Proposed OFO Tariff Changes

11-9-18 / Northwest Pipeline Customer Conference Call





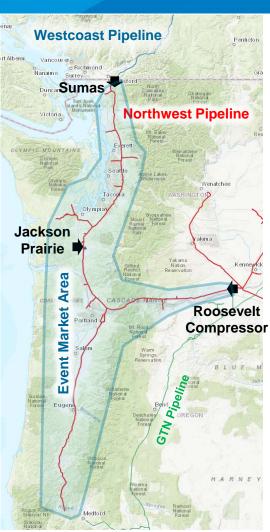
Northwest Pipeline Overview



- Northwest Pipeline is a Federally regulated interstate natural gas pipeline
- Local Utilities, Power Generation Plants, and Industrial Facilities rely on Northwest Pipeline as the primary source of gas in significant portions of Western Washington and Oregon
- Northwest is bi-directional and enables customers to transport gas from Canadian or Domestic supply sources, with gas entering the market area at Sumas Receipt or through Roosevelt Compressor:
 - Sumas Receipt can receive up to 1.3 Bcf/d of Canadian production from Westcoast Pipeline at the Canadian border
 - Roosevelt Compressor can flow up to 0.55 Bcf/d from multiple domestic interconnects and producers
- Jackson Prairie Storage (25.6 Bcf capacity) can deliver up to 1.2 Bcf/d into the market area and is used for system balancing by Northwest Pipeline



October 9, 2018 - Northwest System Status



On October 9, Northwest customers were delivering at an average rate of approximately 1.28 Bcf of gas into the Market Area, and had scheduled an additional 1.21 Bcf for Oct 10

Expected Supply to Market Area	October 9 (Intraday)	October 10 (Evening)
Sumas Receipt	878,553	959,460
Roosevelt Compressor	397,763	246,052
Total	1,276,316	1,205,512

- Planned maintenance was occurring on Northwest Pipeline prior to the winter season
 - Jackson Prairie was reduced from 1.3 Bcf to 0 as part of maintenance scheduled to last Oct 1-12
 - Roosevelt Compressor was undergoing upgrades and reduced from 550,000 to only 400,000 Dth/d as part of maintenance scheduled until October 15.
 - Plymouth LNG, storage facility (east of Roosevelt)
 was liquifying and Clay Basin was requiring
 injections for downhole testing

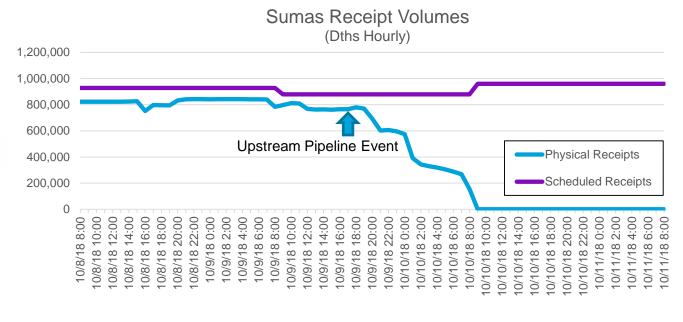
Supply Source	Peak Capacity	Available Capacity
Sumas	1,314,750	1,314,750
Jackson Prairie	1,300,000	0
Roosevelt Compressor	546,000	400,000
Total	3,160,750	1,714,750



Westcoast Incident - October 9 ~6:45 p.m. MST



- On the evening of October 9, 2018, Westcoast Energy Inc.'s (Westcoast) BC Pipeline experienced a rupture on a 36-inch diameter upstream pipeline, causing a significant interruption to gas supply at Northwest's Sumas, Washington receipt point
- Deliveries at Sumas immediately began to fall and its was recognized the market would be in extreme danger of losing service to critical residential and other core loads
- By 9 a.m. on October 10, Northwest was receiving ZERO of 959,460 Dth/d customers were expecting to receive from Sumas

