

2012 BPA Rate Case Customer Workshop

Transmission Rate Development

June 17, 2010



Transmission Rates Workshop Agenda

8:00 A.M. – Noon

- **Opening and Introduction**
- **Transmission Rate Development Topics**
 - Parking Lot Issues
 - Segmentation
 - Utility Delivery
 - Montana Intertie
 - Customer Served Load Replacement (Short Distance Discount) and the corresponding Unauthorized Increase Charge rate schedule language
- **Next Steps**



Acronym List

- BAA – Balancing Authority Area
- CF – Conditional Firm
- COB – California-Oregon Border
- CSL – Customer Served Load
- DNR – Designated Network Resource
- FCRTS – Federal Columbia River Transmission System
- HLH – Heavy Load Hour
- IR – Integration of Resources
- NEPA – National Environmental Policy Act
- NOS – Network Open Season
- NT – Network Transmission
- OATT – Open Access Transmission Tariff
- POD – Point of Delivery
- POR – Point of Receipt
- PTP – Point to Point
- PV – Present Value
- SDD – Short Distance Discount
- SI – Southern Intertie
- TSA – Transmission Service Agreement
- TSR – Transmission Service Request
- UD – Utility Delivery
- UFT – Use of Facilities



Objective

- Our objective today is continued discussion of transmission parking lot issues, initiated by customers during the 2009 fall customer meetings. The alternatives discussed for each parking lot topic do not reflect BPA commitment to adopt any particular proposal or position.
- Today's discussion is preliminary and pre-decisional.
- We look forward to working together to better understand the issues that will help shape the development of the Initial Proposal for Transmission.



Rate Making Principles

- Full and timely cost recovery
- Lowest possible rates consistent with sound business principles
- Cost causation—fairly allocate costs to customers based on proportionate use
- Statutory requirement of equitable allocation
- Simplicity, understandability, public acceptance, and feasibility of application
- Avoidance of rate shock and rate stability from rate period to rate period (e.g., magnitude of rates and rate design)



TR-12 Transmission Parking Lot Topics

- The transmission parking lot issues are primarily rate case topics submitted by customers. The alternatives for each parking lot topic do not reflect BPA commitment to adopt any particular proposal or position. All discussions are **preliminary** and **pre-decisional**.

	Parking Lot Topic	Status of Workshop Meetings
1	Incremental Cost Rates	See Meeting Handouts on: 4/14, 7/14*
2	Delivery Charge	See Meeting Handouts on: 4/14, 6/17
3	Short Distance Discount Added to Southern Intertie	See Meeting Handouts on: 4/14, 7/14*
4	Reservation Fee	See Meeting Handouts on: 4/14, 7/14*
5	CSL Replacement (Short Distance Discount)	See Meeting Handouts on: 4/14, 7/14*
6	Transmission Segmentation	See Meeting Handouts on: 4/14, 6/17, 7/14*
7	Revenue Requirement	To Be Scheduled
8	Revenue/Load Forecasting/LGIA Credits	See Meeting Handouts on: 7/14*
9	Risk Analysis	See Meeting Handouts on: 8/14*
10	Use of Cash Reserves	See Meeting Handouts on: 5/26
11	Montana/Eastern Intertie	See Meeting Handouts on: 6/17
12	Overall Transmission Rates (No Surprises)	To Be Scheduled
13	Power Factor Penalty: Transfer Service, Ratchet Demand	See Meeting Handouts on: 7/14*
14	Customer Reasons for Unsold Utility Delivery Facilities	See Meeting Handouts on: 6/17
15	Determining the allocation of PSANI (Puget Sound Area Northern Intertie) costs and return of the Canadian Entitlement	To Be Determined – Need more definition and clarity to proceed
16	Reduced consequences for canceling PTP Transmission Service Agreements for Small Wind Generation	Out of Scope – Referred to Transmission Policy Manager for guidance

**Note: If customers do not object, we may move the transmission topics planned for the 7/14 workshop date to the 7/15 workshop instead*



Segmentation



Segmentation Study Purpose

- The rate development includes segmentation and revenue requirements and concludes with rate design.
- The primary purpose of the segmentation study is to provide the preliminary costs of serving our customers and to provide the cost basis for segmenting the revenue requirements used to develop transmission rates.
- The output of the segmentation study provides capital investment and historical O&M costs.
- Segments are defined primarily by voltage and function, or, for some segments by voltage and contract.
- Investment and O&M costs are based on historical costs.



