

# New Network Flowgates

June 20, 2012



# Agenda

- MOD Requirements
- Achieving Compliance
- New Flowgates and Map
- What do new flowgates mean?
- Project Plan and Timeline
- Communications Next Steps
- Appendix: Flowgate Definitions

# MOD Requirements

- MOD-001 R1 requires BPA to select one of three prescribed ATC Methodologies (MOD-028, MOD-029, or MOD-030) for each ATC Path.
  - ATC Path: any POR/POD combination where we calculate ATC and any posted path.
  - Posted path: any Balancing Authority (BA) Interconnection, any path for which service is denied, curtailed, or interrupted for more than 24 hours in the past 12 months; and any path for which a customer requests to have ATC or TTC posted.
- As a reminder, BPA has selected to use MOD-029 and MOD-030 for its ATC Paths.
- Where MOD-030 is selected, MOD-030 R2 provides minimum criteria to be used to identify sets of Transmission Facilities as Flowgates:
  - In particular, any limiting element must be kept within its limits for its associated worst Contingency by operating within the limits of another Flowgate or Path. Otherwise a new Flowgate is required.

# MOD-030 R2 Compliance

- As part of BPA's compliance program, BPA conducts an annual self-certification for all NERC Reliability Standards.
- In the 2011 annual self-certification process, we discovered that for the ATC Paths we chose to use MOD-30, our current set of Flowgates are insufficient to meet compliance with MOD-030 R2.
  - A self-report and mitigation plan were filed to WECC to address the violation.
- BPA study engineers compiled a list of new flowgates that must be added in order to achieve compliance.
- As filed in the Mitigation Plan with WECC, all new flowgates required for compliance with MOD-030 R2 must be implemented by **February 15, 2013**.
- **Note:** The NERC ATC MODs apply to Flowgates in the 0-13 month timeframe only. We are evaluating the applicability of the new Flowgates for the beyond 13 month time horizon.

# What do New Flowgates Mean?

- System Operating Limit (SOL) studies will be run and used to determine Total Flowgate Capabilities (TFCs).
- Existing Transmission Commitments (ETC) will be calculated for the Flowgates using BPA's and adjacent Transmission Service Providers' reservations and schedules.
- Available Flowgate Capability (AFC) will be calculated and used for evaluation of new requests that fall within the 0-13 month timeframe.
  - Only the portion of a long-term request that falls within the 0-13 month timeframe will be evaluated for AFC on these new flowgates.
  - There will be no pending capacity held out on these flowgates for long-term requests since the flowgates will not be added in the long-term as of Feb. 15, 2013.
- New Flowgates will be added to the appropriate Congestion Management Tools to be able to implement curtailments and redispatch if needed to relieve flow on the flowgates.
- Dispatchers' Standing Orders will be modified or developed to provide BPA dispatchers with operating procedures for the new flowgates.

# New Network Flowgates

- We identified the following flowgates that must be added by February 15, 2013 to comply with MOD-30 R2:
  1. North of Echo Lake (S>N)
  2. South of Custer (N>S)
  3. Columbia Injection (N>S)
  4. Wanapum Injection (N>S)
  5. West of Lower Monumental (E>W)
  6. South of Boundary (N>S): will likely a MOD-029 Path
  7. South of Allston (S>N)
  8. North of Hanford (S>N)
  
- The current Monroe-Echo Lake flowgate will be removed with the addition of the South of Custer flowgate.



# Communication Next Steps

- BPA is meeting with individual customers and transmission operators and service providers to discuss the flowgates that affect them more in depth.
- We will be providing an update on the new flowgates at the next customer forum.
- Send all questions to Tech Forum at [techforum@bpa.gov](mailto:techforum@bpa.gov).

# Appendix: Flowgate Definitions



# New Flowgate Definitions

- South of Allston (S→N)
  - Keeler-Allston 500kV
  - Trojan – St. Marys 230kV
  - Trojan – Rivergate 230kV
  - Ross – Lexington 230kV
  - St. Helens – Allston 115kV
  - Merwin – St Johns 115kV
  - Seaside – Astoria 115kV
  - Clatsop 230/115kV
- South of Boundary (N→S)
  - Bell - Boundary #1 230kV line
  - Bell – Boundary #3 230kV line
  - Usk – Boundary #1 230kV line
  - Boundary 230/115kV transformer (possibly add to flowgate)
- North of Hanford (S→N)
  - Grand Coulee – Hanford #1 500kV line
  - Schultz-Wautoma #1 500kV line
  - Vantage – Hanford #1 500kV line
- Columbia Injection (N→S)
  - Grand Coulee #1 - Columbia 230kV line
  - Grand Coulee #3 - Columbia 230kV line
  - Rocky Reach – Columbia #1 230kV line
  - Rocky Reach – Columbia #2 230kV line
  - Valhalla #1 - Columbia 115kV line
  - Valhalla #2 - Columbia 115kV line

# New Flowgate Definitions (continued)

- Wanapum Injection (N→S)
  - Midway-Vantage #1 230kV line
  - Priest Rapids #3 - Midway #3 – Wanapum 230kV line
- North of Echo Lake (S→N)
  - Echo Lake – Sno-King Tap 500kV line
  - Echo Lake – Maple Valley 500kV line (metered on 230 side of TX)
  - Covington – Maple Valley 230kV line
- West of Lower Monumental (E→W)
  - Ashe – LoMo 500kV line
  - Hanford - LoMo 500kV line
  - McNary - LoMo 500kV line
- South of Custer (N→S)
  - Custer – Monroe #1 500kV line
  - Custer – Monroe #2 500kV line
  - Custer – Murray 230kV line
  - Custer – Bellingham 230kV line