INDEX

REBUTTAL TESTIMONY of

MICHAEL R. LINN, DAVID W. BOGDON, REBECCA E. FREDRICKSON,

DENNIS E. METCALF, and LAUREN E. TENNEY

Witnesses for Bonneville Power Administration

SUBJECT: SOUTHERN INTERTIE HOURLY NON-FIRM

Page

Attachments

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Section 1: Introduction and Purpose of Testimony

Q. Please state your names and qualifications.

A. My name is Michael R. Linn, and my qualifications are contained in BP-16-Q-BPA-24.

A. My name is Dave W. Bogdon, and my qualifications are contained in BP-16-Q-BPA-06.

A. My name is Rebecca E. Fredrickson, and my qualifications are contained in BP-16-Q-BPA-13.

A. My name is Dennis E. Metcalf, and my qualifications are contained in BP-16-Q-BPA-31.

A. My name is Lauren E. Tenney, and my qualifications are contained in BP-16-Q-BPA-38.

Q. What is the purpose of your testimony?

A. The primary purpose of our testimony is to address the Joint Party 06 (JP06) proposal to revise the hourly non-firm rate design on the Southern Intertie. JP06 consists of the Public Power Council and Powerex. In addition, we will address M-S-R's testimony regarding the Southern Intertie.

Section 2: Southern Intertie Hourly Non-Firm Rate

Q. Briefly summarize how you calculated the Southern Intertie hourly non-firm rate in your initial proposal.

A. We first multiplied the long-term firm rate by 24/16 (24 hours per day divided by the 16 heavy load hours). This calculation results in a rate higher than a simple pro rata fraction of the long-term rate and ensures that customers that reserve transmission during all 16 heavy load hours, when loads are typically highest, pay the same amount as a

long-term firm customer that has the right to schedule transmission 24 hours a day. We then multiplied the result by 7/5 (7 days a week divided by 5 weekdays) to ensure that customers that reserve transmission for five weekdays, again when loads are typically highest, pay the same amount as a long-term firm customer that has the right to schedule every day of the week.

Finally, we divided the rate by 730 hours and multiplied by 1000 to convert the charge into a mills/kWh rate. The practical result of the methodology is that a customer that reserves 1 MW for 80 hours of hourly non-firm transmission (16 hours a day multiplied by five days) pays the same amount as a long-term firm customer buying 1 MW. Our methodology, which we also use to calculate hourly firm on the Southern Intertie as well as hourly firm and non-firm rates on the Network segment and for Scheduling, System Control, and Dispatch (SCD) Service, is fully described in the Transmission Rates Study and Documentation, BP-16-E-BPA-07, sections 4.3 and 5.1.

Q. What are JP06's concerns with the methodology that you proposed?

A. JP06 believes that the proposed hourly non-firm rate is "artificially low" because "it makes a factually unsupported and incorrect assumption about the number of hours per week that the service will be reserved by transmission customers." Baker *et al.*, BP-16-E-JP06-01, at 6. According to JP06, the low rate results in an inequitable allocation of costs between customers that reserve hourly non-firm service on the Southern Intertie and customers that reserve other transmission service over the same facilities, and "provides an incentive for transmission customers to avoid committing to IS [Southern Intertie] Long-Term Firm Service[.]" *Id.* at 8.

Q. Do you agree with JP06's statement that your initial proposal "makes a factually unsupported and incorrect assumption about the number of hours per week that the service will be reserved by transmission customers"? Id. at 6.

A. No. JP06 misconstrues the basis of our calculation. Our methodology is not based on the assumption that customers will actually purchase 16 hours of non-firm transmission service, five days a week (80 hours of transmission service per week). Rather, the methodology creates an incentive to purchase long-term firm transmission by making it more expensive to purchase hourly service if a customer's demand exceeds 80 hours per week. Thus, our use of 80 hours a week is not an attempt to anticipate the number of hours that the average customer will use hourly non-firm transmission in a given week. Instead, it is a common industry method used to incentivize the purchase of long-term firm service, which adds substantially to the predictability and stability of transmission revenue.

Q. To show that long-term firm customers pay more than their fair share of Southern Intertie costs, JP06 stated that a transmission customer that purchases 1 MW of hourly non-firm service for 23 hours in one week would pay $86, whereas a transmission customer that purchases 1 MW of long-term firm service on the Southern Intertie would pay $298 per week. Id. at 9. Do you believe this is inequitable?

A. No. The hourly non-firm customer in the example above pays less because it can use the Southern Intertie only for the 23 hours a week it has reserved, whereas long-term firm customers have the right to schedule their Southern Intertie reservation for all 168 hours of the week. That is, long-term firm customers pay more because they can use the Southern Intertie more. Therefore, the distribution of costs between long-term firm and hourly non-firm transmission is equitable.