Segmentation Background

- Back in September 2009, BPA-TS conducted a sensitivity analysis to separate the Northern Intertie from the Network into its own segment and shared preliminary rate pressure results with customers.
- Looking ahead, the transmission parking lot reflects interest in redefining the Network to begin at Townsend instead of Garrison (see parking lot, Montana Intertie).
- More segmentation background is provided in the **Appendix**.



Summary of Segment Investments

	Asset Investment as of 09/30/07		Asset Investment as of 09/30/09	
Segment	Investment (\$)	% of Total	Investment (\$)	% of Total
Generation Integration	61,366,601	1%	61,535,536	1%
Network	3,703,930,733	79%	3,947,471,917	↑ 81%
Southern Intertie*	712,121,650	15%	685,150,049	↓ 14%
Eastern Intertie	118,137,417	3%	118,137,417	↓ 2%
Utility Delivery	25,826,076	1%	26,743,678	1%
DSI Delivery	62,625,014	1%	62,625,014	1%
Totals**	4,684,007,492	100%	4,901,663,611	100%
Ancillary Services	552,352,183	N/A	586,181,430	N/A

*The Southern Intertie assets investments (\$) can be further broken down into:

	09/30/07	09/30/09
AC Intertie	325,146,229	326,237,856
DC Intertie	386,975,421	358,912,193

**Totals may not add due to rounding



Other Segmentation Considerations

- **Here are key drivers to changes in investments from FY07 to FY09:**
 1. The absolute size of the Network segment has grown by ~\$244 million, or about 6.6%, increasing the relative size from 79% to 81% of total investment in lines and substations.
 2. The total gross investment in the Southern Intertie segment at the end of FY09 was approximately \$27 million less than it was at the end of FY07, a decrease of about 1% in the Southern Intertie's relative size.
 3. The Ancillary Services Segment grew by ~\$34 million or ~6%. Investment in Ancillary Services assets increased in all categories, but the largest relative increase was in the "Computer Hardware and Software for Control Systems" category. This equipment is used for control of the system and is located at the control centers. Examples include the scheduling system and updates to automatic generation control system (AGC).



Other Segmentation Considerations (cont.)

- **In order to reflect modifications to the asset base during the rate period, BPA also forecasts plant investment and reflects these assumptions in the segmentation study.**
 - An update of plant investment assumptions will be provided in a later summer workshop addressing segmentation and revenue requirement topics.

- **The Corps of Engineers (COE) and Bureau of Reclamation (USBR) transmission assets at Federal hydroelectric projects are segmented in the same way as other BPA assets.**
 - However, these transmission costs are included in the Power Service's Revenue Requirement and are then charged back to Transmission through inter-business line transfers.
 - This approach is consistent with prior rate cases.



Utility Delivery



Delivery Charge

- The Delivery Charge is a charge for delivery over the Utility Delivery segment, defined as the segment of the FCRTS that provides service to customers at voltages below 34.5 kV. This service is used to reduce transmission voltages for delivery to customers.
- Currently about 31 public utility customers pay for this Utility Delivery service.
- The monthly billing factor for the Delivery Charge is the total load on the hour of the Monthly Transmission Peak Load at the POD specified as Utility Delivery facilities.



Delivery Charge Background

- As part of the 1996 Rate Case in which the Delivery Charge was established, BPA adopted the Sale of Facilities policy, which states that upon written request, a delivery charge customer has the right to purchase the substation(s) that serve them.
- As a result of this policy, Delivery Charge customers have bought about 80% of the Utility Delivery substations that existed in 1996.
- However, transmission rate settlements have to some degree shielded the Delivery Charge rate from price signals that may have otherwise encouraged more utility delivery substation sales.
- Utility Delivery substation sales have slowed considerably and we understand there is little prospect for the sale of a significant number of the 52 unsold facilities.
- A complicating factor is that under PS' rate schedule, BPA's Transfer customers pay a charge equal to the Delivery Charge rate, but do not have the option of purchasing the substations that serve them.



