

2014 PNCA Rate Proceeding Initial Proposal

Testimony

PNC-14-E-BPA-01

July 2014



INDEX

TESTIMONY of
ROBERT J. DIFFELY

Witness for Bonneville Power Administration

SUBJECT:	PNCA INTERCHANGE ENERGY RATE	Page
Section 1:	Introduction and Purpose of Testimony.....	1
Section 2:	The PNCA.....	1
Section 2.1:	Proposed Changes to the PNCA Interchange Energy Rate	3
Attachment A	Replacement Formula for Interchange Energy	A-1

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1 TESTIMONY of

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3 Witness for Bonneville Power Administration

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5 **SUBJECT: PNCA INTERCHANGE ENERGY RATE**

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

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

8 *A. My name is Robert J. Diffely, and my qualifications are contained in PNC-14-Q-BPA-01.*

9 *Q. What is the purpose of your testimony?*

10 *A. The purpose of my testimony is to describe the proposed changes to the Interchange*
11 *Energy rate under the Pacific Northwest Coordination Agreement (PNCA).*

12 *Q. How is your testimony organized?*

13 *A. My testimony is divided into three sections. This section (Section 1) introduces and*
14 *generally describes the purpose of the rate case. Section 2 briefly describes the PNCA*
15 *and how Interchange Energy is addressed under the PNCA. Section 3 explains the*
16 *proposed change to the Interchange Energy rate and why it is necessary.*

17 **Section 2: The PNCA**

18 *Q. What is the PNCA?*

19 *A. The PNCA is an agreement for planned and coordinated operations among the utilities*
20 *and other entities that operate major electric generating facilities and systems in the*
21 *Pacific Northwest. The PNCA parties include five investor-owned utilities, five*
22 *consumer-owned utilities, three municipalities, the subsidiary of an aluminum producer,*
23 *the United States (acting through the Administrator of the Bonneville Power*
24 *Administration (BPA; the Division Engineer, North Pacific Division, U.S. Army Corps*
25 *of Engineers; and the Bureau of Reclamation), and the United States Entity for the*
26 *Columbia River Treaty.*

1 Q. *How are the coordinated operations achieved under the PNCA?*

2 A. Coordination is achieved by the exchange of energy and capacity among the various
3 PNCA parties. Annually, the PNCA parties develop detailed plans for operation of those
4 generating facilities that are submitted for coordination under the PNCA. For these
5 generating facilities, the aggregate firm load that can be served (known as Firm Load
6 Carrying Capability or FLCC) is calculated. Under the PNCA, each PNCA party
7 commits to make any excess of its coordinated resources over its FLCC available to any
8 other PNCA party that is deficit in relationship to its FLCC. Any such transfers of
9 capability are referred to as Interchange transactions.

10 Q. *How does an obligation for Interchange Energy arise under the PNCA?*

11 A. Water conditions may result in some PNCA parties having capability in excess of their
12 FLCCs, while concurrently other PNCA parties may be deficit with respect to their
13 FLCCs. Under these conditions, an imbalance may result between the Interchange
14 Energy delivered and received by certain PNCA parties. Additionally, because there is
15 no obligation to take Interchange Energy, some parties may elect not to take Interchange
16 Energy under the PNCA, while others may take it. In both instances, the exchange of
17 Interchange Energy may not net to zero. When the balance does not net to zero, the
18 PNCA party must pay for the Interchange Energy under the rate established in the PNCA.

19 Q. *How are payments for Interchange Energy addressed under the PNCA?*

20 A. A PNCA party owes an Interchange Energy charge when it receives more Interchange
21 Energy than it returns to that party. This imbalance is determined and “cashed out” at the
22 end of any operating year (July 31) in which the Coordinated System reservoirs have
23 refilled to at least 98 percent of capacity.

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1 *Q. What is the current rate for Interchange Energy under the PNCA?*

2 A. In the PNCA-02 rate case, the Dow Jones Mid-Columbia Firm Index (On-Peak and Off-
3 Peak) was chosen to price the initial deliveries of Interchange Energy under the PNCA.

4 **Section 2.1: Proposed Changes to the PNCA Interchange Energy Rate**

5 *Q. Why is BPA proposing to replace the Dow Jones Mid-Columbia Firm Index?*

6 A. The Dow Jones Mid-Columbia Firm Index is no longer published. As a result, a
7 replacement index is needed to price the initial deliveries of Interchange Energy.

