

**2010 Wholesale Power Rate Case Initial Proposal**

**REBUTTAL TESTIMONY**

**COST OF SERVICE ANALYSIS and  
RATE ANALYSIS MODEL (FY 2010-2011)**

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April 2009

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WP-10-E-BPA-35



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REBUTTAL TESTIMONY of

PAUL A. BRODIE, RAYMOND D. BLIVEN, and WILLIAM J. DOUBLEDAY

Witnesses for Bonneville Power Administration

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MODEL (FY 2010-2011)**

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2 PAUL A. BRODIE, RAYMOND D. BLIVEN, and WILLIAM J. DOUBLEDAY

3  
4 **SUBJECT: COST OF SERVICE ANALYSIS and RATE ANALYSIS**  
5 **MODEL (FY 2010-2011)**

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

7 *Q. Please state your names and qualifications.*

8 A. My name is Paul A. Brodie, and my qualifications are contained in WP-10-Q-BPA-09.

9 A. My name is Raymond D. Bliven, and my qualifications are contained in  
10 WP-10-Q-BPA-06.

11 A. My name is William J. Doubleday, and my qualifications are contained in  
12 WP-10-Q-BPA-14.

13 *Q. Have you previously submitted testimony in this proceeding?*

14 A. Yes. We submitted direct testimony, with one other witness, regarding the section  
15 7(b)(2) rate test: Doubleday *et al.*, WP-10-E-BPA-15. We also submitted direct  
16 testimony regarding BPA's Cost of Service Analysis and rate design adjustments: Brodie  
17 *et al.*, WP-10-E-BPA-16. Mr. Bliven also submitted direct testimony regarding power  
18 rates policy: Bliven and Lefler, WP-10-E-BPA-10; wind integration: Mainzer *et al.*,  
19 WP-10-E-BPA-22; and rate design issues: Fisher *et al.*, WP-10-E-BPA-30.

20 *Q. Please state the purpose of your rebuttal testimony.*

21 A. The purpose of this rebuttal testimony is to respond to direct testimony filed by the  
22 Pacific Northwest Investor-Owned Utilities (IOUs), LaBolle *et al.*, WP-10-E-JP1-01,  
23 regarding 1) section 7(b)(2) rate protection and the Slice rate and 2) assigning the cost of  
24 the 7(b)(2) industrial adjustment 7(c)(2) Delta to the PF Exchange Rate. We also respond  
25 to the Public Utility Commission of Oregon (OPUC), Hellman *et al.*, WP-10-E-PU-01,  
26 regarding the Residential Exchange Program (REP) benefits under a Cost Recovery

1 Adjustment Clause (CRAC). Finally, we fill in the missing link in APAC's attempt to  
2 reconcile PF loads between the Loads and Resources Study and the Rate Analysis Model.

3 *Q. How is your testimony organized?*

4 A. This testimony consists of five sections. Section 1 explains the purpose and scope of the  
5 testimony. Section 2 responds to issues regarding section 7(b)(2) rate protection and the  
6 Slice rate. Section 3 responds to issues regarding assignment of the cost of the 7(b)(2)  
7 industrial adjustment 7(c)(2) Delta to the PF Exchange rate. Section 4 responds to issues  
8 regarding the REP benefits under a CRAC. Section 5 reconciles the PF loads presented  
9 in different parts of the case.

10  
11 **Section 2: Section 7(b)(2) Rate Protection and the Slice Rate**

12 *Q. The IOUs state that the 2007 Supplemental Wholesale Power Rate Case Administrator's*  
13 *Record of Decision (ROD), WP-07-A-05, correctly concluded that the surplus portion of*  
14 *sales under the Slice rate is not afforded section 7(b)(2) rate protection. LaBolle et al.,*  
15 *WP-10-E-JP1, at 37-38. However, the IOUs claim that recovering from the Slice*  
16 *customers a percentage equal to the Slice percentage of the increased net cost of the REP*  
17 *does not result in the Slice rate customers bearing their appropriate share of section*  
18 *7(b)(3) trigger amounts. Id. at 38-39. They claim this is because the surplus portion of*  
19 *sales under the Slice rate should be allocated its full "pro rata" share of section 7(b)(3)*  
20 *trigger amounts. Id. at 39. Please respond.*

