

# 2010 Rate Case Power Rates (WP-10) Customer Workshop

December 3, 2008



# Revenue Requirement Update



# Revenue Requirement

- **Updates since the October 28 Workshop**
  - Final IPR decisions, both capital and expense, have been fully incorporated.
  - Revised repayment study
    - The study used in October 28 workshop was flawed.
      - It did not include \$108 million of amortization that BPA committed to with the advanced refunding of EN bonds in the beginning of Debt Optimization, so amortization was significantly lower than that scheduled in 2007-2009.
      - The result of correcting this is that minimum required net revenues are substantially higher than previously expected rendering moot the amortization shift discussed in October.
    - Interest rates from BPA's latest forecast have been applied to all projected debt issuances.
- **What will change for the Initial Proposal?**
  - The revenue requirement will be synchronized with forecasted power purchases and augmentation purchases. The income statement currently displays data from the 2007 supplemental proposal.



**GENERATION REVENUE REQUIREMENT  
INCOME STATEMENT  
(\$thousands)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	<b>2010</b>	<b>2011</b>	<b>Average</b>	<b>2009</b>	<b>Change (C less D)</b>
1 OPERATING EXPENSES					
2 POWER SYSTEM GENERATION RESOURCES					
3 OPERATING GENERATION	581,789	693,804	637,797	586,822	50,975
4 OPERATING GENERATION SETTLEMENT PAYMENT	21,328	21,754	21,541	20,909	632
5 NON-OPERATING GENERATION	2,618	2,728	2,673	2,904	(231)
6 CONTRACTED POWER PURCHASES	150,716	133,485	142,101	131,548	10,553
7 AUGMENTATION POWER PURCHASES	160,756	278,070	219,413	161,121	58,292
8 EXCHANGES & SETTLEMENTS	2,421	1,440	1,931	2,000	(69)
9 RENEWABLE GENERATION	45,588	45,938	45,763	43,955	1,808
10 GENERATION CONSERVATION	55,088	54,722	54,905	48,526	6,379
11 CONSERVATION AND RENEWABLE DISCOUNT	32,000	32,000	32,000	32,000	0
12 PS TRANSMISSION ACQUISITION AND ANCILLARY SERVICES	175,418	176,068	175,743	175,098	645
13 POWER NON-GENERATION OPERATIONS	82,793	86,650	84,721	76,024	8,697
14 F&W /U SF&W /PLANNING COUNCIL/ENVIRONMENTAL REQUIREMENTS	263,541	270,618	267,079	229,438	37,641
15 GENERAL AND ADMINISTRATIVE/SHARED SERVICES	67,475	68,341	67,908	60,271	7,637
16 OTHER INCOME, EXPENSES AND ADJUSTMENTS	1,800	3,600	2,700	3,600	(900)
17 NON-FEDERAL DEBT SERVICE	556,052	576,365	566,209	563,720	2,489
18 DEPRECIATION	118,616	119,920	119,268	113,877	5,391
19 AMORTIZATION	79,118	86,989	83,053	74,703	8,350
20 TOTAL OPERATING EXPENSES	2,397,116	2,652,491	2,524,805	2,326,515	198,290
21 INTEREST EXPENSE:					
22 INTEREST					
23 APPROPRIATED FUNDS	222,131	212,267	217,199	224,695	(7,496)
24 CAPITALIZATION ADJUSTMENT	(45,937)	(45,937)	(45,937)	(45,937)	0
25 BONDS ISSUED TO U.S. TREASURY	49,849	68,317	59,083	51,202	7,881
26 AMORTIZATION OF CAPITALIZED BOND PREMIUMS	185	185	185	185	0
27 ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION	(10,800)	(10,200)	(10,500)	(11,400)	900
28 INTEREST CREDIT	(46,464)	(46,300)	(46,382)	(57,900)	11,518
29 NET INTEREST EXPENSE	168,964	178,332	173,648	160,845	12,803
					0
30 TOTAL EXPENSES	2,566,080	2,830,823	2,698,453	2,487,360	211,093
31 MINIMUM REQUIRED NET REVENUES 1/	68,806	54,255	61,531	0	61,531
32 PLANNED NET REVENUES FOR RISK					
33 PLANNED NET REVENUES, TOTAL (31+32)	68,806	54,255	61,531	0	61,531
34 TOTAL REVENUE REQUIREMENT	2,634,887	2,885,079	2,759,984	2,487,360	272,624
1/ PLANNED AMORTIZATION IRRIGATION ASSISTANCE	217,264 0	211,888 0	214,576 0	103,065 7,279	111,511 (7,279)
WP-07 PRE-AMORTIZATION SHIFT				185,065	