Delivery Charge Preliminary Alternatives

1. Set the Delivery Charge to a rate that will recover all the costs of the Utility Delivery segment.
2. Cap the Delivery Charge increase to an amount not to exceed X%.
3. Roll the Utility Delivery segment into the Network and eliminate the Delivery Charge.
4. Substitute a Use Of Facilities (UFT) charge for the Delivery Charge.
5. Do not raise the Utility Delivery Charge rate. **New!**



Delivery Charge Preliminary Alternatives

1. Set the Delivery Charge to recover all of the costs of the Utility Delivery segment.

Pros: Complies better with the principle of cost causation (costs fairly allocated to customers based on use) than does current practice

Cons: Could be viewed as conflicting with the principle of avoiding rate shock (although this effect is more a result of cumulative rate settlements and not a conscious policy decision)

2. Cap the Delivery Charge increase to an amount not to exceed X%.

Pros: Complies better with the principle of avoiding rate shock

Cons: Conflicts with the principle of cost causation, since any Utility Delivery segment costs not recovered by the Delivery Charge will have to be recovered via rates arising from other segments



Delivery Charge Preliminary Alternatives Continued

3. Roll the utility delivery segment into the Network and eliminate the Delivery Charge.

Pros: Relatively easy to implement, and could be seen by many as more in keeping with the principle of simplicity and understandability

Cons: Conflicts with the principle of cost causation. Purchases made by utilities may not have been pursued had an option of rolled in delivery segment costs been available to them up to this time.

4. Substitute a Use Of Facilities (UFT) charge for the Delivery Charge.

Pros: Complies even more closely with the principle of cost causation than current policy. However, some customers may view it as inequitable since different Delivery Charge customers would pay different UFT rates.

Cons: Conflicts with the principles of simplicity/understandability and avoidance of rate shock.



Delivery Charge Preliminary Alternatives (Cont.)

- 5. Do not increase the Utility Delivery Charge rate. This alternative to freeze the current UD rate was suggested at the April 14th workshop.**

Pros: Complies with the principle of avoidance of rate shock.

Cons: Conflicts with the principle of cost causation, since any Utility Delivery segment costs not recovered by the Delivery Charge will be recovered through transmission rates.



Unsold Utility Delivery Substations

- In response to customer requests, the next slide identifies some preliminary estimated book values (acquisition cost net of accumulated depreciation) for the customer-stated categories of unsold utility delivery substations to date. This information was also submitted via a Tech Forum announcement on May 26, 2010.
- BPA does not depreciate at the substation level but rather by asset groups (e.g., equipment, towers, etc). Thus, a rough approximation of book value for unsold substations by customer-selected categories is provided to help facilitate rate development discussion.
- Please note that the book values on the next slide do not add up to the TR-10 Initial Rate Proposal Net Plant values because not (1) we did not have complete information therefore not all of the UD substations are presented (2) duplication of reasons for unsold substations, (3) new information that has been taken into account since the time initial proposal, and (4) the factors used to translate from gross to net investment slightly changed over time.
- The categories for the potential reasons of remaining unsold substations are not reflective of BPA's position or speculation but rather capture customer input.
- This information is a work in progress and is both **preliminary** and **pre-decisional**.



Unsold Utility Delivery Substations

Customer-Specified Category	Substations	Est. Gross Investment	Est. Book Value
1. Ownership Issues	Burbank Eagle Lake Glade Ringold Yaak	\$1.72 million	\$0.95 million
2. Multiple Users	Albany Bonners Ferry Drain Gardiner Langlois Lynch Creek Potlatch Monmouth Moyie North Bench Ringold Troy	\$5.98 million	\$3.30 million



Unsold Utility Delivery Substations - Continued

Customer-Specified Category	Substations	Est. Gross Investment	Est. Book Value
<p>3. Multiple Uses: Serve Network and Utility Delivery Segment</p>	<p>Acton Albany Bandon Bonners Ferry Burbank Drain Eagle Lake Hood River Ione Parkdale Port Orford Potlach Reedsport Sandpoint Scootene Swan Valley Winthrop</p>	<p>\$6.11 million</p>	<p>\$3.36 million</p>



Montana Intertie



Montana Intertie Objectives

- Discuss background and existing interconnections
- Discuss rate analysis of alternatives for current facilities comprising the Eastern Intertie segment
- Discuss rate analysis of potential upgrades to the Montana Intertie
- Discuss next steps

