



# Updates on New ATC Paths

August 30, 2023



# Agenda

1. Updates to North of Pearl Implementation
2. Modeling change for Transmission Service Requests (TSRs) with JOHNDAYINTI500 Source/Sink and JOHNDAY Point of Receipt (POR)/Point of Delivery (POD)
  - a. Summary of Issue
  - b. Upcoming Change
  - c. Change Impacts
  - d. Implementation Timeline
3. Wrap up

# Updates to North of Pearl Implementation



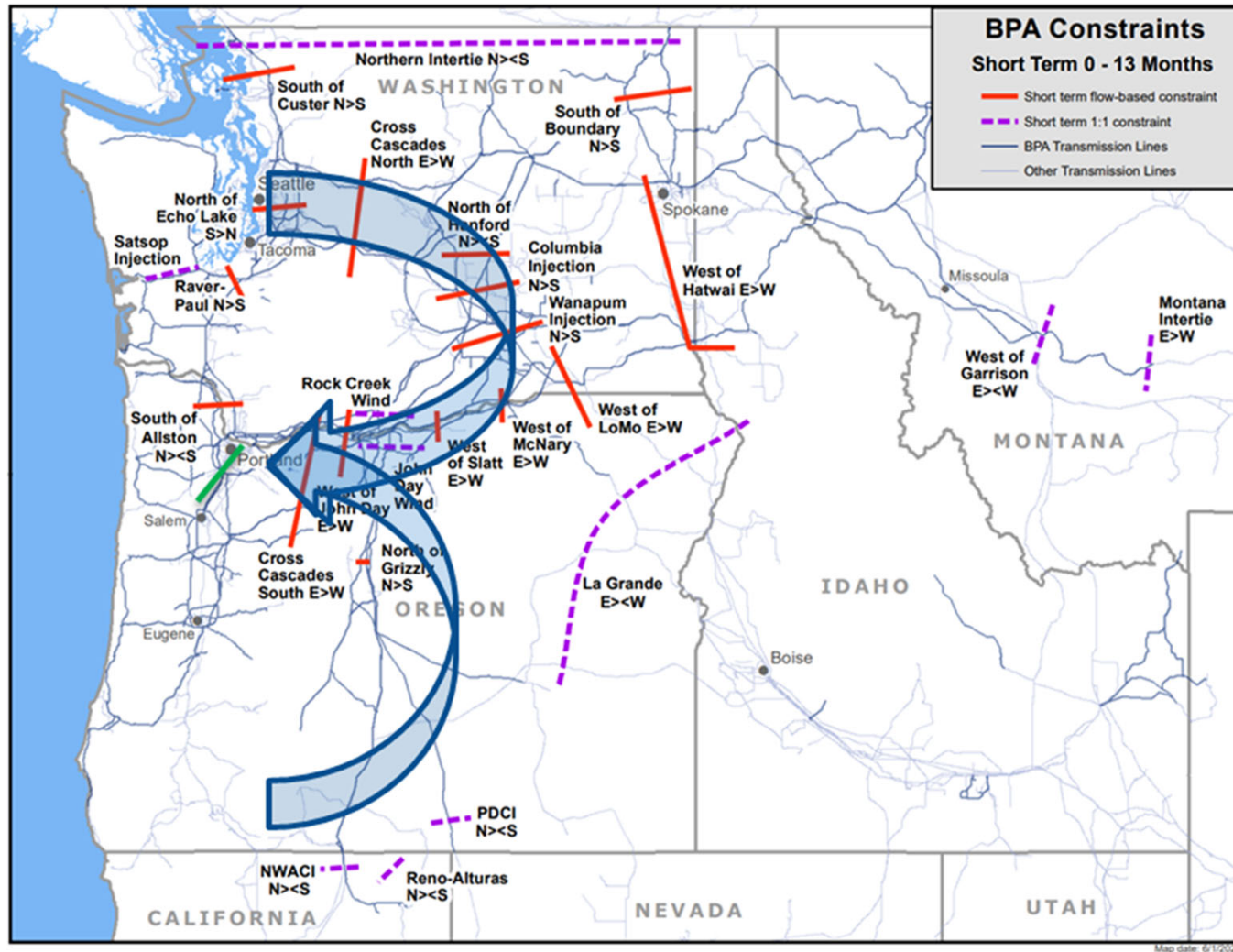
# Updated Timeline for Congestion Management on North of Pearl

1. BPA is in the process of implementing the North of Pearl path in the Portland metro area
2. BPA accelerated the implementation date for congestion management across North of Pearl from November 1<sup>st</sup>, 2023, to August 11<sup>th</sup>, 2023
3. The implementation date for congestion management was accelerated due to operational issues that BPA expects to experience in the Portland metro area when load center average temperatures of 78°F or higher occur for three or more days in a row
4. Given the heat wave in the Portland metro area starting August 13<sup>th</sup>, 2023, BPA deployed North of Pearl congestion management tools on August 11<sup>th</sup>, 2023 in order to support reliability

