



North Mid-Columbia Joint Transmission

Project Update – November 5, 2018
(Rapids-Columbia 230 kV Line)



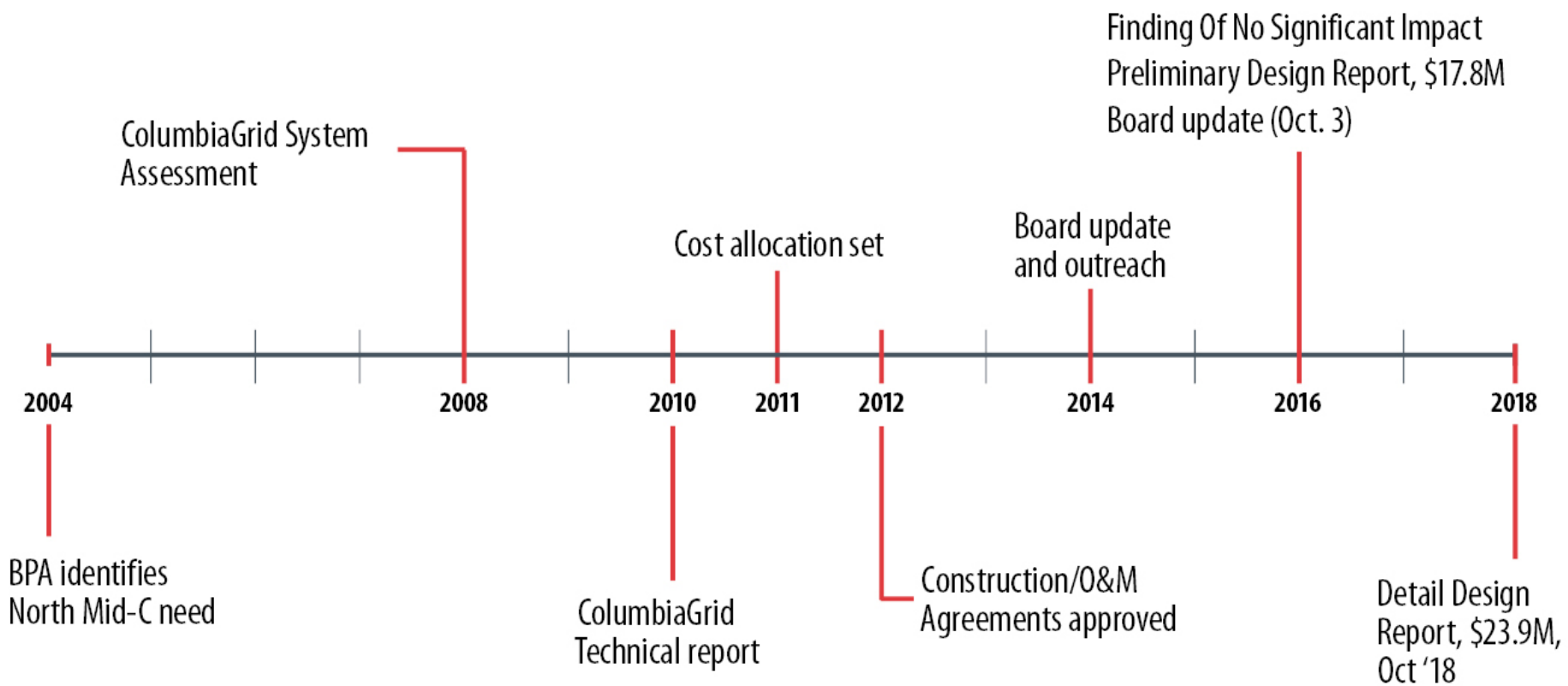
What we'll cover today

- Project benefits
- Project history
- Project description
- What has changed since 2016
- Next steps

SEEKING A NOD OF CONCURRENCE

Benefits

- Regional solution
- Reduces transmission congestion
- Accounts for new Grant and Douglas projects
- Provides greatest operational flexibility
- Provides capacity for future system growth
- Much less expensive than individual utility solutions



What has changed since 2016

- Design has progressed to 90% and the detailed design estimate is now complete.
- Magnitude of estimate provides an opportunity for an off-ramp.
- BPA has continued to negotiate with the Colville and Yakama tribes for cultural monitoring during construction



Project Description

- New 230kV Rapids to Columbia Switchyards,
~ 9 miles and new 230kV bay at Columbia
- \$14 million estimate
- \$23.9 million detailed design estimate
- Goal: **Complete 2020**

Construction Funding - Allocations

- “Single-Utility” planning solution & District avoided costs
- Best long-term solution
- Demonstrates the Northwest can collaborate on cost allocation issues (FERC Order 1000)



42.20%



CHELAN COUNTY

23.85%



17.25%



16.70%

Construction

Construction and ownership responsibilities:

- Douglas will design, construct, own and operate:
 - 9-mile 230kV line
 - Switchyard terminal at Rapids
- BPA will design, construct, own and operate:
 - Switchyard terminal at Columbia
 - Lead the Environmental Assessment
- Chelan and Grant are funding partners
- Provides protections for cost overruns with off-ramps at 30% and 90% design