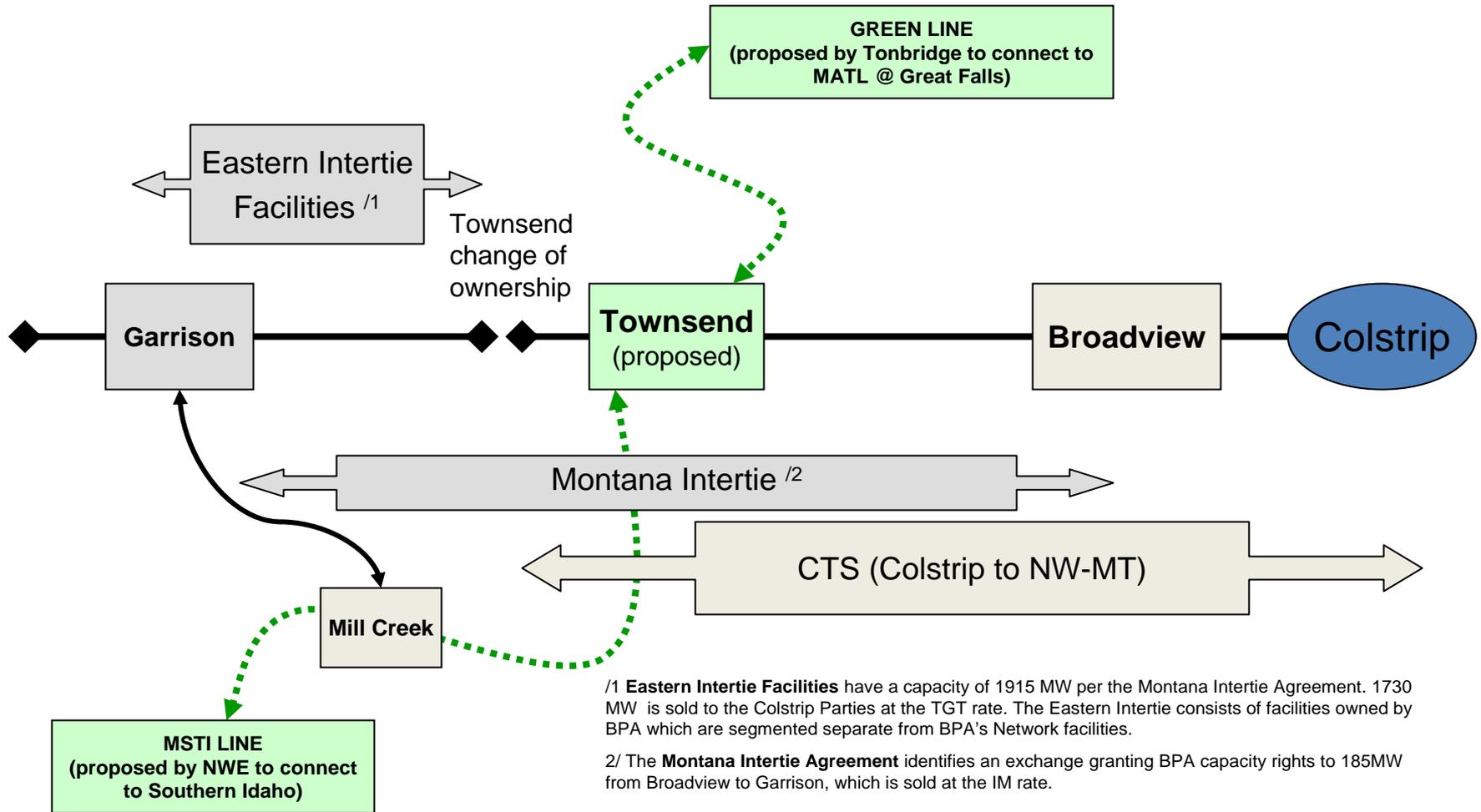


Montana Intertie Background

- At the April 14, 2010 rate case workshop, an alternative was discussed to begin the Network at Townsend instead of Garrison, which effectively eliminates the Montana Intertie (IM) rate (e.g. pancake rates).
- Bonneville built and maintains the Townsend to Garrison Transmission (TGT) or Eastern Intertie line and receives monthly payments based on the total costs of the line, which includes the investment and O&M.
- The Montana Intertie Agreement, which expires in 2027, includes an exchange whereby BPA is granted rights to 185 MW from Broadview to Townsend in exchange for a credit to the TGT participant's bills comparable to 233 MW on the TGT line.
- The total approximate annual cost of the Eastern Intertie is \$12.5 million, which is allocated to all the participants in the Montana Intertie Agreement. BPA's share is approximately \$2.7 million, including the costs of the exchange credit.
- The Montana Intertie rate is calculated by dividing \$2.7 million by 185 MW. To the extent that sales are less than 185MW, the revenue under-recovery is allocated to the other segments.
- Other things to consider may include (1) termination of the Exchange and associated Exchange Credits (2) renegotiation of the Intertie agreement and (3) other policy issues not yet identified or addressed.
- An upgrade to the Eastern Intertie is being considered that would involve installing series capacitors and potentially building a substation at Townsend. The upgrade would add about 550 MW of capacity at a capital cost of approximately \$152M.
- Other Transmission projects have been proposed to interconnect at Townsend, including the Green Line and MSTI (see diagram on next slide).



