SECTION 7(b)(2)
IMPLEMENTATION METHODOLOGY

ADMINISTRATOR'S RECORD OF DECISION

BONNEVILLE POWER ADMINISTRATION
U.S. DEPARTMENT OF ENERGY

b-2-84-F-02
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I.

INTRODUCTION

A. Procedural Posture

On February 29, 1984, BPA issued its "Section 7(b)(2) Proposed Rate Test Methodology." A notice of the "Proposed Section 7(b)(2) Implementation Methodology, Public Hearings, and Opportunities for Public Review and Comment" was published in 49 Fed. Reg. 11235 (March 26, 1984). That notice initiated a formal hearings process under section 7(i) of the Northwest Power Act (16 U.S.C. 839e(i)).

An evidentiary hearing on the proposed methodology was conducted by Judge Seymour Wenner, Hearing Officer. Party status was granted to a total of 45 entities including publicly owned and investor owned utility customers, direct service industrial customers (DSIs), and Federal 1/ and state agencies. Judge Wenner commenced the proceeding with a prehearing conference at which rules of practice and procedural schedules were discussed. He issued special rules of practice on April 10, 1984, which were revised on April 25, 1984.

BPA's proposed methodology was sponsored formally in the written testimony and exhibits of two witnesses. 2/ BPA responded to more than 190 data requests concerning all aspects of its proposal. Three days of clarifying sessions (transcribed oral discovery) were conducted between April 13 and April 20, 1984.

On April 30, 1984, BPA filed a technical brief and the parties filed extensive testimony and exhibits. This was followed by two more clarifying sessions on May 9 and May 14 and by further written discovery. On May 9 the parties filed prehearing briefs; on May 18, BPA filed a prehearing statement of issues.

BPA and the parties simultaneously filed rebuttal testimony on May 17, 1984; additional written discovery ensued. All parties so desiring simultaneously filed surrebuttal testimony on May 25, 1984.

Cross examination occurred on May 31 and June 1, 1984. During the hearing Judge Wenner granted all motions to strike written testimony that was based on legal conclusions or that which went beyond the scope of the proceeding.

1/ Western Area Power Administration filed a request to withdraw as a party but remain as a participant; this request was granted on June 4, 1984.

2/ The written testimony and exhibits of BPA's third witness (John Carr) were later adopted and sponsored by one of its other two witnesses (Shirley Melton).

On June 15, 1984, the parties filed their post-hearing briefs. Consideration of the briefs and the remainder of the offical record of the proceeding resulted in a Tentative Decision released on June 28, 1984. The Administrator has concluded that in order to give BPA customers a measure of certainty as to the section 7(b)(2) methodology, a Record of Decision should be entered. This methodology will not be changed during the course of the 1985 wholesale power proceeding unless an error or anomaly requiring correction is discovered. 3/

Therefore, on July 1, 1984, Judge Wenner issued a supplementary order providing for the filing of reply briefs by the parties. These briefs were submitted on July 17, 1984; the DSIs were granted an extension of time in which to file, and their brief was submitted on August 1, 1984.

This Record of Decision is divided into five sections, which correlate with the broad subject areas being considered: reserve benefits, financing benefits, natural consequences, selection of a computer model, and rate test trigger. Within the individual sections, the issues and evidence are addressed as follows: (1) a summary of each BPA proposal and the position each party has taken on the record concerning the issue; (2) an evaluation of those positions; and (3) the Administrator's decision on the issue. Three informational appendices are included: Appendix A lists the parties to the section 7(b)(2) proceeding and the preferred abbreviations of their names; Appendix B lists the witnesses and representatives of the parties to the section 7(b)(2) proceeding; Appendix C summarizes the methodology to be used to implement the directives of section 7(b)(2).

One other matter must be examined to complete the discussion of the procedures utilized in this case.

On January 23, 1984, BPA published a notice of its proposed legal interpretation of section 7(b)(2) (49 Fed. Reg. 2811). Comments and reply comments were received from interested parties. Subsequently, on May 31, 1984, BPA released its legal interpretation (published on June 8, 1984, in 49 Fed. Reg. 23998). The interpretation resolves the basic legal issues required to implement section 7(b)(2). See Section I.B.2., infra, for a more detailed discussion of this interpretation. It interprets the statute by incorporating principles of statutory construction, reviewing legislative

3/ The methodology adopted herein will be first applied in the 1985 rate case, and will become final only after BPA's rate proposals are confirmed and approved by the Federal Energy Regulatory Commission. 16 U.S.C. 839e(a)(2); Central Lincoln Peoples' Util. Dist. v. Johnson, No. 81-7622 et al., slip op., at 11 (9th Cir. Feb 9, 1984) [hereafter Central Lincoln II]; Public Power Council v. Johnson, No. 84-248-PA, slip op. (D. Ore. May 15, 1984).

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history and considering the comments made by interested parties. BPA's proposed methodology, which is the subject of this proceeding, incorporates the legal interpretation 4/ into its policy and computer program proposals.

B. Legal Requirements

1. Northwest Power Act

Section 7(b)(2) of the Northwest Power Act (16 U.S.C. 839e(b)(2)) requires that after July 1, 1985, the rates charged by BPA for firm power sold to public body, cooperative and federal agency customers ("7(b)(2) customers") may not exceed, in total, as determined by the BPA Administrator, such customers' power costs for their general requirements, under five specified assumptions. In other words, the Administrator, before establishing rates to be charged the 7(b)(2) customers for wholesale firm power sold them after July 1, 1985, must compare two numbers: the average amount BPA would charge them over a five year period pursuant to the general ratemaking guidelines found elsewhere in the Northwest Power Act ("the program case amount") 5/ and the average cost of power to them over the same five year period pursuant to those guidelines and, in addition, pursuant to the five assumptions listed in section 7(b)(2) ("the 7(b)(2) case amount"). If, upon comparison of the two numbers, the 7(b)(2) case amount is smaller than the net program case amount, then the 7(b)(2) customers will be charged the sum representing the total program case amount less the difference between the net program case amount and the 7(b)(2) case amount. 6/ The purpose of section 7(b)(2), then, is to afford BPA's preference customers rate protection in the event that other provisions of the Northwest Power Act (in particular, the power exchange program with the investor owned utilities) would otherwise increase the price of power sold them.

4/ BPA's legal interpretation is not subject to this hearing.

5/ Section 7(b)(2) also requires that the program case amount be reduced by certain 7(g) costs before it ("net program case amount") is compared with the second number. See BPA Legal Interpretation, 49 Fed. Reg. 23998, 24002 (June 8, 1984).

6/ It appears that one party in this proceeding, the DSIs, may have misunderstood the way in which the rate test operates to lower the 7(b)(2) customers' rates. Two of the DSI briefs indicate that BPA is to charge the 7(b)(2) customers the lower of the program case amount or the 7(b)(2) case amount. DSI Opening Brief, Ex. P-DS-01, 1; DSI Post-Hearing Brief, Ex. B-DS-01, 1, 14.

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The legal interpretation published by BPA resolves those basic legal issues involved in the implementation of section 7(b)(2). It was developed through a notice-and-comment procedure that was conducted separately from this hearing. The tentative legal interpretation (published on January 23, 1984, in 49 Fed. Reg. 2811) solicited public comment during the period January 23 through February 29, 1984. Much of the comment and participation which accompanied the development of the June 8 interpretation were provided by the parties to this hearing. Several of the parties remain opposed to the interpretation and presented arguments against portions of it in their briefs. 7/ Matters resolved therein will not be considered in this Record of Decision. See Central Lincoln II, slip op. at 34-37, which supports the proposition that BPA need not re-submit its legal interpretation for another round of public comment.

Three of the parties continue to express concern that certain section 7(g) costs are counted twice in the rate test. See APAC Brief, Ex. B-PA-01, 27-29; PGP Brief, Ex. B-PG-01, 9-18; PPC Brief, Ex. B-PP-01, 30-31; APAC Reply Brief, Ex. R-PA-01, 10; PGP Reply Brief, Ex. R-PG-01, 2-5; and PPC Reply Brief, Ex. R-PP-01, 16. Due to the emphasis placed on this issue, a more detailed exposition is given below.

The relevant portion of section 7(b)(2) provides as follows:

> "...[T]he projected amounts to be charged for firm power... [to 7(b)(2)] customers, exclusive of amounts charged such customers under [section 7(g)] for the costs of conservation, resource and conservation credits, experimental resources and uncontrollable events, may not exceed in total...an amount equal to the power costs if..." [certain assumptions are made]. 16 U.S.C. § 839e(b)(2).

"The projected amounts to be charged" means the program case. "Exclusive of amounts charged ... under section 7(g)" means that the enumerated section 7(g) costs are to be subtracted from the program case. There is no parallel command in the statute to subtract from the 7(b)(2) case the costs corresponding to those allocated under section 7(g) in the program case. The result, in a numerical display, would be as follows:

20 mills	("the projected amount to be charged"; also called the program case amount)
- 3 mills	(certain 7(g) charges)
17 mills	(the amount to be compared with the 7(b)(2) case amount; also called the net program case amount)

7/ In addition to the post-hearing brief references cited in the Tentative Decision at 3, see also PPC Reply Brief, Ex. R-PP-01, 11 and 15; and APAC Reply Brief, Ex. R-PA-01, 9-10 (recognition of natural consequences). The issue of "double counting" certain section 7(g) costs is treated below.

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This amount, 17 mills, is to be compared to the 7(b)(2) case amount. For illustrative purposes, assume that the 7(b)(2) case amount is 15 mills, which may include costs that correspond to those allocated under section 7(g) in the program case. The program case amount is therefore 2 mills greater than the 7(b)(2) case amount (17 mills - 15 mills = 2 mills). The test has thus triggered. Next, since the amounts to be charged to the 7(b)(2) customers, less the enumerated 7(g) costs, may not exceed the 7(b)(2) case amount, it follows that the 7(b)(2) customers may be charged up to the 7(b)(2) case amount plus the enumerated 7(g) costs. Otherwise, there would be no reason for the section 7(g) costs being mentioned in the statute. Hence, the statute allows and provides for the double counting of certain section 7(g) costs.

Double counting of all or some of the section 7(g) costs (conservation; resource and conservation credits ("billing credits"); experimental resources; and uncontrollable events) may be theoretically possible, as explained above. However, it does not occur in all instances. The costs of both experimental resources and uncontrollable events are included in total in both the program case amount (20 mills, in the example given above) and in the 15 mill 7(b)(2) case amount. But the costs of billing credits and conservation, although appearing in the 20 mill figure, are not necessarily included in the 15 mills. This is because billing credits and programmatic conservation are added to the resources used to serve the 7(b)(2) customers only to the extent that they are needed after the FBS is exhausted and only in the event that they are the least-cost resources to be added. If the FBS is sufficient to serve the 7(b)(2) load, or other available additional resources have lower costs, then billing credits and programmatic conservation will not be added to the 7(b)(2) case.

BPA's legal interpretation of June 8, 1984, 49 Fed. Reg. 23998, deals with eight issues relevant to implementation of section 7(b)(2). Only those issues that can be resolved on the basis of statutory language or legislative history are treated in the legal interpretation. Briefly, the eight issues are as follows:

- The five-year rate test period will consist of the test year for the relevant rate case plus the ensuing four years.

- Only the assumptions specified in section 7(b)(2) and any unavoidable consequences or secondary effects of those assumptions will be considered to determine 7(b)(2) customers' power costs in the 7(b)(2) case.

- The costs of conservation, resource and conservation credits, experimental resources, and uncontrollable events ("7(g) costs") will be included in the program case when the projections of loads and rates are made. The final program case power costs will then be reduced by the applicable 7(g) costs for comparison with the 7(b)(2) case power costs.

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areas of 7(b)(2) customers will be assumed, in the 7(b)(2) case, to be served by those customers beginning July 1, 1985, unexpired DSI contracts with BPA notwithstanding.

- The entire amount of DSI load included in the general requirements of the 7(b)(2) customers will be assumed to be served as firm load in the 7(b)(2) case.

- Information contained in Appendix B to the Senate Report, S. Rep. No. 272, 96th Congress, First Session (1979), will be used to identify DSI loads within or adjacent to geographic service boundaries of public bodies and cooperatives. This information will be adjusted as necessary to reflect changes in the status of BPA service to the DSI customers as assumed in the relevant rate case.

- To determine Federal base system (FBS) resources not obligated to "other" entities under existing contracts in the 7(b)(2) case, the DSI load which is not within or adjacent to the service areas of preference customers will be assumed to be served by investor owned utilities only as the DSI power sales contracts with BPA expire.