21 A. In the Rate Design portions of BPA's ratemaking, before the Slice Separation Step, the  
22 PF Preference load pool contains the Non-Slice PF load as well as the firm portion of the  
23 PF Slice product load. Compare the billing determinant used for the PF Preference rate,  
24 Wholesale Power Rate Development Study Documentation, WP-10-E-BPA-05A, at 37,  
25 cell C52, with that used for the unbifurcated PF rate, *id.* at 38, cell C51. Also at this point  
26 in the ratemaking process, secondary revenue sales include both the forecast secondary

1 power marketed by BPA and the amount forecast to sold with the Slice product.  
2 *Compare* the secondary revenues used during the 7(b)(3) allocation, *id.* at 27, cells B13  
3 and C13, with the secondary revenues used in setting rates other than Slice, *id.* at 82, cells  
4 D16 and F16 (the difference being the Slice percentage, 22.263 percent, and  
5 displayed, *id.* at 35, cells D31 and E31). During the allocation of the 7(b)(3) rate  
6 protection amount to all loads other than PF Preference loads, the allocation factor for  
7 Secondary and FPS contract loads includes the full forecast of secondary power, both  
8 Slice and Non-Slice. *See* RAM2010, tab 7b2 Allocation, cells F21 and G21, specifically  
9 the references to cells REV\_\_SIM!I47 and J47. Using FY 2010 as an example, the  
10 allocation factor is 2779.6 aMW, consisting of the 613 aMW allocation factor for FPS  
11 contracts plus the 2,166.6 aMW allocation factor for total secondary sales. This  
12 2,166.6 aMW secondary sales allocation factor is derived by adding the 1,630 aMW of  
13 non-Slice secondary sales to the 477 aMW of Slice product secondary sales and adding a  
14 transmission loss factor to produce an energy allocation from the total sales amount.  
15 Therefore, the Slice product secondary sales are allocated a portion of the 7(b)(3) rate  
16 protection amount, and those sales are not afforded 7(b)(2) protection.

17 *Q. The IOUs state that applying the average section 7(b)(3) surcharge to the projected*  
18 *amount of secondary energy to be sold under the Slice rate results in a section 7(b)(3)*  
19 *trigger amount allocated to Slice secondary energy of \$32.6 million per year; therefore,*  
20 *the IOUs claim, the section 7(b)(3) supplemental rate charge recovered from the Slice*  
21 *rate as a result of secondary sales under the Slice rate should be \$32.6 million per year.*  
22 *LaBolle et al., WP-10-E-JP1-01, at 39. Please respond.*

23 *A.* As explained previously, the 477 aMW of Slice product secondary is allocated its proper  
24 amount of 7(b)(3) rate protection costs. The average amount of \$32.6 million calculated  
25 by the IOUs is included in the roughly \$184 million of 7(b)(3) rate protection costs

1 allocated to the total secondary and FPS contract load. No further allocation of 7(b)(3)  
2 rate protection costs is necessary.

3  
4 **Section 3: Assigning the Cost of the 7(b)(2) Industrial Adjustment 7(c)(2) Delta to the**  
5 **PF Exchange Rate**

6 *Q. The IOUs disagree with BPA's allocation of the 7(c)(2) Delta solely to the preliminary*  
7 *unbifurcated PF rate and the NR rate; the IOUs claim this allocation is unjustified.*  
8 *LaBolle et al., WP-10-E-JP1-01, at 45-47. The IOUs argue that the 7(c)(2) Delta should*  
9 *be equitably allocated "pro rata" to all BPA power rates consistent with section 7(g) of*  
10 *the Northwest Power Act. Id. Please respond.*

11 *A. We disagree with the IOUs' argument that BPA's allocation of the 7(c)(2) Delta is*  
12 *incorrect and that the Delta should be allocated pro rata to all non-DSI loads. It is not*  
13 *true that allocation of the 7(c)(2) Delta is controlled by section 7(g) of the Northwest*  
14 *Power Act. Even if we were to accept that premise arguendo, section 7(g) still provides*  
15 *the Administrator the flexibility to "equitably allocate" the Delta; section 7(g) does not*  
16 *require pro rata allocation over all firm loads.*

17 At the point in BPA's ratemaking of allocating the 7(c)(2) Delta, the unbifurcated  
18 Priority Firm rate pool contains all firm PF Preference load (including the PF Slice  
19 product load) and all PF Exchange load. It is our understanding that neither section 7(g)  
20 nor section 7(c)(2) requires that the 7(c)(2) Delta be allocated to load served under the  
21 FPS rate. This is in contrast to the language in section 7(b)(3), which requires that the  
22 7(b)(3) supplemental rate charge be applied to *all* firm load served by the Administrator.  
23 The 7(c)(2) Delta is not a supplemental rate charge and is not required to be allocated to  
24 all firm power sold by the Administrator. Since 1985, BPA has interpreted and  
25 implemented section 7(c)(2) so that the IP rate is set based on specific relationships of the  
26 IP rate to the PF and NR rates. The 7(c)(2) Delta and its subsequent allocation constitute  
27 the rate adjustment used to adjust the level of the IP, PF, and NR rates so that they have

1 the proper relationships to each other. As such, the allocations are made to rates whose  
2 levels are implicated by section 7(c)(2): the PF, IP, and NR rates.

