

**FY 2012-13
PROPOSED POWER RATE
ADJUSTMENT**

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Docket No. BP-12

**DIRECT TESTIMONY
OF
PACIFIC NORTHWEST GENERATING COOPERATIVE AND MEMBERS (PN)**

WITNESS:

DOUGLAS R. BRAWLEY

SUBJECT:

INDUSTRIAL FIRM POWER (IP-12) VALUE OF RESERVES CREDIT

January 21, 2011

BP-12-E-PN-02

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Direct Testimony of Douglas R. Brawley on IP-12 Value of Reserves Credit

1 **Section 1: Introduction and Purpose of Testimony**

2 *Q: Please state your names and qualifications.*

3 A. My name is Douglas R. Brawley, and my qualifications are contained in BP-12-
4 Q-PN-02.

5 *Q: What is the purpose of your testimony?*

6 A: The purpose of this testimony is to address issues related to the IP-12 Value of
7 Reserves (VOR) Credit which is applied by BPA to reduce the IP-12 rate, make
8 recommendations for changes to the treatment of the VOR Credit, and offer
9 explanations for those changes.

10 *Q: How is your testimony organized?*

11 A: Section 1 is this introduction. Section 2 addresses policy concerns. Section 3
12 focuses on BPA's failure to apply the principle of cost causation in setting the value
13 of the VOR Credit. Section 4 addresses the fact that BPA has shown no need for
14 incremental contingency reserves to be supplied by DSI customers. Section 5
15 disputes BPA's approach to valuing the VOR Credit. Section 6 points out that the
16 VOR Credit as proposed would create a large sunk cost for which BPA will not
17 likely realize value in proportion to its cost.

18 *Q. Does your testimony constitute the entire case of PNGC in this proceeding?*

19 A. No. Other issues are addressed by PNGC witnesses in separately filed testimony,
20 including testimony filed individually and jointly with other customers.

21 **Section 2: Policy Issues Underlying BPA's Proposed VOR Credit**

22 *Q. What is your understanding of BPA's proposed VOR Credit?*

1 A. BPA proposes to apply a VOR Credit to the IP-12 rate for service to DSI customers.
2 Under BPA's current contracts with its DSI customers, Alcoa Inc. (Alcoa) and Port
3 Townsend Paper Corporation (PT Paper), we understand that BPA is entitled to
4 curtail the DSI customers' loads, net of wheel-turning load, by 10%. The total firm
5 loads of Alcoa and PT Paper are 340 aMW, and wheel-turning load amounts to
6 about 6 aMW. BPA proposes to obtain about 33.4 MW of reserves by curtailing
7 those loads pursuant to the contracts. *See also* BP-12-E-BPA-01A, p. 119, Table
8 3.22. According to the DSI contracts, these reserves are intended to comply with
9 North American Electric Reliability Corporation (NERC) and Western Electricity
10 Coordinating Council (WECC) standards applicable to non-spinning, or
11 supplemental, contingency reserves. BPA refers to these reserves as Operating
12 Reserves-Supplemental. *See* BP-12-E-BPA-26, p. 2. We understand that BPA is
13 entitled under the DSI contracts to curtail the DSIs' loads to acquire this quantity of
14 supplemental contingency reserves for up to 105 minutes per "event," as defined in
15 the contracts. The contracts do not limit the number of curtailments that can occur.
16 In order to compensate the DSIs for providing these reserves, BPA proposes a VOR
17 Credit of \$0.95 per MWh to be applied to the IP-12 rate, at a cost of approximately
18 \$2.8 million per year. *See* BP-12-E-BPA-01A, page 119, Table 3.22.

19 *Q. What policy concerns do you have about the proposed VOR Credit?*

20 A. First, the VOR Credit has the effect of reducing BPA's revenues from sale of power
21 under the IP-12 rate by about \$2.8 million per year. BPA will recover this cost not
22 from parties to whom BPA provides or sells operating reserves-supplemental but
23 from the Pacific Northwest Generating Cooperative and other consumer owned

1 utilities that purchase power from BPA at the PF rate. This is inconsistent with
2 sound ratemaking principles. Second, BPA has not demonstrated that it has a need
3 for operating non-spinning contingency reserves to be supplied by curtailment of
4 DSI loads. Third, BPA has not evaluated the cost of the DSI reserves separately
5 from the costs of the hydroelectric generation resources that BPA relies upon to
6 supply non-spinning contingency reserves. Instead, BPA has simply assumed that
7 the cost of DSI reserves will be the same as the costs of the generation resources
8 used by BPA to supply non-spinning contingency reserves (Operating Reserves-
9 Supplemental)—\$7.04 per KW month. Fourth, BPA not performed any studies or
10 analyses to evaluate the comparative cost to BPA of the reserves obtained from DSI
11 customers and contingency reserves available from other sources. Fifth, the VOR
12 Credit to the DSIs creates sunk cost that BPA will not likely fully amortize for the
13 number of times it currently curtails DSI loads. BPA should evaluate available
14 alternatives and choose the least costly contingency reserve. BPA should compare
15 reliance on the NWPP RSG mechanism and the spot market as a measure of what
16 value the DSI reserves really bring to BPA in addition to the very substantial
17 contingency reserves capabilities BPA already has.

