

White Paper

Scheduling, System Control and
Dispatch Rate Design Alternatives

Updated

September 18, 2018

Table of Contents

I. Introduction	1
II. Background	1
Definition and Description of Scheduling, System Control and Dispatch.....	1
SCD Cost Breakdown	1
SCD Cost Recovery and Current SCD Rates.....	3
Connection to Agency Strategy and Transmission Business Model.....	3
Industry Scan.....	4
BPA’s Rate Principles.....	5
Customer Reactions to Proposed SCD Rate Change	5
III. Proposed Alternatives	7
Status Quo	7
Alternative #1 – Do not allocate SCD costs to the Southern Intertie or Montana Intertie.....	8
Alternative #2 – Base the SCD billing determinant on schedules and metered load, and charge SCD only once across BPA’s system.	9
Alternative #3 – Base the SCD billing determinant on schedules and metered load, and continue to charge SCD on each segment.....	10
Alternative #4 – “Roll-in” the SCD rate.	10
Alternative #5 – Base the SCD billing determinant on e-tags and charge SCD only once across BPA’s system.....	11
IV. Evaluation of Alternatives Based on Rate Principles	13
Appendix A: Summary of Customer Comments Received	14

I. Introduction

As part of the Agency Strategy and Transmission Business Model, Bonneville Power Administration (BPA) is reviewing its rates and, where appropriate, looking to better align the rate designs with the function the service provides. Scheduling, System Control and Dispatch (SCD) was identified as a product that could be redesigned according to the Transmission Business Model Strategy. In addition to reviewing the SCD rate as part of the Transmission Business Model Strategy, some customers have asserted BPA's SCD rate is an economic obstacle for generators outside the Balancing Authority (BA) to wheel across BPA's transmission system, as well as for generators inside the BA that export out, creating a "pancake rate." For these reasons, BPA is exploring changes to the SCD rate design.

II. Background

Definition and Description of Scheduling, System Control and Dispatch

Scheduling, System Control and Dispatch service is an Ancillary Service required for scheduling the movement of power through, out of, within, or into a Control Area. This service can be provided only by the operator of the Control Area in which the transmission facilities used for transmission service are located. BPA Transmission Customers must purchase this service from BPA.

BPA currently applies a SCD charge for all original transmission reservations and network transmission load. One implication of charging SCD this way is SCD is billed multiple times for transmission reservations on multiple transmission segments. For example, if a customer reserves transmission with the intention of scheduling energy from a resource to the California-Oregon Border, that customer would be charged SCD on two reservations, once on the Network segment and once on the Southern Intertie segment. The same treatment is followed for the Montana Intertie in accordance with BPA's Open Access Transmission Tariff.

SCD Cost Breakdown

SCD includes all activities associated with scheduling energy transactions, verifying available transmission capacity for the schedule period, controlling generation to ensure adequate generation to meet firm load and interchange schedules, meeting reliability standards, and evaluating performance adequacy. In 2017, Operations and Maintenance expenses for SCD were approximately \$64M and Investments costs totaled approximately \$212M. A more detailed cost breakdown can be seen in Tables 1 and 3 below, or found on the BP-20 Meetings and Workshops page under the July 18, 2018 workshop heading at:

<https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

Table 1: FY2017 Segmented SCD Investments

Segmented SCD Investment 2017													
FERC Code	3531								3912	3913	3970		Grand Total
Sub-FERC Code	3531.101	3531.102	3531.103	3531.104	3531.105	3531.106	3531.107	3531.108	3912.200	3913.200	3970.104	3970.108	
GPLNT Total									33,256,461	28,509,741	583,139	45,958,597	108,307,937
MLEAS-G Total												18,443,322	18,443,322
MLEAS-T Total	2,180,127					2,180,129							4,360,256
TPLNT Total	12,880,948	640,831	75,539	40,497,502	861,659	694,793	19,001,700	6,836,562					81,489,534
Grand Total	15,061,075	640,831	75,539	40,497,502	861,659	2,874,922	19,001,700	6,836,562	33,256,461	28,509,741	583,139	64,401,918	212,601,049
Total Investment	212,601,049												
Scheduling Component	40,497,502	FERC Code 3531.104 used for RODS											

Table 2: FERC Codes used for Ancillary Services

FERC Codes	FERC Code Account Name	FERC Code Account Description
3531.101	Station Eqp - Control	Dispatcher's Board
3531.102	Station Eqp - Control	Stream Gauging
3531.103	Station Eqp - Control	Automatic Weather Reporting
3531.104	Station Eqp - Control	Rods
3531.105	Station Eqp - Control	Powerhouse Data Acq
3531.106	Station Eqp - Control	HVDC Console/Computer
3531.107	Station Eqp - Control	TCDS
3531.108	Station Eqp - Control	RAS (Control Center)
3912.200	Office Furniture & Equipment	Control System Processing Eqp
3913.200	Office Furniture & Equipment	Control System Software
3970.104	Communication - Scada Eqp	Supervisory/Control Eqp
3970.108	Communication - Scada Eqp	Communication SCADA Eqp

