

BPA Transmission Southern Intertie Hourly Non-Firm Workshop

December 17, 2015



Agenda

1. Summary of White Paper comments
2. BPA's evaluation of the effectiveness of each alternative
3. Benchmarking summary
4. BPA staff's initial leaning
5. Next Steps

Summary of Customer Comments on the Draft White Paper

- The majority of customers are satisfied with the White Paper's background, context, and description of alternatives.
- Several customers urge BPA Power to be more actively involved in this process.
- Several customers would like a timeline and process for addressing the other, out of scope seams issue.
- PGE is unconvinced that there is a risk of near-term loss of LTF transmission contracts representing a material impact to BPA and its customers. BPA has not demonstrated the need for an expedited 7i process.
 - The primary driver for a rates solution should be based on verifiable concerns that BPA will be unable to recover its investments in the Southern Intertie.

Evaluating the Effectiveness of each Alternative

BPA staff considered the following questions to develop an initial assessment of the effectiveness of each alternative.

1. Will the alternative be effective at preserving advantages of LT firm in the CAISO market?
 - Does it increase the value of LT relative to Short Term?
 - Will it increase LT rights holders' ability to utilize their transmission rights?
 - Will the alternative increase economic benefits to LTF transmission customers?
2. Will the alternative encourage continued subscription in LTF on the Southern Intertie?
3. Is the alternative durable?
 - Will it be sustainable through time?
 - Will it be effective under different market dynamics?

BPA Evaluation Criteria

- The following matrix is focused solely on the evaluation of the effectiveness of the identified alternatives.

- It does not account for other criteria that are important in selecting rate or non-rate alternatives:
 - Legal and compliance risk (see appendix for BPA Legal and Compliance initial review presented at November 18th Workshop)
 - Systems upgrade costs and time to implementation
 - Impacts on Southern Intertie utilization
 - Potential risks of implementation
 - Potential impacts on regional oversupply

Effectiveness of Rate Alternatives

Possible Rate Range and Criteria	Effectiveness Rating for each Proposed Rate Alternative			
	Status Quo	Alt 1a	Alt 1b (low)	Alt 1b (high)
Possible Rate Range	\$3.53	\$12	~\$5	~\$8
Percent Change in Rate		~240%	40%	130%
<p>1. Will the alternative be effective at preserving advantages of LT firm in the CAISO market?</p> <p>Any increase in the hourly non-firm rate will increase the relative value of LT, increase LT utilization and increase the economic benefits to LT customers. The degree of effectiveness is related to the magnitude of rate change.</p>	No Effect	More Effective	Somewhat Effective	More Effective
<p>2. Will the alternative encourage continued subscription in Long-Term Firm on the Southern Intertie?</p> <p>A increase in the hourly non-firm rate will make LT a better economic investment relative to HNF. The larger the cost advantage of LT the more it encourages continued subscription.</p>	No Effect	Very Effective	More Effective	Very Effective
<p>3. Is the alternative durable?</p> <p>Rates based on historical reservations or other historical data may need to be revisited from rate case to rate case.</p>	No Effect	Somewhat Durable	More Durable	More Durable

Alternative #1a – Recalculate the Southern Intertie HNF rate using the methodology proposed by Joint Party 06 in BP-16.
 Alternative #1b – Recalculate the Southern Intertie HNF rate based on a different measure of Southern Intertie usage.

Effectiveness of Rate Alternatives (Cont.)

Possible Rate Range and Criteria	Effectiveness Rating for each Proposed Rate Alternative			
	Alt 2 (low)	Alt 2 (high)	Alt 3	Alt 5
Possible Rate Range	~\$5	~\$13	>\$20	N/A
Percent Change	40%	270%	>450%	N/A
1. Will the alternative be effective at preserving advantages of LT firm in the CAISO market? Any increase in the hourly non-firm rate will increase the relative value of LT, increase LT utilization, and increase the economic benefits to LT customers. The degree of effectiveness is related to the magnitude of rate change.	Somewhat Effective	More Effective	Very Effective	Somewhat Effective
2. Will the alternative encourage continued subscription in Long-Term Firm on the Southern Intertie? An increase in the hourly non-firm rate will make LT a better economic investment relative to HNF. The larger the cost advantage of LT the more it encourages continued subscription.	More Effective	Very Effective	Very Effective	Somewhat Effective
3. Is the alternative durable? Rates based on historical reservations or other historical data may need to be revisited from rate case to rate case.	More Durable	More Durable	More Durable	Very Durable

Alternative #2 – Calculate the Southern Intertie HNF rate based on a different assumption of “high value” hours

Alternative #3 – Set the Southern Intertie HNF rate based on the cost of expansion

Alternative #5 – Eliminate the HNF interruption credit

*Alternative #4 (Out of Scope) – Set the Southern Intertie HNF rate based on market indicator - Staff recommends against exploring this rate structure because of concerns that it is inconsistent with the principle of cost based rates.

