# TRANSMISSION GENERATION IMBALANCE SERVICE RATE PROPOSAL

# ADMINISTRATOR'S RECORD OF DECISION

# GI-02-A-02

**BONNEVILLE POWER ADMINISTRATION**

**U.S. DEPARTMENT OF ENERGY**

**July 15, 2002**

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## 1.0 INTRODUCTION

This Record of Decision (ROD), based on the record compiled in this rate proceeding, contains the Bonneville Power Administration[1] (BPA) Administrator's decision with respect to the Transmission Business Line's (TBL) proposal to modify the Generation Imbalance Service Rate, a Control Area Service rate, to exempt wind generation resources from the 100-mills per kilowatthour penalty charge (100-mill penalty rate) found in its 2002 Transmission and Ancillary Services Rate Schedules (2002 rate schedules) at schedule ACS-02, section III.B1.b.(i). Upon interim or final approval by the Federal Energy Regulatory Commission (FERC or the Commission), TBL intends for the revised rate to be in effect October 1, 2002, through September 30, 2003.

This ROD is based on a full evidentiary hearing and briefing submitted to the BPA Administrator. BPA issued a draft ROD on June 28, 2002, and the parties had the opportunity to file briefs on exceptions to the draft ROD before the BPA Administrator issued this final ROD.

Chapter 2 presents a discussion of the procedural and substantive issues and positions raised by the parties in this proceeding, and TBL's evaluations of, and decisions relating to those positions. Chapter 3 presents a discussion of other issues raised in this proceeding, including a party's appeal of certain decisions made by the Hearing Officer to the BPA Administrator. Chapter 4 presents the BPA Administrator's decision regarding this rate adjustment proposal.

### 1.1 Background

TBL proposes to revise its Generation Imbalance Service rate found in its 2002 rate schedules. Generation Imbalance Service is taken when there is a difference between scheduled and actual energy delivered from a generation resource in the BPA Control Area during a schedule hour. The existing Generation Imbalance Service rate was established in TBL's 2002 Transmission and Ancillary Service rate proceeding (2002 rate proceeding) and subsequently was approved by FERC for use during the October 1, 2001, to September 30, 2003, rate period.[2] *United States Department of Energy—Bonneville Power Admin.*, 95 FERC ¶62,094 (2001). For imbalances outside the Generation Imbalance Deviation Band (deviation band) when the actual energy delivered from a resource in a schedule hour is less than the energy scheduled for that hour, the current rate charges the greater of: (i) BPA's incremental cost for energy, plus 10 percent, or (ii) 100-mills per kilowatthour. Schedule ACS-02, section III. B.1.b.(i) TBL proposes to exempt wind generation resources from application of the 100-mill penalty rate.

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[1] BPA's Transmission Business Line administers BPA's transmission and ancillary service rates and sponsored this rate adjustment proposal. BPA's Power Business Line (BPA PBL) was a party to this proceeding. References to "BPA" are meant to reference the TBL, except where the context requires otherwise.

[2] FERC later approved BPA's request to accelerate the effective date to July 1, 2001.

The 100-mill penalty rate is a penalty designed to encourage accurate scheduling by generators and to discourage operating practices that could adversely affect the reliability of the Federal Columbia River Transmission System. GI-02-E-TBL-01 at 3. TBL proposed to eliminate the 100-mill penalty rate when applying the Generation Imbalance Service rate to wind generation resources because wind generators are not currently able to accurately schedule their output during the delivery hour and are not able to respond to the rate as an incentive to promote accurate generation scheduling. *Id.* at 3-4. *See also* GI-02-E-TBL-02 at 5 and Exhibit 2.

TBL proposed to revise the Generation Imbalance Service rate so that the rate for wind generation resource imbalances outside the deviation band is BPA's incremental cost for energy plus 10 percent when delivered energy in an hour is less than scheduled energy. *See* Attachment A. All other aspects of the current Generation Imbalance Service rate are unchanged. 67 Fed. Reg. at 18872.

TBL believes this rate revision is necessary because wind generation resources are not able to accurately predict their generation output to avoid application of the penalty rate because of the intermittent nature of wind, and are not able to dispatch their generation during the schedule hour to match generation output to generation schedules, so they are not able to respond to the rate as an incentive to accurately schedule generation output.

## 1.2 Procedural History of this Rate Proceeding

Section 7(i) of the Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. §839e(i) (Northwest Power Act), requires that BPA's wholesale power and transmission rates be established according to certain procedures. These procedures include, among other things, issuance of a Federal Register notice announcing the proposed rates; one or more hearings; the opportunity to submit written views, supporting information, questions, and arguments, and a decision by the BPA Administrator based on the record. This proceeding is governed by BPA's rules for general rate proceedings contained in the *Procedures Governing Bonneville Power Administration Rate Hearings,* 51 Fed. Reg. 7611 (1986) (hereafter BPA's Procedures or Procedures). BPA's Procedures implement the section 7(i) requirements.

Pursuant to section 1010.3 of the Procedures, TBL published notice of its *Proposed Adjustment to the ACS-02 Generation Imbalance Service Rate* in the Federal Register on April 17, 2002. 67 Fed. Reg. 18871 (2002). The Federal Register notice advised that the deadline to file petitions to intervene in the rate proceeding was April 22, 2002, that a scheduling conference would be held April 24, 2002, and that a pre-hearing conference would be held April 25, 2002. The notice advised that TBL, pursuant to section 1010.5 of the Procedures, would accept written participant comments on its proposal until May 28, 2002. Two such comments were received. The notice also advised that TBL would conduct an Expedited Rate Proceeding under section 1010.10 of the Procedures.

TBL's 2002 Generation Imbalance Service rate adjustment proceeding formally began with the pre-hearing conference held April 25, 2002. TBL's Initial Generation Imbalance

Transmission Proposal, GI-02-E-TBL-01, (initial proposal), was made publicly available at the April 24, 2002 scheduling conference[3], and was filed at the April 25, 2002 pre-hearing conference.

On April 25 and 29, 2002, the parties conducted off-the-record clarification of TBL's witnesses. The parties were encouraged to question TBL's witnesses regarding TBL's proposal to better understand the proposal, to prepare discovery questions (data requests), and to prepare their cases. All parties had the opportunity to take part in clarification and several parties did participate, including all those that filed testimony and briefs in this proceeding.

At the pre-hearing conference, the Hearing Officer discussed with the parties, and finalized, his proposed orders on procedural issues applicable to the proceeding and he ruled on the parties' petitions to intervene. On April 26, 2002, the Hearing Officer issued a written order establishing the schedule for this rate proceeding, GI-02-O-04, and issued an order granting the interventions. GI-02-O-06. Twenty-four parties intervened in the proceeding and two entities were granted non-party participant status. On April 30, 2002, the Hearing Officer issued several orders concerning document numbering and marking of documents, GI-02-O-02, data response checkout procedures, GI-02-O-03, data request and discovery procedures, GI-02-O-05, and adopting the official service list for the proceeding. GI-02-O-07. On May 9, 2002, the Hearing Officer issued an order containing special rules of practice to govern the proceeding. GI-02-O-01.

On May 7, 2002, several parties filed a motion seeking to require TBL to supplement its initial proposal. GI-02-M-02. The Hearing Officer denied that motion. GI-02-O-09. *See* section 2.2.

BPA's Procedures provide that oral argument will not be held in an Expedited Rate Proceeding unless all parties agree to substitute oral argument for a brief on exceptions. Procedures §1010.10(c). The Order Establishing Procedural Schedule, GI-02-O-04, required parties to advise all other parties of their intent to file a brief on exceptions by June 4, 2002. Several parties advised that they intended to file briefs on exceptions, so no oral argument was held in this proceeding. *See* GI-02-M-09, GI-02-M-10 and GI-02-M-11.

TBL's initial proposal was supported by written testimony from three expert witnesses, Gilman, McReynolds and Stemler. *See Witness Qualification Statements* GI-02-Q-TBL-01, GI-02-Q-TBL-02, and GI-02-Q-TBL-03. Oral clarification of TBL's initial proposal was held April 25 and 29, 2002. After conducting discovery during the period from April 25 through May 8, 2002, the parties filed their direct testimony on May 13, 2002. Clarification of the parties' direct testimony occurred on May 20, 2002. After further discovery during the period from May 13 through May 29, 2002, the litigants to the proceeding filed rebuttal testimony to the parties' direct cases on May 31, 2002. On June 11, 2002, the litigants conducted cross-examination of all witnesses sponsoring testimony

[3] Where the parties were invited to informally meet to establish a schedule for the rate proceeding.

filed in the proceeding. The parties filed their initial briefs one week later on June 18, 2002.

Written discovery of TBL's and the parties' direct cases occurred during two established periods during the proceeding. TBL responded to 57 data requests submitted by the parties during the proceeding. In addition, other parties responded to 31 data requests concerning testimony filed by various parties in the proceeding.

BPA distributed a draft ROD to the parties on June 28, 2002. On July 8, 2002, the parties submitted briefs on exceptions in response to the draft ROD. Issues raised in the briefs on exceptions were considered in preparation of this final ROD.

This ROD is based on the Administrator's consideration of the entire rate case record, including oral and written comments submitted by parties and participants. This ROD was issued and made available to the parties and the public on July 15, 2002.

## 1.3 Waiver of Issues By Failure to Raise in Briefs

While the parties have raised many issues in this proceeding in their testimony and briefs, there are a number of issues raised by the parties during the hearing that were not raised in the parties' briefs. Pursuant to section 1010.13(b) of the Procedures, arguments not raised in parties' briefs are deemed waived by the party.

## 1.4 Legal Guidelines Governing Establishment of Rates

### 1.4.1 Statutory Guidelines

Section 6 of the Bonneville Project Act of 1937 (Project Act), 16 U.S.C. §832e, requires that the Administrator prepare schedules of rates and charges for electric energy sold to purchasers. Under the Project Act, rate schedules become effective upon confirmation and approval by the Federal Power Commission, succeeded by FERC. Section 6 of the Project Act directs the Administrator to establish rates with a view to encouraging the widest possible diversified use of electric energy. Section 7 provides that rate schedules are to be established having regard to the recovery of the cost of producing and transmitting electric energy, including amortization of the capital investment over a reasonable period of years. 16 U.S.C. §832f.

The Federal Columbia River Transmission System Act of 1974, 16 U.S.C. §838 (Transmission System Act), contains requirements similar to those of the Project Act. Section 9 of the Transmission System Act, 16 U.S.C. §838g, provides that rates shall be established: (1) with a view to encouraging the widest possible diversified use of electric power at the lowest possible rates consistent with sound business principles; (2) with regard to the recovery of the cost of producing and transmitting electric power, including amortization of the capital investment allocated to power over a reasonable period of years; and (3) at levels that produce such additional revenues as may be required to pay when due the principal, premiums, discounts, expenses, and interest in connection with

bonds issued under the Transmission System Act. Section 10 of the Transmission System Act, 16 U.S.C. §838h, allows for uniform rates and specifies that the costs of the Federal transmission system be equitably allocated between Federal and non-Federal power utilizing the system.

The Flood Control Act of 1944 (Flood Control Act) contains ratemaking requirements similar to the Project Act and the Transmission System Act. Section 5 of the Flood Control Act directs that rate schedules should encourage the most widespread use of power at the lowest possible rates to consumers consistent with sound business principles. 16 U.S.C. § 825s. Section 5 also provides that rate schedules should be drawn having regard to the recovery of the cost of producing and transmitting electric energy, including the amortization of the Federal investment over a reasonable number of years. *Id.*

In addition to the Bonneville Project Act, the Transmission System Act, and the Flood Control Act, the Northwest Power Act, 16 U.S.C. § 839, provides numerous rate directives. Section 7(a)(1) of the Northwest Power Act directs the Administrator to establish, and periodically review and revise, rates for the sale and disposition of electric energy and capacity and for the transmission of non-Federal power.
16 U.S.C. §839e(a)(1). Rates are to be set to recover, in accordance with sound business principles, the costs associated with the acquisition, conservation, and transmission of electric power, including the amortization of the Federal investment in the Federal Columbia River Power System (FCRPS) (including irrigation costs required to be repaid by power revenues) over a reasonable period of years. *Id.* Section 7 also contains rate directives describing how rates for individual customer groups may be derived.

