necessary mechanism to send investment signals or incent new generation

- CPM should not be used to send price signals through the following mechanisms that seek to reflect supply and demand and incent development of new generation
  - Scarcity conditions pricing mechanisms
  - Demand curve compensation mechanism
- CPM is not the right vehicle for this
- ISO agrees that incentives and signals need to be provided, but there are other initiatives, as well as the RA program, that will provide this
Several initiatives are currently underway to identify operational needs and new market products

- **ISO Renewable Integration Market and Product Review initiative**
  - Will develop new spot markets and consider forward procurement of those products to meet operational needs
  - Can build in mechanisms to reflect scarcity

- **California PUC Long-Term Procurement Proceeding**
  - Can build in appropriate incentives and compensation

- **These initiatives are better avenues than CPM to address investment signals and incentives for capacity**

- **ISO and stakeholders have finite resources and should focus efforts on these initiatives – keep CPM simple**
Both the enhanced GFC and demand curve approaches were extensively discussed in CPM stakeholder process.

- ISO decided the GFC approach is a better fit for CPM because
  - Complexity of a demand curve is not warranted due to limited amount of backstop procurement
  - Demand curve would in some locations simply raise price to buyers without encouraging new entry
  - Environmental and siting concerns would limit demand curve effectiveness
  - Demand curve could create market power concerns in local areas
Demand response can participate in CPM

- Demand response that is under an ISO Participating Load Agreement is already eligible to participate in CPM
- ISO is working to implement Proxy Demand Response resources and these resources will be eligible for CPM
- ISO continues to develop opportunities for demand response resources to participate in markets, including RA and CPM