

Attachments to

**ADMINISTRATOR'S
DRAFT EQUIVALENT BENEFITS
ANALYSIS DETERMINATION FOR
CONTRACT OFFER TO THE PORT
TOWNSEND PAPER CORPORATION**

February 3, 2011



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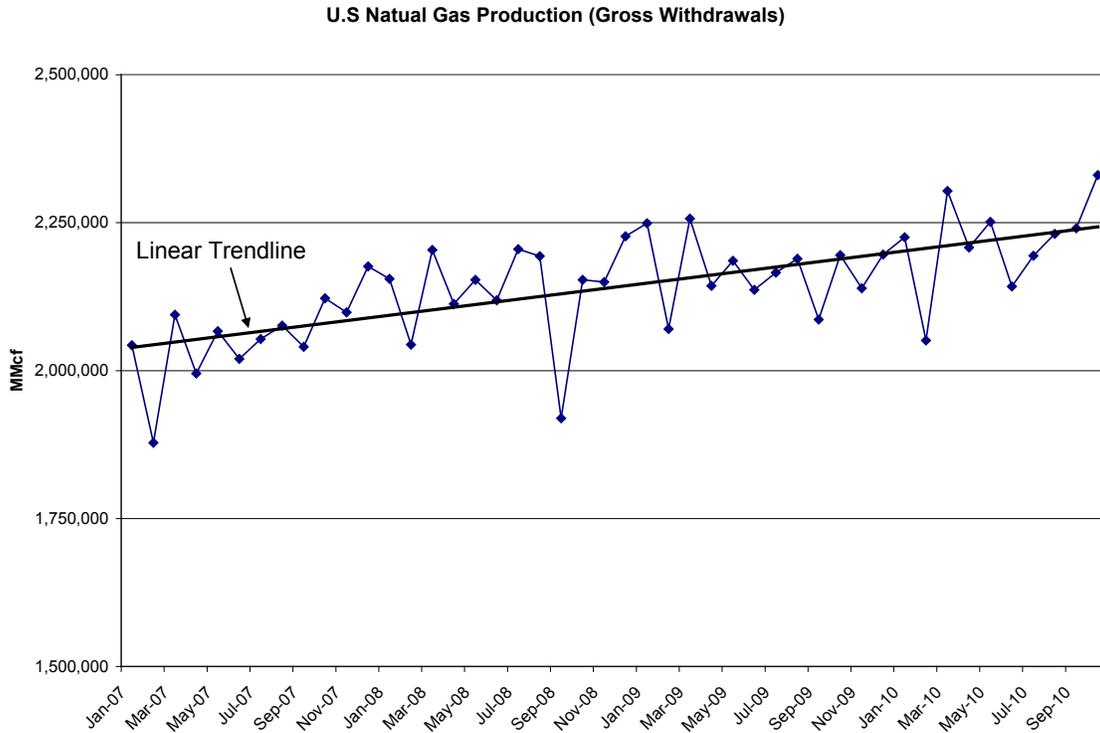
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Attachment A

