

Hourly Firm Evaluation Planning #2

April 11, 2019

Proposed Hourly Firm Evaluation Planning #2 Agenda

April 11, 2019

TIME	TOPIC	PRESENTERS
9:30 - 9:35 AM	Welcome & Safety	Katie Sheckells
9:35 - 9:40 AM	Proposed Agenda and Objectives	Katie Sheckells
9:40 - 11:05 AM	Deep Dive (including Spreadsheet)	Kevin Johnson/Group
11:05 - 11:20 AM	Break	
11:20 - 12:15 PM	Continuation of Discussion	Group
12:15 - 12:30 PM	Proposed Calendar and Next Steps	Katie Sheckells

Today's Objective

- Deep dive on an event to make sure that we have all the information that we need to evaluate the Hourly Firm product.
- This will be an active, collaborative session with BPA and the customers that is focused on the first objective.
- We will leave with a shared understanding of any additional information that may need to be developed and reviewed at future meetings.

DEEP DIVE

DECEMBER 14, 2016
WEST OF JOHN DAY
HE08-09

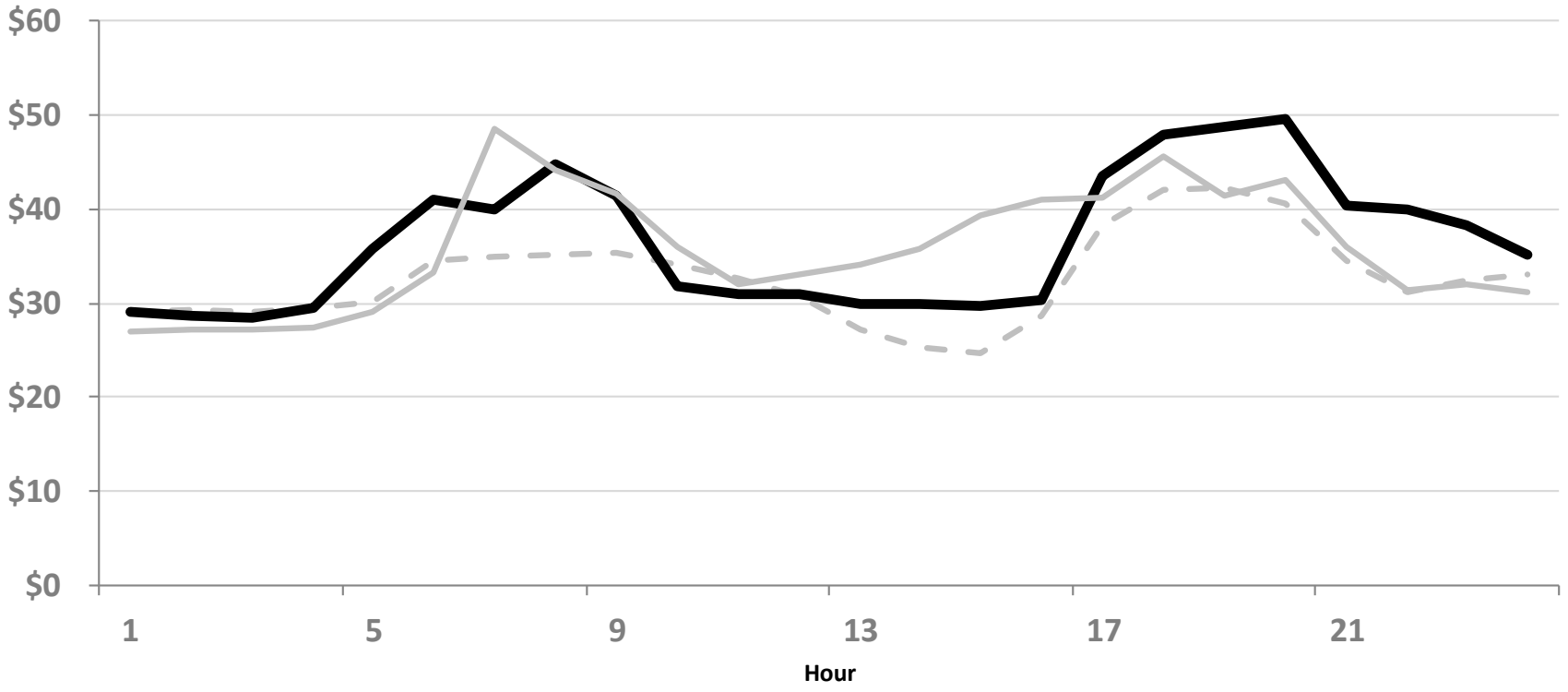
Conditions

- Significant Load & Generation
 - Relatively low PDCI flows
 - Moderate wind
 - Average hydro
 - High WILSWA (Willamette Valley/SW Washington) imports
- Significant Outages
 - John Day-Big Eddy 2 500kV line (Planned)
 - Buckley-Marion 1 500kV line (Unplanned)