Table 3: FY2011-2017 SCD O&M Costs

SCD O&M Costs 2011-2017									
Group	Category	2011	2012	2013	2014	2015	2016	2017	Average
SCHEDULING	SCHED-AFTER-THE-FACT	155,899	235,830	236,080	239,530	237,015	273,268	304,828	240,350
	SCHED-MANAGE SPRVISION & ADMIN	(10,948)							(1,564)
	SCHED-PRE-SCHEDULING	240,302	216,005	240,494	327,694	343,973	381,926	210,762	280,165
	SCHED-REAL-TIME SCHEDULING	3,950,070	3,758,396	3,879,142	4,055,506	4,323,358	4,739,134	5,062,256	4,252,552
	SCHED-RESERVATIONS	3,850,292	4,063,568	4,160,436	1,048,994	1,156,291	1,166,624	1,210,775	2,379,569
	SCHED-TECHNICAL SUPPORT	1,226,234	948,115	431,829	3,939,968	3,731,632	3,641,184	3,655,913	2,510,696
Total Scheduling		9,411,848	9,221,913	8,947,981	9,611,692	9,792,268	10,202,136	10,444,535	9,661,768
SYSTEM OPERATIONS	CONTROL CENTER SUPPORT	14,753,404	13,645,553	14,061,644	19,367,928	20,849,069	23,065,994	23,567,095	18,472,955
	INFORMATION TECHNOLOGY	6,768,154	9,097,766	9,114,520	12,522,118	8,102,648	9,435,780	9,902,553	9,277,648
	POWER SYSTEM DISPATCHING	11,648,816	12,088,991	12,154,914	12,259,798	13,209,406	13,912,852	13,721,727	12,713,786
	TECHNICAL OPERATIONS	4,724,968	3,816,151	4,409,714	5,854,247	6,287,617	7,648,033	6,691,442	5,633,167
Total System Ops		37,895,340	38,648,462	39,740,792	50,004,092	48,448,739	54,062,659	53,882,817	46,097,557

SCD Cost Recovery and Current SCD Rates

BPA's current SCD rate methodology was established as part of the TR-02 Settlement. The SCD rates apply to both firm and non-firm transmission service arrangements on the Network, Southern Intertie, and Montana.

The calculation of the SCD rate starts with the segmented revenue requirement. This revenue requirement is adjusted by applying revenue credits and other adjustments as described in the Transmission Rate Study and Documentation. The adjusted revenue requirement is allocated to NT, PTP and IR service based on the ratio of the sales forecast for each service to the total forecast average annual sales of NT, PTP and IR. The allocated revenue requirements are divided by the applicable billing factor to determine SCD rates for NT, PTP and IR. A more in depth description of the SCD rate design can be found in the BP-18 Transmission Rates Study and Documentation (BP-18-FS-BPA-08).

The current (BP-18) SCD rates are:

- NT Service: \$0.376 per kilowatt per month
- PTP Long-Term Firm: \$0.322
- PTP Short Term Firm and Non-Firm:
 - Monthly, Weekly and Daily Firm and Non-Firm Service
 - Days 1-5: \$0.015 per kilowatt per day
 - Days 6 and beyond: \$0.011 per kilowatt per day
 - Hourly Firm and Non-Firm Service
 - 0.93 mils per kilowatt hour

For Transmission Customers taking Point-to-Point Transmission Service (PTP, IS, and IM rates), the Billing Factor is based on Reserved Capacity, and applies to all PTP transmission service under BPA's OATT regardless of whether the Transmission Customer schedules the transmission. For Transmission Customers taking Network Integration Transmission Service, the Billing Factor is the customer's load on the hour of the Monthly Transmission System Peak Load (TTSL).

Connection to Agency Strategy and Transmission Business Model

As part of the Agency Strategy and Transmission Business Model, BPA is in the process of reviewing its rates and exploring whether its products are priced at the appropriate level for the value of the services provided. In addition to the Agency Strategy and Transmission Business Model, there was an effort to review the Montana Intertie rate, which culminated with the publication of the Montana Renewable Action Plan (Montana Plan).

Industry Scan

BPA reviewed 29 Transmission Providers' Scheduling, System Control and Dispatch Rate designs. Specifically, BPA reviewed their PTP billing determinant, whether they have multiple transmission segments and whether they charge SCD for multiple segments.

