

# **BP-14 Transmission Pre-Rate Case**

June 13, 2012



# Agenda

- Utility Delivery
- Eastern Intertie
- Segmentation



# Utility Delivery



# Utility Delivery Segmentation History

- Prior to 1996, the Utility Delivery segment consisted of facilities providing delivery to preference customers; however these costs were bundled in power rates and a separate Utility Delivery rate did not exist.
- In the 1996 rate case the segment definition was changed and a rate was developed to recover some of the segment costs from the customers taking service over the delivery facilities. The initial proposal recommended a 34.5kV and below level for establishing the Utility Delivery segment and rate. In the context of the settlement agreement the definition was changed to below 34.5kV. This definition has remained up to the current rate period.



# Utility Delivery Segmentation Relationship to the FERC Test

- The FERC test is used to separate distribution facilities from transmission facilities to determine jurisdiction (FERC vs. state PUC). BPA delivery facilities are similar to those used for distribution.
- BPA considered the FERC 7 factor test in developing the Utility Delivery segment definition for the 1996 rate case. The application of the test was based on the judgment of BPA engineers.
- In applying these factors to BPA facilities, BPA concluded that a bright line voltage test would be used for both administrative ease and uniform application of comparability.



# FERC 7 Factor Test

1. Local distribution facilities are normally in close proximity to retail customers.
2. Local distribution facilities are primarily radial in character.
3. Power flows into local distribution systems; it rarely, if ever, flows out.
4. When power enters a local distribution system, it is not reconsigned or transported on to some other market.
5. Power entering a local distribution system is consumed in a comparatively restricted geographical area.
6. Meters are based at the transmission/local distribution interface to measure flows into the local distribution system.
7. Local distribution systems will be of reduced voltage.



# What if Utility Delivery Segment Was Expanded to 34.5kV?

- Some parties have suggested that BPA should explore expanding the definition of the Utility Delivery segment to include higher voltage facilities.
- BPA is not proposing to change the definition of the Utility Delivery segment. However, we have developed analysis of including 34.5 kV facilities.
- 18 substations are identified as having 34.5 kV “delivery” facilities, and 2 additional substations are identified as having 46 kV “delivery” facilities.
- 11 substations deliver to 8 customers that are not existing Utility Delivery customers. 9 substations deliver to 6 current Utility Delivery customers.
- 12 of the 20 substations are multi-segmented (including some Network facilities or already have some Utility Delivery facilities identified).
- Several facilities have similar issues with potential sales as the other remaining Utility Delivery substations.
- Total investment in these facilities is estimated at \$16 million. The latest estimate of investment in the Utility Delivery segment is \$29 million. Adding the higher voltage facilities would increase the Utility Delivery investment by 55%.



# Delivery Stations at 34.5 kV\*\*\*

Investment in \$ Thousands

<b>Substation</b>	<b>Investment</b>
ALFALFA SUBSTATION	\$1,520
MAPLETON SUBSTATION	\$250
CLARKSTON SUBSTATION	\$532
MADISON SUBSTATION (46 kV)	\$1,481
REPUBLIC SUBSTATION	\$513
KELLER SUBSTATION	\$478
KALISPELL SUBSTATION(BPA)	\$3,000
COLUMBIA FALLS SUBSTATION -- 115 YARD	\$486
WESTSIDE SUBSTATION(BPA) (46 kV)	\$1,500
WAGNER LAKE SUBSTATION	\$490
CRESTON SUBSTATION(BPA)	\$1,000
ELLENSBURG SUBSTATION	\$250
DORENA SUBSTATION	\$195
ALVEY SUBSTATION	\$250
POTLATCH SUBSTATION(BPA)	\$923
PRIEST RIVER SUBSTATION(BPA)	\$784
BRIDGE SUBSTATION	\$750
IDAHOME SUBSTATION	\$464
TIMBER SUBSTATION	\$595
WARREN SUBSTATION	\$500
	<hr/>
	<b>\$15,962</b>

\*\*\* 2 stations at 46 kV





# Sales of Utility Delivery Facilities

- As defined in the segmentation study, Utility Delivery facilities connect the integrated network to utility customer's distribution systems below 34.5kV.
- In order to reduce costs and focus resources on main grid, BPA adopted a policy in 1996 to sell as many of the Utility Delivery facilities below 34.5kV as possible.
- BPA has been very successful selling facilities. Since 1996, BPA has sold over 150 substations.
- Currently there are approximately 50 facilities in the Utility Delivery segment. We are working with customers to determine whether we can sell those substations in the future.



