



201 South Main, Suite 2300
Salt Lake City, Utah 84111

May 2, 2011

***VIA ELECTRONIC FILING
AND OVERNIGHT DELIVERY***

Utah Public Service Commission
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City UT 84111

Attention: Julie P. Orchard
Commission Secretary

Re: Docket No. 06-999-03
Rocky Mountain Power's Fossil Fuel Energy Efficiency Standard Plan

On August 10, 2007, the Public Service Commission of Utah issued its Determination Concerning the PURPA Fossil Fuel Generation Efficiency Standard and adopted the PURPA Fossil Fuel Generation Efficiency Standard with a due date of March 31 each year. On November 25, 2010, the Commission modified the filing schedule to May 1 each year.

Enclosed for filing is the 2011 Rocky Mountain Power Fossil Fuel Energy Efficiency Plan Report for all coal fired plants. The report includes a heat rate improvement plan for the PacifiCorp system followed by individual plans for each coal fired plant. Heat rate improvement plans are still being developed for gas fueled plants and therefore are not included with this report. Also included is the summary of the 2010 FERC Form 1 data.

It is respectfully requested that all formal correspondence and staff requests regarding this filing be addressed to:

By e-mail (preferred): datarequest@pacificorp.com

By regular mail: Data Request Response Center
PacifiCorp
825 NE Multnomah, Suite 2000
Portland, Oregon, 97232

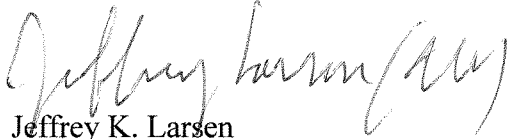
Utah Public Service Commission

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Informal questions should be directed to Dave Taylor at (801) 220-2923.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jeffrey K. Larsen".

Jeffrey K. Larsen

Vice President, Regulation

cc: Division of Public Utilities
Office of Consumer Services

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[illegible]

Form 1 Line no.	Blundell Plant	Carbon Plant	Dawe Johnston Plant	Gadsby Plant	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Huntington Plant	Jim Bridger Plant	Little Mountain	Naughton Plant	Wyodak Plant	Thermal Plants Total	FERC Acct no.	
1	Kind of Plant (Internal Comb Gas Turb Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas - Turbine	Steam	Steam			
2	Type of Constr (Conventional Outdoor, Boiler, etc)	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Conventional			
3	Year Originally Constructed	1964	1954	1959	1951	1978	1980	1978	1974	1972	1971	1978			
4	Year Last Unit was Installed	1984	1957	1972	1955	1980	1983	1983	1977	1979	1972	1971			
5	Net Installed Cap (Max Gen Name Plate Ratings-MW)	26 1	188 6	616 8	418 5	269 2	446 4	1,134 1	892 8	1,494 3	16 0	289 7	5,817 9		
6	Net Peak Demand on Plant - MW (60 minutes)	24	189	801	234	405	310	418	841	1,430	16	712	280	5,660	
7	Net Hours Connected to Load	8,566	8,784	8,784	1,986	8,436	8,534	8,218	8,784	8,782	7,288	8,784	8,595		
8	Net Continuous Plant Capability (Megawatts)														
9	When Not Limited by Condenser Water	175	772		235		250		845	1,387	14	700	268	5,463	
10	Average Number of Employees	16	79	214	39	88	69	266	184	413	6	105	1,508		
11	Cost of Plant, Excl. of Plant Use - \$/KWh	191,912,000	1,411,560,000	5,958,080,000	155,583,000	1,924,874,000	3,150,031,000	8,066,064,000	6,408,988,000	9,908,553,000	5,060,911,000	2,276,888,000	39,478,301,000		
12	Cost of Plant, Incl. of Plant Use - \$/KWh	31,026,420	1,459,546	5,989,417,000	8,876,000	1,978,479,000	3,187,287,000	8,172,855	9,917,855	130,083,405	49,690,448	40,339,656	568,465,234		
13	Cost of Plant, Incl. of Plant Use - \$/KWh	6,982,870	10,125,036	29,833,785	13,069,439	48,754,739	87,511,287	196,195,068	286,551,784	328,330	229,917,653	259,920,145	2,486,486,046		
14	Structures and Improvements														
15	Equipment Costs														
16	Asset Retirement Costs														
17	Total Cost	\$ 69,631,145	\$ 63,748,749	\$ 298,152,451	\$ 69,720,191	\$ 256,265,227	\$ 454,373,053	\$ 896,267,281	\$ 380,629,841	\$ 768,481,274	\$ 3,467,999	\$ 280,152,579	\$ 300,470,327	\$ 3,132,141,837	
18	Cost per KW of Installed Capacity (our share)	\$ 2,667,861	\$ 334,02	\$ 305,04	\$ 277,06	\$ 669,47	\$ 1,017,86	\$ 792,03	\$ 426,33	\$ 514,09	\$ 216,75	\$ 396,14	\$ 1,037,32	\$ 538,37	
19	Operation Supervision and Engineering		551,050	2,386,093	416,863	467,775	166,019	1,174,003	1,561,503	2,513,896		2,098,073	1,092,742	11,965,167	
20	Fuel		9,704,582	38,957,080	4,467,945	30,076,106	19,436,304	30,116,113	79,629,523	48,801,875		62,249,237	20,187,717	368,184,241	
21	Coal and Water (Nuclear Plants Only)														
22	Steam Expenses		1,046,152	2,255,325				5,777,405	2,805,105	5,453,312		2,785,240	2,019,373	23,263,189	
23	Steam From Other Sources	308,743												3,595,449	
24	Electric Transferred (C/I)														
25	Electric Expenses	292,155		908,669		1,152,038		2,888,039	2,189,069	2,022,707		1,511,162	462,404	12,478,758	
26	Misc Steam (or Nuclear) Power Expenses	260,132	1,322,767	2,205,592	680,792	436,868	1,363,398	3,023,530	3,314,911	4,677,411		3,693,488	1,536,537	20,354,840	
27	Rents	4,810				340	380	839		35,611		2,517	43,977		
28	Repairs														
29	Overhauls		659,119	1,697,206	450,700	290,435	898,928	1,678,731	1,862,238	2,153,971		2,532,541	1,097,123	12,497,327	
30	Maintenance of Structures	39,328	130,604	998,331	77,490	507,423	1,425,310	675,371	1,425,369	1,425,369		502,468	269,774	5,664,084	
31	Maintenance of Boilers (or Reactor) Plant	180,160	2,152,015	6,872,868	791,733	2,101,964	3,267,400	6,411,030	4,819,520	11,575,790		6,157,648	2,318,811	41,349,605	
32	Maintenance of Electric Plant	113,485	382,663	1,157,984	488,429	1,324,834	160,207	1,139,381	813,378	2,150,784		2,087,181	321,539	8,664,854	
33	Maintenance of Misc Steam (or Nuclear) Plant	163,324	576,172	2,061,391	301,477	953,267	342,871	1,068,164	2,364,302	2,592,407		1,484,122	777,582	12,791,757	
34	Total Production Expenses	\$ 5,156,436	\$ 17,143,823	\$ 60,804,557	\$ 6,516,659	\$ 40,026,343	\$ 23,528,676	\$ 42,287,086	\$ 105,842,104	\$ 138,786,333	\$ -	\$ 85,013,325	\$ 30,113,602	\$ 520,751,248	
35	Expenses per Net KWh	\$ 0.0266	\$ 0.0123	\$ 0.0102	\$ 0.0047	\$ 0.0133	\$ 0.0122	\$ 0.0134	\$ 0.0108	\$ 0.0140	\$ 0.0167	\$ 0.0132	\$ 0.0132		
36	Total Btu's - \$/MWh	\$ 26.60	\$ 14.29	\$ 10.21	\$ 54.74	\$ 13.29	\$ 12.22	\$ 13.42	\$ 13.09	\$ 10.80	\$ 14.01	\$ 16.73	\$ 13.23	\$ 13.19	
37	Fuel - \$/MWh	\$ -	\$ 6.88	\$ 6.54	\$ 28.72	\$ 9.99	\$ 10.10	\$ 9.56	\$ 9.85	\$ 7.61	\$ 10.51	\$ 12.25	\$ 8.87	\$ 8.33	
38	Non-fuel - \$/MWh	\$ 26.60	\$ 5.41	\$ 3.67	\$ 26.02	\$ 3.30	\$ 2.13	\$ 3.86	\$ 3.24	\$ 3.19	\$ 3.49	\$ 4.48	\$ 4.36	\$ 3.86	
39	Variable O&M (per RDI definition) - \$/MWh	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
40	Fixed O&M (RDI definition) - \$/MWh installed	\$ 1.57	\$ 1.08	\$ 0.73	\$ 0.52	\$ 0.64	\$ 0.42	\$ 0.77	\$ 0.65	\$ 0.64	\$ 0.70	\$ 0.90	\$ 0.87	\$ 0.77	
41	Total O&M without Fuel	\$ 1,509,987	\$ 763,921	\$ 21,847,467	\$ 4,048,714	\$ 9,950,237	\$ 4,090,371	\$ 12,171,973	\$ 26,212,581	\$ 20,423,502	\$ 34,600,081	\$ 22,764,120	\$ 9,925,885	\$ 152,957,007	
42	Fuel Kind (Coal, Gas, Oil or Nuclear)		Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal		
43	Unit (Coal-tons/Oil-barrels/Gas-mcf/Nuclear-indicate)		Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons		
44	Quantity (units) of Fuel Burned	657,283	4,191,858	4,191,858	1,388,262	882,975	1,382,719	3,653,986	2,904,681	5,646,966	2,669,984	1,701,429	21,366,187		
45	Avg Heat Cont. of Fuel Burned (Btu/lbdefine if nuclear)	11,375	11,465	11,465	11,375	11,470	11,354	11,470	11,354	11,354	9,969	11,375	9,735		
46	Average Cost of Fuel per Unit Burned	14,682	14,682	14,682	21,965	21,965	21,965	21,965	21,965	21,965	21,965	21,965	21,965		
47	Average Cost of Fuel Burned per Million BTU	0.607	0.592	0.592	0.948	0.948	0.948	0.948	0.948	0.948	0.948	0.948	0.948		
48	Fuel Kind (Coal, Gas, Oil, or Nuclear)		Gas	Gas											
49	Unit (Coal-tons/Oil-barrels/Gas-mcf/Nuclear-indicate)		MCF	MCF											
50	Quantity (units) of Fuel Burned	1,984,906	1,984,906	1,984,906											
51	Avg Heat Cont. of Fuel Burned (Btu/lbdefine if nuclear)	1,021	1,021	1,021											
52	Average Cost of Fuel per Unit Burned	2,251	2,251	2,251											
53	Average Cost of Fuel Burned per Million BTU	2,205	2,205	2,205											
54	Average Cost of Fuel Burned per KWh Net Gen	0.029	0.029	0.029											
55	Unit (Coal-tons/Oil-barrels/Gas-mcf/Nuclear-indicate)		Oil	Oil											
56	Quantity (units) of Fuel Burned	140,000	140,000	140,000											
57	Avg Heat Cont. of Fuel Burned (Btu/lbdefine if nuclear)	35,338	35,338	35,338											
58	Average Cost of Fuel per Unit Burned	32,282	32,282	32,282											
59	Average Cost of Fuel Burned per Million BTU	5,481	5,481	5,481											
60	Average Cost of Fuel Burned per KWh Net Gen	11,281.77	10,945.47	10,945.47	13,024.94	10,678.61	9,997.24	10,375.93	10,465.12	10,605.49	11,932.80	10,601.14			

