

2007 Wholesale Power Rate Case Initial Proposal

**REBUTTAL TESTIMONY
LOAD RESOURCE STUDY**

March 2006

WP-07-E-BPA-32



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REBUTTAL TESTIMONY OF

JON A. HIRSCH, TIMOTHY C. MISLEY, JANET ROSS KLIPPSTEIN,
HARRY CLARK, AND ROGER SCHIEWE

Witnesses for Bonneville Power Administration

SUBJECT: LOAD RESOURCE STUDY

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Section 1. Introduction and Purpose of Testimony

Q. *Would you state your names?*

A. My name is Jon A. Hirsch, and I am employed by Bonneville Power Administration.

My qualifications are contained in WP-07-Q-BPA-16.

A. My name is Timothy C. Misley. My qualifications are contained in WP-07-Q-BPA-41.

A. My name is Janet Ross Klippstein. My qualifications are contained in

WP-07-Q-BPA-25.

A. My name is Harry Clark. My qualifications are contained in WP-07-Q-BPA-09.

A. My name is Roger Schiewe. My qualifications are contained in WP-07-Q-BPA-48.

Q. Have you previously submitted testimony in this proceeding?

A. Yes, we submitted direct testimony identified as exhibit WP-07-E-BPA-09. Our direct testimony, as well as this rebuttal testimony, is submitted on behalf of BPA.

Q. What is the purpose of this testimony?

A. In this testimony we rebut certain arguments and assertions contained in the direct testimony of the Columbia River Inter-tribal Fish Commission, Nez Perce Tribe and Yakama Nation (Tribes), Sheets, *et al.*, WP-07-E-CR/NZ/YA-01 and the direct testimony of the Joint Customer Group, Brattebo, *et al.*, WP-07-E-JP9-03. We will offer reasons why some of the recommendations contained in that testimony should not be adopted.

1 **Section 2. Resources**

2 *Q. The Tribes asserts that BPA should assume the Court-ordered 2006 operations in its base
3 assumptions for the rate period, Sheets, et al., WP-07-E-CR/NZ/YA-01, page 15, lines 10
4 through 11. Please respond.*

5 A. BPA will incorporate non-power requirements (as they may be agreed upon at the time
6 BPA makes the final hydro-regulation studies) resulting from the 2004 Biological
7 Opinion remand process. Those may, or may not, include spring and summer spill
8 levels as ordered by the court for FYs 2005 and 2006 operations. It should be noted the
9 proposed WP-07 rate design includes a rate adjustment mechanism that enables BPA to
10 adjust for costs of additional non-power operations requirements resulting from
11 litigation not already included in the final study.

12 *Q. The Joint Customer Group (JP9-03) does not agree with BPA's forecast of the Columbia
13 Generating Station (CGS) output of 1,000 aMW during the non-maintenance months in
14 determining the load/resource balance. Brattebo, et al., WP-07-E-JP9-03, page 16, lines
15 8 through 10. The Joint Customers recommend that BPA use different CGS generation
16 estimates for non-maintenance months, based on a 6-year average (2000 through 2006)
17 of actual CGS generation estimates from non-outage months. This six-year average is
18 1,031 aMW. Id. page 18, lines 1 through 5. Please respond.*

19 A. BPA does not agree with the Joint Customers' recommendation for several reasons. The
20 output from the CGS project varies monthly due to forced outages, periodic reductions
21 in generation and maintenance activities to help prevent unanticipated outages,
22 operational limitations that may be due to equipment problems or weather conditions
23 and scheduled maintenance. BPA planning cannot anticipate unforeseen outages.
24 BPA's forecast of CGS generation attempts to capture the expected annual average
25 generation of the project for use in planning. Regardless of how many years of actual
26 CGS generation used in producing the CGS generation forecast, BPA believes the

1 current forecast captures the expected generation on an annual average basis. The
2 reasons were first presented in BPA's Data Response to Data Request BC-BPA-004 and
3 will be further clarified below.

4 First, the CGS historical generation for 2000 through 2005 was associated with
5 transitioning CGS from a 12-month, to an 18-month, and then to a 24-month refueling
6 cycle. Table 1.1 compares the CGS actual generation and specific CGS generation
7 forecasts from prior Rate Case studies. The CGS generation forecasts in these years have
8 changed over time to incorporate real-time operational experience, scheduled or
9 unscheduled maintenance changes, reliability upgrades, and other events.