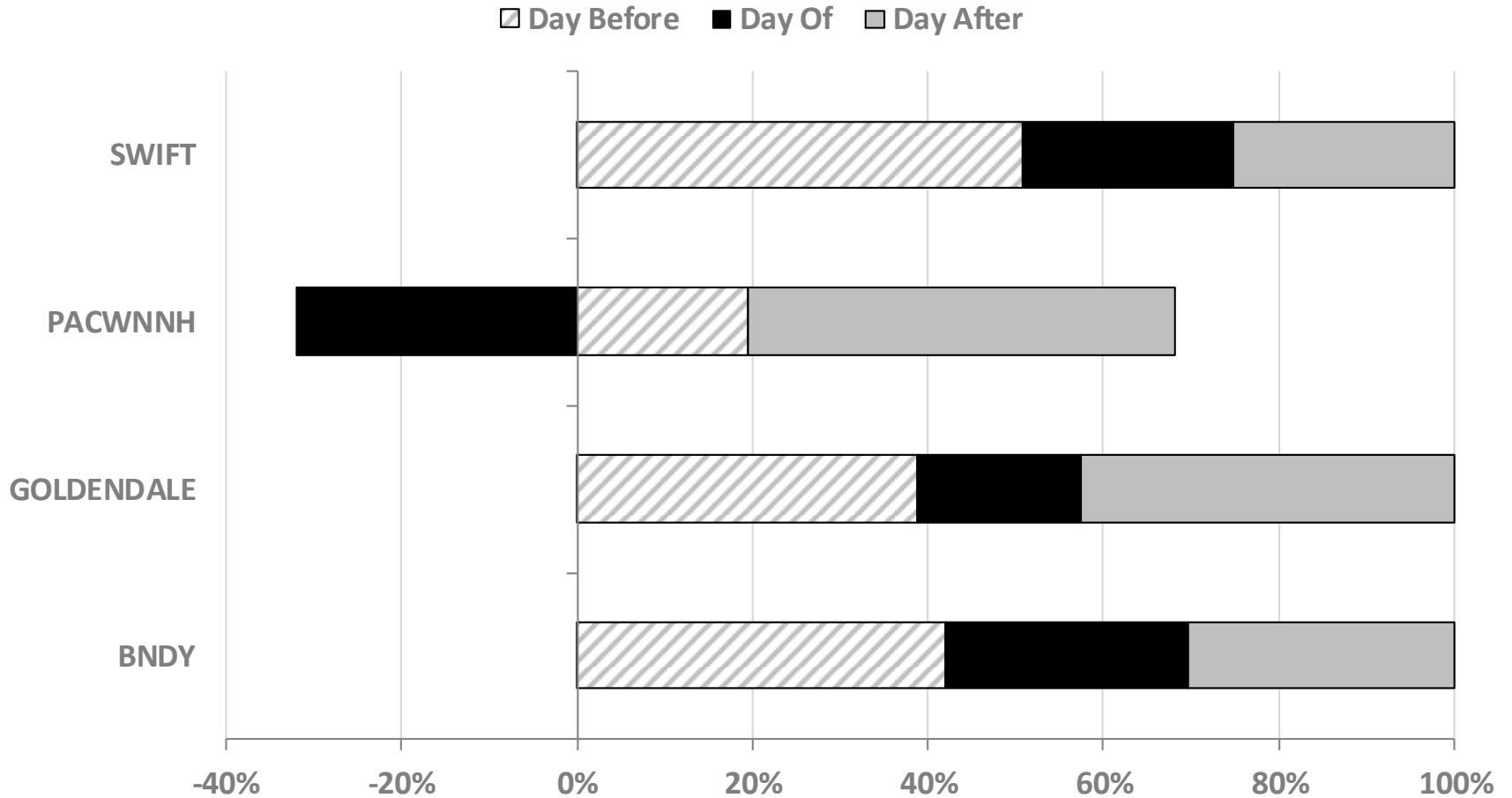
Market

Mid-C Hourly Prices, December 14 2016

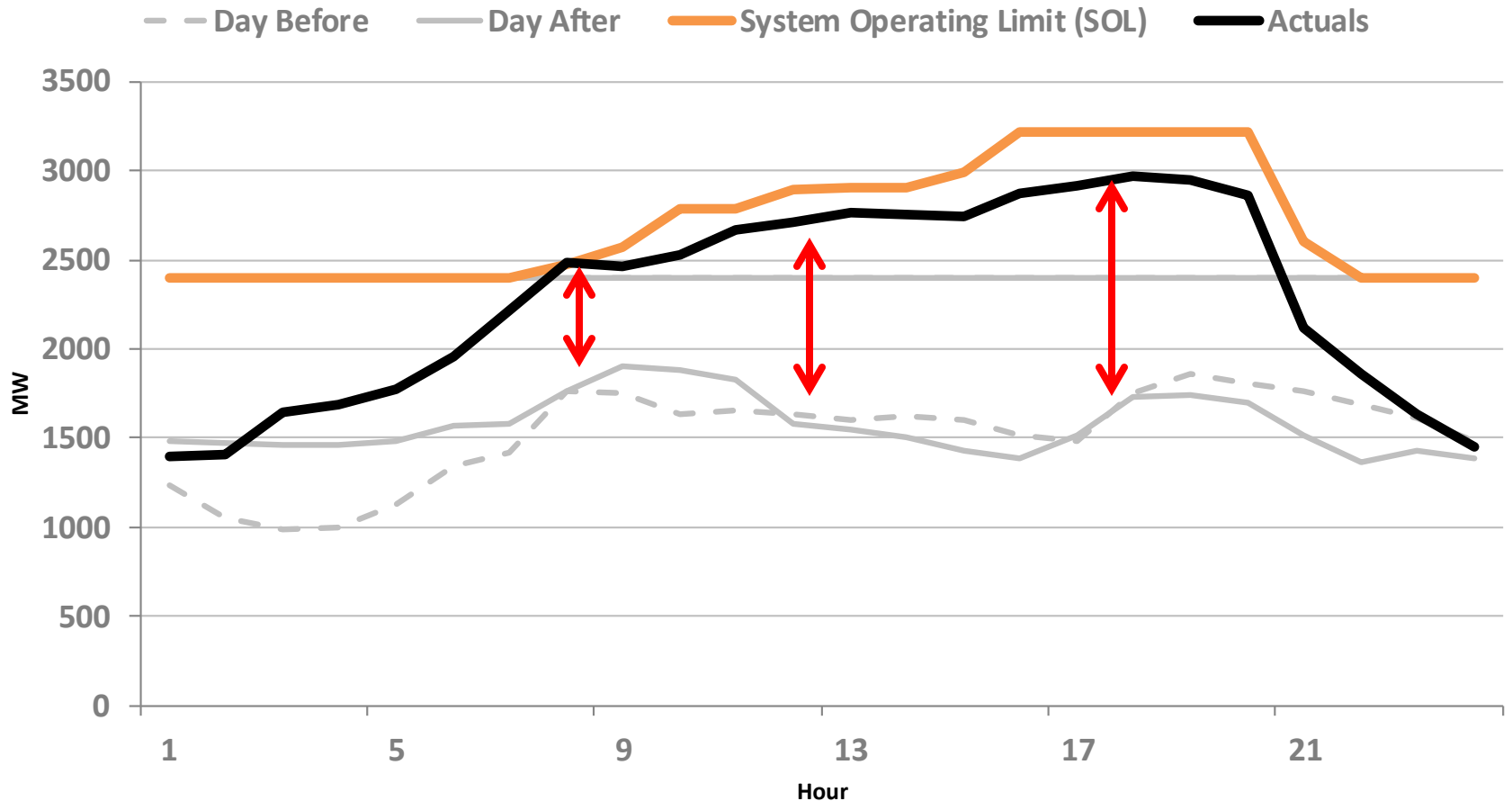
-- Day Before **—** Day Of — Day After



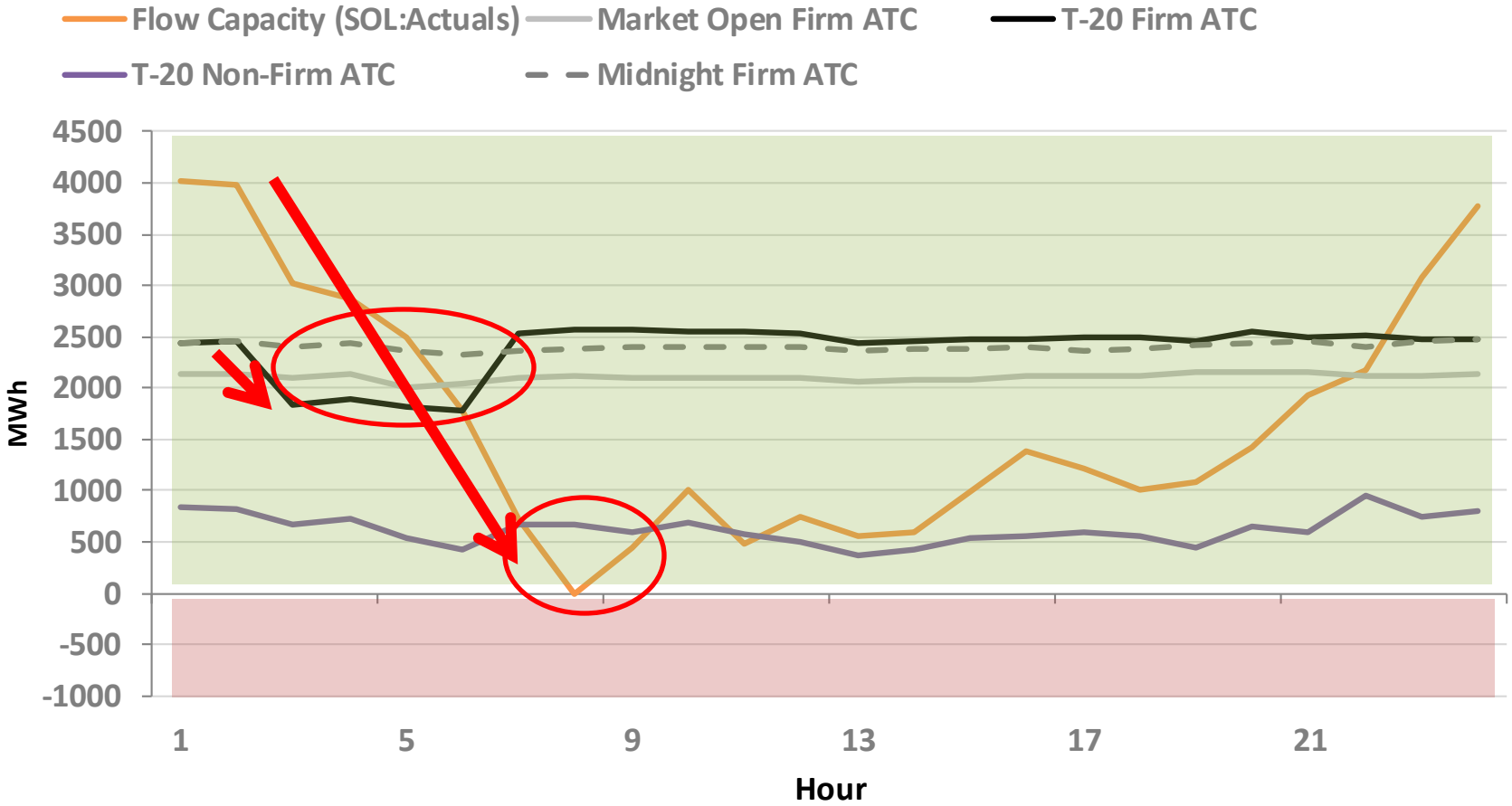
Significant Generation Variances