Table 4: PTP SCD Billing Determinants Benchmarking

Description of SCD Billing Determinant	# of Providers Using this SCD Billing Determinant
Cost per schedule (\$/schedule)	3
SCD included in total transmission rate	5
Reserved Capacity (BPA's Status Quo)	20
Rate based on scheduled energy	1
Total	29

Roughly two thirds of the Transmission Providers BPA reviewed use a reserved capacity billing determinant. Five of the Transmission Providers appear to not have a separate charge for SCD, three use a \$/schedule billing determinant for SCD and one bills SCD on scheduled energy.

Table 5: Transmission Providers with Multiple Segments

Transmission Provider	Separate Transmission Rate(s) for use of Specific "Segments"?	Is SCD applied on each "Segment(s)"?
Avista	Yes - Colstrip Direct Assignment rate	N/A
PGE	Yes - Colstrip Direct Assignment rate	Yes
PSE	Yes - COI and Colstrip Direct Assignment rates	Yes
SMUD	Yes - COTP rate and SMUD System rate	Yes
WAPA - Sierra Nevada	Yes - Separate rates for PACI, COTP, CVP transmission	N/A
WAPA - DSW	Yes	No

The majority of the Transmission Providers BPA reviewed do not have distinct transmission segments. Of the Transmission Providers BPA reviewed, seven have distinct transmission rates for different segments of their transmission system. PGE, PSE and SMUD have direct assignment rates for the COI and/or Colstrip line and charge SCD on each reservation when a customer reserves transmission on multiple segments. Avista has a Colstrip direct assignment rate, but does not have any costs identified for SCD. WAPA – Sierra Nevada has different transmission rates for different transmission segments, but BPA was unable to find

a SCD rate. WAPA – DSW has different transmission rates for different segments and charges SCD based on a \$/tag billing determinant.

The complete industry scan is located on the BP-20 Meetings and Workshops page under the August 22, 2018 workshop heading at: <https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

Key Findings

- The majority of Transmission Providers charge SCD similarly to BPA’s status quo.
- Most Transmission Providers do not have multiple transmission segments; therefore, “pancaking” of SCD costs is not an issue.
- Typically, Transmission Providers that do have distinct transmission rates for different segments charge SCD for each segment. This is how BPA currently charges SCD.

BPA’s Rate Principles

BPA developed principles for the SCD rate design analysis which were used to evaluate the rate proposals. Those principles are the following:

Set rates consistent with ratemaking principles

- a. Cost causation
- b. Full and timely cost recovery
- c. Simplicity, understandability, public acceptance and feasibility of application
- d. Avoidance of rate shock
- e. Rate stability from rate period to rate period
- f. Equitable cost allocation between Federal and non-Federal uses of the transmission system

Customer Reactions to Proposed SCD Rate Change

During the BP-20 pre-rate case workshops, BPA staff shared with customers a proposal to explore two SCD rate designs and requested customers submit other alternative rate designs for staff to evaluate. Initial feedback from customers was largely negative. A few customers expressed interest in exploring rate design changes to the SCD; however, the majority of customers expressed BPA had not made a sufficient business case that the current rate design is deficient or is in need of change. Many customers also expressed concern over the possible cost shifts associated with a methodology change.

At the July 18, 2018 BP-20 Rate Case Workshop, staff shared an initial evaluation of two rate design alternatives (Alternatives 1 and 2 in this document). Staff also shared its leaning to recommend charging the SCD rate based on use of the scheduling system (Alternative 2 in this

document). Most customers were opposed to staff's proposal and expressed concern over the motives for changing the SCD rate design; however, a few customers were still interested in exploring a rate design change for SCD. At the same time, customers offered two additional alternatives and requested staff evaluate them (Alternatives 4 and 5 in this document).

At the August 22, 2018 BP-20 Rate Case Workshop, BPA staff shared with customers a White Paper detailing its evaluation of the SCD rate design proposals. The SCD White Paper was updated August 31, 2018 to incorporate customer feedback received at the workshop and customers were asked to provide comments.

A complete summary of customer comments can be found in Appendix A.

III. Proposed Alternatives

Status Quo

Description

BPA would make no changes to its current SCD rate methodology.

BPA Initial Evaluation

Pros:

- SCD is billed on the same billing determinants as transmission reservations, which simplifies billing and customer understanding of bills
- Rate design uses billing determinants that largely align with industry standard across WECC
- Does not require development of new forecasting methodologies
- Does not result in costs shifts
- Consistent with industry standard

Cons:

- Does not eliminate the “pancaking” of SCD charges
- Renewable Northwest believes the status quo does not satisfy the cost causation rate principle

Possible Rate Range

Please see the supplemental workbook which includes possible rate ranges for this alternative. The workbook is located on the BP-20 Meetings and Workshops page under the August 22, 2018 workshop heading at: <https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

Summary of Customer/Stakeholder Positions

- Clark Public Utilities, Cowlitz PUD, EWEB, Public Power Council, Shell Energy and WPAG have expressed support for maintaining the status quo.