# Gas Price Forecast Update

December 3, 2008



# Natural Gas Mid-Term Outlook (2010, 2011)

## Economic Uncertainty and Natural Gas Fundamentals

- **Natural gas demand**
  - Impacts by sector
  - Alternatives and substitutes
- **Natural gas supply**
  - Credit crunch impacts on production
  - Unconventional sources of supply
  - LNG

## The Price Outlook and External Forecasts

- In uncertain and volatile times, forecasts can lag current events
- BPA is especially concerned about downside risks and forecast lag
- We evaluated low and high price scenarios of about \$5.00 and \$11.00 for 2010 and 2011
- BPA is currently weighting our outlook to the low side based on economics and natural gas market fundamentals
- Our current outlook for Henry Hub natural gas prices falls between the low-\$7.00 range and the low-\$6.00 range.



## ASCs and REP Benefits

- Rate Period ASCs (FYs 2010-11)
- The Section 7(b)(2) Rate Test and Outyear REP Benefits (FYs 2012-15)



# FY 2010-2011 ASC Forecast

## ■ Assumptions for Initial Proposal

- FY 2010-11 Utility ASC filings with corrections for known errors.
- Inflation rate, market price and natural gas price forecast used in BPA initial proposal also used in ASC forecast.
- PF rate will be updated to most recent estimate available.

## ■ Assumptions for Final Proposal

- Use FY 2010-11 BPA Final ASC Reports determinations which will be made in a separate process outside the rate case.





## 7(b)(2) Testimony

DIRECT TESTIMONY OF JOHN D. CARR, SHIRLEY R. MELTON AND DAVID J. ARMSTRONG  
Witnesses for the Bonneville Power Administration

b2-84-E-BPA-02, pages 34-36

Q. How will the two sets of five year rate projections actually be compared?

A. We propose to discount the rates for each year of the five-year rate test periods back to the test year of the relevant rate proposal. The five discounted rates for each year will be averaged. The two averages, one for the program case and one for the 7(b)(2) case, will then be compared. If the average 7(b)(2) case rate is significantly (one-tenth of a mill or more) less than the program case rate, the section 7(b)(2) rate test will be deemed to "trigger."



## 7(b)(2) Testimony (continued)

- Q. What is the rationale behind discounting each year's rate projection back to the test year for the relevant rate case?
- A. Section 7(b)(2) requires that the rates for 7(b)(2) customers be compared over a five year period, but does not specify the method. It is possible that the 7(b)(2) rate could be higher than the PF power rate in one or more years of the period and lower in others. Therefore, the weighting that is applied to the rate projections for each year can significantly affect the result of the rate test. All five years could be weighted equally by computing a simple average of the rates over the five-year period for each case. Although this method would be simple to apply, BPA believes that the comparison of the program case and the 7(b)(2) case rate projections should consider the time value of money. That is, if the rate in the 7(b)(2) case exceeds the rate in the program case in a given year, the differential is economically less harmful to the 7(b)(2) customers the further into the future it appears due to the time value of money. Therefore, BPA proposes to discount each set of rate projections back to the relevant rate case test year for comparison. This method will also simplify the determination of the amount to be reallocated in the test year, as described below.



## 7(b)(2) Testimony (continued)

- Q. At what rate will the five-year rate projections be discounted?
- A. BPA proposes to discount the projected future rates at BPA's projected future borrowing rate for each particular year. BPA's borrowing rate is projected over twenty years for each BPA rate case, and so is readily available. It is logical to use BPA's borrowing rate, since BPA could theoretically borrow the money in the test year to reimburse the 7(b)(2) customers for the five-year section 7(b)(2) rate test differential. The value to BPA of money over time is thus the economically correct value for the rate differential over time.