Q. Do you agree with JP06's statement that your proposed hourly non-firm rate "provides an incentive for transmission customers to avoid committing to IS [Southern Intertie] Long-Term Firm Service"? Id. at 8.

A. No. The evidence does not support this assertion. BPA has sold all of its long-term firm capacity on the Southern Intertie and has a lengthy queue of customers waiting for service. This would not be the case if customers had an incentive to avoid committing to long-term firm service on the Southern Intertie. In our review of hourly non-firm reservations from FY 2012 – FY 2014, there were a significant number of hours where customers attempted to obtain hourly non-firm service on the Southern Intertie, but it was unavailable. The inability to obtain hourly non-firm service in all hours it is requested makes it less valuable than long-term firm service.

Q. JP06 claims that the California ISO "grants awards for deliveries in its markets without regard to the seller's transmission priority on BPA's system – and not according to the OATT framework[,]" thereby "undermin[ing] the value of existing Firm transmission rights[.]" Id. at 4. Can BPA control how the California ISO accepts bids into its markets?

A. No. Moreover, long-term firm transmission on the Southern Intertie still has substantial value even if one accepts JP06's contention. JP06's concern extends only to the California ISO's market, but bidding into the California ISO's market is not the only use of long-term transmission capacity. As noted above, BPA has sold all of its long-term transmission capacity and has a long queue of customers waiting for capacity, which would likely not be the case if the value of long-term service had been undermined.

Q. JP06 states that the potential for the California ISO to grant awards for deliveries in its markets without regard to the seller's transmission priority on BPA's system has been present since 2009, but "has accelerated the past two years as the Cal ISO has more actively publicized [] its market process[.]" Id. at 19. Do you believe that such publicity will lead to a decline in long-term firm sales on the Southern Intertie?

A. No. BPA has seen no reduction in long-term firm sales in the last two years. Again, Southern Intertie capacity has uses besides bidding into the California ISO's market, such as bilateral sales. In future rate periods, BPA may re-examine whether its methodology creates adequate incentives for customers to purchase long-term firm service. This re-examination would include the concerns raised by M-S-R regarding the value of the California-Oregon Transmission Project. Arthur, BP-16-E-MS-01, at 9-14. Currently, however, long-term firm service is fully subscribed, and BPA fully expects to recover the costs of the Southern Intertie.

Q. Has JP06 proposed a different way to calculate hourly non-firm transmission on the Southern Intertie?

A. Yes. JP06 proposes to base the hourly non-firm rate on the actual historical use of hourly non-firm service. Baker *et al.*, BP-16-E-JP06-01, at 15-16. Although JP06 retains the basic formula that we proposed, instead of 80 hours per week JP06 bases the rate on 23 hours per week, which is the average hours per week that JP06 calculates an hourly non-firm customer purchased transmission service between 2012 and 2014. Under JP06's proposal, the hourly non-firm rate would increase from 3.68 mills per kilowatthour to 12.97 mills per kilowatthour.

Q. Did JP06 identify any other transmission providers that use a rate methodology similar to the one it proposes?

A. No. JP06 has not identified a transmission provider that calculates hourly non-firm rates based on average hours of hourly nonfirm transmission reservations. *See* Attachment 1, JP06 response to data request BPA-JP06-25-04.

Q. Have you found other transmission providers that calculate hourly non-firm rates on the Southern Intertie the way JP06 proposes?

A. No. We reviewed long-term and hourly rates to determine how much hourly transmission their customers would have to purchase in a week to equal the cost of a long-term reservation. We found that in most cases the customer would have to purchase 80 hours or more (the number BPA uses) to equal the long-term rate. In only two cases was the number of hours less than on BPA's system, and even these figures were much closer to BPA's than to JP06's.

Table 1 below compares other transmission providers' monthly and hourly transmission rates. The column on the right lists the number of hours a transmission customer would have to reserve a flat amount of transmission per week to pay the same amount as the long-term rate.

Table 1 - Comparison of Long-Term[1] and Hourly Transmission Rates on the Southern Intertie

Transmission Provider	Path	Long-Term[1] Tariff ($/MWh)	Hourly Tariff ($/MWh)	Equivalent Hourly Rate Hours Per Week [2]
TANC	COTP	6.29	17.64	60
SMUD (Monthly Firm)	COTP	6.91	11.14	104
SMUD (Monthly Non-Firm)	COTP	5.05	11.14	76
LADWP (on-peak)	PDCI	5.14	10.81	80
LADWP (off-peak)	PDCI	5.14	5.14	168
WAPA (Summer/Winter Avg.)	PACI	1.14	1.14	168
WAPA (Summer/Winter Avg.)	COTP	2.98	2.98	168
BPA	PACI/PDCI	1.78	3.73	80
JP06 Proposal	PACI/PDCI	1.78	12.97	23

1) Long-Term represents Annual Rate or Monthly Rate when Annual Rate is unavailable.