Alternative #1 – Do not allocate SCD costs to the Southern Intertie or Montana Intertie.

Description

All SCD costs would be recovered by Network Load Service and Network Point-to-Point reservations. The SCD billing determinant would remain the same. A more detailed description of this alternative is available in the “SCD Rate Alternatives Description” document, which is posted on the BP-20 Meetings and Workshops page under the June 14, 2018 workshop heading at: <https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

BPA Initial Evaluation

Pros:

- Simple to implement
- Uses the same billing determinants as the status quo rate design
- Eliminates the “pancaking” of SCD charges
- Fully and timely recovers costs
- Rate stability

Cons:

- Creates large cost shifts. Customers that only have network transmission will see a 1-3% rate increase in their overall transmission costs in addition to any upcoming rate pressure.
- It is possible to use Intertie transmission without using Network transmission, which may lead to free-rider issues
- This alternative may not satisfy the cost causation rate principle because there may be some costs associated with scheduling across the Interties

Possible rate range

Please see the supplemental workbook which includes possible rate ranges for this alternative. The workbook is located on the BP-20 Meetings and Workshops page under the August 22, 2018 workshop heading at: <https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

Summary of Customer/Stakeholder Positions

- Haymaker Wind LLC, M-S-R, Orion Renewable Energy, and Renewable Northwest have expressed support for Alternative 1.

Alternative #2 – Base the SCD billing determinant on schedules and metered load, and charge SCD only once across BPA’s system.

Description

Charge SCD once and base the billing determinant on schedules and metered load (i.e. use a \$/MWh access charge). A more detailed description of this alternative is available in the “SCD Rate Alternatives Description” document, which is posted on the BP-20 Meetings and Workshops page under the June 14, 2018 workshop heading at:

<https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

BPA Initial Evaluation

Pros:

- Eliminates “pancaking” of SCD charges
- Fully and timely recovers costs
- Rate stability

Cons:

- Methodology creates large cost shifts across customers
 - NT customers may see a 2%-7% increase in their transmission costs in addition to any upcoming rate increase
- Methodology is more complicated than the status quo.
 - To validate a monthly transmission bill a customer would have to check the schedules associated with all of its tags. For active PTP customers this could exceed thousands of tags every month, which could lead to more billing disputes with customers.
- Customers have raised concerns whether moving to scheduled energy and metered load is better aligned to the costs of providing SCD.
 - Control and Dispatch costs may better align with the capacity of a reservation and peak load and not how a customer is actually scheduling its transmission. Moving to actual usage may not reflect this.
 - Scheduling costs may not align to the actual scheduled volume of energy. For example is it more expensive to schedule 50 MWs than 1 MW?
 - Customers have asked about the costs associated with customers that frequently use the system for redirects. This rate does not address that type of usage.
- Would require the development of new forecasting models and methodologies

Possible rate range

Please see the supplemental workbook which includes possible rate ranges for this alternative. The workbook is located on the BP-20 Meetings and Workshops page under the August 22, 2018 workshop heading at: <https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

Summary of Customer/Stakeholder Positions

- Haymaker Wind LLC, M-S-R, and Renewable Northwest have expressed support for Alternative 2, with Renewable Northwest expressing preference for this alternative.

Alternative #3 – Base the SCD billing determinant on schedules and metered load, and continue to charge SCD on each segment.

The rate impact of this alternative was conducted per customer request and can be found in the supplemental workbook; however, this alternative was not considered as one of the proposed alternatives to the SCD rate design.

Alternative #4 – “Roll-in” the SCD rate.

Description

Eliminate the SCD rate and allocate the costs across the Network, Intertie and Utility Delivery segments.

BPA Initial Evaluation

Pros:

- Simple to implement
- Uses the same billing determinants as the status quo rate design
- Customers see something close to actual price on OASIS
- Fully and timely recovers costs
- Rate stability

Cons:

- Does not actually eliminate the “pancaking” of SCD charges
 - The costs associated with SCD still show up in both the network and intertie transmission charges, so customers are still charged twice, or more, for a wheel across multiple segments
- This alternative would allocate SCD costs based on “net plant” instead of sales and it is unclear if there is a strong cost based reasoning to do so
- Utility Delivery is not currently charged SCD costs

Possible rate range

Please see the supplemental workbook which includes possible rate ranges for this alternative. The workbook is located on the BP-20 Meetings and Workshops page under the August 22, 2018 workshop heading at: <https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

Summary of Customer/Stakeholder Positions

- M-S-R and Powerex have expressed opposition to Alternative 4.