3 *Q. The IOUs do not agree with BPA's allocation of the 7(b)(2) Industrial Adjustment 7(c)(2)*  
4 *Delta solely to the PF Exchange rate. LaBolle et al., WP-10-E-JP1-01, at 45-46. The*  
5 *IOUs argue that the 7(b)(2) Industrial Adjustment 7(c)(2) Delta should be allocated to*  
6 *the PF Preference Rate, the PF Exchange Rate, and BPA rates for sales of surplus*  
7 *power. Id. Please respond.*

8 *A. We disagree with the IOUs' argument that the 7(b)(2) Industrial Adjustment 7(c)(2) Delta*  
9 *should be borne by all BPA power rates, including the PF Preference rate, the PF*  
10 *Exchange rate, the IP rate, the New Resources rate, the FPS rate, and the Slice rate. Id.*  
11 *at 46. The revenue requirement allocated to the PF Preference rate is set after the 7(b)(2)*  
12 *rate test determines the rate test trigger, if any, and after the calculated rate protection*  
13 *amount is allocated away from the PF Preference rate and to the non-PF Preference rates.*  
14 *After the rate test protection amount is removed from the PF Preference revenue*  
15 *requirement, further cost allocations to the PF Preference rate would require redoing the*  
16 *section 7(b)(2) rate test. If subsequent rate steps were allowed to increase the PF*  
17 *Preference rate above that allowed by the section 7(b)(2) rate test, the rate test would*  
18 *have to be performed again, or preference customers would be denied some of their*  
19 *rightfully due rate protection. With a final allocation of costs to the PF Preference rate*  
20 *after the section 7(b)(2) rate test, the 7(b)(2) Industrial Adjustment 7(c)(2) Delta produces*  
21 *a final IP rate linked to the set PF Preference rate. One can think of the PF Preference*  
22 *rate being set by the result of the 7(b)(2) rate test and the IP rate being tied to that*  
23 *stationary PF Preference rate by the 7(b)(2) Industrial Adjustment 7(c)(2) Delta, resulting*  
24 *in a stationary IP rate. (Technically, if a consumer-owned utility was purchasing under*  
25 *the NR rate for an NLSL, the IP would be linked to the weighted average of a stationary*  
26 *PF Preference rate and a moving NR rate.) Any further allocation of the 7(b)(2)*

1 Industrial Adjustment 7(c)(2) Delta amount to the PF Preference rate would violate  
2 7(b)(2) rate test protection. Similarly, allocating any of the Delta amount to the IP rate  
3 would violate the 7(c)(2) IP-PF relationship.

4 The 7(b)(2) Industrial Adjustment 7(c)(2) Delta is a rate adjustment and not a  
5 supplemental rate charge. As such, the adjustments are made to rates whose levels can be  
6 adjusted: the PF Exchange and NR rates. Technically, the IOUs are incorrect that the  
7 7(c)(2) Delta is allocated solely to the PF Exchange rate; it is also allocated to the NR  
8 rate. Realistically, however, the IOUs are correct, because there is no NR rate service  
9 forecast in this rate case, and all of the 7(b)(2) Industrial Adjustment 7(c)(2) Delta  
10 necessarily must be allocated to the PF Exchange rate.