2) The hours per week when using hourly transmission has the same cost as using Long-Term transmission.

Q. How did JP06 derive the average hours per week that a customer purchases hourly non-firm service?

A. JP06 used actual hourly non-firm Southern Intertie reservations provided by BPA. From the three years of data we provided, JP06 calculated the total number of hours that each customer reserved hourly non-firm service. It then calculated the number of weeks that each customer purchased hourly non-firm service. Finally, JP06 divided the total hours for all customers by the total number of weeks for all customers to derive an average per week.

Q. Do you have any concerns with JP06's methodology?

A. Yes. JP06's methodology ignores both the volume (MW) of the requests and multiple requests on different paths in the same hour. For example, in its calculation a 1 MW request on the AC path of the Southern Intertie and two 50 MW requests (one on the AC path of the Southern Intertie and one on the DC) count as one hour of use, even though the latter would recover 100 times more revenue than the former. Also, as noted above, hourly non-firm transmission is not always available; JP06's calculation shows only the amount customers were able to reserve, not what customer demand was. JP06's calculation of hours per week is skewed toward a lower result, based as much on available hours as on true demand.

Q. Do you have any other concerns with JP06's proposal?

A. Yes. JP06's method of rate-setting fails to provide stability from rate period to rate period. If BPA were to adopt JP06's proposal to more than triple hourly non-firm rates, the use of hourly non-firm transmission likely would drop in the next rate period. Since the rate is based on historical usage, that would result in even higher rates during the following rate period, which would result in even less usage and even higher rates. After several rate periods, use of hourly non-firm might disappear almost entirely, thereby

eliminating nearly all revenue that BPA derives from hourly non-firm sales. Consequently, BPA would be forced to increase long-term firm customers' rates in future rate periods to recover its costs as a result of a shortfall in hourly non-firm revenues.

Q. Would JP06's proposal also logically apply to any other rates?

A. Possibly. JP06 states that the Southern Intertie hourly non-firm rate is "artificially low" and results in an unfair allocation of embedded costs because it is not based on actual use. Although we have not analyzed the actual use of hourly non-firm transmission on the Network, JP06's argument would apply to hourly non-firm rates for the Network if actual use is less than 80 hours per week. We believe, however, that there is adequate incentive to reserve long-term firm transmission service on both the Southern Intertie and the Network because customers continue to reserve long-term firm service on both segments.

In addition, the rationale for JP06's methodology might apply to the rates for Scheduling, System Control, and Dispatch (SCD) service. Customers are required to purchase SCD service when they reserve transmission service on the Southern Intertie or the Network. Currently BPA calculates the hourly non-firm rate for SCD service in the same way that it calculates hourly non-firm rates for transmission service. If BPA changes how it calculates hourly non-firm transmission service on the Southern Intertie, BPA would have to determine whether the change should also apply to the Southern Intertie SCD rate. Finally, although JP06 does not necessarily suggest changes to hourly firm rates, the rates for hourly firm services are calculated using the same method and would also need to be revisited.

We welcome discussions in pre-rate case workshops before the BP-18 rate case to continue to discuss customer concerns on this issue.

Q. Does this conclude your testimony?

A. Yes.

DATA REQUEST NUMBER: BPA-JP06-25-04

DATE: February 12, 2015

PARTY: Joint Party 6

DIRECTED TO: BP-16-E-JP06-01

PAGE(S): 15
LINES (S): 14-15

REQUESTOR: Bonneville Power Administration

DATA REQUEST:

Joint Party 6 proposes a Southern Intertie Hourly Non-Firm rate based on 23 hours per week, which is calculated by dividing "sum of customer total annual hours of reservations in a year" by "sum of customer total weeks with a reservation" as shown in Table 1. Are you aware of any other transmission providers that use historical hourly reservations to calculate the ratio of hourly rates to long term rates?

For technical questions about this request please contact Michael Linn by phone 360.619.6074 and/or email mrlinn@bpa.gov. For non-technical questions about this request, please contact Ryan Sigurdson by phone 503.230.5162 and/or email rmsigurdson@bpa.gov.

PARTY'S RESPONSE:

JP06 has not conducted a survey or analysis of other transmission providers' use of historical hourly reservations to calculate the ratio of hourly rates to long term rates. In addition, given BPA's unique ratemaking obligations and the specific circumstances of transmission service on the Southern Intertie, we do not believe the methodologies used by other transmission providers are necessarily relevant to the merits of JP06's proposal.

For technical questions about this request please contact Irene Scruggs by phone (5035959779) or email (iscruggs@ppcpdx.org)

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