Alternative #5 – Base the SCD billing determinant on e-tags and charge SCD only once across BPA’s system

Description

Charge SCD based on the count of e-tags. This alternative would charge a \$/e-tag for each transmission customer on a tag.

BPA Initial Evaluation

Pros:

- Eliminates “pancaking” of SCD charges
- E-tags may more closely align with the scheduling costs of SCD

Cons:

- Methodology creates large cost shifts across customers
- The majority of NT service is not tagged, so BPA would need to develop a different way to allocate costs between customers that have scheduled tags and customers that have unscheduled service
- E-tags may align closer to the usage of the scheduling portion costs of SCD, but not the control and dispatch aspect
- BPA is still analyzing the costs associated with providing SCD and whether e-tags are the proper metric to measure use of the systems and costs associated with SCD
 - For example, e-tags would not capture use of the system such as redirects. E-tags are often adjusted multiple times throughout the day and billing on e-tags does not reflect this type of usage of the scheduling system.
- Methodology is more complicated than the status quo
 - To validate a monthly transmission bill a customer would have to possibly match thousands of tags. This could lead to more billing disputes with customers

- This alternative would require the development of new forecasting models and methodologies
- Rate stability may fluctuate with customer usage

Possible rate range

Please see the supplemental workbook which includes possible rate ranges for this alternative. The workbook is located on the BP-20 Meetings and Workshops page under the August 22, 2018 workshop heading at: <https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Meetings-and-Workshops.aspx>

Summary of Customer/Stakeholder Positions

- M-S-R and Powerex have expressed opposition to Alternative 5.

IV. Evaluation of Alternatives Based on Rate Principles

Rate Principle	Status Quo	Alternative 1	Alternative 2	Alternative 4	Alternative 5
Cost causation	Yes	Yes, if one could show either there is only benefit to the Network, or if one could show those that are paying the SCD for the Network are all the same customers that are paying the SCD for the Interties.	Yes, if we only allocate the portion related to scheduling.	Yes	Yes
Full and timely cost recovery	Yes	Yes	Yes	Yes	Yes
Simplicity, understandability, public acceptance and feasibility of application	Yes	No	No	Customer acceptance would likely be mixed.	No
Avoidance of rate shock	Yes	No, there would be a 1-3% rate shift to the Network customers.	Yes, if we only allocate the portion related to scheduling. If we allocate all costs, then there would be a significant cost shift across customers.	No	No
Rate stability	Yes	Yes	No	Yes	No
Equitable cost allocation between Federal and non- federal uses of the transmission system	Yes	Yes	Yes	Yes	No

Appendix A: Summary of Customer Comments Received

The customer comments summarized below are available on the BP-20 Customer Comments webpage at: <https://www.bpa.gov/Finance/RateCases/BP-20/Pages/Customer-Comments.aspx>

Clark Public Utilities

Submitted June 28, 2018

- Not necessarily opposed to BPA exploring alternative rate designs associated with SCD, but does not believe BPA has made a business case that the current rate design is deficient or in need of change, nor has BPA demonstrated how the current rate methodology does not meet the rate case principles.
- Concerned that a new rate methodology could result in significant cost shifts.
- Believes the current SCD rate design aligns well with how other transmission providers in the region recover SCD costs.
- Does not recall BPA using the term “hurdle rate” in the past to set rates. The SCD rate is a cost for doing business, and it appears some customers would like a lower rate for doing business.
- Would like more information or clarification as to how a new rate methodology would be implemented; the resulting cost shifts; how it will impact Clark Public Utilities compared to the status quo; or how it would be more reflective of a cost-based service.
- Recommended BPA provide customers with some activity based cost accounting relating to SCD to better explain the work, systems, and personnel involved in providing SCD and why it costs so much.

Submitted September 5, 2018

- Supports WPAG’s comments
- Continues to believe the SCD rate design is not in need of change
- Supports the status quo; all of the alternatives will negatively impact them, and they believe none of the alternatives are fair or show a benefit to a large number of BPA’s customer base.

Cowlitz PUD

Submitted August 28, 2018

- Strongly encourages BPA to retain the status quo for the following reasons:
 - It offers value-based pricing which aligns with BPA’s Transmission of Tomorrow vision

- Many of the activities and costs associated with SCD service are a function of transmission loading levels and patterns; therefore, the status quo is supportive of BPA's Transmission Business model of ensuring rate design aligns with the function the service provides
- It aligns with industry best practices
- The use of a billing factor other than the status quo would greatly increase the complexity of billing
- It is consistent with ratemaking principles

EWEB

Submitted September 5, 2018

- Supports PPC and WPAG's comments
- Continues to support the status quo SCD rate design
- The White Paper confirms the status quo conforms with standard industry practice, and is the only alternative that meets all six of BPA's rate principles.