# Section 7(b)(2) Rate Test and Outyear REP Benefits

<b>Case 0</b>							
<b>Base Case -- 2009 Final Proposal</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	54.53	54.83	54.89	55.03	54.87	
Discount factor	0.9386	0.8790	0.8227	0.7700	0.7214		<b>PF Exch</b>
Program PF	34.48	35.52	37.66	36.56	37.70		47.54
Applicable 7(g) Costs	-1.47	-1.67	-1.75	-1.67	-1.76		<b>PF Pref</b>
Adjusted PF	33.01	33.85	35.91	34.89	35.94	34.72	26.90
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.43	9.38	8.38	10.38	9.68	9.85	
Discounted Adjusted PF	30.98	29.75	29.54	26.87	25.93	28.61	
Discounted 7b2 Case PF	20.25	21.51	22.65	18.87	18.94	20.44	<b>Trigger</b>
Trigger	10.73	8.24	6.89	8.00	6.99	8.17	8.2
Net REP Benefits							266,799
<b>Case 1</b>							
<b>ASCs Escalated at Discount Rate / Trigger Discounted at Borrowing Rate</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	58.80	62.82	67.12	71.64	63.09	
Discount factor	0.9386	0.8790	0.8227	0.7700	0.7214		<b>PF Exch</b>
Program PF	35.17	37.69	41.13	41.35	43.99		51.13
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	33.70	36.02	39.37	39.66	42.20	38.19	24.89
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	12.12	11.55	11.84	15.15	15.94	13.32	
Discounted Adjusted PF	31.63	31.66	32.39	30.54	30.44	31.33	
Discounted 7b2 Case PF	20.25	21.51	22.65	18.87	18.94	20.44	<b>Trigger</b>
Trigger	11.38	10.15	9.74	11.67	11.50	10.89	10.9
Net REP Benefits							139,533



# Section 7(b)(2) Rate Test and Outyear REP Benefits

<b>Case 2</b>							
<b>ASCs Escalated at Inflation Rate / Trigger Discounted at Borrowing Rate</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	56.44	57.85	59.30	60.78	57.89	
Discount factor	0.9386	0.8790	0.8227	0.7700	0.7214		<b>PF Exch</b>
Program PF	34.71	36.40	38.90	38.20	39.78		48.74
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	33.24	34.73	37.14	36.51	37.99	35.92	26.23
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.66	10.26	9.61	12.00	11.73	11.05	
Discounted Adjusted PF	31.20	30.53	30.56	28.11	27.41	29.56	
Discounted 7b2 Case PF	20.25	21.51	22.65	18.87	18.94	20.44	<b>Trigger</b>
Trigger	10.95	9.02	7.91	9.24	8.47	9.12	9.1
Net REP Benefits							224,348
<b>Case 3</b>							
<b>ASCs Flat / Trigger Discounted at Borrowing Rate</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	55.07	55.07	55.07	55.07	55.07	
Discount factor	0.9386	0.8790	0.8227	0.7700	0.7214		<b>PF Exch</b>
Program PF	34.48	35.68	37.68	36.52	37.58		47.54
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	33.01	34.01	35.92	34.83	35.79	34.71	26.90
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.43	9.54	8.39	10.32	9.53	9.84	
Discounted Adjusted PF	30.98	29.89	29.55	26.82	25.82	28.61	
Discounted 7b2 Case PF	20.25	21.51	22.65	18.87	18.94	20.44	<b>Trigger</b>
Trigger	10.73	8.38	6.90	7.95	6.88	8.17	8.2
Net REP Benefits							266,799



# Section 7(b)(2) Rate Test and Outyear REP Benefits

<b>Case 4</b>							
<b>ASCs De-escalated at Inflation Rate / Trigger Discounted at Borrowing Rate</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	53.72	52.41	51.13	49.89	52.44	
Discount factor	0.9386	0.8790	0.8227	0.7700	0.7214		<b>PF Exch</b>
Program PF	34.25	34.98	36.50	34.93	35.56		46.35
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	32.78	33.31	34.74	33.24	33.77	33.57	27.57
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.20	8.84	7.21	8.73	7.51	8.70	
Discounted Adjusted PF	30.77	29.28	28.58	25.59	24.36	27.72	
Discounted 7b2 Case PF	20.25	21.51	22.65	18.87	18.94	20.44	<b>Trigger</b>
Trigger	10.52	7.77	5.93	6.72	5.42	7.28	7.3
Net REP Benefits							309,310
<b>Case 5</b>							
<b>ASCs Escalated as in Final / Trigger Discounted at Inflation (2.5%)</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	54.53	54.83	54.89	55.03	54.87	
Discount factor	0.9756	0.9518	0.9286	0.9060	0.8839		<b>PF Exch</b>
Program PF	34.79	35.82	37.96	36.84	37.97		49.14
Applicable 7(g) Costs	-1.47	-1.67	-1.75	-1.67	-1.76		<b>PF Pref</b>
Adjusted PF	33.32	34.15	36.21	35.17	36.21	35.01	26.01
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.74	9.68	8.68	10.66	9.95	10.14	
Discounted Adjusted PF	32.51	32.50	33.62	31.86	32.01	32.50	
Discounted 7b2 Case PF	21.05	23.29	25.56	22.21	23.21	23.06	<b>Trigger</b>
Trigger	11.46	9.21	8.06	9.65	8.80	9.44	9.4
Net REP Benefits							210,166