Effectiveness of Non-Rate Alternatives

Criteria	Effectiveness Rating for each Proposed Non-Rate Alternative								
	Status Quo	Alt 6	Alt 7a	Alt 7b	Alt 8	Alt 9	Alt 10	Alt 11	Alt 13
1. Will the alternative be effective? The effectiveness of each alternative is determined by the amount of risk it introduces to relying on the availability of HNF.	No Effect	Somewhat Effective	Very Effective	More Effective	Somewhat Effective	More Effective	Somewhat Effective	Very Effective	Somewhat Effective
2. Will the alternative encourage continued subscription in Long-Term Firm on the Southern Intertie? Increased risk of relying on the availability of HNF will increase the relative value of LT and encourage continued subscription of LT.	No Effect	Somewhat Effective	Very Effective	More Effective	Somewhat Effective	More Effective	Somewhat Effective	Very Effective	Somewhat Effective
3. Is the alternative durable? Will the alternative be sustainable over time. Will changing/developing markets or implementation issues require additional changes to maintain effectiveness.	No Effect	Very Durable	Very Durable	Very Durable	Very Durable	More Durable	Very Durable	More Durable	More Durable

Alternative #6 – Sell HNF inventory once

Alternative #7a – Do not sell HNF on the Southern Intertie

Alternative #7b – Stop selling HNF on the Southern Intertie when within a certain % or MW of SOL

Alternative #8 – Implement duration based competition on the Southern Intertie

Alternative #9 – Change the HNF release time on the Southern Intertie

Alternative #10 – Limit HNF sales on the Southern Intertie to the amount calculated after the close of the Day Ahead preschedule window

Alternative #11 – Limit availability of HNF service on the Southern Intertie (tie to posted secondary transmission market)

Alternative #12 – (Out of Scope) BPA limits LTF schedules to their pro-rata share during path de-rates - BPA has determined this alternative is out of scope in this process because it would likely only address seams issue #1. It will be addressed in a different process.

Alternative #13 – BPA proactively manages curtailments on the Southern Intertie prior to the interval

Benchmarking Summary

- BPA staff reviewed regional TPs practices to benchmark proposed alternatives (details in the Appendix).
- **Rates:**
 - PGE and PSE both have HNF rates on the Northern half of the COI that are lower than BPA's.
 - Relationship between LTF and HNF rates:
 - TANC is the only provider with a higher HNF to LTF ratio (equivalent to 60 hours per week using BPA's rate construct)
 - Several providers are close to BPA's ratio (80 hours per week)
 - About half set On Peak and Off Peak rates separately with Off-Peak HNF = hourly cost of LTF (168 hours per week)
- **Treatment of ATC:**
 - BPA is unique in adding the unscheduled portion of HNF reservations back to HNF inventory
 - Wide range of times when unused LTF is sold as HNF
 - BPA's 10 p.m. release time is the latest
 - Several release at noon on the preschedule day (between submittal of CAISO day ahead bids and posting of day ahead awards)

BPA Staff's Initial Leaning

BPA staff is leaning towards a combination of both rate and non-rate alternatives.

Rate Alternative Leanings:

- A rate design change based on “high value hours” (Alt #2); and
- Exploring the elimination of the HNF interruption credit due to curtailment (Alt #5)

Non-Rate Alternative Leanings:

- Selling HNF on the Southern Intertie only once (Alt #6); and
- Changing the release time of HNF (Alt #9).

Next Steps – White Paper

By January 22:

- We request that customers review and comment on the proposed alternatives in the regional white paper, specifically providing considerations either in favor or in opposition to the alternatives.
 - Please use the principles and criteria that were set forth at the beginning of this regional process to evaluate the alternatives (see Appendix).
 - These evaluations will be included in the regional white paper and shared with executives.

- Please send all information to Rebecca Fredrickson via email: rfredrickson@bpa.gov

Next Steps (Cont.)