11 The IOUs state that an allocation of the 7(b)(2) Industrial Adjustment 7(c)(2)  
12 Delta to the PF Preference rate would not result in those customers paying for a portion  
13 of their section 7(b)(2) rate protection, because the PF Preference rate customers receive  
14 their full section 7(b)(2) rate protection as a result of the allocation of the section 7(b)(3)  
15 trigger amount away from the PF Preference rate. LaBolle *et al.*, WP-10-E-JP1-01,  
16 at 45-46. The IOUs argue that because the 7(b)(2) Industrial Adjustment 7(c)(2) Delta is  
17 not part of the 7(b)(3) trigger amount, the PF Preference rate is not entitled to section  
18 7(b)(2) rate protection from allocation of a portion of the 7(b)(2) Industrial Adjustment  
19 7(c)(2) Delta. *Id.* The IOUs' argument that PF Preference rate customers are not  
20 entitled to section 7(b)(2) rate protection from an allocation of the 7(b)(2) Industrial  
21 Adjustment 7(c)(2) Delta because the Delta is not part of the 7(b)(3) trigger amount  
22 misses the point of 7(b)(2) rate test rate protection. The PF Preference revenue  
23 requirement is set after BPA conducts the 7(b)(2) rate test. After that rate test protection  
24 amount is set and removed from the PF Preference revenue requirement, the PF  
25 Preference rate is set and does not change. The only difference between the revenue  
26 requirement allocated to the PF Preference rate after the first 7(c)(2) Delta allocation and

1 the second 7(b)(2) Industrial Adjustment 7(c)(2) Delta allocation is the allocation of the  
2 rate protection away from the PF Preference rate. Therefore, an allocation of 7(b)(2)  
3 Industrial Adjustment 7(c)(2) Delta to the PF Preference rate would precisely result in  
4 what the IOUs deny, shifting rate protection dollars to PF Preference rates.

5 Section 7(b)(2) of the Northwest Power Act provides that:

6 After July 1, 1985, the projected amounts to be charged for firm power for  
7 the general requirements of public body, cooperative and Federal agency  
8 customers, exclusive of amounts charged such customers under subsection  
9 (g) for the costs of conservation, resource and conservation credits,  
10 experimental resources and uncontrollable events, may not exceed in total,  
11 as determined by the Administrator, during any year after July 1, 1985,  
12 plus the ensuing four years, an amount equal to the power costs for general  
13 requirements of such customers if the Administrator ...[assumes the five  
14 7(b)(2) assumptions].

15 Our understanding of that section is that the Northwest Power Act does not state that PF  
16 Preference customers receive section 7(b)(2) rate protection only until BPA performs the  
17 next ratemaking step. Rate protection is provided through rates that have been lowered  
18 by the amount determined in the section 7(b)(2) rate test.

19 *Q. The IOUs state that a direct allocation of the 7(b)(2) Industrial Adjustment 7(c)(2) Delta*  
20 *to the IP rate is unnecessary because the IP rate will be increased as a result of the*  
21 *allocation of the 7(b)(2) Industrial Adjustment 7(c)(2) Delta to the PF Preference rate*  
22 *upon which the IP rate is based. LaBolle et al., WP-10-E-JP1-01, at 47. Do you agree?*

23 *A. As discussed previously, because any allocation of the 7(b)(2) Industrial Adjustment*  
24 *7(c)(2) Delta to the PF Preference rate is inappropriate, the IOUs' argument is based on a*  
25 *false premise.*

26 *Q. The IOUs state that the 7(b)(2) Industrial Adjustment 7(c)(2) Delta should be allocated to*  
27 *BPA's sales of surplus power. LaBolle et al., WP-10-E-JP1-01, at 47. Please respond.*

28 *A. Based on our understanding of the Northwest Power Act, section 7(c)(2) of the Act does*  
29 *not require that the 7(b)(2) Industrial Adjustment 7(c)(2) Delta be allocated to BPA's*  
30 *sales of surplus power (in this case, load served under the FPS rate). In contrast, section*

1 7(b)(3) of the Act requires that the 7(b)(3) supplemental rate charge be applied to all firm  
2 load served by the Administrator. The 7(b)(2) Industrial Adjustment 7(c)(2) Delta is not  
3 a supplemental rate charge and is not required to be allocated to all firm power sold by  
4 the Administrator. The Delta, and its subsequent allocation, is a rate adjustment used to  
5 adjust the level of the IP, PF, and NR rates so they have the proper relationship to one  
6 another. As such, the adjustments are made to rates whose levels can be adjusted at this  
7 point in BPA's ratemaking: the PF Exchange and NR rates.

8 Also, it would not make sense to allocate the 7(b)(2) Industrial Adjustment  
9 7(c)(2) Delta to surplus sales. The firm surplus sales are made at negotiated rates, and  
10 any further allocation of costs to these sales would result in a revenue deficiency. This  
11 revenue deficiency would require adjustment of other rates. The PF Preference rate  
12 cannot be increased to recover such deficiency, because it would violate the section  
13 7(b)(2) rate protection. The IP rate cannot be increased to recover such deficiency  
14 because it would violate the section 7(c)(2) rate linkage. The only remaining rates are the  
15 PF Exchange and NR rates, exactly those rate to which the 7(b)(2) Industrial Adjustment  
16 7(c)(2) Delta is allocated in our current methodology. The same logic holds for  
17 secondary sales. The result of the IOU proposal would be identical to our current  
18 method.

