

Pacific Northwest Coordination Agreement Proposed Adjustment to the Rate for Interchange Energy Imbalances

Draft Record of Decision

PNCA-02-A-01

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1.0 INTRODUCTION

This Draft Record of Decision (Draft ROD) contains the draft decisions of the Bonneville Power Administration (BPA), based on the record compiled in this rate proceeding, with respect to the adoption of the adjusted Interchange Energy (IE) Rate under the Pacific Northwest Coordination Agreement (PNCA), to be effective upon approval by the Federal Energy Regulatory Commission (interim or final) and remaining in effect until revised rates are approved. Chapter 2 presents BPA's position and chapter 3 presents the procedural issues.

1.1 Background

The PNCA is an agreement for planned operations among the utilities and other entities that operate the major electric generating facilities and systems in the Pacific Northwest. The PNCA parties include five investor-owned utilities, five public utility districts, three municipalities, the subsidiary of an aluminum producer, the United States (acting through the Administrator of the BPA; the Division Engineer, North Pacific Division, U.S. Army Corps of Engineers; and the Bureau of Reclamation), and the United States Entity for the Columbia River Treaty. The PNCA is the successor to three prior short-term agreements. It was effective on January 4, 1965 and will expire on June 30, 2003. The PNCA parties have entered into a replacement agreement, known as the 1997 Pacific Northwest Coordination Agreement ("1997 PNCA"). The 1997 PNCA will become effective when the Federal Energy Regulatory Commission (FERC) approves it as to those PNCA parties that are jurisdictional to FERC.

The basic concept of the PNCA is that all PNCA parties will jointly and cooperatively determine the aggregate firm load that can be served by the generating facilities the parties have submitted for coordination under the PNCA. This quantity is known as the total Firm Load Carrying Capability or FLCC. The FLCC is the amount of firm load that can be served under coordinated operation of the aggregate electric generating facilities and systems of the PNCA parties, assuming the reoccurrence of critical stream flow conditions and the use of all PNCA parties' reservoir storage. The PNCA does not require any PNCA party to operate in a manner inconsistent with its requirements for nonpower uses or functions.

Coordination is achieved through exchanges of energy and capacity among the various PNCA parties. Annually, the PNCA parties: (1) develop detailed plans for operation of those generating facilities submitted for coordination under the PNCA; and (2) calculate the FLCC for each PNCA party and for the coordinated system as a whole. In operations, each PNCA party's FLCC is sustained first from generation from its own coordinated resources and then through exchanges of energy with other PNCA parties. Each PNCA party has committed to make any excess of its coordinated resources over its FLCC available to any other PNCA party that has a deficit of coordinated resources to FLCC. These transfers of excess capability are known as Interchange. Because of the variability of hydroelectric generation, at times during the year PNCA parties will have surplus generation relative to their FLCC (resulting in an export of Interchange) and at other times they will have a deficit relative to their FLCC (resulting in an import of Interchange). Over time these transfers of Interchange tend to net to zero. In effect,

therefore, they are exchanges. The IE Rate applies to these exchanges of energy and it is used to keep track of the exchanges so that the parties can cash out any imbalances at the end of an operating year.

The current rate for IE is a fixed rate of 22.55 mills per kilowatt-hour. Since the rate for interchange energy was established in 1995, the energy industry has undergone dramatic change. It has become far more competitive and prices for energy have become far more volatile. During this past year prices of energy have reached unprecedented high levels. The existing rate for IE was intended to cover the PNCA parties' cost of providing the interchange. Because it is a fixed rate, however, it will not do so if prices remain high and continue to fluctuate. BPA is proposing this revision in the rate to ensure that the rate reflects BPA's costs.

In an amendment to the PNCA the other parties updated the method for determining the IE Rate from the current fixed rate to a rate determined by the market price based on the Dow Jones Mid-Columbia Firm index. This proposed BPA rate adjustment will allow BPA to apply the market rate for IE and will allow BPA's IE rate to become more dynamic and responsive to changing conditions.