FERC Acct no.	Form 1 Line no.	Kind of Plant (Internal Comb. Gas Turb. Nuclear Type of Constr. (Conventional, Outdoor, Boiler, etc) Year Originally Constructed Year Last Unit was Installed Total Installed Cap. (Max Gen Name Plate Ratings-MW) Net Peak Demand on Plant - MW (60 minutes) Plant Hours Connected to Load Net Continuous Plant Capability (Megawatts) When Not Limited by Condenser Water Net Generation Net Generation, Exclusive of Plant Use - KWh Cost of Plant, Land and Land Rights Structures and Improvements Equipment Costs Asset Retirement Costs Total Cost Cost per KW of installed Capacity (our share) Operation Supervision and Engineering Fuel Coolants and Water (Nuclear Plants Only) Steam Expenses Steam From Other Sources Electric Expenses Miscellaneous Expenses Rentals Maintenance Maintenance Supervision and Engineering Maintenance of Structures Maintenance of Boiler (or reactor) Plant Maintenance of Electric Plant Maintenance of Misc. Steam (or Nuclear) Plant Total Production Expenses Expenses per Net KWh Total Busbar - \$/MWh Fuel - \$/MWh Non-fuel - \$/MWh Variable O&M (per RDI definition) - \$/MWh Fixed O&M (per RDI definition) - \$/MWh installed Total O&M without Fuel Fuel Kind (Coal, Gas, Oil, or Nuclear) Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate) Quantity (units) of Fuel Burned Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear) Avg Cost of Fuel/unit, as Deliv'd to b. during year Average Cost of Fuel per Unit Burned Average Cost of Fuel per Million BTU Average Cost of Fuel Burned - KWh Net Gen Fuel Kind (Coal, Gas, Oil, or Nuclear) Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate) Quantity (units) of Fuel Burned Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear) Avg Cost of Fuel/unit, as Deliv'd to b. during year Average Cost of Fuel per Unit Burned Average Cost of Fuel per Million BTU Average Cost of Fuel Burned - KWh Net Gen Fuel Kind (Coal, Gas, Oil, or Nuclear) Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate) Quantity (units) of Fuel Burned Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear) Avg Cost of Fuel/unit, as Deliv'd to b. during year Average Cost of Fuel per Unit Burned Average Cost of Fuel per Million BTU Average Cost of Fuel Burned - KWh Net Gen Average BTU per KWh Net Generation	Blundell Plant	Carbon Plant	Dave Johnston Plant	Gadsby Plant	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Hunter Plant	Huntington Plant	Jim Bridger Plant	Little Mountain	Naughton Plant	Wyodak Plant	Thermal Plants Total	FERC Acct no.
1	1	Kind of Plant (Internal Comb. Gas Turb. Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas - Turbine	Steam	Steam	Steam	500		
2	2	Type of Constr. (Conventional, Outdoor, Boiler, etc)	Indoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Conventional	501		
3	3	Year Originally Constructed	1984	1959	1951	1978	1980	1983	1978	1974	1974	1974	1963	1978	502		
4	4	Year Last Unit was Installed	1984	1957	1972	1955	1978	1980	1983	1977	1979	1972	1971	1978	503		
5	5	Total Installed Cap. (Max Gen Name Plate Ratings-MW)	26.1	188.6	816.8	251.6	418.5	446.4	1,134.1	892.8	1,518.0	16.0	707.2	289.7	5,840.9	504	
6	6	Net Peak Demand on Plant - MW (60 minutes)	24	184	807	225	336	421	1,245	857	1,355	16	726	358	5,889	505	
7	7	Plant Hours Connected to Load	8,457	8,760	8,760	8,195	7,423	8,231	8,760	8,760	8,760	5,467	8,160	8,552	506		
8	8	Net Continuous Plant Capability (Megawatts)	-	-	-	-	-	-	-	-	-	-	-	-	507		
9	9	When Not Limited by Condenser Water	-	-	-	-	-	-	-	-	-	-	-	-	508		
10	10	Net Generation	17	77	213	389	250	405	1,044	845	1,387	14	700	286	5,463	509	
11	11	Net Generation, Exclusive of Plant Use - KWh	168,518,000	1,405,087,000	5,983,482,000	181,486,000	2,877,738,000	1,622,550,000	7,117,335,000	6,142,185,000	9,786,354,000	2,298,922,000	2,298,922,000	38,773,647,000	1,471.1	510	
12	12	Cost of Plant, Land and Land Rights	31,026,429	956,547	10,417,291	1,020,271	9,668,916	9,668,916	29,606,748	2,205,422	1,196,756	635	544,478	210,526	77,188,094	511	
13	13	Structures and Improvements	6,135,077	10,010,664	33,051,815	13,399,378	56,667,714	48,889,633	88,040,671	92,739,268	131,156,324	204,044	50,401,888	47,781,677	581,487,163	512	
14	14	Equipment Costs	32,608,604	53,358,962	268,902,191	55,480,540	188,379,503	127,914,526	674,582,163	296,733,901	643,302,608	3,280,554	234,825,158	251,816,132	2,514,830,813	513	
15	15	Asset Retirement Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	514	
16	16	Total Cost	\$ 69,770,110	\$ 64,326,173	\$ 312,371,297	\$ 69,880,189	\$ 258,916,133	\$ 186,573,076	\$ 455,306,721	\$ 391,678,591	\$ 775,618,668	\$ 3,485,233	\$ 285,771,534	\$ 289,808,335	\$ 3,173,506,060	515	
17	17	Cost per KW of installed Capacity (our share)	\$ 2,673.18	\$ 341.00	\$ 362.45	\$ 277.70	\$ 618.68	\$ 603.01	\$ 1,019.05	\$ 784.27	\$ 510.85	\$ 217.83	\$ 404.09	\$ 1,035.04	\$ 543.32	516	
18	18	Operation Supervision and Engineering	135,571	710,746	2,654,825	444,128	481,561	172,796	547,289	1,211,048	1,437,778	2,541,423	63,347,719	20,036,823	12,486,830	500	
19	19	Fuel	-	-	-	-	-	-	-	-	-	-	-	-	-	501	
20	20	Coolants and Water (Nuclear Plants Only)	-	-	-	-	-	-	-	-	-	-	-	-	-	502	
21	21	Steam Expenses	250,277	1,060,549	2,265,354	448,370	2,238,314	847,589	2,205,466	5,291,429	5,121,727	3,386,420	2,081,439	22,425,406	3,557,608	503	
22	22	Steam From Other Sources	3,557,608	-	-	-	-	-	-	-	-	-	-	-	-	504	
23	23	Electric Expenses	292,165	534,878	2,146,411	21,713	1,147,296	435,163	1,145,432	2,728,911	2,142,412	2,128,672	1,517,228	522,864	19,437,085	505	
24	24	Miscellaneous Expenses	355,843	1,134,033	2,117,368	516,554	1,199,470	547,768	1,333,823	3,061,064	4,541,294	36,604	3,291,530	20,024,184	51,095	506	
25	25	Rentals	4,655	-	6,000	-	242	85	273	600	-	-	1,236	-	-	507	
26	26	Maintenance	80,656	685,161	1,791,159	401,474	820,618	286,806	920,535	1,962,507	2,200,929	-	2,968,317	1,073,434	13,191,586	510	
27	27	Maintenance Supervision and Engineering	36,549	94,103	171,331	124,149	411,716	161,469	427,107	1,000,292	780,122	-	482,476	208,946	5,123,539	511	
28	28	Maintenance of Structures	308,758	2,471,311	8,913,317	865,013	2,347,267	2,698,299	7,549,002	7,934,369	10,916,389	-	5,974,263	2,224,456	47,217,102	512	
29	29	Maintenance of Boiler (or reactor) Plant	88,124	394,698	1,806,021	293,079	338,746	448,568	1,360,430	1,974,702	2,338,588	-	1,603,011	324,512	10,214,165	513	
30	30	Maintenance of Electric Plant	228,922	617,200	1,813,935	428,000	848,434	491,705	981,749	2,321,888	2,650,661	-	1,100,598	804,380	12,406,369	514	
31	31	Maintenance of Misc. Steam (or Nuclear) Plant	-	-	-	-	-	-	-	-	-	-	-	-	-	515	
32	32	Total Production Expenses	\$ 5,339,128	\$ 18,152,373	\$ 63,940,860	\$ 7,869,448	\$ 38,009,199	\$ 22,979,948	\$ 40,762,345	\$ 101,771,542	\$ 138,977,726	-	\$ 85,958,372	\$ 29,656,233	\$ 519,055,995	516	
33	33	Expenses per Net KWh	\$ 0.0317	\$ 0.0129	\$ 0.0107	\$ 0.0434	\$ 0.0132	\$ 0.0142	\$ 0.0127	\$ 0.0132	\$ 0.0142	\$ 0.0169	\$ 0.0129	\$ 0.0134	-	517	
34	34	Total Busbar - \$/MWh	\$ 31.68	\$ 12.92	\$ 10.69	\$ 43.36	\$ 13.21	\$ 14.16	\$ 12.68	\$ 13.19	\$ 10.97	\$ 14.20	\$ 16.88	\$ 12.89	\$ 13.39	518	
35	35	Fuel - \$/MWh	-	-	\$ 7.15	\$ 6.62	\$ 23.84	\$ 9.79	\$ 10.22	\$ 9.45	\$ 9.74	\$ 6.91	\$ 12.45	\$ 8.71	\$ 9.28	519	
36	36	Non-fuel - \$/MWh	\$ 31.68	\$ 5.77	\$ 4.07	\$ 19.52	\$ 3.42	\$ 3.94	\$ 3.22	\$ 3.45	\$ 4.06	\$ 4.44	\$ 4.44	\$ 4.18	\$ 4.10	520	
37	37	Variable O&M (per RDI definition) - \$/MWh	\$ 2.11	\$ 1.15	\$ 0.81	\$ 3.90	\$ 0.68	\$ 0.79	\$ 0.84	\$ 0.69	\$ 0.81	\$ 0.69	\$ 0.89	\$ 0.84	\$ 0.82	521	
38	38	Fixed O&M (per RDI definition) - \$/MWh installed	\$ 8.46	\$ 4.61	\$ 3.26	\$ 15.62	\$ 2.74	\$ 3.15	\$ 2.58	\$ 2.76	\$ 3.25	\$ 2.78	\$ 3.55	\$ 3.35	\$ 3.28	522	
39	39	Total O&M without Fuel	\$ 1,781,520	\$ 8,102,890	\$ 24,347,841	\$ 3,543,080	\$ 9,843,724	\$ 6,592,279	\$ 10,367,218	\$ 26,603,221	\$ 24,924,894	\$ 34,044,362	\$ 22,610,653	\$ 9,619,410	\$ 159,335,379	523	
40	40	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	524	
41	41	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	653,833	4,297,263	12,081	12,081	1,395,335	793,688	1,472,632	3,635,635	2,686,976	5,463,528	2,761,404	1,735,400	21,223,978	525	
42	42	Quantity (units) of Fuel Burned	12,081	7,923	8,543	19,166	11,961	11,569	11,567	11,702	11,381	8,395	9,381	8,592	9,778	526	
43	43	Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear)	14,264	14,264	14,264	14,264	14,264	14,264	14,264	14,264	14,264	14,264	14,264	14,264	14,264	527	
44	44	Avg Cost of Fuel/unit, as Deliv'd to b. during year	0.632	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	528	
45	45	Average Cost of Fuel per Unit Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	529	
46	46	Average Cost of Fuel per Million BTU	-	-	-	-	-	-	-	-	-	-	-	-	-	530	
47	47	Average Cost of Fuel Burned - KWh Net Gen	-	-	-	-	-	-	-	-	-	-	-	-	-	531	
48	48	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	532	
49	49	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	-	-	-	-	-	-	-	-	-	-	-	-	-	533	
50	50	Quantity (units) of Fuel Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	534	
51	51	Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear)	-	-	-	-	-	-	-	-	-	-	-	-	-	535	
52	52	Avg Cost of Fuel/unit, as Deliv'd to b. during year	-	-	-	-	-	-	-	-	-	-	-	-	-	536	
53	53	Average Cost of Fuel per Unit Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	537	
54	54	Average Cost of Fuel per Million BTU	-	-	-	-	-	-	-	-	-	-	-	-	-	538	
55	55	Average Cost of Fuel Burned - KWh Net Gen	-	-	-	-	-	-	-	-	-	-	-	-	-	539	
56	56	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	540	
57	57	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	-	-	-	-	-	-	-	-	-	-	-	-	-	541	
58	58	Quantity (units) of Fuel Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	542	
59	59	Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear)	-	-	-	-	-	-	-	-	-	-	-	-	-	543	
60	60	Avg Cost of Fuel/unit, as Deliv'd to b. during year	-	-	-	-	-	-	-	-	-	-	-	-	-	544	
61	61	Average Cost of Fuel per Unit Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	545	
62	62	Average Cost of Fuel per Million BTU	-	-	-	-	-	-	-	-	-	-	-	-	-	546	
63	63	Average Cost of Fuel Burned - KWh Net Gen	-	-	-	-	-	-	-	-	-	-	-	-	-	547	
64	64	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	548	
65	65	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	-	-	-	-	-	-	-	-	-	-	-	-	-	549	
66	66	Quantity (units) of Fuel Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	550	
67	67	Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear)	-	-	-	-	-	-	-	-	-	-	-	-	-	551	
68	68	Avg Cost of Fuel/unit, as Deliv'd to b. during year	-	-	-	-	-	-	-	-	-	-	-	-	-	552	
69	69	Average Cost of Fuel per Unit Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	553	
70	70	Average Cost of Fuel per Million BTU	-	-	-	-	-	-	-	-	-	-	-	-	-	554	
71	71	Average Cost of Fuel Burned - KWh Net Gen	-	-	-	-	-	-	-	-	-	-	-	-	-	555	
72	72	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	556	
73	73	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	-	-	-	-	-	-	-	-	-	-	-	-	-	557	
74	74	Quantity (units) of Fuel Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	558	
75	75	Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear)	-	-	-	-	-	-	-	-	-	-	-	-	-	559	
76	76	Avg Cost of Fuel/unit, as Deliv'd to b. during year	-	-	-	-	-	-	-	-	-	-	-	-	-	560	
77	77	Average Cost of Fuel per Unit Burned	-	-	-	-	-	-	-	-	-	-	-	-	-	561	
78	78	Average Cost of Fuel per Million BTU	-	-	-	-	-	-	-	-	-	-	-	-	-	562	
79	79	Average Cost of Fuel Burned -															

Form 1 Line no	Blundell Plant	Carbon Plant	Dave Johnston	Gadsby Plant	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Hunter Plant	Huntington	Jim Bridger	Little Mountain	Naughton Plant	Wyodak Plant	Thermal Plants Total	FERC Acct no
1	Steam - Geo	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas - Turbine	Outdoor Boiler	Steam		
2	Type of Plant (Internal Comb. Gas Turb. Nuclear	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Conventional		
3	Year Originally Constructed	1984	1959	1951	1978	1980	1983	1983	1974	1974	1972	1963	1978		
4	Year Last Unit was Installed	1984	1957	1955	1978	1980	1983	1983	1974	1974	1972	1963	1978		
5	Net Installed Cap (Max Gen Name Plate Ratings-MW)	26.1	188.6	618.8	251.6	418.5	269.2	448.4	1,134.1	892.8	1,518.0	707.2	289.7	5,840.9	
6	Net Peak Demand on Plant - MW (60 minutes)	23	183	803	220	315	469	616	1,165	918	1,441	713	342	5,855	
7	Plant Hours Connected to Load	8,047	8,714	8,760	3,807	8,342	8,610	6,281	8,760	8,760	6,718	8,760	8,851		
8	Net Continuous Plant Capability (Megawatts)	-	-	-	-	-	-	-	-	-	-	-	-		
9	When Not Limited by Condenser Water	175	772	235	389	250	405	1,044	845	1,387	14	700	268	5,463	
10	Average Number of Employees	-	-	-	-	-	-	-	-	-	-	-	-		
11	Average Number of Contractors	17	34	213	87	87	87	281	182	385	6	187	99	1,471	
12	Net Generation, Exclusive of Plant Use - KWh	160,057,000	1,288,602,000	5,928,660,000	356,380,000	2,547,062,000	2,056,781,000	7,552,503,000	6,452,895,000	10,763,560,000	10,763,560,000	5,223,025,000	2,280,651,000	40,012,333,000	
13	Cost of Plant, Land and Land Rights	31,000,000	9,668,000	1,020,000	9,668,000	9,668,000	9,668,000	17,686,000	17,686,000	17,686,000	17,686,000	17,686,000	17,686,000	595,500,000	
14	Structure, Improvements and Equipment Costs	54,325,000	10,065,816	1,301,251	10,065,816	10,065,816	10,065,816	18,755,500	18,755,500	18,755,500	18,755,500	18,755,500	18,755,500	595,500,000	
15	Equipment Costs	32,681,259	54,325,000	272,409,025	55,805,561	59,586,680	137,002,082	381,761,003	768,577,775	657,255,142	3,255,627	235,546,218	252,745,574	2,582,973,057	
16	Asset Retirement Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	Total Cost	\$ 69,822,765	\$ 65,577,938	\$ 316,183,884	\$ 70,170,388	\$ 255,539,804	\$ 202,972,558	\$ 935,253,826	\$ 402,669,991	\$ 790,399,703	\$ 3,460,306	\$ 291,263,238	\$ 300,481,440	\$ 32,255,323,549	
18	Cost per KW of Installed Capacity (our share)	\$ 2,675.20	\$ 347.64	\$ 387.11	\$ 278.85	\$ 620.17	\$ 753.93	\$ 1,074.78	\$ 624.69	\$ 454.39	\$ 520.68	\$ 216.27	\$ 411.85	\$ 1,037.39	\$ 557.33
19	Operation Supervision and Engineering	76,339	641,233	2,507,502	333,383	575,567	342,741	1,134,414	1,512,788	2,271,303	11,778,393	1,974,540	1,030,346	11,778,393	
20	Fuel	-	9,985,769	41,088,094	8,559,223	29,724,576	20,264,471	74,709,117	51,744,286	122,355,665	-	62,938,356	19,910,256	390,851,857	
21	Coal and Water (Nuclear Plants Only)	-	-	-	-	-	-	-	-	-	-	-	-	-	
22	Steam Expenses	230,872	1,085,286	1,951,405	657,800	2,356,179	1,695,768	4,892,886	2,703,768	5,729,399	-	3,560,767	2,121,568	23,857,941	
23	Steam From Other Sources	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	Electric Expenses	279,216	873,601	1,942,512	62,285	1,241,625	1,078,573	2,690,424	2,122,061	2,056,153	-	1,505,451	527,547	12,566,682	
25	Misc Steam (or Nuclear) Power Expenses	363,613	1,118	185	118	118	180	396	385	(450)	-	3,097,370	738,291	18,200,132	
26	Rents	3,900	-	2,209	-	170	-	-	-	-	-	1,236	-	7,748	
27	Allowances	-	-	-	-	-	-	-	-	-	-	-	-	-	
28	Maintenance Supervision and Engineering	163,362	683,602	1,599,913	358,662	738,397	790,407	1,720,751	1,796,855	1,877,590	-	1,560,212	777,742	10,797,165	
29	Maintenance of Boilers	58,665	138,228	325,324	45,765	207,324	267,324	767,436	767,436	767,436	-	1,771,551	177,155	12,566,682	
30	Maintenance of Electric Reactor Plant	121,650	2,343,268	7,084,033	757,688	2,351,871	4,097,509	7,403,438	7,984,178	8,394,122	-	5,629,034	2,659,468	42,890,434	
31	Maintenance of Boiling Water Reactor Plant	165,711	504,714	1,212,098	252,935	252,747	387,659	1,696,122	1,603,843	387,196	-	772,395	294,592	8,020,408	
32	Maintenance of Misc Steam (or Nuclear) Plant	206,927	712,122	2,122,766	343,362	679,612	938,403	1,916,135	3,105,988	2,545,883	-	1,908,378	456,960	13,651,685	
33	Total Production Expenses	\$ 6,247,705	\$ 17,187,565	\$ 62,009,163	\$ 11,982,963	\$ 39,467,603	\$ 27,681,777	\$ 37,180,334	\$ 100,067,461	\$ 75,154,467	\$ 152,542,551	\$ 83,361,911	\$ 28,644,286	\$ 540,964,911	
34	Expenses per Net KWh	\$ 0.0326	\$ 0.0137	\$ 0.0105	\$ 0.0336	\$ 0.0134	\$ 0.0135	\$ 0.0145	\$ 0.0132	\$ 0.0116	\$ 0.0142	\$ 0.0160	\$ 0.0125	\$ 0.0135	
35	Total Busher - \$/MWh	\$ 32.79	\$ 13.73	\$ 10.46	\$ 33.62	\$ 13.39	\$ 13.46	\$ 14.55	\$ 13.25	\$ 11.65	\$ 14.18	\$ 15.98	\$ 12.51	\$ 13.52	
36	Fuel - \$/MWh	\$ -	\$ 7.44	\$ 6.93	\$ 24.02	\$ 10.09	\$ 9.85	\$ 9.89	\$ 8.02	\$ 8.38	\$ 11.38	\$ 12.05	\$ 8.70	\$ 9.77	
37	Non-fuel - \$/MWh	\$ 32.79	\$ 6.29	\$ 3.53	\$ 9.61	\$ 3.31	\$ 3.61	\$ 4.66	\$ 3.36	\$ 3.63	\$ -	\$ 3.93	\$ 3.81	\$ 3.75	
38	Fixed O&M (per RDI definition) - \$/MWh	\$ 2.04	\$ 1.26	\$ 0.71	\$ 1.92	\$ 0.66	\$ 0.72	\$ 0.98	\$ 0.67	\$ 0.73	\$ 0.86	\$ 0.78	\$ 0.78	\$ 0.76	
39	Variable O&M (RDI definition) - \$/MWh installed	\$ 8.20	\$ 5.03	\$ 2.82	\$ 7.69	\$ 2.64	\$ 2.89	\$ 3.90	\$ 2.69	\$ 2.90	\$ 2.25	\$ 3.13	\$ 3.05	\$ 3.00	
40	Total O&M without Fuel	\$ 1,640,253	\$ 8,101,786	\$ 20,920,069	\$ 3,423,562	\$ 5,743,033	\$ 7,423,305	\$ 12,460,715	\$ 25,358,344	\$ 23,409,789	\$ 30,166,896	\$ 20,422,703	\$ 6,734,030	\$ 150,073,054	
41	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
42	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	tons	tons	tons	tons	tons	tons	tons	tons	tons	tons	tons	tons	tons	
43	Quantity (units) of Fuel Burned	600,317	4,196,252	13,668,535	946,144	1,132,777	1,132,777	3,447,456	2,914,593	6,085,879	6,085,879	2,697,267	1,698,697	21,638,461	
44	Avg Heat Cont. - Fuel Burned (Btu/indicate if nuclear)	11,281	7,937	10,703	10,703	10,703	10,703	10,703	10,159	10,529	10,529	10,412	8,052	9,817	
45	Avg Cost of Fuel/unit, as Deliv'd to b. during year	15,071	9,038	20,846	20,846	20,846	20,846	20,846	17,075	19,781	19,781	21,094	11,379	11,379	
46	Average Cost of Fuel Burned per Unit Burned	15,065	8,719	21,341	21,341	21,341	21,341	21,341	18,252	20,524	20,524	23,097	11,379	11,379	
47	Average Cost of Fuel Burned per MWh Net Gen	0.700	0.431	1.000	1.007	1.007	1.007	1.007	0.868	0.951	0.951	1.169	0.578	0.578	
48	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	
49	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	
50	Quantity (units) of Fuel Burned	3,784,798	3,784,798	1,044	1,044	1,044	1,044	1,044	76,841	76,841	76,841	8,310	1,044	3,861,639	
51	Avg Heat Cont. - Fuel Burned (Btu/indicate if nuclear)	8,310	8,310	8,310	8,310	8,310	8,310	8,310	8,310	8,310	8,310	8,310	8,310	8,310	
52	Avg Cost of Fuel/unit, as Deliv'd to b. during year	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	
53	Average Cost of Fuel Burned per Unit Burned	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	2,261	
54	Average Cost of Fuel Burned per Million BTU	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	
55	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	
56	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	barrel	barrel	barrel	barrel	barrel	barrel	barrel	barrel	barrel	barrel	barrel	barrel	barrel	
57	Quantity (units) of Fuel Burned	3,350	13,221	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	
58	Avg Heat Cont. - Fuel Burned (Btu/indicate if nuclear)	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	
59	Avg Cost of Fuel/unit, as Deliv'd to b. during year	26,416	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	
60	Average Cost of Fuel Burned per Unit Burned	26,416	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	22,168	
61	Average Cost of Fuel Burned per Million BTU	4.503	3.945	6.408	6.408	6.408	6.408	6.408	6.408	6.408	6.408	6.408	6.408	6.408	
62	Average BTU per KWh Net Generation	10,535.49	11,248.59	9,945.80	9,850.56	9,518.40	9,784.46	9,784.46	9,188.65	11,927.64	11,927.64	10,769.26	11,941.02	10,728.20	