- Three types of resources will be assumed to be available to serve 7(b)(2) customers' loads when the FBS resources are exhausted in the 7(b)(2) case: (1) the resources actually acquired by BPA from the 7(b)(2) customers in the relevant rate case; (2) the resources owned or purchased by the 7(b)(2) customers that are not dedicated to their own regional loads; and (3) generic resources of whatever size is required to serve the preference customers' remaining load, at the average cost of all new resources acquired by BPA from non-7(b)(2) customers during the relevant five-year period. The resources will be "stacked" in order of cost and assumed to be used as needed to meet loads, least cost first.

II.

RESERVE BENEFITS

Section 7(b)(2)(E) presents one of the assumptions that BPA is to make when calculating the power costs of the 7(b)(2) customers in the 7(b)(2) case: "the quantifiable monetary savings, during such 5-year period, to public body, cooperative and Federal agency customers resulting from ... reserve benefits as a result of the Administrator's actions under this Act were not achieved." That is, the 7(b)(2) customers' power costs will be higher by some amount in the 7(b)(2) case because they must replace the system reserves that are provided in the program case by BPA's restriction rights on the DSI loads. The reserve benefits issue concerns how to quantify that amount.

Issue #1

How should reserve benefits be quantified?

Summary of Positions

BPA proposed to quantify reserve benefits in the 7(b)(2) case by using the same analysis as is used in the relevant rate case to determine the value of the reserves provided by BPA's restriction rights on DSI loads. The full value attributed to those rights by that analysis, rather than the credit allowed the DSIs for those rights, would be the basis for quantifying the loss of reserve benefits in the 7(b)(2) case relative to the program case. Melton and Armstrong, BPA, Ex. E-BPA-01, 16; Melton and Armstrong, BPA, Ex. E-BPA-03R, 11.

PPC proposed that instead of the full value of the rights, the credit allowed the DSIs in the relevant rate case (which credit is a portion of the calculated full value) should be used to quantify reserve benefits in the 7(b)(2) case. Wolverton, PPC, Ex. E-PP-01, 19-20; Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 24; Reply Brief, PPC, Ex. R-PP-01, 16.

APAC and PGP joined PPC in urging that the reserves credit, rather than the full value of the rights, be used. APAC Brief, Ex. B-PA-01, 35; PGP Brief, Ex. B-PG-01, 22; PGP Reply Brief, Ex. R-PG-01, 5-7.

The DSIs agreed in principle with BPA's proposal. They were concerned that the computer model proposed for use in the rate test did not reflect BPA's actual valuation method and thus did not take into account the full value BPA attributes to the rights. They also proposed that a financing benefits analysis be performed in the determination of reserve benefits in the 7(b)(2) case. Peseau, DSI, Ex. E-DS-01, 9-10 and 18; DSI Brief, Ex. B-DS-01, 4-5; DSI Reply Brief, Ex. R-DS-01, 2-3. APAC and PGP opposed this last suggestion. APAC Brief, Ex. B-PA-01, 36; PGP Brief, Ex. B-PG-01, 18-24; PGP Reply Brief, Ex. R-PG-01, 7-8.

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PPC argued that the credit more nearly reflects the reserve benefit than does the value attributed to the restriction rights by the rate case analysis, and that the credit has remained more stable over time than has the value. Wolverton, PPC, Ex. E-PP-01, 19; PPC Reply Brief, Ex. R-PP-01, 14. PPC and APAC claimed that the full value affects only the rate test and not the actual rates themselves. Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 23; APAC Brief, Ex. B-PA-01, 35. The example posited by PPC is that the full value of the restriction rights could be increased from case to case, while the credit would remain the same. In fact, the values assigned by past rate cases were $521 million (1981 rate case); $95 million (1982 rate case); and $88 million (1983 rate case). The respective credits were $76 million; $48 million; and $45 million. PPC argued that by using the value rather than the credit, the 7(b)(2) customers' costs would increase, thus decreasing the chance that the rate test would trigger. Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 23. Nevertheless, as BPA and the DSIs pointed out, the calculation of the credit given the DSIs is based on a share-the-savings methodology. Thus the credit does not represent the cost of the reserves that the 7(b)(2) customers would need to acquire in the 7(b)(2) case. Melton and Armstrong, BPA, Ex. E-BPA-03R, 12; Peseau, DSI, Ex. E-DS-02R, 8-9. PPC's characterization of the value of reserves calculation as "hypothetical" (Lucas, Wolverton and O'Meara, PPC, Ex. E-PP-04R, 24) appears to refer to the fact that the dollar amount itself is not used to calculate any actual rates. But that value is objectively determined and is open to review by all parties in the relevant rate case. Peseau, DSI, Ex. E-DS-02R, 8; Melton and Armstrong, BPA, Ex. E-BPA-03R, 12. Moreover, PPC's assertion that the credit has remained more "stable" than the value over time is not accurate. BPA used different methods to determine the value between 1981 and 1983: in the 1981 rate case, the calculation was based on a marginal costing method, while in both the 1982 and 1983 rate cases the value was calculated by using the opportunity cost of providing equivalent reserves through such devices as combustion turbines and load tripping devices. O'Meara, PPC, TR 1176. It is clear that both the credit and the value of reserves remained "stable" as between the 1982 and 1983 rate cases. Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 24.

PGP believes that BPA has misread section 7(b)(2)(E). PGP Reply Brief, Ex. R-PG-01, 5-6. PGP interprets the language, "the monetary savings ... from ... reserve benefits ... under this Act were not achieved," to mean that only the monetary equivalent of the restriction rights (whether the full value or the credit), and not the monetary value of reserves provided to replace the restriction rights, is to be considered. Under the Northwest Power Act, the Administrator has the authority to provide reserves for the BPA system. See Section 5(d)(1) and (3). BPA's restriction rights on DSI loads currently provide these reserves. See BPA 1983 Wholesale Power Rate Design Study, Ex. WP-83-FS-BPA-07 at A-9. However, in the event that these restriction rights are inadequate to provide the required level of reserves, BPA can acquire additional reserve resources. To examine what monetary savings from reserve benefits under the Northwest Power Act were not achieved, the monetary savings that were achieved must be examined. This requires a point of reference. In this case, that point of reference is what the costs would have been had BPA not been able to take actions authorized by the Northwest Power Act. These include the acquisition of restriction rights and additional

reserve resources. This is not in conflict with BPA's legal interpretation because it is one of the five assumptions specifically required by section 7(b)(2).

The DSIs criticism of the manner in which the computer model reflects the value of reserves analysis used in the rate case was addressed in BPA's rebuttal testimony: the proxy calculation currently in the model has been replaced to represent more accurately BPA's actual valuation method. Melton and Armstrong, BPA, Ex. E-BPA-03R, 12.

The DSIs also proposed that BPA include financing benefits in the calculation of the reserve benefits for the 7(b)(2) case; Peseau, DSI, Ex. E-DS-01, 9-10; DSI Brief, Ex. B-DS-01, 4-5; DSI Reply Brief, Ex. R-DS-01, 2-3. This proposal is reasonable. BPA's analysis of the full value of the restriction rights in its rate cases represents, in part, the amount it would cost BPA to provide 7(b)(2) customers with alternative reserve resources, if the restriction rights were unavailable. PGP Brief, Ex. B-PG-01, 20-21; Melton and Armstrong, BPA, Ex. E-BPA-03R, 14. That analysis takes into account interest rates available to BPA at the time of the assumed resource construction. However, the reserves in the 7(b)(2) case would have to be provided by resources owned by the regional utilities, since provision of reserves by BPA is an action precluded in the 7(b)(2) case by section 7(b)(2)(E). Melton and Armstrong, BPA, Ex. E-BPA-01, 14-15. However, these utilities would not have the option of BPA financing currently accounted for in BPA's analysis. This proposal, then, tracks in the 7(b)(2) case the same methodology (albeit using a different interest rate) used in the relevant rate case. Thus the proposal is not, as was argued by PGP and APAC, contrary to the Northwest Power Act or to BPA's legal interpretation by taking into account assumptions (or their natural consequences) not listed in section 7(b)(2). This proposal has been implemented by providing the necessary information on the resources used in the analysis of the restriction rights to the financial analyst. Armstrong, BPA, TR 787-789.

PGP argues that the financing benefits analysis required by section 7(b)(2)(E)(i) applies solely to the load/resource balance defined in section 7(b)(2)(D). Thus no analysis of financing benefits should be performed on the reserve benefits that must be quantified under section 7(b)(2)(E)(ii). PGP Reply Brief, Ex. R-PG-01, 6-7. The reserve benefits, though, resulting from BPA's "actions under this Act" (section 7(b)(2)(E)(ii)) include BPA's actions related to the provision of reserves. Therefore, section 7(b)(2)(E)(ii) requires the assumption that the 7(b)(2) customers construct their own reserve resources using their own sources of financing to determine the monetary savings from reserve benefits that were not achieved.

Decision

BPA will quantify reserve benefits in the 7(b)(2) case by using the same analysis as is used in the relevant rate case. The full value (not the credit) attributed to the restriction rights by that analysis will be the quantity of the reserve benefits in the 7(b)(2) case. A financing benefits analysis of the reserve margins required in the 7(b)(2) case will be reflected in the reserve benefits determination; this analysis will be performed by the outside financial analyst. See Section III, Issue #2, infra.

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What adjustments, if any, should be made to the rate case's analysis of the value of the restriction rights for the quantification of reserve benefits for the 7(b)(2) case?

Summary of Positions

BPA proposed that the analysis performed in the relevant rate case which quantifies the value of the restriction rights be adjusted to reflect the fact that "within or adjacent" DSI loads in the 7(b)(2) case will be less than 100 percent of DSI loads served by BPA in the program case. Melton and Armstrong, BPA, Ex. E-BPA-01, 16. Another proposed adjustment accounts for the difference in reserve requirements that may occur between the program case and the 7(b)(2) case due to different load/resource balances in the two cases.

PGP, APAC and PPC opposed in general BPA's recognition of natural consequences, one of which is demand elasticities, so presumably they opposed BPA's proposed adjustment to reserve requirements due to different load/resource balances. PGP Brief, Ex. B-PG-01, 5, 23; APAC Brief, Ex. B-PA-01, 19-20; PPC Brief, Ex. B-PP-01, 14-19. PGP asserted that BPA's proposed adjustment to reserve requirements was offered, without justification, as a fourth natural consequence. PGP Reply Brief, Ex. R-PG-01, 8-10.

The DSIs proposed that the reserve benefits calculation for the 7(b)(2) case should include a monetary quantification of the reserves provided by the first quartile of DSI load. Peseau, DSI, Ex. E-DS-01, 9; Ex. E-DS-03SR, 2; DSI Brief, Ex. B-DS-01, 3-4.

Evaluation of Positions

PGP, APAC and PPC's posture on BPA's recognition of natural consequences in general is discussed in Section IV, Issue #1, infra. For the reasons noted in Issue #1, at 9, supra, BPA's proposed adjustment to reserve requirements is not considered a natural consequence. See PGP Reply Brief, Ex. R-PG-01, 9-10.

The DSI position is that the restriction rights lost when the first quartile of DSI load is assumed to transfer to 7(b)(2) customers as firm load must be quantified in the 7(b)(2) case whether or not it is so quantified in the program case or the relevant rate case. Peseau, DSI, Ex. E-DS-01, 9; Ex. E-DS-03SR, 2; DSI Brief, Ex. B-DS-01, 4. BPA has not explicitly quantified in its past rate cases the value of the restriction rights provided by the first quartile of the DSI load. Melton and Armstrong, BPA, Ex. E-BPA-03R, 13; Peseau, DSI, Ex. E-DS-01, 9. However, during cross examination, the BPA witness declared that for the 7(b)(2) case, a determination would have to be made at the time of the relevant rate proceeding as to whether the first quartile's restriction rights provide reserves. If so, then the value of those restriction rights (reserves) would be explicitly quantified even if no such quantification is made in the program case or in the rate case. Armstrong, BPA, TR 786-787.

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No party opposed BPA's proposal that an adjustment be made to the rate case's quantification of reserves due to the fact that only the "within or adjacent" DSI customers are assumed to be served by 7(b)(2) customers in the 7(b)(2) case.

Decision

The quantification of reserves as calculated in the relevant rate case will be adjusted in the 7(b)(2) case for the actual amount of "within or adjacent" DSI loads assumed to be served by 7(b)(2) customers.

An evaluation of the recognition of differing load/resource balances can be found in Section IV, Issue #1, infra. Based on the decision on that issue, and on the decision to perform a financing benefits analysis on the reserve benefits (see Issue #1, at 9, supra), an adjustment will be made for the potentially different level of reserves required for the 7(b)(2) case.