BPA must satisfy section 212(i) of the Federal Power Act, 16 U.S.C. §824k(i), which states that transmission rates will be governed only by otherwise applicable law, except that no BPA transmission rate applicable to transmission service ordered by the Commission shall be unjust, unreasonable, or unduly discriminatory or preferential as determined by the Commission. Section 212(i) does not require the Commission to examine BPA rates under this standard independent of an Order directing BPA to provide transmission service, but the Commission has previously done so upon BPA's request when presented with transmission rates established by the Administrator in a 7(i) proceeding. *See United States Department of Energy--Bonneville Power Admin.*, 80 F.E.R.C. ¶ 61,118, at 61,370 (1997).

BPA will not seek Federal Power Act section 212(i) approval for this rate adjustment. BPA intends to seek from FERC the same rate approval it sought for the transmission and other rates established in the 2002 rate proceeding, meaning approval under section 7 of the Northwest Power Act and a finding that the change to the rates associated with BPA's Open Access Transmission Tariff (tariff) satisfies the comparability standards applicable to non-public utilities pursuant to the reciprocity conditions of FERC Order 888.[4]

[4] Several members of the Joint Wind Energy Group opposed TBL's seeking Federal Power Act section 212(i) approval of the entire revised Generation Imbalance Service rate in their brief on exceptions.

### 1.4.2 The Broad Ratemaking Discretion Vested in the Administrator

The Administrator has broad discretion to interpret and implement statutory standards applicable to ratemaking. These standards focus on cost recovery and do not restrict the Administrator to any particular rate design methodology or theory. *See Pacific Power & Light v. Duncan,* 499 F. Supp. 672 (D.C. Or. 1980); *accord City of Santa Clara v. Andrus,* 572 F. 2d 660, 668 (9th Cir. 1978) ("widest possible use" standard is so broad as to permit "the exercise of the widest administrative discretion"); *ElectriCities of North Carolina v. Southeastern Power Admin.,* 774 F. 2d 1262, 1266 (4th Cir. 1985).
In addition, section 7(f) of the Northwest Power Act provides that "[n]othing in this Act prohibits the Administrator from establishing, in rate schedules of general application, a uniform rate or rates for sale of peaking capacity or from establishing time-of-day, seasonal rates, or other rate forms." 16 U.S.C. 839e(f).

The United States Courts of Appeals of the Ninth Circuit has also recognized the Administrator's ratemaking discretion. *Central Lincoln Peoples' Utility District v. Johnson,* 735 F. 2d 1101, 1120-29 (9th Cir. 1984) ("[b]ecause BPA helped draft and must administer the Northwest Power Act, we give substantial deference to BPA's statutory interpretation"); *PacifiCorp v. F.E.R.C.,* 795 F. 2d 816, 821 (9th Cir. 1986) ("BPA's interpretation is entitled to great deference and must be upheld unless it is unreasonable"); *Atlantic Richfield Co. v. Bonneville Power Admin.,* 818 F. 2d 701, 705 (9th Cir. 1987) (BPA's rate determination upheld as a "reasonable decision in light of economic realities"); *Aluminum Company of America v. Central Lincoln Peoples' Utility District,* 467 U.S. 380, 389 (1984) ("The Administrator's interpretation of the [Northwest Power] Act is to be given great weight"); *Department of Water and Power of the City of Los Angeles v. Bonneville Power Admin.,* 759 F. 2d 684, 690 (9th Cir. 1985) ("Insofar as agency action is the result of its interpretation of its organic statutes, the agency's interpretation is to be given great weight"). BPA's rate making includes discretion to design rates or charges for specific purposes. *City of Seattle v. Johnson,* 813 F.2d 1364, 1367 (1987) (BPA statutes do not require BPA to impose any particular type of rate on its customers but does require BPA to use "sound business principles" in setting rates).

### 1.4.3 Federal Energy Regulatory Commission Confirmation and Approval of Rates

BPA's rates become effective upon confirmation and approval by FERC. 16 U.S.C. § 839e(a)(2) and (k). FERC's review is appellate in nature, based on the record developed by the Administrator. *United States Department of Energy--Bonneville Power Administration,* 13 F.E.R.C. ¶ 61,157, 61,339 (1980). The Commission may not modify rates proposed by the Administrator, but may only confirm, reject, or remand them. United States Department of Energy – Bonneville Power Administration, 23 F.E.R.C. ¶ 61,378, 61,801 (1983). Pursuant to section 7(i)(6) of the Northwest Power Act, 16 U.S.C. §839e(i)(6), FERC has promulgated rules establishing procedures for the approval of BPA rates. 18 C.F.R. Part 300 (1997).

With respect to rates, FERC determines whether: (1) rates are sufficient to assure repayment of the federal investment in the FCRPS over a reasonable number of years after first meeting BPA's other costs; (2) rates are based on BPA's total system costs; and (3) transmission rates equitably allocate the cost of the federal transmission system between federal and non-federal power using the system. 16 U.S.C. § 839e(a)(2). *See United States Department of Energy--Bonneville Power Administration,* 39 F.E.R.C. ¶ 61,078, 61,206 (1987). The limited FERC review of rates permits the Administrator substantial discretion in the design of rates and the allocation of costs, neither of which are subject to FERC jurisdiction. *Central Lincoln Peoples' Utility District v. Johnson,* 735 F. 2d 1101, 1115 (9th Circuit 1984).

### 1.4.4 Standard of Judicial Review

Section 9(e)(2) of the Northwest Power Act provides that "final determinations regarding rates under section 7 shall be supported by substantial evidence in the rulemaking record required by section 7(i) considered as a whole." 16 U.S.C. §839f(e)(2). In describing the applicable standards of judicial review, the Ninth Circuit has stated that "[t]his court must affirm the rates if 'substantial evidence in the rulemaking record' supports BPA's determination . . . We must also affirm the agency's action unless it is arbitrary, capricious, an abuse of discretion or in excess of statutory authority." *Alcoa v. Bonneville Power Administration*, 891 F. 2d 748, 752 (9th Cir. 1990). *See also, Southern California Edison Co. v. Jura*, 909 F. 2d 339, 342 (9th Cir. 1990); *Central Lincoln Peoples' Utility District et al. v. Johnson*, 735 F. 2d 1101, 1115 (9th Cir. 1984).

## 2.0 PROCEDURAL AND SUBSTANTIVE ISSUES

### 2.1 Introduction

This section identifies the key substantive issues raised by the parties in their initial briefs, and briefs on exception, the parties' and TBL's positions on each issue, TBL's evaluation of each issue, and the Administrator's final decision on each issue. Four entities filed initial briefs and briefs on exception in this proceeding either in opposition to, or in support of, TBL's proposal: 1) the Independent Power Coalition (IPC) (representing Avista Energy, Inc.; PPL EnergyPlus, LLC; PPL Montana, LLC; and TransAlta Energy Marketing (U.S.), Inc.), 2) the Industrial Customers of Northwest Utilities (ICNU), 3) the Joint Wind Energy Group (JWEG) (representing the American Wind Energy Association; BPA PBL; FPL Energy, LLC; Last Mile Electric Cooperative; Northwest Wind, LLC; Oregon Office of Energy; PacifiCorp; PacifiCorp Power Marketing; Portland General Electric Company; Renewable Northwest Project; SeaWest Windpower, Inc.; and the City of Seattle, through its City Light Department), and 4) Klickitat County Public Utility District No. 1 (Klickitat PUD).

The main arguments raised in opposition to TBL's proposal are 1) challenges to the ratemaking process, including challenges to the scope of the case, the adequacy of TBL's evidence and initial proposal, alleged discovery limitations, and alleged flaws in the rate

design, 2) allegations that the proposal discriminates against other resources that are similarly situated to wind resources in their inability to avoid the 100-mill penalty rate, 3) concerns about the revenue impact caused by exempting wind resources from the 100-mill penalty rate, and 4) concerns about the effects on transmission system reliability if wind resources are exempted from the 100-mill penalty rate.

Section 1010.13(b) of BPA's Procedures provides that arguments not raised by parties in their briefs are deemed to be waived.

## 2.2 Ratemaking Process

### Issue

*Has TBL violated its statutory ratemaking processes in this proceeding?*

### Parties' Positions

ICNU asserts that TBL is circumventing its statutory ratemaking requirements, allegedly including whether the proposed rate is fair and non-discriminatory, by establishing rates without adequate participation of interested persons by: 1) unduly limiting the scope of this proceeding; 2) failing to set forth a complete initial case and presenting its case-in-chief in its rebuttal testimony; and 3) unduly limiting intervener discovery. GI-02-B-IN-01 at 2.

ICNU asserts that the narrow scope established by the BPA Administrator for this proceeding, and the Hearing Officer's orders striking direct and rebuttal testimony that exceeded this narrow scope, prevented the parties from having an adequate opportunity to refute and rebut the issues raised in TBL's initial proposal. GI-02-B-IN-01 at 3-4. ICNU argues that IPC and Klickitat PUD sought to introduce testimony that the TBL proposal was discriminatory to thermal and biomass generators, but the testimony was rejected. *Id.* at 3-4. ICNU argues that BPA's draft ROD failed to provide any rationale or support for the narrow scope established for this proceeding. GI-02-R-IN-01 at 2. ICNU also argues that it is arbitrary and capricious for TBL to exclude relevant testimony regarding whether wind and non-wind generation resources are similarly situated, and then make factual findings that wind and non-wind resources are not similarly situated. *Id.* at 3.

ICNU asserts that the Hearing Officer should have required TBL to supplement its initial proposal. GI-02-B-IN-01 at 4.

ICNU asserts that TBL's initial testimony and exhibits fail to provide adequate support for TBL's proposal. GI-02-B-IN-01 at 4. Similarly, IPC implies that TBL's initial testimony is insufficient to support the proposal. GI-02-B-AE/PM/TE-01 at 2.

ICNU asserts that TBL presented its "case-in-chief" on rebuttal. GI-02-B-IN-01 at 5.

ICNU asserts that the limited discovery periods provided in this expedited proceeding were inadequate and the parties should have been allowed to conduct discovery on the rebuttal testimony filed in this proceeding. GI-02-B-IN-01 at 5.

**TBL's Position**

TBL properly limited the scope of this proceeding, presented sufficient testimony during the proceeding to support its proposal, and the Hearing Officer provided ample opportunity for the parties to conduct discovery on TBL's proposal. BPA's Procedures sections 1010.9 and 1010.10. *See also* GI-02-0-04 and GI-02-O-09.

The parties had a full and fair opportunity to refute and rebut the issues raised in TBL's initial proposal and the Hearing Officer properly struck direct and rebuttal testimony that exceeded the narrow scope of the proceeding. GI-02-M-03, GI-02-O-10 and GI-02-O-11.

The Hearing Officer properly denied the motion filed by the Public Power Council (PPC), and joined by ICNU and others, GI-02-M-02, which sought to require TBL to supplement its initial proposal. GI-02-O-09.

TBL's initial proposal is sufficient to support its proposed rate adjustment. GI-02-E-TBL-01.

TBL properly submitted evidence on rebuttal to refute positions taken by other parties in this proceeding and did not submit its "case-in-chief" on rebuttal. GI-02-E-TBL-02.

The parties had a full and fair opportunity to conduct discovery, GI-02-M-03, and the Hearing Officer correctly did not provide for discovery on rebuttal testimony filed in this Expedited Rate Proceeding. Tr. April 25, 2002 Hearing at 29-32.