Natural Gas Statistics

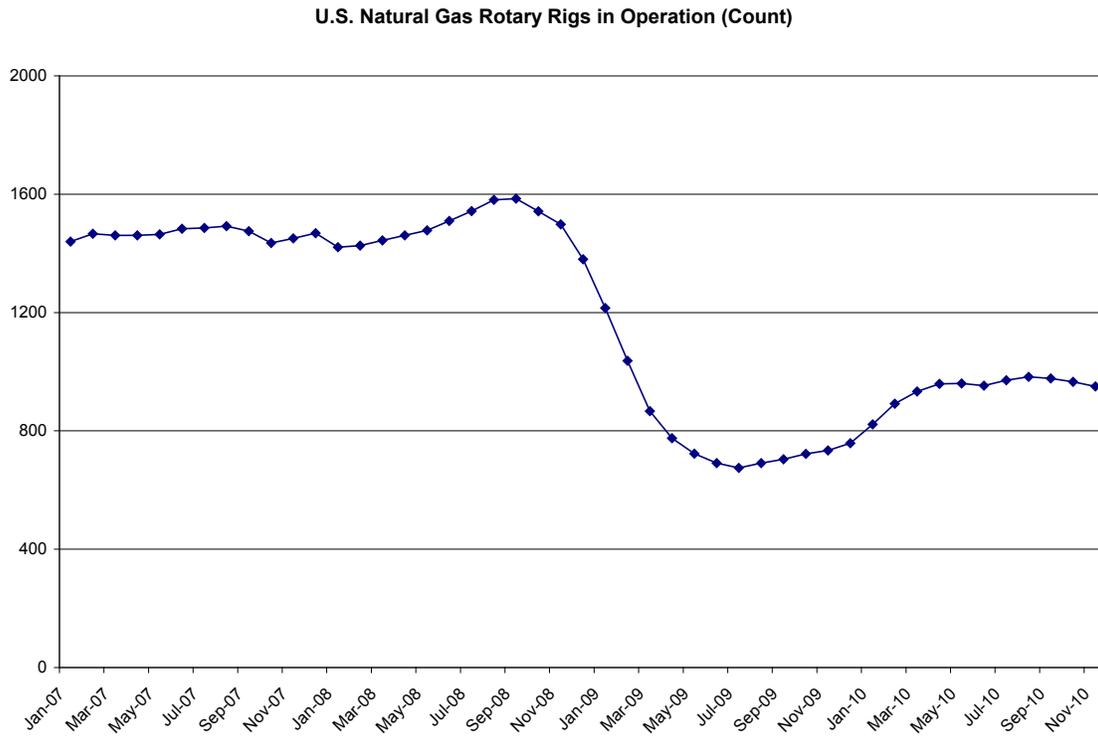
Natural Gas Statistics

Figure 1 – Natural Gas Production



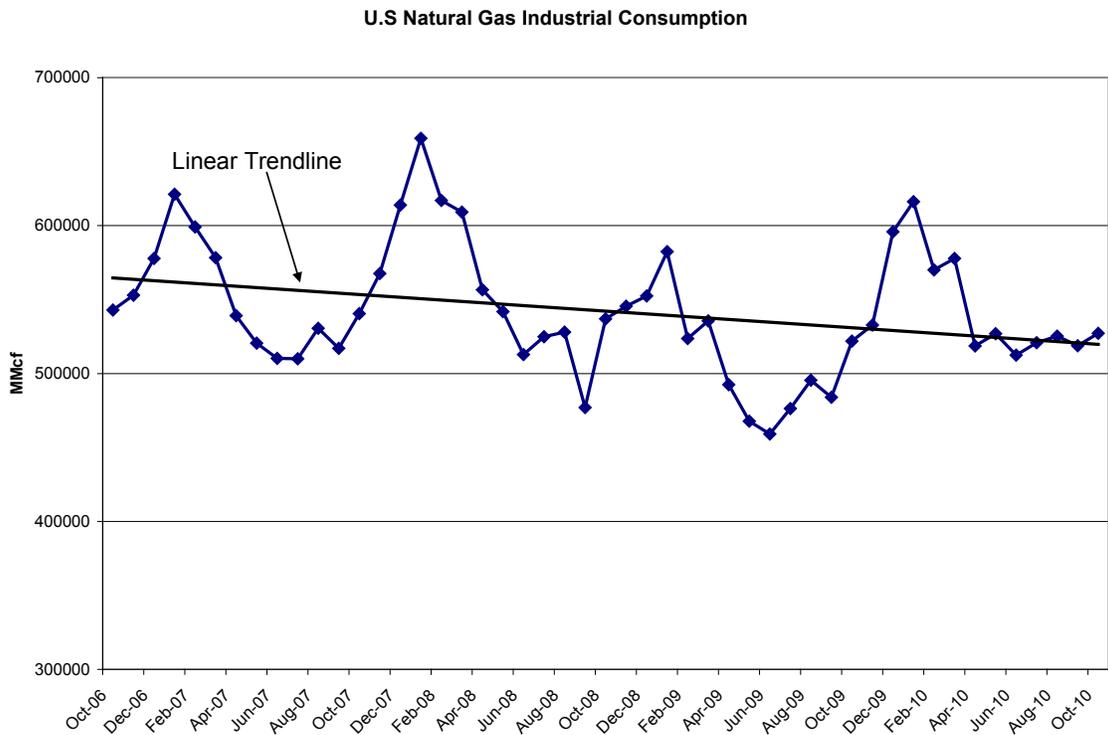
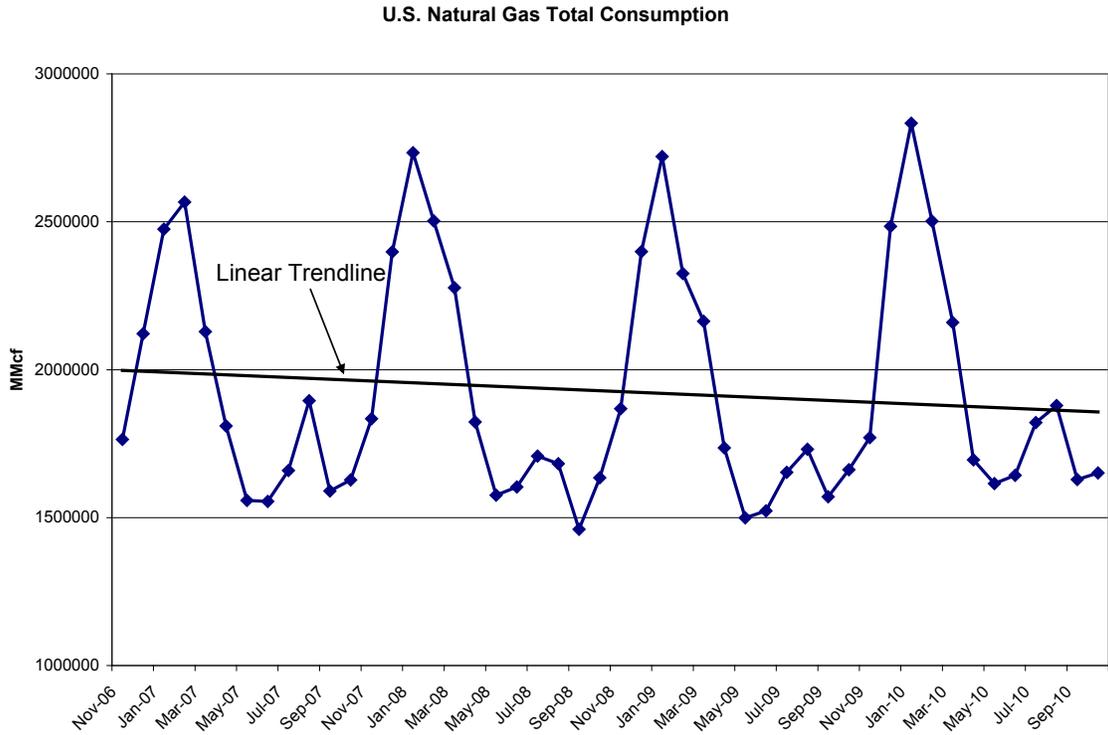
Source: United States Department of Energy, Energy Information Administration, January 14, 2011

Figure 2 – Natural Gas Rig Count



Source: United States Department of Energy, Energy Information Administration, January 14, 2011.

Figure 3 – U.S. Natural Gas Total Consumption and Industrial Consumption



Source: United States Department of Energy, Energy Information Administration, January 14, 2011.

Figure 4 – Natural Gas Storage

Weekly Natural Gas Storage Report

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Released: January 13, 2011 at 10:30 a.m. (eastern time) for the Week Ending January 7, 2011.
 Next Release: January 20, 2011

Working Gas in Underground Storage, Lower 48

other formats: [Summary TXT](#) [CSV](#)

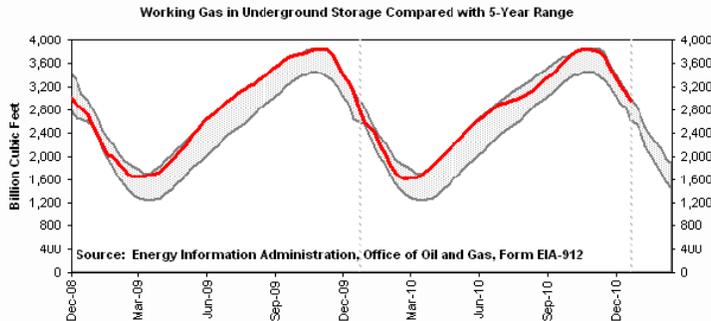
Region	Stocks in billion cubic feet (Bcf)			Historical Comparisons			
	01/07/11	12/31/10	Change	Year Ago (01/07/10)		5-Year (2006-2010) Average	
				Stocks (Bcf)	% Change	Stocks (Bcf)	% Change
East	1,510	1,590	-80	1,553	-2.8	1,545	-2.3
West	390	428	-38	417	-6.5	380	2.6
Producing	1,059	1,079	-20	920	15.1	874	21.2
Total	2,959	3,097	-138	2,890	2.4	2,798	5.8