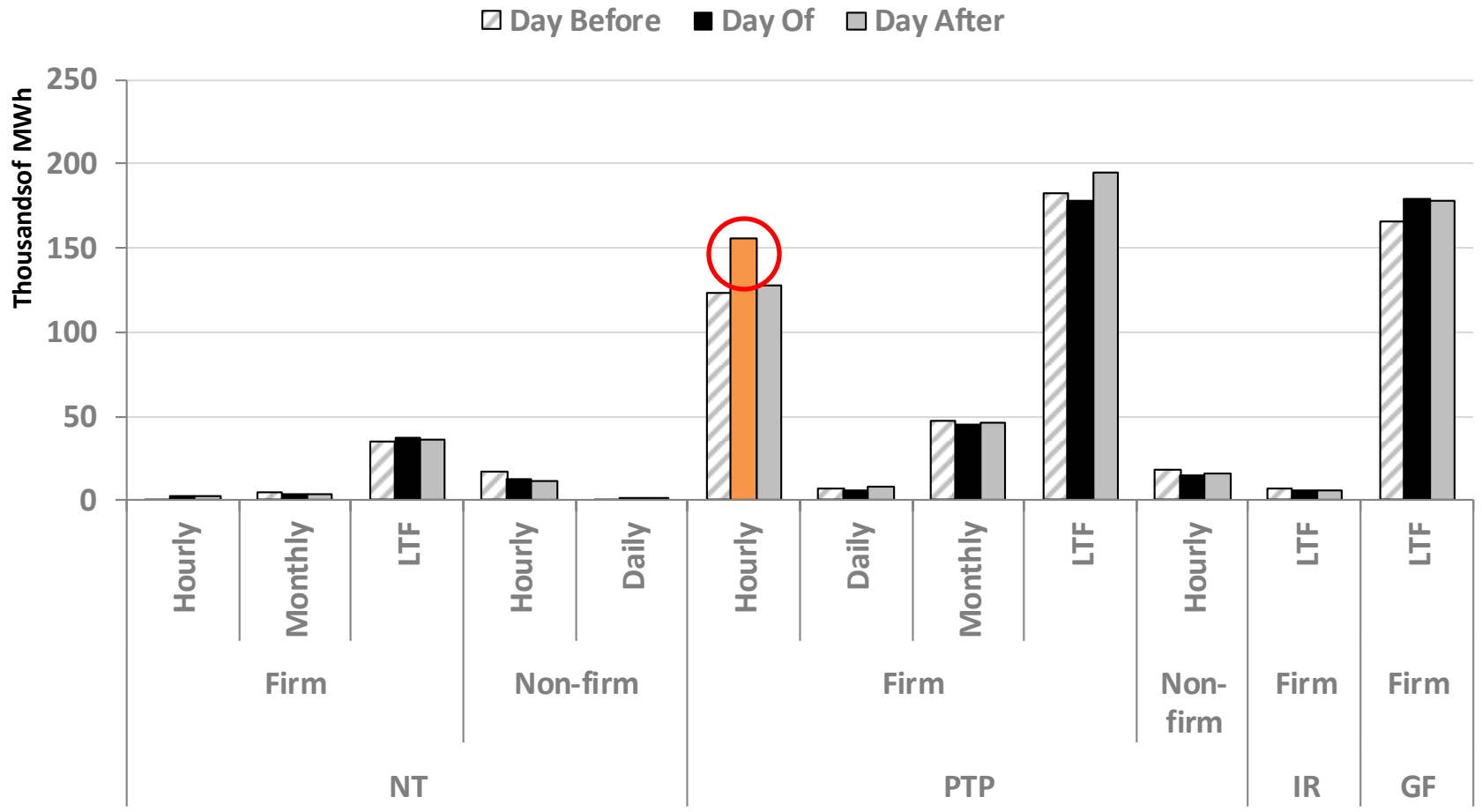
System Flows and Operating Limit



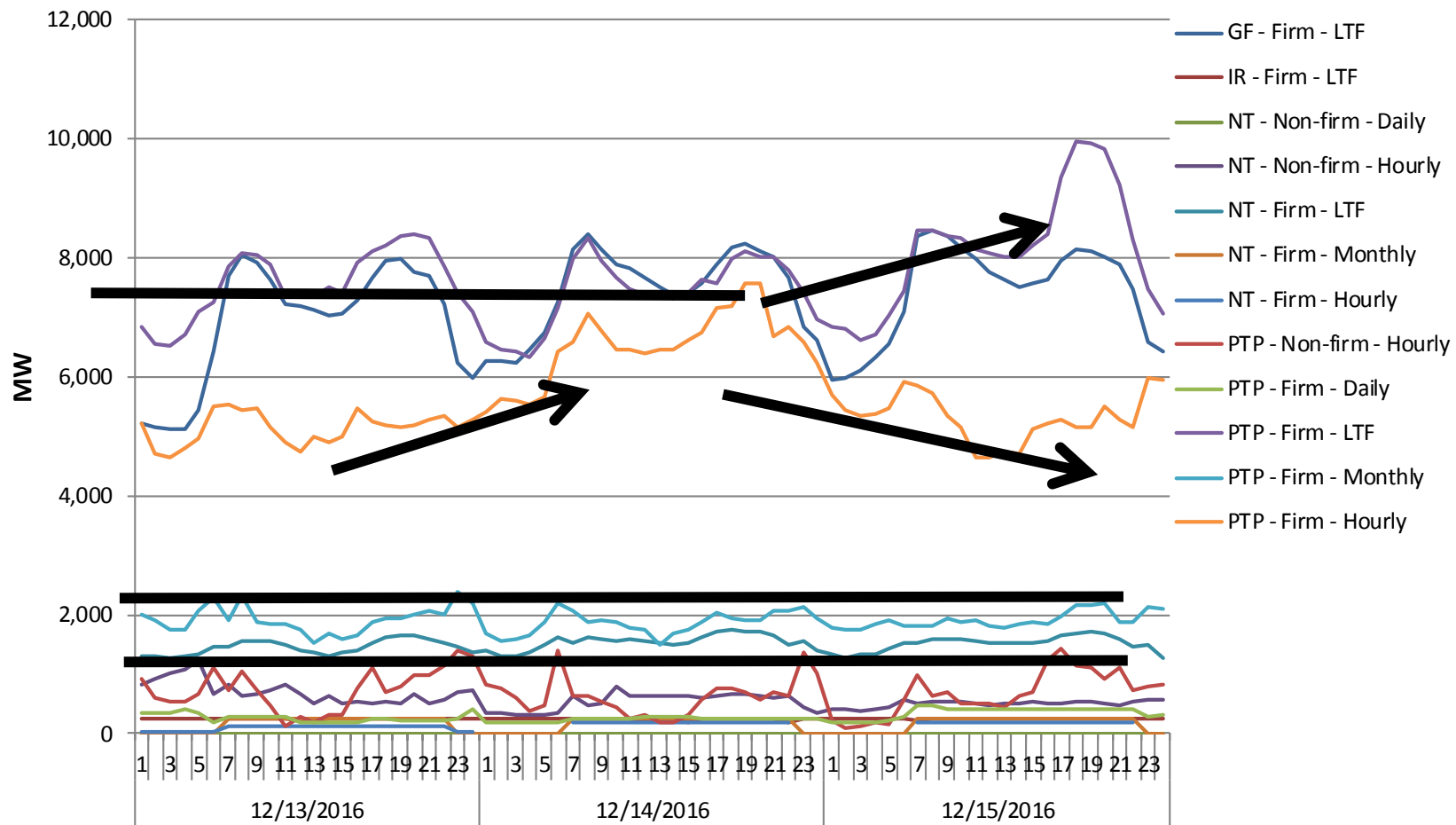
Available Capacity



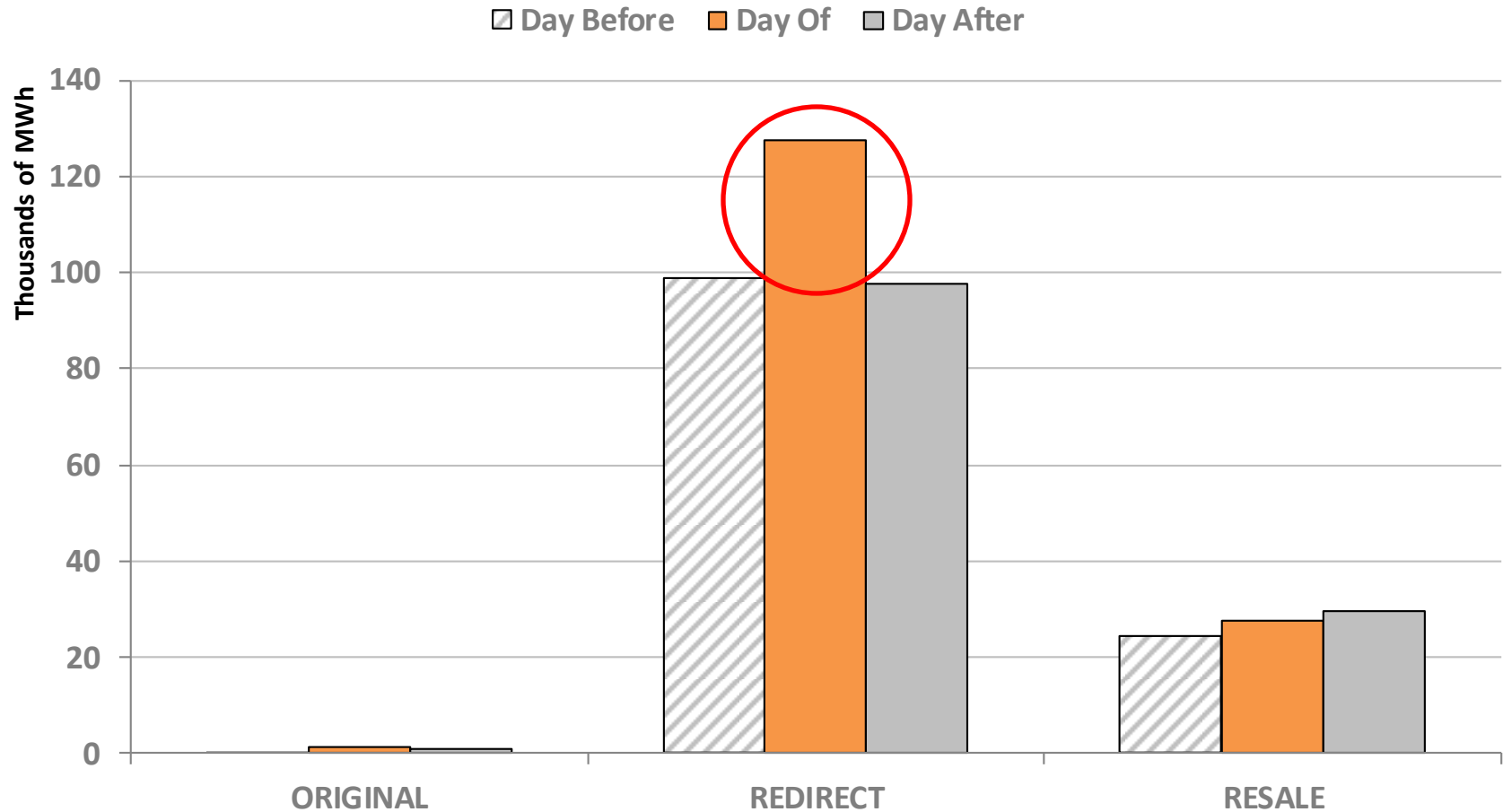
Product Schedules