Existing and Proposed Montana Interconnections



Preliminary Rate Impact Alternatives for the Montana Intertie Rate

	Alternatives for Montana Intertie	Network Rate Impact		Intertie Rate Impact	
		With Exchange Credits	Without Exchange Credits	With Exchange Credits	Without Exchange Credits
1	Status Quo - Keep separate Montana Intertie transmission path	No Change	-0.23%	No Change	-58%
2	Roll Costs of BPA's Montana Intertie Rights (185 MW only) into Network costs	0.08%	-0.23%	N/A	N/A
3	Roll full costs of Eastern Intertie into Network costs (no TGT payments)	1.80%	1.80%	N/A	N/A
4	Upgrade and keep separate Montana Intertie Transmission Path	-0.05%	-0.05%	108%	94%
5	Upgrade and roll costs of BPA's Montana Intertie Rights (185 MW) and upgrade into Network Costs	3.80%	3.60%	N/A	N/A
6	Upgrade and roll costs of Eastern Intertie Facilities costs into Network costs	5.50%	5.50%	N/A	N/A



Possible Alternatives for the Current Facilities Comprising the Eastern Intertie Segment

1. **Status Quo – Keep the Eastern Intertie (1915 MW) and Montana Intertie (185 MW) as currently defined.**

Pros: Adheres to principles of simplicity and understandability, cost causation, and avoidance of rate shock.

Cons: Does not address customer's concerns of pancaked rates.

- **Rate: Status Quo – No change**

Note: If the Exchange is terminated, the Montana Intertie Rate would be a service just for Townsend to Garrison. The Eastern Intertie remains as it is currently defined.

This is not a rate issue but is included for analytical completeness

- **Rate: IM rate would be reduced by 58% and the Network rates would be reduced 0.23%**



Possible Alternatives for the Current Facilities Comprising the Eastern Intertie Segment (cont.)

2. Roll BPA's share of the Montana Intertie (185MW) into Network, and
 - a. **Eliminate Exchange.** Roll the re-defined Montana intertie (BPA's 185 MW) into the Network. Treat the Montana Intertie Agreement as grandfathered.
 - **Rate: Network rates would decrease 0.23%**
 - b. **Keep Exchange.** Roll the Montana Intertie (BPA's 185 MW from Broadview to Garrison) into the Network. Only BPA's share of the Eastern Intertie and the exchange costs would be rolled into the Network. Treat the Montana Intertie Agreement as grandfathered.
 - Pros:** Eliminates pancaked rates for new users.
 - Cons:** Inconsistent with cost causation principle and treats Colstrip owners differently from new users.
 - **Rate: Network rate increased by 0.08%**



Possible Alternatives for the Current Facilities Comprising the Eastern Intertie Segment (cont.)

3. **Renegotiate Montana Intertie Agreement, rolling costs into the Network, and**
 - a. **Eliminate Exchange.** Renegotiate the Montana Intertie Agreement. Roll the entire Eastern Intertie costs into the Network.
 - **Rate: Network rates increase 1.8%**
 - b. **Keep Exchange.** Renegotiate the Montana Intertie Agreement to keep the 185 MW of rights from Broadview. Roll the entire Eastern Intertie costs into the Network.
 - Pros:** Eliminates pancaked rates for all parties
 - Cons:** Potential cost shift and inconsistent with cost causation principle
 - **Rate: Network rates increase 1.8%**



Possible Rate Options for Upgrades to Montana Intertie and Service Provided by those Upgrades

4. If the Montana Intertie continues to be marketed separately from the network, an
 - a. If costs are determined to be incremental, an incremental rate is developed.
 - **Rate: Incremental Rate**
 - b. If costs of the upgrade are determined to be embedded costs, the costs of the upgrade will be rolled into the Montana Intertie.
 - **Capital Assumptions: \$152 million (direct costs)**
 - **Estimated Rate Impact with exchange credits: IM rate increase of 108% and Network rates reduction by 0.5%**
 - **Estimated Rate Impact without exchange credits: IM rate increase of 94% and Network rates reduction by 0.5%**