Notes and Definitions

Summary

Working gas in storage was 2,959 Bcf as of Friday, January 7, 2011, according to EIA estimates. This represents a net decline of 138 Bcf from the previous week. Stocks were 69 Bcf higher than last year at this time and 161 Bcf above the 5-year average of 2,798 Bcf. In the East Region, stocks were 35 Bcf below the 5-year average following net withdrawals of 80 Bcf. Stocks in the Producing Region were 185 Bcf above the 5-year average of 874 Bcf after a net withdrawal of 20 Bcf. Stocks in the West Region were 10 Bcf above the 5-year average after a net drawdown of 38 Bcf. At 2,959 Bcf, total working gas is within the 5-year historical range.

Data
History (XLS)
5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)
References
Methodology
Differences Between Monthly and Weekly Data
Revision Policy
Related Links
Storage Basics
Natural Gas Weekly Update
Natural Gas Navigator



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2006 through 2010.
 Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate current and year-ago weekly periods.

Source: United States Department of Energy, Energy Information Administration, January 14, 2011.

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Attachment B

Alcoa EBT Analysis

Alcoa EBT Analysis Beginning May 27, 2012

May 2012 energy and revenue amounts are for the period 5/27/12 through 5/30/12

Alcoa EBT Analysis

TABLE 1 - Usage and Rates

Month	Alcoa Usage			Projected IP Rates		
	Demand (kW)	HLH (MWh)	LLH (MWh)	Demand (\$ / kW)	HLH (\$ / MWh)	LLH (\$ / MWh)
May-12	320,000	15,360	23,040	\$8.15	\$35.11	\$19.85
Jun-12	320,000	133,120	97,280	\$8.39	\$36.27	\$20.50
Jul-12	320,000	128,000	110,080	\$10.55	\$46.43	\$33.34
Aug-12	320,000	138,240	99,840	\$10.99	\$48.48	\$35.15
Sep-12	320,000	122,880	107,520	\$10.38	\$45.58	\$31.83
Oct-12	320,000	138,240	99,840	\$9.35	\$40.74	\$30.93
Nov-12	320,000	128,000	102,720	\$9.46	\$41.26	\$30.71
Dec-12	320,000	128,000	110,080	\$10.13	\$44.40	\$34.23
Jan-13	320,000	133,120	104,960	\$9.74	\$42.56	\$31.50

TABLE 2 - BPA's Projected Revenue

Month	Revenues by Rate Determinant			Projected IP Revenue	
	Demand (\$)	HLH (\$)	LLH (\$)	Month (\$)	Cumulative (\$)
May-12	\$0	\$539,290	\$457,344	\$996,634	\$996,634
Jun-12	\$0	\$4,828,262	\$1,994,240	\$6,822,502	\$7,819,136
Jul-12	\$0	\$5,943,040	\$3,670,067	\$9,613,107	\$17,432,243
Aug-12	\$0	\$6,701,875	\$3,509,376	\$10,211,251	\$27,643,494
Sep-12	\$0	\$5,600,870	\$3,422,362	\$9,023,232	\$36,666,726
Oct-12	\$0	\$5,631,898	\$3,088,051	\$8,719,949	\$45,386,675
Nov-12	\$0	\$5,281,280	\$3,154,531	\$8,435,811	\$53,822,486
Dec-12	\$0	\$5,683,200	\$3,768,038	\$9,451,238	\$63,273,725
Jan-13	\$0	\$5,665,587	\$3,306,240	\$8,971,827	\$72,245,552

TABLE 3 - BPA's Forecasted Revenues Obtained from the Market

Month	Forecasted Market Price		Forecasted Revenues Obtained from the Market			
	HLH Price (\$ / MWh)	LLH Price (\$ / MWh)	HLH (\$)	LLH (\$)	Month (\$) (HLH + LLH)	Cumulative (\$)
May-12	\$35.68	\$21.17	\$548,045	\$487,757	\$1,035,802	\$1,035,802
Jun-12	\$37.13	\$22.24	\$4,942,746	\$2,163,507	\$7,106,253	\$8,142,054
Jul-12	\$47.37	\$34.84	\$6,063,360	\$3,835,187	\$9,898,547	\$18,040,602
Aug-12	\$49.32	\$36.61	\$6,817,997	\$3,655,142	\$10,473,139	\$28,513,741
Sep-12	\$46.26	\$33.16	\$5,684,429	\$3,565,363	\$9,249,792	\$37,763,533
Oct-12	\$46.49	\$35.68	\$6,426,778	\$3,562,291	\$9,989,069	\$47,752,602
Nov-12	\$46.53	\$34.65	\$5,955,840	\$3,559,248	\$9,515,088	\$57,267,690
Dec-12	\$49.50	\$38.40	\$6,336,000	\$4,227,072	\$10,563,072	\$67,830,762
Jan-13	\$48.97	\$37.11	\$6,518,886	\$3,895,066	\$10,413,952	\$78,244,714

TABLE 4 - BPA's Net Benefit before Adjustment

Month	Net Revenue or (Cost)	
	Month (\$)	Cumulative (\$)
May-12	(\$39,168)	(\$39,168)
Jun-12	(\$283,750)	(\$322,918)
Jul-12	(\$285,440)	(\$608,358)
Aug-12	(\$261,888)	(\$870,246)
Sep-12	(\$226,560)	(\$1,096,806)
Oct-12	(\$1,269,120)	(\$2,365,926)
Nov-12	(\$1,079,277)	(\$3,445,203)
Dec-12	(\$1,111,834)	(\$4,557,037)
Jan-13	(\$1,442,125)	(\$5,999,162)

TABLE 5a - BPA's Net Benefit Adjustments

Month	Value of Reserves	
	Month (\$)	Cumulative (\$)
May-12	\$36,480	\$36,480
Jun-12	\$218,880	\$255,360
Jul-12	\$226,176	\$481,536
Aug-12	\$226,176	\$707,712
Sep-12	\$218,880	\$926,592
Oct-12	\$226,176	\$1,152,768
Nov-12	\$219,184	\$1,371,952
Dec-12	\$226,176	\$1,598,128
Jan-13	\$226,176	\$1,824,304