# Section 7(b)(2) Rate Test and Outyear REP Benefits

<b>Case 6</b>							
<b>ASCs Escalated at Discount Rate / Trigger Discounted at Inflation</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	58.80	62.82	67.12	71.64	63.09	
Discount factor	0.9756	0.9518	0.9286	0.9060	0.8839		<b>PF Exch</b>
Program PF	35.62	38.14	41.58	41.77	44.42		53.52
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	34.15	36.47	39.82	40.08	42.63	38.63	23.54
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	12.57	12.00	12.29	15.57	16.37	13.76	
Discounted Adjusted PF	33.32	34.71	36.98	36.31	37.68	35.80	
Discounted 7b2 Case PF	21.05	23.29	25.56	22.21	23.21	23.06	<b>Trigger</b>
Trigger	12.27	11.42	11.42	14.10	14.47	12.74	12.7
Net REP Benefits							55,061
<b>Case 7</b>							
<b>ASCs Escalated at Inflation Rate / Trigger Discounted at Inflation</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	56.44	57.85	59.30	60.78	57.89	
Discount factor	0.9756	0.9518	0.9286	0.9060	0.8839		<b>PF Exch</b>
Program PF	35.09	36.77	39.28	38.56	40.14		50.73
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	33.62	35.10	37.52	36.87	38.35	36.29	25.11
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	12.04	10.63	9.99	12.36	12.09	11.42	
Discounted Adjusted PF	32.80	33.41	34.84	33.40	33.90	33.67	
Discounted 7b2 Case PF	21.05	23.29	25.56	22.21	23.21	23.06	<b>Trigger</b>
Trigger	11.75	10.12	9.28	11.19	10.69	10.61	10.6
Net REP Benefits							153,877



# Section 7(b)(2) Rate Test and Outyear REP Benefits

<b>Case 8</b>							
<b>ASCs Flat / Trigger Discounted at Inflation</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	55.07	55.07	55.07	55.07	55.07	
Discount factor	0.9756	0.9518	0.9286	0.9060	0.8839		<b>PF Exch</b>
Program PF	34.81	36.01	38.01	36.82	37.89		49.27
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	33.34	34.34	36.25	35.13	36.10	35.03	25.93
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.76	9.87	8.72	10.62	9.84	10.16	
Discounted Adjusted PF	32.53	32.68	33.66	31.83	31.91	32.52	
Discounted 7b2 Case PF	21.05	23.29	25.56	22.21	23.21	23.06	<b>Trigger</b>
Trigger	11.48	9.39	8.10	9.62	8.70	9.46	9.5
Net REP Benefits							205,594
<b>Case 9</b>							
<b>ASCs De-escalated at Inflation Rate / Trigger Discounted at Inflation</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	53.72	52.41	51.13	49.89	52.44	
Discount factor	0.9756	0.9518	0.9286	0.9060	0.8839		<b>PF Exch</b>
Program PF	34.53	35.25	36.78	35.19	35.82		47.81
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	33.06	33.58	35.02	33.50	34.03	33.84	26.75
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.48	9.11	7.49	8.99	7.77	8.97	
Discounted Adjusted PF	32.25	31.96	32.52	30.35	30.08	31.43	
Discounted 7b2 Case PF	21.05	23.29	25.56	22.21	23.21	23.06	<b>Trigger</b>
Trigger	11.20	8.67	6.96	8.14	6.87	8.37	8.4
Net REP Benefits							257,433





