

# **2012 BPA Rate Case Customer Workshop**

**Tier 1 System Firm Critical Output  
September 14, 2010**



# Edits to Table 3.4 of the TRM



## Overview

- A recent review of BPA's *Tiered Rate Methodology* (TRM), Table 3.4 (Designated BPA System Obligations), revealed the need to edit sections of the U.S. Bureau of Reclamation (Reclamation) loads (rows 2-13 of Table 3.4).
- These edits are for clarification only and do not represent any new "Designated BPA System Obligations" as described in the TRM.
- All of these loads have congressional authorization to receive power as part of a Reclamation project.



## Overview (continued)

- The edits made include:
  - **Corrected contract numbers:** Some of the contracts cited in the original Table 3.4 are third-party wheeling agreements rather than the implementing agreements that establish BPA's obligation to serve the load. The edits clean up the contract number references to show only contracts that describe BPA's obligation to serve load.
  - **Addition of the Umatilla Basin Project:** The Umatilla Basin Project load was not separately listed in the original Table 3.4. It is an existing BPA obligation and is therefore included in the edited Table 3.4.
  - **Updated groupings:** The initial organization of the system obligations did not match up with the organizational structure used in different workgroups within BPA. In order to address these inconsistencies, the workgroups worked on a universal method to categorize these loads. The revised table reflects this new method.



## Comparison of Original and Edited Tables

Original Table 3.4

1	Obligation	Contract Number	Expiration Date	Discretionary Contract
2	BPA to BRCJ	14-03-49151	8/23/2024	
3	BPA to BRCJ	14-03-17506	12/31/2023	
4	BPA to BRRCR	14-03-73152	Mutually agreed	
5	BPA to BREG	14-03-49151	8/23/2024	
6	BPA to BRGC	14-03-001-12160	6/30/2017	
7	BPA to BROP	14-03-79239	Mutually agreed	
8	BPA to BRSI	14-03-49151	8/23/2024	
9	BPA to BRSID	14-03-99106	Mutually agreed	
10	BPA to BRSV	14-03-63656	Mutually agreed	
11	BPA to BRTD	14-03-32210	Mutually agreed	
12	BPA to BRTV	14-03-49151	8/23/2024	
13	BPA to BRYK	00PB-12132	9/30/2011 (year to year)	



## Comparison of Original and Edited Tables (continued)

- Edited Table 3.4

1	Obligation	Contract Number(s)	Expiration Date(s)	Discretionary Contract
2	USBR's Chief Joseph Project	14-03-17506; 14-03-49151	12/31/23; 8/23/24	
3	USBR's Columbia Basin Project	lbp-4512; 14-03-001-12160	Under Review	
4	USBR's Crooked River Project	14-03-73152	None	
5	USBR's Owyhee Project	EW-78-Y-83-00019	None	
6	USBR's Rathdrum Prairie Project	14-03-49151	8/23/24	
7	USBR's Southern Idaho Projects (Minidoka Project, Palisades Project, and Michaud Flats Project)	EW-78-Y-83-00019	None	
8	USBR's Spokane Indian Development Project	14-03-49151	8/23/24	
9	USBR's Spokane Valley Project	14-03-63656	None	
10	USBR's Reclamation Project	14-03-32210	None	
11	USBR's Tualatin Project	14-03-49151	8/23/24	
12	USBR's Umatilla Basin Project	10GS-75345 (draft)	2030	
13	USBR's Yakima Project	DE-MS79-88BP92512	None	



# Treatment of Slice Transmission Loss Returns



## T1SFCO Study Treatment of Slice Transmission Loss Returns

- **Similar to the present Subscription Slice, the RD Slice customers are responsible for transmission losses associated with the delivery of their Slice Output Energy. When BPA makes Slice Output Energy available it has not been reduced for transmission losses.**
- **In accordance with the RD Slice/Block contract, BPA delivers power to the BPA bus bar and is responsible for any associated transmission losses to this point. These transmission losses are Tier 1 System Obligations.**
- **Slice customers take delivery of Slice Output Energy at the bus bar and are responsible for transmission losses to the next delivery point. This is done by returning the transmission losses as determined by Transmission Services.**
- **To be in alignment with the Slice/Block contract, the Tier 1 System Firm Critical Output study needs to reflect these transmission loss returns. This is shown in more detail in the following slides.**



# Tier 1 System Firm Critical Output Updates



# Federal System Tier 1 System Firm Critical Output

**Table 3.1: Federal System Hydro Generation (Study 69)  
Energy in aMW**

1.	Regulated Hydro	2012	2013	Average
2.	Albeni Falls	26.5	26.6	26.5
3.	Bonneville Hydro	402.3	402.0	402.2
4.	Chief Joseph Hydro	1,074.3	1,074.3	1,074.3
5.	Dworshak Hydro	147.8	148.1	148.0
6.	Grand Coulee Hydro	1,860.8	1,861.1	1,860.9
7.	Hungry Horse	89.4	89.4	89.4
8.	Ice Harbor Hydro	166.1	166.2	166.1
9.	John Day Hydro	801.5	801.4	801.5
10.	Libby	176.9	177.2	177.1
11.	Little Goose Hydro	190.3	190.5	190.4
12.	Lower Granite Hydro	188.4	188.5	188.5
13.	Lower Monumental Hydro	188.4	188.6	188.5
14.	Mc Nary Hydro	489.6	488.4	489.0
15.	The Dalles Hydro	602.1	601.9	602.0