TABLE 5b - BPA's Net Benefit Adjustments

Month	Avoided Tx and Ancillary Service Costs		
	Month (\$)	Proportional Month (\$)	Cumulative (\$)
May-12	\$101,806	\$95,817	\$95,817
Jun-12	\$524,069	\$493,241	\$589,058
Jul-12	\$246,818	\$232,299	\$821,357
Aug-12	\$43,497	\$40,939	\$862,296
Sep-12	\$20,371	\$19,173	\$881,469
Oct-12	\$12,378	\$11,650	\$893,118
Nov-12	\$32,792	\$30,863	\$923,982
Dec-12	\$77,506	\$72,947	\$996,929
Jan-13	\$267,721	\$251,972	\$1,248,901

TABLE 5c - BPA's Net Benefit Adjustments

Month	Demand Shift		
	Month (\$)	Proportional Month (\$)	Cumulative (\$)
May-12	\$200,734	\$188,926	\$188,926
Jun-12	\$1,174,751	\$1,105,648	\$1,294,573
Jul-12	\$533,197	\$501,832	\$1,796,406
Aug-12	\$103,935	\$97,821	\$1,894,227
Sep-12	\$61,947	\$58,303	\$1,952,530
Oct-12	(\$45,776)	(\$43,083)	\$1,909,447
Nov-12	\$103,379	\$97,298	\$2,006,744
Dec-12	\$110,588	\$104,083	\$2,110,827
Jan-13	\$407,165	\$383,215	\$2,494,042

TABLE 6 - BPA's Net Benefit after Adjustments

Month	BPA's Adjusted Net Revenue or (Cost) (May Cumulative reflects beginning May 27)					
	Net Revenue or (Cost)	Value of Reserves	Avoided Tx Costs	Demand Shift	A + B + C + D	Cumulative
	(A) Month (\$)	(B) Month (\$)	(C) Month (\$)	(D) Month (\$)	Month (\$)	(\$)
May-12	(\$39,168)	\$36,480	\$95,817	\$188,926	\$282,055	\$282,055
Jun-12	(\$283,750)	\$218,880	\$493,241	\$1,105,648	\$1,534,019	\$1,816,073
Jul-12	(\$285,440)	\$226,176	\$232,299	\$501,832	\$674,867	\$2,490,940
Aug-12	(\$261,888)	\$226,176	\$40,939	\$97,821	\$103,048	\$2,593,988
Sep-12	(\$226,560)	\$218,880	\$19,173	\$58,303	\$69,796	\$2,663,784
Oct-12	(\$1,269,120)	\$226,176	\$11,650	(\$43,083)	(\$1,074,377)	\$1,589,406
Nov-12	(\$1,079,277)	\$219,184	\$30,863	\$97,298	(\$731,932)	\$857,475
Dec-12	(\$1,111,834)	\$226,176	\$72,947	\$104,083	(\$708,628)	\$148,847
Jan-13	(\$1,442,125)	\$226,176	\$251,972	\$383,215	(\$580,762)	(\$431,915)

Attachment C

Port Townsend EBT Analysis

**Port Townsend EBT Analysis with Avoided Transmission and Ancillary Services
Cost and Demand Shift Benefits through May 26, 2012**

Port Townsend EBT Analysis

TABLE 1 - Usage and Rates

Month	Port Townsend Usage			Projected IP Rates		
	Demand (kW)	HLH (MWh)	LLH (MWh)	Demand (\$ / kW)	HLH (\$ / MWh)	LLH (\$ / MWh)
Jun-11	20,000	8,320	6,080	\$1.32	\$31.18	\$23.29
Jul-11	20,000	8,000	6,880	\$1.61	\$33.33	\$28.66
Aug-11	20,000	8,640	6,240	\$1.89	\$37.31	\$31.40
Sep-11	20,000	8,000	6,400	\$1.96	\$36.49	\$32.26
Oct-11	20,000	8,320	6,560	\$9.35	\$40.74	\$30.93
Nov-11	20,000	8,000	6,420	\$9.46	\$41.26	\$30.71
Dec-11	20,000	8,320	6,560	\$10.13	\$44.40	\$34.23
Jan-12	20,000	8,000	6,880	\$9.74	\$42.56	\$31.50
Feb-12	20,000	8,000	5,920	\$9.75	\$42.65	\$31.64
Mar-12	20,000	8,640	6,220	\$9.36	\$40.78	\$29.71
Apr-12	20,000	8,000	6,400	\$8.57	\$37.06	\$26.54
May-12	20,000	7,040	5,440	\$8.15	\$35.11	\$19.85
Jun-12	20,000	8,320	6,080	\$8.39	\$36.27	\$20.50
Jul-12	20,000	8,000	6,880	\$10.55	\$46.43	\$33.34
Aug-12	20,000	8,640	6,240	\$10.99	\$48.48	\$35.15
Sep-12	20,000	7,680	6,720	\$10.38	\$45.58	\$31.83
Oct-12	20,000	8,640	6,240	\$9.35	\$40.74	\$30.93
Nov-12	20,000	8,000	6,420	\$9.46	\$41.26	\$30.71
Dec-12	20,000	8,000	6,880	\$10.13	\$44.40	\$34.23
Jan-13	20,000	8,320	6,560	\$9.74	\$42.56	\$31.50
Feb-13	20,000	7,680	5,760	\$9.75	\$42.65	\$31.64
Mar-13	20,000	8,320	6,540	\$9.36	\$40.78	\$29.71
Apr-13	20,000	8,320	6,080	\$8.57	\$37.06	\$26.54
May-13	20,000	8,320	6,560	\$8.15	\$35.11	\$19.85
Jun-13	20,000	8,000	6,400	\$8.39	\$36.27	\$20.50