# Sales of Utility Delivery Facilities (cont.)

- The sale of remaining facilities has many challenges.
  - Joint ownership.
  - Land owned by others besides BPA (e.g. Forest Service)
  - Substations primarily used by the Network.
  - Old transformers.
  - WECC or NERC registered equipment.
  - Purchasing utility would need to register equipment with WECC and NERC.
- Conduct a review of remaining substations and determine reasons facilities have not sold.
- What are some alternatives for handling the remaining facilities?
  - Consider changes to sales policy to address customer issues (e.g. payments for purchase price, maintenance, pricing transparency)
  - Set a timeline for completing facility sales.



# Next Steps

- Looking for customer comments on:
  - Alternatives for selling facilities.
  - The Utility Delivery segment.
- Please submit comments by June 27:
  - [techforum@bpa.gov](mailto:techforum@bpa.gov)



# Eastern Intertie



# Eastern Intertie

- Due to the elimination of the exchange provision of the Montana Intertie Agreement, the discussion going forward will discuss the Eastern Intertie.
- There were several issues that the parties requested more information about before there could be discussion on whether their customers could come to an agreement on precedent setting.
- The following is a summary of the issues along with BPA's current thinking on these issues:
  - Eastern Intertie
    - If rolling in BPA's share of the Eastern Intertie without roll-in of the Eastern Intertie capacity of the other parties to Montana Intertie Agreement would be discriminatory.
      - BPA does not believe this would be discriminatory, as long as the parties to the Montana Intertie Agreement are given credit for the sales, if any, of Eastern Intertie capacity.
    - Is rolling in the Eastern Intertie inconsistent with the segmentation methodology?
      - Under appropriate facts, roll in of the Eastern Intertie could be justified without violating BPA's segmentation methodology.



# Eastern Intertie

- The following is a summary of the issues (cont.):
  - Market
    - If rolling in the Eastern Intertie sends artificially low transmission signals to future wind developers?
      - Because the costs of the Eastern Intertie are “sunk,” roll in would not send an artificially low price signal. Wind developers would likely be required to pay incremental costs to upgrade the system west of Garrison.
    - If rolling in the Eastern Intertie would result in additional utilization of the Eastern Intertie and additional Network revenues?
      - BPA believes that lowering the price could result in additional usage.
    - Is BPA authorized to support development of wind resources in eastern Montana through its segmentation policy?
      - BPA can consider statutory policies in deciding whether to support development of wind resources in Eastern Montana by rolling in the Eastern Intertie, even though those resources are not located in the Northwest, as defined in BPA statutes. Under appropriate facts, BPA could implement the policy of Transmission System Act section 4(a) and other applicable statutes by rolling in BPA’s share of the costs of the Eastern Intertie.
  - BA
    - Would the Pacific Northwest receive wind generation diversity if wind generation from eastern Montana were exported to the Pacific Northwest?
      - BPA’s analysis shows that there is a diversity benefit from Montana wind, as compared to developing more wind in the Columbia Gorge.
    - Does rolling in the Montana Intertie exacerbate over generation events?
      - Only if the Montana wind is in BPA’s BA. However, there is no requirement that BPA would need to expand its BA to Townsend and include the Montana wind in its BA.



# Eastern Intertie

- The following is a summary of the issues (cont.):
  - Rates
    - Does rolling in the Eastern Intertie result in unreasonable cost shifts to BPA's Integrated Network?
      - BPA presented rate impacts of rolling in the Eastern Intertie on January 19, 2012. Based on the analysis there were minimal rate impacts on the Network.
    - Does rolling in the Eastern Intertie increase incremental sales and what amount of expected upgrades would be required to the main grid to accommodate such additional generation?
      - Any upgrades on the Network will go through the NOS process that will perform the embedded rate test and therefore will determine if upgrades will be a rolled in or incremental rate.
  - Precedent
    - Does rolling in the Eastern Intertie set precedent for roll-in of other non-Network segments of BPA's transmission system?
      - BPA believes that the Southern Intertie can be distinguished from the Eastern Intertie. Nevertheless, BPA continues to seek an agreement that parties will not argue that roll in of the Eastern Intertie sets a precedent for roll in of the Southern Intertie.



# Next Steps

- Looking for customer comments on:
  - Alternatives for settlement that address roll-in precedent.
  - Additional challenges or information that need to be discussed before settlement discussions.
  - Comments due by June 27, 2012:
    - [techforum@bpa.gov](mailto:techforum@bpa.gov)