Form 1 Line no.	Blundell Plant	Carbon Plant	Dave Johnston Plant	Gadsby Plant	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Hunter Plant	Huntington Plant	Jim Bridger Plant	Little Mountain	Naughton Plant	Wyodak Plant	Thermal Plants Total	FERC Acct no.
1	Kind of Plant (Internal Comb. Gas Turb. Nuclear	Steam - Gas	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas - Turbine	Outdoor Boiler	Steam	Steam	
2	Type of Constr. (Conventional, Outdoor, Boiler, etc.)	Indoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Boiler	Outdoor Boiler	Outdoor Boiler	Conventional	Conventional	
3	Year Originally Constructed	1964	1959	1959	1959	1960	1983	1978	1974	1974	1972	1972	1963	1978	
4	Year Last Unit was Installed	1964	1957	1959	1955	1980	1983	1983	1977	1977	1979	1979	1971	1978	
5	Total Installed Cap (Max Gen Name Plate Ratings-MW)	26.1	186.8	816.8	251.6	269.2	446.4	1,134.1	892.8	1,518.0	16.0	707.2	289.7	5,840.9	
6	Net Peak Demand on Plant - MW (60 minutes)	20	188	786	216	425	270	2,130	922	1,435	16	746	288	5,784	
7	Plant Hours Connected to Load	8,576	8,628	8,760	4,929	7,294	7,551	8,760	8,743	8,760	4,488	8,760	8,328		
8	Net Continuous Plant Capability (Megawatts)	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	When Not Limited by Condenser Water	23	175	772	235	389	460	1,108	895	1,387	14	700	268	5,577	
10	Average Number of Employees	17	77	213	34	87	87	281	182	395	6	187	69	1,471	
11	Net Generation, Excluding of Plant Use - kWh	155,529,000	1,220,355,000	5,233,793,000	363,093,000	2,723,760,000	1,995,925,000	3,311,109,000	8,530,794,000	7,131,471,000	10,605,981,000	2,260,794,000	4,703,428,000	2,260,895,000	39,765,240,000
12	Cost of Plant, Land and Land Rights	31,026,429	956,546	10,417,291	1,020,271	9,868,916	9,868,916	9,868,916	29,606,976	2,362,218	1,146,351	635	459,248	210,526	77,205,274
13	Structures and Improvements	6,146,555	10,180,468	45,683,536	13,626,582	58,496,585	47,661,717	91,149,801	132,026,993	93,326,993	204,044	55,319,778	47,801,377	607,636,993	
14	Equipment Costs	32,731,843	60,741,030	314,425,428	56,028,499	201,940,916	136,024,852	386,525,233	724,481,003	315,463,485	653,398,776	3,254,927	253,150,338	252,847,894	2,666,554,221
15	Asset Retirement Costs														
16	Total Cost	\$ 69,904,827	\$ 71,878,034	\$ 370,526,255	\$ 70,676,352	\$ 270,276,417	\$ 193,555,485	\$ 487,543,950	\$ 951,375,852	\$ 411,172,697	\$ 786,614,934	\$ 3,459,606	\$ 308,928,364	\$ 300,659,557	\$ 3,345,396,486
17	Cost per KW of Installed Capacity (our share)	\$ 2,678.35	\$ 381.03	\$ 453.65	\$ 206.88	\$ 645.82	\$ 718.95	\$ 1,092.17	\$ 838.87	\$ 460.54	\$ 216.23	\$ 436.83	\$ 1,038.66	\$ 572.75	
18	Operation Supervision and Engineering	205,966	1,933,801	3,795,217	758,785	1,772,351	772,351	2,317,053	2,218,245	550,541	-	2,739,124	21,852,650	348,278,865	
19	Fuel	-	8,201,028	28,747,127	11,744,310	21,356,415	15,594,410	25,007,036	61,957,860	113,621,498	-	58,781,469	21,852,650	348,278,865	
20	Coolants and Water (Nuclear Plants Only)	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	Steam Expenses	101,262	41,470	969,644	2,502	1,546,465	438,881	1,062,614	3,047,960	4,731,412	-	900,844	870,903	11,818,381	
22	Steam From Other Sources	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	Electric Expenses	3,696,102	-	-	-	-	-	-	-	-	-	-	-	-	
24	Misc. Steam (or Nuclear) Power Expenses	1,138,627	4,832,262	12,788,671	2,802,020	6,626,499	6,621,934	19,659,785	15,498,004	14,853,345	-	6,792,776	3,732,511	82,098,001	
25	Rents	-	645	120,084	2,845	15,171	15,171	45,513	3,989	160,184	-	3,311	-	336,551	
26	Allowances	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	Maintenance Supervision and Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	
28	Maintenance of Structures	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	Maintenance of Boiler (or reactor) Plant	8,719	2,037,402	6,643,314	447,901	3,141,810	(3,226,177)	2,050,045	3,719,557	5,375,988	-	4,693,917	1,834,801	26,727,277	
30	Maintenance of Electric Plant	118,182	1,558,230	2,619,689	708,714	1,178,286	83,195	455,842	1,727,333	990,995	1,703,452	-	1,527,848	399,871	9,844,477
31	Maintenance of Misc Steam (or Nuclear) Plant	143,648	59,601	1,689,648	(28,714)	968,886	598,098	694,000	1,172,666	6,992,080	-	(281,880)	1,149,429	14,105,456	
32	Total Production Expenses	\$ 5,412,526	\$ 18,654,439	\$ 57,396,368	\$ 15,892,926	\$ 35,605,893	\$ 20,005,863	\$ 36,469,411	\$ 92,980,165	\$ 147,988,500	\$ -	\$ 75,157,409	\$ 29,840,165	\$ 512,422,892	
33	Expenses per Net kWh	\$ 0.0348	\$ 0.0153	\$ 0.0110	\$ 0.0131	\$ 0.0105	\$ 0.0110	\$ 0.0116	\$ 0.0097	\$ 0.0140	\$ -	\$ 0.0160	\$ 0.0132	\$ 0.0129	
34	Total Btuair - \$/MWh	\$ 34.80	\$ 15.30	\$ 10.87	\$ 43.74	\$ 13.07	\$ 10.47	\$ 11.01	\$ 11.58	\$ 9.69	\$ 13.95	\$ 15.98	\$ 13.20	\$ 12.91	
35	Fuel - \$/MWh	-	\$ 6.72	\$ 5.49	\$ 32.35	\$ 7.84	\$ 7.81	\$ 7.55	\$ 7.72	\$ 6.22	\$ 10.71	\$ -	\$ 12.50	\$ 9.67	\$ 8.80
36	Non-fuel - \$/MWh	\$ 34.80	\$ 8.57	\$ 5.47	\$ 11.40	\$ 2.66	\$ 3.46	\$ 3.96	\$ 3.47	\$ 3.24	\$ -	\$ 3.48	\$ 3.53	\$ 4.11	
37	Variable O&M (per RDI definition) - \$/MWh	\$ 2.21	\$ 1.71	\$ 1.69	\$ 2.28	\$ 1.05	\$ 0.53	\$ 0.69	\$ 0.77	\$ 0.66	\$ 0.85	\$ 0.70	\$ 0.71	\$ 0.82	
38	Fuel O&M (RDI definition) - \$/kW installed	\$ 2.83	\$ 0.85	\$ 0.48	\$ 1.92	\$ 0.49	\$ 0.21	\$ 0.27	\$ 0.30	\$ 0.27	\$ 0.26	\$ -	\$ 0.29	\$ 0.28	
39	Total O&M without Fuel	\$ 1,716,424	\$ 10,663,411	\$ 28,651,241	\$ 4,136,616	\$ 14,249,479	\$ 5,311,453	\$ 11,461,375	\$ 31,022,305	\$ 24,723,440	\$ 34,387,002	\$ -	\$ 16,375,940	\$ 7,987,513	\$ 163,143,989
40	Fuel, Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
41	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	552,599	3,705,572	3,705,572	1,229,116	993,322	1,539,373	1,539,373	3,673,322	6,083,322	-	2,509,985	1,663,322	21,042,989	
42	Avg Heat Cont. - Fuel Burned (btu/mcf if nuclear)	12,335	7,379	7,379	11,901	11,808	11,808	11,808	15,147	18,342	-	23,065	13,965	11,911	
43	Avg Cost of Fuel/Unit, as Delivered to b. during year	14,172	7,319	7,319	16,817	16,817	16,817	16,817	15,147	18,342	-	23,065	13,965	11,911	
44	Average Cost of Fuel per Unit Burned	14,615	7,423	7,423	17,261	17,196	17,196	17,196	14,937	18,584	-	23,189	13,954	11,911	
45	Average Cost of Fuel Burned per Million BTU	0.602	0.465	0.465	0.725	0.727	0.727	0.737	0.730	0.623	-	1.163	0.814	0.814	
46	Fuel, Kind (Coal, Gas, Oil, or Nuclear)	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	
47	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	4,501,028	4,501,028	4,501,028	-	-	-	-	-	-	-	-	-	-	
48	Avg Heat Cont. - Fuel Burned (btu/mcf if nuclear)	1,038	1,038	1,038	-	-	-	-	-	-	-	-	-	-	
49	Average Cost of Fuel per Unit Burned	2,509	2,514	2,514	-	-	-	-	-	-	-	-	-	-	
50	Average Cost of Fuel Burned per Million BTU	0.632	0.632	0.632	-	-	-	-	-	-	-	-	-	-	
51	Fuel, Kind (Coal, Gas, Oil, or Nuclear)	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	Oil	
52	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	4,897	4,897	4,897	10,000	140,000	140,000	140,000	140,000	140,000	-	140,000	140,000	140,000	
53	Avg Heat Cont. - Fuel Burned (btu/mcf if nuclear)	26,695	26,695	26,695	25,972	26,378	27,574	26,378	25,999	23,627	-	27,574	27,574	27,574	
54	Average Cost of Fuel per Unit Burned	26,695	26,695	26,695	25,972	26,378	27,574	26,378	25,999	23,627	-	27,574	27,574	27,574	
55	Average Cost of Fuel Burned per Million BTU	4.538	4.195	4.195	4.417	4.486	4.690	4.486	4.354	4.018	-	4.579	4.579	4.579	
56	Average BTU per kWh Net Generation	11,194.34	11,309.82	12,867.41	10,755.83	10,717.06	10,154.16	10,498.26	9,941.70	10,658.05	-	10,669.07	11,620.01	10,845.36	