1.2 Procedural History of This Rate Proceeding

Section 7(i) of the Northwest Power Act, 16 U.S.C. §839e(i), 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 (FRN) announcing the proposed rates; one or more hearings; the opportunity to submit written views, supporting information, questions, and arguments; and a decision by the Administrator based on the record. This proceeding is governed by BPA's rule for general rate proceedings of the *Procedures Governing Bonneville Power Administration Rate Hearings*, 51 Fed. Reg. 7611 (1986) (hereinafter Procedures). These Procedures implement the statutory section 7(i) requirements.

Bonneville filed notice in the Federal Register that it proposed to adjust the rate for Interchange Energy imbalances under the PNCA pursuant to §1010.10 of the Procedures. 67 Fed. Reg. 2869 (2002). BPA's initial proposal was published on January 22, 2002. The deadline for petitions to intervene was January 28, 2002. Only four parties intervened in this proceeding.¹ The Federal Register notice stated that Bonneville would accept participant comments until March 22, 2002. No comments were received. BPA's PNCA-02 proceeding began with a prehearing conference held on January 29, 2002. At the prehearing conference, the Hearing Officer issued orders concerning procedural matters in this proceeding and granted the petitions to intervene. During the prehearing conference BPA proposed a modification to the procedural schedule published in the Federal Register. The proposed modification required parties to provide notice by

The interveners include Public Generating Pool, Pacificorp, Puget Sound Energy, Inc., and Confederated Tribes and Bands of the Yakama Nation.

February 12, 2002 of their intent to contest BPA's rate proposal. If no parties submitted notice, then the procedural schedule would be accelerated to the Draft ROD.

On February 4, 2002, the Hearing Officer issued an Order establishing the schedule for this rate proceeding, which included BPA's proposed modification. None of the parties provided notice of an intent to contest and on February 22, 2002, BPA filed a motion to waive the procedural schedule and proceed to the Draft ROD. On March 7, 2002, the Hearing Officer granted BPA's motion and revised the procedural schedule accordingly. The revised procedural schedule affords parties an opportunity to file briefs on exception following the issuance of the Draft ROD. BPA requested and was granted a two-week extension to prepare the Draft ROD. The extension affords the parties the same amount of time to respond to BPA's Draft ROD.

1.3 Waiver of Issues By Failure to Raise in Briefs

Since no issues were raised by any of the parties during this rate proceeding, the parties will raise their issues in the briefs on exception in response to the Draft ROD. Issues that are not raised in the briefs on exception, however, will be waived. *See* §1010.13(b) of the *Procedures Governing BPA Rate Hearings*. Issues not challenged will be decided based on BPA's stated position in the record.

1.4 Legal Guidelines Governing Establishment of Rates

Section 6 of the Bonneville Project Act (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 the 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 of the Act, 16 U.S.C. § 832f, 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.

The Federal Columbia River Transmission System Act, 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 with (1) a view to encouraging the widest possible diversified use of electric power at the lowest possible rates consistent with sound business principles; (2) 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 be paid when due for the principal, premiums, discounts, expenses, and interest in connection with bonds issued under the Transmission System Act.

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.

In addition to the Bonneville Project Act, the Transmission System Act, and the Flood Control Act, the Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. § 839 (Northwest Power Act), provides numerous rate directives. Section 7 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. 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. 16 U.S.C. § 839e(a)(1). Section 7 also contains rate directives describing how rates for individual customer groups may be derived.

1.5 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 Court of Appeals for 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 standby charge for power not taken was lawful and distinct from a curtailment charge upheld as a “reasonable decision in light of economic realities”); *cf.*

Aluminum Company of America v. Central Lincoln Peoples' Utility District, 467 U.S. 380, 389 (1984) (“The Administrator’s interpretation of the Regional Act is to be given great weight”); Dep’t 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 of 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).