# Updated Timeline for Congestion Management on North of Pearl (cont.)

5. There are no other timeline changes to the North of Pearl implementation
  - a. BPA will add North of Pearl to OASIS on October 18<sup>th</sup>, 2023, with an effective date of November 1<sup>st</sup>, 2023
  - b. Once the path is added to OASIS, any portion of any new TSR requiring service for November 1<sup>st</sup>, 2023 and beyond will require ST ATC across this path, as posted to OASIS

# North of Pearl Location



# Customer Tools on North of Pearl

1. BPA has added North of Pearl to the following Short-Term Available Transfer Capability tools posted to [Transmission Availability - Bonneville Power Administration \(bpa.gov\)](https://www.bpa.gov/Transmission-Availability)
  - a. Short-Term Original Transmission Service Request Calculator
  - b. Short-Term Redirect Transmission Service Request Calculator
  - c. Short-Term PTDF Table

# Modeling change for TSRs with JOHNDAYINTI500 Source/Sink and JOHNDAY POR/POD





# Summary of Issue

1. On June 1<sup>st</sup>, 2023, BPA implemented the North of Grizzly path to study the transmission system in central Oregon, set appropriate limits for Available Transfer Capability (ATC), limit new TSRs to the established ATC, and curtail schedules in case of congestion
2. This path is geographically located between John Day and the California-Oregon Border (COB), which BPA considers to be the AC Intertie (NWACI)
3. When the North of Grizzly path was implemented, BPA committed to monitoring the interaction of the North of Grizzly path with the NWACI to ensure firm rights across the NWACI were being respected

## Summary of Issue (cont.)

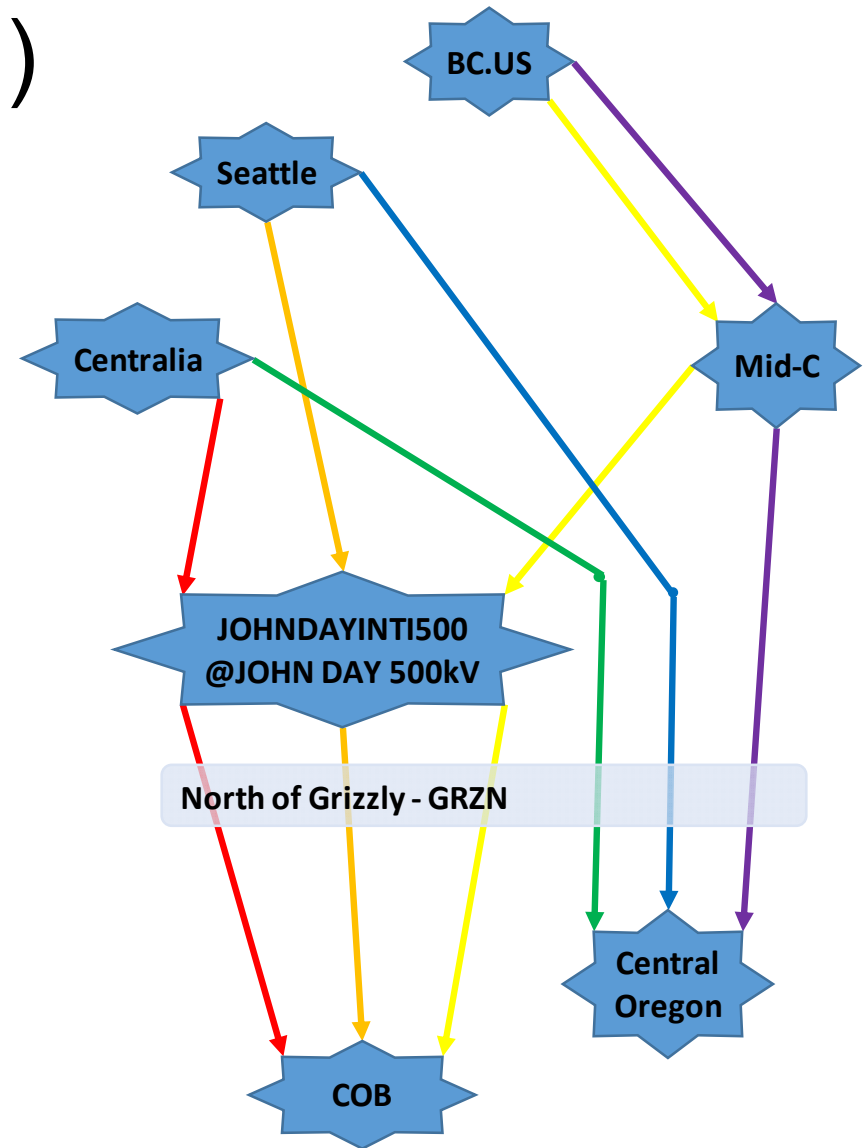
4. North of Grizzly is a flow-based network path in both the NERC (0-13 month) and Planning (beyond 13 month) time horizons
5. Customers scheduling on the NWACI require a network segment of transmission with a Source/Sink of JOHNDAYINTI500 and POR/POD of JOHNDAY as well as a NWACI segment
6. BPA requires separate TSRs for the network and NWACI segments, and evaluates the network and NWACI TSRs independently of each other for ATC purposes
7. The network segment is evaluated via a flow-based method using Power Transfer Distribution Factors (PTDFs) across all flow-based paths, and the NWACI segment is evaluated using a 1:1 method, where 1 MW of reserved capacity equals 1 MW of impact across only that path