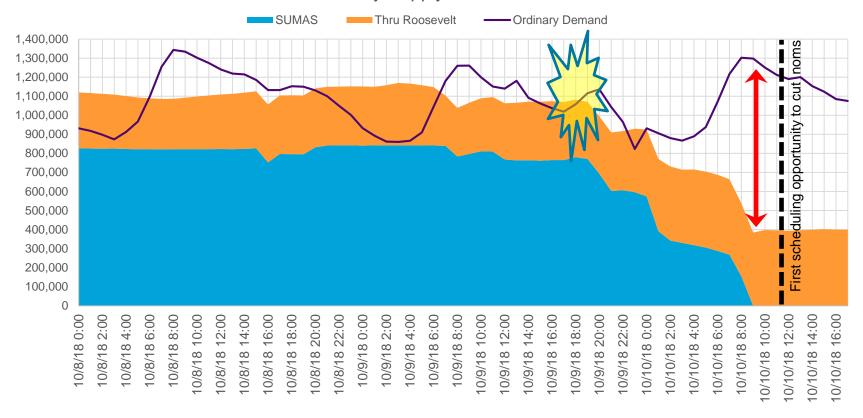




Critical Operating Condition Ensues

> Market area needs to shed Demand





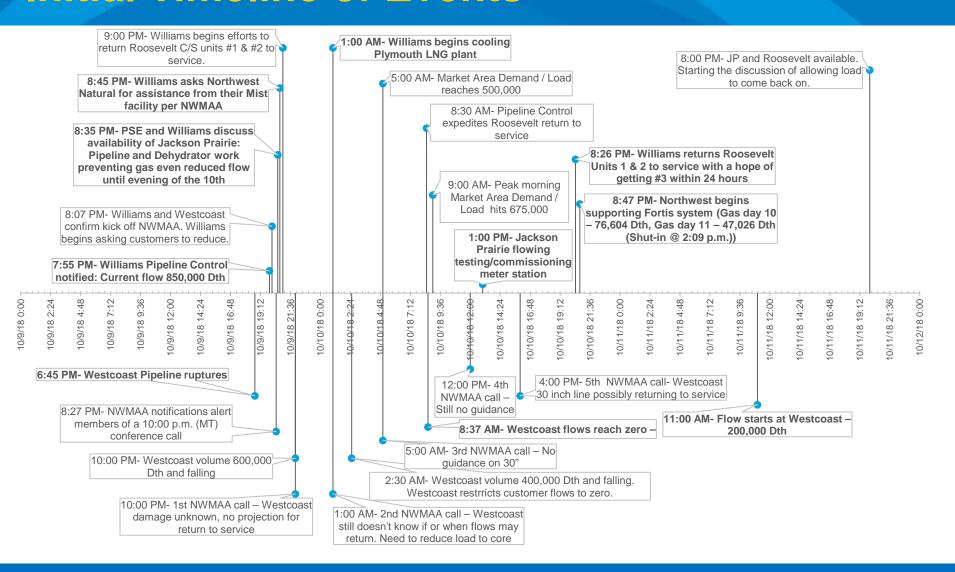


Key Market Responses to Incident

- > Activated the Northwest Mutual Assistance Agreement (NWMAA)
 - Consists of LDCs, pipelines and industry groups in the Pacific Northwest who operate, control natural gas assets or have an ability to assist in the case of an emergency
 - First call by 10:00 p.m. (approximately three hours after the incident)
 - Call included Westcoast, Fortis, Northwest, LDC's and power participants
 - Steps were put in-place to shed natural gas demand
 - Major power, industrial and LDC load started to come off the system immediately
- > Northwest issued overrun entitlement for gas day October 10 at 5%, thereafter 3%
- Northwest accelerated work to restore full operational service at its Roosevelt compressor station
- > Puget Sound Energy and Northwest expedited Jackson Prairie's return to service
- Northwest took steps to make Plymouth LNG supply available if required
- > Northwest Natural provided significant relief by serving its demand from Mist