Haymaker Wind LLC

Submitted September 6, 2018

- The pancaked SCD rate on the Montana Intertie was identified as a potential barrier to developing renewable resources in Montana through the Montana Plan.
- The status quo doesn't support the recommendations and actions of the Montana Plan.
- Favors Alternative #1 for the following reasons:
- Simple to implement and eliminates the pancaking of SCD rates on the Interties, removing a potential barrier to development in Montana
- Supports a free-rider modification: the free-rider issue could be resolved by leaving all SCD segment rates in place and charging the transmission customer a single SCD charge based on the highest use of any of the segments
- Supports a cost-shift modification: If eliminating the SCD rate from the Montana Intertie results in no significant cost shifts to other customers, Haymaker would support the elimination of the Montana Intertie SCD rate alone.

Joint Comments of Avangrid, Avista, Idaho Power, PacifiCorp, PGE, and PSE

Submitted June 28, 2018

- Requested additional information about the alternatives BPA staff presented at the workshop.
- Recommended that billing determinants for SCD under Alternative 2 should, to the extent practicable, be comparable for different services.

Joint Comments of Avista, Idaho Power, PacifiCorp, PGE, and PSE

Submitted September 7, 2018

- Regarding Alternative 1: any free-rider issues must be resolved if BPA pursues this alternative
- Regarding Alternative 2 or 3: the billing determinants for SCD should, to the maximum extent practicable, be comparable for different services.
- Regarding Alternative 5: would need to develop an appropriate billing factor for untagged NT service before pursuing.
- Believe that BPA has not assessed the practical feasibility of implementing Alternatives 2, 3 or 5 from a billing perspective.

Joint Comments of EWEB, Cowlitz PUD, PNGC Power, and WPAG

Submitted June 28, 2018

- Not necessarily opposed to BPA exploring alternative rate designs associated with SCD, but does not believe BPA has made a business case that the current rate design is deficient or in need of change, nor has BPA demonstrated how the current rate methodology does not meet the rate case principles.
- Believes the current SCD rate design aligns well with how other transmission providers in the region recover SCD costs.
- Believes BPA's claim that some customers feel the current SCD billing methodology is a "hurdle rate" is too ill-defined to be persuasive.
- Recommends BPA first establish that a change to the SCD methodology is needed, and then provide significant analysis of rate design alternatives, including information on resulting cost shifts.
- Recommends BPA provide customers with some activity based cost accounting relating to SCD to better explain the work, systems, and personnel involved in providing SCD and why it costs so much.

M-S-R

Submitted September 5, 2018

- Believes BPA should review and improve its SCD rate methodology
 - BPA's SCD charge has nearly doubled since 2004 and is significantly higher than other utilities' rates.
 - The SCD charge needs to be modified to better reflect cost causation; specifically cites the imposition of the charge twice when power is wheeled off of or through the network and across either of the interties.
- Believes that regardless of the pancaking issue, charging SCD for use of more than one segment does not reflect cost causation because no additional services are received by the customer.
- Supports Alternatives 1 and 2 because they appear to accomplish the goal of eliminating pancaking/avoiding double charges, but would like to know the magnitude of the free-rider concern listed in Alternative 1.
- Opposes Alternatives 3, 4 or 5 because they do not eliminate pancaking/double charges
- Questions why SCD charges don't currently apply to Utility Delivery customers.
- If BPA decides to breakdown SCD charges, additional questions need to be answered.

Northwest Requirements Utilities

Submitted June 28, 2018

- Believes BPA staff has not provided a sufficient explanation for the reasons given for proposing a change to the SCD rate design and has failed to explain how the current SCD rate design falls short of ratemaking principles.
- Believes the existing SCD rate design appears to already be the simplest approach
 - It uses the same forecasted data and billing determinants as other transmission rates.
 - A new billing determinate poses risks of inaccurate forecasting and billing; increased systems/processes conflicts with BPA's Strategic Plan.
 - The existing SCD rate appropriately addresses cost causation, while a new methodology is likely to cause cost shifts.
 - Due to the nature of SCD services, it is appropriate to allocate SCD costs based on reservation amounts because that is the amount of power that could be scheduled at any given moment.
- Believes the existing SCD rate design is consistent with other balancing authority areas in the PNW and is more consistent with BPA's strategic plan
 - Changing the rate design without justification conflicts with the Strategic Plan

- The proposed changes to the SCD rate design would increase staff time, costs, and risks
- Unclear what a “hurdle rate” means and believes that BPA’s primary objective is to remove the purported “hurdle rate” from the Intertie segment. This fails to consider cost causation.
 - NRU members do not see the SCD charge as an additional hurdle rate