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FERC Acct no.	Form 1 Line no.	Blundell Plant	Carbon Plant	Dave Johnston Plant	Gadsby Plant	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Huntington Plant	Jim Bridger Plant	Little Mountain	Naughton Plant	Wyodak Plant	Thermal Plants Total	FERC Acct no.
	1	Kind of Plant (Internal Comb. Gas Turb. Nuclear													
	2	Type of Constr (Conventional, Outdoor, Boiler, etc)													
	3	Year Originally Constructed													
	4	Year Last Unit was Installed													
	5	Year Last Unit was Installed (Name Plate Ratings-MW)													
	6	Net Peak Demand (MW) (60 minutes)													
	7	Net Continuous Plant Capacity (Megawatts)													
	8	Net Continuous Plant Capacity (Megawatts)													
	9	When Not Limited by Condenser Water													
	10	When Limited by Condenser Water													
	11	Average Number of Employees													
	12	Net Generation, Excluding of Plant Use - KWh													
	13	Cost of Plant, Land and Land Rights													
	14	Structures and Improvements													
	15	Equipment Costs													
	16	Asset Retirement Costs													
	17	Total Cost													
	18	Cost per KW of Installed Capacity (our share)													
	19	Operation Supervision and Engineering													
	20	Fuel													
	21	Coolants and Water (Nuclear Plants Only)													
	22	Steam Expenses													
	23	Steam from Other Sources													
	24	Electric Expenses													
	25	Electric Expenses													
	26	Misc Steam (or Nuclear) Power Expenses													
	27	Rents													
	28	Allowances													
	29	Maintenance Supervision and Engineering													
	30	Maintenance of Structures													
	31	Maintenance of Boiler (or reactor) Plant													
	32	Maintenance of Electric Plant													
	33	Maintenance of Misc Steam (or Nuclear) Plant													
	34	Total Production Expenses													
	35	Expenses per Net KWh													
	36	Total Busbar - \$/MWh													
	37	Fuel - \$/MWh													
	38	Non-fuel - \$/MWh													
	39	Variable O&M (per RPD definition) - \$/MWh													
	40	Fixed O&M (per RPD definition) - \$/MWh													
	41	Total O&M (per RPD definition) - \$/MWh													
	42	Fuel Kind (Coal, Gas, Oil, or Nuclear)													
	43	Quantity (units) of Fuel Burned													
	44	Avg Heat Cont. - Fuel Burned (if nuclear)													
	45	Avg Cost of Fuel/Unit, as Delivered to b. during year													
	46	Average Cost of Fuel per Unit Burned													
	47	Average Cost of Fuel Burned per Million BTU													
	48	Average Cost of Fuel Burned per KWh Net Gen													
	49	Fuel Kind (Coal, Gas, Oil, or Nuclear)													
	50	Quantity (units) of Fuel Burned													
	51	Avg Heat Cont. - Fuel Burned (if nuclear)													
	52	Avg Cost of Fuel/Unit, as Delivered to b. during year													
	53	Average Cost of Fuel per Unit Burned													
	54	Average Cost of Fuel Burned per Million BTU													
	55	Average Cost of Fuel Burned per KWh Net Gen													
	56	Average BTU per KWh Net Generation													
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FERC Act no.	Form 1 Line no.	Blundell Plant	Carbon Plant	Dave Johnston	Gasday Plant	Godsby Peakers	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Hunter Plant	Huntington Plant	Jim Bridger Plant	Little Mountain	Naughton Plant	West Valley Peakers	Woodak Plant	Thermal Plants Total	FERC Act no.
1	1	Kind of Plant (Internal Comb. Gas Turb. Nuclear Type of Fuels (Coal, Oil, Gas, etc.)	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal	Steam - Coal		
2	2	Year Installed	1984	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954		
3	3	Year Originally Constructed	1984	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954		
4	4	Year Last Unit was Installed	1984	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954	1954		
5	5	Total Installed Capacity (MW)	26.0	188.6	616.7	251.6	141.0	472.5	485.5	1,440.5	996.0	2,311.2	16.0	707.2	217.0	352.0	7,473.8	
6	6	Net Peak Demand on Plant - MW (60 minutes)	23	177	762	218	133	405	461	205	886	1,404	18	719	218	280	5,977	
7	7	Plant Hours Connected to Load	8,599	6,653	8,700	6,285	3,051	6,782	6,099	8,780	8,510	8,160	6,127	8,780	2,483	8,570		
8	8	Net Continuous Plant Capacity (Megawatts)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9	9	Net Continuous Plant Capacity (Megawatts)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10	10	When Limited by Condenser Water	23	175	762	225	131	430	460	1,320	885	2,120	14	700	185	335	6,895	
11	11	Average Number of Employees	13	75	219	37	77	77	77	231	162	359	6	153	10	71	1,336	
12	12	Net Generation, Exclusive of Plant Use - kWh	184,449,000	1,320,395,000	5,759,784,000	495,453,000	3,027,001,000	1,670,986,000	3,418,272,000	8,115,871,000	5,977,919,000	9,630,089,000	80,803,000	5,019,340,000	373,926,000	2,289,052,000	39,412,431,000	
13	13	Cost of Plant, Land and Land Rights	31,028,428	956,546	1,020,271	1,020,271	9,646,598	10,253,198	29,546,333	29,546,333	2,405,337	1,146,361	635	458,248	210,526	48,028,460	77,167,978	
14	14	Structures and Improvements	6,150,130	10,867,218	47,257,355	13,415,332	60,068,408	49,384,908	88,384,287	197,737,614	94,496,627	132,803,837	204,044	55,985,785	48,028,460	48,028,460	606,552,401	
15	15	Equipment Costs	33,073,388	68,603,399	328,028,863	54,710,346	211,074,253	146,286,297	373,875,813	731,235,363	324,895,385	672,352,890	4,067,980	268,468,813	248,617,522	248,617,522	2,833,549,198	
16	16	Other Plant Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	17	Total Cost	\$ 70,249,947	\$ 76,894,854	\$ 386,701,509	\$ 69,145,949	\$ 280,805,229	\$ 205,217,773	\$ 477,483,306	\$ 558,520,310	\$ 421,760,349	\$ 808,303,089	\$ 4,272,689	\$ 324,517,846	\$ 266,856,238	\$ 266,856,238	\$ 3,417,010,088	
18	18	Cost per kW of Installed Capacity (see above)	\$ 3,054.35	\$ 444.54	\$ 507.48	\$ 317.18	\$ 594.31	\$ 434.32	\$ 953.57	\$ 685.41	\$ 423.45	\$ 346.87	\$ 267.04	\$ 458.89	\$ 620.04	\$ 620.04	\$ 457.20	
19	19	Operation Supervision and Engineering	1,052	135,979	183,387	(160,342)	43,515	43,515	43,515	130,541	13,527	3,983,821	1,401	415,967	1,659,328	1,659,328	6,376,045	500
20	20	Fuel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	501
21	21	Coolants and Water (Nuclear Plants Only)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	502
22	22	Steam Expenses	27,807	706,274	229,613	-	-	-	-	-	-	-	-	-	-	-	-	503
23	23	Steam From Other Sources	3,800,080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	504
24	24	Electric Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	505
25	25	Misc. Steam (or Nuclear) Power Expenses	1,483,244	4,058,652	11,872,454	3,972,995	2,862,630	(2,620,553)	2,863,949	2,756,026	7,054,590	3,976,614	891,132	6,699,143	7,256,900	7,256,900	10,057,556	506
26	26	Rents	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	507
27	27	Allowances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	508
28	28	Maintenance Supervision and Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	509
29	29	Maintenance of Structures	38,520	142,478	1,654,314	169,481	1,642,851	1,644,848	1,619,656	5,107,155	1,468,827	7,468,228	-	1,322,522	-	369,884	2,657,470	510
30	30	Maintenance of Electric Plant	78,990	871,343	2,477,524	1,487,804	3,711,830	3,711,830	4,200,000	3,188,080	4,425,884	6,719,390	-	1,322,522	-	369,884	17,711,688	511
31	31	Maintenance of Electric Plant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	512
32	32	Maintenance of Misc. Steam (or Nuclear) Plant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	513
33	33	Total Production Expenses	\$ 5,513,359	\$ 21,484,743	\$ 68,254,518	\$ 37,586,633	\$ 35,365,347	\$ 22,731,674	\$ 39,186,909	\$ 97,303,927	\$ 80,430,356	\$ 157,557,396	\$ 5,997,639	\$ 85,784,173	\$ 24,883,177	\$ 24,883,177	\$ 611,250,895	514
34	34	Expenses per Net kWh	\$ 0.0299	\$ 0.0162	\$ 0.0119	\$ 0.0759	\$ 0.0117	\$ 0.0136	\$ 0.0115	\$ 0.0120	\$ 0.0135	\$ 0.0164	\$ 0.0171	\$ 0.0171	\$ 0.0109	\$ 0.0109	\$ 0.0155	
35	35	Total Base - \$/MWh	\$ 29.89	\$ 16.22	\$ 11.85	\$ 78.69	\$ 11.69	\$ 13.61	\$ 11.46	\$ 11.99	\$ 13.45	\$ 16.36	\$ 17.09	\$ 17.09	\$ 10.78	\$ 10.78	\$ 15.51	
36	36	Fuel - \$/MWh	\$ 29.89	\$ 16.22	\$ 11.85	\$ 78.69	\$ 11.69	\$ 13.61	\$ 11.46	\$ 11.99	\$ 13.45	\$ 16.36	\$ 17.09	\$ 17.09	\$ 10.78	\$ 10.78	\$ 15.51	
37	37	Variable O&M (see Note 1) - \$/MWh	\$ 7.43	\$ 6.21	\$ 3.98	\$ 11.33	\$ 2.97	\$ 4.84	\$ 3.07	\$ 3.42	\$ 4.21	\$ 3.46	\$ 9.55	\$ 9.55	\$ 2.95	\$ 2.95	\$ 4.17	
38	38	Fuel O&M without Fuel	\$ 1,713,279	\$ 10,264,063	\$ 25,765,996	\$ 7,014,514	\$ 11,228,872	\$ 10,266,850	\$ 13,114,015	\$ 34,639,735	\$ 31,351,331	\$ 41,558,417	\$ 964,592	\$ 31,657,769	\$ 8,437,772	\$ 8,437,772	\$ 204,984,264	
39	39	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
40	40	Unit (Coal: tons/coal; Gas: mcf; Oil: barrels; Nuclear: indicate)	606,630	3,845,637	3,845,637	3,845,637	1,372,925	745,564	1,563,913	3,712,402	2,698,708	5,495,620	2,638,187	2,638,187	1,695,517	1,695,517	20,691,901	
41	41	Avg Heat Content - Fuel Burned (indicate if nuclear)	12,264	8,289	8,289	8,289	11,521	11,504	11,480	11,505	11,321	10,024	10,024	10,024	8,110	8,110	9,806	
42	42	Avg Heat Content - Fuel Burned (indicate if nuclear)	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	
43	43	Average Cost of Fuel Burned per Million BTU	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	
44	44	Average Cost of Fuel Burned per kWh Net Gen	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	
45	45	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
46	46	Unit (Coal: tons/coal; Gas: mcf; Oil: barrels; Nuclear: indicate)	606,630	3,845,637	3,845,637	3,845,637	1,372,925	745,564	1,563,913	3,712,402	2,698,708	5,495,620	2,638,187	2,638,187	1,695,517	1,695,517	20,691,901	
47	47	Avg Heat Content - Fuel Burned (indicate if nuclear)	12,264	8,289	8,289	8,289	11,521	11,504	11,480	11,505	11,321	10,024	10,024	10,024	8,110	8,110	9,806	
48	48	Avg Heat Content - Fuel Burned (indicate if nuclear)	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	
49	49	Average Cost of Fuel Burned per Million BTU	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	
50	50	Average Cost of Fuel Burned per kWh Net Gen	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	
51	51	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
52	52	Unit (Coal: tons/coal; Gas: mcf; Oil: barrels; Nuclear: indicate)	606,630	3,845,637	3,845,637	3,845,637	1,372,925	745,564	1,563,913	3,712,402	2,698,708	5,495,620	2,638,187	2,638,187	1,695,517	1,695,517	20,691,901	
53	53	Avg Heat Content - Fuel Burned (indicate if nuclear)	12,264	8,289	8,289	8,289	11,521	11,504	11,480	11,505	11,321	10,024	10,024	10,024	8,110	8,110	9,806	
54	54	Avg Heat Content - Fuel Burned (indicate if nuclear)	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	
55	55	Average Cost of Fuel Burned per Million BTU	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	
56	56	Average Cost of Fuel Burned per kWh Net Gen	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	
57	57	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
58	58	Unit (Coal: tons/coal; Gas: mcf; Oil: barrels; Nuclear: indicate)	606,630	3,845,637	3,845,637	3,845,637	1,372,925	745,564	1,563,913	3,712,402	2,698,708	5,495,620	2,638,187	2,638,187	1,695,517	1,695,517	20,691,901	
59	59	Avg Heat Content - Fuel Burned (indicate if nuclear)	12,264	8,289	8,289	8,289	11,521	11,504	11,480	11,505	11,321	10,024	10,024	10,024	8,110	8,110	9,806	
60	60	Avg Heat Content - Fuel Burned (indicate if nuclear)	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	16,997	
61	61	Average Cost of Fuel Burned per Million BTU	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	\$ 10.78	
62	62	Average Cost of Fuel Burned per kWh Net Gen	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	\$ 0.008	
63	63	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
64	64	Unit (Coal: tons/coal; Gas: mcf; Oil: barrels; Nuclear: indicate)	606,630	3,845,637	3,845,637	3,845,637	1,372,925	745,564	1,563,913	3,712,402	2,698,708	5,495,620	2,638,187	2,638,187	1,695,517	1,695,517	20,691,901	
65	65	Avg Heat Content - Fuel Burned (indicate if nuclear)	12,264	8,289	8,289	8,289	11,521	11,504	11,480	11,505	11,321	10,024	10,024	1				