**Evaluation**

Scope of Proceeding:

The BPA Administrator intentionally defined a narrow scope for this rate proceeding in its Federal Register notice, as allowed by BPA's Procedures. TBL determined that only one rate issue, whether TBL should exempt wind generation resources from the 100-mill penalty rate, should be considered in this proceeding. An Expedited Rate Proceeding under section 1010.10 of its Procedures, as opposed to a General Rate Proceeding where substantially all of TBL's transmission and other rates would be revised, see Procedures section 1010.9, is sufficient and appropriate for TBL to determine whether to make the proposed change to the Generation Imbalance Service rate. There is nothing unique about conducting a 90-day Expedited Rate Proceeding with a narrowly defined scope under section 1010.10 of BPA's Procedures, and BPA has conducted similar expedited proceedings with narrowly defined scopes in the past. *See e.g.* PNCA-02-A-02 at 2, UAI-96R-A-01 at 2, and FPS-96R-A-01 at 2.

This case is focused on just one issue, the elimination of the 100-mill penalty rate for wind resources for imbalances that exceed the Generation Imbalance Deviation Band and where actual energy delivered from a resource in a schedule hour is less than the energy scheduled for that hour. Given that this proposal only involves the revision of one rate, and that the revised rate will be in effect for only the remainder of the current rate period, one year, the BPA Administrator proposed to conduct an Expedited Rate Proceeding with limited scope. 67 Fed. Reg. 18871 at 18873. Further, the evidence demonstrates the unique nature of wind resources, compared to non-wind resources, with respect to their ability to consistently accurately predict their output and schedule within the deviation band and their dispatchability. *See* sections 2.3.2 and 2.5. Further, as discussed in section 2.3.1, statutes applicable to BPA, and other Federal policies, favor the development of wind resources. *See* section 2.3.1. It is not arbitrary and capricious for BPA to limit the scope of this proceeding to only exempting the 100-mill penalty rate for wind resources because wind is unique as a renewable resource with respect to its inability to avoid the 100-mill penalty rate and schedule within the deviation band as compared to other resources in BPA's Control Area. *See* sections 2.3.1, 2.3.2 and 2.5. Therefore, it was appropriate for BPA to limit the scope of this proceeding in its Federal Register notice to exempt the 100-mill penalty rate for wind resources only.

ICNU's assertion that the scope of the proceeding is too narrow is incorrect. The scope of the case is within the Administrator's discretion. ICNU's claim that IPC and Klickitat PUD should have been allowed to submit testimony to establish that TBL's proposal was discriminatory to non-wind resources, GI-02-B-IN-01 at 3-4, is not correct. IPC's and Klickitat PUD's testimony regarding the alleged intermittent characteristics of non-wind resources was not aimed at asserting TBL's proposal was flawed. Rather, the testimony sought to submit testimony to support an alternative to TBL's proposal to exempt other resources from the 100-mill penalty rate, which was outside the scope established for this proceeding. Instead of arguing TBL's proposal was wrong, the testimony argued TBL's proposal was proper and that the proposal should be expanded to other resources. In rejecting IPC's contentions that TBL should have considered other resources, the Hearing Officer agrees that it is proper, and not arbitrary and capricious, to exclude testimony outside the scope of the issue under consideration where it does not seek to refute or rebut material allowed into evidence. GI-02-O-10 at 3. ICNU will be able to argue for other changes to the Generation Imbalance Service rate, which exceed the scope of this proceeding, in future General Rate Proceedings. Further, as discussed in section 3.1, the parties did submit evidence (even though some of it was rejected by the Hearing Officer) to support their assertions that, at certain times, non-wind resources have limitations that prevent them from consistently accurately scheduling within the deviation band. That evidence was not sufficient to overcome the conclusion that only wind resources are not able to consistently schedule accurately and are therefore dissimilar to other resources. *See* section 3.1.

TBL's Initial Case is Sufficient and TBL did not Submit its Case in Chief on Rebuttal:

On May 7, 2002, the PPC, joined by several parties including Klickitat PUD, Pacific Northwest Generating Cooperative, Northwest Requirements Utilities, and ICNU, filed a

motion (PPC motion) seeking to require TBL to supplement its initial proposal, or alternatively, seeking to bar TBL from supporting its case in rebuttal. GI-02-M-02. The PPC motion asserted that TBL's initial testimony, GI-02-E-TBL-01, was insufficient to support TBL's proposal. The motion argued that TBL's alleged failure to include additional analysis and studies violated the parties' rights, prevented the parties from adequately participating in discovery and developing their cases, and would result in TBL submitting its "case-in-chief" on rebuttal. GI-02-M-02. The motion also expressed concern about the precedential effect of the alleged insufficiency of TBL's testimony. *Id.*

TBL responded that the parties had an adequate opportunity to gather information related to TBL's case through discovery and clarification, that the parties did, in fact, perform extensive discovery, that TBL fully responded to all data requests, that the parties were able to fully develop their cases, that the parties' motion was premature, and that the alternative motion seeking to prevent TBL from participating in rebuttal with the same rights afforded the other parties was improper. GI-02-M-03.

The Hearing Officer denied PPC's motion on May 17, 2002. GI-02-O-09. The Hearing Officer determined that the procedural disadvantages raised in the PPC motion were rendered moot, as no party joining in the motion offered evidence to contradict TBL's initial testimony, and, in fact, the only testimony filed by any party joining in the motion supports, at least in part, TBL's proposal. *Id.* at page 3. Further, the Hearing Officer determined that the motion was premature, but stated that PPC could raise its arguments to the Administrator upon the closing of the record. *Id.* Neither PPC, nor any other parties, asked for rehearing on the order.

ICNU claims that TBL's initial proposal is insufficient and that TBL presented its case-in-chief in its rebuttal are incorrect. TBL submitted initial testimony that adequately supports its proposal. TBL's testimony clearly states that wind resources are not able to accurately schedule their output to stay within the deviation band and avoid the 100-mill penalty rate, while all other resources in BPA's Control Area can consistently schedule their output to avoid the penalty. GI-02-E-TBL-01 at 4.

TBL properly submitted rebuttal testimony and supporting data to refute testimony filed by others in this proceeding. GI-02-E-TBL-02. No party challenged or attempted to strike TBL's rebuttal testimony on the basis that TBL submitted its case-in-chief on rebuttal despite an order by the Hearing Officer allowing them to do so. GI-02-O-09 at 3-4. TBL only introduced one piece of new evidence in its rebuttal testimony that was not previously provided to the parties in discovery prior to their filing of their direct cases. *See* GI-02-E-TBL-02 at Exhibit 6. That testimony, a statistical analysis of Klickitat PUD's Roosevelt Landfill biomass facility's scheduling performance was properly submitted to refute Klickitat PUD's assertions regarding its inability to schedule accurately and was not challenged by Klickitat PUD or any other party at cross-examination. TBL did not submit its case-in-chief on rebuttal.

Discovery after Rebuttal:

At the pre-hearing conference on April 25, 2002, counsel for Alcoa, Inc., moved for an order to allow discovery after the litigants submitted their rebuttal testimony. Tr. April 25, 2002 Hearing at 29-32. TBL argued that the parties were provided ample discovery on TBL's initial proposal prior to submitting their direct cases, and were also given full discovery on each others' direct cases, which should be sufficient to provide a full understanding of the issues and evidence. *Id.* at 31. Further, TBL argued that, given the short duration of the expedited proceeding, additional discovery would be inappropriate, as it would likely require the expansion of the schedule beyond the established 90 days. *Id.* Finally, TBL argued that no new issues not already in the proceeding should be raised on rebuttal. *Id.*

The Hearing Officer declined to expand the proceeding to add discovery after rebuttal. However, he did state that the parties could submit an expedited petition to seek discovery after rebuttal if, at that time, the circumstances required it. *Id.* at 32. Neither ICNU, nor any other party, filed such a motion or otherwise raised the issue after the parties' filed their rebuttal testimony.[5]

ICNU cannot now argue that the parties should have been allowed to conduct discovery after rebuttal when they neither joined in the motion at the pre-hearing conference, nor moved for additional discovery after rebuttal testimony was submitted. As mentioned above, TBL submitted very little new evidence in its rebuttal testimony. All parties had ample opportunity to cross-examine TBL's witnesses on their direct and rebuttal testimony and discovery responses. The parties were provided sufficient discovery.

Discovery:

ICNU's assertion that the discovery process provided for in this proceeding bars interested parties from investigating all relevant issues regarding TBL's proposal is without merit.

The parties were given a full and fair opportunity to gain a full understanding of TBL's proposal through discovery and to rebut the conclusions found in TBL's proposal in their direct and rebuttal testimony, and in their initial briefs. In addition, the parties had the benefit of two days of off-the-record clarification, which ICNU participated in, to

[5] ICNU raised in its brief on exceptions that unfair limitations in the procedural schedule were adopted in this proceeding. GI-02-R-IN-01 at 3-5. ICNU participated in the April 24, 2002 scheduling conference where the schedule for this proceeding was mutually developed by the parties, and in the April 25, 2002 pre-hearing conference where the Hearing Officer adopted the procedural schedule after first inviting all parties, including ICNU, to raise and discuss their concerns regarding the schedule. Tr. April 25, 2002 Hearing at 28-35. ICNU did not express any concerns with the procedural schedule at the pre-hearing conference. It is inappropriate for ICNU to complain about the procedural schedule now when it could have raised its concerns at the pre-hearing conference.

question TBL's witnesses about TBL's proposal to better understand the proposal and to prepare discovery questions. Other than establishing deadlines consistent with the short duration of this proceeding, which were not challenged by any party, the Hearing Officer placed no limitations on the ability of the parties to conduct adequate discovery on TBL's proposal. There was no limitation placed on the number of data requests parties could submit, and no party filed motions seeking to compel the production of data by TBL.

Parties represented by IPC, including Avista Energy, and ICNU, submitted 36 out of 57 total data requests submitted to TBL in this proceeding. Avista Energy submitted 19 data requests and ICNU submitted 17 data requests to TBL. TBL fully responded to all data requests prior to the date the parties filed their direct testimony. The parties filed no motions to compel discovery. The parties clearly had a fair opportunity to learn about detailed facts and information supporting TBL's proposal through discovery and respond to the proposal in their direct cases.

In fact, the parties relied upon TBL's data responses to support their cases. IPC submitted two volumes of supporting direct testimony, comprising approximately 60 pages of testimony and supporting exhibits, including 11 of TBL's data responses: 1) AE-TBL-014; 2) AE-TBL-012; 3) AE-TBL-010; 4) AE-TBL-002; 5) AE-TBL-008; 6) IN-TBL-001; 7) IN-TBL-002; 8) IN-TBL-003; 9) IN-TBL-004; 10) IN-TBL-005, and; 11) IN-TBL-008. GI-02-E-AE/PM/TE-01 at 8-9 and GI-02-E-AE/PM/TE-02 at 4 and attachments. Other parties also submitted several of TBL's data responses to support their testimony. Klickitat PUD, incorporated data response IN-TBL-006. GI-02-E-KC-01 at 4. JWEG incorporated data responses IN-TBL-007, AE-TBL-018, AE-TBL-008. GI-02-E-WE-01 at 4 and 5. TBL submitted data responses PN-TBL-001, AE-TBL-001, AE-TBL-006, AE-TBL-018, and FP-TBL-01 to support its rebuttal testimony. GI-02-E-TBL-02 at 6 and Exhibits 1-5. In short, the litigants incorporated the vast majority of TBL's data responses into their testimony. The record taken as a whole, including TBL's data responses, initial proposal and rebuttal testimony, provide substantial evidence to support TBL's proposal.

The parties conducted cross-examination of TBL's and other parties' witnesses on June 11, 2002. All parties were provided the opportunity to fully cross-examine TBL's witnesses on TBL's initial proposal and rebuttal testimony. The Hearing Officer did not establish any limits on the parties' ability to cross-examine TBL's witnesses. Counsel representing Avista Energy (a member of IPC) and Klickitat PUD fully cross-examined TBL's witnesses.