Submitted September 7, 2018

- Offered feedback and suggested specific revisions to the White Paper including:
 - Believes there is a discrepancy in the description of why the SCD rate design is being reviewed
 - Believes the status quo con “RNW believes the status quo does not satisfy the cost causation rate principle” is not objective
 - Disagrees with the assertion that “pancaking” of the SCD charge is a negative or inappropriate.
 - Believes status quo should list “rate stability” as a pro
 - Questions why “rate stability” is listed as a pro under Alternatives 1 and 2 since there are fairly large rate impacts when comparing them to the status quo.
 - Suggests the White Paper should describe the rate impact range for the SCD rate in addition to the rate impact range for overall transmission costs.
 - Believes the free-rider issue listed under Alternative 1 is certain to occur rather than possible to occur.
 - Believes Alternative 1 would not at all satisfy cost causation rate principles because there are costs associated with scheduling across the interties, as well as system control and dispatch costs.
 - Believes “cost causation” cannot be evaluated based on only one part of the services provided by SCD
 - Disagrees that any of the alternatives (other than status quo) meet the cost causation rate design principle.
 - Requests BPA explain “rate stability” in the context it is used in the White Paper

Orion Renewable Energy

Submitted September 5, 2018

- Successful development of their 750 MW Clearwater wind project will most likely require utilization of the BPA Eastern/Montana Intertie
- Believes pancaked scheduling fees should not be charged for the use of multiple segments since separate schedules aren’t required to use multiple segments.

- Believes there isn't a cost basis for assigning S, C or D costs to the Eastern/Montana Intertie rates:
 - BPA's control and dispatch functions effectively end at Garrison
 - The RAS that operates beyond Garrison in eastern Montana was put in place to support increased transfer capability on the Main Grid and is not used or needed to support transfer capability
- Believes SCD costs have been incorrectly allocated in the past, therefore it will be necessary to "shift" some of the costs to correctly reflect cost causation.
- Believes any "large cost shifts" would be the result of eliminating the SCD on the Southern Intertie, not the Eastern/Montana Intertie.
- Suggests the "free rider" effect could be eliminated by charging the SCD rate on the highest use of any of the segments.
- Not opposed to changing the billing determinants for the SCD, but believes the current capacity-based SCD charge is reasonable.
- Favors Alternative 1 or a modified Alternative 1 that eliminates the SCD rate for the Eastern/Montana Intertie only

Powerex

Submitted June 28, 2018

- Requests BPA provide further information on what BPA believes is the problem to be resolved, and why it proposes making changes to the SCD charge.
- Requests BPA analyze and present information on cost shifts to customers, as well as identify its assumptions on the estimated SCD rates and billing determinants used for analysis of any proposals.
- Requests BPA explain how its proposal aligns with industry standard and is consistent with BPA strategy, including examples from other comparable transmission tariffs.
- Powerex's review suggests the majority of providers recover SCD based on a reserved capacity charge and this would align with the fact that scheduling costs are largely fixed costs to the Transmission Provider. There is little-to-no variable cost component if customers schedule on their reserved capacity or not.

Submitted September 7, 2018

- Requests BPA provide an analysis of additional costs that may be incurred to develop systems and implement a modified design.
- Believes the rate principle evaluation matrix provided is insufficient and in some cases incorrect; BPA should conduct a more detailed/nuanced analysis.

- Believes Alternative 2 introduces potential inequity in terms of the billing determinant allocation and may violate the “cost causation” rate-making principle
 - Concerned that scheduling costs are largely fixed costs to the TP; BPA hasn’t explained how Alternative 2 appropriately allocates the majority of SCD costs to the scheduling of energy on the transmission system.
- Agrees that Alternative 3 should not be considered
- Believes Alternative 4 should not be considered as it is not industry standard and there isn’t a strong cost-based reason to adopt the alternative.
- Believes Alternative 5 should not be considered because it potentially violates the “cost causation” rate-making principle.
- Questions the conclusion of the rate principle evaluation matrix that all alternatives meet the “full and timely cost recovery” rate-making principle – requests further analysis and discussion on how each alternative would do so.

Public Power Council

Submitted June 13, 2018

- PPC Generally supports a rate design that is simple, transparent and recovers costs, but would like to better understand how the alternate rate design better meets those criteria when compared to BPA’s current SCD rate.
- Requested more information about the SCD proposal:
 - More specificity on how the charge would be applied, including a detailed description of how the rate would apply in specific scenarios;
 - Expected costs (both initial and ongoing) of making this change;
 - Expected changes in the billing determinant; and
 - An assessment on any changes in cost recovery risk due to the changed rate design.
- PPC is concerned that BPA would propose a rate change simply because some customers have the “impression” that a rate creates a hurdle for specific uses of the system.
- Requested BPA make additional data/information available to customers, including historical scheduling data, how reservations are used to schedule and how the number of schedules impacts the costs associated with SCD charges.