Form 1	Line No.	Blundell Plant	Carbon Plant	Dave Johnston	Gassy Plant	Gassy Plant	Gasdyne Peaker	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Hunter Plant	Huntington	Jin Bridge	Little Mountain	Naughton Plant	Peakers	Wyodak Plant	Thermal Plants	Form 1
1	Kind of Plant (Internal Comb. Gas Turb. Nuclear)	Steam	Steam	Steam	Steam	Steam	Gas Turbine	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas Turbine	Steam	Steam	1
2	Type of Plant (Conventional, Coal, Gas, Turb. Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	2
3	Year Originally Constructed	1984	1954	1959	1959	1959	1959	1980	1980	1983	1978	1978	1974	1974	1978	1972	1978	1978	3
4	Year Last Unit was Installed	1984	1957	1972	1972	1972	1972	1980	1980	1983	1978	1978	1974	1974	1978	1972	1978	1978	4
5	Total Installed Capacity (MW Name Plate Rating-MW)	26.0	188.6	816.7	251.6	251.6	141.0	443.0	285.0	405.6	1,222.6	990.0	1,541.1	16.0	707.2	289.0	217.0	217.0	5
6	Net Peak Demand on Plant - MW (60 minutes)	25	176	759	215	215	123	413	268	462	1,267	1,067	1,541.1	16.0	707.2	289.0	217.0	217.0	6
7	Net Peak Demand on Plant - MW (180 minutes)	8,590	8,760	2,001	4,340	4,340	8,275	7,810	7,810	8,176	8,176	8,176	8,176	8,176	8,176	8,176	8,176	8,176	7
8	Net Capacity (MW Name Plate Rating-MW)	23	175	762	225	225	114	403	259	480	1,122	895	1,413	14	700	288	215	215	8
9	When Not Limited by Condenser Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
10	Average Number of Employees	15	75	231	37	37	-	60	51	85	217	174	257	6	175	10	66	66	10
11	Average Number of Employees	15	75	231	37	37	-	60	51	85	217	174	257	6	175	10	66	66	11
12	Net Generation, Exclusive of Plant Use - KWh	198,465,000	1,371,265,000	5,302,445,000	156,301,000	385,068,000	1,289,170	3,131,772,000	1,887,215,000	3,475,795,000	8,494,782,000	7,713,219,000	9,653,111,000	86,653,000	4,796,139,000	580,925,000	2,197,461,000	40,440,869,000	12
13	Cost of Plant, Land and Land Rights	31,025,429	850,546	10,417,260	1,289,170	1,289,170	1,289,170	8,648,588	9,648,588	1,285,197	28,946,333	2,403,387	161,925	635	56,827,016	635	48,159,801	616,477,654	13
14	Structures and Improvements	6,167,165	11,000,869	44,565,515	3,072,740	3,072,740	3,072,740	9,648,588	9,648,588	1,285,197	28,946,333	2,403,387	161,925	635	56,827,016	635	48,159,801	616,477,654	14
15	Accumulated Depreciation	3,036,817	67,022,046	346,595,716	55,138,575	55,138,575	55,138,575	1,285,197	1,285,197	1,285,197	1,285,197	1,285,197	1,285,197	1,285,197	1,285,197	1,285,197	1,285,197	1,285,197	15
16	Asset Retirement Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	Total Cost	\$ 70,269,011	\$ 78,986,063	\$ 404,231,906	\$ 70,261,740	\$ 70,261,740	\$ 70,261,740	\$ 285,555,623	\$ 202,524,188	\$ 477,464,188	\$ 963,954,362	\$ 434,964,362	\$ 836,460,325	\$ 4,396,451	\$ 351,396,900	\$ -	\$ 297,636,676	\$ 13,590,502,869	17
18	Cost per KW of Installed Capacity (our share)	\$ 2,702.65	\$ 418.81	\$ 454.95	\$ 278.54	\$ 278.54	\$ 278.54	\$ 840.10	\$ 710.61	\$ 903.41	\$ 781.47	\$ 436.73	\$ 542.77	\$ 486.88	\$ -	\$ 1,028.44	\$ -	\$ 559.75	18
19	Operation Supervision and Engineering	2,730	238,831	718,931	78,292	78,292	78,292	88,245	88,245	88,245	284,735	36,242	15,347,831	4,125	188,118	4,125	15,347,831	21,180,832	19
20	Fuel	8,057	10,521,512	33,562,590	6,07														

FERC Act no.	Form 1 Line no.	Bundled Plant	Carbon Plant	Dave Johnston Plant	Gadsby Peakers	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Hunter Plant	Huntington Plant	Jim Bridger Plant	Little Mountain	Naughton Plant	West Valley Peakers	Wyodak Plant	Thermal Plants Total	FERC Act no.
		Kind of Plant (Internal Comb. Gas Turb. Nuclear Steam, Geo Thermal, Wind, Solar, etc.)	Steam - Geo Outdoor Boiler	Steam Semi-Outdoor Outdoor Boiler	Steam Outdoor Boiler	Steam Outdoor Boiler	Steam Outdoor Boiler	Steam Outdoor Boiler	Steam Outdoor Boiler	Steam Outdoor Boiler	Steam Semi-Outdoor Outdoor Boiler	Gas Turbine Outdoor Boiler	Gas Turbine Outdoor Boiler	Gas Turbine Outdoor Boiler	Coal Conventional		
		Year Last Unit Installed	1984	1957	1957	1957	1957	1957	1957	1974	1974	1974	1974	1974	1974		
		Year Last Unit Installed	1984	1957	1957	1957	1957	1957	1957	1974	1974	1974	1974	1974	1974		
		Total Installed Capacity (Max Gen Name Plate Rating-MW)	26.1	188.6	816.8	251.6	141.0	443.0	1,223.6	986.0	1,541.1	16.0	16.0	217.0	283.6	6,141.7	
		Net Peak Demand on Plant - MW (60 minutes)	25	174	779	216	126	268	468	907	1,381	705	705	206	278	5,968	
		Plant Hours Connected to Load	8,538	8,772	8,784	961	3,362	8,289	8,469	8,629	8,784	6,021	6,021	3,529	8,140		
		Net Continuous Plant Capability (Megawatts)	-	-	-	-	-	-	-	-	-	-	-	-	-		
		When Not Limited by Combined Water	23	172	762	235	120	259	460	885	1,413	14	14	700	268	5,989	
		Average Number of Employees	12	71	188	39	73	74	220	164	348	6	6	210	74	1,275	
		Net Generation, Exclusive of Plant Use - KWh	194,676,000	5,824,643,000	66,596,000	258,948,000	2,010,041,000	3,575,300,000	8,437,874,000	6,388,634,000	9,620,371,000	91,965,000	5,245,831,000	395,480,000	2,153,135,000	40,013,428,000	
		Cost of Plant, Land and Land Rights	31,282,815	956,546	1,259,170	9,628,532	10,333,162	29,486,226	2,402,337	2,402,337	1,161,925	635	1,245,586	210,526	210,526	78,422,036	
		Structures and Improvements	6,218,337	11,578,139	48,237,859	13,811,541	4,111,894	60,603,393	98,603,203	98,465,311	133,079,404	209,660	57,150,068	48,460	48,377,029	622,220,751	
		Equipment Costs	33,692,461	73,322,778	352,302,688	55,921,836	75,114,904	221,344,932	735,245,344	359,245,344	711,525,468	4,888,107	269,861,504	81,813	250,111,165	2,925,179,524	
		Asset Retirement Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Total Plant Costs	\$ 71,193,613	\$ 86,857,463	\$ 417,133,869	\$ 79,228,767	\$ 203,151,503	\$ 479,586,518	\$ 973,015,313	\$ 441,756,101	\$ 855,153,986	\$ 4,898,402	\$ 351,639,717	\$ 130,273	\$ 280,688,270	\$ 3,651,265,891	
		Year Begun	1974	1957	1957	1957	1957	1957	1957	1974	1974	1974	1974	1974	1974		
		Year Begun	1974	1957	1957	1957	1957	1957	1957	1974	1974	1974	1974	1974	1974		
		Net Generation (KWh of Installed Capacity (per share))	27,499,100	133,006	455,141	282,127	27,872	1,678,796	2,660,781	1,678,796	2,660,781	1,678,796	2,660,781	1,678,796	2,660,781		
		Operation Supervision and Engineering	630	11,422,174	36,943,321	1,678,796	2,660,781	1,678,796	2,660,781	1,678,796	2,660,781	1,678,796	2,660,781	1,678,796	2,660,781		
		Coal and Water (Nuclear Plants Only)	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Steam Expenses	6,661	682,262	210,184	-	-	-	-	-	-	-	-	-	-		
		Steam Transferred (C)	4,158,192	-	-	-	-	-	-	-	-	-	-	-	-		
		Electricity	-	917,362	37,229	-	-	-	-	-	-	-	-	-	-		
		Misc Steam (or Nuclear) Power Expenses	1,525,679	5,311,683	12,430,434	4,160,091	1,598,981	2,194,293	1,986,096	1,370,754	1,986,096	184	452,888	184	584,478	17,064,416	
		Rents	145	-	40,453	943	24,340	13,683	17,561	55,584	660,671	-	-	-	-	7,086	
		Allowances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Maintenance Supervision and Engineering	-	-	(570)	-	-	-	-	-	-	-	-	-	-	-	
		Maintenance of Structures	77,962	492,808	107,246	100,049	-	1,665,906	5,262,046	1,231,589	1,323,097	-	-	-	-	5,902	
		Maintenance of Boiler (or reactor) Plant	2,513	4,652,825	8,618,474	1,821,368	3,444	5,715,614	17,514,174	3,444	5,715,614	-	-	-	-	420,801	
		Maintenance of Reactor (Nuclear) Plant	91,013	2,548,794	5,108,676	437,423	1,031,693	639,626	1,451,171	2,568,380	2,568,380	-	-	-	-	4,652,825	
		Maintenance of Misc Steam (or Nuclear) Plant	22,424	506,026	1,203,100	254,339	151,677	122,452	102,754	394,234	1,095,126	368	768,138	9,709	607,475	26,319,211	
		Total Production Expenses	\$ 6,157,834	\$ 26,588,293	\$ 68,642,152	\$ 8,757,612	\$ 25,489,313	\$ 46,384,315	\$ 111,257,092	\$ 85,287,163	\$ 167,472,163	\$ 7,172,638	\$ 85,017,240	\$ 29,835,850	\$ 24,370,765	\$ 632,089,883	
		Expenses per Net KWh	\$ 0.0316	\$ 0.0232	\$ 0.0118	\$ 0.0135	\$ 0.0127	\$ 0.0130	\$ 0.0132	\$ 0.0140	\$ 0.0171	\$ 0.0162	\$ 0.0757	\$ 0.0757	\$ 0.0113	\$ 0.0158	
		Total Fuel - \$/MWh	\$ 31.60	\$ 23.23	\$ 11.78	\$ 13.52	\$ 12.68	\$ 12.97	\$ 13.19	\$ 14.60	\$ 17.05	\$ 16.21	\$ 75.69	\$ 11.32	\$ 15.80		
		Non-Fuel - \$/MWh	\$ 31.60	\$ 10.08	\$ 6.34	\$ 25.18	\$ 9.24	\$ 9.98	\$ 9.14	\$ 9.98	\$ 12.28	\$ 70.02	\$ 11.53	\$ 27.60	\$ 6.34	\$ 10.14	
		Fuel Cost (Fuel Unit as Delivered to Plant)	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/MWh	\$ 31.60	\$ 13.15	\$ 5.44	\$ 100.34	\$ 4.52	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00	
		Fuel Cost (Fuel Unit as Delivered to Plant) - \$/															

[illegible]

[illegible]

Line no	Kind of Plant (Internal Combustion, Gas Turbine, Nuclear, Steam, etc.)	Blundell Plant	Carbon Plant	Current Creek	Dave Johnston	Gaskys Plant	Gaskys Plant	Hunter Unit 1	Hunter Unit 2	Hunter Unit 3	Hunter Plant	Harbington Plant	Jim Bridger Plant	Lake Side	Little Mountain	Naughton Plant	West Valley	Wyodak Plant	FECC
		Steam - Geo Thermal	Steam - Geo Thermal	Gas Turbine	Steam - Geo Thermal	Gas Turbine	Gas Turbine	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Gas Turbine	Steam - Geo Thermal	Act
1	Kind of Plant (Internal Combustion, Gas Turbine, Nuclear, Steam, etc.)	Steam - Geo Thermal	Steam - Geo Thermal	Gas Turbine	Steam - Geo Thermal	Gas Turbine	Gas Turbine	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Steam - Geo Thermal	Gas Turbine	Steam - Geo Thermal	
2	Year Original Construction	1984	1984	1984	1989	1989	1989	1978	1978	1978	1978	1978	1978	1978	1978	1978	1978	1978	
3	Year Last Unit was Installed	1984	1984	1984	1989	1989	1989	1978	1978	1978	1978	1978	1978	1978	1978	1978	1978	1978	
4	Total Installed Gas (Max Gen Name Plate Rating-MW)	38.1	18.6	506.9	816	237.6	141.0	443.0	285.0	495.6	1,223.6	595.0	1,917	1,541.1	548.0	16.0	217.0	289.7	7,547.6
5	Total Installed Gas (Max Gen Name Plate Rating-MW)	38.1	18.6	506.9	816	237.6	141.0	443.0	285.0	495.6	1,223.6	595.0	1,917	1,541.1	548.0	16.0	217.0	289.7	7,547.6
6	Net Continuous Plant Capacity (MW)	7,038	8,691	3,351	1,194	1,124	1,124	843.3	463.3	7,011	8,765	8,765	8,765	8,765	8,765	8,765	8,765	8,765	7,195
7	Net Continuous Plant Capacity (Megawatts)	7,038	8,691	3,351	1,194	1,124	1,124	843.3	463.3	7,011	8,765	8,765	8,765	8,765	8,765	8,765	8,765	8,765	7,195
8	When Not Limited by Condensate Water	34	112	540	762	235	120	403	259	460	1,413	895	1,413	548	14	700	202	268	7,025
9	Average Number of Engines	11	16	37	37	37	37	74	74	74	122	183	341	21	6	140	3	3	1,300
10	Net Generation, Exclusive of Plant Use - KWh	13,675,000	1,339,340	3,656,071	5,666,860	305,822,000	327,217,000	2,052,174,000	2,950,942,000	8,036,655,000	9,036,655,000	7,122,068,000	1,185,861,000	1,185,861,000	112,002,000	5,210,018,000	867,031,000	2,256,168,000	112,259,116
11	Cost of Plant, Land and Land Rights	41,195,566	595,546	3,403,030	10,451,083	1,252,590	1,252,590	9,688,975	9,688,975	10,276,401	22,562,351	2,386,762	1,181,925	1,181,925	217,599	4,330,754	116,354	47,820,904	174,451,602
12	Expenditures for Plant Improvements	6,686,536	24,224,901	32,574,901	14,086,046	61,925,142	61,925,142	50,727,551	89,910,667	202,560,360	112,074,877	134,988,247	47,901,000	47,901,000	217,599	64,944,044	116,354	47,820,904	174,451,602
13	Asset Retirement Costs	6,356,728	72,122,267	235,165	38,252,755	56,726,747	56,726,747	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041
14	Asset Retirement Costs	6,356,728	72,122,267	235,165	38,252,755	56,726,747	56,726,747	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041	1,581,041
15	Total Cost	\$ 113,695,626	\$ 99,458,059	\$ 340,093,471	\$ 451,353,374	\$ 72,334,374	\$ 72,334,374	\$ 302,507,894	\$ 314,769,753	\$ 504,205,153	\$ 624,614,459	\$ 928,614,459	\$ 343,590,218	\$ 343,590,218	\$ 5,300,637	\$ 395,434,148	\$ 738,755	\$ 320,639,448	\$ 28,565,549
16	Cost per kW of installed capacity (four phases)	\$ 2,983.11	\$ 489.54	\$ 601.36	\$ 553.59	\$ 281.56	\$ 281.56	\$ 753.64	\$ 1,017.36	\$ 634.83	\$ 634.83	\$ 634.83	\$ 634.83	\$ 634.83	\$ 634.83	\$ 634.83	\$ 634.83	\$ 634.83	\$ 634.83
17	Operating Supervision and Engineering	31,426	11,605,801	1,160,500	1,160,500	1,													