ICNU chose not to participate in cross-examination and chose not to file direct or rebuttal testimony in this proceeding. ICNU cannot choose not to file direct or rebuttal testimony or participate in cross-examination, then complain that it was not given an adequate opportunity to refute TBL's proposal.

IPC and the other parties have produced a substantial record given the limited scope of this proceeding. ICNU's and IPC's assertions that TBL's proposal is unsupported by the evidence allowed into the record, which TBL denies based upon the huge volume of

evidence allowed into the record, is simply not correct. The parties were afforded a full and fair opportunity to understand and respond to TBL's proposal through clarification, discovery and cross-examination of TBL's witnesses. Further, the Hearings Officer's various orders denying PPC's request to compel the supplementation of TBL's proposal, striking certain testimony as outside the scope of the proceeding, and barring discovery on rebuttal, were proper and did not deny the parties' an opportunity to understand and refute TBL's proposal. The parties' rights to fully understand and respond to TBL's proposal were not violated.

**Decision**

TBL has not violated its statutory ratemaking processes in this proceeding.

## 2.3 Discrimination Against Similarly Situated Generators

### 2.3.1 Legal Issues

**Issue**

Does TBL's proposal violate discrimination protections found in law applicable to this proceeding?

**Parties' Positions**

ICNU asserts that TBL's proposal unduly discriminates against non-wind resources in violation of statutes applicable to BPA's ratemaking, including the Transmission System Act and section 212 of the Federal Power Act. GI-02-B-IN-01 at 6-10. *See also* GI-02-R-IN-01 at 6-13.

IPC implies that TBL's proposal discriminates against resources other than wind in violation of equal protection. GI-02-B-AE/PM/TE-01 at 4.

JWEG asserts that the Northwest Power Act does not contain an anti-discrimination standard, and that in any case there is no evidence in the record of undue discrimination against non-wind generators. GI-02-B-WE-01 at 7 *citing Ass'n of Pub. Agency Customers v. BPA*, 126 F.3d 1158, 1172 (9th Cir. 1997).

Klickitat PUD argues that TBL's failure to waive the 100-mill penalty rate for its biomass resource is discriminatory and in violation of statutory obligations. GI-02-R-KC-01 at 6.

**TBL's Position**

TBL took no position on the legal aspects of the parties' discrimination arguments during the proceeding. The legal issues were raised in the parties' initial briefs and briefs on exceptions.

**Evaluation**

TBL's Generation Imbalance Service is a Control Area Service and, unlike Energy Imbalance Service that is an Ancillary Service, is not a service taken under TBL's tariff or a tariff rate. Tr. June 11, 2002 Hearing at 55 and 73. Generation Imbalance Service does not provide access to transmission. Rather, it is a Control Area Service. Control Area Services are available to meet the Reliability Obligations of a party with resources or loads in the BPA Control Area that is not satisfying those obligations through the purchase or self-provision of Ancillary Services or through a transmission agreement. ACS-02 at 34. Generation Imbalance Service is taken when there is a difference between scheduled and actual energy delivered from generation resources in the BPA Control Area during a schedule hour. ACS-02 at 45.

BPA's statutes do not contain a discrimination standard with respect to BPA's ratemaking. The applicable standard to be applied by BPA in setting its transmission rates is to ensure that they are sufficient to recover, in accordance with sound business principles, the cost of transmitting electric power, repaying the Federal investment in the FCRPS over a reasonable number of years, and other costs and expenses incurred by the Administrator. 16 U.S.C. §§839e(a)(1) and (2)(A) and (B). In addition, BPA sets transmission rates that equitably allocate the costs of the transmission system between Federal and non-Federal power using the system. 16 U.S.C. §839e(a)(2)(C).

ICNU cites section 6 of the Transmission System Act, 16 U.S.C. §838d, and *Ass'n of Pub. Agency Customers, Inc. v. Bonneville Power Admin.*, 126 F.3d 1158 (9th Cir. 1997) (*APAC*), to support its allegation that TBL's proposal impermissibly discriminates against other resources. Section 6 of the Transmission System Act is irrelevant to the TBL's proposal to amend the Generation Imbalance Service rate. Section 6 requires the Administrator to make available to all utilities on a fair and nondiscriminatory basis transmission capacity in excess of that required to transmit electric power generated or acquired by the United States. *Id.* Section 6 is not a general nondiscrimination standard that applies to BPA's ratemaking. It is a transmission wheeling provision that has nothing to do with BPA's rates.

ICNU's reference to *APAC* is also unavailing. In *APAC* the Ninth Circuit analyzed whether BPA's offer to wheel non-federal power to direct service industries (DSI), without also offering the same service to APAC's members companies that purchase power at retail from public agency customers of BPA was discriminatory. 126 F.3d at 1171-1172. The Court held that no anti-discrimination provision was applicable to BPA's provision of wheeling to DSIs but not to APAC's members because the DSI's and APAC's members were not similarly situated for purposes of applying section 6 of the Transmission System Act and section 212 of the Federal Power Act. *Id.* The court observed that to make a discrimination claim under the Federal Power Act, APAC had to show at a minimum that its members were similarly situated to the DSIs and there is disparate treatment for the same service. *Id.* at 1172 *citing City of Vernon v. FERC*, 845 F.2d 1042, 1045-46 (D.C. Cir. 1988). Just as APAC's members were not similarly situated to the DSIs, the non-wind resources in BPA's Control Area are not similarly

situated to the wind resources, as discussed below in section 2.3.2. Further, in *APAC* the Ninth Circuit observed that "the crucial fact which renders the DSIs and APAC's members not 'similarly situated' – that BPA was faced with the prospect of losing the DSIs as customers – is also the fact which impelled BPA to act as it did. Under these circumstances, there has been no discrimination." *Id.* Just as BPA faced losing DSI customers in *APAC*, evidence presented in this proceeding establishes that BPA could face losing wind resources in its Control Area if they are abandoned or are forced to relocate to other control areas because of the increased financing costs associated with the 100-mill penalty rate. GI-02-E-WE-01 at 6-7.

ICNU also cites section 212 of the Federal Power Act, 16 U.S.C. 824k(i)(1)(B)(ii), and again implies without discussion that this section prevents TBL from only exempting wind resources from the 100-mill penalty rate. Section 212, including the "unduly discriminatory" standard relied upon by IPC, applies only when FERC orders BPA to provide transmission service and establishes the terms and conditions for that service under sections 210 (interconnection orders), 211 (wheeling orders), 212 (transmission terms and conditions), and 213 (information requirements for wholesale transmission service) of the Federal Power Act. 16 U.S.C. 824k(i)(1). This proceeding does not involve FERC-ordered interconnection, wheeling, establishment of transmission terms and conditions[6], or information request issues. Assuming for the sake of argument that the Control Area Service at issue in this proceeding is a "transmission" service, which TBL denies, TBL is, in fact, providing the service to all applicable resources. TBL is not "denying" transmission to ICNU or anyone else, and FERC is not "ordering" TBL to provide transmission service under section 211 of the Federal Power Act. Section 212 is not applicable to this proceeding. FERC has determined that the section 211 review standards only apply where the Commission orders BPA to provide transmission services, which is not the case here. *See United States Department of Energy-Bonneville Power Administration*, 67 FERC ¶61,351 (1994) and *United States Department of Energy-Bonneville Power Administration*,68 FERC ¶ 61,344 (1994). Moreover, even if section 212 were applicable to this proceeding, it provides that rates shall not be *unduly* discriminatory. Different rates for different classes of customers are appropriate as long as they are not unduly discriminatory. 16 U.S.C. 824k(i)(1)(B)(ii). As discussed below in section 2.3.2, differences between wind and non-wind resources justify only exempting wind resources from the 100-mill penalty. The "unduly discriminatory" standard found in section 212 of the Federal Power Act does not apply to this proceeding.

Furthermore, TBL does not discriminate against non-wind resources in violation of the equal protection provisions in the U.S. Constitution. IPC cites *U.S. v. Whiton*, 48 F.3d 356 (8th Cir. 1995), in support for its equal protection argument that TBL is discriminating against other resources by proposing only to exempt wind resources from the 100-mill penalty rate. GI-02-B-AE/PM/TE-01 at 4. Even if TBL were discriminating against other resources, which TBL denies (based upon the differences between wind and other resources discussed below in section 2.3.2), the case cited by IPC actually supports

[6] TBL's Generation Imbalance Service is a Control Area Service and is not a tariff service

TBL's proposal to exempt only wind resources from the 100-mill penalty rate because wind and other resources are not similarly situated. GI-02-E-TBL-02 at Exhibit 2 and 4.

The initial inquiry in analyzing an equal protection argument, if such an evaluation were relevant here, is whether a person is similarly situated to those persons who allegedly receive favorable treatment. *U.S. v. Whiton*, 48 F.3d at 358. Dissimilar treatment of dissimilarly situated persons does not violate equal protection. *Id.* Different classifications violate equal protection standards when they are without a reasonable basis and, therefore, arbitrary. *Morey v. Doud*, 354 U.S. 457, 463 (1957). A classification having some reasonable basis does not offend the concept of equal protection merely because it is not made with mathematical nicety or because in practice it results in some inequality. *Id.* Distinctions in the treatment of business entities engaged in the same business activity may be justified by genuinely different characteristics of the business involved as long as the distinction has a reasonable relation to these differences. *Morey*, 354 U.S. at 465. The Supreme Court has held "unless a classification trammels fundamental personal rights or is drawn upon inherently suspect distinctions such as race, religion or lineage, our decisions . . . . require only that the classifications challenged be rationally related to a legitimate state interest." *City of New Orleans v. Dukes*, 427 U.S. 297, 303 (1976).

These equal protection cases support TBL's decision to exempt wind resources, which are unable to accurately schedule and respond to the penalty rate, from other resources that are able to consistently accurately schedule in a manner that allows them to avoid the penalty rate. IPC's argument assumes that wind and non-wind resources are, in fact, similarly situated. That assertion is disputed by TBL, and the evidence in the record favors TBL's position. As discussed in section 2.3.2 , the data and analysis actually put forth by TBL and others demonstrates that wind resources have inherent scheduling limitations preventing them from avoiding the penalty, while other resources do not. Therefore, wind and other resources are not similarly situated with respect to the application of the 100-mill penalty rate.

Also, the Northwest Power Act specifies that among its purposes are "to encourage . . . the development of renewable resources within the Pacific Northwest," and to develop regional plans and programs related to renewable resources. 16 U.S.C. 839(1) and (3). *See also* 16 U.S.C. 839d(e) (giving the BPA Administrator authority to foster the development of renewable resources). Other Federal statutes and policies promote the development of renewable energy resources such as wind. GI-02-E-WE-01 at 8-10. TBL's proposal to eliminate the 100-mill penalty rate for wind resources will further these objectives and promote the development of wind resources by removing an impediment to their development. GI-02-B-WE-01 at 10. The only other renewable resource in BPA's Control Area subject to the Generation Imbalance Service rate, Klickitat PUD's biomass plant, already demonstrates exceptional scheduling practices and is not unfairly penalized and is not impeded by the 100-mill penalty rate. *See* discussion of Klickitat PUD's biomass facility at section 2.3.2.

**Decision**

TBL's proposal does not violate section 6 of the Transmission System Act. That provision applies to access, not rates. Further, the "unduly discriminatory" standard found in section 212 of the Federal Power Act is inapplicable to this proceeding, as this proceeding does not involve FERC-ordered wheeling. In any event, there is no undue discrimination because wind and non-wind resources are not similarly situated for purposes of applying the 100-mill penalty rate.

### 2.3.2 Discrimination Against Similarly Situated Generators

**Issue**

*Does TBL's proposal illegally discriminate against similarly situated generators?*

**Parties' Positions**

ICNU asserts that TBL's proposal is discriminatory and unfair because it impermissibly treats similarly situated resources differently in violation of BPA's statutes. GI-02-B-IN-01 at 3, 6-10. ICNU asserts that the proposal discriminates in favor of wind generators. *Id.* at 6.