19  
20 **Section 4: Applying the CRAC to REP Benefits**

21 *Q. OPUC suggests developing a "more complex and superior approach" for applying*  
22 *CRACs to REP benefits by analyzing how rates would change if the actual cause for a*  
23 *CRAC were modeled. Hellman et al., WP-10-E-PU-01, at 13. How do you respond?*

24 *A. We agree with OPUC that the "drawback to this approach is that it is more complex and*  
25 *does not lead to a simple rule for allocating CRACs." Id. The prospects are daunting for*  
26 *tracking every cost and revenue change that impacts BPA's Accumulated Modified Net*

1 Revenue, which is the basis for implementing a CRAC, for the purpose proposed by the  
2 OPUC. In the absence of a specific alternative approach, we cannot know just how much  
3 more complex such an approach would be, nor if or how much superior. The more  
4 simple CRAC allocation in BPA's approach is a very big advantage for implementing the  
5 approach and for explaining it. The possible benefits of a more complex approach are  
6 only speculative and provide us no basis for changing our approach.

7  
8 **Section 5: PF Load Forecast in RAM**

9 *Q. APAC states that the RAM2010 worksheet tab PF Preference, which contains the PF*  
10 *sales forecast, and the Loads and Resources testimony forecast for PF sales for*  
11 *FY 2010-2011 do not agree, a fact discovered when adjusting for the conservation impact*  
12 *on load. Wolverton, WP-10-E-AP-01, at 4-6. Similarly, JP8 notes that in the file*  
13 *"RAM\_2010\_IP2.xls" in the tab labeled "L-R Balance," the cells in rows 44 through 46*  
14 *in Columns D and E appear to describe the total PF Preference load. O'Meara et al.,*  
15 *WP-10-E-JP8-01, at 8. However, JP8 claims, the values contained in those cells (and the*  
16 *underlying data contained in the "PF Preference" tab) do not match the values contained*  
17 *in Table 2.1 of the Loads and Resources Study, WP-10-E-BPA-01, page 8. Id. Please*  
18 *respond.*

19 *A. The figures in the RAM include approximately 196 aMW of Irrigation Rate Mitigation*  
20 *Product (IRMP) sales. These IRMP sales are sales to preference customers under the*  
21 *FPS rate schedule at rates calculated as a discount from PF rates. These sales are*  
22 *included in the RAM loads, with a corresponding net cost included in the revenue*  
23 *requirement. Table 2.1 in the Loads and Resources Study, WP-10-E-BPA-01, reflects*  
24 *those loads that will be subject to PF rates and therefore does not include the IRMP*  
25 *amounts. APAC's proposed adjustment is therefore incorrect, and no adjustment to*  
26 *RAM loads is needed.*

1 Q. *If the IRMP sales mentioned above are sales to preference customers under the FPS rate*  
2 *schedule at rates calculated as a discount from PF rates, why have they been included as*  
3 *PF Preference load for ratemaking purposes?*

4 A. We believe this is largely a legal issue regarding the interpretation of section 7(b)(2)(B)  
5 of the Northwest Power Act. As a factual matter, however, preference loads currently  
6 served by IRMP sales were previously served by PF Preference sales. IRMP sales were  
7 converted to surplus sales under section 5(f) of the Northwest Power Act, and not  
8 requirements sales under section 5(b), only as an accommodation to IRMP customers.  
9 Indeed, the rates for IRMP sales are calculated as a discount to the PF Preference rate.  
10 This allowed BPA to use the negotiated FPS rate established under section 7(f) of the Act  
11 to provide such customers with rate reductions through special rate design features. The  
12 IRMP provides only a portion of the BPA power sold to irrigation customers. IRMP  
13 customers were historically (and continue to be) public body customers whose power  
14 requirements were (and are) generally met with section 5(b) sales. In order to make a  
15 proper comparison of the costs of power to public body customers in the Program and  
16 7(b)(2) Cases, the total loads of the public body customers should be reflected in both  
17 Cases.

18 Q. *Does this conclude your testimony?*

19 A. Yes.  
20