TABLE 2 - BPA's Projected Revenue

Month	Revenues by Rate Determinant			Projected IP Revenue	
	Demand (\$)	HLH (\$)	LLH (\$)	Month (\$)	Cumulative (\$)
Jun-11	\$26,400	\$259,418	\$141,603	\$427,421	\$427,421
Jul-11	\$32,200	\$266,640	\$197,181	\$496,021	\$923,442
Aug-11	\$37,800	\$322,358	\$195,936	\$556,094	\$1,479,536
Sep-11	\$39,200	\$291,920	\$206,464	\$537,584	\$2,017,120
Oct-11	\$0	\$338,957	\$202,901	\$541,858	\$2,558,978
Nov-11	\$0	\$330,080	\$197,158	\$527,238	\$3,086,216
Dec-11	\$0	\$369,408	\$224,549	\$593,957	\$3,680,173
Jan-12	\$0	\$340,480	\$216,720	\$557,200	\$4,237,373
Feb-12	\$0	\$341,200	\$187,309	\$528,509	\$4,765,881
Mar-12	\$0	\$352,339	\$184,796	\$537,135	\$5,303,017
Apr-12	\$0	\$296,480	\$169,856	\$466,336	\$5,769,353
May-12	\$0	\$247,174	\$107,984	\$355,158	\$6,124,511
Jun-12	\$0	\$301,766	\$124,640	\$426,406	\$6,550,918
Jul-12	\$0	\$371,440	\$229,379	\$600,819	\$7,151,737
Aug-12	\$0	\$418,867	\$219,336	\$638,203	\$7,789,940
Sep-12	\$0	\$350,054	\$213,898	\$563,952	\$8,353,892
Oct-12	\$0	\$351,994	\$193,003	\$544,997	\$8,898,889
Nov-12	\$0	\$330,080	\$197,158	\$527,238	\$9,426,127
Dec-12	\$0	\$355,200	\$235,502	\$590,702	\$10,016,829
Jan-13	\$0	\$354,099	\$206,640	\$560,739	\$10,577,569
Feb-13	\$0	\$327,552	\$182,246	\$509,798	\$11,087,367
Mar-13	\$0	\$339,290	\$194,303	\$533,593	\$11,620,960
Apr-13	\$0	\$308,339	\$161,363	\$469,702	\$12,090,662
May-13	\$0	\$292,115	\$130,216	\$422,331	\$12,512,994
Jun-13	\$0	\$290,160	\$131,200	\$421,360	\$12,934,354

TABLE 3 - BPA's Forecasted Revenues Obtained from the Market

Month	Forecasted Market		Forecasted Revenues Obtained from the Market			
	HLH Price (\$ / MWh)	LLH Price (\$ / MWh)	HLH (\$)	LLH (\$)	Month (\$) (HLH + LLH)	Cumulative (\$)
Jun-11	\$30.17	\$22.73	\$250,981	\$138,205	\$389,186	\$389,186
Jul-11	\$32.67	\$25.56	\$261,330	\$175,841	\$437,171	\$826,357
Aug-11	\$36.24	\$28.63	\$313,074	\$178,631	\$491,706	\$1,318,063
Sep-11	\$34.20	\$27.78	\$273,575	\$177,807	\$451,382	\$1,769,445
Oct-11	\$41.44	\$32.61	\$344,781	\$213,922	\$558,702	\$2,328,147
Nov-11	\$42.43	\$33.22	\$339,440	\$213,272	\$552,712	\$2,880,860
Dec-11	\$45.75	\$36.51	\$380,640	\$239,506	\$620,146	\$3,501,005
Jan-12	\$42.59	\$32.33	\$340,720	\$222,430	\$563,150	\$4,064,156
Feb-12	\$42.12	\$32.07	\$336,960	\$189,854	\$526,814	\$4,590,970
Mar-12	\$40.73	\$30.73	\$351,907	\$191,141	\$543,048	\$5,134,018
Apr-12	\$36.94	\$26.35	\$295,520	\$168,640	\$464,160	\$5,598,178
May-12	\$35.68	\$21.17	\$251,187	\$115,165	\$366,352	\$5,964,530
Jun-12	\$37.13	\$22.24	\$308,922	\$135,219	\$444,141	\$6,408,671
Jul-12	\$47.37	\$34.84	\$378,960	\$239,699	\$618,659	\$7,027,330
Aug-12	\$49.32	\$36.61	\$426,125	\$228,446	\$654,571	\$7,681,901
Sep-12	\$46.26	\$33.16	\$355,277	\$222,835	\$578,112	\$8,260,013
Oct-12	\$46.49	\$35.68	\$401,674	\$222,643	\$624,317	\$8,884,330
Nov-12	\$46.53	\$34.65	\$372,240	\$222,453	\$594,693	\$9,479,023
Dec-12	\$49.50	\$38.40	\$396,000	\$264,192	\$660,192	\$10,139,215
Jan-13	\$48.97	\$37.11	\$407,430	\$243,442	\$650,872	\$10,790,087
Feb-13	\$49.61	\$37.64	\$381,005	\$216,806	\$597,811	\$11,387,898
Mar-13	\$47.28	\$35.13	\$393,370	\$229,750	\$623,120	\$12,011,018
Apr-13	\$43.61	\$33.17	\$362,835	\$201,674	\$564,509	\$12,575,527
May-13	\$40.98	\$24.97	\$340,954	\$163,803	\$504,757	\$13,080,283
Jun-13	\$41.86	\$25.19	\$334,880	\$161,216	\$496,096	\$13,576,379

TABLE 4 - BPA's Net Benefit before Adjustment

Month	Month (\$)	Cumulative (\$)
Jun-11	\$38,235	\$38,235
Jul-11	\$58,850	\$97,085
Aug-11	\$64,389	\$161,473
Sep-11	\$86,202	\$247,675
Oct-11	(\$16,845)	\$230,830
Nov-11	(\$25,474)	\$205,356
Dec-11	(\$26,189)	\$179,167
Jan-12	(\$5,950)	\$173,217
Feb-12	\$1,694	\$174,911
Mar-12	(\$5,912)	\$168,999
Apr-12	\$2,176	\$171,175
May-12	(\$11,194)	\$159,981
Jun-12	(\$17,734)	\$142,247
Jul-12	(\$17,840)	\$124,407
Aug-12	(\$16,368)	\$108,039
Sep-12	(\$14,160)	\$93,879
Oct-12	(\$79,320)	\$14,559
Nov-12	(\$67,455)	(\$52,896)
Dec-12	(\$69,490)	(\$122,385)
Jan-13	(\$90,133)	(\$212,518)
Feb-13	(\$88,013)	(\$300,531)
Mar-13	(\$89,527)	(\$390,058)
Apr-13	(\$94,806)	(\$484,864)
May-13	(\$82,426)	(\$567,290)
Jun-13	(\$74,736)	(\$642,026)