8 *Q. What is the proposed replacement for the Dow Jones Index?*

9 A. BPA is proposing to replace the Dow Jones Index with the Intercontinental Energy
10 Exchange Mid-C On Peak and Off Peak Index (ICE Index).

11 *Q. Why do you believe that the ICE Index is a suitable substitute for the Dow Jones Index?*

12 A. When the Dow Jones was initially proposed as the mechanism to price the energy during
13 PNCA-02, it was chosen because it was a published source that generally reflected a
14 good representation of energy prices in the Pacific Northwest. (See Administrator's
15 Record of Decision, PNCA-02-A-02 at 7.) I understand that since the Dow Jones ceased
16 to publish the Mid-C index, the ICE Index is now generally recognized in the energy
17 industry as a good representation of power prices in the Pacific Northwest.

18 *Q. Is BPA proposing any other changes to the Interchange Energy Rate?*

19 A. Yes. BPA is proposing to set a floor of \$0.00/MWh for rate.

20 *Q. Why is BPA proposing to set a floor for the Interchange Energy Rate?*

21 A. The floor is to address the possibility that a PNCA party requests Interchange Energy at a
22 time when prices on the ICE Index are negative. As previously explained, under the
23 PNCA, each PNCA party makes any excess of its coordinated resources over its FLCC
24 available to any other PNCA party that is deficit. Without a floor, if a PNCA party were
25 to receive Interchange Energy when prices are negative, it would mean the delivering
26 party would have to pay the deficit PNCA party to take the energy. BPA believes that

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this is inconsistent with the underlying intent providing Interchange Energy under the PNCA. As a result, BPA Staff is proposing to place a floor of \$0.00/MWh on the price of Interchange Energy. Such a floor will avoid the perverse result of forcing a party to pay another to take the energy.

Q. How will these changes be reflected?

A. Attachment A to this testimony is a redlined version of the proposed changes to the testimony. Once adopted and the necessary regulatory approvals granted, it will be incorporated into the PNCA.

Q. Does this conclude your testimony?

A. Yes.

Attachment A

Replacement Formula for
Interchange Energy

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1 The following is proposed for the replacement of charges for the delivery of Interchange Energy.
2 The actual changes from the current version are identified as redline replacements. The balance
3 of the three formulas remains the same.

4

5 **A. Initial Deliveries of IE**

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

7

8 **Formula 1**

9
$$C = (ID_{ON} * I_{ON}) + (ID_{OFF} * I_{OFF})$$

10 Where for each day

11 C = Daily charge for Initial Deliveries of ID in Dollars

12 ID_{ON} = The Initial Deliveries of IE made during the day during On Peak hours.

13 I_{ON} = The Intercontinental Exchange Mid-C On Peak Index hours in dollars per megawatt hour,

14 but I_{ON} shall not be less than \$0.00 per megawatt hour.

15 ID_{OFF} = The Initial Deliveries of IE made during the day during Off Peak hours.

16 I_{OFF} = The Intercontinental Exchange Mid-C Off Peak Index hours in dollars per megawatt hour,

17 but I_{ON} shall not be less than \$0.00 per megawatt hour.

18 Initial Deliveries of IE on Sundays and on NERC (or its successor organization(s)) recognized
19 holidays are priced at the Off Peak rate.

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1 **B. Return of IE**

2 This charge applies to the return of ID that was initially delivered to BPA from another PNCA
3 party. The charge is as follows:

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5 **Formula 2**

6 $C_{PARTY} = IER_{PARTY} * R_{PARTY}$

7 Where for each PNCA Party for a given day:

8 C_{PARTY} = Daily charge for the return of such PNCA party's IE in dollars.

9 IER_{PARTY} = The quantity of IE returned to a PNCA party on a day in megawatt hours.

10 R_{PARTY} = the applicable IE return rate for the PNCA party for the given day as calculated in in
11 Formula 3 below in dollars per megawatt hour.

12
13 **Formula 3**

14 $R_{PARTY} = \sum C_{PARTY} \div \sum IER_{PARTY}$

15 Where for each PNCA Party for a given day:

16 R_{PARTY} = the IE return rate calculated for the PNCA party as of the given day in dollars per
17 megawatt hour.

18 $\sum C_{PARTY}$ = all payments received by BPA from such PNCA party from the date of the last cash
19 out of IE Imbalances to the date BPA returns the ID, in dollars.

20 $\sum IER_{PARTY}$ = the net of all IE BPA has received from such PNCA party and the IE returned by
21 BPA to such PNCA party from the date of the last cash out of IE Imbalances to the date BPA
22 returns the IE, in megawatt hours.

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