## Summary of Issue (cont.)

8. Currently, BPA uses the John Day 500 kV PTDF to evaluate network TSRs with a Source/Sink of JOHNDAYINTI500 and POR/POD of JOHNDAY
9. The John Day 500 kV bus is located north of the North of Grizzly path
10. By using the John Day 500 kV PTDF in the evaluation of these network TSRs, BPA can under-account for the impacts of TSRs flowing over the North of Grizzly path, as this path is located to the south of the John Day 500 kV bus

# Summary of Issue (cont.)

11. The visual illustrates the location of the John Day 500 kV bus in relation to the North of Grizzly path:



# Upcoming Change

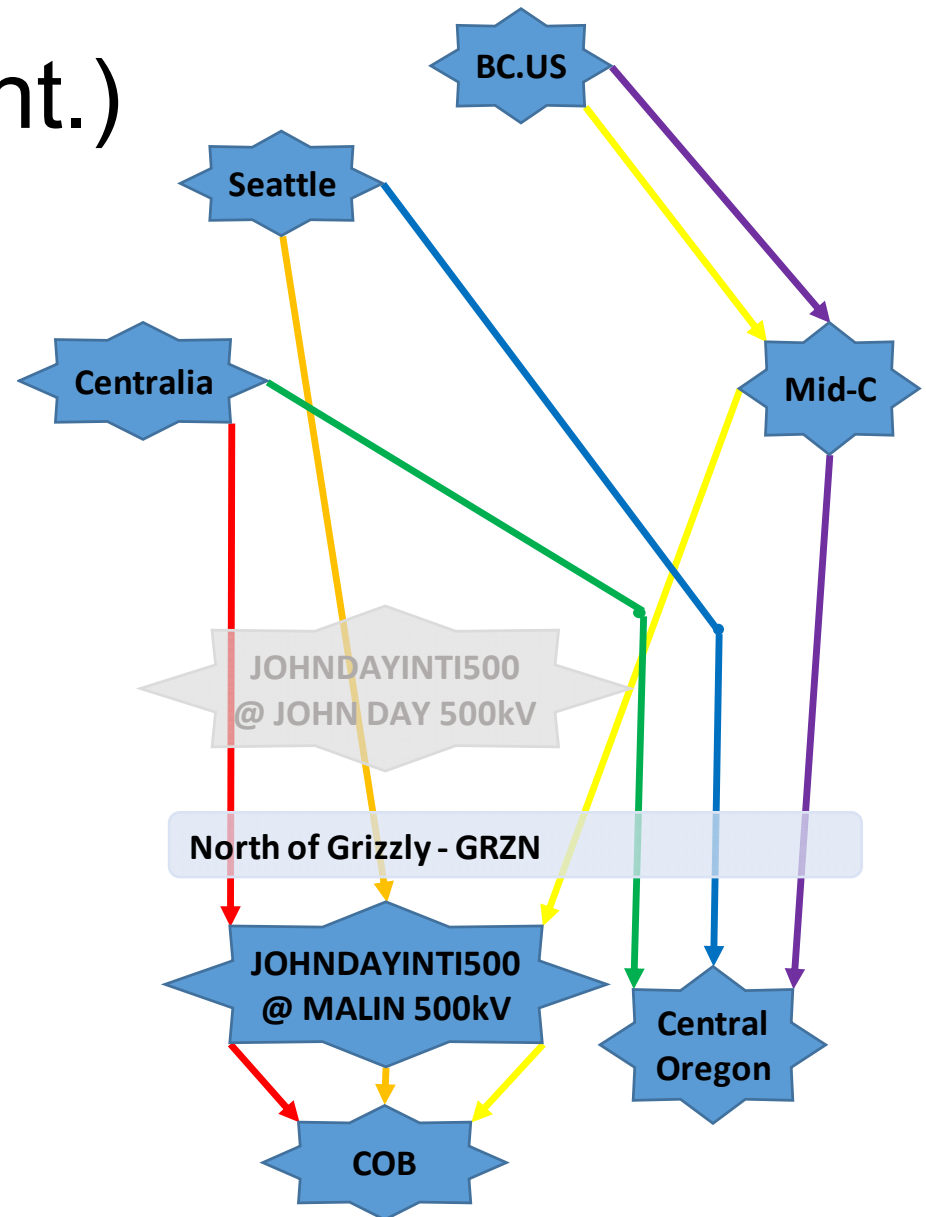
1. BPA has the following objectives for the transmission system in central Oregon:
  - a. Ensure that firm rights across the NWACI are respected
  - b. Ensure that the true impacts of incremental TSRs across North of Grizzly are being captured, to avoid overselling across this path and exacerbating the need for congestion management across North of Grizzly
2. In order to accomplish these objectives, BPA will be modifying the PTDF used to evaluate network TSRs with a Source/Sink of JOHNDAYINTI500 and POR/POD of JOHNDAY from the John Day 500 kV PTDF to the Malin 500 kV PTDF
3. Since the Malin 500 kV bus is located to the south of the North of Grizzly path, this PTDF will allow BPA to capture the impacts of TSRs flowing over the North of Grizzly path more appropriately