A determination will be made in the relevant rate proceeding as to whether the restriction rights on the first quartile of the DSI load provide reserves. If it is determined that they do, and the value of those restriction rights has not been calculated as part of the relevant rate case valuation of reserves analysis, then the value will be explicitly quantified in a manner consistent with the valuation method performed in the relevant rate case for the other three quartiles. This analysis of the first quartile's restriction rights will be made in the 7(b)(2) case even if it is not made in the relevant rate case.

III.

FINANCING BENEFITS

Section 7(b)(2)(E) requires the following assumption about the financing costs the 7(b)(2) customers face in the 7(b)(2) case: "the quantifiable monetary savings, during such 5-year period, to public body, cooperative and Federal agency customers resulting from . . . reduced public body and cooperative financing costs as applied to . . . [additional] resources, other than Federal base system resources, . . . were not achieved." 8/ In other words, the 7(b)(2) customers' power costs may be higher by some amount in the 7(b)(2) case because the customers themselves would have to finance the acquisition of additional resources needed to meet their firm loads after BPA's FBS resources are exhausted. In the program case, BPA acquires the additional resources needed, making possible reduced financing costs. The financing benefits issue concerns how to quantify the difference between BPA's financing cost and the 7(b)(2) customers' cost.

Issue #1

Should all additional resources needed to serve the general requirements of the 7(b)(2) customers be assumed to be owned by those customers?

Summary of Positions

BPA proposed that all additional resources required (other than FBS resources) be assumed to be owned by the 7(b)(2) customers. As to the type 3 resource, that is, those resources acquired from non-7(b)(2) customers, BPA proposed that they be assumed to have been constructed by a proxy association of all 7(b)(2) customers, each having an ownership share in proportion to firm load. The financing benefits analysis would then be performed using the proxy association's cost of construction. Melton and Armstrong, BPA, Ex. E-BPA-01, 11-12.

PPC agreed that with respect to type 1 and 2 resources, the actual owner (a 7(b)(2) customer) should be assumed to have constructed the resource in the 7(b)(2) case and the analysis would be performed as to that 7(b)(2) customer. Wolverton, PPC, Ex. E-PP-01, 28-29.

8/ The types of additional resources are described in section 7(b)(2)(D): type 1, planned or existing resources, owned by 7(b)(2) customers, acquired by BPA in the five year rate test period; type 2, existing resources, owned by 7(b)(2) customers, which are not committed to those customers' loads; and type 3, planned or existing resources owned by non-7(b)(2) customers, acquired by BPA in the five year rate test period. Type 2 resources will not require a financing benefits analysis because they are already fully constructed and financed.

of the type 3 resource. They urged that the analysis be performed on the entity that actually constructed the resource, whether that entity is an investor owned utility or a DSI. Wolverton, PPC, Ex. E-PP-01, 29-31; APAC Brief, Ex. B-PA-01, 33. Also, in the case of conservation, PPC proposed that conservation funded by BPA in the program case should be assumed to be performed, for purposes of the financing benefits analyses, by the utility serving the geographical area where BPA's conservation investment was made. Wolverton, PPC, Ex. E-PP-01, 31.

Evaluation of Positions

The PPC and APAC proposal to analyze financing costs for the non-7(b)(2) customer actually constructing the type 3 resource means that the quantification would relate to the costs of the non-7(b)(2) customer rather than to those of the 7(b)(2) customer. Section 7(b)(2)(E)(1) refers to financing benefits for "public body and cooperative" entities. It is thus unclear how any amount of financing benefits quantified for a non-7(b)(2) customer would translate to an amount affecting the 7(b)(2) customers in the 7(b)(2) case. Melton and Armstrong, BPA, Ex. E-BPA-03R, 15-16. PPC's opposition to the concept of a proxy association was that 7(b)(2) customers (particularly the cooperatives, since they can obtain financing through the REA) would organize construction efforts to minimize costs. No studies or other evidence were offered to support this assertion. Wolverton, PPC, Ex. E-PP-01, 29-30.

PPC's proposal to estimate financing benefits of conservation investments, based on an analysis of the utility serving the area where the BPA investment was made, is unacceptable for similar reasons. BPA may make investments in conservation for areas that are served by non-7(b)(2) customers. Again, the financing benefits for these customers may have no relation to financing benefits that would be forgone by 7(b)(2) customers.

Decision

The assumption of resource ownership by the 7(b)(2) customers of type 1 and type 2 resources is reasonable and was supported by the parties. The assumption that type 3 and conservation resources are owned or sponsored by the 7(b)(2) customers avoids speculation and additional complicating assumptions about financing arrangements in the 7(b)(2) case. It recognizes that financing benefits should logically be quantified for only the 7(b)(2) customers in order properly to determine their power costs in the 7(b)(2) case.

Issue #2

Should an outside financial expert perform the financing benefits analysis?

Summary of Positions

BPA proposed to employ an outside consultant to perform the analysis of financing benefits because BPA's in-house expertise is insufficient to perform such an analysis. Melton and Armstrong, BPA, Ex. E-BPA-01, 11.

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PGP, PPC, APAC and the DSIs supported the use of an outside consultant. Wolverton, PPC, Ex. E-PP-01, 26; Peseau, DSI, Ex. E-DS-01, 27; E-DS-3SR, 9; Spettel, PGP, Ex. E-PG-01, 6; APAC Brief, Ex. B-PA-01, 31.

Evaluation of Positions

The parties to this proceeding agreed that an outside consultant should be retained to analyze financing benefits. The analysis requires expertise beyond that of BPA staff. Melton and Armstrong, BPA, Ex. E-BPA-01, 13-14.

Decision

An outside consultant has been employed to analyze financing benefits for the section 7(b)(2) rate test.

Issue #3

Are BPA's assumptions relating to the analysis of financing benefits appropriate?

Summary of Positions

BPA proposed to provide the outside consultant with several assumptions relating to the type, cost and ownership of the resources to be analyzed. Melton and Armstrong, BPA, Ex. E-BPA-01, 11-13.

Neither PPC nor APAC criticized BPA's proposal of the substance of the information to be provided to the consultant. Wolverton, PPC, Ex. E-PP-01, 25; APAC Brief, Ex. B-PA-01, 33.

The DSIs supported BPA's proposal, provided that all relevant information on resource additions is sent to the consultant, including information related to reserve resources, with no constraints on the type of analysis to be performed. Peseau, DSI, Ex. E-DS-03SR, 9.

Evaluation of Positions

The parties to this proceeding agreed on the type of information to be provided to the outside financial expert by BPA. Such information includes resource type, cost and sponsor. Pursuant to the evaluation and decision regarding reserve resources (at 9, supra), the information should include that relating to reserve resources.

Decision

BPA will provide the information as to type, cost and ownership of additional resources, including reserve resources, to the consultant.

Issue #4

Is Wertheim & Co., Inc., the appropriate outside financial expert to perform the financing benefits analysis for the rate test as part of BPA's 1985 initial rate proposal?

Summary of Positions

BPA selected Wertheim & Co., Inc., BPA's financial adviser, to perform a financing benefits analysis for the 1985 initial proposal rate test on the basis of Wertheim's expertise in financial matters related to Northwest utilities. Melton and Armstrong, BPA, Ex. E-BPA-01, 13-14.

PPC opposed BPA's selection of Wertheim on the grounds that Wertheim has an ongoing contractual relationship with BPA and thus may produce a biased analysis. Wolverton, PPC, Ex. E-PP-01, 25-26; PPC Brief, Ex. B-PP-01, 26-27.

PGP and APAC supported the PPC position. Spettel, PGP, TR 1144-1145; APAC Brief, Ex. B-PA-01, 31-32.

The DSIs supported BPA's position. Peseau, DSI, Ex. E-DS-01, 27; Ex. E-DS-03SR, 9.

Evaluation of Positions

BPA selected Wertheim & Co., Inc., to perform the financing benefits analysis for the 1985 rate test because of Wertheim's proven working knowledge of the region's economy and regional utilities acquired by acting as BPA's financial adviser for the last three years. Melton and Armstrong, BPA, Ex. E-BPA-01, 13-14. PPC, PGP and APAC believe that the ongoing contractual relationship might inhibit independent analysis, and could result in only that analysis acceptable to BPA. No examples or specific instances of bias were offered for this assertion. O'Meara, PPC, TR 1168; Spettel, PGP, TR 1144-1145. PPC also expressed doubts about the expertise of any bond house to perform the financing benefits analysis. PPC presented no reasons as to why a bond house might lack that expertise. Wolverton, PPC, Ex. E-PP-01, 26. Moreover, any financial expert retained by BPA or by any of the parties would be under contract and would be subject to the same claims of bias. The financing benefit analysis, whether sponsored by BPA or by an intervenor in the rate case, will be subject to cross examination and other procedures required by section 7(i) of the Northwest Power Act. In any event, expertise, not independence, is the crux of this issue. Were it not for the fact that BPA staff lacks the necessary expertise, the analysis would be performed in-house. Melton and Armstrong, BPA, Ex. E-BPA-01, 11.

Decision

PPC, PGP and APAC's opposition to the selection of Wertheim & Co., Inc., to perform the financing benefits analysis is not supported by the evidence. The choice of Wertheim to perform any necessary financing benefits analysis for the 1985 initial proposal is reasonable.

Issue #5

Was BPA's selection process for the outside financial expert proper?

Summary of Positions

BPA selected Wertheim & Co., Inc., again because of Wertheim's working knowledge of the region's economy and regional utilities. BPA did not consult with outside parties in making the selection. Melton and Armstrong, BPA, Ex. E-BPA-01, 11.

PPC believes that BPA should have consulted with PPC and other parties before choosing a financial consultant. Wolverton, PPC, Ex. E-PP-01, 25-27; PPC Reply Brief, Ex. R-PP-01, 17. PPC offered a detailed selection procedure: PPC would select one representative, and BPA and all non-7(b)(2) customers would select one representative. The two would select a third representative; these three would then choose a financial expert to perform the analysis. The selection committee would be formed eight months before BPA's initial proposal for a rate adjustment is filed; the expert selected seven months before the initial proposal; the expert's findings made available three months later; customer meetings and a comment period would ensue one month after that; and the final analysis would be submitted to BPA two months before publication of the initial proposal for inclusion into its direct case. Wolverton, PPC, Ex. E-PP-01, 27-28; PPC Brief, Ex. B-PP-01, 25, 27-28.

APAC supported PPC's proposal. APAC Brief, Ex. B-PA-01, 32.

PGP agreed that the selection of a financial expert should be made through joint consultation with the parties. PGP Pre-Hearing Brief, Ex. P-PG-01, 14.

Evaluation of Positions

The decision to retain Wertheim to perform the analysis of financing benefits for the 1985 rate test was made as part of the Administrator's authority to set rates and his discretion to employ methodologies for that purpose. This authority and discretion are counterbalanced by the Administrator's responsibility to solicit input via a public involvement process each time he proposes to set rates. Melton and Armstrong, BPA, Ex. E-BPA-03R, 14. In addition, BPA consulted with interested parties, including PPC, APAC and PGP, in a series of discussion meetings held specifically to discuss the section 7(b)(2) implementation methodology. Melton and Armstrong, BPA, Ex. E-BPA-01, 13. The PPC proposal would introduce an unnecessary and unworkable procedure into the already complex and time-consuming ratesetting process. Melton and Armstrong, BPA, Ex. E-BPA-03R, 15. First, there is no statutory requirement that any component of a rate filing be subject to public comment before publication of a notice of BPA's initial proposal. See 16 U.S.C. 839e(i) (section 7(i)). Second, the schedule is impractical considering the timing of determinations of data for BPA's rate filings: data would not be available as needed to implement the schedule. Melton and Armstrong, BPA, Ex. E-BPA-03R, 15.

A major thrust of the PPC and APAC arguments regarding the selection of Wertheim was that BPA, in essence, simply named a consultant to perform an analysis and that this act does not constitute a methodology. Wolverton, PPC, Ex. E-PP-01, 24; Lucas, Wolverton and O'Meara, PPC, Ex. E-PP-04R, 9; PPC Brief, Ex. B-PP-01, 25; APAC Brief, Ex. B-PA-01, 32. BPA proposed more than the name of Wertheim, however. As was pointed out in Section II, Issue #3,

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supra, BPA suggested several assumptions to be provided to the financial expert. These assumptions are found in BPA's direct testimony (Melton and Armstrong, Ex. E-BPA-01, 11-13) and include, among others, what additional resources are assumed to be required; whether proxy sponsorship of resources is assumed; and the type and cost of additional resources. The PPC methodology proposal itself, on the other hand, appears simply to name an expert (or at least, to name who will appoint representatives to name an expert). APAC's critique of BPA's proposal (APAC Brief, Ex. B-PA-01, 32-33) highlights BPA testimony that is allegedly inconsistent with regard to the method of determining financing benefits. Upon close examination, however, it can be seen that the statements are not contradictory. Witness Melton testified that BPA proposes to use Wertheim for the short term, i.e., for the 1985 rate case, but that BPA would not be compelled to use Wertheim in future rate cases (TR 974). Witness Armstrong said that one part of BPA's methodology was to name Wertheim (TR 878), later clarifying his statement by explaining that the methodology BPA proposed included the "general concept" of using an outside financial consultant, "and only for the '85 rate case are we proposing that Wertheim be used." Armstrong, BPA, TR 1083.

