

BPA Transmission Segmentation Workshop

February 19, 2014



Agenda

- Principles
- History of Segmentation
- Network assignment for new facilities
- Industry scan of Segmentation practices
- Related issues
- Next steps
 - Timeline
 - Proposal expectations

Segmentation History

pre-1976

- bundled power rates included transmission costs
- wheeling rates set by contract
- wheeling based on facilities used by contract path

1974 Federal Columbia River Transmission System Act

1976-1996

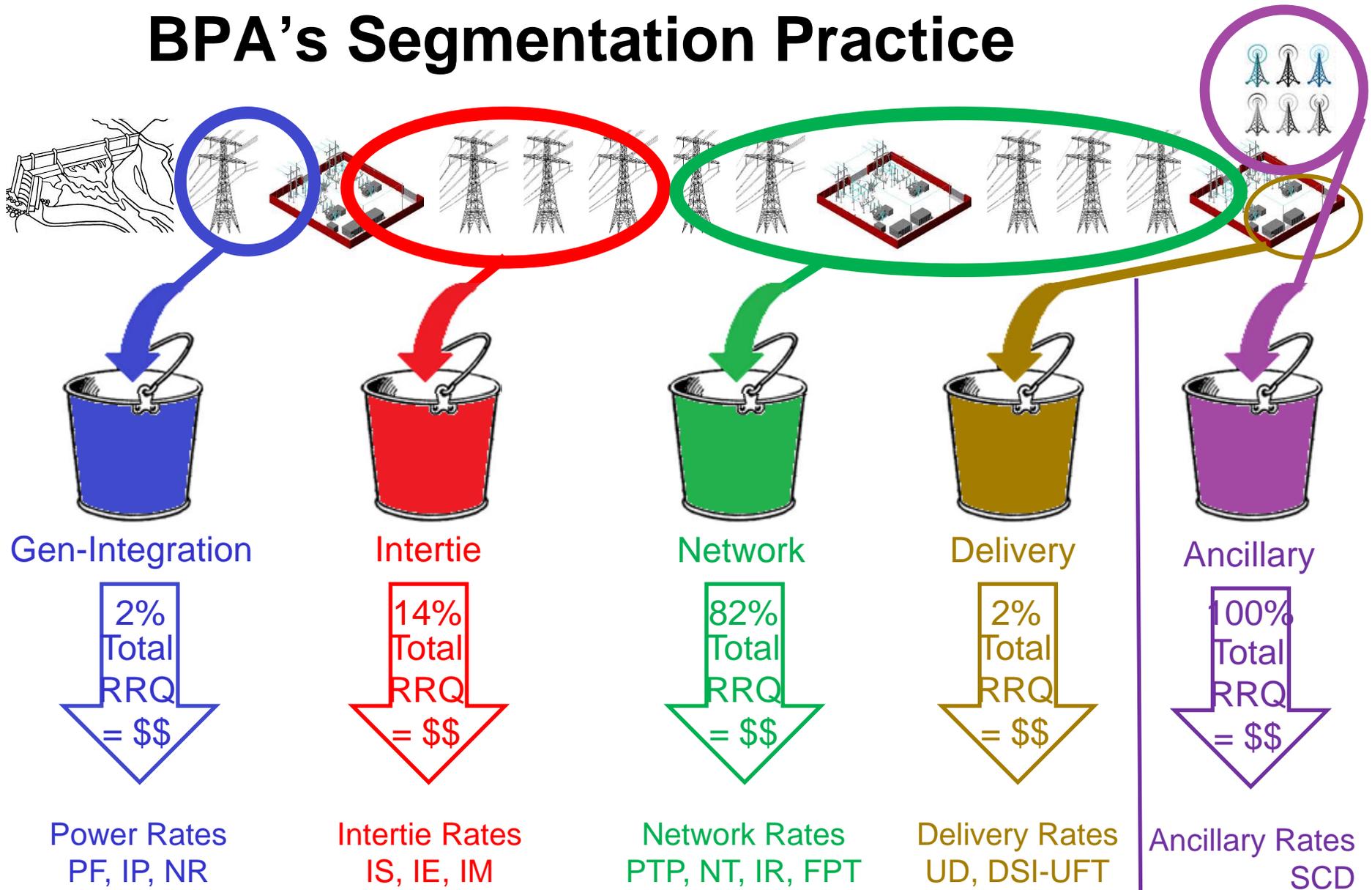
- wheeling rate schedules instead of contract rates
- shifting from specific facility rates to network rates
- network: facilities used by federal and non-federal power
- fringe/delivery: facilities used by federal power only
- bundled power rates include fringe/delivery + share of network

