BPA South of Allston (SOA) Non-Wires Pilot: Implementation Plan

June 13, 2018

The purpose of this document is to provide an overview of the SOA Non-Wires Redispatch Pilot (SOA Pilot) program. The paper is divided into four sections. The first section provides background on non-wires used to reduce flows during summer peak periods. The second section describes the business practices that were modified to support the implementation of the SOA Pilot. The third section builds off of the business practices to explain how scheduling worked with the SOA Pilot. The fourth section provides a written overview of the process flowchart which is provided separately.

1. Background

For many years, the Bonneville Power Administration has been working to manage congestion on transmission facilities in southwest Washington and northwest Oregon. This constraint is on the amount of electricity capable of being transmitted on the South of Allston (SOA) flowgate.[1] Congestion on this flowgate is a concern during periods of high electricity flow into or through the greater Portland/Vancouver area, such as hot summer afternoons.

In April 2016, BPA issued a Request for Offer (RFO) for a pilot program to acquire a portfolio of third-party supplied non-wires measures in the form of incremental energy (INCs), decremental energy (DECs), and Demand Side Management (DSM) load reduction for use in the BPA Balancing Authority Area. After careful evaluation of twenty bids, BPA short-listed seven suppliers and executed separate contracts with three different third-party suppliers. All contracts were executed in 2016 for a two-year term ending September 30, 2018. To obtain the full value of the SOA Pilot, BPA intends to deploy the maximum of forty hours of capacity and energy from the total portfolio.

2. Business Practices

On May 25, 2016, BPA updated three Business Practices to complement BPA's RFO seeking non-wire measures to mitigate congestion risk on the South of Allston (SOA) during summer peaks. The summary of changes is described below:

A. Scheduling Transmission Service, Version 21

The changes established Bilateral Redispatch for Congestion Management as a program in which BPAT establishes agreements with third parties for INC and DEC resources for the purpose of providing flow relief. Changes required a bilateral agreement with BPA to supply Bilateral Redispatch for Congestion Management and describe how a customer would tag and schedule using a centroid, as either the Source or the Sink, that is created for Bilateral Redispatch Congestion Management purposes only. For more information, see Section J, "Scheduling for Bilateral Redispatch for Congestion Management."

[1] A flowgate is comprised of monitored transmission facilities used to analyze the impact of power flows. The SOA is used to monitor the impact of power flows along the I-5 Corridor.

B. Requesting Transmission Service, Version 28

The changes required customers to have a bilateral agreement with BPA to supply Bilateral Redispatch for Congestion Management. Changes required bidders to have Transmission Service Requests (TSRs) and provides a credit back for either Firm or Non-Firm PTP transmission that is reserved on the BPA Network for Bilateral Redispatch Congestion Management purposes. Transmission customers receive from BPA a billing credit for the transmission reservation for an Original reservation on the BPA Network for Bilateral Redispatch for Congestion Management.

All transmission reservations exclusively used for Bilateral Redispatch for Congestion Management will be charged at the prevailing Firm and Non-Firm PTP Transmission Rate. Transmission to or from the Congestion Management centroid may not be resold or redirected by providers participating in the SOA Pilot. For more information, see Section 6, "TSRs for Bilateral Redispatch for Congestion Management."

C. Redispatch and Curtailment Procedures, Version 11

The changes made involved establishing Bilateral Redispatch Congestion Management as one reason BPA would deploy and execute Bilateral Redispatch for Congestion Management. It also specifies that a customer must have a bilateral agreement with BPA to participate in the program. For more information, see Section B, "Bilateral Redispatch for Congestion Management."

3. Scheduling

BPA adopted in its Requesting Transmission Service Business Practice the creation of a new Bilateral Redispatch centroid (BPAT.RD). A centroid is a scheduling point on the transmission system that is not connected to a physical transmission facility. BPA deploys the INCS and DECs as a joint schedule using the centroid. The INCs are scheduled from the source generator (and/or DR) to the centroid scheduling point. The DECs are scheduled from the centroid to the generator (and/or DR). These two transactions function as one whole schedule to create counterflow.

As part of the SOA Pilot, transmission is reserved and requested on an "original" transmission service request and may not be resold or redirected, which preserves the value of the SOA Pilot. BPA provides a billing credit for such transmission reservations on the BPA Network for the express purpose of providing SOA congestion relief.

For scheduling purposes, BPA adopted additional scheduling requirements, including a bilateral agreement where transactions must be scheduled using the e-tag type used as "normal" and where each schedule must provide an A-REF number.

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The following is a summary of the product notice period, tag type, source or sink points, product code and transmission reservation for the SOA Pilot transactions.

Product Notice Period	Tag Type	Source or Sink Point	Product Code	Reservation*
Day ahead	Normal	BPA Centroid	G-FP	Firm or NF PTP

4. Process flowchart

BPA staff developed a process flowchart to illustrate the sequence of steps to implement the SOA Pilot. Events are deployed consistent with deployment limits, specified in the contracts with each third party provider. Below is an overview of the process:

a) On each pre-schedule day, sometime after 4:15am transmission dispatchers check the Event Advisory tool to determine if congestion is forecasted or not. If congestion is forecasted, transmission dispatch determines whether to trigger the event, and notifies real-time scheduling of the event, the date, and the hours.

b) Soon after 5:00am, a notice on OASIS is posted prior to pre-schedule and BPA initiates TLR Avoidance on SOA (including limiting new firm sales and redirects) for the date and hours of the event.

c) Before 9:00am on the pre-schedule day, real time transmission scheduling places phone calls to each of the INC providers to request that each 3rd party provider submit e-Tags with their maximum contractual redispatch amount.

d) After 9:00am on the pre-schedule day, real time transmission scheduling calls the DEC supplier to request an amount of redispatch equal to the total expected INC supply.

e) All post-event information is made available to analysts to validate then is transferred to customer billing consistent with internal billing procedures.

f) At any point, if a deviation from the deployment plan happens it is immediately flagged and noticed to implementation staff to take appropriate action.