# Upcoming Change (cont.)

- The visual below illustrates the location of the Malin 500 kV bus in relation to North of Grizzly, as well as the PTDF impacts between the current and future evaluation points:

**North of Grizzly PTDF Impact**

Mid-C to JOHNDAYINTI500	
Status Quo	
JOHN DAY 500kV	-0.0711
Proposal	
MALIN 500 kV	0.6857



# Change Impacts

1. This change only impacts how long-term and short-term TSRs are evaluated
2. Even though BPA is moving to a study process for long-term TSRs on October 1<sup>st</sup>, 2023, PTDFs will still be used to determine impacts of long-term TSRs
3. Long-term TSRs with a Source/Sink of JOHNDAYINIT500 will be evaluated with a Malin 500 kV PTDF
4. Short-term TSRs with a POR/POD of JOHNDAY will be evaluated with a Malin 500 kV PTDF

## Change Impacts (cont.)

5. The PTDF impacts (.03 or greater) of this change on the evaluation of a 100 MW TSR from Mid-C to JOHNDAY are shown below:

Path	PTDF impact: current evaluation bus of John Day 500	PTDF impact: proposed evaluation bus of Malin 500	ATC impact: current evaluation bus of John Day 500	ATC impact: proposed evaluation bus of Malin 500
NORTH OF GRIZZLY N>S	-0.0711	0.6857	0 MW	69 MW
WEST OF JOHN DAY E>W	-0.362	-0.1757	0 MW	0 MW
CROSS CASCADES SOUTH E>W	-0.1296	0.0221	0 MW	2 MW (de minimis)
WEST OF HATWAI E>W	-0.0265	-0.0669	0 MW	0 MW
WEST OF MCNARY E>W	0.1863	0.1516	19 MW	15 MW
NORTH OF HANFORD S>N	-0.5883	-0.5581	0 MW	0 MW
NORTH OF HANFORD N>S	0.5883	0.5581	59 MW	56 MW



## Change Impacts (cont.)

6. Since the PTDF used to evaluate and calculate impacts of short-term TSRs with a POR/POD of JOHNDAY will change to Malin 500 kV, customers will see a shift in short-term ATC
7. There will not be any impacts to BPA's curtailment process
  - a. BPA curtails from the Source/POR to Sink/POD on each tag
  - b. BPA already uses the Malin 500 kV PTDF to perform curtailments on schedules with the JOHNDAYINTI500 Source/Sink and JOHNDAY POR/POD
8. This change does not impact any long-term contracts, or long-term or short-term reservation or scheduling points - customers will continue to use the same points as today
9. The modeling change will apply to all existing and future long-term and short-term request types (e.g. Original, Redirect, etc)

# Implementation Timeline

- BPA intends to implement this change with a system baseline
- BPA's next baseline is scheduled for Wednesday, October 18th, 2023
- BPA will update the appropriate customer tools located on the [Transmission Availability - Bonneville Power Administration \(bpa.gov\)](#) page as part of this change

## Wrap up

- Thank you for engaging with BPA on issues relating to BPA's implementation of new ATC paths across BPA's transmission system
- Please send any questions you may have about the changes discussed today to [techforum@bpa.gov](mailto:techforum@bpa.gov), with a copy to your Account Executive