ICNU argues that non-wind generation resources, including thermal and biomass resources, are similarly situated to wind in their inability to consistently schedule their output to avoid the 100-mill penalty charge and should not be subject to the penalty. *Id.* at 7, 8, 10. ICNU asserts there is no evidence in the proceeding that states that thermal resources can consistently and accurately schedule their output during all time periods. *Id.* at 8. ICNU further asserts that TBL has failed to present evidence demonstrating that wind generators and non-wind generators, including thermal generators during certain time periods, are not similarly situated. Id at 9. ICNU claims that TBL's position that thermal generators and wind resources are not similarly situated conflicts with conclusions of FERC. Id at 9-10.

ICNU claims that during certain periods of time, including start-up periods, ramping periods and forced outages, thermal resources are unable to consistently schedule their output with sufficient accuracy to stay within the deviation band for the schedule hour. *Id.* at 7-8.

ICNU claims that there is conflicting evidence whether wind generators can accurately and consistently schedule their output. *Id.* at 7.

IPC asserts that non-wind resources operate intermittently during certain periods during which their output cannot be predicted with sufficient accuracy to stay within the deviation band. GI-02-B-AE/PM/TE-01 at 4.

IPC claims that TBL's proposal discriminates against similarly situated generators because, for example wind generators can game power schedules. GI-02-B-AE/PM/TE-01 at 4 and 5. IPC further claims that the wind generators are in fact similar to the thermal generators in their ability to game their power schedules. *Id.* at 5.

Klickitat PUD asserts that TBL's proposal is discriminatory in its failure to also exempt Klickitat's Roosevelt Landfill Gas-to-Energy (biomass) plant from the 100-mill penalty rate. *See generally* GI-02-B-KC-01.

Klickitat PUD claims that biomass resources have the same intermittent scheduling problems and inability to be dispatched as wind. GI-02-B-KC-01 at 3.

Klickitat PUD asserts that the BPA Administrator is violating his commitment made in the final ROD for the Business Plan to avoid environmental impacts from new generation resources by not discouraging renewable resources. GI-02-B-KC-01 at 3.

Klickitat PUD asserts TBL's analysis of only one month of scheduling data for its biomass plant is insufficient. GI-02-B-KC-01 at 4.

JWEG asserts that TBL's proposal is not unfairly discriminatory and notes that "abundant and uncontroverted evidence in the record supports TBL's proposal to remove the 100 Mill Floor Rate for wind generators". GI-02-B-WE-01 at 7.

JWEG asserts that TBL's analysis of thermal and biomass facilities in its Control Area demonstrates that those resources can avoid the penalty rate, while wind cannot, and that there is no evidence to the contrary. *Id.* 7-8

**TBL's Position**

TBL believes it performed sufficient analysis of wind and non-wind resources to determine that wind and non-wind resources are dissimilar, and to support its proposal to exempt only wind resources from the 100-mill penalty rate. *See* GI-02-E-TBL-01 at 4 and GI-02-E-TBL-02 at 3-6 and 8-11 and Exhibits 1-6. *See also* GI-02-E-AE/PM/TE-01 Attachments 1-3 and 5-11 and GI-02-E-AE/PM/TE-02 Attachment 1.

Wind resources in BPA's Control Area are not able to accurately schedule to avoid the 100-mill penalty rate. GI-02-E-TBL-01 at 4. *See also* Tr. June 11, 2002 Hearing at 87-88.

Non-wind resources in BPA's Control Area are able to consistently schedule with sufficient accuracy to avoid the penalty rate. *Id.* *See also* Tr. June 11, 2002 Hearing at 87-88.

Klickitat PUD's biomass plant can consistently schedule with sufficient accuracy to avoid the penalty rate. GI-02-E-TBL-02 at 10-11. *See also* GI-02-E-TBL-01 at 4.

TBL supports JWEG's position that resources, other than wind, are capable of consistently accurately scheduling generation output to avoid the 100-mill penalty. Tr. June 11, 2002 Hearing at 87-88.

**Evaluation**

TBL has not discriminated against non-wind resources in proposing to only exempt wind resources from the 100-mill penalty rate. Wind and non-wind resources are not similarly situated with respect to their ability to avoid the 100-mill penalty rate for delivering less energy than scheduled during a schedule hour. GI-02-E-TBL-01 at 4.

Wind resources are not able to accurately predict generation output during the delivery hour. *Id.* As stated in the Federal Register notice initiating this proceeding, ". . . wind generators are not currently able to accurately schedule their output during *each* delivery hour. 67 Fed. Reg. at 18872 (emphasis added). The evidence of record clearly supports that assertion, which no party denied.

TBL considered the overall performance of generators, both wind and non-wind, in coming to the conclusion that there are no generators, other than wind, that are not able to consistently schedule accurately. Tr. June 11, 2002 Hearing at 29 and 73. TBL determined whether there are fundamental physical or technological constraints that would consistently prevent resources from being able to respond to dispatch orders or consistently prevent them from being able to predict their output to stay within the deviation band. GI-02-E-TBL-02 at Exhibit 2. TBL determined that there are two distinct classes of generation resources, wind and all others, and that wind resources are the only resources in BPA's Control Area that cannot meet the dispatchability and predictability criteria and respond to the intent of the penalty rate. *Id. See also* TR. June 11, 2002 Hearing at 72-73. Other than wind generation resources, generators in BPA's Control Area have demonstrated the ability to consistently operate within the deviation band. GI-02-E-TBL-02 at Exhibit 4.

TBL considered observations of generation performance, discussions with people in the field (of wind energy), wind developers, discussions in technical forums and seminars, and considered dozens of scientific papers and studies addressing wind generation issues to develop the opinion that wind resources cannot consistently schedule their output with sufficient accuracy to consistently stay within the deviation band. GI-02-E-TBL-02 Exhibit 4. *See also* GI-02-E-AE/PM/TE-02 Attachment 1. In addition, TBL stated that it is not aware of any studies or demonstrations that indicate wind resources can consistently predict their output with the required accuracy to stay within the deviation band. *Id.*

TBL reviewed substantial amounts of historical generation data for resources in BPA's Control Area. GI-02-E-TBL-02 at Exhibit 3. TBL also compared data showing that the number of hourly deviations outside the deviation band for wind generators far exceeded thermal resources' deviations. GI-02-E-AE/PM/TE-02 Attachment 1. TBL determined that wind resources are unable to avoid the penalty while other resources can.

Wind resources are the only resources that do not control their fuel supply (wind) and cannot predict the anticipated "fuel" availability in a particular scheduling hour with sufficient accuracy to consistently stay within the deviation band, at this time. GI-02-E-TBL-02 at 5. Wind resources lack the ability to predict wind flows with sufficient precision to avoid the 100-mill rate. GI-02-B-WE-01 at 2-3 (quoting GI-02-E-TBL-01 at 4 and GI-02-E-TBL-02 at 6-10).

TBL assessed thermal and wind generating resource performance at staying within the deviation band and avoiding the penalty. GI-02-E-AE/PM/TE-02 Attachment 1. To quantify this empirical observation in a factual and disciplined statistical manner, a standard z-test was performed on generating resources in BPA's Control Area for March 2002, the most recent month for which data was available, thus reflecting the most experienced performance by plant operators, and it was the most recent month for which comparable data was available from other generators in BPA's Control Area for comparison. *Id.* The March data covers 744 hours of data for representative wind and thermal resources, which is sufficient in TBL's opinion to draw statistically significant inferences from the z-test comparison. The analysis demonstrates that wind resources are not able to consistently schedule within the deviation band to avoid the 100-mill penalty rate, while thermal resources can. *Id.* *See also* Tr. June 11, 2002 Hearing at 85-88. The parties did not challenge this analysis, and there is no contrary evidence in the record.

There are no studies, data or analyses in the record to support the contention that generators, other than wind, cannot accurately schedule their output during start up and ramping periods, although some parties attempted to submit contrary testimony without supporting data or studies. GI-02-E-AE/PM/TE-01 at 5. *See also* section 3.1 (discusses orders striking testimony). TBL is not persuaded that non-wind generators lack the ability to schedule accurately to avoid the penalty.

Klickitat PUD asserts that its biomass generator is a renewable resource with the same intermittent scheduling problems and inability to be dispatched as wind. GI-02-B-KC-01 at 3. Klickitat PUD states that TBL "recognized that intermittent recourses (*sic*) like biomass and wind can't schedule accurately within the hour." *Id.* at 2 *citing* Tr. June 11, 2002 Hearing at 78. Klickitat PUD mischaracterizes TBL's testimony. In fact, when the preceding testimony is read in context, it is clear that TBL testified that wind resources are unable to schedule within the limits of the deviation band. Tr. June 11, 2002 Hearing at 78. TBL did not testify that biomass resources are unable to accurately schedule within the hour.

TBL does not define a class of resources as intermittent resources. Tr. June 11, 2002 Hearing at 102. However, TBL did consider biomass resources, wind resources, thermal resources, and small run-of-river hydroelectric resources expected to be in BPA's Control Area during the rate period at issue in its analysis to determine what types of resources should be exempted from the 100-mill penalty rate. Tr. June 11, 2002 Hearing at 104-106. TBL did not consider solar, geothermal and hybrid resources because they either are too small to be subject to the Generation Imbalance Service rate or are not found in

BPA's Control Area. *Id.* TBL determined that there are no resources in BPA's Control Area, except for wind, that cannot consistently schedule their output to stay within the deviation band for the schedule hour, and, therefore that are routinely subject to the 100-mill penalty rate. GI-02-E-TBL-01 at 4, lines 5-8. *See also* GI-02-E-AE/PM/TE-06, GI-02-E-TBL-02 at Exhibit 4 and GI-02-E-AE/PM/TE-02 at Attachment 1. *See also* GI-02-E-TBL-02 at Exhibit 3 and GI-02-E-AE/PM/TE-06.

TBL analyzed the scheduling performance of Klickitat PUD's biomass generator. GI-02-E-TBL-02 at 10-11. TBL's analysis demonstrates that this resource does, in fact, schedule with far better accuracy than other thermal resources in BPA's Control Area. *Id.* Accordingly, it would make little sense to exempt Klickitat PUD's facility from the penalty, when Klickitat PUD is already performing admirably in its scheduling practices and not consistently incurring the penalty rate. Unlike wind, which cannot respond to the rate, Klickitat PUD can respond to the rate, and is doing so. *Id.*

Klickitat PUD also argues the TBL's use of one month of generation data, see GI-02-E-TBL-02 at 10-11, is insufficient to support TBL's conclusion that Klickitat PUD's biomass facility does not have the same scheduling limitation as wind resources. GI-02-R-KC-01 at 5. In fact, in addition to the statistical analysis TBL performed on Klickitat PUD's resource, see GI-02-E-TBL-02 at 10-11 and Exhibit 6, TBL also considered thousands of hours of generation data, including data from Klickitat PUD's resource, in reaching its conclusion that Klickitat PUD's biomass resource is able to consistently schedule to avoid the 100-mill penalty rate. GI-02-E-TBL-02 at 6 and Exhibit 3. TBL also considered four months of billing data which establishes the number of megawatthours generation resources, including Klickitat PUD's biomass resource ("Small Thermal A"), operate outside the deviation band. GI-02-E-AE/PM/TE-06. This data shows that Klickitat PUD incurred minimal generation imbalance penalties for the first four months in 2002, compared to wind resources. Klickitat PUD, and no other party for that matter, submitted *any* generation data or studies to contradict the generation data relied upon by TBL in this proceeding to establish that wind resources are uniquely situated in their inability to accurately schedule to avoid the 100-mill penalty rate.

Klickitat PUD concludes that the BPA Administrator is violating his commitment made in the final ROD for the Business Plan to avoid environmental impacts from new generation resources by not discouraging renewable resources. GI-02-B-KC-01 at 3. However, the Administrator is indeed fulfilling his commitment under the Business Plan ROD. *See* section 3.3. In addition, development of wind resources in BPA's Control Area could be inhibited because developers' ability to obtain financing would be in jeopardy if TBL does not exempt wind resources from the penalty rate. GI-02-WE-01 at 7. To the extent that a renewable resource such as wind cannot accurately schedule within the deviation band, TBL's proposed revision to the Generation Imbalance Service rate will remove an impediment to the continued development of wind resources in the BPA Control Area.