18 **Section 3: Including Costs of the VOR Credit in the PF Rates Violates the Principle**
19 **of Cost Causation.**

20 *Q. Is it appropriate for BPA to recover costs of DSI Reserves in the PF Rate?*

21 A. No.

22 *Q. Why?*

1 A. As discussed in BP-12-E-BPA-17, pp. 8-9, BPA compensates the DSIs for the
2 provision of reserves by applying a credit to the IP Rate, the VOR Credit. This
3 results in an underrecovery by BPA of the costs of serving DSI loads, which
4 increases BPA's losses on these sales. This cost is recovered by BPA in the PF
5 rates charged to COU customers. If BPA applied the principle of cost causation
6 with respect to the costs of DSI reserves, it would allocate and recover those costs
7 in the same manner it allocates and recovers the costs of the Federal generating
8 resources in the BPA Balancing Authority Area available for Operating Reserves.
9 *See* BP-12-E-BPA-26, pp. 9-11. That testimony states that all system resources
10 determined to be available to supply Operating Reserves, Spinning or
11 Supplemental, are listed in the Revenue Requirement Study Documentation, BP-12-
12 E-BPA-05A, Table 4.5. BPA treats the DSI reserves as non-spinning contingency
13 reserves, available in conformity with applicable NERC and WECC standards, but
14 does not include DSI curtailment rights among its resources available to supply
15 Operating Reserves-Supplemental, as listed in Table 4.5. Nor does BPA reflect the
16 cost of the VOR Credit in its revenue requirement for operating reserves. BP-12-E-
17 BPa-05A, Table 4.6. The cost of the VOR Credit should be included there.

18 **Section 4: DSI-Supplied Operating Reserves-Supplemental are Not Needed By BPA**

19 *Q. Has BPA made any demonstration that it has a need to obtain operating reserves-*
20 *supplemental from DSI Customers?*

21 A. No. BPA has an obligation to demonstrate an operational need and a business case
22 for paying such a high price, the proposed VOR Credit, for these DSI reserves.

1 BPA may not just rely on legal argument. *See* BP-12-E-BPA-17, pp. 8-9. We will
2 address this legal argument in our briefing.

3 *Q. Do you believe that BPA has such a need? If not, why?*

4 A. No. At most, under its contracts BPA can look to the DSIs to provide only 33.4
5 MW of operating reserves-supplemental per hour. Moreover, BPA is a member of
6 the Northwest Power Pool (NWPP) Reserves Sharing Group (RSG). The RSG
7 pools the contingency reserves of about 19 balancing authorities and enables its
8 members to comply with NERC and WECC reliability standards collectively that
9 would be far more difficult for at least some balancing authorities to satisfy
10 individually, due at least to the size of their most severe single contingencies. *See*
11 *also* BP-12-E-BPA-26, pp. 3-4. Attached to this testimony as Exhibit A is a table
12 comprising data provided to PNGC by BPA in response to data request PN-BPA-3
13 (columns A-I) and certain pricing information from PNGC's business records
14 (column J). Exhibit A takes as examples the curtailments of the loads of Alcoa
15 from January through November of 2010. Columns A-E identify each curtailment
16 event, its timing and duration, and the amount of firm power BPA says it obtained
17 for non-spinning contingency reserves by curtailing Alcoa's load. Column G
18 reflects the amounts of contingency reserves BPA says, or estimates, that it reported
19 to the NWPP RSG as forecasted contingency reserves for the date of each
20 curtailment. With the exception of anomalous data reported for Curtailment Event
21 Nos. 5 and 7, BPA reported having far more contingency reserves than it needed to
22 deploy to meet contingencies when it says it curtailed Alcoa's load. On many
23 occasions, according to BPA data provided to PNGC (Column H), BPA ceased

1 deploying reserves before the Alcoa curtailment event is said to have ended. This
2 suggests that the values shown in Column E for the amounts of energy obtained by
3 BPA through curtailment of Alcoa's load may not be accurate. We also note that
4 the Column E values (Average of 105 Minute Response (aMW)) appear to exceed
5 in every case (except Event No. 15) the amount BPA was contractually entitled to
6 secure from Alcoa. The values shown in Column I indicate that on only two
7 occasions among the 24 Alcoa Curtailment Events did BPA secure any significant
8 quantities of reserves through the NWPP RSG automated system. Collectively, this
9 data indicates that BPA had, on most occasions, substantially more contingency
10 reserves available than was needed for deployment to meet contingencies occurring
11 when Alcoa Curtailment Events took place, and if it did not, it could secure
12 contingency reserves through the RSG, all without curtailing any Alcoa or other
13 DSI load.