- **Next meeting: February 17 (Wed.)**
 - BPA will share:
 - Rate process timeline if a rate alternative is recommended
 - The preferred rate alternative if recommended
 - Non-rate alternatives to explore further and the forum in which they will be addressed if recommended

Appendix

Rates Benchmarking Summary

Transmission Provider (Path)	Hourly Non-firm Rate	Hourly Firm Rate Equal to HNF Rate?	LTF Rate	LT Multiplier to develop HNF rate (ex. BPA is 168/80)	Posted Discounts
BPA Southern Intertie	\$3.53	Yes	\$14,760/ MW yr	168/80	Currently No Posted Discounts
Avista	\$5.77	Does not offer hourly firm	\$24,000/ MW yr	~168/79.8	Currently No Posted Discounts
Avista - Colstrip	\$3.91	Does not offer hourly firm	\$16,410/ MW yr	~168/80.5	Currently No Posted Discounts
BC Hydro	\$7.42	Yes	\$64,967.88/MW yr	168/168	On Peak: \$3/hr Off Peak:\$1/hr
Idaho Power	On Peak: \$4.79 Off Peak: \$2.67	Does not offer hourly firm	\$23,430/ MW yr	On Peak: ~168/93.8 Off Peak: 168/168	Currently No Posted Discounts
LADWP	On Peak: \$10.81 Off Peak: \$5.14	Yes	\$44,990/ MW yr	On Peak = 168/79.8 Off Peak = 168/168	Currently 25% - 40% on certain unconstrained paths through Dec
NV Energy	On Peak: \$6.25 Off Peak: \$3.75	Does not offer hourly firm	\$31,760/ MW yr	On Peak = 168/97.5 Off Peak = 168/162.4	Currently No Posted Discounts
PacifiCorp	On Peak: \$6.85 Off Peak: \$3.26	Yes	\$28,505.70/MW yr	On Peak = 168/79.8 Off Peak = 168/168	Currently No Posted Discounts
PGE	On Peak: \$1.257 Off Peak: \$0.718	Does not offer hourly firm	\$6,280/MW yr	On Peak: 168/95.8 Off Peak: ~168/168	Currently No Posted Discounts
PSE	On Peak: \$4.3254 Off Peak: \$2.4714	Yes	\$21,592.30/MW yr	On Peak = 168/95.7 Off Peak = ~168/168	Have a discount posted on Windridge to Wanapum path (due to settlement)
PSE - COI Direct Assignment	On Peak: \$1.9851 Off Peak: \$1.1343	Does not offer hourly firm	\$9,909.6/MW yr	On Peak = 168/95.7 Off Peak = ~168/168	Currently No Posted Discounts
SMUD - COTP	\$11.1430	Does not offer hourly firm	\$60,528/MW yr	~168/104.2	Currently No Posted Discounts
SMUD - Network	\$2.0640	Does not offer hourly firm	\$10,452/MW yr	~168/97.1	Currently No Posted Discounts
TANC	\$17.64	Does not offer hourly firm	\$54,450/MW yr	~168/59.2	Discount frequently on the COTP. Previous HNF discounts: 9/11/15 - \$13.23 7/23/15 - \$8.82 11/24/14 - \$10.58 6/9/14 - \$8.33 4/11/14 - \$10.58 Have a formalized process for discounting

Valid for Service on Northern half of Southern Intertie
Valid for Service on Southern half of Southern Intertie

ATC Benchmarking Summary

	Postback Unused HNF?	Timing for Postback of unused Firm as Non Firm
Avista	Possible this occurs because ATC is updated after new and adjusted e-tags are received.	12:07 p.m. of the preschedule day
Idaho Power	No	Noon of the preschedule day
LADWP	No	4 p.m. of the preschedule day
NV Energy	No	Noon of the preschedule day
PacifiCorp		3:05 p.m. of the preschedule day
PGE	No	Start selling HNF at noon the preschedule day based on estimates. Release any additional capacity based on actual firm schedules at 2 p.m.
PSE	No	168 hours before the hour

White Paper – Rate Alternatives

Rate Alternative	Seams Issues Addressed	BPA’s Initial Review
<p>1a. Recalculate HNF rate with JP06 BP-16 Rate Proposal, which uses a measurement of reservations per week per customer as the divisor.</p>	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • No tariff change required • Methodology change may be difficult to confine to the Southern Intertie • BPA concerns with JP06 proposal: <ul style="list-style-type: none"> • Methodology would be volatile • HNF customers are unable to purchase on some hours. • No evidence that HNF customers can achieve the same value in 23 hours as LTF customers, who use many more hours on average. • Ignores MWs of purchases. • Does not recognize diversity among HNF purchasers
<p>1b. Recalculate HNF rate based on a different measure of Southern Intertie usage.</p>	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • No tariff change required • Methodology change may be difficult to confine to the Southern Intertie