The evidence on record in this proceeding conclusively establishes that wind generators are not similarly situated to other resources in the BPA Control Area and should be exempted from the 100-mill penalty rate.

**Decision**

Wind generators, unlike other generators, are uniquely situated, cannot respond to the intent of the 100-mill penalty rate, and should be exempt from the 100-mill penalty. TBL has not discriminated against other resources by only exempting wind resources from the 100-mill penalty rate.

## 2.4 Financial Impacts

**Issue**

*What are the financial impacts associated with TBL's proposal to exempt wind resources from the 100-mill penalty rate?*

**Parties' Positions**

IPC claims "TBL's proposal inadequately explains or analyzes the financial effects associated with its proposal." GI-02-B-AE/PM/TE-01 at 3. IPC asserts "significant changes in cash flow would evidentially result from exemption of wind generators from the 100-mill floor rate." *Id.*

JWEG argues that the removal of the 100-mill penalty rate for wind generation resources will not affect TBL's ability to meet its revenue requirements because TBL assumes no revenue from the Generation Imbalance Service rate. GI-02-B-WE-01 at 5. JWEG also asserts that removing the 100-mill penalty rate will not shift costs to other TBL customers and that cost-shifting is relevant only to General Rate Proceedings, in which the allocation of costs among customer classes and specific customers is at issue, and is not relevant in the instant proceeding, which addresses the limited issue of whether to remove a non-cost-based penalty for wind generators. *Id.*

**TBL's Position**

TBL sufficiently analyzed the revenue effects of its proposal. *See* GI-02-E-TBL-01 at 4 and GI-02-E-TBL-02 at 8 and 9-10. While some revenue would be foregone if wind resources were exempted from the penalty, the lost revenue would be insignificant.

TBL assumes no revenue from the Generation Imbalance Service rate, including the 100-mill penalty rate. GI-02-E-TBL-01 at 4. The 100-mill rate is a penalty charge and is not based on the cost to provide generation imbalance services. GI-02-E-TBL-02 at 9. Under TBL's proposal, TBL will continue to collect the actual costs of any energy provided as Generation Imbalance Services to wind resources. *Id.* The proposed rate adjustment will not shift costs to other customers. *Id.*

**Evaluation**

IPC asserts that TBL has not adequately considered the revenue effects associated with the proposal to exempt wind resources from the 100-mill penalty rate. GI-02-B-AE/PM/TE-01 at 3.

TBL provided several data responses to establish its revenue from the Generation Imbalance Service rate, including the 100-mill penalty rate. *See e.g.* GI-02-E-AE/PM/TE-01 at Attachments 3, 6, 7, 8, 9, and 11, and GI-02-E-TBL-02 at Exhibit 5. Several parties, including IPC, included that data in their testimony. *Id.* This data clearly indicates that TBL analyzed the revenue it receives from the Generation Imbalance Service rate to understand how the proposed rate affects its revenues.

IPC asserts that TBL receives significant Generation Imbalance Service revenue from wind resources, as much as $900,000 for a four month period in 2002, and implies this revenue would be foregone if wind resources are exempted from the 100-mill penalty rate. GI-02-B-AE/PM/TE-01 at 3.

IPC's analysis of Generation Imbalance Revenue data prepared by TBL is misleading. *See* Exhibit GI-02-E-AE/PM/TE-06 (also found in Attachment 3 to GI-02-E-AE/PM/TE-01). IPC's calculation does not take into account revenue BPA receives for the generation imbalance energy it provides, at the incremental cost plus 10 percent, and will continue to receive from wind resources. Further, Exhibit GI-02-E-AE/PM/TE-06 is based on preliminary data and the final revenue numbers may change before final billing. Tr. June 11, 2002 Hearing at 40.

TBL acknowledged that there would be some actual revenue foregone as a result of the proposed change in the rate. GI-02-E-TBL-01 at 4. This lost revenue would be measured by the difference between the revenue it would receive from wind resources, at the incremental cost for energy plus 10 percent, and the revenue that could be received if the 100-mill penalty were applied (assuming the incremental cost plus 10 percent is less than 100-mills per kilowatthour). *Id.* While some revenue would be foregone if wind resources were exempted from the penalty, TBL does not believe the lost revenue would be significant. GI-02-E-TBL-02 at 10.

Even with the proposed rate change, BPA will still recover the incremental cost for the energy plus 10 percent from wind resources. GI-02-E-TBL-01 at Attachment 1, section III.B.1.b. (i). BPA will continue to be made whole by recovering the actual costs for the generation imbalance energy it provides. GI-02-E-TBL-02 at 8. Therefore, the proposed rate adjustment will not shift costs to other customers. GI-02-B-WE-01 at 5. *See also* GI-02-WE-01 at 7. IPC agrees that removing the 100-mill penalty rate will not shift costs to other TBL customers. GI-02-E-AE/PM/TE-03 at 8.

TBL performed a financial analysis sufficient to satisfy its ratemaking requirements under section 7 of the Northwest Power Act, 16 U.S.C. 839e, when it adopted its 2002

rate schedules, including the Generation Imbalance Service rate. TR-02-A-01 at 17-23. *See also* TR-02-FS-BPA-01 and TR-02-FS-BPA-03. The 2002 rate proceeding established the Generation Imbalance Service rate that is being modified in this proceeding. FERC approved BPA's 2002 transmission rates, including the Generation Imbalance Service. 95 FERC ¶62,094 (2001).

TBL's 2002 rate proceeding forecasted no revenue from the Generation Imbalance Service rate, including the 100-mill penalty rate. GI-02-E-TBL-01 at 4. TBL assumed that resource operators would schedule their generation output accurately to stay within the deviation band and avoid the Generation Imbalance Service charge. *Id.* Therefore, elimination of the 100-mill penalty charge for wind resources would not affect the 2002 financial analysis.

**Decision**

TBL adequately evaluated the financial impacts associated with its proposal. The proposed rate revision will have no significant financial impacts upon TBL. TBL's overall cost recovery demonstration from the 2002 rate proceeding is unaffected by the proposed rate revision, because TBL forecasts no revenue from the 100-mill penalty rate. In addition, elimination of the 100-mill penalty rate for wind resources will not shift costs to other customers because TBL will continue to recover the actual cost for generation imbalance energy from wind resources.

## 2.5 Transmission System Reliability

**Issue**

*Would TBL's proposal to exempt wind resources from the 100-mill penalty rate adversely affect the reliability of the Federal Columbia River Transmission System (transmission system)?*

**Parties' Positions**

IPC asserts that the TBL failed to adequately analyze the relationship between wind generation and transmission system reliability.[7] GI-02-B-AE/PM/TE-01 at 5-6.

[7] IPC also asserts that the current Generation Imbalance Service rate design is flawed and that TBL proposes the wrong solution since its proposal fails to comport with the rate's purpose to encourage accurate scheduling. GI-02-B-AE/PM/TE-01 at 2-3. IPC raises similar arguments in its rebuttal testimony. GI-02-B-AE/PM/TE-03 at 2-3. FERC approved TBL's design of the Generation Imbalance Service rate when it approved TBL's 2002 rates. *Order Confirming and Approving Rate Schedules on a Final Basis*, 95 FERC 62,094 (May 7, 2001). IPC's "rate design" argument appears to repackage, under a new label, the reliability and discrimination arguments asserted elsewhere in IPC's brief. IPC did not explicitly raise the current Generation Imbalance Service rate design issues during the proceeding, and there is no supporting evidence in the record for such asserted flaws, other than IPC's reliability and discrimination allegations addressed by TBL in this ROD. TBL's Federal Register notice clearly establishes that rate design issues regarding the current Generation Imbalance Service rate (other than whether the 100 mill penalty charge should be applicable to wind generation) are outside the scope of this proceeding. 67 Fed. Reg. at 18873. TBL will not readdress reliability and discrimination issues stemming from alleged flaws in the current rate design. IPC should raise Generation Imbalance Service rate design flaws in a future TBL General Rate Proceeding.

Klickitat PUD asserts that since TBL expects no transmission system reliability problems resulting from the anticipated expansion to 565 total MW of wind generation by the end of the rate period, then including its 8 MW biomass generator in the exemption from the 100-mill penalty will not create reliability concerns. GI-02-B-KC-01 at 5.

JWEG asserts that TBL's proposal to exempt wind resources from the 100-mill penalty rate will not give rise to transmission systems reliability concerns. GI-02-B-WE-01 at 4. JWEG claims that wind generators lack the ability to predict wind output (which is formulaically related to wind flows) with sufficient precision to avoid the 100-Mill Floor Rate. *Id.* at 3-4. Further, JWEG asserts that the during the rate period the proposed rate change will be in effect, wind generation will be such a relatively small amount of the total overall generation capacity on the TBL transmission system that it will be insignificant and will not adversely affect system reliability. *Id.* at 4-5.

**TBL's Position**

TBL has determined that exempting wind resources from the 100-mill penalty rate will have no adverse impact on transmission system reliability. Tr. June 11, 2002 Hearing at 21-24, 33 and 92. During the limited time period in which TBL's proposed change will be in effect, wind generation will be a small percentage of the total BPA Control Area generation capacity and a reliability problem is not expected to result from implementing the proposed Generation Imbalance Service rate revision. *Id.* *See also* GI-02-E-TBL-02 at 3.

**Evaluation**

The 100-mill penalty rate is intended to encourage accurate scheduling by generation resources, and to discourage operating practices that could adversely affect the reliability of the transmission system. GI-02-E-TBL at 3. IPC asserts that TBL's proposal does not comport with this stated purpose. GI-02-B-AE/PM/TE-01 at 2-3.

TBL has considered the effects on transmission system reliability associated with exempting wind resources from the 100-mill penalty rate. TBL does not expect reliability problems to result if wind resources are exempted from the 100-mill penalty rate because the total wind capacity expected to come online during the rate period is too small to have a reliability impact, Tr. June 11, 2002 Hearing at 92, and because the remaining portion of the Generation Imbalance Service rate applicable to wind, the incremental cost for energy plus 10 percent will discourage improper scheduling. Tr. June 11, 2002 Hearing at 77-78. Further, TBL testified that whenever a new generator resource requests to interconnect with BPA's transmission system, TBL performs a system reliability study to determine the reliability effects associated with the interconnection and to determine whether remedial measures are required prior to granting the interconnection request. Tr. June 11, 2002 Hearing at 92-96.

There are currently four wind generation resources, totaling 165 MW, online in BPA's Control Area. GI-02-E-AE/PM/TE-01, Attachment 5 and GI-02-E-AE/PM/TE-01, Attachment 2. *See also* GI-02-E-TBL-02 at Exhibit 1. Based upon interconnection requests for proposed new wind projects that TBL has received from developers, TBL forecasts that there will be 565 MW (projected) of total wind resources online in its Control Area by the end of the period covered by TBL's proposal. GI-02-E-AE/PM/TE-01 at Attachment 5. *See also* TR June 11, 2002 Hearing at 30, 92. By contrast, TBL anticipates there will be approximately 4,830 MW, excluding hydroelectric generation, of non-wind generation online by the end of the rate period. GI-02-E-AE/PM/TE-01at Attachment 5 and Tr. June 11, 2002 Hearing at 93. Further, TBL testified that BPA's PBL anticipates an average output of 9,280 MW of hydroelectric generation in every hour. Tr. June 11, 2002 Hearing at 92. There is in excess of 17,000 MW of hydroelectric capacity in TBL's system. *Id.* at 94. The evidence shows that the amount of wind generation capacity expected to be online during the rate period, in terms of megawatts, is minimal, 565 MW, when compared to the total amount of generation capacity expected to be on the system, which is in excess of 22,000 MW.

