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**Bruce A. Measure**  
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**James A. Yost**  
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**W. Bill Booth**  
Idaho



**Rhonda Whiting**  
Vice-Chair  
Montana

**Bill Bradbury**  
Oregon

**Tom Karier**  
Washington

**Phil Rockefeller**  
Washington

July 25, 2012

## MEMORANDUM

**TO:** Council Members

**FROM:** Howard Schwartz

**SUBJECT:** Report from Mid-Columbia utilities on Transmission activities

The rather small, but locally quite important, Northern Mid-Columbia Joint Transmission Project illustrates many of the problems faced by transmission owners and system operators when they are faced with a need to expand the transmission system. Representatives from several of the partners in the project—Grant Co. PUD, Chelan Co. PUD, Douglas Co. PUD and BPA—will explain why the project was undertaken, why it took seven years to bring it to fruition, the role of Columbia Grid in facilitating the project, and how the parties settled on a cost-allocation scheme. The project can be seen as a smaller, simplified version of what the transmission system as a whole will face under FERC Order 1000.



# Columbia Grid Northern Mid-C Joint Project

Northwest Power and  
Conservation Council

August 8, 2012

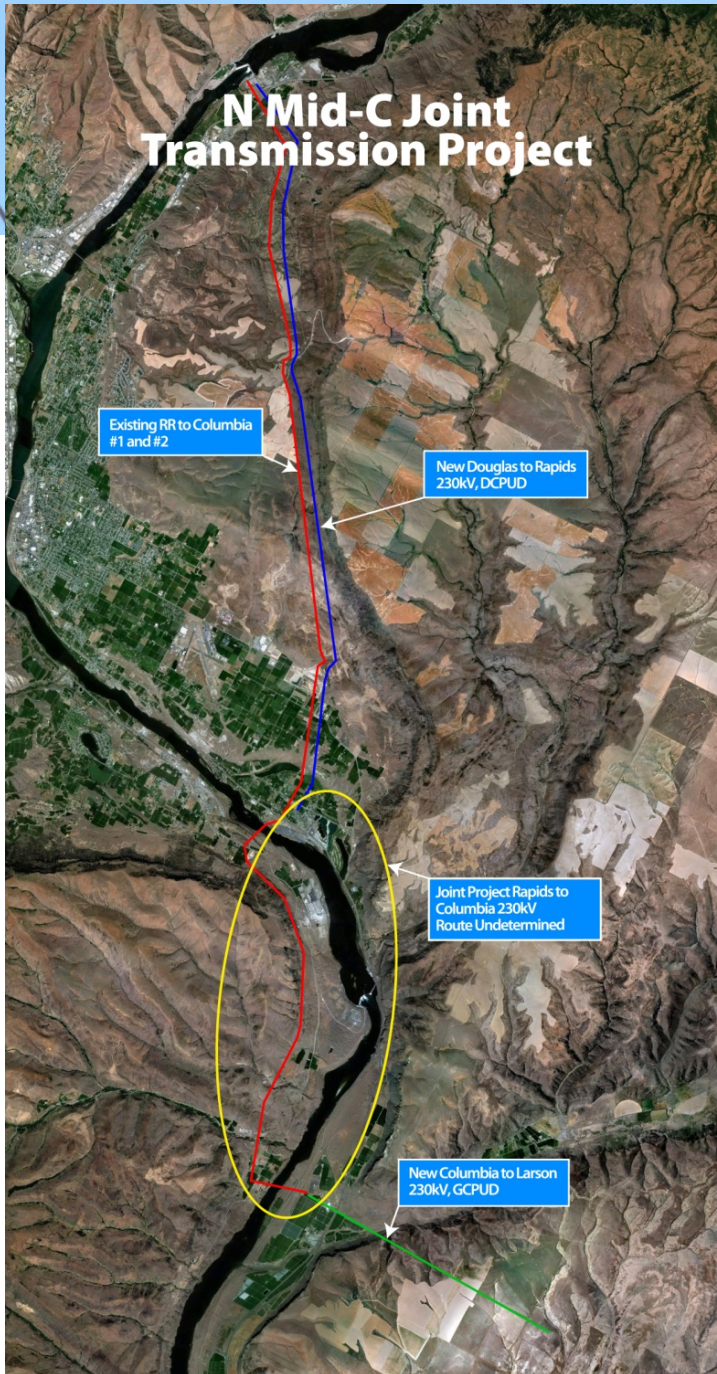
# Northern MidC (NMidC)