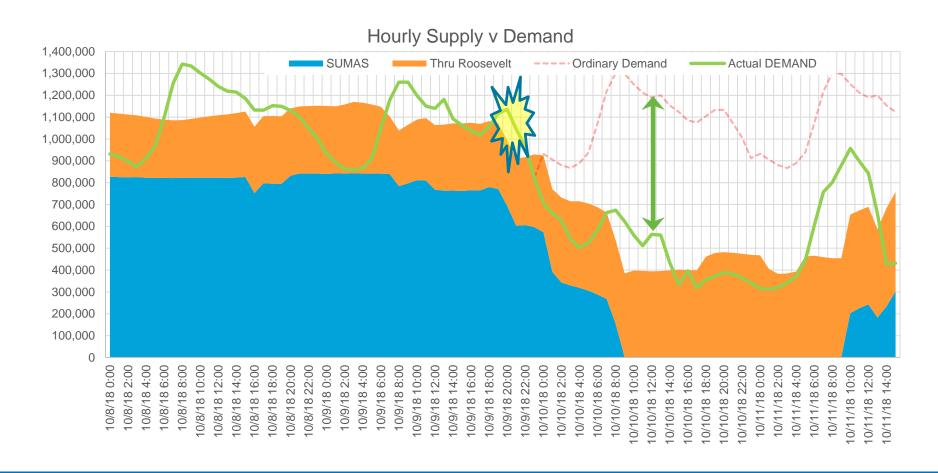
Initial Timeline of Events





NWMAA Success Story

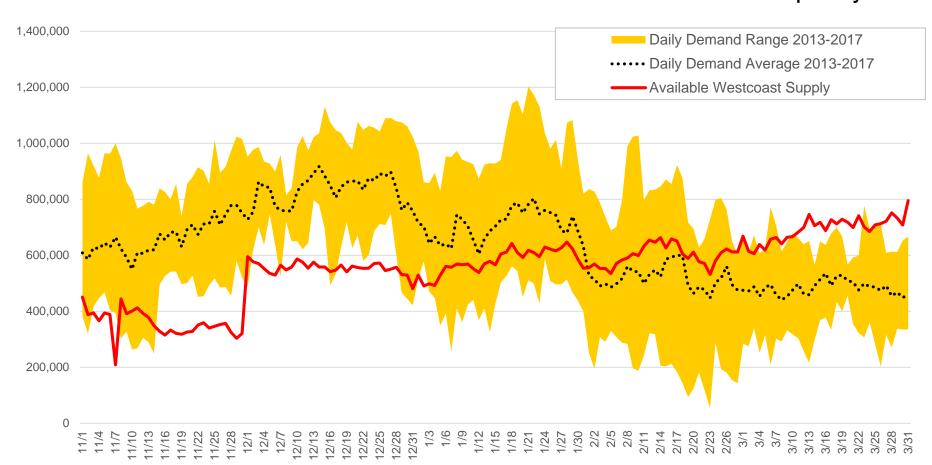
> Customers shed demand and balance Northwest Pipeline





Northwest Poised for Tight Winter

Historical I-5 Market Area Demand in Excess of Roosevelt Capacity





Section 14.15 (d) - Unable to Find a Market

- > Section 14.15(d):
- If Shipper is unable to find a market at its primary delivery point to comply with the terms of an OFO, Northwest will accept shipper's supply by creating a shipper imbalance
- > Proposed Changes
 - Relocate the general OFO provision under CSOFO Section 14.15(d)(i) and Mustflow OFO Section 14.15(d)(iii) since the provision doesn't apply to Realignment Shippers
 - Remove the reference to primary delivery points, since Northwest currently accepts supply if Shipper can't find any market



Section 14.15 (f) – Failure of Gas Supply

- > Section 14.15(f): "...If Shipper is unable to comply with the terms of an OFO due to failure of gas supply, penalties shall not be assessed to Shipper..."
 - Note: Historically, this provision has never been used by a shipper
- > Realignment Shippers
 - Northwest has the authorization to decrease Shipper's nominations if they fail to comply with an OFO due to failure of gas supply
 - Reservation charge adjustments do not apply
- > Contract-specific OFO (CSOFO) and Must-flow Shippers
 - Transporter will verify the good faith efforts of Shipper to obtain a gas supply



Realignment Shippers – Failure of Gas Supply

> Proposed Changes

- Relocate Realignment Shipper's rights associated with the failure of gas supply provisions under the Realignment OFO Section 14.15(d)(ii)
- Remove the tariff inconsistency that limits compliance to primary receipt points since it has no applicable meaning
 - Shippers can elect to voluntarily decrease their nominations without realigning
- Provide Northwest with the authorization to decrease Realignment Shipper's scheduled quantities if they haven't complied with the Realignment OFO when Northwest has invoked a Supply Shortage OFO



CSOFO and Must-flow OFO Shippers – Failure of Gas Supply

> Proposed Changes

- Relocate CSOFO and Must-flow OFO Shipper's rights associated with the failure of gas supply provisions under the CSOFO Section 14.15(d)(i) and the Must-flow OFO Section 14.15(d)(iii)
- Remove the tariff inconsistency that requires compliance from primary receipt points
- Provide additional time to obtain gas supply by moving the compliance deadline to the Intraday 1 cycle when a Supply Shortage OFO has been invoked by Northwest
- Require Shippers to provide a signed affidavit prior to the Intraday 1 cycle