TABLE 5a - BPA's Net Benefit Adjustments

Month	Value of Reserves	
	Month (\$)	Cumulative (\$)
Jun-11	\$11,520	\$11,520
Jul-11	\$11,904	\$23,424
Aug-11	\$11,904	\$35,328
Sep-11	\$11,520	\$46,848
Oct-11	\$14,136	\$60,984
Nov-11	\$13,699	\$74,683
Dec-11	\$14,136	\$88,819
Jan-12	\$14,136	\$102,955
Feb-12	\$13,224	\$116,179
Mar-12	\$14,117	\$130,296
Apr-12	\$13,680	\$143,976
May-12	\$11,856	\$155,832
Jun-12	\$13,680	\$169,512
Jul-12	\$14,136	\$183,648
Aug-12	\$14,136	\$197,784
Sep-12	\$13,680	\$211,464
Oct-12	\$14,136	\$225,600
Nov-12	\$13,699	\$239,299
Dec-12	\$14,136	\$253,435
Jan-13	\$14,136	\$267,571
Feb-13	\$12,768	\$280,339
Mar-13	\$14,117	\$294,456
Apr-13	\$13,680	\$308,136
May-13	\$14,136	\$322,272
Jun-13	\$13,680	\$335,952

TABLE 5b - BPA's Net Benefit Adjustments**Avoided Tx and Ancillary Service Costs (May-12 is through May 26)**

Month	Month (\$)	Proportional Month (\$)	Cumulative (\$)
Jun-11	\$277,342	\$16,314	\$16,314
Jul-11	\$85,751	\$5,044	\$21,358
Aug-11	\$0	\$0	\$21,358
Sep-11	\$0	\$0	\$21,358
Oct-11	\$8,526	\$502	\$21,860
Nov-11	\$22,634	\$1,331	\$23,191
Dec-11	\$70,298	\$4,135	\$27,327
Jan-12	\$275,908	\$16,230	\$43,556
Feb-12	\$229,707	\$13,512	\$57,069
Mar-12	\$238,162	\$14,010	\$71,078
Apr-12	\$406,871	\$23,934	\$95,012
May-12	\$631,194	\$32,179	\$127,190
Jun-12	\$0	\$0	\$127,190
Jul-12	\$0	\$0	\$127,190
Aug-12	\$0	\$0	\$127,190
Sep-12	\$0	\$0	\$127,190
Oct-12	\$0	\$0	\$127,190
Nov-12	\$0	\$0	\$127,190
Dec-12	\$0	\$0	\$127,190
Jan-13	\$0	\$0	\$127,190
Feb-13	\$0	\$0	\$127,190
Mar-13	\$0	\$0	\$127,190
Apr-13	\$0	\$0	\$127,190
May-13	\$0	\$0	\$127,190
Jun-13	\$0	\$0	\$127,190

The May-12 Proportional Month is the amount of benefit for May 1 through May 26.

TABLE 5c - BPA's Net Benefit Adjustments**Demand Shift (May-12 is through May 26)**

Month	Proportional		
	Month (\$)	Month (\$)	Cumulative (\$)
Jun-11	\$231,819	\$13,636	\$13,636
Jul-11	\$59,053	\$3,474	\$17,110
Aug-11	(\$170,339)	(\$10,020)	\$7,090
Sep-11	(\$79,296)	(\$4,664)	\$2,426
Oct-11	(\$58,137)	(\$3,420)	(\$994)
Nov-11	\$32,607	\$1,918	\$924
Dec-11	\$32,513	\$1,913	\$2,836
Jan-12	\$389,460	\$22,909	\$25,746
Feb-12	\$340,733	\$20,043	\$45,789
Mar-12	\$481,712	\$28,336	\$74,125
Apr-12	\$571,432	\$33,614	\$107,739
May-12	\$1,244,548	\$63,448	\$171,186
Jun-12		\$0	\$171,186
Jul-12		\$0	\$171,186
Aug-12		\$0	\$171,186
Sep-12		\$0	\$171,186
Oct-12		\$0	\$171,186
Nov-12		\$0	\$171,186
Dec-12		\$0	\$171,186
Jan-13		\$0	\$171,186
Feb-13		\$0	\$171,186
Mar-13		\$0	\$171,186
Apr-13		\$0	\$171,186
May-13		\$0	\$171,186
Jun-13		\$0	\$171,186

The May-12 Proportional Month is the amount of benefit for May 1 through May 26.

TABLE 6 - BPA's Net Benefit after Adjustments

Month	BPA's Adjusted Net Revenue or (Cost)					
	Net Revenue or (Cost) (A) Month (\$)	Value of Reserves (B) Month (\$)	Avoided Tx Costs (C) Month (\$)	Demand Shift (D) Month (\$)	A + B + C + D Month (\$)	Cumulative (\$)
Jun-11	\$38,235	\$11,520	\$16,314	\$13,636	\$79,705	\$79,705
Jul-11	\$58,850	\$11,904	\$5,044	\$3,474	\$79,272	\$158,977
Aug-11	\$64,389	\$11,904	\$0	(\$10,020)	\$66,273	\$225,250
Sep-11	\$86,202	\$11,520	\$0	(\$4,664)	\$93,057	\$318,307
Oct-11	(\$16,845)	\$14,136	\$502	(\$3,420)	(\$5,627)	\$312,680
Nov-11	(\$25,474)	\$13,699	\$1,331	\$1,918	(\$8,526)	\$304,154
Dec-11	(\$26,189)	\$14,136	\$4,135	\$1,913	(\$6,005)	\$298,149
Jan-12	(\$5,950)	\$14,136	\$16,230	\$22,909	\$47,325	\$345,474
Feb-12	\$1,694	\$13,224	\$13,512	\$20,043	\$48,474	\$393,948
Mar-12	(\$5,912)	\$14,117	\$14,010	\$28,336	\$50,550	\$444,498
Apr-12	\$2,176	\$13,680	\$23,934	\$33,614	\$73,403	\$517,901
May-12	(\$11,194)	\$11,856	\$32,179	\$63,448	\$96,288	\$614,190
Jun-12	(\$17,734)	\$13,680	\$0	\$0	(\$4,054)	\$610,135
Jul-12	(\$17,840)	\$14,136	\$0	\$0	(\$3,704)	\$606,431
Aug-12	(\$16,368)	\$14,136	\$0	\$0	(\$2,232)	\$604,199
Sep-12	(\$14,160)	\$13,680	\$0	\$0	(\$480)	\$603,719
Oct-12	(\$79,320)	\$14,136	\$0	\$0	(\$65,184)	\$538,535
Nov-12	(\$67,455)	\$13,699	\$0	\$0	(\$53,756)	\$484,780
Dec-12	(\$69,490)	\$14,136	\$0	\$0	(\$55,354)	\$429,426
Jan-13	(\$90,133)	\$14,136	\$0	\$0	(\$75,997)	\$353,429
Feb-13	(\$88,013)	\$12,768	\$0	\$0	(\$75,245)	\$278,184
Mar-13	(\$89,527)	\$14,117	\$0	\$0	(\$75,410)	\$202,775
Apr-13	(\$94,806)	\$13,680	\$0	\$0	(\$81,126)	\$121,648
May-13	(\$82,426)	\$14,136	\$0	\$0	(\$68,290)	\$53,359
Jun-13	(\$74,736)	\$13,680	\$0	\$0	(\$61,056)	(\$7,697)