FERC NOPR → Order 888 → 1996 Rate Case

1996-to date

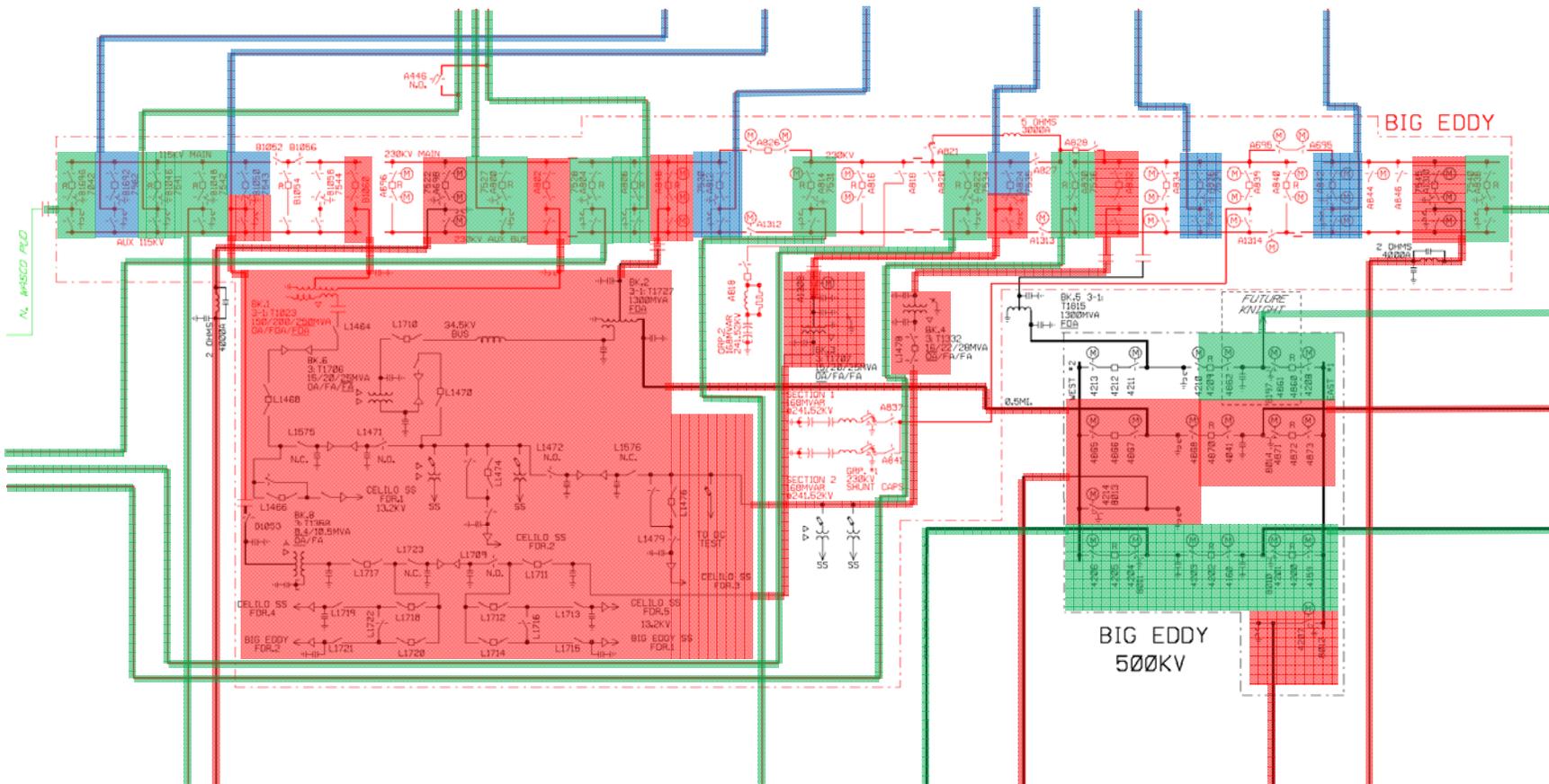
- unbundled power and transmission
- open-access transmission rates and tariffs
- fringe eliminated, no federal and non-federal distinction
- delivery reduced to facilities below 34.5kV
- low-voltage delivery partly charged to users

