Demand Response
Overlapping Ancillary Services and Load Management Events

Demand Response Subcommittee
September 23, 2013
• **Ancillary Services**: inflexible SR and Regulation assigned 1 hour before operating hour

• **Load Management**
  – 30 minute: mandatory as of 6/1/2015
  – 60, 120 minutes: exception basis as of 6/1/2015

DR may be assigned Ancillary Service during a Load Management Event and is not able to provide it.
Example of Overlapping Ancillary Services and Load Management:

- **SR assignment**: 60 min. notice, 30 min. LM event
- **60 min. LM event**: 60 min. notice, 30 min. LM event
- **30 min. LM event**: 30 min. LM event
- **ASO**: 13:00
Load Management Event on 9/11/2013

<table>
<thead>
<tr>
<th></th>
<th>DR MW offered in SR</th>
<th>DR MW cleared in SR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before event was called</td>
<td>260</td>
<td>240</td>
</tr>
<tr>
<td>First full hour of event</td>
<td>135</td>
<td>120</td>
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</tbody>
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At least 105 MW of the 120 MW that cleared during the first hour of the event could not perform in both SR and LM.
• **Reliability**
  – PJM unaware of insufficient SR or Regulation during Pre-Emergency or Emergency conditions

• **Penalties**
  – Potential CSP penalties for not providing assigned AS during LM event

• **User Error**
  – CSP may not make resource unavailable for AS for hours beyond first hour of assignment
- During Load Management Event
  - Remove Ancillary service assignments
  - Do not allow new assignments
- Mandatory events only
  - Non-mandatory LM de-assigned if reliability concern
- Only if location is part of LM event
  - Even if 2 different CSPs
- All lead times will be de-assigned at LM notification
- Applies to pool-scheduled and self-scheduled
- Resource paid for all assigned intervals
• **Reliability**
  – PJM can assign additional resources to SR/Regulation if needed during LM event
• **Penalties**
  – CSP not penalized for not providing AS during LM because no assignment
• **Minimize user error**
  – CSP is not responsible for making resource unavailable for remainder of event
• Manual 11 update for transparency/clarity:

• Section 4.2.8 – Demand Resources in Synchronized Reserve Market

When a Demand Resource that is eligible for the Synchronized Reserve Market is called for a mandatory Emergency or Pre-Emergency Load Management Event, it will be de-assigned from Synchronized Reserves for any intervals that overlap with the Load Management Event, starting from the notice time of the Load Management Event. PJM will not assign the resource to Synchronized Reserves for the remainder of the mandatory portion of the Load Management Event.
Manual 11 Section 3.2.1 – Regulation Market Eligibility

When a Demand Resource that is eligible for the Regulation Market is called for a mandatory Emergency or Pre-Emergency Load Management Event, it will be de-assigned from Regulation for any intervals that overlap with the Load Management Event, starting from the notice time of the Load Management Event. PJM will not assign the resource to Regulation for the remainder of the mandatory portion of the Load Management Event.