# Section 7(b)(2) Rate Test and Outyear REP Benefits

<b>Case 10</b>							
<b>ASCs Escalated as in Final / Trigger Discounted at 13%</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	54.53	54.83	54.89	55.03	54.87	
Discount factor	0.8850	0.7832	0.6931	0.6134	0.5428		<b>PF Exch</b>
Program PF	34.13	35.17	37.31	36.24	37.38		45.69
Applicable 7(g) Costs	-1.47	-1.67	-1.75	-1.67	-1.76		<b>PF Pref</b>
Adjusted PF	32.66	33.50	35.56	34.57	35.62	34.38	27.94
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.08	9.03	8.03	10.06	9.36	9.51	
Discounted Adjusted PF	28.90	26.24	24.65	21.21	19.33	24.07	
Discounted 7b2 Case PF	19.10	19.16	19.08	15.03	14.25	17.32	<b>Trigger</b>
Trigger	9.80	7.08	5.57	6.18	5.08	6.75	6.8
Net REP Benefits							<b>333,318</b>
<b>Case 11</b>							
<b>ASCs Escalated at Discount Rate / Trigger Discounted at 13%</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	58.80	62.82	67.12	71.64	63.09	
Discount factor	0.8850	0.7832	0.6931	0.6134	0.5428		<b>PF Exch</b>
Program PF	34.63	37.16	40.59	40.85	43.49		48.34
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	33.16	35.49	38.83	39.16	41.70	37.67	26.45
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.58	11.02	11.30	14.65	15.44	12.80	
Discounted Adjusted PF	29.35	27.80	26.91	24.02	22.63	26.14	
Discounted 7b2 Case PF	19.10	19.16	19.08	15.03	14.25	17.32	<b>Trigger</b>
Trigger	10.25	8.64	7.83	8.99	8.38	8.82	8.8
Net REP Benefits							<b>238,670</b>



# Section 7(b)(2) Rate Test and Outyear REP Benefits

<b>Case 12</b>							
<b>ASCs Escalated at Inflation Rate / Trigger Discounted at 13%</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	56.44	57.85	59.30	60.78	57.89	
Discount factor	0.8850	0.7832	0.6931	0.6134	0.5428		<b>PF Exch</b>
Program PF	34.30	36.00	38.49	37.82	39.40		46.62
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	32.83	34.33	36.73	36.13	37.61	35.53	27.42
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.25	9.86	9.20	11.62	11.35	10.66	
Discounted Adjusted PF	29.05	26.89	25.46	22.16	20.41	24.79	
Discounted 7b2 Case PF	19.10	19.16	19.08	15.03	14.25	17.32	<b>Trigger</b>
Trigger	9.95	7.73	6.38	7.13	6.16	7.47	7.5
Net REP Benefits							299,858
<b>Case 13</b>							
<b>ASCs Flat / Trigger Discounted at 13%</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	55.07	55.07	55.07	55.07	55.07	
Discount factor	0.8850	0.7832	0.6931	0.6134	0.5428		<b>PF Exch</b>
Program PF	34.10	35.31	37.30	36.16	37.22		45.55
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79		<b>PF Pref</b>
Adjusted PF	32.63	33.64	35.54	34.47	35.43	34.34	28.02
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	11.05	9.17	8.01	9.96	9.17	9.47	
Discounted Adjusted PF	28.88	26.35	24.63	21.14	19.23	24.05	
Discounted 7b2 Case PF	19.10	19.16	19.08	15.03	14.25	17.32	<b>Trigger</b>
Trigger	9.78	7.19	5.55	6.11	4.98	6.73	6.7
Net REP Benefits							337,840



# Section 7(b)(2) Rate Test and Outyear REP Benefits

<b>Case 14</b>							
<b>ASCs De-escalated at Inflation Rate / Trigger Discounted at 13%</b>							
	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Average</b>	
Weighted Avg. ASCs	55.07	53.72	52.41	51.13	49.89	52.44	
Discount factor	0.8850	0.7832	0.6931	0.6134	0.5428	<b>PF Exch</b>	
Program PF	33.95	34.68	36.20	34.65	35.27	44.76	
Applicable 7(g) Costs	-1.47	-1.67	-1.76	-1.69	-1.79	<b>PF Pref</b>	
Adjusted PF	32.48	33.01	34.44	32.96	33.48	33.27	
7b2 Case PF	21.58	24.47	27.53	24.51	26.26	24.87	
Undiscounted Trigger	10.90	8.54	6.91	8.45	7.22	8.40	
Discounted Adjusted PF	28.74	25.85	23.87	20.22	18.17	23.37	
Discounted 7b2 Case PF	19.10	19.16	19.08	15.03	14.25	17.32	
Trigger	9.64	6.69	4.79	5.19	3.92	6.05	
Net REP Benefits							<b>365,994</b>



# Risk Mitigation and Residential Exchange

December 3, 2008

Pre-Decisional. For discussion Purposes Only.



# Risk Mitigation and Residential Exchange

- The PF Exchange rate is based on a revenue requirement that includes PNRR.
- For the last three rate cases, BPA has defined the CRAC and DDC as applying to several PF rates including the PF Exchange, but it hasn't mattered because the Exchange benefits have generally been determined by settlement.
- For the 2010 rate case, application of the CRAC to the Exchange may really matter.



