UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
BEFORE THE
BONNEVILLE POWER ADMINISTRATION

Fiscal Year 2014-2015 Proposed	**)**	**BPA Docket No. BP-14**
Power and Transmission Rate	**)**	
Adjustment Proceeding	**)**	

DIRECT TESTIMONY OF:

JOINT PARTY 9

SUBJECT:

BPA'S GENERATION INPUTS POLICY AND PRICING

WITNESSES:
Nancy Baker
Geoffrey H. Carr
Michael Deen
Kevin O'Meara

January 28, 2013

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SUBJECT: JOINT PARY 9'S TESTIMONY REGARDING GENERATION INPUTS POLICY AND PRICING

SECTION 1: Introduction and Purpose of Testimony

Q: Please state your names and qualifications.

A: My name is Nancy Baker. My qualifications are shown at BP-14-Q-PP-02.

A: My name is Geoffrey H. Carr. My qualifications are shown at BP-14-Q-NR-01.

A: My name is Michael Deen. My qualifications are shown at BP-14-Q-IN-01.

A: My name is Kevin P. O'Meara. My qualifications are shown at BP-14-Q-PP-01.

Q: What is the purpose of your testimony?

A: We are offering testimony on behalf of the Joint Party 9 (JP9) on BPA's initial proposals regarding the allocation of the costs of Type 1 capacity purchases (Klippstein, *et al*., BP-14-E-BPA-24); BPA's proposed redefinition of "incremental cost" of imbalance energy (Fisher, *et al*., BP-14-E-BPA-21; Jackson, *et al*., BP-14-E-BPA-28); and the application of risk mitigation measures to certain ACS rates (Mandell, *et al*., BP-14-E-BPA-28).

Q: Please briefly summarize your principal conclusions regarding these rates.

A: JP9 supports the result in this rate case of BPA's proposed methodology for allocating the costs of Type 1 capacity purchases among customer classes purchasing balancing capacity through ACS. We do not, however, support BPA's proposed redefinition of "incremental cost" as that term is used in pricing imbalance energy; the redefinition allocates the costs of energy deployed from Type1, Type 3 and Type 4 capacity purchases in violation of cost-causation principles. JP9 supports the application of CRAC, DDC and NFB mechanisms to the rates of ACS that are balancing capacity sales.

Q: What is JP9's interest in these rates and charges?

A: JP 9 is a group of member organizations, each of which represents the common interests of its members. All Public Power Council (PPC) and Northwest Requirement Utilities (NRU) members are preference customers of BPA and all purchase requirements power from BPA, including the purchase of ancillary and control area services. Many of PPC's members also purchase energy and power products from non-federal generators located both inside and outside BPA's Balancing Authority Area (BA) and more are expected to do so in the future, including during the FY 2014-15 rate period. All PPC's and NRU's members use the BPA transmission system to deliver federal and non-federal energy to their loads under the rates, terms and conditions set forth in BPA's rate schedules. Those that purchase an ancillary or control area service that is used to supply Generation Inputs have an interest in ensuring that the rate is fair. With regard to Generation Inputs, PPC's and NRU's members have an additional interest because, if a proposed rate were not to recover BPA's generation input costs to provide an ancillary or control area service that is used to supply Generation Inputs, they would likely bear some fraction of those unrecovered costs.
Industrial Customers of Northwest Utilities (ICNU) is a non-profit organization comprised of industrial companies in the Northwest, many of which are end-use consumers of BPA power. Most ICNU members are affected by BPA's rates, terms and conditions.

Q: *How is your testimony organized?*

A: Section 1 is this introduction. Section 2 describes JP9's policy position on the outcome of BPA's proposed methodology for allocating the costs of purchased capacity needed to provide balancing reserves to support the growing wind generation fleet. Section 3 concerns JP9's objections to BPA's proposal to redefine "incremental cost" as that term is used in Energy Imbalance Service and Generation Imbalance Service. Section 4 discusses the application of risk mitigation measures to those ACS that are sales of balancing capacity.

Section 2: BPA's Proposed Methodology to Allocate the Costs of Capacity, Which BPA May Purchase to Provide Balancing Reserves, Reaches the Correct Result

Q: *Does BPA forecast a need to purchase capacity from non-federal resources to meet its balancing obligations?*

A: Yes. BPA forecasts the need to purchase balancing capacity on a planned basis to meet forecasted need. Over a range of assumptions, BPA forecasts Type 1 purchases in a range of 27 to 174 MW of incremental (inc) balancing capacity. Generation Inputs Study Documentation, BP-14-E-BPA-05A- E01, Table 3.19, p. 49. "Type 1" capacity purchases are "planned purchases needed to make up the shortfall between the planned Federal balancing reserve capability (900 MW) and the rate case planned balancing needs of the Base Service after adjusting for any self-supply of generation imbalance (CSGI or other)." Klippstein, *et al*., BP-14-E-BPA-24, p. 52, lines 21-24. This section of our testimony concerns the allocation of costs of Type 1 capacity purchases.