Possible Rate Options for Upgrades to Montana Intertie and Service Provided by those Upgrades

5. If entire Montana Intertie is rolled into the Network, and
 - a. If customers are charged an Incremental rate for the upgrades, they will follow the NOS process for Incremental Rate.
 - **Rate: Incremental rate**
 - b. If customers are not charged an Incremental rate and the costs of upgrade are rolled into the Network, they will follow the NOS process for rolled-in embedded rate.
 - **Capital Assumptions: \$152 million (direct costs)**
 - **Estimated Rate Impact with exchange credits: Network rate increase 3.8%**
 - **Estimated Rate Impact without exchange credits: Network rate increase 3.6%**



Possible Options to Evaluate Upgrades to Montana Intertie and Service Provided by those Upgrades (cont.)

6. If the entire Eastern Intertie facilities are rolled into the Network, and
 - a. If customers are charged an Incremental rate for the upgrades, they will follow the NOS process for Incremental Rate.
 - **Rate: Incremental rate**
 - b. If customers are not charged an Incremental rate and costs of upgrade are rolled into the Network, they will follow the NOS process for rolled-in embedded rate.
 - **Capital Assumptions: \$152 million (direct costs)**
 - **Estimated Rate Impact with exchange credits: Network rate increase 5.5%**
 - **Estimated Rate Impact without exchange credits: Network rate increase 5.5%**



Customer Served Load Replacement (Short Distance Discount)

Unauthorized Increase Charges



Customer Served Load

- CSL is the monthly amount in megawatts of the Transmission Customer's Network Load that the Transmission Customer elects to serve on a firm basis from sources internal to its system, or over non-Federal transmission facilities, or pursuant to contracts other than the Network Integration (NT) Service Agreement.
 - The Customer must specify the amount of CSL in the Customer's NT Service Agreement.
- The Billing Factor for Customers with CSL is the Customer's Network Load on the hour of the Monthly Transmission Peak Load less Declared CSL (unless the Actual CSL is less than 60% of the Declared CSL during Heavy Load Hours, in which case the CSL credit does not apply).





Customer Served Load Background

- Currently, five NT Customers have declared Customer Served Load (CSL) in their NT Service Agreements totaling approximately 288 MW.
- Since 1996 CSL has been included in the BPA-TS NT Rate Schedule and Open Access Transmission Tariff (OATT).
- Pursuant to the 2006 Transmission Rate Case Settlement Agreement, CSL will expire at midnight on September 30th, 2011.
 - BPA-TS agreed to work with interested Customers to determine an appropriate replacement mechanism, if any.



Alternative 1- No CSL Replacement

- The Transmission Provider has an obligation to plan for all NT Customer Network Load, including load growth.
- If an NT Customer designates a Behind the Meter Resource, the Transmission Provider nevertheless has the obligation to plan for all Network Load.
- An NT Customer can elect not to designate a particular load at a discrete Point of Delivery and not be subject to the NT Rate.



Alternative 2- Offer a Short Distance Discount

- Reflects a limited use of the Transmission System.
 - Provides an economic benefit for NT Customers with qualifying resources.
- The table below shows preliminary estimates based on current CSL and the proposed short distance discount scenario at existing FY10 transmission rates:

	Current CSL	Qualify for SDD
General Criteria*	(1) Internal resources, (2) Non-Federal transmission facilities, or (3) Contracts other than NT Service Agreements	A SD DNR is a resource that is designated as a Network Resource in Customer's NT Service Agreement and (1) is scheduled over the FCRTS using less than 75 circuit miles of the FCRTS calculated in accordance with the Tx Distance definition below; or (2) is directly connected to the customer's system and the delivery of the SD DNR output is not scheduled to the customer's load over the FCRTS; or (3) is directly connected to a third party's system and the delivery of the SD DNR output is not scheduled over the FCRTS to the customer's load.
Number of Customers	5	11 (16 resources)
MW Impacted	288	332
Estimated Financial Impact	\$4.5 million/year	\$1.9 million/year

* Criteria used for estimated financial analysis above is based on resources using 75 circuit miles or less of BPA transmission facilities, including Behind the Meter Resources.