The NMidC is the area from Wanapum/Vantage Substation north through Wenatchee to Wells Dam

## Parties involved in the Joint Project



# N Mid-C Joint Transmission Project



# Timeline



- 2004** BPA identifies North Mid-C constraints
- 2006** NW Power Pool South Mid-C Study
- 2008** ColumbiaGrid System Assessment
- 2010** ColumbiaGrid Northern Mid-C Final Technical Report Published
- 2011** Determine cost allocation

# Study Process



- Joint project team included BPA, Chelan, Douglas, Grant, Puget Sound Energy and ColumbiaGrid
- Developed and evaluated 7 plans
- Recommended the best “one-utility plan” to resolve system deficiencies
- Utilities then determined cost allocation

# Joint Project

- New 230kV line from Rapids Switchyard to Columbia Switchyard, approximately 9 miles
- New 230kV bay at Columbia Switchyard
- Planning Estimate: \$14M
- Goal for completion is 2015

# Individual Projects



- Douglas PUD: New 13 Mile 230 kV from Douglas substation to Rapids substation with 115/230 kV transformation at Rapids
- Grant PUD: New 30 mile 230 kV line from Columbia Substation to Rocky Ford substation

Douglas and Grant are responsible for all costs on their associated individual projects



# Joint Project Benefits



- Mitigates existing problems on BPA and Chelan; Rocky Reach –Columbia 230kV lines
- Mitigates impacts of new Grant and Douglas projects
- Balances Columbia 230kV bus
- Provides the most operational flexibility
- Reduces the need for the Columbia Injection Nomogram
- Reduces the need to redispatch or reduce Rocky Reach and Wells generation
- Provides capacity for future system growth
- Much less expensive than individual utility solutions

# Agreements




## **Joint Project Construction Funding Agreement:**

BPA, Chelan, Douglas, Grant

## **O&M and Capacity Rights Agreement:**

Chelan, Douglas, Grant

# Construction & Ownership



## **Douglas will design, construct, own and operate:**

Approximately 9 mile, Rapids –Columbia 230kV line  
and associated switchyard terminal at Rapids for joint  
line

## **BPA will design, construct, own and operate:**

Switchyard terminal at Columbia for the Joint Line

# Cost Allocation

The parties worked together independent of Columbia Grid to agree to the following cost allocations:

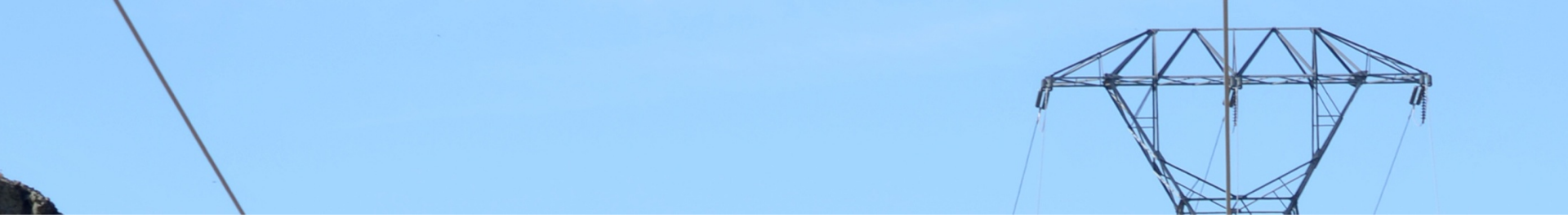
BPA	42.20%	\$5.91M
Chelan	23.85%	\$3.34M
Douglas	17.25%	\$2.41M
Grant	16.70%	\$2.34M
<b>Total Planning Estimate</b>		<b>\$14.00M</b>

There are off ramps to the funding agreement if planned costs exceed certain predetermined levels


# Takeaways



- The Columbia Grid process that uses non-mandatory cost allocation as a backstop is an effective process
- Developing a “one utility solution” prior to beginning cost allocation discussions is an important aspect of the process