# Federal System Tier 1 System Firm Critical Output

**Table 3.1: Federal System Hydro Generation (Study 69) (Continued)**  
**Energy in aMW**

16.	Independent Hydro	2012	2013	Average
17.	Anderson Ranch	14.6	14.7	14.7
18.	Big Cliff	10.2	10.3	10.3
19.	Black Canyon	8.1	8.1	8.1
20.	Boise River Diversion	1.3	1.3	1.3
21.	Bonneville Fishway	21.4	21.4	21.4
22.	Chandler	8.6	8.6	8.6
23.	Cougar	16.5	16.6	16.6
24.	Cowlitz Falls	26.2	26.2	26.2
25.	Detroit	41.9	41.9	41.9
26.	Dexter	9.2	9.2	9.2
27.	Foster	12.5	12.5	12.5
28.	Green Peter	27.5	27.6	27.6
29.	Green Springs - USBR	5.8	5.8	5.8
30.	Hills Creek	18.0	18.0	18.0
31.	Idaho Falls - Upper, City, and Lower Plants	14.0	14.0	14.0
32.	Lookout Point	36.3	36.4	36.4
33.	Lost Creek	28.6	28.7	28.6
34.	Minidoka	16.4	16.4	16.4
35.	Palisades	74.1	74.2	74.2
36.	Roza	7.9	7.9	7.9
<b>37.</b>	<b>Total Federal System Hydro Generation</b>	<b>8,816.0</b>	<b>8,817.0</b>	<b>8,816.5</b>



# Federal System Tier 1 System Firm Critical Output

**Table 3.2: Designated Non-Federally Owned Resources (Study 69)  
Energy in aMW**

1.	Project	2012	2013	Average
2.	Ashland Solar Project	0.0	0.0	0.0
3.	Columbia Generating Station	1,030.0	877.6	953.8
4.	Condon Wind Project	10.6	10.6	10.6
5.	Dworshak/Clearwater Small Hydropower	2.6	2.6	2.6
6.	Elwha Hydro	2.1	0.0	1.0
7.	Foote Creek 1	5.1	5.1	5.1
8.	Foote Creek 2	0.4	0.4	0.4
9.	Foote Creek 4	4.1	4.1	4.1
10.	Fourmile Hill Geothermal (Not included)	0.0	0.0	0.0
11.	Georgia-Pacific Paper (Wauna)	19.2	19.2	19.2
12.	Glines Canyon Hydro	4.8	0.0	2.4
13.	Klondike I	7.7	7.7	7.7
14.	Stateline Wind Project	21.9	21.9	21.9
15.	White Bluffs Solar	0.0	0.0	0.0
<b>16.</b>	<b>Total Designated Non-Federally Owned Resources</b>	<b>1,108.5</b>	<b>949.2</b>	<b>1,028.9</b>



# Federal System Tier 1 System Firm Critical Output

**Table 3.3: Designated BPA Contract Purchases (Study 69)  
Energy in aMW**

1.	Contract Purchases	Contract #	2012	2013	Average
2.	Priest Rapids CER for Canada	97PB-10099	30.0	29.4	29.7
3.	Rock Island #1 CER for Canada	97PB-10102	11.3	11.1	11.2
4.	Rock Island #2 CER for Canada	97PB-10102	7.2	7.0	7.1
5.	Rock Reach CER for Canada	97PB-10103	38.5	37.7	38.1
6.	Wanapum CER for Canada	97PB-10100	29.0	28.5	28.8
7.	Wells CER for Canada	97PB-10101	24.6	24.1	24.4
8.	BCHP to BPA PwrS	99PB-22685	1.0	1.0	1.0
9.	PASA to BPA Pk Repl	94BP-93658	1.1	1.1	1.1
10.	PASA to BPA S/N/X	94BP-93658	0.4	0.4	0.4
11.	PASA to BPA Xchg Nrg	94BP-93658	1.9	1.9	1.9
12.	PPL to BPA So Idaho	89BP-92524	160.2	159.9	160.0
13.	RVSD to BPA Pk Repl	94BP-93958	4.8	4.9	4.9
14.	RVSD to BPA Seas Xchg	94BP-93958	4.3	4.3	4.3
15.	RVSD to BPA Xchg Nrg	94BP-93958	7.3	7.3	7.3
16.	SPP to BPA Harney Wells	88BP-92436	60.0	60.0	60.0
17.	PPL to BPA SNX (Spring Return)	94BP-94332	0.0	0.0	0.0
18.	PPL to BPA SPX (Summer Return)	94BP-94332	5.7	5.7	5.7
<b>19.</b>	<b>Total Designated BPA Contract Purchases</b>		<b>387.3</b>	<b>384.6</b>	<b>385.9</b>