## Details – *HOW* Should CRAC Apply to Exchange?

- One straight-forward method
  - Apply CRAC (or DDC) to PF rate and thence to the PF Exchange rate in September 2009. Recalculate Exchange benefits utility-by-utility using new Exchange rates and previously established ASCs. Adjust PF rate until the total of increased (or decreased) PF revenues and decreased (or increased) Exchange payments matches the amount needed for the CRAC calculations (or for the DDC calculations).
  
- Comments?



# Load Forecast Update

December 3, 2008

Pre-Decisional. For discussion Purposes Only.



## Recession – Looming or Here?

- Housing price escalation and resulting bubble 2007 into 2008 started economic slowdown in many sectors.
- High energy prices through last year added to downturn causing additional sectors to decline.
- Credit crunch this fall seems to be the straw that broke the camel's back.
- Economists seem to be watching the falling economy to determine:
  - Which sectors will be affected
  - How long will it last
  - How deep will it go





# Global Insights' Forecast for the Nation

- As of November 2008, the base case prediction is that the recession will be through 2nd quarter CY 2009 with somewhat normal growth returning by 4th quarter CY 2010.
  - Slowing has already occurred in the consumption sector of the economy and is expected to continue.
  - Greater decline is expected in the export sector as the Global economy continues to decline.
  - Smaller declines are expected in the Government sectors of the economy following the declines from the other sectors.
  - Declines in the transportation sector, finance, and residential sectors have been felt.
  - Additional declines are expected in other sectors in coming quarters.



# How deep will it go?

- Global Insights is predicting in the pessimistic case (25% chance) that the recession will be through 4th quarter CY 2009 with normal growth returning by 2nd quarter CY 2010.

	2006	2007	2008	2009	2010	2011	2012
<b>Real GDP (% change)</b>							
Base	2.78	2.03	1.34	-0.99	1.70	3.10	3.46
Pessimistic	2.78	2.03	1.28	-2.39	0.33	2.92	2.87
<b>Unemployment Rate (%)</b>							
Base	4.61	4.64	5.68	7.72	8.20	7.76	7.08
Pessimistic	4.61	4.64	5.70	8.18	9.23	8.77	8.06
<b>Industrial Production (%change)</b>							
Base	2.20	1.66	-0.86	-3.54	0.89	3.57	3.87
Pessimistic	2.20	1.66	-0.97	-5.71	-2.00	5.59	4.58
<b>Consumer Sentiment Index</b>							
Base	87.3	85.6	63.6	61.0	67.1	71.9	78.2
Pessimistic	87.3	85.6	63.5	57.2	59.7	64.8	72.3
<b>Light Vehicle Sales (Million units)</b>							
Base	16.50	16.09	13.30	12.20	13.99	15.19	16.33
Pessimistic	16.50	16.09	13.15	10.28	13.42	14.88	15.07
<b>Housing Starts (Million units)</b>							
Base	1.81	1.34	0.93	0.71	1.08	1.39	1.60
Pessimistic	1.81	1.34	0.92	0.67	0.91	1.19	1.45
<b>Payroll Employment (%change)</b>							
Base	1.79	1.12	-0.10	-1.47	0.12	1.38	1.91
Pessimistic	1.79	1.12	-0.13	-2.10	-0.89	1.14	1.92
<b>Exports- Real GDP (% change)</b>							
Base	9.09	8.45	8.42	0.75	1.10	7.88	8.74
Pessimistic	9.09	8.45	8.36	-2.29	-1.44	10.46	8.65



## Which path are we on?

- With the November update of their forecast, GI reduced GDP forecasts by over 1% from the October forecast.
- Actual values continue to come in above and below predicted values giving mixed signs on where the economy is headed.
- The trends show that for several economic indicators the economy continues to worsen not stabilize or improvement.
- We are probably on a path that is heading between the base and the pessimistic scenario.



# What does that mean for the Northwest?

- Indications are that the Northwest economy might be impacted less than the Nation.
  - Employment diversity should help the Northwest see less decline and potentially rebound more quickly

	2006	2007	2008	2009	2010	2011
<b>Unemployment Rate (%)</b>						
National	4.61	4.64	5.68	7.72	8.20	7.76
Northwest	4.70	4.42	5.32	6.86	6.96	6.34
<b>Payroll Employment (%change)</b>						
National	1.79	1.12	-0.10	-1.47	0.12	1.38
Northwest	3.15	2.26	0.56	-0.66	1.35	1.75
<b>Industrial Production Index 2000=100</b>						
National	2.20	1.66	-0.86	-3.54	0.89	3.57
Washington	7.03	5.60	2.41	3.26	4.51	2.54
Oregon	3.82	1.72	-2.76	-1.16	5.06	5.15
Idaho	6.36	3.77	-3.49	-0.31	4.26	4.90
Montana	6.27	4.67	1.91	1.84	5.32	3.77