Scheduled Segments from Dec 13-15, 2016



Hourly Firm PTP Schedule



Dispatcher Actions

- No Dispatch topology actions
- Limit wind by path on WOJD
 - Limits generation to sum of schedules
 - From 0719 until 0842
- Stop Transmission Sales (TLR Avoidance)
 - Firm and NF HE08-09

Redispatch

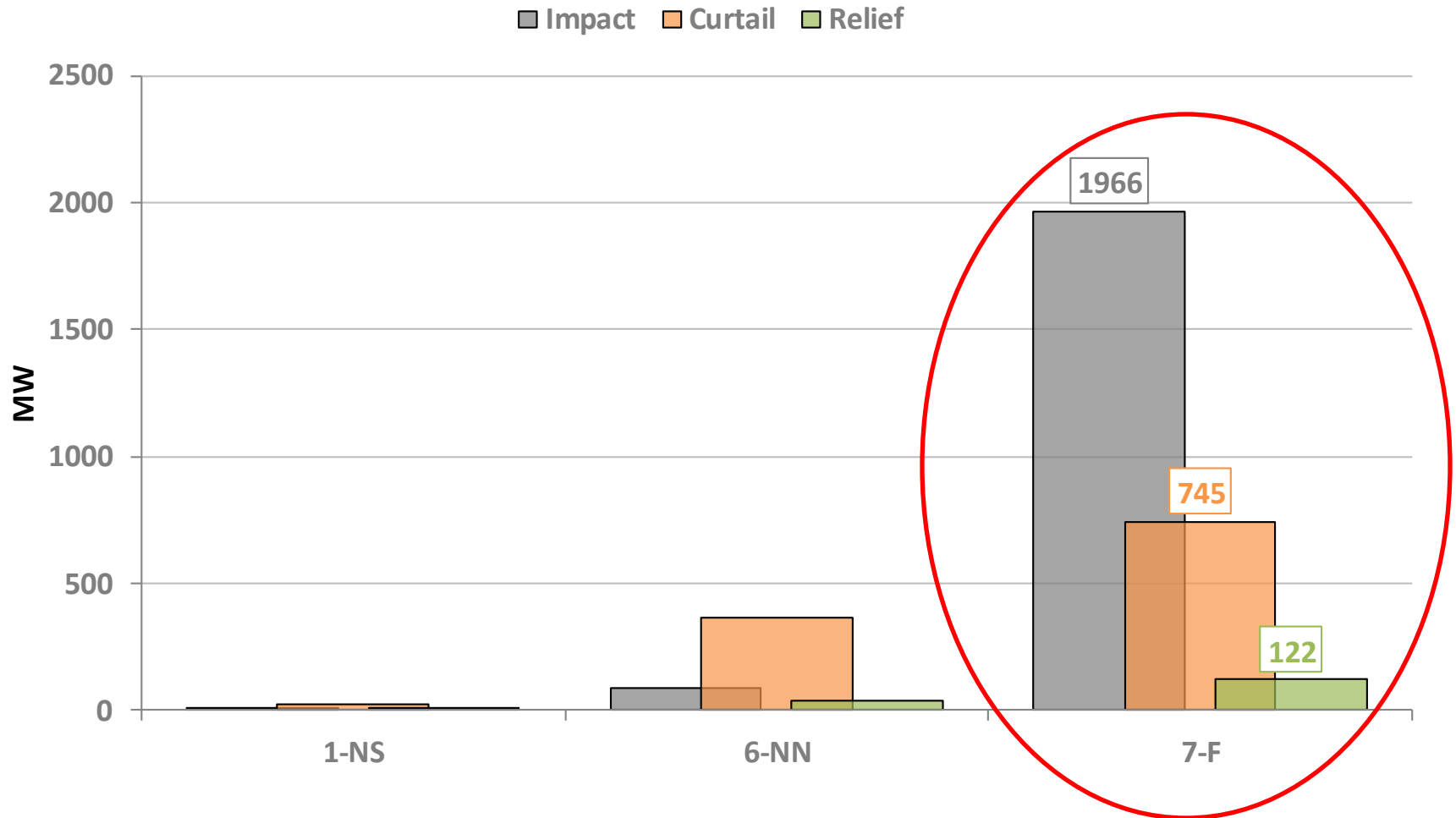
- 50MW discretionary redispatch
 - 37.0 MW of relief
 - From 0723 until 0800
- NT Redispatch on 4 of the curtailments
 - Varies: 2.1MW - 62.6MW

