



Demand Response Overlapping Ancillary Services and Load Management Events

MIC

November 7, 2014

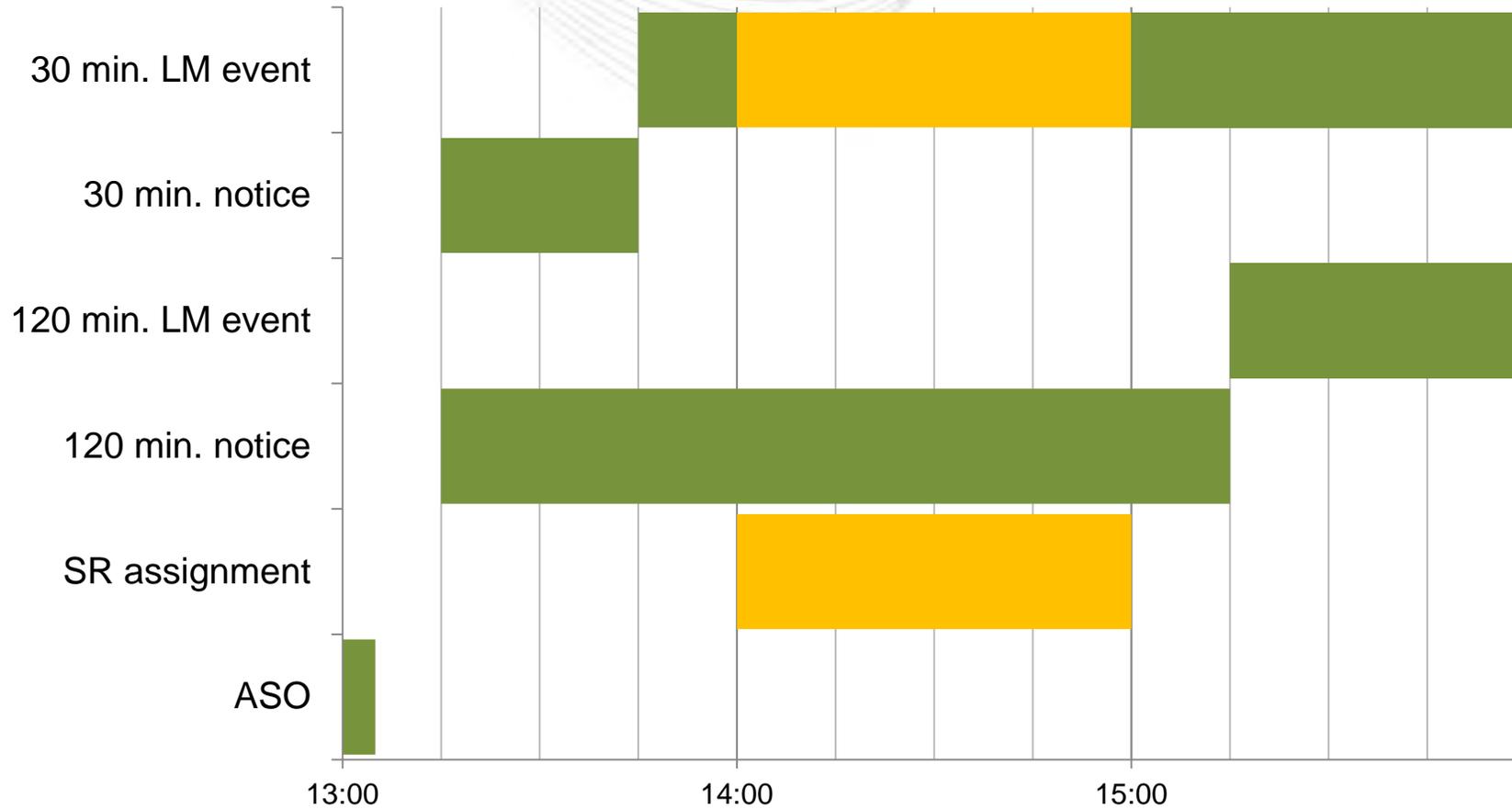
- 8/27/2014 – DRS – Problem statement introduced by Energy Connect
- 9/23/2014 – DRS – Consensus reached at DRS on single proposal
- 10/08/2014 – MIC – First read
- 10/30/2014 – MRC – First read
- 11/07/2014 – MIC – Endorsement
- 11/20/2014 – MRC – Endorsement
- 6/1/2015 – Implementation

Note: Manual changes only.

- **Ancillary Services:** inflexible SR and Regulation assigned 1 hour before operating hour
- **Load Management**
 - Pre 6/1/2015: 120 min. lead time → no conflict between SR and LM
 - As of 6/1/2015 : 30 min. mandatory lead time → possible conflict

DR may be assigned Ancillary Service during a Load Management Event and is not able to provide it.

Overlapping Ancillary Services and Load Management Example



- **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

Appendix

Load Management Event on 9/11/2013

	DR MW offered in SR	DR MW cleared in SR
Before event was called	260	240
First full hour of event	135	120

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