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Attachment D

BPA's Record of Decision on Short-Term Marketing and Operating Arrangements

ADMINISTRATOR'S RECORD OF DECISION

SHORT-TERM MARKETING AND OPERATING ARRANGEMENTS

INTRODUCTION

The Bonneville Power Administration (BPA) has decided to enter into short-term marketing and operational arrangements in order to participate continuously in the open electric power market. These arrangements would enable BPA to achieve the best reliability and expected economic outcome, as well as to best meet its environmental responsibilities, given diverse market conditions. This decision would support power cost control, enhance BPA competitiveness, and provide public benefits. The amount of hydropower available to BPA will be defined by the System Operation Review (SOR), a separate process underway to determine future hydro operations. The decision documented in this Record of Decision (ROD) is a direct application of BPA's earlier decision to use a Market-Driven approach for participation in the increasingly competitive electric power market.

The decision to enter into these short-term contractual arrangements is consistent with BPA's Business Plan, the Business Plan Environmental Impact Statement (BP EIS) (DOE/EIS-0183, June 1995) and the BP ROD (August 15, 1995). In response to a need for a sound policy to guide its business direction under changing market conditions, BPA explored six alternative plans of action in its BP EIS. The six alternatives were: Status Quo (no action), BPA Influence, Market-Driven, Maximize Financial Returns, Minimal BPA, and Short-Term Marketing. In the subsequent BP ROD, the BPA Administrator selected the Market-Driven Alternative. Although the Status Quo and the BPA Influence alternatives were environmentally preferred, the differences in total environmental impacts among alternatives were relatively small. 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 high level of support for public benefits such as energy conservation and fish and wildlife mitigation activities.

The BP EIS and ROD were also intended to guide BPA in a series of related decisions on specific issues and actions. Decisions on providing short-term marketing and operational arrangements are some of these subsequent actions, and the subject of this tiered ROD. Tiering subsequent RODs to the BP ROD helps delineate BPA decisions clearly and provides a logical framework for connecting broad programmatic decisions to more specific actions.

Before taking specific action on any of these issues, BPA affirmatively stated that it would review the BP EIS to ensure that a particular action was adequately covered within the scope of that EIS and, if appropriate, issue a tiered ROD. This ROD, which summarizes and incorporates information from the BP ROD, is a result of such a review. It describes specific information on the decision to provide short-term marketing and operational arrangements, and summarizes the environmental impacts associated with this decision, as described in the BP EIS.

NEW COMPETITIVENESS IN THE ELECTRIC INDUSTRY

The electric utility industry is becoming increasingly competitive and dynamic. Four factors are substantially affecting BPA's ability to compete: market change, increased non-power obligations, deterioration of BPA's cost/price advantage, and lost hydro output. The emergence of competition has led to significantly lower prices for wholesale electric power. At the same time, BPA's costs for providing major public benefits (including fish and wildlife enhancement and support of energy efficiency) have increased significantly. A series of dry years and changes in hydro system operations have also seriously affected BPA's ability to produce power and generate revenues.

The current West Coast surplus, decline in costs of competing generating resources, low cost of energy, and difficulty in siting and developing new generating facilities continue to lead electric utilities and other parties to emphasize shorter-term commitments to buy and sell. In addition, the recent market deregulation has fostered the emergence of marketers and broker parties. These parties by their nature concentrate on shorter-term commitments than do utilities that have extended obligations to serve load.

However, BPA must be able to balance its costs and revenues. The availability of power at competitive prices from other suppliers prevents BPA from meeting costs simply by raising rates for its customers. That BPA firm power rate level above which a rate increase would no longer increase BPA's revenue and cover BPA's costs would produce BPA's maximum sustainable revenue. Allowing BPA's rates to exceed this level would not be consistent with sound business principles. BPA's total revenue would be reduced, as would BPA's ability to fund public benefits.

SHORT-TERM MARKETING CUSTOMERS

BPA will negotiate short-term marketing and operating arrangements and related transmission services with parties able to participate in the open electric power market. Potential customers include utilities and Direct Service Industries within the region, and other power purchasers inside and outside the Pacific Northwest (PNW).

DESCRIPTION OF THE PROPOSED SHORT-TERM MARKETING AND OPERATIONAL ARRANGEMENTS AND RELATED TRANSMISSION ARRANGEMENTS

Short-Term Marketing

BPA will continuously participate in the bulk electric power market via its short-term marketing arrangements. Short-term marketing and operating arrangements cover a variety of scheduling periods--hours, weeks, days, months, or years. The vast majority of these market-based actions cover periods of less than 1 year, although some actions could have terms of up to 5 years.

BPA's short-term marketing actions will try to maximize the value of hydrosystem conditions that result from decisions made by other agencies. (As noted earlier, the amount of hydropower available to BPA will be defined by the SOR. Decisions made by the Corps of Engineers or Bureau of Reclamation to manage river operations for navigation, flood control, irrigation, recreation and fish and wildlife activities determine how much water is available for generation and when it is available.) Maximizing hydrosystem value can take a number of forms. For example, throughout the late spring and summer months, BPA sells very large amounts of surplus energy generated from flow provided for downstream salmon migration, as prescribed by the National Marine Fisheries Service 1995 Biological Opinion. During the fall, BPA often purchases large quantities of energy to recover depleted reservoirs, in preparation for winter loads. BPA also makes purchases to meet extreme weather conditions and unexpected resource or transmission outages.