Decision

BPA's selection process for the outside consultant for the financing benefits analysis was proper. The Administrator's authority to set power rates, and his responsibility to encourage public involvement, support BPA's position.

Issue #6

Should the analysis of financing benefits be performed in the same manner for each rate test?

Summary of Positions

BPA proposed that the analysis of financing benefits be performed in a manner chosen by the financial expert for each rate test. Each analysis would take into account the economic conditions existing at the time the analysis is made. Melton and Armstrong, BPA, Ex. E-BPA-01, 14; Armstrong, BPA, TR 880.

The DSIs supported BPA's position. Peseau, DSI, Ex. E-DS-01, 27-28.

PPC seemed implicitly to support BPA's position by suggesting that the method used to quantify financing benefits could change for each rate test because different contractors could be performing the analysis each time. O'Meara, PPC, TR 1178-1179.

Evaluation of Positions

The parties agreed that the analysis of financing benefits should be performed anew for each rate test to reflect, among other things, current economic conditions at the time of the relevant rate case.

Decision

The analysis of financing benefits will be performed on a case-by-case basis for each rate test. The analysis itself will be performed in a manner deemed appropriate by the financial expert conducting the analysis.

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IV.

NATURAL CONSEQUENCES

Natural consequences, also referred to as secondary effects, result from the relationship of the 7(b)(2) case to the program case: the two cases will be modeled using the same underlying premises and ratemaking procedures. Implementing the five assumptions listed in section 7(b)(2) in the 7(b)(2) case may produce results different from those in the program case when using the same underlying premises and ratemaking procedures used in the program case. These differing results are the natural consequences of the 7(b)(2) assumptions. See BPA Legal Interpretation, 49 Fed. Reg. 23998, 2400-2401 (1984), which contains a full discussion of the legal basis for the recognition of such secondary effects.

Issue #1

Are the natural consequences identified by BPA the direct and unavoidable results of the five section 7(b)(2) statutory assumptions?

Summary of Positions

BPA identified three natural consequences of the five statutory assumptions listed in section 7(b)(2): demand elasticities, amount of surplus firm power available, and size of nonfirm energy markets. These three consequences result from the section 7(b)(2) assumptions because the underlying premises of economic principles and system physical constraints will be held constant between the program case and the 7(b)(2) case. Melton, BPA, Ex. E-BPA-01, 10-11.

PPC opposed BPA's recognition of any natural consequences. In particular, PPC argued that BPA proposed to consider only those natural consequences that are harmful to the preference customers. Wolverton, PPC, Ex. E-PP-01, 7; PPC Brief, Ex. B-PP-01, 14-16; PPC Reply Brief, Ex. R-PP-01, 15.

PGP and APAC supported the PPC positions. Spettel, PGP, Ex. E-PG-01, 4; PGP Brief, Ex. B-PG-01, 5-6; APAC Brief, Ex. B-PA-01, 19-26; APAC Reply Brief, Ex. R-PA-01, 9-10.

ICP implicitly supported BPA's proposal. Wilson, McCullough, Hannigan and Powers, ICP, Ex. E-IC-01, 3-4; ICP Brief, Ex. B-IC-01, 1-3.

Evaluation of Positions

BPA's proposal to recognize natural consequences is consistent with its legal interpretation. The three natural consequences identified by BPA result from maintaining the same underlying premises and processes in the 7(b)(2) case as in the program case. When the five assumptions from section 7(b)(2) are implemented within that framework, unavoidable natural consequences may result. Reflecting those unavoidable natural consequences will avert technical inconsistencies. Melton, BPA, Ex. E-BPA-01, 10-11; ICP Brief, Ex. B-IC-01, 2. For example, if the 7(b)(2) case amount and the

program case amount differ significantly, the customer elasticity may need to be reflected in a new load forecast for the 7(b)(2) case. Melton, BPA, Ex. E-BPA-01, 11. Disregarding any significant differences and their effect on loads implies that the price elasticity of demand for electricity for the 7(b)(2) customers is zero. This implication is not one of the five assumptions listed in section 7(b)(2). Melton, BPA, Ex. E-BPA-01, 12. Similarly, since the load/resource balances in the program case and the 7(b)(2) case will differ due to the transfer of DSI loads, the amount of surplus firm power available and the assumed size of the market for nonfirm energy will differ between cases. A failure to recognize those differences would change the underlying premises upon which BPA bases its load/resource balance. Melton, BPA, Ex. E-BPA-01, 11. Such a change is not one of the assumptions in section 7(b)(2). Melton, BPA, Ex. E-BPA-01, 12.

PPC and PGP alleged that BPA has proposed to reflect only the natural consequences that would harm the 7(b)(2) customers. Wolverton, PPC, Ex. E-PP-01, 7; Spettel, PGP, Ex. E-PG-01, 4. PPC, APAC and PGP described certain situations that could benefit the 7(b)(2) customers: 9/

- In the 7(b)(2) case, residential customers of investor owned utilities would incur higher rates, and thus use less electricity. More cheap power would then be available for the 7(b)(2) customers.

- The price, not merely the amount, of surplus firm power could change. The capacity of the Pacific Southwest intertie could constrain surplus sales to California. BPA could sell surplus firm on the nonfirm market. This reduces the amount of surplus firm power and in turn possibly increases the realized price of surplus firm power. This may make it likelier for the rate test to trigger.

- Power lost because of the fish flush is a change in the physical characteristic of the FBS and should be restored to 7(b)(2) customers.

- There would be a decrease in BPA's operation and maintenance costs due to the absence, in the 7(b)(2) case, of certain costs incurred because of the Northwest Power Act (conservation, fish and wildlife, billing credits, and the like).

- The 7(b)(2) customers, in the 7(b)(2) case, could negotiate with the DSIs to serve the industries with interruptible power.

- Changes in the price of power affect not only loads (the basis for BPA's proposal to account for demand elasticities) but also load pattern shapes over a given period of time. The change in these shapes could affect the level of average energy available.

9/ The suggestions that follow were not offered for adoption as secondary effects, see Spettel, PGP, TR 1145-1146; they were offered to show that the natural consequences proposed by BPA are "arbitrary" PPC Reply Brief, Ex. R-PP-01, 11-12.

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Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 17-18; Spettel, PGP, Ex. E-PG-01, 4-5; Miller, APAC, TR 1042-1044.

Most of the examples are not the direct result of implementing the 7(b)(2) assumptions and leaving all other underlying premises and ratemaking principles the same. Many require assumptions not specified in section 7(b)(2). Furthermore, the examples suggest a "what if" approach (that is, an approach to the 7(b)(2) case that attempts to hypothesize, in extreme detail, the conditions that would have existed had the Northwest Power Act never passed). PPC, PGP and APAC criticized this approach as arbitrary and speculative. Wolverton, PPC, Ex. E-PP-01, 7; PPC Brief, Ex. B-PP-01, 15; PGP Brief, Ex. B-PG-01, 5; APAC Brief, Ex. B-PA-01, 20.

- Assuming that 7(b)(2) customers could obtain cheap power from investor owned utilities in the 7(b)(2) case would conflict with BPA's legal interpretation. 7(b)(2) customers are assumed to be served with FBS and defined additional resources only.

- BPA does not argue with the proposition that the price of surplus firm power could differ between the cases. The levels of surplus firm and nonfirm sales and markets, discussed in Issue #4, at 24-25, infra, could vary between the cases. The price of surplus firm depends on the resources and their amounts that comprise the surplus firm available, and the amount that is assumed marketed, so the price may also vary between the cases. Melton, BPA, TR 826. It should be noted that BPA is not hereby identifying a fourth secondary effect. An adjustment to the price of surplus firm power occurs because of the differing levels of surplus firm power available, discussed in Issue #4, at 24-25, infra.

- Excluding the fish flush would require the assumption that the fish and wildlife provisions of the Northwest Power Act are not binding. This is not specified in section 7(b)(2), and the fish flush will be included in the program case. Therefore, it would not be appropriate to exclude it in the 7(b)(2) case.

- Decreasing BPA's operation and maintenance costs would require the assumption that programs such as fish and wildlife did not take place in the 7(b)(2) case, which is not specified in section 7(b)(2). To the extent that conservation and billing credits are not included in additional resource costs in the 7(b)(2) case, their costs would not be included. Melton and Armstrong, BPA, Ex. E-BPA-01, 32.

- Speculation on interruptible service to DSIs by the 7(b)(2) customers in the 7(b)(2) case conflicts with BPA's legal interpretation which requires 100 percent firm service to within or adjacent DSI loads.

- With respect to the changes in load pattern shapes, BPA witness Melton testified (TR 1043) that it would be "possible" for the changes to affect the level of average energy available. This is not sufficient evidence to recognize that suggestion as a secondary effect in the 7(b)(2) case.

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effects (elasticity, amount of surplus firm power and size of nonfirm energy markets) is the result not of BPA system physical constraints or economic principles, but of BPA staff inability to model other secondary effects. APAC Brief, Ex. B-PA-01, 25. Certainly BPA witnesses are concerned about the burden imposed by complex computer modeling processes. Melton, BPA, TR 1046. The administrative burden placed on an agency is a valid consideration as to whether a task should be undertaken. See University of Cincinnati v. Heckler, No. 83-307, slip op., at 5 (6th Cir., May 14, 1984).

Decision

The PPC/PGP/APAC criticism of the three natural consequences identified by BPA was not supported by their evidence. Their examples of other natural consequences are either in conflict with BPA's legal interpretation or are not natural consequences of the 7(b)(2) assumptions. The three natural consequences that were identified by BPA are valid results of the assumptions in section 7(b)(2). BPA already takes into account the potential change in price of surplus firm power as between the program case and the 7(b)(2) case.

Issue #2

Should a new load forecast for the 7(b)(2) case be generated if the rates in the two cases differ significantly?

Summary of Positions

BPA proposed that the load forecast prepared for the relevant rate case (extended for the rate test period) be input to the computer model to calculate the program case rates. The loads used to calculate the 7(b)(2) case rates will be the same as those used for the program case, except that programmatic conservation savings will be removed and DSI loads not served by BPA will be assumed to be served 100 percent firm. If the 7(b)(2) case rates differ significantly from the program case rates, making a new forecast necessary, the same demand models used to forecast the rate case and program case loads may be used to generate a new 7(b)(2) case load forecast. Melton and Armstrong, BPA, Ex. E-BPA-01, 8.

PPC and PGP proposed that the loads should not differ between the program case and the 7(b)(2) case. Wolverton, PPC, Ex. E-PP-01, 14-15; Spettel, PGP, Ex. E-PG-01, 4; PGP Brief, Ex. B-PG-01, 14-15; PPC Brief, Ex. B-PP-01, 16-19. APAC implicitly supported the PPC/PGP position. APAC Brief, Ex. B-PA-01, 23.

ICP proposed that it would be necessary to perform a load forecast for the 7(b)(2) case, using the rates calculated for the 7(b)(2) case and forecasting models that incorporate long term elasticities. Iteration would be necessary between the rate test computer model and BPA's load forecasting model to reach equilibrium between price and demand. Wilson, McCullough, Hannigan and Powers, ICP, Ex. E-IC-01, 25; ICP Brief, Ex. B-IC-01, 6-7.

Evaluation of Positions

BPA believes that the elasticity of demand for electricity is an underlying premise of the ratesetting process that needs to be reflected as a

natural consequence of the five assumptions listed in section 7(b)(2). Reflecting demand elasticities may make a new load forecast necessary if the rates calculated for the program case and 7(b)(2) case differ significantly. Melton, BPA, Ex. E-BPA-01, 11.

The PPC/PGP/APAC position is inconsistent with BPA's legal interpretation. Melton and Armstrong, BPA, Ex. E-BPA-3R, 8. In addition, PPC proposed that elasticity effects be reflected in the program case but not in the 7(b)(2) case. The PPC witness was unable to give either a technical reason for this inconsistency or any scenario that would produce rates which would yield such results. Wolverton, PPC, TR 1202-1206.