Q: How does BPA propose to allocate Type 1 purchased capacity costs among balancing reserve customers?

A: BPA's proposal for allocating the purchased capacity costs is "based on a methodology that determines which balancing service use causes the need for BPA to acquire balancing reserve capacity. The methodology is applied equally and consistently across three identified use categories (Categories): load, dispatchable energy resources, and variable energy resources (which includes solar resources)." *Id.*, p. 53, lines 9-13 (citing Generation Inputs Study, BP-14-E-BPA-05, § 3.5.3).

> [P]urchase costs are allocated to the Categories with remaining balancing service need after all Categories are first provided equal access to the cost of the planned FCRPS balancing reserve capacity, which is an amount of FCRPS-sourced balancing reserve capacity equal to approximately 3.5% of a Category's nameplate (or nameplate equivalent for load).

Id., p. 57, line 22, - p. 58, line 1.

Q: Do you believe that BPA's proposed cost allocation methodology for Type 1 purchased capacity costs would reach the correct allocation in all cases?

A: We do not believe that this would be the case in every application of the Type 1 cost allocation methodology. BPA is subject to statutory rate directives that govern the allocation of costs to power sales made to preference customers and those directives must be satisfied before general principles are considered in establishing rates. We would need to examine the application and the result of this, or any other, cost allocation methodology in future rate cases. We do not intend our testimony to, and expressly do not, support or ratify the cost allocation methodology or its use or result in any rate case other than this one.

Q: Do you agree that BPA's proposed cost allocation methodology reaches the right result in this rate case?

A: Yes. We believe that the application of the proposed cost allocation methodology for Type 1 capacity purchases reaches an appropriate result. BPA's proposed cost allocation methodology identifies customer categories based on operational characteristics of those customers. *Id.*, p. 58, lines 1-4. The methodology then allocates a share of the FCRPS costs – up to 3.5 percent of each category's nameplate or its equivalent – and then allocates the costs of Type 1 capacity purchases to each customer category whose needs exceed that 3.5 percent amount.

Overall, we believe that the result reached in this case by applying BPA's cost allocation methodology to Type 1 purchased capacity costs is consistent with cost causation principles: the result allocates those costs to the balancing capacity users that cause BPA to purchase balancing capacity. The growth of the variable generation fleet, and the accompanying demand for increased amounts of balancing capacity, have caused BPA's system balancing reserve requirement to exceed the FCRPS's ability to supply the system's needs. Thus, allocation of Type 1 purchased capacity costs to VERBS customers is appropriate based on cost causation principles.

Section 3: BPA's Proposal to Redefine "Incremental Cost" for Energy and Generation Imbalance Rates Violates Cost-Causation Principles.

Q: What is the cost basis for imbalance energy on which charges are based in BPA's FY 2012-13 Energy Imbalance and Generation Imbalance Services rates?

A: Currently, BPA determines the cost of imbalance energy for those rates based on BPA's "incremental cost" for the hour in which the imbalance occurred. BPA's rate schedules for these services state that the incremental cost "will be based on an hourly energy index in the Pacific Northwest." *See e.g.*, BP-12-A-02-AP03, p. 52, ACS-12 § II.D.2.a (Energy Imbalance Service) (appended to this testimony as Attachment 1).

Q: Does BPA propose the same pricing for imbalance energy during the FY 2014-15 rate period?

A: No. BPA proposes to determine the cost of imbalance energy for those services by calculating, for the hour in which the imbalance occurred, the "weighted average cost of energy deployed." Fisher, *et al*., BP-14-E-BPA-21, p. 46, lines 17-18. This translates into the weighted average of the market index energy price and the offer price for energy deployed from a non-federal generator. Those non-federal generators are those generators that are selling balancing capacity to BPA to meet the balancing requirements of wind resources. *See id*., p. 46, line 25, - p. 47, line 7.

Q: Why does BPA propose this change?

A: BPA asserts the need to provide incentives to generators to sell balancing capacity to BPA.