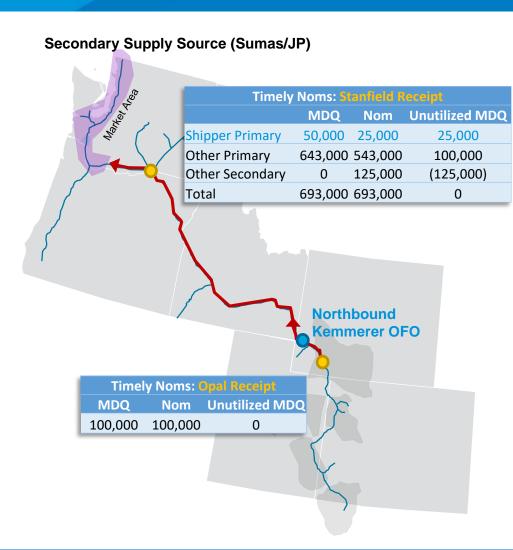


CSOFO and Must-flow OFO Shippers – Failure of Gas Supply

- > Remove Primary Receipt Point limitation
 - Shipper's OFO obligations pertain to flows through a given corridor, not to primary receipt to primary delivery points
 - FERC policy and Northwest's Tariff do not allow Northwest to reserve Shipper's primary receipt point rights since Timely secondary requests have a higher priority that Intraday primary requests
 - Necessary to prevent operational problems
 - Limits the shifting of OFO burdens



Realignment Shipper's Alternate Receipt Point Exposure



Shipper's Primary Path:
Stanfield and Opal → Market Area

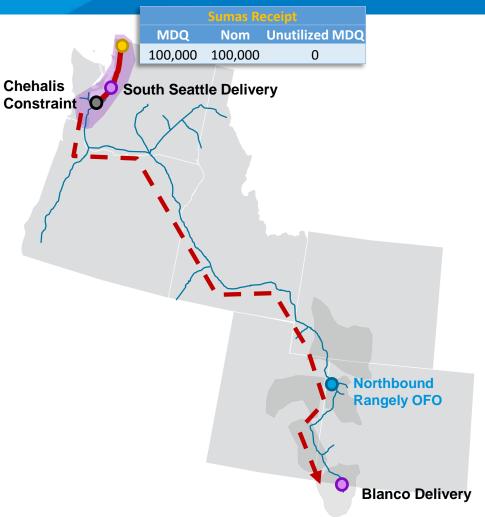
> To comply with an OFO, shippers may have to use secondary supply sources

> Example:

- Shipper's OFO Realignment Obligation is 10,000 Dth through Kemmerer
- Shipper will be unable to realign to Stanfield in the Evening cycle, since Secondary Nominations in the Timely cycle has filled the remaining available capacity
- As a result, Shipper will have to realign 10,000 Dth from a secondary supply source



Must-Flow Shipper's Alternate Receipt Point Exposure



Shipper's Primary Path: Sumas Receipt → Blanco Delivery

> Example:

- Shipper schedules its supplies from Sumas to secondary delivery point at South Seattle in the Timely Cycle
- Shipper has a 5,000 Dth Must-flow OFO obligation southbound through Rangely

> Evening Cycle

 If Chehalis is full going south, Shipper will have to flow from a secondary receipt point south of Chehalis to meet its OFO obligation through Rangely



Supply Shortage OFO

- > Supply Shortage OFO
 - Shippers subject to a Supply Shortage OFO are those shippers with primary firm corridor rights that have been scheduled through a constraint point
- > A Supply Shortage OFO is only in effect when:
 - Northwest has invoked a Supply Shortage OFO due to a major supply interruption; and
 - The revised OFO provisions are unable to reduce the scheduled quantities through a given constraint point or provide the necessary displacement



Supply Shortage OFO (Cont'd)

- In summary, to minimize the impact to Shippers subject to a Supply Shortage OFO, Northwest is seeking approval:
 - to decrease Realignment Shippers previously scheduled quantities if they fail to comply with a Realignment OFO;
 - to require CSOFO and Must-flow OFO Shippers to use good faith efforts to obtain supply at any point on the downstream side of an OFO constraint point; and
 - provide CSOFO and Must-flow OFO Shippers until the Intraday 1 cycle to obtain such supply