# Federal System Tier 1 System Firm Critical Output

**Table 3.4: Designated BPA System Obligations (Study 69)**

Energy in aMW

1.	System Obligation	Contract #	2012	2013	Average
2.	BPA to BRCJ Chief Joseph	14-03-17506; 14-03-49151	9.2	9.2	9.2
3.	BPA to BRCB Columbia Basin Project	lbp-4512; 14-03-001-12160	136.8	137.1	137.0
4.	BPA to BRCR Crooked River Project	14-03-73152	1.1	1.1	1.1
5.	BPA to BROP Owyhee Project	EW-78-Y-83-00019	3.4	3.4	3.4
6.	BPA to BRRP Rathdrum Prairie Project	14-03-49151	0.7	0.7	0.7
7.	BPA to BRSID Southern Idaho Projects	EW-78-Y-83-00019	20.3	20.3	20.3
8.	BPA to BRSIN Spokane Indian Development	14-03-49151	0.3	0.3	0.3
9.	BPA to BRSV Spokane Valley	14-03-63656	0.9	0.9	0.9
10.	BPA to BRTD The Dallas Reclamation Project	14-03-32210	2.0	2.0	2.0
11.	BPA to BRTV Tualatin Project	14-03-49151	0.6	0.6	0.6
12.	BPA to BRUB Umatilla Basin Project	10GS-75345 (draft)	0.0	0.0	0.0
13.	BPA to BRYK Yakima Project	DE-MS79-88BP92591	1.7	1.7	1.7
12.	BPA To BCHA Can Ent	99EO-40003	522.3	504.7	513.5
13.	BPA to BHEC 2012PSC	97PB-10051	5.2	5.2	5.2
14.	BPA to PASA C/N/X	94BP-93658	1.1	1.1	1.1
15.	BPA to PASA S/N/X	94BP-93658	0.4	0.4	0.4
16.	BPA to RVSD C/N/X	94BP-93958	4.8	4.9	4.9
17.	BPA to RVSD Seas Xchg	94BP-93958	4.3	4.3	4.3
18.	BPA to SPP Pwr S	88BP-92436	60.0	60.0	60.0
19.	Federal Intertie Losses (Calculated: 3.0% of Intertie Sales in Table 3.4 lines 14-17)	n/a	0.3	0.3	0.3
20.	BPA to AVWP WP3 S	85BP-92186	41.7	41.6	41.6
21.	BPA to PPL SNX (Spring Delivery)	94BP-94332	0.0	0.0	0.0
22.	BPA to PPL SPX (Summer Delivery)	94BP-94332	5.7	5.7	5.7
23.	BPA to PPL SoID	89BP-92524	160.2	159.9	160.0
24.	BPA to PSE WP3 S	85BP-92185	41.7	41.6	41.6
25.	BPAP to BPAT (Dittmer/Substation Service)	09PB-12128	9.1	9.1	9.1
26.	Federal Power Trans. Losses (Calculated: 2.82% of totals in Tables 3.1, 3.2, & 3.3)	n/a	234.1	229.5	231.8
27.	Transmission Returns (Slice) (27.027%*1.9%* sum of Tables 3.1, 3.2, & 3.3 less sum of Table 3.4 lines 1-25)	n/a	-36.1	-35.4	-35.8
<b>28.</b>	<b>Total Designated System Obligations</b>		<b>1,231.7</b>	<b>1,210.2</b>	<b>1,221.0</b>



# Federal System Tier 1 System Firm Critical Output

## Federal Tier 1 System Firm Critical Output (Study 69) Energy in aMW

<b>T1SFCO Projection (Study 69) Energy in aMW</b>	<b>2012</b>	<b>2013</b>	<b>Average</b>
<i>Table 3.1: Total Federal System Hydro Generation</i>	6,804	6,804	6,804
<i>Table 3.2: Total Designated Non-Federally Owned Resources</i>	1,109	949	1,029
<i>Table 3.3: Total Designated BPA Contract Purchases</i>	387	385	386
<i>Table 3.4: Total Designated System Obligations</i>	(1232)	(1210)	(1221)
<b>Federal Tier 1 System Firm Critical Output</b>	<b>7,068</b>	<b>6,928</b>	<b>6,998</b>



# Cost Allocation Treatment



## Cost Allocation Treatment for Slice and Non-Slice Transmission Losses

- Slice-resource product is purchased at the generator bus bar; the Slice customer 'pays' for network losses by returning network losses to the BPA system.
- Non-Slice products (load following and Slice-block) are delivered to the customer; Network losses associated with these deliveries are included in the costs allocated to the Composite Cost Pool.
- Without an adjustment, Slice customers would pay for network losses (through return deliveries) on their own Slice product, plus their Slice share of non-Slice losses.
  - This would charge network losses associated with non-Slice products to the Slice product.
- To circumvent this, a credit to the Composite cost pool, and associated charge to the Non-Slice cost pool will be developed.
  - Network losses will be computed as 1.9 percent of non-Slice Tier 1 loads valued at the Tier 1 PF Equivalent Rate (captures the allocated unit cost on Tier 1 energy).
  - The credit is applied to the Composite pool, and the cost charged to Non-Slice cost pool.