ICP proposed that the effects of rates on loads should be reflected beginning with the date of the passage of the Northwest Power Act. It suggested that load forecasting models with long term elasticities be used to forecast loads for the 7(b)(2) case. Wilson, McCullough, Hannigan and Powers, ICP, Ex. E-IC-01, 24-25. Such a process is inconsistent with BPA's proposal to keep the underlying processes (e.g., load forecasts) the same for the 7(b)(2) case as for the program case. Melton, BPA, Ex. E-BPA-01, 9. The ICP proposal requires that a different load forecasting model be used for the 7(b)(2) case than would be used for the program case. Hannigan, ICP, TR 718. See Issue #3, infra.

Decision

BPA's proposal to perform a new load forecast for the 7(b)(2) case if the monetary amounts in the program case and 7(b)(2) case differ significantly is reasonable. It is consistent with BPA's legal interpretation. It also considers the practical aspects of performing a new load forecast in an already complex ratesetting process.

Issue #3

Should the same demand models used to forecast loads for the relevant rate case be used to develop loads for the 7(b)(2) case?

Summary of Positions

BPA proposed that the same demand models used for the relevant rate case be used to forecast loads for the 7(b)(2) case. Melton and Armstrong, BPA, Ex. E-BPA-01, 8.

ICP proposed that the models used for the 7(b)(2) case should incorporate elasticity effects occurring both before and after the five year rate test period. This implies that the demand models to be used for the section 7(b)(2) rate test should be different than those used for the relevant rate case. Wilson, McCullough, Hannigan and Powers, ICP, Ex. E-IC-01, 25-27; Hannigan, ICP, TR 718.

Evaluation of Positions

The BPA proposal to use the same demand models to forecast loads for the section 7(b)(2) rate test as are used for the relevant rate case is consistent with BPA's legal interpretation. The program case is a simulation of the

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Armstrong, BPA, Ex. E-BPA-01, 9. As such, it logically should use as many inputs as possible from the relevant rate case. The load forecast prepared for the relevant rate case can easily be extended to serve the input requirements of the section 7(b)(2) rate test. Melton and Armstrong, BPA, Ex. E-BPA-01, 8.

The ICP proposal is inconsistent with BPA's legal interpretation. Attempting to reflect cumulative elasticity effects since the passage of the Northwest Power Act would be an overly speculative, complex process. Melton and Armstrong, BPA, Ex. E-BPA-03R, 18.

Decision

BPA will use the demand models used to forecast loads in the relevant rate case to determine loads for the section 7(b)(2) rate test. This practice is consistent with BPA's legal interpretation.

Issue #4

Should adjustments to surplus firm and nonfirm sales and markets be made between the program case and the 7(b)(2) case?

Summary of Positions

BPA proposed that the level of surplus firm power available will differ between the two cases due to the different load/resource balances. The nonfirm energy markets will also differ between the two cases. These two adjustments are natural consequences of the five 7(b)(2) assumptions. Melton and Armstrong, BPA, Ex. E-BPA-01, 17; Armstrong, BPA, TR 796.

PPC appeared implicitly to support BPA's position on the level of surplus firm available. Its proposed PPC/7(b)(2) computer model (discussed in Section V, infra) includes a provision for adjusting the level of surplus firm based on loads and resources in the 7(b)(2) case. Wolverton, PPC, Ex. E-PP-01, 81-82. APAC, by supporting the use of the PPC/7(b)(2) computer model, appeared to support PPC's position. APAC Brief, B-PA-01, 16.

PGP urged that neither the level of surplus firm power available nor the level of the nonfirm market should differ between the two cases. Spettel, PGP, Ex. E-PG-01, 6-7; Spettel, PGP, TR 1145. However, PGP also supported the use of the PPC/7(b)(2) computer model. Spettel, PGP, Ex. E-PG-01, 7-13. This is inconsistent with PGP's position on the determination of available surplus firm in the 7(b)(2) case.

Evaluation of Positions

BPA's proposal reflects provisions of its legal interpretation. Changes between the program case and the 7(b)(2) case in the amount of surplus power and the size of nonfirm energy markets are natural consequences of the five assumptions listed in section 7(b)(2). Loads in the 7(b)(2) case will differ from the program case loads because of the assumption of 100 percent firm service to the "within or adjacent" DSIs, because of the potential new load forecast to reflect price elasticity, and because of the differences in

resources used in the 7(b)(2) and program cases. Such load differences could require an adjustment in the amount of surplus power available between the program case and the 7(b)(2) case. Similarly, the smaller DSI first quartile nonfirm load, and the potentially different amount of displacable new resource generation, support possible adjustments to nonfirm energy markets in the 7(b)(2) case. Melton and Armstrong, BPA, Ex. E-BPA-01, 17. PPC and APAC appeared to support BPA's position on the determination of the level of surplus firm available.

PGP's position cannot be ascertained.

Decision

To be consistent with BPA's legal interpretation, adjustments to surplus firm power availability and nonfirm energy markets in the program case will be made for the 7(b)(2) case. Such adjustments are natural consequences of the section 7(b)(2) assumptions.

Issue #5

What assumption should be made in the 7(b)(2) case as to the amount of surplus firm power sales?

Summary of Positions

BPA proposed that the level of surplus firm power sold in the two cases would be the same, except as adjusted for the amount of surplus firm power available (which will be different in the two cases due to natural consequences) and for the absence of sales in the 7(b)(2) case of surplus firm power to the DSI first quartile. Melton and Armstrong, BPA, Ex. E-BPA-01, 17-18; TR 822-823.

The DSIs argued that the amount of surplus firm power sales in the 7(b)(2) case should be different from the amount in the program case because of the elasticity effects of different prices for the surplus firm power in the two cases. DSI Brief, Ex. B-DS-01, 12-14; DSI Reply Brief, Ex. R-DS-01, 4-5.

Evaluation of Positions

BPA's assumption that the levels of surplus firm sales in the 7(b)(2) and program cases will not differ except for the two adjustments described in Issue #4 at 24-25, supra, is consistent with BPA's general approach in its legal interpretation of section 7(b)(2). The DSIs are concerned that BPA's assumption of equal levels of surplus firm sales in the two cases is in error in that the levels of forecasted sales of other types of power may be adjusted for price elasticity effects. DSI Brief, Ex. B-DS-01, 13; DSI Reply Brief, Ex. R-DS-01, 5. To the extent that the relevant rate case, and thus the program case, reflects price in the determination of surplus firm power sales, that same process is used in the 7(b)(2) case. At this time, the program case targets a particular amount of marketable surplus firm power, which amount is assumed to exist in the 7(b)(2) case. To assume otherwise would require speculation. Melton, BPA, TR 826-827; 831-832.

Decision

BPA will assume the same level of surplus sales in the program case and in the 7(b)(2) case, except as adjusted for availability and DSI first quartile sales.

Issue #6

How should additional resources be assumed to meet load in the 7(b)(2) case: in exact increments to meet the load, or in discrete "lumps" that could result in a surplus of firm power?

Summary of Positions

BPA proposed that the type 1 and 2 additional resources be added in discrete "lumps", but that the type 3 resource be assumed to be added in the exact amount needed to meet the load in the 7(b)(2) case. Armstrong, BPA, TR 808. This proposal is consistent with BPA's legal interpretation. Armstrong, BPA, TR 805. Melton and Armstrong, BPA, Ex. E-BPA-03R, 11.

PGP, APAC and PPC proposed that all additional resources should "be acquired in the quantity necessary to obtain a balance between power loads and resources." Thus, no surplus should ever exist in the 7(b)(2) case. Spettel, PGP, Ex. E-PG-01, 5; APAC Brief, Ex. B-PA-01, 29-30; Wolverton, PPC, Ex. E-PP-01, 16-17; Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 25-26; PPC Brief, Ex. B-PP-01, 19-21; PPC Reply Brief, Ex. R-PP-01, 17.

The DSIs proposed that a short term surplus may exist in the 7(b)(2) case as a result of adding any of the three types of additional resources to meet load. Peseau, DSI, Ex. E-DS-01, 19-20; DSI Brief, Ex. B-DS-01, 7-8; Peseau, DSI, Ex. E-DS-02R, 3-6; DSI Reply Brief, Ex. R-DS-01, 6.

ICP supported the DSI position. Wilson, McCullough, Hannigan and Powers, ICP, Ex. E-IC-02R, 1-2; ICP Brief, Ex. B-IC-01, 7-8; ICP Reply Brief, Ex. R-IC-01, 3-4.

Evaluation of Positions

PGP/PPC/APAC supported their proposal of no surplus due to additional resources in the 7(b)(2) case with the existence of "regional arrangements" that can have the effect of adding resources in increments as necessary to meet load. Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 25-26. Such arrangements would also reduce or eliminate the surplus in the program case. Wolverton, PPC, TR 1210. The DSIs and ICP pointed out that, in reality, contingency planning results in resources often coming on line ahead of the exact time needed, and in lumpy increments that result in a surplus of capacity. Peseau, DSI, Ex. E-DS-01, 19. The PPC proposal is unrealistic in its assumption of perfect resource timing, and is inconsistent with the program case. "The economic principle of cost minimization" that PGP uses to support its proposal (Spettel, PGP, Ex. E-PG-01, 5) is more theoretical than practical. Utilities may indeed attempt to minimize the cost of their resource additions, but the reality remains that surpluses are created by adding resources in "lumps". Peseau, DSI, Ex. E-DS-02R, 5; Wilson, McCullough, Hannigan and Powers, ICP, Ex. E-IC-02R, 1.

PPC also argued that section 7(b)(2) does not refer specifically to costs of surplus power and therefore that no surplus should be reflected in the 7(b)(2) case. PPC Brief, Ex. B-PP-01, 21; PPC Reply Brief, Ex. R-PP-01, 17. PPC's argument is inconsistent with BPA's legal interpretation. Moreover, it would introduce bias to the rate test by understating 7(b)(2) case power costs. DSI Brief, Ex. B-DS-01, 7.

The DSI/ICP proposal, that all three resource types be added in "lumps", is overly speculative, because the type 3 resource is made up of generic resources with generic (average) costs. Adding resources from this third category in exact increments is the practical solution. Armstrong, BPA, TR 804. Moreover, BPA's legal interpretation requires that the generic resources be added in the "size required [for the] remaining loads..." 49 Fed. Reg. at 24005. While nongeneric resources often come on line in lumpy increments, no adequate showing has been made by ICP or the DSIs as to why generic resources would (or to what extent they would). See DSI Reply Brief, Ex. R-DS-01, 7-8; ICP Reply Brief, Ex. R-IC-01, 4. A generic resource is nowhere defined as a discrete, single existing resource; section 7(b)(2)(D)(ii) requires merely that additional resources be obtained at the "average cost of all other new resources acquired by BPA." The ICP reference (ICP Reply Brief, Ex. R-IC-01, 4) to the analysis of financing benefits for the type 3 resource is not persuasive. The "average cost of all other new resources" requires an averaging of the cost, not of the physical characteristics, of other new resources. The assumption of "average" physical characteristics for the type 3 resources, in order to achieve lumpiness, would be arbitrary and speculative.

Decision

BPA will treat the first and second types of additional resources in the 7(b)(2) case as "lumps"; this reflects the actual increments by which BPA acquires them. BPA will assume that generic resources are acquired in exact increments as needed to meet load, thus reflecting the generic nature of that category of additional resources, as described in the BPA legal interpretation.

Issue #7

What resources should be assumed to comprise any potential surplus in the 7(b)(2) case?

Summary of Positions

BPA proposed to maintain the same underlying premises and processes between the two cases. Under BPA's current ratemaking methodologies, two resource pools would be used in the 7(b)(2) case to be consistent with the program case. That is, 7(b)(2) customers' general requirements would be assumed to be served with FBS resources until those resources are exhausted, then with additional resources. Surplus firm power would be assumed to be comprised of resources in the reverse order. Armstrong, BPA, TR 815-816.

BPA also proposed that the costs of unsold surplus FBS power be allocated to all customers of the FBS. The costs of unsold surplus additional resources should be allocated to the 7(b)(2) customers. Armstrong, BPA, TR 872.

[illegible] appeared to agree with BPA's initial proposal for the treatment of resource costs in the 7(b)(2) case. ICP expressed concern that any FBS surplus firm power should be allocated only the costs of the FBS, and that surplus additional resources owned by the 7(b)(2) customers should be allocated the full cost of those resources. Wilson, McCullough, Hannigan and Powers, ICP, Ex. E-IC-01, 4-7. The ICP Brief reiterated the concept that additional resources in the 7(b)(2) case should be treated by the SPM as if owned by the 7(b)(2) customers, not by BPA. ICP Brief, Ex. B-IC-01, 3-5. The ICP Reply Brief claimed that the SPM treats additional resources as BPA resources, thus allocating the overhead costs related to those additional resources to FBS customers. It also claims that "unsold surplus resources are then sold outside the region, rather than allocated to the 7(b)(2) customers . . ." ICP Reply Brief, Ex. R-IC-01, 4-5.