1.6 Confirmation and Approval of Rates

BPA’s rates become effective upon confirmation and approval by FERC. 16 U.S.C. § 839e(a)(2). FERC’s review is appellate in nature, based on the record developed by the Administrator. U.S. Dep’t of Energy – Bonneville Power Admin., 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. U.S. Dep’t of Energy – Bonneville Power Admin., 23 F.E.R.C. ¶ 61,378, 61,801 (1983).

2.0 SUBSTANTIVE ISSUES

2.1 Introduction

BPA filed testimony in this proceeding to support the proposed PNCA IE rate adjustment and to explain how the PNCA IE rate is applied. Testimony of Eric V. King, PNCA-02-E-BPA-01. No other party filed testimony or opposed or contested BPA’s testimony. As BPA testified, IE is the energy (as opposed to capacity) component of Interchange. It is delivered by one utility system to another, and may be returned later, usually within the same Contract Year (August 1 through July 31). IE is made available, when needed, such that each party can reach its full Firm Energy Load Carrying Capability (FELCC). FELCC is the energy component of FLCC. FELCC is, in planning, the total amount of firm energy that can be produced and shaped to load by a utility under critical stream flow conditions. Under the PNCA, each party must make available its generating capability that exceeds its FELCC to other PNCA parties that have insufficient generation to meet their FELCC. This excess energy is IE.

When one PNCA party supplies IE from its own resources to another PNCA party, such delivery is considered an “initial delivery” of IE. Parties that receive IE must return the IE at a later time if the supplying system requests it. As a PNCA party receives initial deliveries of IE, an IE imbalance (or an obligation to return IE) is established. This IE imbalance is decreased when the party returns the IE to the supplying system or transfers “previously received” IE to another PNCA party that requests IE (thereby transferring the IE imbalance and the obligation for the return). A PNCA party may accumulate an IE

imbalance with one or more supplying parties either directly through the receipt of initial deliveries or indirectly by receipt of previously received IE from third parties.

An IE Imbalance is the net of IE delivered and returned between two PNCA parties. Since each PNCA party may have a unique IE Imbalance with each other PNCA party, separate accounts for each pair of PNCA parties are established to record the IE imbalances.

A PNCA party owes an IE charge when it receives more IE from another PNCA party than it has returned to that party. This imbalance is measured and “cashed out”—that is, the parties settle the imbalances by payments to each other— at the end of any operating year (July 31) in which the Coordinated System reservoirs have refilled to at least 98% of capacity. In theory, this reservoir level signals that reservoirs have reset and are ready to enter another “critical period.” A critical period is that period, assuming adverse stream flows of historical record, adjusted for changes in use, during which the least amount of estimated firm energy load could be served from the firm resources of the PNCA parties.

The PNCA assumes that over a critical period of stream flows IE will net to zero. If an IE imbalance remains when a potential new critical period starts (reservoirs have again refilled to at least 98% of capacity at the end of an operating year), the imbalance is again settled out by means of the cash out. This procedure protects the PNCA parties from accruing extremely large IE imbalances. In addition, since it may take many years for reservoirs to refill to 98% and trigger the cash out of IE, the PNCA allows the delivering parties to demand payment for IE when it is delivered. Such payments are called “interim cash payments” and are made at the end of each month. A final settlement of the remaining IE imbalance takes place when IE is cashed out.

The charge for initial delivery of IE is established on the day of delivery. This is necessary because under the proposed IE rate, the charge for IE is established by reference and changes each day an initial delivery of IE is made. Accounts established for each party record the total charges accrued and the total IE delivered. As explained below, the charge for initial deliveries of IE is based on the Dow Jones Mid-Columbia Firm index. The charge for the return of IE is determined as follows: when BPA returns IE to another PNCA party, BPA determines the net of all IE imbalance payments owed by BPA to such party and IE imbalance payments owed to BPA from such party since the last time IE imbalances were cashed out. This calculation is made without taking into account any interim cash payments that have been made. Next BPA determines the net of all IE BPA has received from the other party and returned to such party since the last cash out. Dividing the net payment obligation by the net returns yields the rate for the return of the IE. This formula sets the rate for return of IE at the melded average rate for the outstanding IE imbalance and assures that if all the IE is returned, the total exchange of money between parties will net to zero.