In light of this data, TBL has determined that its proposal to exempt wind resources from the 100-mill penalty rate is not likely to adversely affect system reliability. GI-02-E-TBL-02 at 3. *See also* Tr. June 11, 2002 Hearing at 92.

The difference between wind and other resources is that wind generation is technologically limited in its ability to accurately predict hourly generation schedules because the fuel source (wind) can neither be controlled nor accurately predicted to consistently stay within TBL's Generation Imbalance Deviation Band. GI-02-E-TBL-02 at 5. The amount of scheduling error, in megawatt-hours for each hour, for wind and non-wind resources has approximately the same reliability impacts; however, the amount of megawatt-hours that will be generated in any hour by wind generators in the BPA Control Area during the rate period at issue is a tiny fraction of that generated by thermal generators. *Id.* The reliability impacts are correspondingly reduced. *Id.*

IPC further asserts that wind generators are capable of "gaming" the system by intentionally submitting incorrect power schedules in order to realize financial gains. GI-02-B-AE/PM/TE-01 at 4. In fact, IPC's witness suggested that wind generators have a greater opportunity to game their schedules, Tr. June 11, 2002 Hearing at 128, and suggests that wind resources should do just that, intentionally under-schedule their generation (over-generate) to avoid the 100-mill penalty. Tr. June 11, 2002 Hearing at 130-133. TBL acknowledges that wind resources, like other resources, are capable of intentionally scheduling improperly. Tr. June 11, 2002 Hearing at 22-24. However, just because wind generators *can* intentionally submit inaccurate schedules, that does not mean they will, or should,[8] do so. Intentionally misscheduling could subject wind

[8] This practice would violate the "credit" portion of the Generation Imbalance Service rate schedule, under which TBL credits resources that under-schedule at 90% of the BPA's decremental cost for energy, unless the over-generation results from an Intentional Deviation or the Federal System was in Spill Condition at any time during the month. *See* Attachment 1 at section III.B.2. This portion of the Generation Imbalance Service rate was not at issue in this proceeding. GI-02-E-TBL-02 at 4.

resources to penalties. Tr. June 11, 2002 Hearing at 97. JWEG disputes IPC's claim that wind generators will schedule less accurately if the 100-mill penalty is removed, pointing out that is pure speculation unsupported by any evidence in the record. GI-02-B-WE-01 at 4. JWEG acknowledges that other portions of the Generation Imbalance Service rate will prevent that practice by encouraging accurate scheduling and operation. *Id.*

TBL has adequately considered the alleged uncertainty about the complex reliability effects relating to over-scheduling and under-scheduling, and the effects caused by exempting wind resources from the 100-mill penalty rate. GI-02-E-TBL-02 at 2-6. The Generation Imbalance Service rate provides that wind generators will pay TBL 110 percent of the incremental power costs for under-generating. Tr. June 11, 2002 Hearing at 78. TBL believes this portion of the Generation Imbalance Service rate will be sufficient to encourage wind resources to schedule properly. *Id.*

By contrast, there are significant amounts of thermal generation capacity in BPA's Control Area and these resources are controllable. GI-02-E-TBL-02 at 3. If adequate incentives to promote accurate scheduling by thermal resources are not present in the rate design, major reliability problems may occur, such as those caused by uncertainty related to reserve margins and operating reserves. *Id.* Without a penalty for scheduling errors, thermal generators would not have an incentive to schedule accurately and could intentionally misschedule, which could degrade the operational reliability of TBL's system. *Id.* Accordingly, TBL does not believe it is appropriate to exempt non-wind resources from the 100-mill penalty rate.

Klickitat PUD implies that no transmission system reliability problems would result if TBL were to also exempt its 8 MW biomass generator from the 100-mill penalty rate. GI-02-B-KC-01 at 5. Klickitat PUD is correct that its biomass plant is too small to impair or affect transmission system reliability through improper scheduling if the resource were to be exempted from the 100-mill penalty rate. However, Klickitat PUD's scheduling performance indicates that it, in fact, schedules with sufficient accuracy to avoid application of the penalty rate. *See* section 2.3.

**Decision**

TBL has evaluated the relationship between reliability and generation scheduling in considering its proposal to exempt wind resources from the 100-mill penalty rate. System reliability problems are not expected if wind resources are exempted from the 100-mill penalty rate.

## 3.0 OTHER ISSUES

### 3.1 Motion on Exceptions to Orders to Strike Direct and Rebuttal Testimony

On May 21, 2002, the BPA PBL filed a motion seeking to strike certain direct testimony filed by IPC and Klickitat PUD as being outside the scope established by the Administrator for this proceeding. GI-02-M-04. The BPA PBL asked the Hearing

Officer to strike IPC testimony which sought a symmetrical penalty rate that would allegedly promote accurate scheduling, and testimony seeking the experimental elimination of the 100-mill penalty rate for all generators during start-up, ramping, forced outages periods to evaluate the reliability effects, or, alternatively, the elimination of the 100-mill penalty rate for wind resources at all hours, and for non-wind resources during low load hours to allegedly enhance reliability, and during start-up periods and ramping periods, when generators allegedly cannot control their output to stay within deviation band. GI-02-M-04 at 3. The BPA PBL also asked the Hearing Officer to strike Klickitat PUD testimony asserting that TBL's proposal is unfair to its biomass generator and seeking relief from the 100-mill penalty rate for all intermittent resources. *Id.*

The Hearing Officer granted in part, and denied in part, BPA PBL's motion. GI-02-O-10. The Hearing Officer allowed into evidence IPC evidence asserting that, in some instances, the 100-mill penalty rate could lead to behavior that increases reliability, and in other instances may decrease reliability, see GI-02-E-AE/PM/TE-02 at 2, lines 1-25, through 3, lines 1-13, and asserting that thermal generation resources operate intermittently and cannot consistently accurately predict their output to stay within the deviation band during start-up, ramping and unexpected outages. GI-02-E-AE/PM/TE-02 at 5, lines 7-11. GI-02-O-10. The Hearing Officer also allowed in Klickitat PUD evidence found at GI-02-E-KC-01 at page 6, line 23 through page 7, line 5 that asserts TBL's alleged discriminatory treatment of renewable resources is not warranted by operational or economic considerations and is inconsistent with the Northwest Power Act and uncited Department of Energy, FERC and "other federal agency" policies regarding renewable resources, as discussed. GI-02-O-10.

On June 4, 2002, TBL filed a motion seeking to strike certain rebuttal testimony filed by the IPC as being outside the scope of the proceeding. GI-02-M-08. TBL asked the Hearing Officer to strike IPC testimony similar to the testimony he struck in response to BPA PBL's motion. The IPC testimony advocated a symmetrical rate for all resources, asserted scheduling difficulties during start-up periods, and asserted that other control area operators do not impose a penalty rate for imbalance services. Again, the Hearing Officer granted in part, and denied in part, TBL's motion. GI-02-O-11. The Hearing Officer allowed into evidence IPC testimony asserting the 100-mill penalty rate acts as a disincentive for accurate scheduling. GI-02-O-11. *See also* GI-02-E-AE/PM/TE-03 at page 2, lines 16-26. This testimony is virtually identical to testimony the Hearing Officer earlier struck from IPC's direct testimony at GI-02-E-AE/PM/TE-01 at page 6, lines 13-23. GI-02-O-10.

At the June 11, 2002, cross-examination hearing IPC requested rehearing of the two orders striking its testimony, which was opposed by both TBL and BPA PBL, and which the Hearing Officer denied. Tr. June 11, 2002 Hearing at 119-120. However, the Hearing Officer issued a bench order allowing parties to file exceptions to his orders and requiring them to do so by June 18, 2002. Tr. June 11, 2002 Hearing at 138-139. IPC filed a Motion on Exceptions to Orders GI-02-O-10 and GI-02-O-11, asking the BPA Administrator to reinstate the testimony that was stricken by the Hearing Officer's orders. GI-02-M-14. IPC asked the BPA Administrator to reinstate its stricken testimony

arguing that all of the stricken testimony is relevant to TBL's proposal and/or merely rebuts assertions made by JWEG in its direct testimony that support TBL's proposal. GI-02-M-14 at 2-3. Klickitat PUD did not file exceptions to the orders or otherwise seek reinstatement of its stricken testimony.

TBL and BPA PBL filed oppositions to IPC's motion on exceptions. GI-02-M-15 and GI-02-M-16, respectively. In their oppositions to IPC's motion, TBL and BPA PBL argued that the Hearing Officer correctly struck certain portions of IPC's direct and rebuttal testimony as being outside the scope of the proceeding established by the BPA Administrator, that granting the motion would improperly expand the scope of the proceeding, and that it would be procedurally unfair to the other parties to allow the stricken testimony back into the proceeding at such a late stage. *See* GI-02-M-15 at 1-2 and GI-02-M-16 at 2-3.

After considering the limited scope I established for this proceeding in the Federal Register notice, IPC's stricken direct and rebuttal testimony, the BPA PBL and TBL motions to strike the testimony, the answers to those two motions submitted by IPC, the Hearing Officer's orders on the two motions, the arguments made in IPC's motion on exceptions, and TBL's and PBL's oppositions to IPC's motion, I am convinced that the Hearing Officer properly excluded the testimony from the proceeding.

The stricken testimony sought to bring in issues outside of the defined scope of the proceeding, the elimination of the 100-mill penalty rate for wind resources. I intentionally established a narrow scope in the Federal Register notice, as provided by BPA's Procedures. I determined that only one rate issue, whether TBL should exempt only wind generation resources from the 100-mill penalty rate, was to be considered in this proceeding. I determined that conducting an Expedited Rate Proceeding under section 1010.10 of its Procedures, as opposed to a General Rate Proceeding where substantially all of TBL's transmission and other rates would be revised, see Procedures section 1010.9, would be sufficient and appropriate to determine whether to make the proposed change to the Generation Imbalance Service rate. Further, the revised rate will only be in effect for a limited duration, from October 1, 2002, through September 30, 2003, the remainder of TBL's current transmission rate period.

The Hearing Officer correctly relied upon the narrow scope I established in the Federal Register notice to exclude testimony relating to non-wind resources that was outside the scope I established for the proceeding. As discussed below, I am not convinced that eliminating the 100-mill penalty for all resources, or eliminating it on an experimental basis for wind and other resources at some times, but not others, would be in the best interest of BPA. Further, although thermal resources are not exempted from the rate, TBL will be able to continue to evaluate various resources' abilities to schedule accurately by observing their performance over the next year. The owners of such resources, or their representatives, may provide TBL detailed information to assist TBL's evaluation. It is not necessary to remove the penalty for all resources to observe their scheduling performance.

basis for wind and other resources at some times, but not others, would be in the best interest of BPA. Further, although thermal resources are not exempted from the rate, TBL will be able to continue to evaluate various resources' abilities to schedule accurately by observing their performance over the next year. The owners of such resources, or their representatives, may provide TBL detailed information to assist TBL's evaluation. It is not necessary to remove the penalty for all resources to observe their scheduling performance.

After considering both the testimony the Hearing Officer allowed into testimony and the excluded evidence, I determine that even if the Hearing Officer did allow all of IPC's testimony into evidence, it would not have affected my decision in this ROD. The Hearing Officer did not strike all the testimony BPA PBL and TBL moved to be excluded. He allowed into the record IPC testimony asserting that, in some instances, the 100-mill penalty rate could lead to behavior that increases reliability, and in other instances may decrease reliability. GI-02-E-AE/PM/TE-02 at 2, lines 1-25, through 3, lines 1-13. I find persuasive TBL's response to these assertions in its rebuttal testimony that demonstrates that removing the 100-mill penalty rate for wind resources will not result in reliability concerns, but removing the penalty for thermal resources may lead to major reliability problems. GI-02-E-TBL-02 at 2-6. Further, the Hearing Officer allowed into evidence testimony which asserts that thermal generation resources operate intermittently and cannot consistently accurately predict their output to stay within the deviation band during start-up, ramping and unexpected outages. GI-02-E-AE/PM/TE-02 at 5, lines 7-11. This appears to be the main point raised in IPC's testimony. Again, I find TBL's response in rebuttal to this testimony persuasive. GI-02-E-TBL-02 at 8-9. I believe IPC's testimony regarding limitations during start-up and ramping periods lacks sufficient specificity or detail to adequately support or allow meaningful analysis of the testimony. *Id.* IPC provided no usable definition of "start-up." "Ramping" periods could be virtually all hours a generator is in operation, which would exempt resources from the penalty rate at all hours. *Id.* Further, TBL testified that it does not assess the 100-mill penalty during forced outages, so it is not necessary for me to consider whether the penalty should be removed at those times. *Id.* In addition, IPC's testimony is unsupported by generation data or analysis and is merely assertions. In short, TBL's testimony convinces me that IPC's stricken testimony, if it had been admitted, would not have been sufficient to support their assertions seeking to expand the 100-mill penalty rate exemption to other resources.