The DSI position is that the costs of all resources in the 7(b)(2) case should be melded. The 7(b)(2) customers and the purchasers of surplus firm power in the 7(b)(2) case would thus be allocated the same costs. Peseau, DSI, Ex. E-DS-01, 24-27; Peseau, DSI, Ex. E-DS-03SR, 5; DSI Brief, Ex. B-DS-01, 11; DSI Reply Brief, Ex. R-DS-01, 3-4.

PPC supported BPA's proposal for resource stacking. Wolverton, PPC, Ex. E-PP-01, 15-16; Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 15; PPC Brief, Ex. B-PP-01, 28-30.

Evaluation of Positions

BPA projects three "rates" in the 7(b)(2) case. The rate for power sold under pre-Northwest Power Act contracts is based on FBS costs, including a portion of the costs of any potential unsold surplus FBS resources, and additional non-7(b)(2) related cost and revenue adjustments. The second rate (the 7(b)(2) rate) applies to the general requirements of the 7(b)(2) customers. It is based on the costs of the remaining FBS and any potential new resources, including costs of unsold surplus FBS or additional resources. The third rate is for surplus firm power sales, based on the costs of surplus resources and the non-7(b)(2) related cost and revenue adjustment allocations. Melton and Armstrong, BPA, Ex. E-BPA-01, 30-31. However, BPA agrees with the ICP position that because additional resources should be assumed to be owned and operated by 7(b)(2) customers, FBS costs and other BPA related costs and revenue adjustments should be allocated only to loads served with the FBS.

BPA's treatment of resource costs in the 7(b)(2) case is consistent with its legal interpretation. As stated therein, ". . . additional resources are assumed to be acquired to meet the 7(b)(2) customers' loads when FBS resources are exhausted" (emphasis added). Also, as argued by PPC, the SPM's treatment of additional resources is consistent with the assumption that the 7(b)(2) customers would own and operate those resources: the ICP implication that surplus additional resources could not be sold is "economically implausible." Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 10-11. To assume that no surplus firm power from additional resources could be sold also would be inconsistent with BPA's assumption of the same level of surplus firm power sales in the 7(b)(2) case as in the program case (adjusted only for natural consequences), as discussed in Issue #5, at 25, supra. The asymmetry

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between the program case and the 7(b)(2) case proposed by ICP and the DSIs is inconsistent with BPA's general approach of keeping the underlying ratemaking premises and processes the same for the two cases. Armstrong, BPA, TR 816.

Decision

ICP and the DSIs did not support with sufficient evidence their proposal that the "one pool" concept would properly account for the costs of additional resources in the 7(b)(2) case. BPA's treatment of resources stacking is consistent with BPA's legal interpretation and ensures symmetry between the program case and the 7(b)(2) case.

V.

SELECTION OF COMPUTER MODEL TO PERFORM THE RATE TEST

Issue

What is the appropriate computer model to perform the section 7(b)(2) rate test?

Summary of Positions

BPA proposed to use its Supply Pricing Model (SPM) to calculate the two sets of rates to be used in the rate test. Melton and Armstrong, BPA, Ex. E-BPA-01, 20-21.

PPC offered two models for consideration, but recommended that its PPC/7(b)(2) model be used for the rate test. The PPC/7(b)(2) model would utilize extensive inputs from the relevant rate case to calculate the two sets of rates to be compared; the model then would perform the rate test. Wolverton, PPC, Ex. E-PP-01, 74-75; PPC Reply Brief, Ex. R-PP-01, 15-16. PPC also proposed, as a second best alternative, a modified version of BPA's SPM which separates, as much as possible, the determinations made for the program case from those made for the 7(b)(2) case and modularizes the SPM. Wolverton, PPC, Ex. E-PP-01, 95-96.

APAC supported use of the PPC/7(b)(2) model. APAC Brief, Ex. B-PA-01, 16-19.

PPC, ICP and the DSIs, in a meeting held May 15, 1984, agreed to use the SPM, as modified by PPC, as a base from which to develop a workable rate test model. Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 2.

PGP supported the use of either of PPC's proposed models. Spettel, PGP, Ex. E-PG-01, 7-13.

ICP stated generally that the 7(b)(2) methodology should accurately model BPA's ratesetting practices. Wilson, McCullough, Hannigan and Powers, ICP, Ex. E-IC-01, 4.

The DSIs did not address the selection of a computer model to conduct the section 7(b)(2) rate test, but made specific proposals relating to the SPM's technique. Peseau, DSI, Ex. E-DS-01, 4. They urged that the PPC/7(b)(2) model not be adopted for use in the section 7(b)(2) rate test. Peseau, DSI, Ex. E-DS-02R, 10-11. The DSIs generally supported the technical restructuring of the SPM. Peseau, DSI, Ex. E-DS-02R, 12. They specifically stated that the ICP proposed model of nonfirm markets be adopted. DSI Reply Brief, Ex. R-DS-01, 12.

Evaluation of Positions

Any computer model is simply a tool to perform rapid mathematical and logical calculations. BPA Pre-Hearing Brief, Ex. P-BPA-01, 1. The calculations of concern here implement the theories and decisions to be

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applied in the rate test. It is these decisions and theories that are of paramount importance, although certainly they must be represented accurately in any computer model.

The SPM was modified by PPC. PPC, ICP and the DSIs all generally appeared to approve the SPM as modified (Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 2-3; McCullough and Peseau, ICP and DSI, Ex. E-JP-01R, 1-3) although PPC continued to urge the use of its PPC/7(b)(2) model. BPA was able to duplicate the results of the its original SPM with the modified SPM, and agreed to adopt the modified SPM as the basis for further modeling efforts to perform the rate test. Armstrong, BPA, TR 756. In addition, BPA agreed to evaluate five modeling proposals submitted by the joint ICP/DSI rebuttal testimony for inclusion in the SPM. Armstrong, BPA, TR 781-782. The PPC/SPM was not complete at the time it was adopted, but it provided a common basis for further model development and evaluation by BPA and the parties. Wolverton, PPC, E-PP-01, 97-98; Peseau, DSI, Ex. E-DS-02R, 11-12; Lucas, O'Meara and Wolverton, PPC, Ex. E-PP-04R, 4; McCullough and Peseau, ICP and DSI, Ex. E-JP-01R, 3-4.

The modified SPM does two things: it models the program case (which tracks the rate case and projects that case over a five year period), and it models the 7(b)(2) case (which tracks the program case over the same five year period, with the addition of the five assumptions and their natural consequences). This comports with BPA's approach as defined in its legal interpretation (see 49 Fed. Reg. at 2400-2401).

The PPC/7(b)(2) model, by contrast, attempts to fix a portion of the rate test methodology and to separate entirely the program case from the 7(b)(2) case. Wolverton, PPC, Ex. E-PP-01, 75. However, the program case and the 7(b)(2) case are inextricably linked and cannot be separated on account of BPA's approach of modeling the cases the same except for the 7(b)(2) assumptions and their natural consequences. Melton and Armstrong, BPA, Ex. E-BPA-03R, 21-23. The separation of the cases effected by the PPC/7(b)(2) model results from inputting much of the data needed by the model to develop the 7(b)(2) projections. The PPC/7(b)(2) model does not produce projections for the program case. However, this is an essential feature of any rate test model. Melton, BPA, TR 854. The other models needed to calculate the inputs for the PPC/7(b)(2) model (including some model like the SPM for use in modeling the program case) would themselves be subject to scrutiny and contention, thus possibly increasing, rather than lessening, the complexity of the rate test. Peseau, DSI, Ex. E-DS-02R, 10-11. DSI Brief, Ex. B-DS-01, 18.

Decision

BPA used the modified SPM as the basic model to develop the final rate test model. BPA reemphasizes the fact that the computer model is a tool for implementing the legal interpretation and the Administrator's decisions on the substance of the section 7(b)(2) methodology. A computer model cannot, of course, be used to abridge or circumscribe the statutory discretion accorded the Administrator to set rates.

VI.

RATE TEST TRIGGER

Issue

What assumptions should be made in order to compare the results of the power cost projections for the two cases and to determine any potential amount to be reallocated during the relevant rate case (test year amount)?

Summary of Positions

BPA proposed that the rate test compare per kilowatthour amounts, rather than the total allocated power costs of the 7(b)(2) customers, in the two cases. Those five yearly amounts for each case would be discounted back to the test year of the relevant rate case, using BPA's projected future borrowing rate for each of the five years. The rates for each case would then be averaged, and the result rounded to the nearest one-tenth of a mill. The rate test would trigger if the program case amount was one-tenth of a mill or more greater than the 7(b)(2) case amount. This differential would then be multiplied by the general requirements of the 7(b)(2) customers in the test year to determine the test year amount. Melton and Armstrong, BPA, Ex. E-BPA-01, 34-37.

PPC proposed a rounding rule: amounts less than five-hundredths of a mill should be rounded down; amounts equal to or greater than five-hundredths of a mill should be rounded up. O'Meara, PPC, TR 948; PPC Brief, Ex. B-PP-01, 31-32. BPA supported PPC's rounding rule. Melton and Armstrong, BPA, E-BPA-03R, 21.

APAC supported PPC's and BPA's positions. APAC Brief, Ex. B-PA-01, 35-36.

The DSIs argued that a one-tenth of a mill threshold before the rate test triggers should be established. They claim that rounding the rates before the comparison is made is not an alternative to a threshold and effectively reduces the threshold by one-half. Peseau, DSI, Ex. E-DS-03SR, 6-7; DSI Brief, Ex. B-DS-01, 14-16; DSI Reply Brief, Ex. R-DS-01, 9-10.

Evaluation of Positions

BPA and PPC agreed that the program case amounts and the 7(b)(2) case amounts should be rounded to one-tenth of a mill before the comparison is made. Wolverton, PPC, E-PP-01, 33; Melton and Armstrong, BPA, E-BPA-03R, 21; PPC Brief, Ex. B-PP-01, 31. BPA chose the one-tenth of a mill level of significance to be consistent with the rounding rules used in establishing wholesale power and transmission rates. PPC questioned BPA's reason for using one-tenth of a mill, but did not offer an alternative. Melton, BPA, TR 948.

The DSIs argued that instead of rounding the amounts, an absolute threshold of one-tenth of a mill should be established. Peseau, DSI, E-DS-03SR, 6-7; DSI Brief, Ex. B-DS-01, 15-16; Reply Brief, DSI, Ex. R-DS-01, 9. They claimed that this threshold would be reasonable because the amounts

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are not accurate to hundredths of a mill. [illegible]
Reply Brief, Ex. R-DS-01, 9. This proposal is inconsistent with BPA's ratesetting process; furthermore, section 7(b)(2) requires that the rate test trigger whenever the program case amount exceeds the 7(b)(2) case amount. Rounding does not alter this requirement.

Decision

The discounted, averaged per kilowatthour amounts for each case will be rounded to the nearest tenth of a mill for comparison. If the difference between the program case amount and the 7(b)(2) case amount is one tenth of a mill or more, the rate test will trigger. This difference will then be multiplied by the general requirements of the 7(b)(2) customers in the test year of the relevant rate case to calculate the test year amount.

Issued at Portland, Oregon, this 17th day of August 1984.

Peter T. Johnson
Administrator

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APPENDIX A

PARTY ABBREVIATIONS

Association of Public Agency Customers	APAC
Bonneville Power Administration	BPA
California Public Utilities Commission	CPUC
Direct Service Industries 1/	DSIs
Hanna Nickel	HN
Intercompany Pool 2/	ICP
Los Angeles (City of) Department of Water and Power	LADWP
Montana Power Company	MPC
Oregon Public Utilities Commissioner	OPUC
Pacific Gas and Electric Company	PG&E
Pacific Northwest Generating Company	PNGC
Pacific Power and Light Company	PP&L
Portland General Electric	PGE
Public Generating Pool 3/	PGP
Public Power Council	PPC
Puget Sound Power and Light Company	PSP&L
San Diego Gas and Electric Company	SDGE
Southern California Edison	SCE
Tacoma (City of)	TU
Washington Water Power Company	WWPC
Western Area Power Administration 4/	WAPA
Western Washington Public Utility Districts 5/	WWPUD

1/ Direct Service Industries, Inc., neither petitioned for nor received party status. Rather, individual members of the association were granted party status, but for convenience, they are collectively referred to as the DSIs. The individual parties are: Aluminum Company of America; Arco Metals Company; The Carborundum Company; Georgia-Pacific Corporation; Martin Marietta Aluminum, Inc.; Oregon Metallurgical Corporation; Pacific Carbide and Alloys Company; Pennwalt Corporation; and Reynolds Metals Company.