Open CSL Discussion

- Let's discuss the customer's revised Short Distance Discount proposal (separate attachment).
- In order to better understand the customer's revised proposal, we suggest additional customer discussion on the following topics:
 1. **Elimination of 12 month designation requirement**
 2. **Partial undesignations**
- Additionally, BPA-TS would like to discuss some ideas we've generated on the topic of **transmission distance**. The following slides provide three potential methods to measure transmission distance based on circuit miles (paths identified in power flow studies).
- Finally, a few alternatives to calculate **POD limits** will be discussed.



Transmission Distance #1

- Measure the circuit miles from the resource to the load based on the path to the closest POD as identified in power flow studies, and assume all generation from the resource goes to that closest POD.
 - Example- Customer has a 250MW resource and 3 PODs. If the distance to the closest POD is **20 miles** (less than 75 circuit miles), the Customer would receive the SDD credit for the entire 250 MW as if delivered to the closest POD, regardless of the capacity of the POD. The SDD factor would be $0.4 \cdot (75 - 20) / 75$ or **0.293**, which would be identified in the contract and multiplied by the HLH Average energy generated each month to determine the credit.



Transmission Distance #2

- Measure the circuit miles from the resource to load based upon the amount of capacity that could be delivered to load at each POD within 75 miles.
 - Example- Customer has a 250 MW resource and 3 PODs. The POD MW limit and circuit miles from the resource are (1) 100 MW and 20 miles (qualifies), (2) 100 MW and 50 miles (qualifies), and (3) 50 MW and 80 miles (does not qualify). The first two PODs qualify for SDD and the calculated distance would be $(20 \text{ mi} * 100 \text{ MW} + 50 \text{ mi} * 100 \text{ MW}) / 200 \text{ MW}$ or **35 miles**. Since only 200 MW of the 250 MW resource qualifies for the SDD, the measured HLH MW would also be reduced by 200/250. The resulting SDD factor would be $0.4 * (75 - 35) / 75 * (200 / 250)$ or **0.171**, which would be identified in the contract and multiplied by the HLH Average energy generated each month to determine the credit.



Transmission Distance #3

- Measure circuit miles from the resource to load based upon the amount of capacity that could be delivered to load at each POD with the distance based upon the allocations to all PODs that satisfy the delivery of the full designated resource.
 - Example- Customer has a 250 MW resource and 3 PODs, same as in Example 2. The transmission distance captured in the contract would be calculated as $(20 \text{ mi} * 100 \text{ MW} + 50 \text{ mi} * 100 \text{ MW} + 80 \text{ mi} * 50 \text{ MW}) / 250 \text{ MW}$ or **44 miles** which qualifies for a SDD credit. The SDD factor would be $0.4 * (75 - 44) / 75$ or **0.165**, which would be identified in the contract and multiplied by the HLH Average energy generated each month to determine the credit.
- Alternatives to base transmission distance on airline miles do not provide a realistic representation of the electron flow through the Transmission System.



Point of Delivery Limits

Here are a few things to consider for what to base the calculation of POD limits on:

1. Transformer / Line limits
2. Historical metered load
3. Forecast load at the POD



Unauthorized Increase Charge (UIC) Relationship to CSL Replacement

- Customer Served Load (CSL) will expire at midnight on September 30, 2011.
- Transmission Customers taking Network Integration Transmission (NT) Service under the NT Rate Schedule are assessed the UIC if the Actual CSL is less than the Declared CSL.
- As CSL expires, BPA Transmission Services is considering alternatives to replace the NT Service Unauthorized Increase Charge.



Open UIC Discussion

Our intent is to discuss and obtain customer feedback for developing an NT Unauthorized Increase Charge.

1. Behind the Meter Generation exceeding Network Load for any given hour.
 - Behind the Meter Resources do not use BPA transmission facilities. Behind the Meter generation exceeding Network Load flows onto the BPA Transmission System. There are no schedules submitted for Behind the Meter Resources, but over-generation above load would be picked up in an imbalance account.

2. All Designated Network Resources generation exceeding Network Load for any given hour.
 - Excess generation leads to unreserved use of BPA Transmission System.



Open UIC Discussion - Continued

3. Scheduling NT Firm above contractually designated capacity.
 - Customer can submit additional schedules for secondary non-firm service to Network Load.

- Currently, Point to Point (PTP) Customers are subject to UIC.