FERC Acct no.	Form 1 Line no.	Kind of Plant	Blondell Plant	Carbon Plant	Chatsalis Plant	Current Creek	Dave Johnston	Gadsby Plant	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Hunter Plant	Huntington	Jim Bridger	Lake Side	Little Mountain	Naughton Plant	West Valley	Wyodak Plant	Thermal Plants Total	FERC Acct no.
1	2	Type of Plant	Steam - Geo	Steam - Geo	Steam - Geo	Gas Turbine	Steam - Geo	Gas Turbine	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	Steam - Geo	1
2	3	Year of Construction	1984	1984	1984	2003	1989	2002	1978	1980	1983	1978	1978	1974	2007	2007	1972	2002	2002	1978	2
3	4	Year of Conversion	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
4	5	Total Installed Capacity (MW)	38.1	38.1	38.1	520.0	466.0	141.0	443.0	285.0	468.0	1,233.0	596.0	1,541.0	546.0	16.0	707.2	214.0	289.7	289.7	4
5	6	Net Peak Demand on Plant (MW (60 minutes))	8,336	8,336	8,336	7,732	8,784	3,079	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	5
6	7	Plant Hours Connected to Load	8,336	8,336	8,336	7,732	8,784	3,079	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	6
7	8	When Not Limited by Condensate Water	8,336	8,336	8,336	7,732	8,784	3,079	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	7
8	9	When Limited by Condensate Water	8,336	8,336	8,336	7,732	8,784	3,079	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8,784	8
9	10	Average Number of Employees	25	25	25	540	762	235	403	259	460	1,122	895	1,413	548	14	700	202	268	268	9
10	11	Average Number of Contractors	25	25	25	540	762	235	403	259	460	1,122	895	1,413	548	14	700	202	268	268	10
11	12	Cost of Plant (Land and Land Rights)	254,377,000	254,377,000	254,377,000	3,789,585,000	5,638,860,000	2,010,000,000	3,114,951,000	2,042,987,000	3,533,197,000	6,891,731,000	3,386,120,000	2,861,722,000	1,266,700,000	108,560,000	5,114,450,000	1,78,356,000	2,452,788,000	2,452,788,000	11
12	13	Cost of Plant (Land and Land Rights)	41,185,596	41,185,596	41,185,596	3,033,277	4,021,000	1,250,000	1,075,401	688,976	1,075,401	3,386,120	1,161,925	1,161,925	1,161,925	1,161,925	1,161,925	1,161,925	1,161,925	1,161,925	12
13	14	Structures and Improvements	7,404,973	7,404,973	7,404,973	40,236,674	52,148,654	15,058,364	4,121,643	62,728,662	51,861,298	90,638,287	205,229,287	111,555,714	136,136,880	27,057,001	287,331	65,636,170	48,014,021	48,014,021	13
14	15	Equipment Costs	66,334,298	66,334,298	66,334,298	304,844,865	408,881,472	57,668,039	17,860,691	231,862,609	154,814,041	402,801,860	789,778,536	516,605,763	814,872,796	305,014,470	5,092,337	331,940,962	274,840,748	274,840,748	14
15	16	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	15
16	17	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	16
17	18	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	17
18	19	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	18
19	20	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	19
20	21	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	20
21	22	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	21
22	23	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	22
23	24	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	23
24	25	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	24
25	26	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	25
26	27	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	26
27	28	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	27
28	29	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	28
29	30	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	29
30	31	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	30
31	32	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	31
32	33	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	32
33	34	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	33
34	35	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	34
35	36	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	35
36	37	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	36
37	38	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	37
38	39	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	38
39	40	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	39
40	41	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	40
41	42	Cost per kWh of Installed Capacity (our share)	\$ 118,271.03	\$ 118,271.03	\$ 118,271.03	\$ 351,619.84	\$ 474,961.57	\$ 74,969,501	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	\$ 71,787,865	41
42	43	Cost per kWh of Installed Capacity (our share)	\$ 118,27																		

FERC Acct no.	Form 1 Line no.	Blundell Plant	Carbon Plant	Chehalis Plant	Current Creek	Dave Johnston	Gasby Plant	Gasby Plant	Hunter Unit No. 1	Hunter Unit No. 2	Hunter Unit No. 3	Hunter Plant	Huntington	Jim Bridger	Lake Side	Little Mountain	Naughton Plant	Wyodak Plant	Thermal Plants Total	FERC Acct no.	
	1	Weld of Plant (Internal Comb. Gas Turb. Number)																			
	2	Type of Cond. (Conventional, Outdoor, Boiler, etc.)																			
	3	Year Originally Constructed	1984	1954	2003	2005	1959	1951	1978	1980	1983	1978	1974	1974	1974	2007	1972	1983	1978		
	4	Year Last Unit was Installed	2007	1957	2003	2005	1972	1955	2002	1978	1980	1983	1974	1974	1974	2007	1972	1983	1978		
	5	Gas Installed Cap (Mac Gen Name, Rate, Ration, MW)	36.1	186.6	583.3	586.9	616.8	231.6	457.7	239.5	486.6	124.8	36	36	36	512	512	512	280	0.029.5	
	6	Gas Installed Cap (Mac Gen Name, Rate, Ration, MW) (50 minutes)	69	353.3	1093.3	1093.3	616.8	231.6	457.7	239.5	486.6	124.8	36	36	36	512	512	512	280	0.029.5	
	7	Plant Hours Connected to Load	8584	8717	4662	7654	8760	3753	8165	7977	8076	8760	8716	8760	8760	5912	7976	8760	6315	7.441	
	8	Net Continuous Plant Capability (Megawatts)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9	When Not Limited by Condenser Water	34	172	520	550	762	231	403	299	460	1122	896	1411	568	14	700	268	7.269		
	10	Average Cost of Fuel Burned per Unit (nuclear)	22	70	18	19	38	38	0	0	0	223	0	166	346	22	6	144	0		
	11	Average Cost of Fuel Burned per Unit (coal)	22	70	18	19	38	38	0	0	0	223	0	166	346	22	6	144	0		
	12	Net Generation, Excluding Plant (KWh)	279,121,000	1,211,875,000	1,747,292,000	2,464,483,000	2,964,104,000	2,964,104,000	3,497,713,000	3,497,713,000	3,497,713,000	3,497,713,000	3,497,713,000	3,497,713,000	3,497,713,000	3,497,713,000	3,497,713,000	3,497,713,000	3,497,713,000	45,488,965,000	
	13	Cost of Plant, Land and Land Rights	41,189,598	568,546	1,973,791	3,403,777	10,451,083	1,252,050	9,889,975	9,889,975	9,889,975	9,889,975	9,889,975	9,889,975	9,889,975	9,889,975	9,889,975	9,889,975	9,889,975	210,526	
	14	Structures and Improvements	900,332	14,711,825	23,230,441	43,802,597	57,419,130	15,072,596	63,027,096	63,027,096	63,027,096	63,027,096	63,027,096	63,027,096	63,027,096	63,027,096	63,027,096	63,027,096	63,027,096	114,333,188	
	15	Equipment	69	1,000,000	31,200,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	1,000,000	
	16	Asset Retirement Costs	1,339,278	6,527,369	6,889,117	134,648	11,441,590	597,009	228,036	228,036	228,036	228,036	228,036	228,036	228,036	228,036	228,036	228,036	228,036	457,539,798	
	17	Total Cost	\$ 119,206,450	\$ 125,790,759	\$ 339,742,189	\$ 359,896,465	\$ 557,539,341	\$ 75,288,254	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 210,390,904	\$ 36,039,517	
	18	Cost per KWh of Installed Capacity (our share)	\$ 3,128.78	\$ 666.76	\$ 972.63	\$ 622.43	\$ 299.24	\$ 299.24	\$ 669.75	\$ 741.53	\$ 1,032.68	\$ 830.91	\$ 641.37	\$ 641.37	\$ 641.37	\$ 641.37	\$ 641.37	\$ 641.37	\$ 641.37	\$ 1,137.60	
	19	Operation, Maintenance and Engineering	50,045	61,684	83,486	99,940	109,742	12,089	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	19,679.86	
	20	Construction and Engineering	50,045	61,684	83,486	99,940	109,742	12,089	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	39,453,923	19,679.86	
	21	Costs and Water (Nuclear Plants Only)	18,614,554	88,420,253	88,420,253	147,616,377	45,397,616	34,130,632	2,885,015	2,885,015	2,885,015	2,885,015	2,885,015	2,885,015	2,885,015	2,885,015	2,885,015	2,885,015	2,885,015	19,679.86	
	22	Steam Expenses	1,396,202	3,997,576	3,997,576	2,851,366	6,148	4,077,590	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	19,679.86	
	23	Steam From Other Sources	5,426	1,810,205	2,661,898	2,851,366	17,159,533	4,077,590	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	19,679.86	
	24	Electric Engineering (Ch)	9,640	170	15,009	6,148	148,543	4,077,590	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	19,679.86	
	25	Misc Steam (or Nuclear) Power Expenses	1,806,790	4,934,749	15,009	6,148	148,543	4,077,590	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	19,679.86	
	26	Rentals	9,640	170	15,009	6,148	148,543	4,077,590	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	1,886,496	19,679.86	
	27	Nonrenewables	162,048	336,038	10,917	250,824	2,442,564	220,739	2,020,238	1,949,545	1,841,148	5,810,031	1,148,595	595,038	595,038	595,038	595,038	595,038	595,038	2,244,555	
	28	Insurance, Supervision and Engineering	153,519	2,988,372	10,917	250,824	2,442,564	220,739	2,020,238	1,949,545	1,841,148	5,810,031	1,148,595	595,038	595,038	595,038	595,038	595,038	595,038	2,244,555	
	29	Maintenance of Structures	403,022	1,556,410	2,875,448	6,436,968	8,595,794	860,210	2,965,997	1,066,457	1,170,308	1,167,195	2,060,488	8,306,771	1,886,595	712,185	10,677,987	4,789,284	1,451,664	84,978,915	
	30	Maintenance of Boiler (or reactor) Plant	153,519	2,988,372	10,917	250,824	2,442,564	220,739	2,020,238	1,949,545	1,841,148	5,810,031	1,148,595	595,038	595,038	595,038	595,038	595,038	595,038	2,244,555	
	31	Maintenance of Electric Plant	403,022	1,556,410	2,875,448	6,436,968	8,595,794	860,210	2,965,997	1,066,457	1,170,308	1,167,195	2,060,488	8,306,771	1,886,595	712,185	10,677,987	4,789,284	1,451,664	84,978,915	
	32	Maintenance of Reactor (or Nuclear) Plant	153,519	2,988,372	10,917	250,824	2,442,564	220,739	2,020,238	1,949,545	1,841,148	5,810,031	1,148,595	595,038	595,038	595,038	595,038	595,038	595,038	2,244,555	
	33	Net Production Expenses	\$ 6,243,367	\$ 30,564,278	\$ 95,098,111	\$ 156,863,964	\$ 98,744,146	\$ 41,361,364	\$ 40,290,203	\$ 52,450,921	\$ 33,862,445	\$ 27,774,844	\$ 143,411,300	\$ 105,786,560	\$ 204,864,766	\$ 124,953,365	\$ 18,863,037	\$ 106,593,318	\$ 31,509,302	\$ 1,198,793,661	
	34	Expenses per Net KWh	\$ 0.0224	\$ 0.0272	\$ 0.0544	\$ 0.0637	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0176	\$ 0.0254	
	35	Total Fuel (Coal, Gas, Oil, or Nuclear)	\$ 2,645,781	\$ 13,370,284	\$ 3,647,768	\$ 7,221,992	\$ 43,347,030	\$ 7,221,992	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 43,347,030	\$ 2,645,781	
	36	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
	37	Quantity (units of Fuel Burned)	561,433	12,079	561,433	12,079	561,433	12,079	561,433	12,079	561,433	12,079	561,433	12,079	561,433	12,079	561,433	12,079	561,433	12,079	
	38	Avg Heat Cont. - Fuel Burned (Btu/nuclear indicator)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	39	Avg Cost of Fuel Burned (Btu/nuclear indicator)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	40	Avg Cost of Fuel Burned (Btu/nuclear indicator)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	41	Average Cost of Fuel Burned per Unit (nuclear)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	42	Average Cost of Fuel Burned per Unit (coal)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	43	Average Cost of Fuel Burned per Unit (gas)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	44	Average Cost of Fuel Burned per Unit (oil)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	45	Average Cost of Fuel Burned per Unit (nuclear)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	46	Average Cost of Fuel Burned per Unit (coal)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	47	Average Cost of Fuel Burned per Unit (gas)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	48	Average Cost of Fuel Burned per Unit (oil)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	49	Average Cost of Fuel Burned per Unit (nuclear)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	50	Average Cost of Fuel Burned per Unit (coal)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	
	51	Average Cost of Fuel Burned per Unit (gas)	12,079	34,043	12,079	34,043	12,079	34,043	12,079	34,043	12,079										

[illegible]

Summary

[illegible]



Carbon Plant Heat Rate Improvement Plan

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1. Revision History

Version	Status	Author	Reason for Issue	Date
1			2011 Plan Issue	April 30, 2011

2. Revision Control

This document is maintained by the PacifiCorp Energy Asset Management group.

3. Glossary of Terms**3.1. Actual Net Heat Rate (Btu/kWh)**

Total actual heat input in Btu's divided by actual net generation.

3.2. As-built Net Heat Rate (Btu/kWh)

Total guaranteed heat input, from the design heat balances in Btu's divided by the guaranteed net generation, corrected for changes in equipment from design. This is the baseline number for the plant personnel when they make their annual reconciliation.

3.3. British thermal unit (Btu)

British thermal unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

3.4. Gross Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual gross generation.

3.5. Net Generation (kWh)

Gross generation minus auxiliary or station usage

3.6. Planned Net Heat Rate (Btu/kWh)

Total budgeted heat input in Btu's divided by the budgeted net generation. This number is the annual goal for the plant personnel to achieve.

4. Overall Plan and Objectives**4.1. Unit 1- Goals for 10-year plan**

Figure 1, in the appendix, shows the ten-year heat rate plan for Carbon unit 1. The dips in the Planned Net Heat Rate in the years 2009, 2014 and 2018 are due to the work that is scheduled to take place during the planned outages in 2009, 2013 and 2017 (see section 7).

4.2. Unit 2 - Goals for 10-year Plan

Figure 2, in the appendix, shows the ten-year heat rate plan for Carbon unit 2. The dip in the Planned Net Heat Rate in the year 2008 is due to the work that occurred during the planned outages in 2008. There are only small fluctuations in the unit heat rate in other years that will be the result of smaller overhaul projects (see section 7).

5. Performance against last year's plan

5.1. Unit 1

Planned Net Heat Rate			12,261
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	34	49	15
Turbine Losses	813	(207)	(1020)
Other Losses	60	(70)	(130)
Actual Net Heat Rate			11,127

Negative numbers in the table above are improvements to heat rate.

5.2. Unit 2

Planned Net Heat Rate			11,170
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	42	79	37
Turbine Losses	1,138	903	(235)
Other Losses	49	(8)	(57)
Actual Net Heat Rate			10,914

Negative numbers in the table above are improvements to heat rate.

6. Major Losses for Current Planned Net Heat Rate

This section of the heat rate plan identifies the reconciliation of the items that have the most impact between the As-built Net Heat Rate and the Planned Net Heat Rate.

6.1. Unit 1

As-Built Net Heat Rate	11,354
Boiler Losses	9
Turbine Losses	733
Other Losses	-62
Planned Net Heat Rate	12,034

6.2. Unit 2

As-Built Net Heat Rate	9,941
Boiler Losses	92
Turbine Losses	1,211
Other Losses	140
Planned Net Heat Rate	11,384

7. Major Unit Specific Initiatives

This section identifies the major planned capital and operational activities to improve or regain lost heat rate for the current 10-year plan.

7.1. Unit 1

Table 1 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.2. Unit 2

Table 2 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

8. Annual Review and Update

This plan will be reviewed and updated annually by the Carbon plant management team by April 30.

