TO: BPA Ancillary and Control Area Services Practices Forum

From: Renewable Northwest Project, Southern California Edison, Calpine, Iberdrola Renewables, EDP Renewables

RE: Pilot Program for Short-term Purchases of Balancing Reserves and Expenditure of Certain Settlement Funds

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Introduction:

There is potential to save ratepayers money and extend the capabilities of the Federal Columbia River Power System by using short-term purchases of balancing reserves to maintain system balance during periods of high generation and load variability.

At this time, we believe it is in the region's interest to begin gaining experience with short-term procurement (and supply) of balancing reserves so that we can begin to 1) assess the reality and magnitude of the benefits, 2) refine the BPA process for making short-term purchases, and 3) begin building up liquidity in this nascent market (assuming positive benefits are found).

The BP-14 Generation Inputs and Transmission Ancillary and Control Area Services Rates Partial Settlement Agreement (the "Partial Settlement") recognized that gaining experience with short-term purchases of balancing reserves may have value during the FY 2014-15 Rate Period. Attachment 2 to the Partial Settlement, which sets forth the rate period terms, provides for a $2 million annual budget to be used for certain purposes described in Section 4(b) of Attachment 2.[1] Importantly, however, Section 4(f) of Attachment 2 to the Partial Settlement provides for other uses of this budget:

> *Bonneville may, after consultation with customers, change the intended utilization of the Acquisition Budget set out in section 4(b)(1) of this Attachment 2. Such change would be to allow Bonneville to utilize the Acquisition Budget to strategically target high volatility wind events (see section 10.e below).*[2]

We appreciate that BPA is taking steps to be able to purchase balancing reserves on a pre-schedule basis by April 2014. However, consistent with the details outlined

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[1] Partial Settlement, Attachment 2, Section 4(a) provides "Bonneville shall establish a $2 million annual budget to be used for the purposes set forth in 4(b) (Acquisition Budget)."

[2] Partial Settlement, Attachment 2, Section 4(b) provides "Bonneville will utilize the Acquisition Budget to (1) purchase inc capacity (not to exceed the cap of 900 MW inc) during times when, due to operational constraints, the FCRPS is unable to provide the reserves required by a 99.5 percent planning standard for VERBS Base Service; and (2) manage risk of any differences between the cost incurred for third-party capacity deployment costs and the hourly energy index in the Pacific Northwest."

below, we believe that the time has come for BPA to use some of the $2 million budget set aside in the settlement to conduct a pilot program for making short-term purchases of balancing reserves.

Example Pilot Structure:

BPA should work in an open and transparent manner with all customers to design and implement a pilot program for procuring balancing reserves on a short-term basis. Recognizing that many of the details will be refined through this stakeholder process, we offer the following examples of how a pilot might be structured:

Timing and Expenditures: BPA should provide the quarterly update and status of the Acquisition Budget per Section 4(d) of Attachment 2 to the Partial Settlement.[3] Assuming the Acquisition Budget is largely intact, BPA should make available no less than $250,000 for purchases starting in April 2014 and ending in October 2014, expending funds roughly equally before, during, and after the spring runoff. If, after reviewing spring hydro forecasts, BPA determines that the likelihood of needing any of the $2 million set aside in the Partial Settlement for oversupply events during 2014 is low, BPA should allocate up to a total of $1 million to the short-term purchases pilot.

Reporting and Consultation: BPA should provide regular verbal updates to customers during the pilot and should provide a final written report and hold a meeting to discuss the report prior to the start of ex parte for BPA's FY 2016-17 Rate Case.

Definition of Short-term: After reporting the results of testing BPA's Real-Time Reserve Requirement Tool,[4] BPA should work with customers to define the best time horizons for short-term purchases. For example, one option is for BPA to use a day-ahead forecast to set aside the expected average amount of balancing reserves needed from the federal system, and then purchase any additional balancing reserves on an hour-ahead basis, informed by an updated forecast. Other time horizons and product definitions should be considered as well.

Targeted Use: BPA could use the short-term purchases to target providing a higher quality of balancing service above what the long-term federally sourced and quarterly non-federally-sourced balancing reserves are providing. Or, BPA could use the short-term purchases to replace the federal balancing reserves on a periodic basis.

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[3] Section 4(d) requires Bonneville to "provide quarterly reports on its OASIS website on the types and amounts of expenditures made in the previous quarter and the status of the Acquisition Budget."

[4] Partial Settlement, Attachment 2, Section 10(e) provides "Bonneville will develop a method to determine balancing reserve capacity needs on a short-term basis (e.g., the Real-Time Reserve Requirement Tool or "R3T"). Bonneville will discuss and refine this method with customers."

Market Coordination: BPA should publicly announce the rough time periods when BPA will implement the pilot program and test its capabilities. BPA should set up master agreements with potential suppliers to delineate as much as possible the terms and conditions, except for price and quantity, of any purchases that may occur under the pilot.

Rate Impacts: There is no rate impact associated with the pilot. Customers will continue to pay the fixed VERBS and DERBS rates and the cost of balancing load, consistent with the Settlement Agreement. Customers pay these costs just as if BPA hydro and the quarterly contracts for non-federally-sourced balancing reserves were providing all of the balancing reserves. BPA would use the allocation of the funds under Sections 4(a) and 4(f) of Attachment 2 to the Partial Settlement to pay for any short-term purchases of balancing reserves made under the pilot program.

Federal Hydro Operations: BPA should structure the pilot to minimize any impact to federal hydro operations.

Conclusion:

This letter, together with subsequent workshop discussions, is intended to fulfill the consultation requirement set out in Section 4(f) of Attachment 2 of the Partial Settlement. We look forward to discussing the details of this pilot program with BPA and other stakeholders.