> There are times when the hourly market index price may be lower than the expected operating costs of a non-Federal resource. As a result, some resources may be reluctant to sell a balancing reserve capacity product to BPA because they may be compensated for capacity but not fully compensated for any energy that is deployed. To increase the likelihood that non-Federal generators will offer to sell to BPA reserve capacity for imbalance services, we are proposing to compensate those generators for energy that is

> deployed from those resources, in addition to their costs of the reserve capacity. We propose to pay the non-Federal generator's offer price of generation deployed for imbalance energy, and then average that cost with the hourly index price for energy deployed from Federal resources to calculated BPA's incremental cost of imbalance energy.

Id., p. 46, line 22, - p. 47, line 7.

Q: BPA contends that the costs of energy deployed from capacity purchases are properly allocated to all Energy Imbalance Service and Generation Imbalance Service customers with imbalances within the hour. Id., p. 47, lines 21-23. Do you agree?

A: No. BPA ignores the root cause of the balancing capacity purchases and the identity of the parties who benefit from those purchases. BPA correctly notes in the Generation Inputs Study that "[t]hree of the purchase types (Types 1, 3, and 4 . . .) are caused by demand for additional balancing reserve capacity that can be linked to a particular customer or customer category." BP-14-E-BPA-05, p. 65, lines 16-18. The capacity resources must be purchased in order to provide the additional balancing capacity required to balance variable generation.

BPA asserts a need to align the cost and price because the price of the purchased energy might be higher than the hourly market index price. Because the energy from the resource would be more expensive than the average hourly energy index price, it would be unreasonable in the vast majority of circumstances for BPA to deploy the energy available unless less expensive FCRPS energy were unavailable. BPA would not deploy the purchased energy until it is closer to the top of its dispatch stack. If BPA has reached a point where it has exhausted the FCRPS and is calling on more expensive purchased capacity to provide energy, it will be calling on a very significant amount of energy to meet balancing requirements in the hour. This would mostly likely be caused by a substantial wind ramp. Deployment of the purchased energy for wind ramps is consistent with the purpose for which the capacity was purchased in the first place: to provide balancing reserves to wind generation that is beyond the capability of the FCRPS to provide.

Q: BPA implies that the redefinition of "incremental cost" is needed to support its capacity-purchase program. Do you agree that redefining incremental cost is required to achieve that result?

A: We do not agree that it is necessary to charge a weighted average cost of the energy in order to better align the pricing of the energy with its cost. BPA argues that, in order to provide an incentive for sellers to offer capacity to BPA, BPA must be willing to pay the cost of energy deployment. We agree that BPA must recover the costs of the imbalance energy it purchases, but BPA can pay the cost to the seller without charging a weighted cost in the manner it proposes. How BPA recovers the cost is not relevant to the seller.

Q: How do you propose BPA recover the cost of the energy deployed from capacity reserves purchased to support wind generation?

A: We propose that BPA forecast the amount of energy that it will deploy from the Type 1, 3 and 4 purchased capacity reserves and the difference between the market and the contract price for the energy. The difference between the two prices would then be added to the hourly energy index price charged to the participating wind plants for their imbalances. This approach places the cost with the parties that BPA originally identified as responsible for the costs of the underlying capacity purchases. This fully meets BPA's stated goal that it needs to recover the difference between the market price and the offer price of energy deployed from a purchased capacity resource and is fully consistent with its allocation of costs as set out in its cost allocation methodologies for allocating the costs of purchased capacity.

Q: Are there other reasons why the BPA proposal of redefining "incremental cost" is inappropriate and that your proposed approach is superior?

A: Yes. BPA does not propose any mechanism to ensure that the offer price for energy deployed from its capacity purchases will be reasonable. When pricing capacity and energy from a resource, BPA and the seller are free to structure the prices so that capacity is expensive, and the energy price is low, or vice versa. This may be less important when the same customer is paying the costs of both the capacity and the energy. When different groups of customers are each assigned responsibility for one cost or the other, however, the capacity and energy prices matter very much.

There is potential for BPA to shift costs inappropriately from one customer class to another with little to no oversight in order to advantage one class at another's expense. First, BPA provides no metric for how it would determine a reasonable aggregate price, how it would fairly price energy versus capacity or what recourse customers might have to challenge unfair pricing. Second, BPA does not plan to discuss or take comment on purchases or prices before it makes a Type 1 capacity purchases, unless the term of the purchase exceeds 60 days, nor does BPA intend to provide any notice and comment period for Type 4 purchases. For Type 3 purchases, BPA "expects" "to develop the acquisition strategy and notice and comment procedures." Jackson, *et al*., BP-14-E-BPA-28, p. 28, lines 8-18. BPA's most recent practices in providing notice and comment on proposed power sales agreements have been insufficient and BPA's statements provide no assurance that a meaningful process will be provided to customers. Third, BPA's statement, that it "*expect[s]*" that it will "*explore* the *possibility* of requiring independent audits, price caps, or any other parameters that will help to ensure that the costs of non-Federal energy that is deployed for imbalance energy are reasonable," contains no commitment that BPA will adopt any protections or commit to providing any meaningful oversight of purchases. *Id*., p. 48, lines 14-16 (emphasis added).