9. Appendix

Figure 1
Carbon Unit 1
10-year Plan Heat Rate Goals

Carbon 1															
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	11,354	11,354	11,354	11,354	11,354	11,354	11,354	11,354	11,354	11,354	11,354	11,354	11,354	11,354	11,354
Planned Net Heat Rate 2011, Btu/Kwh	11,650	12,757	12,189	11,799	12,261	12,041	12,582	12,782	12,542	10,800	11,800	12,895	13,489	13,203	13,809
Actual Net Heat Rate, Btu/Kwh	11,449	12,030	11,754	11,370	11,416										
Capacity Factor 2011, %	88.5%	89.0%	86.0%	75.1%	90.4%	70.8%	67.3%	63.1%	69.9%	68.7%	66.0%	56.8%	58.2%	56.8%	57.6%

Figure 2
Carbon Unit 2
10-year Plan Heat Rate Goals

	Carbon 2														
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941
Planned Net Heat Rate 2011, Btu/Kwh	11,420	11,065	10,776	11,169	11,170	11,269	11,422	11,852	11,827	10,603	11,094	11,574	11,564	11,539	12,047
Actual Net Heat Rate, Btu/Kwh	11,204	11,269	11,482	11,116											
Capacity Factor 2011, %	86.3%	84.9%	74.3%	84.4%	89.0%	82.6%	69.9%	80.6%	80.5%	75.6%	68.0%	73.2%	69.2%	67.7%	66.1%

Carbon Plant Heat Rate Improvement Plan

Table 1
Carbon Unit 1
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
CY2009 Air Heater Partial Basket Replacement (hot end)	Btu/kWh	-28	-25	-22	-19	-16	-13	-10	-7	-4	-4
Retube Condenser CY2009	Btu/kWh	-50	-50	-50	-50	-50	-50	-50	-50	-50	-50
Total adjustments related to Capital Projects	Btu/kWh	-78	-75	-72	-69	-66	-63	-60	-57	-54	-54
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-35	-34	-32	-31	-30	-28	-27	-26	-24	-24
Replacement Plan for Air Heater Seals	KW	62	83	21	42	62	83	83	83	83	83
Mercury Capture (2017 -0.1 MW)	KW							100	100	100	100
Total Auxiliary Load Changes	KW	27	49	-12	10	33	55	156	157	159	159
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
	MW										
Total Capacity Changes	MW	0	0	0	0	0	0	0	0	0	0

Carbon Plant Heat Rate Improvement Plan

Table 2
Carbon Unit 2
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
CY2008 overhaul Air Heater Basket Replacement (hot and cold)	Btu/kWh	-18	-15	-12	-9	-6	-30	-30	-30	-30	-30
Total adjustments related to Capital Projects	Btu/kWh	-18	-15	-12	-9	-6	-30	-30	-30	-30	-30
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-11	-9	-8	-6	-4	-19	-19	-19	-19	-19
Replacement Plan for Air Heater Seals	KW	41	-21	0	21	41	-21	-21	-21	-21	-21
Mercury Capture (2018 -0.1 MW)	KW								100	100	100
Total Auxiliary Load Changes	KW	30	-30	-8	15	37	-40	-40	60	60	60
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
	MW										
Total Capacity Changes	MW	0	0	0	0	0	0	0	0	0	0

10. Required Signatures

Performance Engineer – Carbon Plant		April Haynes	
Signature:	{ on file }	Date:	4/15/11

Manager, Engineering – Carbon Plant			
Signature:		Date:	

Managing Director, Carbon Plant		Shawn Smith	
Signature:	{ on file }	Date:	4/15/11



Dave Johnston Plant Heat Rate Improvement Plan

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1. Revision History

Version	Status	Author	Reason for Issue	Date
1			2010 Plan Issue	April 30, 2011

2. Revision Control

This document is maintained by the PacifiCorp Energy Asset Management group.

3. Glossary of Terms

- 3.1. Actual Net Heat Rate (Btu/kWh)
Total actual heat input in Btu's divided by actual net generation.
- 3.2. As-built Net Heat Rate (Btu/kWh)
Total guaranteed heat input, from the design heat balances in Btu's divided by the guaranteed net generation, corrected for changes in equipment from design. This is the baseline number for the plant personnel when they make their annual reconciliation.
- 3.3. British thermal unit (Btu)
British thermal unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.
- 3.4. Gross Heat Rate (Btu/kWh)
Total actual heat input in Btu's divided by actual gross generation.
- 3.5. Net Generation (kWh)
Gross generation minus auxiliary or station usage
- 3.6. Planned Net Heat Rate (Btu/kWh)
Total budgeted heat input in Btu's divided by the budgeted net generation. This number is the annual goal for the plant personnel to achieve.

4. Overall Plan and Objectives

- 4.1. Unit 1- Goals for 10-year plan
Figure 1, in the appendix, shows the ten-year heat rate plan for Dave Johnston unit 1. The dips in the Planned Net Heat Rate in the years 2013 and 2018 are due to the work that is scheduled to take place during the planned outages in 2013 and 2018 (see section 7).

4.2. Unit 2 - Goals for 10-year Plan

Figure 2, in the appendix, shows the ten-year heat rate plan for Dave Johnston unit 2. The dips in the Planned Net Heat Rate in the years 2012 and 2017 are due to the work that is scheduled to take place during the planned outages in 2012 and 2017 (see section 7).

4.3. Unit 3 - Goals for 10-year Plan

Figure 3, in the appendix, shows the ten-year heat rate plan for Dave Johnston unit 3. The dips in the Planned Net Heat Rate in the years 2010, 2014, and 2018 are due to the work that is scheduled to take place during the planned outages in 2010, 2014 and 2018 (see section 7).

4.4. Unit 4 - Goals for 10-year Plan

Figure 4, in the appendix, shows the ten-year heat rate plan for Dave Johnston unit 4. The dips in the Planned Net Heat Rate in the years 2012 and 2016 are due to the work that is scheduled to take place during the planned outages in 2012 and 2016 (see section 7).

5. Performance against last year's plan

5.1. Unit 1

Planned Net Heat Rate	11,106		
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	(9)	6	15
Turbine Losses	619	929	310
Other Losses	106	220	114
Actual Net Heat Rate	11,545		

Negative numbers in the table above are improvements to heat rate.

5.2. Unit 2

Planned Net Heat Rate	11,038		
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	14	46	32
Turbine Losses	598	659	61
Other Losses	37	236	199
Actual Net Heat Rate	11,330		

Negative numbers in the table above are improvements to heat rate.

5.3. Unit 3

Planned Net Heat Rate			11,473
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	31	(45)	(76)
Turbine Losses	580	177	(403)
Other Losses	355	633	278
Actual Net Heat Rate			11,272

Negative numbers in the table above are improvements to heat rate.

5.4. Unit 4

Planned Net Heat Rate			10,459
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	(64)	13	77
Turbine Losses	416	714	298
Other Losses	(135)	117	252
Actual Net Heat Rate			11,085

Negative numbers in the table above are improvements to heat rate.

6. Major Losses for Current Planned Net Heat Rate

This section of the heat rate plan identifies the reconciliation of the items that have the most impact between the As-built Net Heat Rate and the Planned Net Heat Rate.

6.1. Unit 1

As-Built Net Heat Rate	10,390
Boiler Losses	-7
Turbine Losses	604
Other Losses	70
Planned Net Heat Rate	11,057

6.2. Unit 2

As-Built Net Heat Rate	10,389
Boiler Losses	16
Turbine Losses	633
Other Losses	46
<u>Planned Net Heat Rate</u>	<u>11,083</u>

6.3. Unit 3

As-Built Net Heat Rate	10,507
Boiler Losses	30
Turbine Losses	398
Other Losses	426
<u>Planned Net Heat Rate</u>	<u>11,362</u>

6.4. Unit 4

As-Built Net Heat Rate	10,242
Boiler Losses	-65
Turbine Losses	599
Other Losses	-203
<u>Planned Net Heat Rate</u>	<u>10,574</u>

7. Major Unit Specific Initiatives

This section identifies the major planned capital and operational activities to improve or regain lost heat rate for the current 10-year plan.

7.1. Unit 1

Table 1 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.2. Unit 2

Table 2 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.3. Unit 3

Table 3 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.4. Unit 4

Table 4 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

8. Annual Review and Update

This plan will be reviewed and updated annually by the Dave Johnston plant management team by March 31.

9. Appendix

Figure 1
Dave Johnston Unit 1
10-year Plan Heat Rate Goals

Dave Johnston 1																
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
As-Built Net Heat Rate, Btu/Kwh	10,390	10,389	10,390	10,389	10,390	10,390	10,390	10,390	10,390	10,390	10,390	10,390	10,399	10,399	10,399	
Planned Net Heat Rate 2011, Btu/Kwh	11,090	11,201	11,061	10,971	11,106	11,059	11,103	10,948	10,784	10,840	10,910	10,942	11,151	11,069	11,106	
Actual Net Heat Rate, Btu/Kwh	11,020	11,156	11,610	11,454	11,574											
Capacity Factor 2011, %	90.6%	87.7%	79.0%	89.2%	90.2%	83.5%	83.7%	76.3%	84.7%	85.1%	85.5%	86.1%	80.5%	90.8%	90.3%	

Figure 2
Dave Johnston Unit 2
10-year Plan Heat Rate Goals

Dave Johnston 2																
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
As-Built Net Heat Rate, Btu/Kwh	10,390	10,371	10,390	10,384	10,389	10,389	10,389	10,389	10,389	10,389	10,389	10,398	10,398	10,398	10,398	
Planned Net Heat Rate 2011, Btu/Kwh	11,090	10,804	10,959	10,987	11,038	11,085	11,001	10,513	10,553	10,702	10,764	10,749	10,893	10,923	10,952	
Actual Net Heat Rate, Btu/Kwh	11,169	10,987	11,421	11,528	11,355											
Capacity Factor 2011, %	88.9%	78.9%	82.7%	92.6%	91.3%	83.5%	75.6%	84.6%	84.7%	85.1%	85.5%	76.1%	92.3%	91.2%	90.1%	

Figure 3
Dave Johnston Unit 3
10-year Plan Heat Rate Goals

Dave Johnston 3																
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
As-Built Net Heat Rate, Btu/Kwh	10,490	10,488	10,490	10,490	10,506	10,694	10,694	10,694	10,505	10,504	10,504	10,504	10,504	10,504	10,504	
Planned Net Heat Rate 2011, Btu/Kwh	11,200	11,171	11,335	11,476	11,473	11,364	11,321	11,072	11,136	11,142	11,206	11,179	11,420	11,165	11,429	
Actual Net Heat Rate, Btu/Kwh	11,487	11,447	11,058	11,472	11,237											
Capacity Factor 2011, %	89.8%	88.4%	92.2%	88.1%	75.0%	83.5%	83.7%	84.6%	74.3%	81.3%	81.7%	82.3%	82.1%	90.1%	89.7%	

Figure 4
Dave Johnston Unit 4
10-year Plan Heat Rate Goals

Dave Johnston 4

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	10,252	10,252	10,252	10,245	10,242	10,242	10,249	10,253	10,254	10,254	10,254	10,254	10,254	10,254	10,254
Planned Net Heat Rate 2011, Btu/Kwh	11,080	11,062	10,758	10,563	10,459	10,576	10,612	10,145	10,282	10,431	10,383	10,371	10,572	10,510	10,757
Actual Net Heat Rate, Btu/Kwh	11,263	11,233	11,418	11,318	11,088										
Capacity Factor 2011, %	82.3%	83.9%	81.2%	57.1%	89.0%	83.5%	74.5%	85.7%	85.8%	86.3%	78.2%	87.2%	89.7%	89.8%	79.4%

Table 1
Dave Johnston Unit 1
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
	Btu/kWh										
Total adjustments related to Capital Projects	Btu/kWh	0	0	0	0	0	0	0	0	0	0
Budgeted / Planned Auxiliary Load Changes											
Hg Capture (100 kw in 2018)	KW								100	100	100
Total Auxiliary Load Changes	KW	0	0	0	0	0	0	0	100	100	100
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
	MW										
Total Capacity Changes	MW	0	0	0	0	0	0	0	0	0	0

Table 2
Dave Johnston Unit 2
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Pulverizer/PA Fan Controls Replace - (2008)	Btu/kWh	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Total adjustments related to Capital Projects	Btu/kWh	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13
Hg Capture (100 kw in 2017)	KW							100	100	100	100
Total Auxiliary Load Changes	KW	-13	-13	-13	-13	-13	-13	87	87	87	87
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
	MW										
Total Capacity Changes	MW	0	0	0	0	0	0	0	0	0	0

Table 3
Dave Johnston Unit 3
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
3C Mill PA Flow indication 2010	Btu/kWh	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Clean Air Initiative - DFGD (85%) LNB	Btu/kWh	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6
Total adjustments related to Capital Projects	Btu/kWh	194.6	194.6	194.6	194.6	194.6	194.6	194.6	194.6	194.6	194.6
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	367	367	367	367	367	367	367	367	367	367
Total Auxiliary Load Changes	KW	367	367	367	367	367	367	367	367	367	367
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Clean Air Initiative - DFGD (85%) LNB	MW	-4.21	-4.21	-4.21	-4.21	-4.21	-4.21	-4.21	-4.21	-4.21	-4.21
Unit Rerated after Environmental Projects (2014 +10MWn)	MW				10	10	10	10	10	10	10
Total Capacity Changes	MW	-4.21	-4.21	-4.21	5.79	5.79	5.79	5.79	5.79	5.79	5.79

Table 4
Dave Johnston Unit 4
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Digital Control System	Btu/kWh	-70	-70	-70	-70	-70	-70	-70	-70	-70	-70
FW Heater Level Controls Replace	Btu/kWh	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
AH Basket Replacement	Btu/kWh	-25	-20	-20	-10	-10					
AH Sootblowers	Btu/kWh	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
Clean Air Initiative - DFGD (90%), BH, LNB	Btu/kWh		92.1	138.1	138.1	138.1	138.1	138.1	138.1	138.1	138.1
Total adjustments related to Capital Projects	Btu/kWh	-125	-28	18.1	28.1	28.1	38.1	38.1	38.1	38.1	38.1
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-321	-72	46	72	72	98	98	98	98	98
Total Auxiliary Load Changes	KW	-321	-72	46	72	72	98	98	98	98	98
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Clean Air Initiative - DFGD (90%), BH, LNB	MW		-4.4	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4
Total Capacity Changes	MW	0	-4	-4	-4	-4	-4	-4	-4	-4	-4

10. Required Signatures

Performance Engineer – Dave Johnston Plant		Teresa Jorris	
Signature:	{ signature on file }	Date:	30Apr11

Engineering Manager – Dave Johnston Plant			
Signature:		Date:	

Managing Director, Acting – Dave Johnston Plant			
Signature:	{ signature on file }	Date:	30Apr11



Huntington Plant Heat Rate Improvement Plan

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1. Revision History

Version	Status	Author	Reason for Issue	Date
1			2011 Plan Issue	April 30, 2011

2. Revision Control

This document is maintained by the PacifiCorp Energy Asset Management group.

3. Glossary of Terms**3.1. Actual Net Heat Rate (Btu/kWh)**

Total actual heat input in Btu's divided by actual net generation.

3.2. As-built Net Heat Rate (Btu/kWh)

Total guaranteed heat input, from the design heat balances in Btu's divided by the guaranteed net generation, corrected for changes in equipment from design. This is the baseline number for the plant personnel when they make their annual reconciliation.

3.3. British thermal unit (Btu)

British thermal unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

3.4. Gross Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual gross generation.

3.5. Net Generation (kWh)

Gross generation minus auxiliary or station usage

3.6. Planned Net Heat Rate (Btu/kWh)

Total budgeted heat input in Btu's divided by the budgeted net generation. This number is the annual goal for the plant personnel to achieve.

4. Overall Plan and Objectives**4.1. Unit 1- Goals for 10-year plan**

Figure 1, in the appendix, shows the ten-year heat rate plan for Huntington unit 1. The dips in the Planned Net Heat Rate in the years 2011 and 2015 are due to the work that is scheduled to take place during the planned outages in 2010 and 2014 (see section 7).

4.2. Unit 2- Goals for 10-year plan

Figure 2, in the appendix, shows the ten-year heat rate plan for Huntington unit 2. The dips in the Planned Net Heat Rate in the years 2012 and 2016 are due to the work that is scheduled to take place during the planned outages in 2011 and 2015 (see section 7).

5. Performance against last year's plan**5.1. Unit 1**

Planned Net Heat Rate			10,110
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	111	165	54
Turbine Losses	218	219	1
Other Losses	(10)	172	182
<hr/>			
Actual Net Heat Rate			10,347

Negative numbers in the table above are improvements to heat rate.