10 The years of 2000 and 2001 were the CGS transition years from a 12-month to
11 18-month refueling cycle and would not reflect how CGS may operate in the future under
12 a 24-month refueling cycle. For 2000 and 2001, the 1996 Final Rate Case Proposal,
13 completed in June 1996, estimated CGS generation in non-maintenance months at
14 1,010 aMW and 1,054 aMW, respectively. The averaged annual CGS actual generation
15 during this time period was greater than the 1996 Final Rate Case Proposal forecast by
16 24 aMW.

17 For 2002 through 2005, the 2002 Final Rate Case Proposal, completed in
18 May 2000, CGS generation estimates incorporated additional years of performance and
19 updates in reliability information to forecast the CGS generation at 1,000 aMW in non-
20 maintenance months. The CGS refueling years of 2003 and 2005, show the averaged
21 annual actual CGS generation forecast was lower than the CGS generation forecast by
22 9 aMW. In 2002 and 2004, the first full years of the 24-month maintenance schedule, the
23 averaged annual CGS actual generation was greater than the forecast by 62 aMW. It
24 should be noted that 2002 and 2004 had the highest generating output on record in the
25 22 years of CGS operation. Since there are only 4 historical observations that encompass
26

1 the 24-month refueling cycle, it would be difficult for BPA to base a long-term CGS
2 generation forecast on that data.

3

4 **Table 1.1**
Annual CGS Generation Comparison
Actual verses Rate Case Forecast

5

Fiscal Year	Actual CGS Generation		Forecasted CGS Generation	Difference Actual Less Forecast
	mwh	aMW	aMW	
2000	7,779,830	886	853 ^{1/}	33
2001	7,820,814	893	878 ^{1/}	15
2002	9,025,057	1030	1000 ^{2/}	30
2003	7,588,732	866	875 ^{2/}	-9
2004	9,607,963	1094	1000 ^{2/}	94
2005	7,597,008	867	875 ^{2/}	-8

12 ^{1/} 1996 Final Power Rate Proposal, Loads and Resources Study
13 Documentation, Volume 2, Part 1 of 2, June 1996

14 ^{2/} 2002 Final Power Rate Proposal, Loads and Resources Study
Documentation, May 2000

15 For the WP-07 Initial Proposal, BPA estimated CGS generation in non-
16 maintenance months at 1,000 aMW for 2007 through 2009. During the 2007 through
17 2009 period, CGS is expected to have two refueling outage years and one non-outage
18 year similar to those experienced between 2003 and 2005. BPA's CGS forecast of
19 1,000 aMW in non-maintenance refueling outage months tracked closely to the actual
20 annual CGS generation for the refueling years in 2003 and 2005. The CGS generation
21 forecast for non-outage years was lower than the actual CGS generation for 2002 and
22 2004. However, forced outages and unexpected or preventative maintenance activities
23 were minimal during this timeframe. Actual generation in non-maintenance months can
24 vary between 500 aMW and 1,100 aMW due to forced outages, preventative maintenance
25 activities, and weather conditions, and the potential risks associated with extended
fueling outages and forced outages associated with restarts. At this time, BPA feels it is

1 also inconsistent to forecast the monthly CGS generation differently in refueling and non-
2 refueling years, especially since BPA and Energy Northwest (EN) have only 4 years of
3 actual experience with the 24-month refueling schedule (2002 through 2005).

4 Based on recent history, BPA believes the forecast of 1,000 aMW for CGS in
5 non-maintenance months provides an accurate, though slightly conservative estimate of
6 the annual generation potential for CGS. The annual CGS generation levels are
7 consistent between refueling and non-maintenance outage years and are prudent for long-
8 term planning and ratemaking purposes. As EN and BPA gain experience with the
9 24-month CGS maintenance schedule and realize reliability and maintenance upgrade
10 benefits, the generating output of CGS will be adjusted to account for any improvements
11 or degradation in plan performance.

12 Q. *Does this conclude your testimony?*

13 A. Yes.

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