White Paper – Rate Alternatives

Rate Alternative	Seams Issues Addressed	BPA Initial Review
2. Calculate HNF rate based on different assumption of “high use” hours.	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • No tariff change required • Methodology change may be difficult to confine to the Southern Intertie
3. Set IS HNF rate based on the cost of expansion, then allow discounting.	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • No tariff change required • May provide further incentive for customers to continue rolling over LTF • Methodology change may be difficult to confine to the Southern Intertie
4. Set IS HNF rate based on market indicator.	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • BPA will be exploring only cost-based rate methodologies at this time.

White Paper – Rate Alternatives

Rate Alternative	Seams Issues Addressed	BPA Initial Review
5. Eliminate HNF interruption credit.	<ul style="list-style-type: none">• Seams Issue 2• Seams Issue 3	<ul style="list-style-type: none">• No tariff change required

NOTE: Discounting can be considered for any of the rate alternatives.

White Paper – Non-Rate Alternatives

Non-Rate Alternative	Seams Issues Addressed	BPA Initial Review
6. Sell HNF inventory once; do not continue to resell unscheduled non-firm reservation	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • No tariff change required • ATC methodology and business practice change likely • Will require software or hardware upgrades
7. Do not sell HNF on the Southern Intertie, or stop selling hourly non-firm when schedules reach a certain % of the SOL.	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • Tariff change required (section 14) • May require software or hardware upgrades
8. Implement duration based competition on the Southern Intertie	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • Possibly require tariff change, depending on methodology • May require software or hardware upgrades

White Paper – Non-Rate Alternatives

Non-Rate Alternative	Seams Issues Addressed	BPA Initial Review
9. Change the HNF release time on the Southern Intertie	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • No tariff change required • Will require software or hardware upgrades • May impact other contract paths
10. Limit HNF sales to the amount calculated after the close of the DA preschedule window (Do not continuously update the IS HNF inventory after the close of preschedule)	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • Probably does not require a tariff change • Will require software or hardware upgrades
11. Limit availability of HNF service (tie to posted secondary transmission market).	<ul style="list-style-type: none"> • Seams Issue 2 • Seams Issue 3 	<ul style="list-style-type: none"> • Tariff change required • Will require software or hardware upgrades • BPA would need to explore how this market is monitored

White Paper – Non-Rate Alternatives

Non-Rate Alternative	Seams Issues Addressed	BPA Initial Review
12. BPA limits LTF schedules to their pro-rata share during path de-rates	<ul style="list-style-type: none"> Seams Issue 1 	<ul style="list-style-type: none"> BPA has determined this is out of scope in this process. It will be addressed in a different process.
13. BPA proactively manages curtailments on the IS prior to the interval	<ul style="list-style-type: none"> Seams Issue 2 Seams Issue 3 	<ul style="list-style-type: none"> No tariff change required

Principles/Criteria

▪ Rate Principles and Criteria:

- Set rates and policies consistent with statutory requirements
 - Full and timely cost recovery
 - BPA's rates are based on total system costs
 - Equitable cost allocation between Federal and non-Federal uses of the transmission system
 - Encourages the widest possible diversified use of electric power at the lowest possible rates to consumers, consistent with sound business principles
- Set rates consistent with ratemaking principles
 - Cost causation
 - Consistent with statutory obligations and minimize compliance risk
 - Simplicity, understandability, public acceptance and feasibility of application
 - Avoidance of rate shock
 - Rate stability from rate period to rate period
- Considerate of seams issues with California
 - Preserve the value of BPA transmission products and ensure their long term viability
 - Encourages continued subscription of LTF on the Southern Intertie
 - Durable, will be consistent over time and will withstand possible market changes

Principles/Criteria

▪ Non-Rate Criteria:

- Consistent with statutory obligations and minimizes compliance risk
- Consistent with desired future state of BPA business and policy – Does the decision support the longer term direction of BPA with regards to its policies and practices?
- Ability to implement both from a BPA technical perspective and from the customer's perspective. – Options provided herein will have implications for the ability to implement both from a technical standpoint, but also from a customer process and communication standpoint.
- Supportability – Ongoing costs (if any) associated with maintenance and system upgrades.
- Considers impacts to different customers
- Considers impacts to reliable operations
- Financial – Implementation – Options presented may have significantly different implementation costs associated with them.
- Financial – Revenue