Submitted September 5, 2018

- Believes the information and analysis provided by BPA in the White Paper supports maintaining the current SCD rate design. PPC has not heard any compelling argument for changing the current rate design.
- Regarding the analysis of Alternative 1:

- Believes BPA has not provided information to support the argument that assigning costs of SCD only to the Network could be consistent with cost causation if “there is only benefit to the Network.” And, believes testimony from TR-02 is contradictory to that argument.
- Questions BPA’s cost causation statement. Believes that even “if one could show that those who are paying the SCD for the Network are all the same customers as those paying the SCD for the Interties” it is not clear that the SCD rate should be eliminated on the Interties because customers using two segments of transmission on the Network would still be incurring two charges.

Renewable Northwest

Submitted June 28, 2018

- Encouraged by BPA’s examination of the current SCD rate methodology.
- Concerned that the current approach to recover SCD costs is not directly tied to a customer’s use of SCD services and, as such, is inconsistent with cost causation principles.
- For customers scheduling a single transaction across two or more of BPA’s transmission segments, the current SCD rate design effectively amounts to an additional transmission service wheel and is not proportional to that customer’s single utilization of BPA’s SCD services.
- Believes the current SCD rate structure is disproportionately burdensome for lower capacity factor resources such as wind and solar energy.
- Believes the current SCD rate design is disconnected from the expanding participation in the Western EIM.
- Believes the current SCD rate design is inconsistent with BPA’s Strategic Plan, given the factors listed and changing market conditions.
- Believes BPA’s current method to recovering SCD costs is not consistent with industry standards.

Submitted August 6, 2018

- Continues to support changes to the SCD rate design
- Believes that in order to meet BPA’s ratemaking principles, at the very least, the “scheduling” portion of the SCD rate must be aligned with the number of schedules submitted and there must only be one charge for each schedule regardless of the number of BPA segments that scheduled power flows over.

Submitted September 7, 2018

- Encourages BPA to provide customers and stakeholders additional info on the Control and Dispatch functions of SCD, as well as break down the SCD investments by the SCD functions.
- Questions the usefulness of the Industry Scan findings particularly related to TPs with multiple segments. Believes including the Colstrip examples skews the findings because they are governed by unique legacy contracts.
- Encourages BPA to identify the unique issues related to the SCD rate as it applies to the Eastern Intertie
- Disagrees with BPA's characterization of initial customer reactions to exploring the SCD rate design change.
- Encourages BPA to outline its rationale for determining whether an alternative SCD rate design complies with a particular rate principle.
- Believes that by eliminating the pancaking of SCD charges, Alt 1 and 2 would be consistent with cost causation principle since individual schedules are not submitted for each segment of BPA transmission.
- Believes sometimes cost shifts are necessary to better align existing rates with established ratemaking principles.
- Believes Alternative 2 better aligns the rate determinant with the use of Scheduling function, thereby better aligning the SCD rate with cost causation principles.
- Encourages BPA to explain why it considers the status quo consistent with the principle of cost causation.
- Encourages BPA to identify potential solutions to perceived cons, such as charging a customer once for the highest use of any segment to mitigate the "free-rider" concern.
- Supports Alternatives 1 or 2
 - Believes Alternative 2 aligns best with cost causation, but recognizes the additional implementation hurdles; therefore, considers Alternative 1 a reasonable compromise

Shell Energy

Submitted August 1, 2018

- Based on the BPA's rate impact analysis of Alternative 2, Shell Energy is concerned that the "avoiding rate shock principle" has not been met.
- Believes true cost causation principles would assign cost to the number of schedules which BPA processes.
- Scheduling functions are not proportionate to MWh scheduled, so charging the SCD based on transmission MWh scheduled may not meet BPA's cost causation principle.

- A MWh scheduled billing determinant would create cost shifts to large load customers or larger transmission lines, counter to reflecting and encouraging economies of scale.
- Even if an owner of a particular segment of transmission is not the entity scheduling energy from its generation or energy to its load, that does not mean the transmission owner is not receiving a benefit from those transmission schedules.
- Encourages BPA to maintain the status quo for SCD cost recovery, as it is commonly accepted, similar to other utility allocation basis, and likely meets BPA’s “sound business practice” criteria.

Snohomish PUD

Submitted June 13, 2018

- Requested more information/clarification on BPA’s proposed rate alternative including:
 - How the SCD rate itself would change;
 - The overall revenue impact from the rate design change;
 - Whether BPA believes it currently collects adequate/inadequate amount of revenue from the SCD charge to cover its cost of providing the service;
 - Analysis of specific scheduling scenarios.

WPAG

Submitted September 7, 2018

- Continues to support the current SCD rate design for the following stated reasons and reasons stated in earlier submitted comments:
 - It conforms with standard industry practice
 - It is the only alternative evaluated that meets all of BPA’s rate principles