Curtailments

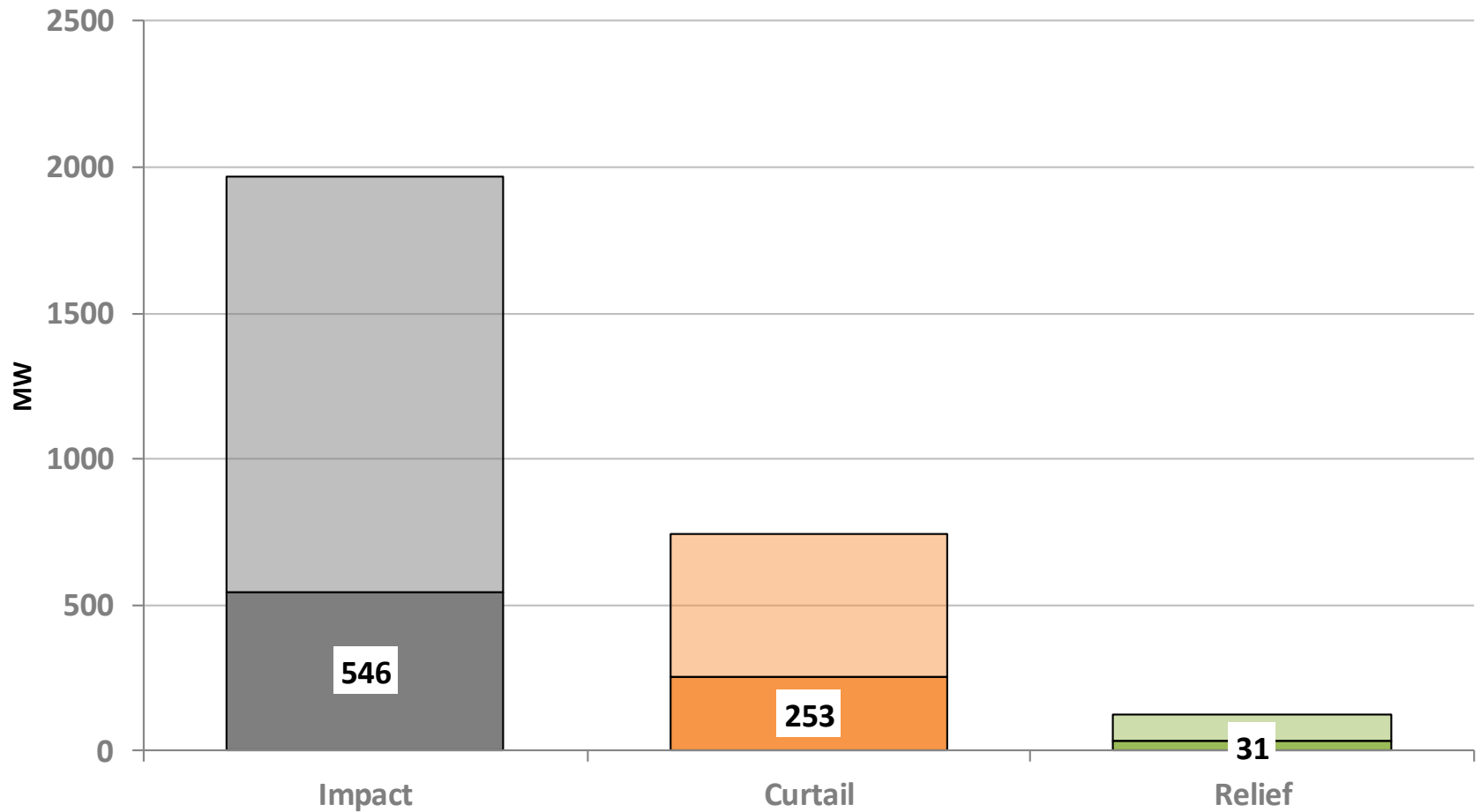
- 6 curtailments across 5 15-minute intervals
- Focus on iCRS04995-7 (largest curtailment)

Event ID	Curtailment Implementation Date	Curtailment Start	Curtailment Stop
[iCRS04997-7]	12/14/2016 08:16:28.466PST	12/14/16 8:30	12/14/16 8:45
[iCRS04996-6]	12/14/2016 07:58:04.413PST	12/14/16 8:15	12/14/16 8:30
[iCRS04995-7]	12/14/2016 07:55:34.067PST	12/14/16 8:00	12/14/16 8:15
[iCRS04994-6]	12/14/2016 07:41:26.489PST	12/14/16 8:00	12/14/16 8:15
[iCRS04993-7]	12/14/2016 07:40:56.209PST	12/14/16 7:45	12/14/16 8:00
[iCRS04991-7]	12/14/2016 07:32:03.946PST	12/14/16 7:32	12/14/16 7:45