2/ The Intercompany Pool neither petitioned for nor received party status. For convenience, Portland General Electric Company, Puget Sound Power and Light Company, Pacific Power & Light Company, Washington Water Power Company and Montana Power Company are referred to as the ICP.

3/ The Public Generating Pool was granted party status, as were certain of its members: Public Utility District No. 1 of Chelan County; Central Lincoln People's Utility District; Clatskanie People's Utility District; Tillamook People's Utility District; Eugene Water and Electric Board; City of Seattle; and City of Tacoma.

4/ Withdrew as a party on June 4, 1984.

5/ The Western Washington Public Utility Districts was granted party status, as were certain of its members: Clallam County Public Utility District; Clark County Public Utility District; Lewis County Public Utility District; Grays Harbor Public Utility District; Mason Public Utility District No. 1; Mason Public Utility District No. 3; Pacific County Public Utility District No. 3; Pacific County Public Utility District; and Snohomish County Public Utility District.

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APPENDIX B

LIST OF PARTIES' WITNESSES AND REPRESENTATIVES APPEARING IN THE SECTION 7(b)(2) IMPLEMENTATION METHODOLOGY HEARING

Individual	Representing
Addison, Tom	PSP&L
Armstrong, David J.	BPA
Ater, Jonathan	DSIs
Austin, R. Michael	BPA
Ball, David A.	DSIs
Baxendale, J. Richard	PPC
Bearzi, Judith A.	PPC
Benedetti, A. J.	Weyerhaeuser Co.
Benedict, James E.	PGP
Bubenik, Mark L.	TU
Cameron, John A., Jr.	BPA
Carey, Linda	WAPA
Cooke, Jenny M.	BPA
Crisson, Mark	Martin Marietta
Eckhart, Tom	PSP&L
Engberg, David	PP&L
Fairchild, Peter G.	CPUC
Fell, James F.	PP&L
Flanagan, Stephen P.	ESMG, Inc.
Foster, Bruce	SCE
Frazee, Mark A.	SCE
Furman, Donald	PGE
Fusselman, Jerry	PPC
Galloway, George M.	PP&L
Garten, Allen M.	APAC
Gentry, Robert	Clark PUD
Glover, Lori A.	DSIs
Graham, Paul A.	OPUC
Greening, Robert M., Jr.	PPC
Grey, Robert J.	HN
Hannigan, Scott R.	PGE
Holt, Roger	LADWP
Howard, Marty	PGE
Howarth, John W.	Tillamook PUD
Hutchison, Coe	Snohomish PUD
Johnson, Eric R.	PGE
Johnson, Leayesh	PNGC
Kari, Donald G.	PSP&L
Landau, Jack L.	DSIs
Lauckhart, Richard	PSP&L
Leone, C. Clark	BPA
Lessner, Rochelle	PPC
Lucas, Deborah J.	PPC
McCullough, Robert F.	PGE
McKenzie, A. Kirk	DSIs
Melton, Shirley R.	BPA
Miller, Max M.	APAC
Mills, Edward	PP&L
Mundorf, Terence L.	WWPUD
Murphy, Paul	DSIs
O'Meara, Kevin P.	PPC
Peseau, Dennis E.	DSIs
Powers, John T.	PGE
Rehmann, James	SCE
Saxton, Ronald L.	DSIs
Shanker, Roy J.	APAC
Siniscal, Evelyn	PGE
Spettel, Scott C.	PGP
Walsh, James F.	MPC
Williams, Walter	City of Seattle
Wilson, Robert C.	PP&L
Wolverton, Lincoln	PPC
Wordley, Bill	PP&L
Young, Robert	DSIs
Yu, Fu-Hau	BPA

APPENDIX C
SECTION 7(b)(2) IMPLEMENTATION METHODOLOGY

I. Introduction

The Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. § 839 (1980), ("Northwest Power Act") confirms BPA's obligation to establish and revise BPA's rates for the sale and transmission of electric power. Section 7(b)(2) of the Northwest Power Act provides that "after July 1, 1985, the projected amounts to be charged for firm power for the general requirements of public body, cooperative and Federal agency customers, exclusive of amounts charged such customers under subsection (g) for the costs of conservation, resource and conservation credits, experimental resources and uncontrollable events, may not exceed in total, as determined by the Administrator, during any year after July 1, 1985, plus the ensuing four years, an amount equal to the power costs for general requirements of such customers if, the Administrator" makes a set of assumptions outlined in the remainder of section 7(b)(2). These assumptions hypothetically remove the effects of certain provisions in the Northwest Power Act. In order to implement the provisions in section 7(b)(2) BPA has formulated a methodology that specifies how BPA will conduct the section 7(b)(2) rate test.

The implementation of section 7(b)(2) in any given BPA rate proceeding requires two distinct steps. The first step is to compare a projection of BPA rates developed under all the provisions of the Northwest Power Act, but without considering the effects of section 7(b)(2) (the program case), with a projection of BPA rates developed under the assumptions outlined in section 7(b)(2) (the 7(b)(2) case). Both projections are of rates applicable to public body, cooperative, and Federal agency customers (7(b)(2) customers) and are based on the costs of power required to serve the general requirements of those customers over a five-year period.

If the projected rates in the program case are determined to be higher than those in the 7(b)(2) case, then the second step is required. The rates for the 7(b)(2) customers being developed in the BPA rate proceedings must be reduced and the difference allocated to other BPA rates pursuant to section 7(b)(3) of the Northwest Power Act. This potential reallocation must be made within the framework of sound ratemaking principles and of BPA's statutory obligations.

II. Definitions

This section contains definitions applicable to section 7(b)(2). Terms identified in the Northwest Power Act have the same meaning in this section, unless further defined.

1. 7(b)(2) Customers. Those firm power customers of BPA that are listed in section 7(b)(2) of the Northwest Power Act as subject to the rate test, viz, public bodies, cooperatives, and Federal agencies.

2. Location of Adjacent. Relating to direct service industrial (DSI) customers' loads determined in accordance with section 7(b)(2)(A) to be geographically within or adjacent to the service territories of 7(b)(2) customers.

3. Forecast DSI Loads. Those loads of direct service industries that are forecast to be served by BPA, during any future period, pursuant to section 5(d)(1) of the Northwest Power Act.

4. Relevant Rate Case. The wholesale power rate adjustment proceeding being conducted at the time the projections for section 7(b)(2) are made, and in which any adjustment to rates in accordance with section 7(b)(2) may be reflected.

5. 7(b)(2) Case. The entire process of projecting rates for the relevant five-year period under the provisions of section 7(b)(2) of the Northwest Power Act, including specific data, assumptions, and results.

6. Program Case. The entire process of projecting rates to be charged in the future under the provisions of the Northwest Power Act other than section 7(b)(2), including specific data, assumptions and results.

7. Relevant Five-Year Period. The test year of the relevant rate case, plus the ensuing four years.

8. 7(b)(2) General Requirements. For the purpose of this methodology, the public body, cooperative and Federal agency customers' electric power assumed to be purchased from BPA in the 7(b)(2) case. General requirements include only power purchased from BPA under section 5(b) of the Northwest Power Act; section 5(c) purchases from BPA are not included.

9. Applicable 7(g) Costs. The costs identified in section 7(g) of the Northwest Power Act that are also listed in section 7(b)(2), viz, costs chargeable to 7(b)(2) customers for conservation, resource and conservation credits, experimental resources and uncontrollable events.

III. Legal Interpretation

BPA published its Legal Interpretation of Section 7(b)(2) of the Pacific Northwest Power Planning and Conservation Act in the 49 Fed. Reg. 23998 (1984). The notice presented BPA's interpretation of the statute, incorporating principles of statutory construction, review of the legislative history, and consideration of views expressed in a series of informal meetings with interested persons and in comments received in response to the publication of an earlier proposed legal interpretation. The scope of the notice was limited to those issues that relied on the statutory language or legislative intent for resolution.

Briefly, BPA interprets section 7(b)(2) as follows:

1. The five-year rate test period will consist of the test year for the relevant rate case plus the ensuing four years.

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2. Only the assumptions specified in section 7(b)(2) and the natural consequences or secondary effects of those assumptions will be considered to determine 7(b)(2) customers' power costs in the 7(b)(2) case.

3. The final program case power costs will be reduced by the applicable section 7(g) costs (conservation, resource and conservation credits, experimental resources, and uncontrollable events) chargeable to the 7(b)(2) customers for comparison with the section 7(b)(2) case power costs.

4. The DSI loads that are located within or adjacent to the service areas of 7(b)(2) customers will be assumed, in the 7(b)(2) case, to be served by those customers beginning July 1, 1985, unexpired DSI contracts with BPA notwithstanding.

5. The entire amount of DSI load included in the general requirements of the 7(b)(2) customers will be assumed to be served as 100 percent firm load in the 7(b)(2) case.

6. Information contained in Appendix B to the Senate Report, S. Rep. No. 272, 96th Congress, First Session (1979), will be used to identify DSI loads within or adjacent to geographic service boundaries of public bodies and cooperatives. The list will be adjusted to reflect changes in the status of BPA service to the list of DSI customers as assumed in the relevant rate case.

7. To determine Federal base system resources not obligated to "other" entities under existing contracts in the 7(b)(2) case, the DSI load which is not within or adjacent to the service areas of preference customers will be assumed to be served by investor-owned (private) utilities only as the DSI power sales contracts with BPA expire.

8. Three types of resources will be assumed to be available to serve 7(b)(2) customers' loads when the Federal base system (FBS) resources are exhausted in the 7(b)(2) case: (a) the existing or planned resources actually acquired by BPA from the 7(b)(2) customers in the relevant rate case; (b) the existing resources owned or purchased by the 7(b)(2) customers that are not dedicated to their own regional loads; and (c) generic resources of whatever size required to serve the preference customers' remaining load, at the average cost of all existing or planned resources acquired by BPA from non-7(b)(2) customers during the relevant five-year period. The resources listed in (a) and (b) will be "stacked" in order of cost and assumed to be used as needed to meet loads, least cost first. Should additional resources be needed to serve 7(b)(2) customers' loads, they will come from category (c).

IV. The Program Case

The program case is the five-year projection of power costs for serving the general requirements of the 7(b)(2) customers conforming with all the provisions of the Northwest Power Act, but without considering the effects of section 7(b)(2). The program case will be developed as a simulation of the BPA rate proposal results for the test year and a projection of the rates for the ensuing four years based on the test year rate proposal methodology and data. All the rate proposal determinations, decisions and assumptions for the test year regarding revenue requirements, loads, resources, cost allocation and rate design will be input or modeled as accurately as possible. Input

data for the ensuing four years will be consistent with or extrapolated from test year data. Ratemaking methodologies, such as those based on the "post-85" rate directives in the Northwest Power Act and those used to allocate costs and revenue adjustments to BPA customer classes, will be unchanged over the five-year rate test period.

A load forecast is developed for every BPA rate proposal independent of any requirements for implementing section 7(b)(2). It will include estimates of BPA programmatic conservation savings for the forecast period. This forecast will provide the load estimates for the program case.

Regional resource generation studies are also conducted for BPA's rate proposals. These studies determine the capability of BPA's and the region's hydro and thermal resources. The results of these studies as applied to the test year of the rate proposal will be used in the program case as the basis for the full five-year period. The test year results will be held constant except as modified to reflect the start of commercial operation of generating resources beyond the test year and for the planned effect or expiration of relevant contracts. Firm and nonfirm hydroelectric generation will be based on these studies and assumptions about the level of surplus firm power sales for the program case will be the same as those made for the rate proposal.

BPA's repayment process will be simulated as closely as possible for the determination of BPA revenue requirements over the five-year period. Costs will be projected over the five-year period using budget estimates, when available. Estimates of future inflation and real cost escalation and planned additions to the BPA's power system will be used when budget estimates are unavailable.

Finally, the methodologies for allocating costs and revenue adjustments among BPA's customer classes used in BPA's rate proposal will be modeled. These methodologies will be assumed to remain the same for the five-year period.

The methodologies and data from the rate proposal cannot be described in detail in this document. They are properly rate case determinations that are outside the scope of the methodology for implementing section 7(b)(2). The section 7(b)(2) methodology must be flexible enough to incorporate the methodologies and data from the rate proposal for which the section 7(b)(2) rate test is being conducted. These methodologies and data, as part of a BPA rate filing are, in turn, subject to review and comment pursuant to section 7(i) of the Northwest Power Act. The section 7(b)(2) methodology can require only that the rate proposal methodologies and data be modeled or incorporated as accurately as possible, which would be subject to examination during the section 7(i) process for the rate proposal.