While the record in this proceeding is insufficient for expanding the 100-mill penalty rate, TBL intends to conduct a General Rate Proceeding to develop its post-2003 Transmission and Ancillary Service rates, including its Control Area Service rates, in the spring of 2003. Parties will be provided the opportunity to raise issues related to the Generation Imbalance Service rate in that proceeding. If generation resources, including wind, thermal and biomass, can demonstrate they have operational constraints or characteristics that impact their ability to avoid incurring the 100-mill penalty rate, TBL states it will consider making appropriate changes in a future rate proceeding. I find this to be adequate justification at this time to not take action on the expansion issue.

### 3.3 Environmental Compliance

BPA has assessed the potential environmental effects of its rate proposal, as required by the National Environmental Policy Act (NEPA). 42 U.S.C. §4321. The NEPA analysis is performed separately from the rate process. The following is a record of the NEPA analysis applicable to this rate adjustment proceeding.

This rate adjustment is consistent with the environmental analysis TBL performed in developing the Generation Imbalance Service rate in its 2002 rate proceeding. This proceeding modifies the Generations Imbalance Service rate developed in the 2002 rate proceeding. TBL's 2002 Final Transmission and Ancillary Services Rate Proposal was found to be consistent with BPA's Business Plan Final Environmental Impact Statement (DOE/EIS-0183, June 1995) (BPEIS) and the Business Plan ROD (August 15, 1995) (Business Plan ROD). *See* 2002 Final Transmission Proposal Administrator's ROD (TR-02-A-01, page 5 and 30-32). This proposed rate adjustment is consistent with the environmental analysis and tiered decision supporting the development of the Generation Imbalance Service rate in the 2002 rate proceeding.

TBL's proposed adjustment to its Generation Imbalance Service rate is a direct application of the business direction alternative adopted in the August 1995 Business Plan ROD, in which the BPA Administrator selected the Market-Driven alternative from the June 1995 BPEIS. This BPEIS evaluated the environmental impacts of a range of six business structure alternatives that included, among other things, various combinations of rate designs and resulting rate levels for BPA's transmission services: Status Quo (No Action), BPA Influence, Market-Driven, Maximize Financial Returns, Minimal BPA, and Short-Term Marketing. Although the Status Quo and the BPA Influence alternatives were the environmentally preferred alternatives, the differences among alternatives in total environmental impacts were relatively small and BPA's ability to meet its public and financial responsibilities would be weakened under these alternatives. In addition, other business aspects, including loads and rates, showed greater variation among the alternatives. The Market-Driven alternative strikes a balance between marketing and environmental concerns. It also helps BPA to ensure the financial strength necessary to maintain a high level of support for public service benefits, such as energy conservation and fish and wildlife mitigation activities.

In the Business Plan ROD, the BPA Administrator considered several factors in adopting the Market-Driven alternative from the BPEIS which are relevant to this rate proposal: (1) develop rates that meet customer needs for clarity and simplicity, (2) avoid the environmental impacts from new generation resources by not discouraging renewable resources, (3) recover costs through rates; and (4) continue to meet BPA's legal mandates. This rate proposal will accommodate these considerations as it will simplify TBL's Generation Imbalance Service charge for wind resources, it will reduce the additional environmental impacts associated with non-renewable resources, it will remove the unintended burden TBL's current Generation Imbalance Service rate structure

imposes on wind resources, it will allow BPA to recover its costs of providing Generation Imbalance Service energy by linking the rate for the energy to the market price for energy, and it will conform with the Northwest Power Act's requirement that BPA establish and revise its rates to recover its power costs.

This decision to implement this proposed rate adjustment is consistent with the business direction alternative adopted by BPA in its Business Plan ROD. In addition, because this rate adjustment is undertaken to clarify rates and remove a market barrier to renewable resources, the adjustment is consistent with the decision made in the Business Plan ROD to meet BPA's public service and environmental obligations. Therefore, TBL's adjustment of the Generation Imbalance Service rate is within the scope of the Market-Driven alternative that was evaluated in the BPEIS and adopted in the Business Plan ROD, and the decision to implement this rate adjustment is tiered to the Business Plan ROD, as provided for in the BPEIS and Business Plan ROD.

### 3.4 Participant Comments

BPA distinguishes between "participants in" and "parties to" its ratemaking hearings. BPA Procedures §§1010.4 and 1010.5. Participants may, but parties may not, submit written comments and recommendations to BPA's Public Information Office. BPA Procedures §1010.5. Participants' comments are part of the official record and are considered by the Administrator in reaching his decision. *Id.*

TBL's Federal Register notice established May 28, 2002, as the closing date for participants to submit comments concerning this rate adjustment. 67 Fed. Reg. 18871 (2002). TBL receive two participant comments, one from Northwestern Energy, LLP (Northwestern Energy), and one from Oregon Governor John A. Kitzhaber, joined by the Oregon Office of Energy.

Northwestern Energy supports TBL's proposal to revise the Generation Imbalance Service rate to remove the 100-mill penalty rate for wind resources, stating that wind resource schedulers are unable to control output to stay within the deviation band and avoid the charge, the punitive rate is not relevant to wind resources, and that the charge imposes an economic burden on the development of wind resources.

Governor Kitzhaber also expressed support for the proposal to modify the Generation Imbalance Service rate for wind resources. He states that removing the 100-mill penalty rate for wind resources will encourage the development of wind resources, support new jobs in Oregon, promote a nonpolluting resource that will help stabilize fuel prices, reduce reliance upon energy imports and improve system reliability.

TBL considered these comments in developing this ROD.

## 4.0 DECISION

BPA proposes to adopt the TBL proposal to revise the Generation Imbalance Service rate to remove the 100-mill penalty rate for wind generation resources for deviations outside the deviation band when energy delivered in a schedule hour is less than the energy scheduled. *See* Attachment A, Generation Imbalance Service.

As required by law, the proposed adjustment to the Generation Imbalance Service rate established and adopted in this ROD has been set to recover the costs incurred by BPA of providing Generation Imbalance Service to wind generators, thus recovering the costs associated with the acquisition, conservation, and transmission of electric power, including the amortization of the Federal investment in the FCRPS (including irrigation costs required to be repaid out of power revenues) over a reasonable period of years and all other costs and expenses incurred by the BPA Administrator in carrying out the requirements of the Northwest Power Act and other provisions of law. Because this proposed rate adjustment will result in no cost shift, it will result in no impact on the equitable allocation of costs of the Federal transmission system, which the Commission found was met by BPA's 2002 transmission rates. 95 FERC 62,094 (2002). In addition, this adjustment to the Generation Imbalance Service rate has been designed consistent with sound business principles, to encourage the widest possible use of BPA's power and to satisfy BPA's ratemaking and other obligations. The Hearing Officer has assured that all interested parties and participants were afforded the opportunity for a full and fair evidentiary hearing, as required by law.

BPA has evaluated the proposed adjustment to rates in a section 7(i) proceeding pursuant to the Northwest Power Act. BPA has also evaluated the potential environmental impacts of the proposed rate increases and alternatives thereto, as required by NEPA. As described in section 3.3, the environmental analysis contained in the Business Plan Final EIS has been considered in making the decision in this ROD.

Based upon the record compiled in this proceeding, the decisions expressed herein, and all requirements of law, I hereby adopt the attached Generation Imbalance Service Rate Schedule as Bonneville Power Administration's Generation Imbalance Service rate proposal. In accordance with FERC requirements, 18 C.F.R. section 300.10(g), I hereby certify that the Generation Imbalance Service rate adopted herein is consistent with applicable laws and is the lowest possible rate consistent with sound business principles.

BPA will seek FERC approval of the Generation Imbalance Service rate adopted in this ROD for the period October 1, 2002 through September 30, 2003. My decision in this ROD to exempt wind resources, and not to exempt other resources, from the 100-mill penalty rate does not establish binding precedent for future BPA decisions regarding the disposition of the penalty provisions of the Generation Imbalance Service rate, whether for wind or any other resources. I encourage owners and developers of thermal and renewable resources, including wind and biomass resources, who argued that their resources should be exempted from the 100 mill penalty rate, to participate in a future

General Rate Proceeding and present evidence to demonstrate that they are unable to avoid the 100-mill penalty rate.

Issued in Portland, Oregon, this 15th day of July 2002.

Stephen J. Wright
Administrator
Bonneville Power Administration

## ATTACHMENT A

## SCHEDULE ACS-02
## ANCILLARY SERVICES AND
## CONTROL AREA SERVICES RATE

### SECTION III. CONTROL AREA SERVICE RATES

### B. GENERATION IMBALANCE SERVICE

The rates below apply to generation resources in the BPA Control Area if Generation Imbalance Service is provided for in an interconnection agreement or other arrangement. Generation Imbalance Service is taken when there is a difference between scheduled and actual energy delivered from generation resources in the BPA Control Area during a schedule hour. The rates for this service differ depending upon whether the Generation Imbalance occurs within the Generation Imbalance Deviation Band or outside the Generation Imbalance Deviation Band. The Generation Imbalance Deviation Band is + or – 1.5% of the scheduled amount of energy, or 2 MW, whichever is larger (absolute value).

#### 1. RATES

**a. For Imbalance Within the Generation Imbalance Deviation Band**

BPA-TBL will maintain a deviation account showing the net Generation Imbalance (the sum of positive and negative deviations from schedule for each hour). Return energy must be scheduled to bring the deviation account balance to zero each month. BPA-TBL will designate the hours and amounts of return energy for each hour that will be scheduled. The customer shall make the arrangements and submit the schedule for the balancing transaction.

**b. For Imbalance Outside the Generation Imbalance Deviation Band**

(i) When energy delivered in a schedule hour by the generation resource, not including wind generation resources, is less than the energy scheduled, the charge will be the greater of: (i) BPA's incremental cost plus 10%, or (ii) 100 mills per kilowatthour. When energy delivered in a schedule hour by a wind generation resource is less than the energy scheduled, the charge will be BPA's incremental cost plus 10%.

BPA's incremental cost will be based on an hourly energy index in the PNW, if one exists. If one does not exist, an alternative index will be based on: the Dow-Jones Mid-Columbia, California PX, or NYMEX Mid-Columbia index prices. On September 30 each year, BPA-TBL will post on the OASIS the index to be used for the ensuing fiscal year.

**(ii)** When energy delivered by the generation resource is greater than the scheduled amount, a credit equal to 90% of BPA's decremental cost may be given for deviations.

## 2. BILLING FACTORS

For each hour a Generation Imbalance occurs, the Billing Factor for the rates specified in section 1.b., Imbalance Outside the Generation Imbalance Deviation Band, is:

a. the amount of energy that the customer delivers, in kilowatthours, less than the lower limit of the Generation Imbalance Deviation Band, or

b. the amount of energy the customer delivers, in kilowatthours, in excess of the upper limit of the Generation Imbalance Deviation Band.

No credit will be given for an energy difference if: (a) the imbalance was an Intentional Deviation (as determined by BPA-TBL); or (b) the Federal System was in a Spill Condition at any time during the month.