When a PNCA party delivers IE, it may declare the IE to be Loaned Interchange Energy. Loaned Interchange Energy has the same function as IE but has no charge and more liberal return provisions. Loaned Interchange Energy imbalances are “zeroed out”—that

is, deemed to be zero—when IE is cashed out. Therefore, PNCA parties generally make every effort possible to ensure that the imbalance of Loaned Interchange Energy is reduced as much as possible before being zeroed out. PNCA parties usually deliver Loaned Interchange Energy in order to take advantage of the more liberal return provisions.

BPA’s proposed charge for an initial delivery of IE is based on the market value of energy at the Mid-Columbia hub. The charge for initial deliveries of IE is the same regardless of whether the IE is supplied from a hydroelectric or thermal resource, and the price per megawatt hour is based on the Dow Jones Mid-Columbia Firm index. The Dow Jones Mid-Columbia index was chosen because the price at the Mid-Columbia is readily available from a published source and is a good representation of energy prices in the Northwest. The Dow Jones Mid-Columbia Firm index segments the hours of the day into “On Peak” and “Off Peak” hours. Each day the index publishes an on-peak price and an off-peak price. Initial deliveries of IE are separated into deliveries made during on-peak hours and those made during off-peak hours. The proposed charge is the sum of two figures: 1) the product of the On Peak deliveries and the On Peak price; and 2) the product of the Off Peak deliveries and the Off Peak price. Since the proposed IE charge is based on a variable index, the charge will change as the index is updated.

Under the existing PNCA, a service charge is incurred when IE is returned in an hourly shape other than the hourly shape in which it was delivered. This service charge recognizes that the value of energy is different over the hours in a day and that the party delivering IE in a different shape has provided shaping services. The hourly Dow Jones Mid-Columbia Firm index captures the variation in value during the day and eliminates the need for IE service charges. If IE is delivered during on-peak hours, the rate per megawatt hour charged for the IE would reflect the higher value. Therefore, BPA has eliminated the service charge from its proposed IE rate.

2.2 BPA Proposal

All terms contained herein have the meaning accorded them in the PNCA. This rate schedule is to be effective upon approval by the Federal Energy Regulatory Commission (interim or final) and will remain in effect until revised rates are approved and become effective.

A. IE Imbalances For Other Than Loaned IE

1. Initial Deliveries of IE

This charge applies to IE delivered from BPA to another PNCA party.

The calculation is as follows:

Formula 1

$$C = (ID_{ON} * I_{ON}) + (ID_{OFF} * I_{OFF})$$

Where for each day:

C = Daily charge for the Initial Deliveries of IE in dollars.

ID_{ON} = The Initial Delivery of IE made during the day
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I_{ON} = during On Peak hours in megawatt hours.
 The Dow Jones Mid-Columbia Firm index price for On Peak hours in dollars per megawatt hour.
 $I_{D_{OFF}}$ = The Initial Delivery of IE made during the day during Off Peak hours in megawatt hours.
 I_{OFF} = The Dow Jones Mid-Columbia Firm index price for Off Peak hours in dollars per megawatt hour.

Note: Initial Deliveries of IE on Sundays or NERC- [or its successor organization(s)] recognized holidays are priced at the Off Peak rate.