In summary, the program case will be BPA's best projection of its rates without considering the effects of section 7(b)(2). The exact methodology for the rate calculation in the program case cannot be determined until BPA has prepared its rate proposal. However, the rate test model will reflect the rate proposal methodology as completely as possible in producing the program case when the rate test is conducted for that rate proposal.

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V. The 7(b)(2) Case

The language of section 7(b)(2) not only directs BPA to conduct a rate test for the 7(b)(2) customers, but also provides a considerable amount of direction as to how the rate test is to be conducted. BPA's legal interpretation of section 7(b)(2) provides the general approach to developing the 7(b)(2) case. Based on this, the 7(b)(2) case will be modeled in the same way as the program case, except where section 7(b)(2) provides specific assumptions that modify the program case. The modeling of these assumptions may lead to different results or natural consequences from the underlying premises and ratemaking processes that will be held constant between the two cases. The remainder of this section outlines how the 7(b)(2) case rate projection for the five-year test period will be developed.

1. Load Forecast

The initial loads that will be used in the 7(b)(2) case will be the same as those used in the program case, except that they will not include estimates of programmatic conservation savings. If the 7(b)(2) case rate projection results differ significantly from the program case results, the 7(b)(2) case rates may be used to generate a new load forecast using the same demand models that were used to generate the rate proposal load forecast. A new 7(b)(2) case rate projection would then be developed with the new loads. The determination as to whether the rate projections for the two cases differ significantly enough to warrant generating a new load forecast, together with a determination as to the administrative feasibility of performing a new load forecast, will be made during the relevant rate case.

2. DSI Loads

DSI loads will be input to the rate test model on a plant-by-plant basis. The plants will be flagged to indicate whether they are within or adjacent to the service area of any 7(b)(2) customer based on the list contained in Appendix B. If a DSI leaves the region or is no longer served by BPA, its loads will not be assumed to transfer from BPA service to utility service. Any DSI served by a utility other than BPA in the program case will continue to be served by that utility in the 7(b)(2) case. However, if a DSI plant is forecast not to operate due to economic conditions under the program case, but projected electric rates are low enough under the 7(b)(2) case to allow a forecasted level of operation, then the load associated with that level of plant operation may be included in the 7(b)(2) case load forecast.

All "within or adjacent" DSI loads will be included in the general requirements of the 7(b)(2) customers from the start of the five-year period. DSI loads not "within or adjacent" will remain BPA loads until their pre-Northwest Power Act power sales contracts would have expired, at which time they are assumed to be served by private utilities. The forecasted operating levels of the DSIs that are transferred to public and private utilities are assumed to be served as 100 percent firm loads. Those DSIs continuing to be served by BPA receive the same quality of service as in the program case.

3. Resources

The residential and small farm power exchange is eliminated in the 7(b)(2) case. The FBS and any additional resources, as defined in section 7(b)(2), are the only resources available to serve the general requirements of the 7(b)(2) customers. However, the amount of FBS resources available to serve the 7(b)(2) customers will be reduced by any contractual obligations on these resources that were in existence prior to passage of the Northwest Power Act. These contractual obligations include the power sales contracts with those DSIs that are not "within or adjacent," and the Washington Public Power Supply System Nuclear Plant (WNP) No. 1 Hanford Exchange contract with the private utilities. As these contracts expire, the amount of the FBS available to serve the general requirements of the 7(b)(2) customers will increase. As a result of this priority to FBS power, the projected rates applicable to the pre-Northwest Power Act contracts could be lower than the projected rates for the 7(b)(2) customers. Also, 7(b)(2) case adjustments for reserve benefits that are discussed below would not be allocated to the loads under those contracts.

If FBS resources, after meeting contractual obligations, are insufficient to meet the general requirements of the 7(b)(2) customers, then three types of additional resources can be added to serve those loads. These additional resources are defined in section 7(b)(2) and are: (a) actual and planned resource acquisitions by BPA from 7(b)(2) customers consistent with the program case; (b) existing 7(b)(2) customer resources not currently dedicated to their regional load; and (c) generic resources at the average cost of actual and planned resource acquisitions by BPA from non-7(b)(2) customers consistent with the program case. These resources will include any conservation programs undertaken or acquired by BPA. They will be assumed to come on-line to meet the remaining general requirements of the 7(b)(2) customers after FBS service in order of least cost first. The first two types of resources will come on-line in discrete increments, reflecting the actual size of the resource or the increment actually acquired by BPA. The third type will be brought on-line in the exact amount required to meet the 7(b)(2) customers general requirements, reflecting their generic nature.

4. Financing Benefits

Section 7(b)(2)(E)(i) requires that BPA assume that quantifiable monetary savings to 7(b)(2) customers resulting from reduced public utility financing costs for the three types of non-FBS resources described above were not achieved in the 7(b)(2) case. Therefore, any additional resources required to serve the general requirements of 7(b)(2) customers will not reflect the financing cost reductions implicit in resource acquisitions in the program case.

In order to quantify these financing cost reductions, BPA will contract for the services of a financial consultant. If additional resources are required in the 7(b)(2) case, a list of these resources will be sent to the consultant, containing cost and sponsor information for each resource. For those resources actually acquired by BPA from the 7(b)(2) customers under the program case, the consultant will estimate the financing costs for the resource sponsor assuming that BPA had not acquired the resource output. For those resources actually acquired by BPA from non-7(b)(2) customers, a proxy

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public utility sponsorship will be assumed for the resources. This public sponsorship will be assumed to be a company formed for resource construction with ownership and participation by all the region's public utilities in proportion to their system loads. The consultant will estimate the financing costs of the resources assuming BPA did not acquire the resource output and the proxy public sponsorship described above. Finally, when detailed financing cost and sponsor information is not available for planned resources, the consultant will follow the same procedures, assuming the proxy public sponsorship. Any reductions in financing costs determined from this analysis will be included in the costs of the resource in the 7(b)(2) case.

For the 1985 rate case, BPA has contracted with Wertheim & Co., Inc., BPA's financial advisor, to conduct the financing benefits analysis.

5. Reserve Benefits

Section 7(b)(2)(E)(11) requires BPA to assume that ". . . the quantifiable monetary savings, during such five-year period, to the public body, cooperative and Federal Agency customers resulting from reserve benefits as a result of the Administrator's actions under this Act were not achieved." Reserve benefits result from BPA's restriction rights on DSI loads provided for in the DSIs' power sales contracts. The DSIs currently receive a credit to their rate based on the value of the reserves provided by these restriction rights. In the 7(b)(2) case, these restriction rights are lost as the DSIs transfer to public and private utilities and are assumed to be served as 100 percent firm loads. Public and private utilities would have to incur the costs of providing an equivalent amount of reserves from another source. Therefore, it will be assumed that public utilities will incur a level of costs based on the value of the reserves provided by the DSI restriction rights as determined in BPA's rate proposal from those DSIs that are within or adjacent to public utility service areas. The value of reserves determination is currently based, in large part, on the cost of an alternative reserve resource. If this methodology is continued, the financing benefits for the construction of the reserve resource will be determined by the financial consultant and included in the reserve benefits determination. This will reflect the fact that the 7(b)(2) customers would provide the reserve resource rather than BPA through its acquisition authority under the Northwest Power Act. Also, if the level of reserves provided by the DSI restriction rights, and on which the value of reserves determination is based, is insufficient in the 7(b)(2) case, based on BPA planning criteria, then additional reserve resources will be added in the 7(b)(2) case.

6. Surplus Firm and Nonfirm Sales

The load and resource situation in the 7(b)(2) case will be considerably different from that in the program case. The increase in the region's firm load due to the 100 percent firm service to within or adjacent DSI loads, a potentially different load forecast for the 7(b)(2) case, and a potentially different set of resources all imply that a different level of surplus firm power may be projected for the 7(b)(2) case than for the program case. The level of surplus firm sales at fully allocated cost in the 7(b)(2) case will be determined in the same manner as it is in the program case. However, due to the potentially different forecasts of available surplus firm power for the two cases, the level of assumed surplus firm sales will be

surplus firm power projected to be made in the program case to serve the first quartile of DSI loads that are "within or adjacent" will not be made in the 7(b)(2) case. Any surplus firm costs that cannot be recovered from surplus sales at fully allocated cost will be recovered from regional customers based on the resources that comprise the surplus. Unrecovered FBS surplus costs will be allocated to all loads served with FBS. Unrecovered additional resource surplus costs will be allocated to the 7(b)(2) customers' general requirements.

Nonfirm energy generation of the region's hydroelectric system will also be assumed to be the same as in the program case. However, the nonfirm energy markets will be adjusted in the 7(b)(2) case to reflect the reduction in the size of the DSI first quartile and the potential change in the amount of displaceable new resource generation.

VI. Rate Test Computer Model

Conducting the section 7(b)(2) rate test requires the use of a computer model to develop the rate projections for the program case and the 7(b)(2) case. The exact form of the program case methodologies cannot be determined until the time of the relevant rate case for which the rate test is being conducted. The 7(b)(2) case is inextricably linked to the program case as a result of the general approach applied to modeling the 7(b)(2) case. Therefore, the exact structure and form of the computer model cannot be specified as part of this methodology. However, a computer model can be selected that will provide a flexible basis for implementing the rate test during the relevant rate case. To this end, BPA's Supply Pricing Model as modified by the PPC will be the base model for implementing the section 7(b)(2) rate test in the 1985 BPA initial rate proposal.

VII. Comparison of Projection Amounts

For each of the two cases, program and 7(b)(2), the rate test model will produce a projection of annual average energy rates for the five-year rate test period. These two rate projections will be compared to determine if a reallocation of costs pursuant to section 7(b)(3) is required. The relevant rate projection for the comparison from the program case is BPA's Priority Firm Power (PF) rate applicable to the general requirements of the 7(b)(2) customers. The relevant rate projection from the 7(b)(2) case is the per kilowatthour power costs of serving the general requirements of the 7(b)(2) customers.

The PF rate in the program case will be developed in the same manner as it is in BPA's rate proposal. The 7(b)(2) rate in the 7(b)(2) case will include the costs of resources required to serve the 7(b)(2) customers, along with all other costs and revenue adjustments not excluded by the assumptions in section 7(b)(2). These costs and revenue adjustments include BPA administrative and general costs, fixed rate contract revenue deficiencies, and surplus firm power revenue deficiencies.

Prior to comparison with the 7(b)(2) rates from the 7(b)(2) case, the projected PF rates from the program case will be reduced by the applicable section 7(g) costs listed in section 7(b)(2) that were included in the PF rate

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projection. All the costs of BPA conservation programs, offsetting credits, experimental resources, and uncontrollable events that were allocated to the PF rate will be subtracted. This reduced PF rate projection will then be compared to the 7(b)(2) rate projection to determine if the 7(b)(2) rate projection is lower, on average, than the program case projection.

The comparison between the program case and the 7(b)(2) case rate projections is conducted for a five-year period and should consider the time value of money. Therefore, the two projections will be discounted back to the test year of the relevant rate case at BPA's projected future borrowing rate, and averaged over the five years. The discounted average will be rounded to the nearest tenth of a mill. If the average of the five years of discounted 7(b)(2) rates is less than that of the PF rates, then the determination of an amount of costs to be reallocated in BPA's rate proposal is required.

VIII. Determination of Test Year Amount

If it is determined that the results of the rate test require a reallocation of costs for BPA's rate proposal, then the amount to be credited to the 7(b)(2) customers and reallocated to BPA's other customers must be calculated. This credit reflects the fact that it is a one-year adjustment that is based on a five-year determination, and also reflects the comparison method used to determine the need for the credit. The credit will be based on the five-year average of the difference between the net discounted rate projections for the two cases. This average difference will be multiplied by the general requirements of the 7(b)(2) customers for the rate proposal test year to determine the reduction in the 7(b)(2) customers' test year costs.

IX. Conclusion

The section 7(b)(2) rate test, up to and including the point at which the test year amount is determined, is conducted outside the mainstream of BPA's rate development process. While the rate test reflects the assumptions used in the rate proposal, the rate test has no impact on BPA rates until the test year amount is included in BPA's rate design. At this point, any adjustment made to reflect the rate test results in BPA rates must be done within the overall framework of the rate development process and of BPA's ratemaking objectives and statutory requirements. Therefore, the section 7(b)(2) rate test will be conducted and a test year amount determined as outlined in section 7(b)(2). The test year amount will then be included as a step in BPA's rate design process, consistent with other statutory provisions and BPA's ratemaking objectives.