# What does that mean for the Northwest?

- Housing markets should fare better than nation
  - Expect less decline in house values

	2004	2005	2006	2007	2008	2009	2010	2011
<b>Home Prices (% change)</b>								
National	9.0	9.5	1.3	-2.1	-8.5	-10.4	-3.1	3.9
Washington	12.1	11.6	13.6	7.6	-3.0	-2.9	0.4	2.1
Oregon	11.6	13.5	14.0	6.8	-4.7	-2.8	0.4	2.4
Idaho	9.9	11.2	14.6	7.5	-3.4	-3.3	0.1	1.7
Montana	10.7	8.2	10.9	7.8	-0.4	-1.4	2.1	3.1
California	23.6	17.5	4.7	-7.1	-22.8	-6.0	-0.4	2.1

- Housing starts should rebound quicker than nationally

<b>Housing Starts (% change)</b>								
National		6.3	-12.6	-26.0	-30.9	-22.9	51.4	28.2
Northwest		9.0	-6.7	-19.5	-32.1	-5.4	22.6	18.2



# What does that mean for the Agency?

- **We expect urban areas to be hit more than rural areas.**
  - Employment in several areas already hit. (WaMu, Boeing, Freightliner, others)
    - More manufacturing employment in urban areas than rural areas.
  - Most Northwest urban areas not full service customers of BPA.
  - Housing problems more prevalent in urban, however spotty locations in rural areas do exist.
- **Rural areas likely to be hit by export declines in coming quarters.**
  - Food/agriculture sizable export amounts in NW.
  - Larger industries in rural areas will see declines (like pulp & paper, some metals).
  - Other rural areas will see continued increases.
  - Precious metals may increase loads (Gold fields looking to increase loads).
  - Wind generation continues with expected station service loads for wind fields.



# What does that mean for the Agency?

- **Agency contracts will prevent some load decreases.**
  - Block, slice, and slice/block contracts are required purchase levels and approximately 45% of total public utility load.
  - These contracts are also for major urban areas that will likely see most of the decline.
  - Compared to current rate case forecast.
    - We expect the public utility loads for FY 2009 to be about 120 aMW below the current forecast.
    - We now expect the loads to grow at a 1.7% average growth rate compared to 1.5% in the rate case forecast to 2013.
    - The difference between the two forecasts diminishes over time.



# Ratemaking in Uncertain Times

December 3, 2008

Pre-Decisional. For discussion Purposes Only.





# Ratemaking in Uncertain Times

- **BPA now in situation of maximal financial uncertainty**
  - Nation is a few months into greatest financial crisis of last half-century



## More Information Is Coming

- We'll know more about nation's and region's economies by May (Final Studies), but we don't know how much more. Roughly half of BPA's 2009 net secondary revenue risk will be gone.
- We'll know even more by next September (CRAC calculations), but we don't know how much more. Most of BPA's 2009 net secondary revenue risk will be gone.



## Financial Risk Is Currently High

- Annual PNRR could be several hundreds of millions of dollars.
- **WHAT?!** With those **huge** BPA reserves?
  - Ending 2008 BPA total financial reserve: \$1.6B
  - Amount attributed to Power: \$1.07B
  - Available for Power risk: \$875M
  - (Why the reduction? \$200M of cash from suspended Residential Exchange payments is NOT available for risk.)



## Alternatives to High PNRR?

- A CRAC would reduce the need for PNRR, but would have to be big.
- A forward-looking CRAC could be sized more precisely to the financial need by taking into account changes in the prospects for FY 2010.
- One possibility: base the FY 2010 CRAC/DDC on a TPP calculation in September 2009
- Set the CRAC or DDC to the level that produces a 95% two-year TPP.



## Example TPP Trigger for CRAC/DDC

- In September 2009, run new TPP for FY 2010-11
- Update for actual cash flow to date in 2009.
- Update forecasts for FY 2010-11:
  - Ending 09 reservoir levels
  - Gas price/electricity prices
  - Interest and depreciation
  - Hydro operation requirements
  - Expense forecasts
  - Load forecasts
  - CGS operations



# Residential Exchange Issues – Draft Standstill Agreement

December 3, 2008

Pre-Decisional. For discussion Purposes Only.