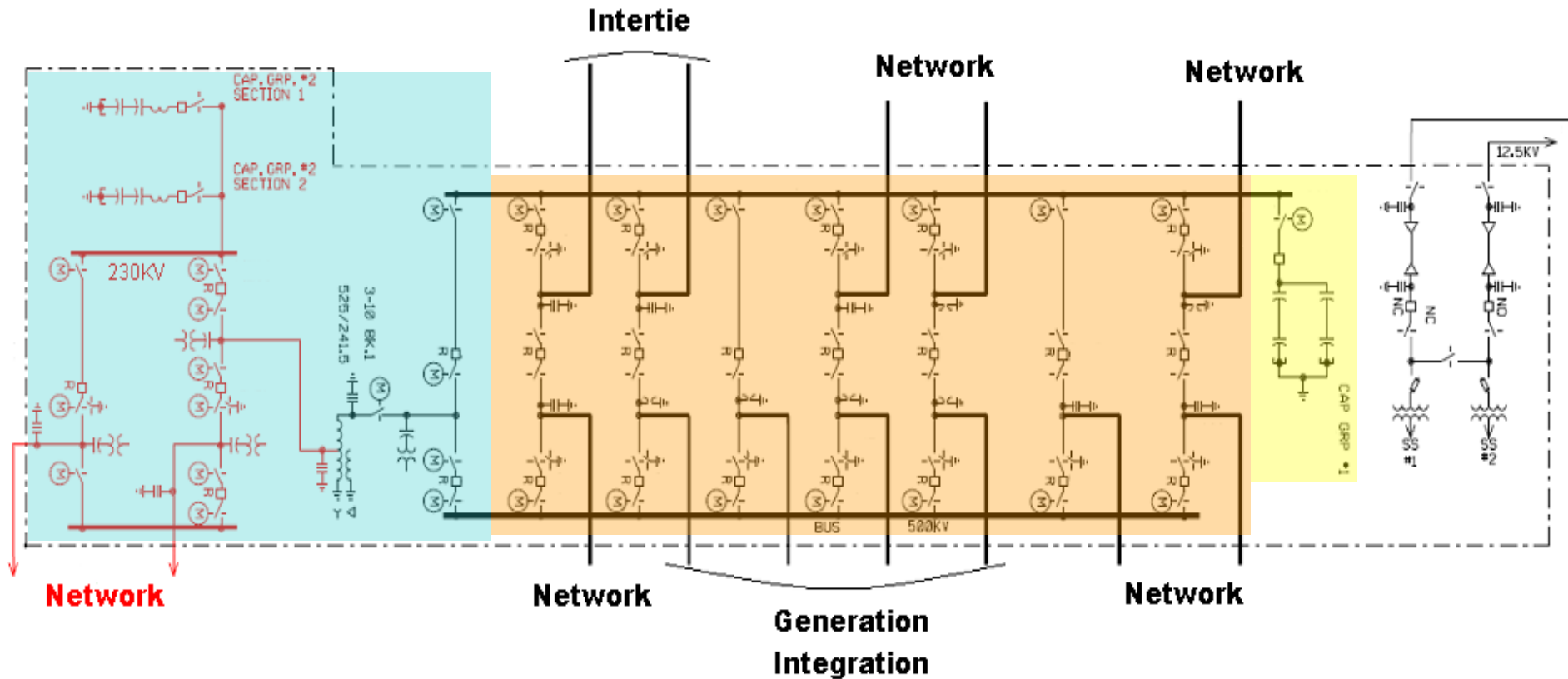
# Segmentation



# Multi-Segment Allocation Example

Assumptions:

- 230 kV equipment is all Network
- Compensation equipment is all Intertie
- 500 kV equipment is shared by terminal count
- Station Service is non-major equipment



# Multi-Segment Allocation (cont.)

<b>Total Investment</b>	<b>35,000,000.00</b>			
<u>Major Equipment</u>	<u>Investment</u>	<u>%</u>	<u>Non-major Allocation</u>	<u>Total</u>
230kV Major Eqpt	3,250,000.00	18.3%	3,169,300.23	6,419,300.23
500kV Major Eqpt	11,350,000.00	64.1%	11,068,171.56	22,418,171.56
500kV Comp Eqpt	3,120,000.00	17.6%	3,042,528.22	6,162,528.22
<b>Total</b>	<b>17,720,000.00</b>		<b>17,280,000.00</b>	<b>35,000,000.00</b>
Non-major Eqpt	17,280,000.00			
			Total 500 kV Terminals	12
<u>Generation Integration</u>	4 terminals		<b>Total GI</b>	<b>7,472,723.85</b>
				<b>21.4%</b>
<u>Southern Intertie</u>	2 terminals		<b>Total Intertie</b>	<b>9,898,890.14</b>
	plus Compensation Eqpt			<b>28.3%</b>
<u>Network</u>	6 terminals		<b>Total Network</b>	<b>17,628,386.00</b>
	plus 230kV Eqpt			<b>50.4%</b>



# Next Steps

- Upcoming Workshops - June 27
  - Transmission Pre-Rate Case – AM
    - Dynamic Transfer Capability (DTC)
    - Incremental Rate
    - Redispatch
  - Generation Inputs - PM
  - [http://www.bpa.gov/corporate/ratecase/bp14\\_meeting\\_ws.cfm](http://www.bpa.gov/corporate/ratecase/bp14_meeting_ws.cfm)