BPA's Segmentation Practice



How We Do Segmentation

Example: Big Eddy Substation

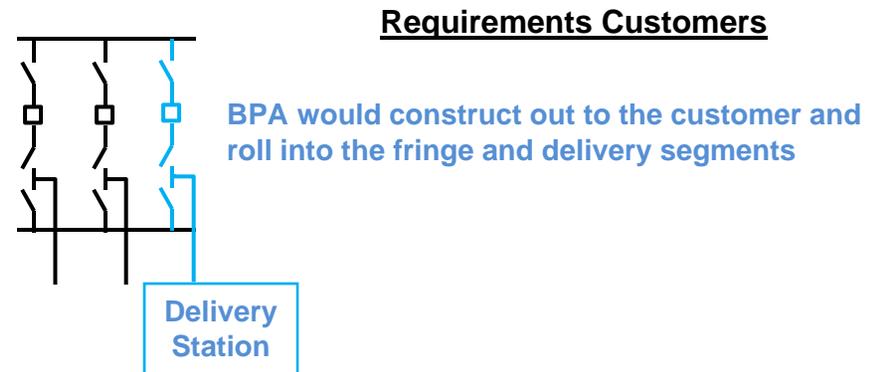


Result: 5% G-I, 14% Network, 81% Intertie

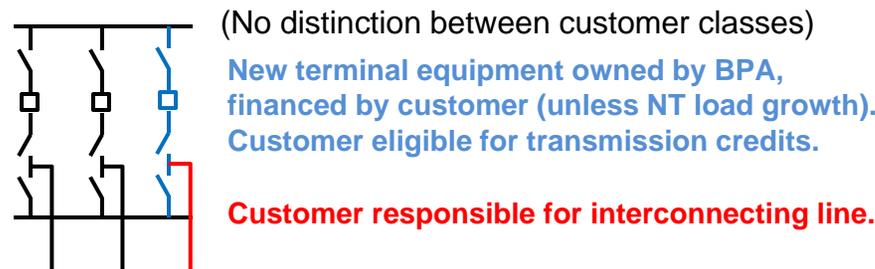
Typical BPA Direct Assignment Examples

Terminal Constructed for New Interconnection

Pre-1996



Post-1996

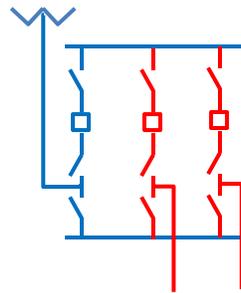


Pre-1996, generally speaking, large customers funded and owned additions in BPA substations required to interconnect. For requirements customers, BPA bundled the costs into the power rates.

Typical BPA Direct Assignment Examples

New Substation for Multiple Customers

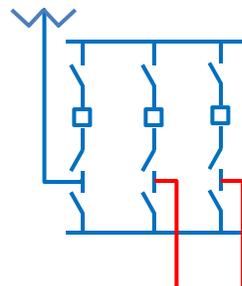
Pre-1996



New substation including transformation built and owned by BPA and rolled into rates.

New line terminal equipment directly assigned to customers.

Post-1996



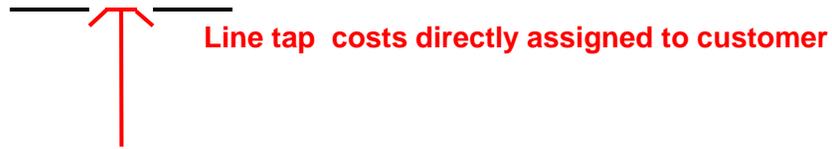
New substation equipment including transformation owned by BPA, financed by customers. Customers eligible for transmission credits.

Customer responsible for interconnecting line.