# DRAFT Standstill Agreement

The undersigned signatories to this Standstill Agreement (“Agreement”) hereby agree to the following:

1. BPA shall file a motion with the Hearing Officer requesting an order that preserves the arguments and positions of the parties from the WP-07 Supplemental Proceeding with respect to certain specified areas. The proposed Order would state as follows:

Many of the issues that would likely be litigated in the WP-10 Rate Proceeding have already been fully briefed and responded to in BPA’s WP-07 Supplemental Rate Proceeding Administrator’s Final Record of Decision. Because these issues have been thoroughly argued in the prior proceeding, it would not be a prudent use of BPA’s or the parties’ resources to re-litigate all of these issues again in the WP-10 Rate Proceeding. Consequently, in the interest of administrative and judicial economy, BPA has requested that an order be issued preserving the parties’ arguments and BPA’s decisions from the WP-07 Supplemental Proceeding in the WP-10 Rate Proceeding.

Having duly considered BPA’s Motion, the positions of the parties, and all other matters contained in the record, NOW THEREFORE IT IS HEREBY ORDERED as follows:

(1) By issuance of this order the arguments made and evidence relied upon by a party or BPA in the WP-07 Supplemental Rate Proceeding that relate to the issues identified in Section 4 of this Order are hereby preserved and shall be deemed to have been made by that party or BPA in this proceeding. Parties and BPA should not repeat arguments or present evidence in this WP-10 Rate Proceeding previously submitted in the WP-07 Supplemental Rate Proceeding that relate to the issues identified in Section 4. Duplicative material will be subject to motions to strike. This limitation does not preclude the parties or BPA from addressing new issues that (a) are not related to the Section 4 issues decided in the WP-07 Supplemental Rate Proceeding Administrator’s Final Record of Decision, or (b) if related to a Section 4 issue, were not decided on a final basis in the WP-07 Supplemental Rate Proceeding Administrator’s Final Record of Decision.



# DRAFT Standstill Agreement

(2) BPA agrees that if the Federal Energy Regulatory Commission (FERC) or a court of competent jurisdiction remands, reverses, or otherwise determines that BPA has erred in any final decisions made in the WP-07 Supplemental Rate Proceeding Administrator's Final Record of Decision that relate to the issues identified in Section 4, then such determination shall constitute a finding that such error also exists in the WP-10 Rate Proceeding. BPA agrees that whatever relief is either required or determined to be appropriate to remedy such error shall also be the relief provided to correct for the corresponding error in the WP-10 Rate Proceeding.

(3) Any record material from the WP-07 Supplemental Rate Proceeding relevant to the issues identified in Section 4 is hereby deemed to be part of the WP-10 Rate Proceeding record and may be cited to and relied upon by any party or BPA for purposes of any subsequent appeal of the Administrator's final decisions in this proceeding.

Parties to this proceeding that did not intervene or otherwise participate in the WP-07 Supplemental Rate Proceeding may adopt any arguments or evidence previously made in that proceeding, provided that, such arguments or evidence relate to the issues identified in Section 4 of this Order. Adoption of such arguments or evidence, however, only preserves the party's rights for purposes of the WP-10 Rate Proceeding, and does not modify or otherwise alter such party's ability to appeal the decisions made in the WP-07 Supplemental Rate Proceeding Administrator's Final Record of Decision.





# DRAFT Standstill Agreement

(4) The arguments and evidence submitted by BPA and the parties, and the Administrator's final decisions, for the following sections of the WP-07 Supplemental Rate Proceeding Administrator's Final Record of Decision are hereby deemed to have been made in the WP-10 Rate Proceeding:

- (a) Legal issues regarding BPA's Response to the Court's Decisions (Sections 2.6 and 2.7)
- (b) Calculation of the Lookback Amounts (Chapters 3.0 – Chapter 8.0)
- (c) Lookback Recover and Return (Chapter 9.0)
- (d) Allocation of 7(b)(3) trigger to surplus sales (Section 15.2)
- (e) Section 7(b)(2) – (Chapter 16.0).
- (f) [Others???

- 2. Provided that BPA files a motion requesting the relief identified in Section 1 of this Agreement, no party to this Agreement will file any opposition or objection to such motion.
- 3. The signatories agree that they will not assert in any forum that anything in this Standstill Agreement or any action with regard to this Standstill Agreement taken or not taken by any signatory, the Hearing Officer, the Administrator, FERC, or a court, creates or implies any procedural or substantive precedent or creates or implies agreement to any underlying principle or methodology, or creates any precedent under any contract between BPA and any signatory.