14 **Section 5: BPA Should Not Value DSI Reserves At the Cost of the FCRPS**
15 **Resources That BPA Relies Upon to Supply Operating Reserves-Supplemental**

16 *Q. How has BPA valued the VOR Credit?*

17 A. BPA has simply assumed that the unit rate of \$7.04 per KW per month embedded
18 cost of Operating Reserve-Supplemental developed for the FCRPS generating
19 resources available to supply these reserves is an appropriate valuation of the DSI
20 reserves. BP-12-E-BPA-17, p. 10. BPA conducted no analysis and considered no
21 alternatives. In its response to PNGC data request PN-BPA-3, BPA stated,

22 BPA has not conducted any studies or undertaken analysis to evaluate the
23 comparative cost to BPA of reserves acquired from DSI loads and reserves
24 available from all other sources and pursuant to BPA Rules of Procedure

1 Governing Rate Hearings, Section 1010.8(b), it is not required to perform
2 any new analysis in order to respond to the request.

3 *Q. Is this valuation approach appropriate?*

4 A. No. Rather than setting a VOR Credit the results in payment of about \$2.8 million
5 per year without regard to how much these reserves are actually needed and
6 supplied, BPA should conduct an analysis of whether and how much incremental
7 contingency reserves are needed in the FY 12-13 rate period, evaluate all available
8 options and select the least cost alternative.

9 **Section 6: If BPA Can Demonstrate Some Need for Incremental Contingency**
10 **Reserves, BPA Should Consider Maintaining Its Reliance on the NWPP RSG**
11 **as a Source of Occasionally Required Contingency Reserves Instead of**
12 **Incurring Large Sunk Costs for DSI Reserves**

13 *Q. Do you believe that paying the DSIs about \$2.8 million per year pursuant to the*
14 *proposed VOR Credit has any merit as a business proposition?*

15 A. No. Although they are subject to legal challenge, BPA now has contracts in place
16 to serve Alcoa and PT Paper. Until those contracts set aside or terminated and not
17 replaced, by setting the VOR Credit at \$0.95 per MWh, BPA commits itself to pay
18 about \$2.8 million per year to these DSIs. This becomes a sunk cost when the rates
19 become final. Unless BPA adopts a policy to consciously try to get the most value
20 for this expenditure by curtailing the DSIs as much as practicable, BPA will in all
21 likelihood pay more than is necessary or appropriate for those reserves. We
22 believe that placing reliance on the NWPP RSG for the modest increment of non-
23 spinning contingency reserves said to have been supplied by Alcoa from January
24 through November, 2010, would have been far less costly than reducing Alcoa's IP
25 Rate with a VOR Credit under the WP-10 rates. The hourly market prices shown in

1 Column J, observed and contemporaneously recorded by PNGC staff at the times of
2 the Alcoa curtailments, reflect that BPA could have paid relatively modest spot
3 market prices for contingency reserves had BPA not burdened itself with obtaining
4 non-spinning contingency reserves from the DSIs. We do not believe that
5 circumstances would be materially different for the BP-12 rate period, when BPA
6 proposes an increased VOR Credit. As BPA witnesses state, in BP-12-E-BPA-26,
7 p. 11,

8 When Operating Reserve is utilized to provide energy, that energy is
9 priced based on an hourly energy index in the Pacific Northwest, or an
10 alternative index if an adequate hourly index is not available, as
11 determined by BPA. Study, section 10.4.1-10.4.2. We are forecasting no
12 revenue from the energy associated with deployment of reserves, because
13 BPA will be compensated at the current market price at the time of
14 deployment. There is no difference in cost recovery between using the
15 energy for an Operating Reserve deployment and selling the power off the
16 trading floor.

17 The proposed VOR Credit is unreasonably high in the absence of a demonstrated
18 need and a sound business case obtaining these DSI reserves. BPA should
19 reconsider its approach to complying with the Northwest Power Act's mandate to
20 obtain reserves from the DSIs.

21 *Q. Does this conclude your testimony?*

22 *A. Yes.*

23