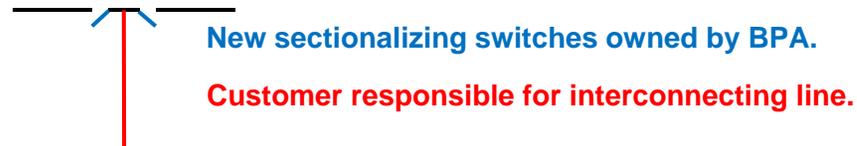
Typical BPA Direct Assignment Examples

New Customer Tap on Existing BPA Line

Pre-1996

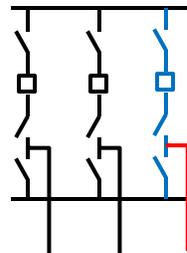


Post-1996



Summary of Typical BPA Direct Assignment Examples Post 1996

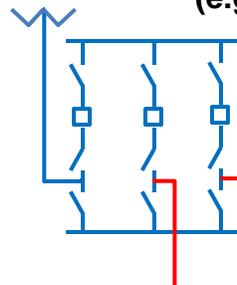
Terminal constructed for new load or gen interconnection



New terminal equipment owned by BPA,
financed by customer (unless NT load growth).
Customer eligible for transmission credits.

Customer responsible for interconnecting line.

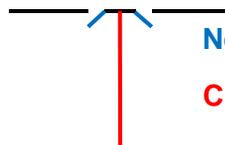
New substation for multiple customers (e.g., multiple wind generators)



New substation equipment including transformation
owned by BPA, financed by customers.
Customers eligible for transmission credits.

Customer responsible for interconnecting line.

New customer tap on existing BPA line



New sectionalizing switches owned by BPA.

Customer responsible for interconnecting line.

Post-1996, generally speaking, the customer builds to connect to the existing network. Under NOS, for multiple customers, BPA may extend the Network.

Scan of Industry Practices

- Reviewed 102 FERC-jurisdictional transmission utilities, those with more than 500 line miles
- Where do they distinguish between transmission and distribution?
 - Analogous to BPA's distinguishing network and delivery facilities
 - Some utilities used a "bright line" to differentiate segments and some used a "fuzzy line" (meaning that that a predominant amount of facilities at a certain voltage were considered transmission with everything below in distribution)
 - Median voltage used to distinguish transmission and distribution is around 35kV
- Do they distinguish transmission rates by voltage?
 - About one-third have voltage-differentiated rates
 - Most of these are due to ISO/RTO requirements
 - Voltage threshold varies from 200kV to 40kV
 - One utility's subtransmission rates, for users of 69kV and below facilities, are being protested at FERC

Related Issues

- BPA has identified several areas which may be affected by changes in Segmentation, particularly alternatives which would establish a new “subtransmission” segment. BPA would like customers to reflect on these and other areas that may be affected in their proposals.
- Possible issues arising from an alternative segmentation:
 - Changes in scheduling and reservation systems
 - Ability to resale or redirect across multiple segments
 - Ability to utilize contiguous points
 - Assessing Available Flowgate Capacity on multiple segments
 - Loss factors on BPA’s segments
 - Required revisions in existing contracts
 - Requirements to purchase Ancillary Services (including SCD) for multiple segments

Segmentation Timeline

Date	Topic
Tuesday, March 4	Customers bring alternative proposals
Thursday, March 20	Alternative proposals (Continued)
Wednesday, April 2	Review alternative proposals
Wednesday, April 16	Review alternative proposals
Wednesday, May 7	BPA shares customer impacts of proposals
Thursday, May 29	Customer impacts (Continued)
Wednesday, June 11	Stakeholders finalize white paper
Wednesday, June 25	Segmentation review concludes and BPA presents white paper/Staff segmentation recommendation for Initial Proposal

Proposal Expectations

- By the March 20 workshop, BPA would like customers proposals to be complete for discussion and for possible additional analysis by BPA.
- A complete proposal includes:
 - Criteria for segmentation of BPA's system
 - Assignment of costs
 - Addressing how proposed changes would effect other related issues (see slide 9)
 - A timeline for adopting proposed changes

Next Steps

- For the March 4 workshop BPA is asking that customers bring draft/conceptual proposals
 - Other customers will be able to provide initial feedback on draft proposals at this time to help with development of more complete proposals by March 20
- BPA staff is available to meet informally with interested stakeholders prior to the March 20 meeting to discuss potential segmentation methodologies and policy and help craft proposals to be considered in this process leading up to the BP-16 case.