

Transmission Congestion/Outage Update

NETWORK OPERATING COMMITTEE
(NOC) Meeting
March 8th, 2016



Topics Covered

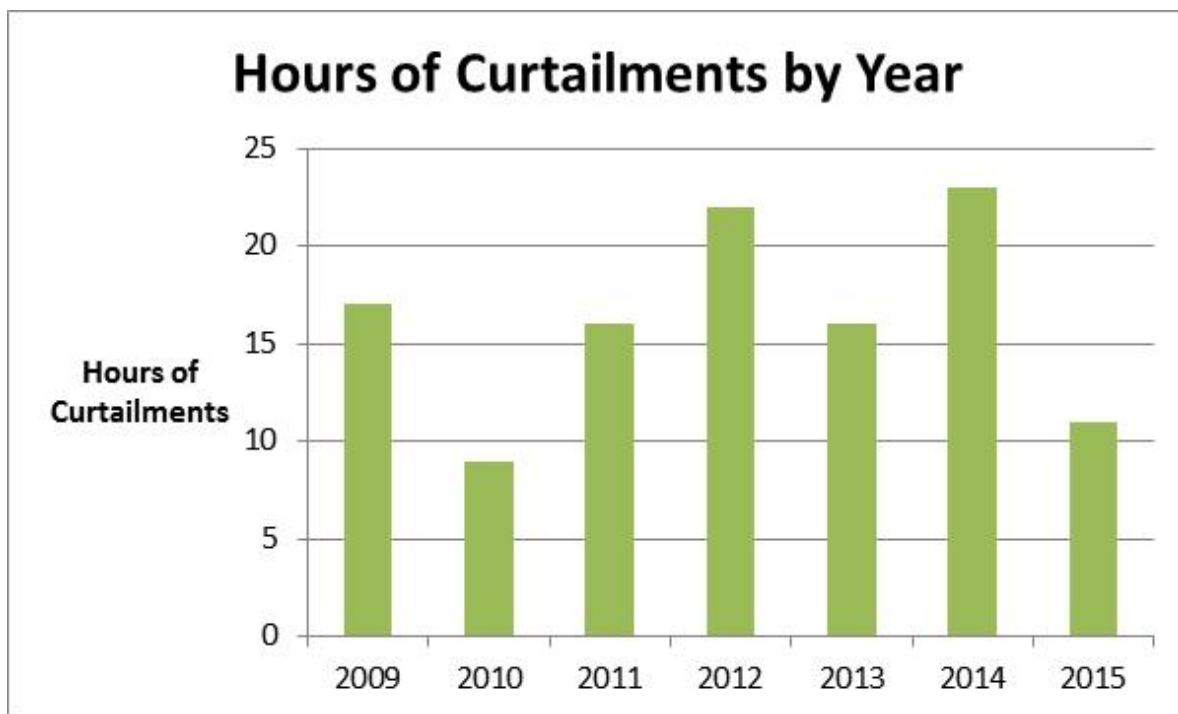
- Transmission Congestion / Mitigation Activities
 - Historical Hours of Curtailments
 - Historical Number of Curtailment Orders
- Transmission Line Outages
 - Upcoming Scheduled Outages