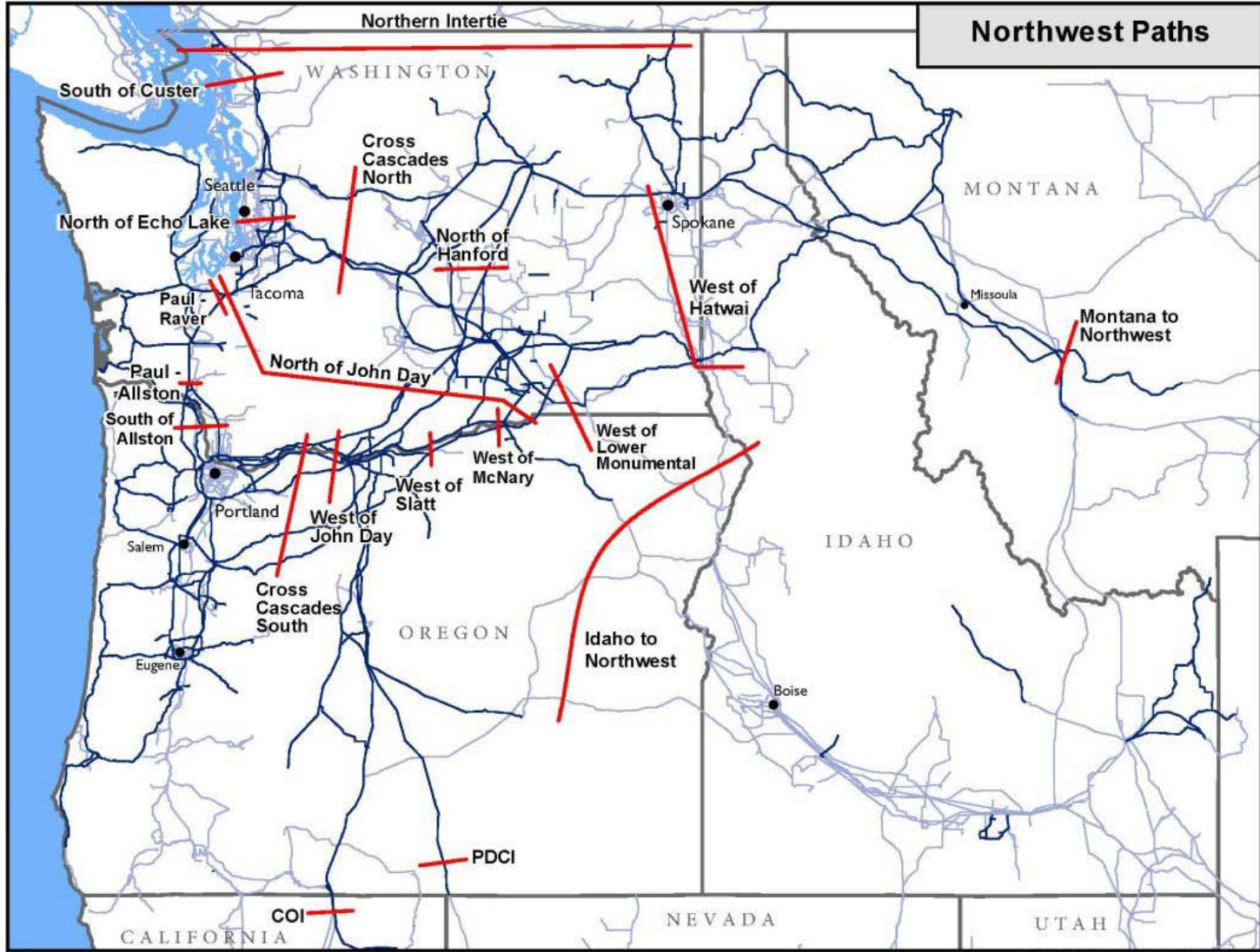
Curtailment Tag Evaluation by Product



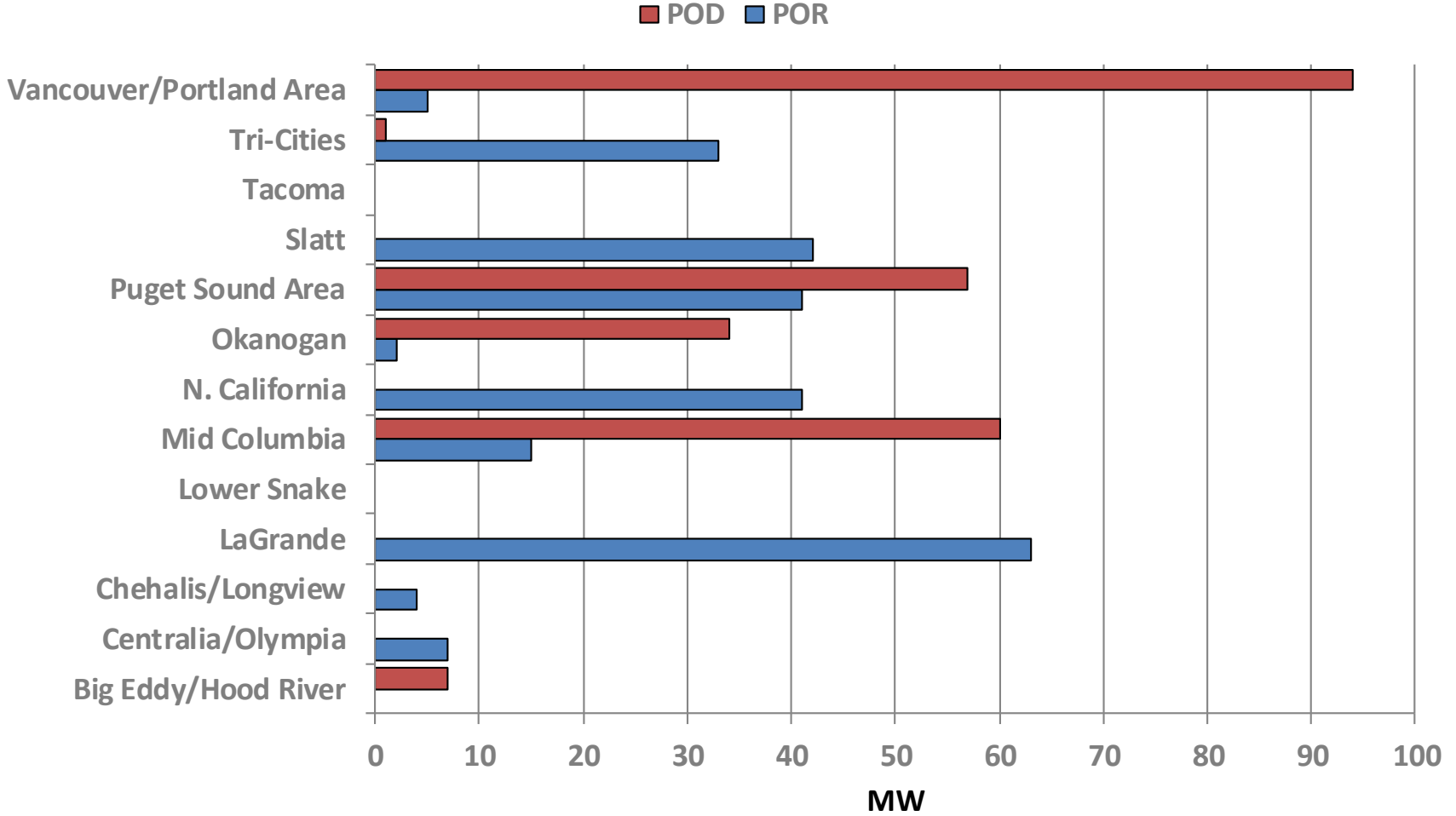
Hourly Firm PTP Curtailment Evaluation



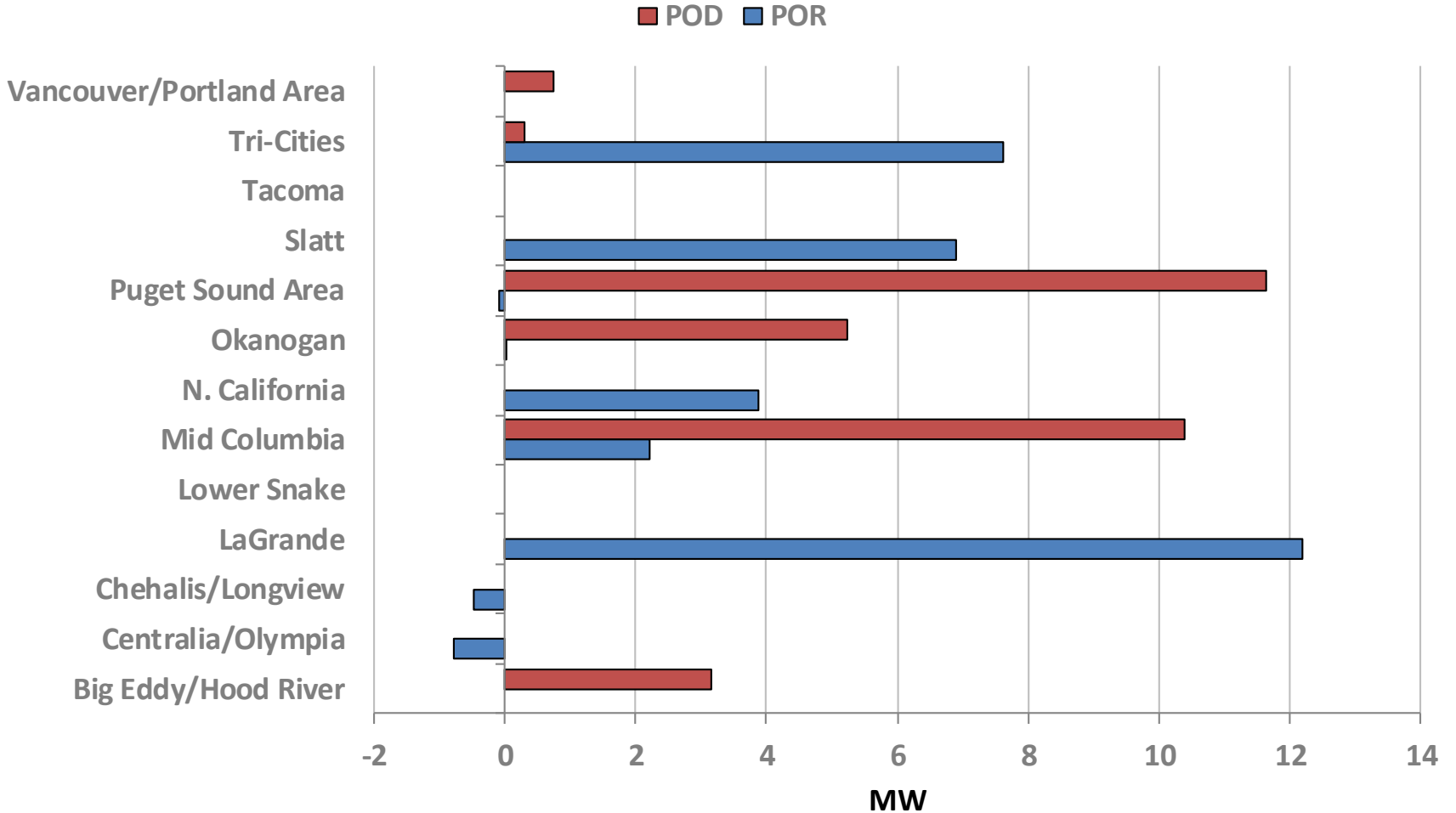
Flowgates



Hourly Firm Region Curtailment



Hourly Firm Region Relief



Monitoring Data

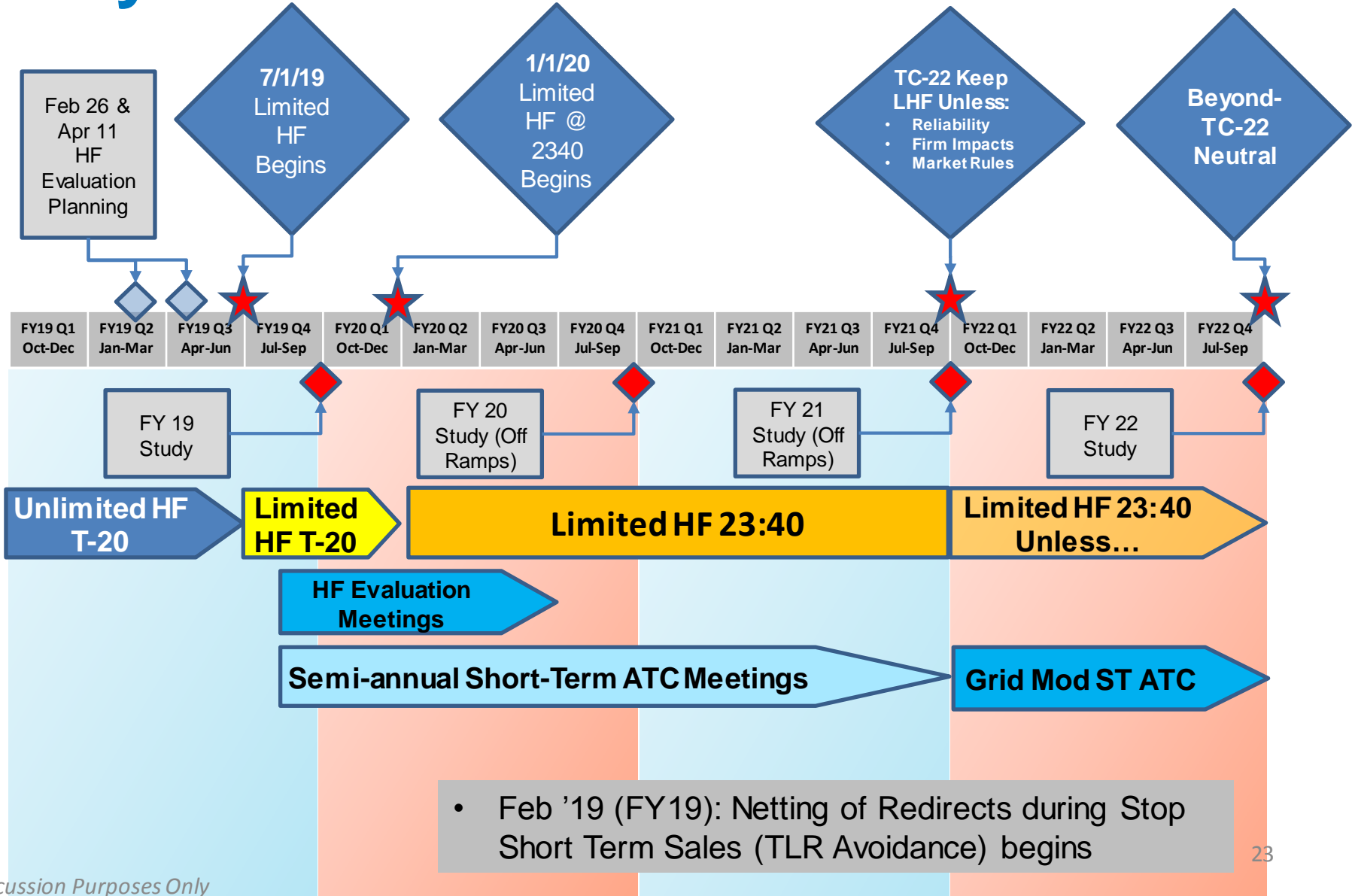
Establish on a series of reports and raw data that would be generated to meet the TC-20 Settlement. Generate monthly reports and append them to the running reports.

Post the updated and generated reports on a monthly basis on BPA's external website:

<https://www.bpa.gov/transmission/CustomerInvolvement/TC20Implementation/Pages/default.aspx>

NEXT STEPS

Hourly Firm & Short-Term ATC Timeline



Draft Evaluation Schedule

HOURLY FIRM PROPOSED CUSTOMER ENGAGEMENT SCHEDULE		
DATE	ENGAGEMENT TYPE	PURPOSE
4/11	Customer Workshop (RHR) - 3 hours	Tell the data story behind the Events - validate the data and depictions with Customers
4/16	Customer Webinar - 2 hours	Customers provide feedback from 4/11
4/24	Customer Webinar - 2 hours	BPA presents updated material based on 4/16 feedback
5/6	Customer Workshop (RHR) - 3 hours	BPA presents 1st draft of Monitoring & Evaluation Plan
5/17	Customer Webinar - 2 hours	Customers provide feedback on the Plan
6/13	TC-20 Customer Workshop (RHR)	BPA presents updated Monitoring & Evaluation Plan
6/13 - 7/11	Customer Comment Period	All customer comments due
7/17	Tech Forum Posting	Final Monitoring & Evaluation Plan shared

Evaluation Results Workshops will be scheduled for September '19, March '20, June '20

Proposed Calendar & Next Steps

- Next meeting:

Webinar: Tuesday, April 16, 2019

- BPA has posted an aggregate calendar on its web site at:

<https://www.bpa.gov/transmission/CustomerInvolvement/Documents/2019-public-meetings.pdf>