2. Return of IE

This charge applies to the return of IE that was initially delivered to BPA from another PNCA party. The charge is based on a calculated average price unique to each PNCA party that had previously supplied BPA with IE. The calculation is as follows:

Formula 2

$$C_{PARTY} = IER_{PARTY} * R_{PARTY}$$

Where for each (PNCA) Party for a given day:

C_{PARTY} = Daily charge for the return of such PNCA party's IE in dollars.
 IER_{PARTY} = The quantity of Interchange Energy returned to a PNCA party on a day in megawatt hours.
 R_{PARTY} = The applicable IE return rate for the PNCA party for the given day as calculated in Formula 3 below in dollars per megawatt hour.

Formula 3

$$R_{PARTY} = \sum C_{PARTY} \div \sum IER_{PARTY}$$

Where for each (PNCA) Party for a given day:

R_{PARTY} = The IE return rate calculated for the PNCA party as of the given day in dollars per megawatt hours.
 $\sum C_{PARTY}$ = The net of all IE imbalance payments made by BPA to such PNCA party and all payments received by BPA from such PNCA party from the date of the last cash out of IE Imbalances to the date BPA returns the IE, in dollars.
 $\sum IER_{PARTY}$ = The net of all IE BPA has received from such PNCA party and the IE returned by BPA to such PNCA party from the date of the last cash out of IE Imbalances to the date BPA returns the IE, in megawatt hours.

3.0 PROCEDURAL ISSUES

3.1 Waiver of Cross-Examination

The modified schedule that was accepted by the Hearing Officer at the prehearing conference required parties to provide notice by February 12, 2002, if they intended to contest BPA's proposed rates. None of the parties provided notice, thus the parties waived their opportunity to cross-examine BPA's witness.

3.2 Environmental Compliance

BPA has assessed the potential environmental effects of its rate proposal, as required by the National Environmental Policy Act (NEPA). Because this proposal is consistent with the business direction alternative adopted by BPA in its August 1995 ROD for the Business Plan Final Environmental Impact Statement (FEIS) (DOE/EIS-0183), and BPA evaluated the potential environmental effects of this type of proposal in the Business Plan FEIS, the decision to implement this rate proposal is tiered to the Business Plan ROD, as provided for in the Business Plan FEIS and ROD. The following is a record of this decision for the purposes of NEPA.

BPA has decided to adjust the rate for IE Imbalances under the PNCA. By linking the IE price to the market price for energy (instead of charging a fixed rate), BPA will be able to recover its costs in providing IE to another PNCA party. This rate adjustment is a direct application of the business direction alternative adopted in the Business Plan ROD, in which the BPA Administrator selected the Market-Driven alternative from the Business Plan FEIS. This FEIS evaluated the environmental effects of six alternatives: 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.

The Business Plan ROD identifies the factors considered by the Administrator in adopting the Market-Driven alternative. This alternative was adopted because, among other reasons, it allows BPA to: (1) recover costs through rates; (2) develop rates that meet customer needs for clarity and simplicity; and (3) continue to meet BPA's legal mandates. The rate adjustment for IE Imbalances under the PNCA is consistent with these aspects of the Market-Driven alternative because it will allow BPA to recover its costs in providing IE to another PNCA party by linking the IE rates to the market price

for energy, will use relatively simple formulas for calculating these rates, and will conform with the Northwest Power Act's requirement that BPA establish and revise its rates to recover its power costs. In addition, because this rate adjustment is being undertaken to respond to increased volatility in energy prices and the potential insufficiency of revenues to cover costs of providing IE, the rate adjustment is consistent with the decision made in the Business Plan ROD to mitigate potential revenue shortfalls and cost/revenue imbalances by implementing mitigation response strategies.

Among the environmental impacts evaluated in the Business Plan FEIS were those potentially resulting from various combinations of rate designs and rate levels for BPA's power services. The potential environmental effects from the rate adjustment would be similar to those examined in the Business Plan EIS. Therefore, BPA's adjustment of the rate for IE Imbalances under the PNCA is within the scope of the Market-Driven alternative that was evaluated in the Final Business Plan EIS and adopted in the ROD.