The peak load demands of the PNW and California occur at different times. The PNW peaks occur in winter, while California's demand peaks in summer. During the summer, the PNW hydro-based systems tend to have excess capacity that can be used to help meet California's peak demands. Similarly, California's thermal-based system tends to have excess capacity in the winter, which can be used to help the PNW meet its peak demands. BPA has several seasonal and capacity/energy exchange contracts with California utilities.

In general, BPA will be in the market buying or selling to match energy supplies to load and/or to execute operational strategies. To the extent permitted by statute and consistent with sound business principles, BPA will also expand its short-term marketing activity beyond the disposal of surplus generation or the meeting of short-term load. BPA will look continuously for marketing opportunities in power-related trading and financial transactions. BPA's objective will be to improve net revenues, reduce costs, and reduce the risk of periodic revenue shortfalls due to changes in supply or market conditions.

Water Management

The Power Supply Manager may arrange for water storage, rentals or other physical water management operations for fish-related or other non-power purposes; for energy storage as a service to other utilities; and for implementation actions related to the Pacific Northwest Coordination Agreement, the Columbia River Treaty annual operating plan or detailed operating plan, and non-Treaty coordination operations such as the Non-Treaty Storage Agreement.

ENVIRONMENTAL ANALYSIS

Consistent with the BP ROD, the Administrator reviewed the BP EIS to determine whether (1) entering into short-term (5 years or less) marketing and operational arrangements in order to participate continuously in the open electric power market and (2) making generation operation decisions that accommodate that participation were adequately covered within the scope of the BP EIS. The BP EIS was intended to support a number of decisions, including short-term contractual arrangements lasting 5 years or less. The chosen Market-Driven Alternative includes the offering of flexible short-term arrangements with customers. In addition, one of the other alternatives analyzed in the EIS, Short-Term Marketing, limited BPA's marketing activities to short-term marketing of power and transmission products and services.

The BP EIS showed that environmental impacts are determined by the responses to BPA's marketing actions, rather than by the actions themselves. These market responses include resource development, resource operation, transmission development and operation, and consumer behavior.

Environmental Impacts

Short-term marketing and operating arrangements are an integral part of the marketing efforts of a Market-Driven BPA. As such, the potential impacts on resource development, resource operations, transmission system development and operations, and consumer behavior were considered in determining the potential environmental impacts of adopting a Market-Driven approach to participation in the competitive electric utility market.

Regionally, fewer new resources (most likely combustion turbines) would be developed because less load would be shifted away from BPA. However, the operation of existing generation would be greater, as other participants compete within the utility market. The higher emissions levels of these mostly older, less-efficient thermal resources would result in higher levels of air emissions and water use. Transmission system development would be unchanged; transmission system operation would likely be more efficient. BPA rates would be competitive with market rates.

Marketing Impacts

The expected broad marketing impacts of BPA's adopted approach will be (1) to preserve or increase BPA's market share in the PNW and West Coast open markets as much as possible, given the deregulated and competitive nature of the market, (2) to maximize BPA's power operations efficiency, in context with non-power objectives, and (3) mutually to benefit BPA's power economics and power system operations through coordinated short-term trading and risk management arrangements. Many of BPA's customers and other parties participating in the open market are expected to respond to BPA's short-term marketing and operating arrangement efforts. Flexible contracts responding to the pricing and unbundling forces emerging with the opening of the wholesale power market will meet customer needs for competitively priced products and services, improve customer relations, assist BPA in reducing costs, and enhance BPA's ability to use a Market-Driven approach to participate continuously in the open electric market. Systematic efforts to meet customer needs, offer feasible service options, and lower rates will help BPA to continue to serve the bulk of its historic loads. Load will be lost mainly as customers seek ways to diversify their sources of power, and not through dissatisfaction with BPA. To the extent that BPA is successful in applying a Market-Driven approach to its business activities, BPA will be more likely to maintain revenues and be better able to fund public benefits.

Public Benefits

Consistent with the Market-Driven approach, the decision to undertake short-term contractual arrangements lasting 5 years or less strikes a balance between marketing and environmental concerns. BPA will actively participate in the competitive market for power, and will use its success in the market to ensure the financial strength necessary to produce the public benefits that BPA affords to the region.

Mitigation

In deciding to enter into these short-term contractual arrangements under the Market-Driven approach, BPA understands that the conditions that permit the agency to function successfully may change over time. Therefore, the Market-Driven Alternative contains preparatory mitigation measures (response strategies) to respond to change and allow the agency to balance cost and revenues. Such mitigation will enhance BPA's ability to adapt to changing market conditions.

These response strategies--which include means to decrease spending, increase revenues, and transfer costs--could be implemented if BPA's costs and revenues did not balance. BPA has already decided (in the BP ROD) to apply as many mitigation response strategies as necessary whenever BPA's costs and revenues do not balance. These mitigation strategies, or equivalents, will be implemented to enable BPA to best meet its public service and environmental obligations, while remaining competitive in the wholesale electric power market.

PUBLIC AVAILABILITY

Copies of the Business Plan EIS and the Business Plan ROD, as well as additional copies of this ROD, are available to all interested and affected persons and agencies from BPA's Public Involvement Office, P.O. Box 12999, Portland, Oregon 97212. Copies of these documents may also be obtained by using BPA's nationwide toll-free request line, 1-800-622-4520.

CONCLUSION

I have decided that BPA will enter into short-term marketing and operational arrangements (consistent with the SOR) in order to participate continuously in the open electric power market.

This decision is consistent with BPA's Market-Driven approach for participation in the increasingly competitive power market, since it will enable BPA to increase the value of its short-term power products, increase net revenues, and control costs. BPA seeks to be responsive to its customers' needs, while ensuring the financial strength necessary to produce public benefits such as fish and wild life mitigation and energy conservation.

Issued in Portland, Oregon, on January 22, 1996.

/s/ Randall W. Hardy
Administrator and Chief
Executive Officer

bcc:
Adm. Chron. File – A

Official File - KEC (EQ-14 – Business Plan EIS – 1996)

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This Electronic File:
W\KEC\EISs – EQ-14\Business Plan\All Finalized BP RODs\
Short-Term Marketing ROD 1-22-96.doc