Wrap Up

- To suggest rate case topics to be added to the parking lot for discussion, please submit a written request to techforum@bpa.gov and state “**2012 Rate Case**” in the subject line.
 - Customers are encouraged to also participate in workshop discussions where such topic(s) are discussed.
- Customers that desire to post other rate-related materials to our rates website must submit a written request to techforum@bpa.gov
- See 2012 Rate Case website for additional information, workshop postings and handouts, and the BPA Calendar: <http://www.bpa.gov/corporate/ratecase/2012>. The BPA Calendar is also located at http://www.bpa.gov/corporate/public_affairs/calendar/.
- The next scheduled rates workshop on July 14th will cover the following transmission rate topics: Incremental Rates, Reservation Fee, Power Factor Penalty: Ratchet Demand and Transfer Service.



Appendix



Segmentation Process

- Classify the facilities of the FCRTS and assign them to different segments (categories of service) according to the type of services they provide.
- Project investment and O&M costs associated with these segments over the rate period.
- The final Segmentation Study is an input to the Revenue Requirements Study, which is used to develop transmission rates.



Segment Categories

- **Generation Integration (GI)** – Facilities to connect Federal generation to the Network.
- **Integrated Network (Network)** – Facilities to provide bulk power transmission.
- **Southern Intertie** – AC and DC connections to California.
- **Eastern Intertie** – Townsend- Garrison 500 kV line and equipment.
- **Utility Delivery (UD)** – Facilities to deliver power to public customers at <34.5 kV.
- **Industrial Delivery (DSI)** – Facilities to deliver power to Direct Service Industries (DSIs) at <34.5 kV.
- **Ancillary Services** – FERC-defined facilities and operations necessary for reliable transmission service.



Generation Integration Segment

- Consists of all facilities that connect the Federal generating plants to the integrated BPA transmission network.
- Includes transmission lines and equipment between the Federal generator bus and the first BPA transmission system substation encountered by the generated power.
- The costs associated with this segment are assigned to Power Services.



Integrated Network Segment

- Consists of facilities that:
 - Transfer bulk power from generation to load, including to the Delivery and Southern and Eastern Intertie segments.
 - Provide voltage regulation and overall reliability resulting from multiple transmission pathways.

- Consists of line and substation equipment at voltages from 34.5 kV to 500 kV owned and operated by BPA.

- By far the biggest segment



Southern Intertie Segment

- This segment is a system of transmission lines that interconnect the PNW and California power systems.

- The Southern Intertie consists of:
 - The Celilo Converter Station and 1,000 kV direct-current transmission line originating at The Dalles, Oregon (the DC Intertie).

 - A set of 500 kV alternating-current lines and substations originating in North Central Oregon (the AC Intertie)



Eastern Intertie Segment

- Consists of the Garrison-Townsend 500 kV line and the associated substation facilities at Garrison.
- The facilities are used to connect power generated at Colstrip to the BPA network and to transfer power between the Northwest and Montana



Delivery Segments

- The two delivery segments consist primarily of substation facilities required to “step down” (reduce) from prevailing transmission voltages for delivery to customers at voltages below 34.5 kV. Consists of two sub-segments:
 - Utility Delivery Segment: Consists of the facilities required to supply power at delivery voltages to BPA’s public utility customers.
 - Industrial Delivery (DSI) Segment: Consists of facilities required to supply BPA’s industrial customers.



Ancillary Services Segment

- Services that the Transmission Provider are required by FERC order to supply
- Required for reliable transmission service.
- Transmission equipment that supports ancillary services are certain communications and control systems, SCADA equipment, and computer hardware and software located at the control centers.
- These costs are assigned to various Ancillary Services



Segmentation Methodology

- BPA's transmission facilities are grouped as lines or substations and are assigned to segments on the basis of voltage and function.
- A number of technical sources are relied on to identify facilities for specific segments.
- In some cases, as for Interties, contracts define some or all of the facilities in a segment.



Segmentation Methodology (cont.)

- After the facilities are identified by segment, the investment cost of each segmented facility is determined from accounting records.
- Some facilities are common to more than one segment.
 - For substations, the facility costs are divided among the segments based on the use of each major component of the substation or, in some cases by contract
 - For lines, allocation is based on the miles in each segment, except for Buckley-Summer Lake, which has remained unchanged from the 1985 rate filing
- Historical investment is through September 30, 2009



Segmentation Methodology

- Direct O&M expenses for each transmission line and substation are obtained from plant and maintenance records for the latest 3 years (data available FY07-09)
- The historical segmented direct O&M costs are then used in the Revenue Requirements Study to allocate forecasted O&M costs and overhead to the test years
- Investment and O&M associated with providing the FERC-defined Ancillary Services are Identified



The End