BPA has an Integrated Program Review to provide customers an opportunity to review and comment on costs that BPA plans to incur. Those few costs that are not reviewed in IPR are issues that can be considered in the rate case process. Although BPA has a planned need to purchase balancing capacity for VERBS customers, BPA has not provided, and does not commit to provide, a process by which customers can review and comment on the purchases or forecasts for the prices of purchases.

Q: How does your proposal, above, for forecasting and recovering Type 1, Type 3 and Type 4 capacity purchase costs avoid these problems?

A: Our proposal for allocating the costs of energy deployed from purchased capacity would allocate the energy and capacity cost to the same customer. This will permit the balancing services customer and BPA to decide how to price the capacity and energy components of the purchase. For example, a customer might prefer a higher capacity cost that would represent a known, steady cost or it might prefer a higher energy cost, which would be incurred less frequently and without notice. It would also permit the customer and BPA to work out the conditions for the dispatch of that resource, whether more often or not, depending on the price structure. This would permit BPA and the customer to get the most efficient use from the resource.

Section 4: JP9 Supports BPA's Proposed Application of the CRAC and Other Risk Tools to Ancillary and Control Area Services through which BPA Resells FCRPS Capacity and Energy.

Q: Does BPA propose to apply risk mitigation tools to any of the Ancillary and Control Area Services, and if so, which of the ACS?

A: BPA proposes to apply the CRAC, DDC and NFB mechanisms to the ACS that supply balancing capacity. Mandell, *et al.*, BP-14-E BPA-28, p. 3, lines 15-18. These ACS are Regulation and Frequency Reserve Service, Spinning Reserve Service, Supplemental Reserve Service, VERBS and DERBS. Generation Inputs Study, § 10.2.3, p. 111, lines 7-16.

Q: Do you agree that application of these risk tools to the listed ACS is appropriate?

A: Yes. Sales of these ACS create financial risk for BPA. The variable cost component of the cost of FCRPS-supplied balancing capacity is calculated assuming average water, and the risk that the actual water volume will be less than average is significant. BPA takes on the risk, therefore, that the value of the actual water used to produce FCRPS balancing capacity will be less than forecast. Use of average water in the variable cost calculation benefits customers purchasing these ACS by lowering the costs attributed to those services relative to the costs that would be attributed to them if critical water were used.

Also, BPA determines the cost of FCRPS capacity used to balance the power system using a combination of fixed and variable costs. Some of variable costs measure the impact of providing these reserves on BPA's sales of secondary energy. Once the megawatt impact is determined, BPA uses its forecast of market prices in the Power Risk and Market Price Study, BP-14-E-BPA-04, § 2.4, to determine the cost attributed to the production of these reserves. The accuracy of the BPA's market price forecast is another area of uncertainty and financial risk for BPA.

In short, the pricing of these ACS services creates financial risk for BPA and may create revenue shortfalls, while at the same time benefiting those customers by lowering their rates. It is fair and appropriate that these ACS should participate in the risk mitigation and that the tools listed in BPA's proposal should be applied to them.

Q: Does this conclude your testimony?

A: Yes.

D. ENERGY IMBALANCE SERVICE

The rates below apply to Transmission Customers taking Energy Imbalance Service from BPA-TS. Energy Imbalance Service is taken when there is a difference between scheduled and actual energy delivered to a load in the BPA Control Area during a scheduling period. Accounting for hourly schedules will be on an hourly basis and accounting for intra-hour schedules will be on the same basis as the intra-hour scheduling period.

1. RATES

a. Imbalances Within Deviation Band 1

Deviation Band 1 applies to deviations that are less than or equal to: i) ± 1.5% of the scheduled amount of energy, or ii) ± 2 MW, whichever is larger in absolute value. BPA-TS will maintain deviation accounts showing the net Energy Imbalance (the sum of positive and negative deviations from schedule for each period) for Heavy Load Hour (HLH) and Light Load Hour (LLH) periods. Return energy may be scheduled at any time during the month to bring the deviation account balances to zero at the end of each month. BPA-TS will approve the hourly schedules of return energy. The customer shall make the arrangements and submit the schedule for the balancing transaction.