Where We Are

- \$800k for environmental work funded
- Finding of No Significant Impact published March 2016
- \$23.9 million detailed design estimate
> 15% off-ramp; increases driven by:
 - \$1.4M Cultural Monitoring
 - \$1.6M Increase in steel prices
- Benefit review

Additional Benefits

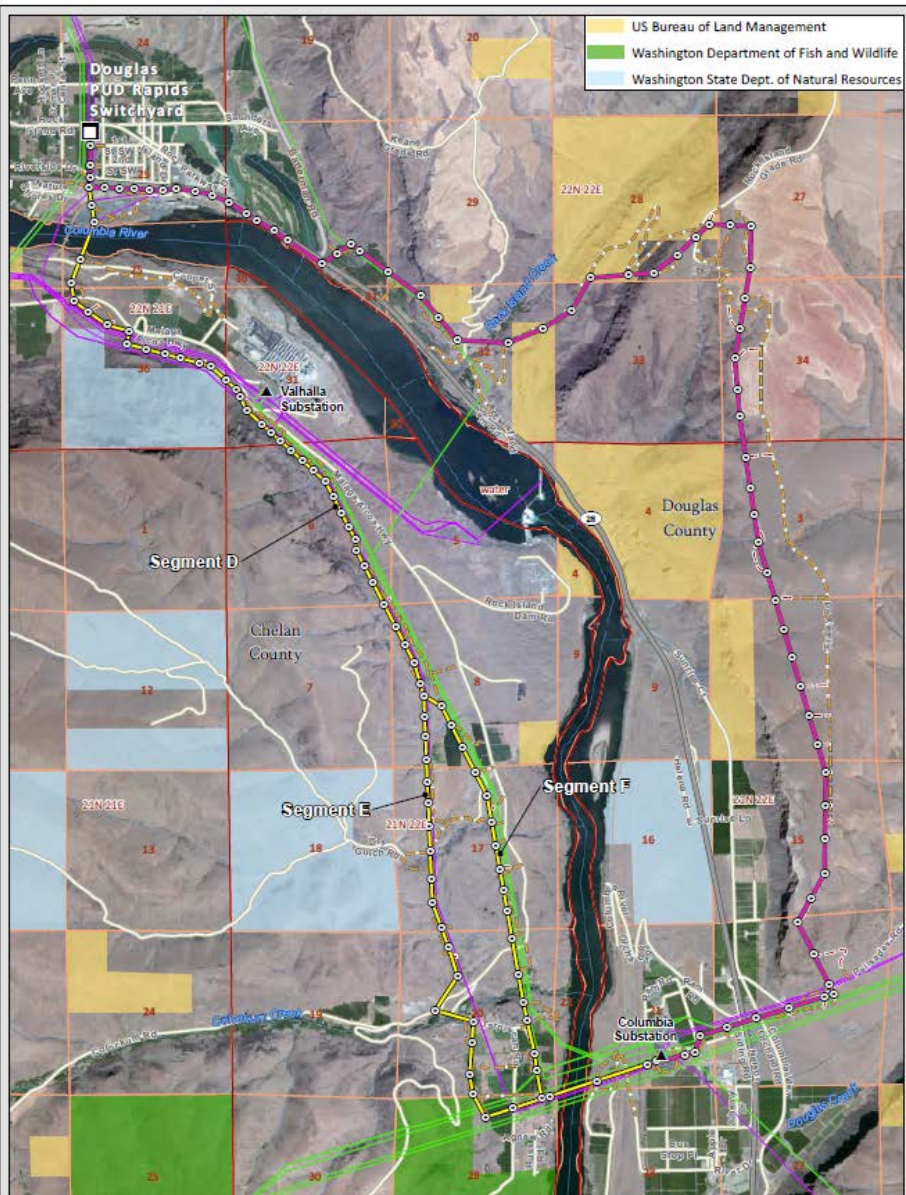
- Project Cost: \$23.9M less \$3.3M sunk = \$20.6M net costs to finish
- Chelan's share is 23.85%, which is \$5.7M & \$4.9M net of sunk costs
 - Break even analysis at 7% IRR
 - Benefits include ½ aMW of transmission line loss savings plus 2.3 hours of avoided generation reduction at Rocky Reach to break even
 - 2016 analysis required 5.6 hours, which is more than the 2.3 hours shown in the current analysis and indicates the continued financial viability of the project.

Next Steps

- Seek concurrence to move past the off-ramp
- Align the project budget with the new estimate, \$1.5M increase (2019 budget)

Questions

An aerial photograph of a valley. In the foreground, a river flows through a lush green area with several houses and a large vineyard. A road runs parallel to the river. In the middle ground, there are more vineyards and a large, calm body of water. The background features rolling hills and a prominent, layered mountain range under a clear sky. The word "Questions" is overlaid in large white text across the center of the image.



Project Vicinity Map
Proposed Northern Mid-Columbia Joint Project
 Chelan and Douglas Counties, Washington

- ▲ BPA Substation
- ⊙ Proposed Transmission Structures
- BPA Transmission Line
- Non-BPA Transmission Line
- East Route Alternative
- West Route Alternatives
- Existing Road Proposed for Access
- New Road Proposed for Access



0 1 2 Miles

9/15/2014



11/5/2018