# Questions



# Columbia Grid Northern Mid-C Joint Project

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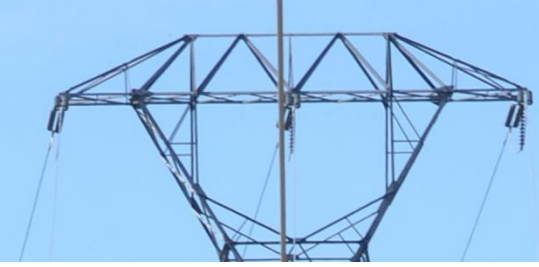
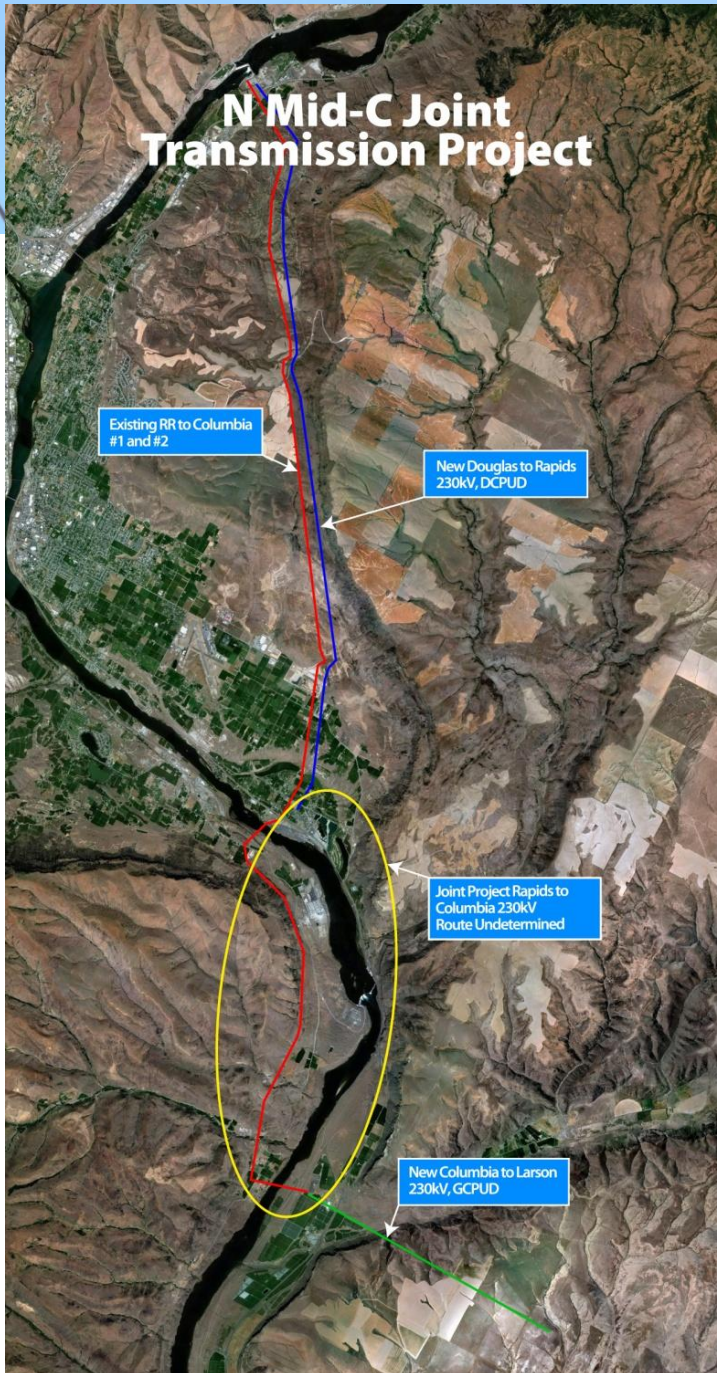
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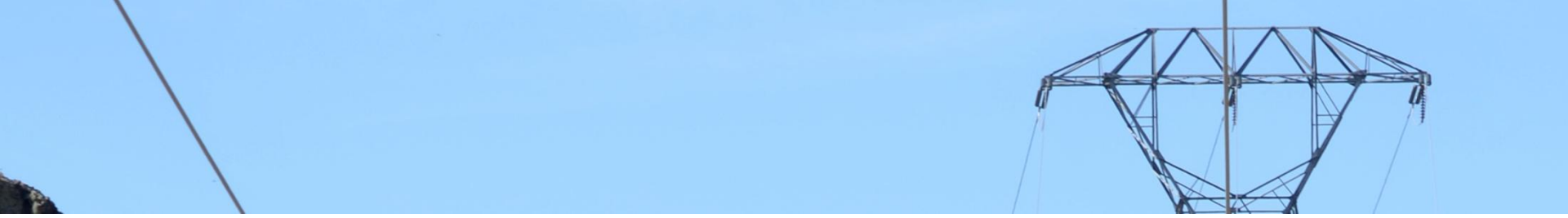
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