The following rates will be applied when a deviation balance remains at the end of the month:

(i) When the monthly net energy (determined for HLH and LLH periods) taken by the Transmission Customer is greater than the energy scheduled, the charge is BPA's incremental cost based on the applicable average HLH and average LLH incremental cost for the month.

(ii) When the monthly net energy (determined for HLH and LLH periods) taken by the Transmission Customer is less than the energy scheduled, the credit is BPA's incremental cost based on the applicable average HLH and LLH incremental cost for the month.

b. Imbalances Within Deviation Band 2

Deviation Band 2 applies to the portion of the deviation i) greater than ± 1.5% of the scheduled amount of energy or ± 2 MW, whichever is larger in absolute value, ii) up to and including ± 7.5% of the scheduled amount of energy or ± 10 MW, whichever is larger in absolute value.

(i) When energy taken by the Transmission Customer in a schedule period is greater than the energy scheduled, the charge is 110% of BPA's incremental cost.

(ii) When energy taken by the Transmission Customer in a schedule period is less than the scheduled amount, the credit is 90% of BPA's incremental cost.

c. Imbalances Within Deviation Band 3

Deviation Band 3 applies to the portion of the deviation i) greater than ± 7.5% of the scheduled amount of energy, or ii) greater than ± 10 MW of the scheduled amount of energy, whichever is larger in absolute value.

(i) When energy taken by the Transmission Customer in a schedule period is greater than the energy scheduled, the charge is 125% of BPA's highest incremental cost that occurs during that day. The highest daily incremental cost shall be determined separately for HLH and LLH.

(ii) When energy taken by the Transmission Customer in a schedule period is less than the scheduled amount, the credit is 75% of BPA's lowest incremental cost that occurs during that day. The lowest daily incremental cost shall be determined separately for HLH and LLH.

2. OTHER RATE PROVISIONS

a. BPA Incremental Cost

BPA's incremental cost will be based on an hourly energy index in the Pacific Northwest. If no adequate hourly index exists, an alternative index will be used. BPA-TS will post the name of the index to be used on the OASIS at least 30 days prior to its use. BPA-TS will not change the index more often than once per year unless BPA-TS determines that the existing index is no longer a reliable price index.

For any hour(s) that the energy index is negative, no credit is given for positive deviations (actual energy delivered is more than scheduled).

b. Spill Conditions

For any day that the Federal System is in a Spill Condition, no credit is given for negative deviations (actual energy delivered is less than scheduled) for any period of that day.

If the energy index is negative in any hour that the Federal System is in a Spill Condition:

(i) For negative deviations (energy taken is less than the scheduled energy) within Band 1, no credit will be given.

(ii) For negative deviations (energy taken is less than the scheduled energy) within Band 2, the charge is the energy index for that hour.

(iii) For negative deviations (energy taken is less than the scheduled energy) within Band 3, the charge is the energy index for that hour.

c. Persistent Deviation

The following penalty charges shall apply to each Persistent Deviation:

(1) No credit is given when energy taken is less than the scheduled energy.

(2) When energy taken exceeds the scheduled energy, the charge is the greater of: i) 125% of BPA's highest incremental cost that occurs during that day, or ii) 100 mills per kilowatthour.

If the energy index is negative in any hour(s) in which there is a negative deviation (energy taken is less than the scheduled energy) that BPA-TS determines to be a Persistent Deviation, the charge is the energy index for that hour.

If BPA-TS assesses a persistent deviation penalty charge in any scheduled period for a positive deviation, BPA-TS will not also assess a charge pursuant to Section II (D) (1) of this ACS-12 schedule.

Reduction or Waiver of Persistent Deviation Penalty

BPA-TS, at its sole discretion, may waive all or part of the Persistent Deviation penalty charge if (a) the customer took mitigating action(s) to avoid or limit the Persistent Deviation, including but not limited to changing its schedule to mitigate the magnitude or duration of the deviation, or (b) the Persistent Deviation was caused by extraordinary circumstances.

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing testimony on Bonneville Power Administration's Office of General Counsel and Hearing Clerk and all litigants in this proceeding by uploading the document to the 2014 Rate Adjustment Proceeding (BP-14) secure websites pursuant to BP-14-HOO-02.

DATED: January 28, 2013.

Alex Walker
Public Power Council
825 NE Multnomah St., Suite 1225
Portland, Oregon 97232
503 595 9770