Transmission Congestion / Mitigation Activities

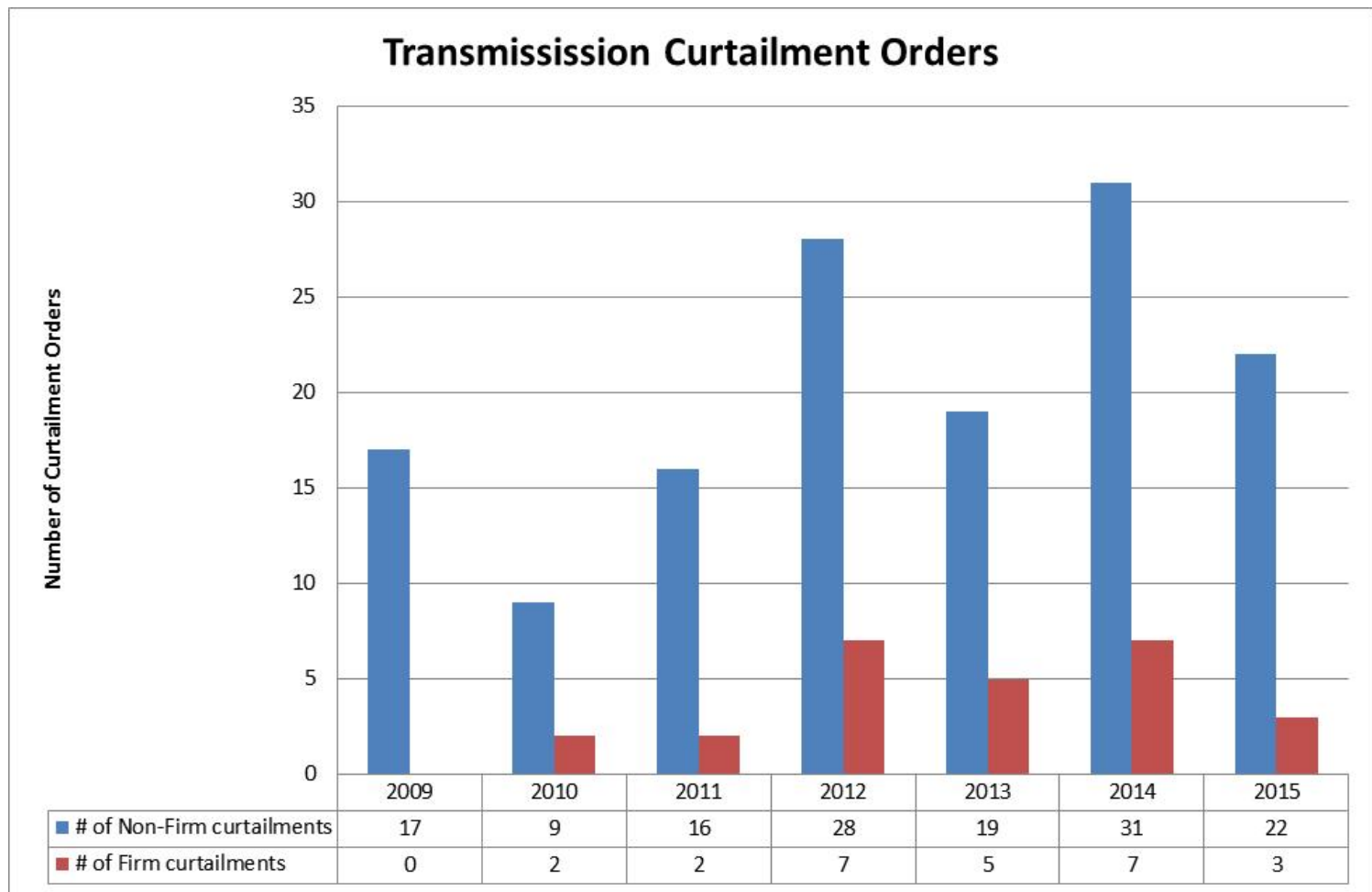
- BPA uses multiple congestion / mitigation tools prior to redispatch or curtailments.
- BPA issues curtailment orders during transmission system constraints when flows approach/exceed the System Operating Limits (SOL).
 - Curtailment orders are issued by decreasing (or cutting) transmission schedules (e-tags).
- SOL exceedances (anticipated and actual) have multiple contributing factors: weather, hydro conditions, loadings/flows, contingencies for vulnerable equipment, topology.
- Transmission curtailments help BPA manage system constraints by decreasing flows across a particular flowgate or affected area.
- BPA issues curtailment orders in accordance with NERC curtailment priorities.
 - Non-firm transmission schedules (e-tags) are curtailed first.
 - If a constraint is not resolved through non-firm curtailments, BPA will curtail Firm transmission schedules.
 - BPA will curtail Firm PTP schedules, but will redispatch the FCRPS to avoid curtailment of Firm NT schedules.

Transmission Curtailment Hours

- The graph represents the total hours of transmission curtailments, by year. [Note – in some hours BPA may have issued multiple curtailment orders.]



Transmission Curtailment Orders



Notable Transmission Outages - 2016

- Pacific Direct Current Intertie (PDCI or DC)
 - 6/25-6/26 – DC -0-: LADWP annual maintenance
 - 10/1-10/30 – DC -0-: BPA outage to complete upgrade
- California-Oregon Intertie (COI or AC)
 - 3/12-3/14 & 4/2-4/4 – COI N>S 1400mw: BPA Remedial Action Scheme (RAS) work – testing
 - RAS work also impacts WOCS 3500mw, NOH 2800mw, NOJD 5425mw
 - Additional dates for RAS testing 4/11-4/15; 4/18-4/22; 6/27-7/1; 9/6-9/30 & 11/2-11/13
 - 6/24 – COI impacts: PGE work
 - 10/11-10/31 COI N>S 2800mw: CAISO work
 - 3/22-3/24; 4/23-4/24; 9/12-10/14; 10/17-11/18 – COI impacts: PacifiCorp work
- LaGrande
 - 5/10 & 8/29 – LaGrande 50mw: BPA work
- Reno-Alturas Transmission System (RATS)
 - 3/26-4/4; 5/3-5/12 & 6/1-6/14 – RATS -0-: NV Energy work