5.2. Unit 2

Planned Net Heat Rate			10,101
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	124	58	(66)
Turbine Losses	241	624	383
Other Losses	35	189	154
<hr/>			
Actual Net Heat Rate			10,572

Negative numbers in the table above are improvements to heat rate.

6. Major Losses for Current Planned Net Heat Rate

This section of the heat rate plan identifies the reconciliation of the items that have the most impact between the As-built Net Heat Rate and the Planned Net Heat Rate.

6.1. Unit 1

As-Built Net Heat Rate	9,791
Boiler Losses	117
Turbine Losses	187
Other Losses	-520
<hr/>	
Planned Net Heat Rate	9,576

6.2. Unit 2

As-Built Net Heat Rate	9,702
Boiler Losses	109
Turbine Losses	249
Other Losses	37
<hr/>	
Planned Net Heat Rate	10,096

7. Major Unit Specific Initiatives

This section identifies the major planned capital and operational activities to improve or regain lost heat rate for the current 10-year plan.

7.1. Unit 1

Table 1 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.2. Unit 2

Table 2 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

8. Annual Review and Update

This plan will be reviewed and updated annually by the Huntington plant management team by April 30.

9. Appendix

Huntington Plant Heat Rate Improvement Plan

Figure 1
Huntington Unit 1
10-year Plan Heat Rate Goals

		Huntington 1														
	Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh		9,793	9,787	9,794	9,794	9,791	9,793	9,793	9,793	9,793	9,791	9,791	9,791	9,791	9,791	9,791
Planned Net Heat Rate 2011, Btu/Kwh		10,320	10,026	10,177	10,143	10,110	9,569	9,655	9,786	9,824	9,554	9,561	9,626	9,725	9,601	9,615
Actual Net Heat Rate, Btu/Kwh		9,573	9,935	9,993	10,020	10,347										
Capacity Factor 2011, %		89.3%	89.3%	89.3%	85.4%	72.1%	76.5%	89.4%	88.6%	87.5%	77.2%	92.8%	91.5%	90.0%	79.1%	91.7%

Figure 2
Huntington Unit 2
10-year Plan Heat Rate Goals

		Huntington 2														
	Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh		9,701	9,742	9,701	9,702	9,702	9,701	9,702	9,702	9,702	9,701	9,692	9,692	9,692	9,692	9,692
Planned Net Heat Rate 2011, Btu/Kwh		10,140	10,753	10,078	10,075	10,101	10,060	10,080	10,260	10,313	10,042	9,663	9,728	9,765	9,781	9,816
Actual Net Heat Rate, Btu/Kwh		9,774	10,214	9,940	10,034	10,573										
Capacity Factor 2011, %		67.1%	93.7%	94.6%	87.4%	88.0%	91.9%	89.9%	88.8%	77.9%	92.7%	91.5%	90.5%	81.3%	91.6%	92.9%

Huntington Plant Heat Rate Improvement Plan

Table 1
Huntington Unit 1
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
3 Feedwater Heater Replacement (2010)	Btu/kWh	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Cooling Tower Fill (2010)	Btu/kWh	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Air Heater Basket Replacements (2010)	Btu/kWh	-80	-80	-80	-80	-80	-80	-80	-80	-80	-80
Scrubber Wet Stack Conversion (Aux steam reheat)(2010)	Btu/kWh	-75	-75	-75	-75	-75	-75	-75	-75	-75	-75
Steam Air Heaters (est)(2011)	Btu/kWh	120	120	120	120	120	120	120	120	120	120
Dense Pack Turbine	Btu/kWh	-350	-350	-350	-350	-350	-350	-350	-350	-350	-350
Low NOX Burners (LOI effect)	Btu/kWh	50	50	50	50	50	50	50	50	50	50
Total adjustments related to Capital Projects	Btu/kWh	-355	-355	-355	-355	-355	-355	-355	-355	-355	-355
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-14	-14	-14	-14	-126	-126	-126	-126	-126	-126
Total Auxiliary Load Changes	KW	-14	-14	-14	-14	-126	-126	-126	-126	-126	-126
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Clean Air Initiative Additions (1.48MW 2010)	MW	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48
Turbine upgrade Dense Pack (18nMW 2010)	MW	18	18	18	18	18	18	18	18	18	18
Total Capacity Changes	MW	17	17	17	17	17	17	17	17	17	17

Huntington Plant Heat Rate Improvement Plan

Table 2
Huntington Unit 2
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Cooling Tower Fill	Btu/kWh	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Air Heater Basket Replacements (2011)	Btu/kWh		-80	-80	-80	-80	-80	-80	-80	-80	-80
Steam Air Heaters (2011)	Btu/kWh		120	120	120	120	120	120	120	120	120
2 LP FWHeaters (2015)	Btu/kWh					-5	-5	-5	-5	-5	-5
Dense Pack Turbine	Btu/kWh					-62	-373	-373	-373	-373	-373
Total adjustments related to Capital Projects	Btu/kWh	-10	30	30	30	-37	-348	-348	-348	-348	-348
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-25	62	62	62	62	-37	-37	-37	-37	-37
Complete Unit 1 & 2 BA Drag Chain Conveyor (eliminate ash water pumps)(2011)	KW					-73	-440	-440	-440	-440	-440
Total Auxiliary Load Changes	KW	-25	62	62	62	-11	-477	-477	-477	-477	-477
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Turbine upgrade Dense Pack (18nMW 2019)	MW					18	18	18	18	18	18
Total Capacity Changes	MW	0	0	0	0	18	18	18	18	18	18

10. Required Signatures

Performance Engineer – Huntington Plant		Ron Hall	
Signature:	(on file)	Date:	15Apr11

Manager, Engineering – Huntington Plant		Glenn Pinterich	
Signature:	(on file)	Date:	15Apr11

Managing Director – Huntington Plant		DJ Cunningham	
Signature:	(on file)	Date:	15Apr11



Hunter Plant Heat Rate Improvement Plan

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1. Revision History

Version	Status	Author	Reason for Issue	Date
1			2011 Plan Issue	April 30, 2011

2. Revision Control

This document is maintained by the PacifiCorp Energy Asset Management group.

3. Glossary of Terms

3.1. Actual Net Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual net generation.

3.2. As-built Net Heat Rate (Btu/kWh)

Total guaranteed heat input, from the design heat balances in Btu's divided by the guaranteed net generation, corrected for changes in equipment from design. This is the baseline number for the plant personnel when they make their annual reconciliation.

3.3. British thermal unit (Btu)

British thermal unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

3.4. Gross Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual gross generation.

3.5. Net Generation (kWh)

Gross generation minus auxiliary or station usage

3.6. Planned Net Heat Rate (Btu/kWh)

Total budgeted heat input in Btu's divided by the budgeted net generation. This number is the annual goal for the plant personnel to achieve.

4. Overall Plan and Objectives

4.1. Unit 1- Goals for 10-year plan

Figure 1, in the appendix, shows the ten-year heat rate plan for Hunter unit 1. The dips in the Planned Net Heat Rate in the years 2011 and 2015 are due to the work that is scheduled to take place during the planned outages in 2010 and 2014 (see section 7).

4.2. Unit 2 - Goals for 10-year Plan

Figure 2, in the appendix, shows the ten-year heat rate plan for Hunter unit 2. The dips in the Planned Net Heat Rate in the years 2012 and 2016 are due to the work that is scheduled to take place during the planned outages in 2011 and 2015 (see section 7).

4.3. Unit 3 - Goals for 10-year Plan

Figure 3, in the appendix, shows the ten-year heat rate plan for Hunter unit 3. The dips in the Planned Net Heat Rate in the years 2013 and 2017 are due to the work that is scheduled to take place during the planned outages in 2012 and 2016 (see section 7).

5. Performance against last year's plan

5.1. Unit 1

Planned Net Heat Rate	10,125		
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	162	7	(155)
Turbine Losses	288	263	(25)
Other Losses	(170)	511	681
Actual Net Heat Rate	10,625		

Negative numbers in the table above are improvements to heat rate.

5.2. Unit 2

Planned Net Heat Rate	10,681		
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	267	145	(122)
Turbine Losses	519	906	387
Other Losses	56	437	381
Actual Net Heat Rate	11,327		

Negative numbers in the table above are improvements to heat rate.

5.3. Unit 3

Planned Net Heat Rate	10,238		
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	211	150	(61)
Turbine Losses	402	234	(168)
Other Losses	50	166	116
Actual Net Heat Rate	10,126		

Negative numbers in the table above are improvements to heat rate.

6. Major Losses for Current Planned Net Heat Rate

This section of the heat rate plan identifies the reconciliation of the items that have the most impact between the As-built Net Heat Rate and the Planned Net Heat Rate.

6.1. Unit 1

As-Built Net Heat Rate	9,843
Boiler Losses	190
Turbine Losses	289
Other Losses	(84)
Planned Net Heat Rate	10,238

6.2. Unit 2

As-Built Net Heat Rate	9,839
Boiler Losses	165
Turbine Losses	323
Other Losses	96
Planned Net Heat Rate	10,423

6.3. Unit 3

As-Built Net Heat Rate	9,576
Boiler Losses	235
Turbine Losses	508
Other Losses	118
Planned Net Heat Rate	10,437

7. Major Unit Specific Initiatives

This section identifies the major planned capital and operational activities to improve or regain lost heat rate for the current 10-year plan.

7.1. Unit 1

Table 1 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.2. Unit 2

Table 2 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.3. Unit 3

Table 3 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

8. Annual Review and Update

This plan will be reviewed and updated annually by the Hunter plant management team by April 30.

9. Appendix

Figure 1
Hunter Unit 1
10-year Plan Heat Rate Goals

Hunter 1

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	9,846	9,846	9,846	9,846	9,845	9,844	9,844	9,844	9,845	9,846	9,846	9,846	9,846	9,846	9,846
Planned Net Heat Rate 2011, Btu/Kwh	10,720	10,675	10,758	10,762	10,125	10,238	10,398	10,506	10,502	10,363	10,419	10,443	10,227	10,230	10,302
Actual Net Heat Rate, Btu/Kwh	10,697	10,656	11,042	10,993	10,625										
Capacity Factor 2011, %	91.1%	85.9%	88.1%	84.5%	75.5%	89.6%	85.4%	84.2%	71.0%	90.6%	90.5%	89.7%	81.7%	90.2%	90.0%

Figure 2

**Hunter Unit 2
10-year Plan Heat Rate Goals**

Hunter 2

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	9,839	9,839	9,839	9,839	9,839	9,839	9,840	9,840	9,840	9,840	9,840	9,840	9,840	9,842	9,842
Planned Net Heat Rate 2011, Btu/Kwh	10,570	10,463	10,558	10,607	10,681	10,423	10,233	10,345	10,435	10,164	10,224	10,255	10,308	10,134	10,170
Actual Net Heat Rate, Btu/Kwh	10,636	10,198	10,817	11,117	11,327										
Capacity Factor 2011, %	80.4%	90.6%	89.7%	84.1%	88.9%	73.0%	87.9%	86.8%	86.0%	84.2%	90.9%	89.4%	88.9%	82.1%	90.9%

Figure 3

**Hunter Unit 3
10-year Plan Heat Rate Goals**

Hunter 3

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	9,576	9,572	9,576	9,576	9,576	9,575	9,574	9,574	9,574	9,574	9,574	9,574	9,574	9,574	9,574
Planned Net Heat Rate 2011, Btu/Kwh	10,300	10,141	10,098	10,178	10,238	10,437	10,101	10,156	10,190	10,232	10,088	10,142	10,171	10,221	10,093
Actual Net Heat Rate, Btu/Kwh	10,318	10,123	10,275	10,335	10,126										
Capacity Factor 2011, %	85.2%	81.3%	88.4%	81.2%	89.6%	82.6%	73.5%	84.1%	82.0%	87.1%	82.4%	87.9%	86.2%	86.0%	79.8%

Table 1
Hunter Unit 1
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Plant controls replacement/Optimization systems in place	Btu/kWh	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Feedwater Heater Replacement--HP FWH's	Btu/kWh	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16
Air Preheater basket and seal replacement	Btu/kWh	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
HP/IP Turbine Upgrade	Btu/kWh	-374	-374	-374	-374	-374	-374	-374	-374	-374	-374
Clean air initiative: Baghouse installation, wet stack	Btu/kWh				21	32	32	32	32	32	32
Total adjustments related to Capital Projects	Btu/kWh	-408	-408	-408	-387	-376	-376	-376	-376	-376	-376
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-100	-100	-100	-37	-6	-6	-6	-6	-6	-6
Total Auxiliary Load Changes	KW	-100	-100	-100	-37	-6	-6	-6	-6	-6	-6
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Clean air initiative: wet stack & baghouse	MW	0	0	0	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5
HP/IP/LP Turbine Upgrade	MW	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Total Capacity Changes	MW	17	17	17	16	16	16	16	16	16	16

Table 2
Hunter Unit 2
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Plant controls replacement/Optimization system in place	Btu/kWh	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Air Preheater Basket Replacement	Btu/kWh	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
Turbine Upgrade DensePack	Btu/kWh	-249	-374	-374	-374	-374	-374	-374	-374	-374	-374
Clean air initiative - Baghouse installation, wet stack	Btu/kWh	23	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
Clean air initiative - SCR	Btu/kWh									36	36
Total adjustments related to Capital Projects	Btu/kWh	-234	-358	-358	358	-358	-358	-358	-358	-322	-322
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	12	43	43	43	43	43	43	43	143	143
Total Auxiliary Load Changes	KW	12	43	43	43	43	43	43	43	143	143
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Clean air initiative: Baghouse, wet stack	MW	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48	-1.48
Turbine Upgrade DensePack	MW	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Clean air initiative - SCR	MW									-2.4	-2.4
Total Capacity Changes	MW	15.52	15.52	15.52	15.52	15.52	15.52	15.52	15.52	13.16	13.16

Table 3
Hunter Unit 3
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Cooling tower replacement	Btu/kWh						-20	-20	-20	-20	-20
Feedwater Htr replacement - HP	Btu/kWh	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Turbine Upgrade DensePack	Btu/kWh		-284	-378	-378	-378	-378	-378	-378	-378	-378
CAI work (SCR)	Btu/kWh						0	0	0	0	0
Total adjustments related to Capital Projects	Btu/kWh	-10	-294	-388	-388	-388	-408	-408	-408	-408	-408
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-29	-86	-86	-86	-86	-86	-86	-86	-86	-86
Total Auxiliary Load Changes	KW	-29	-86	-86	-86	-86	-86	-86	-86	-86	-86
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Turbine Upgrade DensePack	MW		19	19	19	19	19	19	19	19	19
CAI work (SCR)	MW		0	0	0	0	0	0	0	0	0
Total Capacity Changes	MW	0	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9

10. Required Signatures

Performance Engineer – Hunter Plant		Kent Gilbert	
Signature:	(on file)	Date:	30Mar10

Manager, Engineering – Hunter Plant		Larry Bruno	
Signature:	(on file)	Date:	30Mar10

Managing Director – Hunter Plant		Laren Huntsman	
Signature:	(on file)	Date:	31Mar10



Jim Bridger Plant Heat Rate Improvement Plan

JB_2011_HRIP

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10.	Required Signatures	14

1. Revision History

Version	Status	Author	Reason for Issue	Date
1			Original Submittal	April 30, 2011

2. Revision Control

This document is maintained by the PacifiCorp Energy Asset Management group.

3. Glossary of Terms

3.1. Actual Net Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual net generation.

3.2. As-built Net Heat Rate (Btu/kWh)

Total guaranteed heat input, from the design heat balances in Btu's divided by the guaranteed net generation, corrected for changes in equipment from design. This is the baseline number for the plant personnel when they make their annual reconciliation.

3.3. British thermal unit (Btu)

British thermal unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

3.4. Gross Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual gross generation.

3.5. Net Generation (kWh)

Gross generation minus auxiliary or station usage

3.6. Planned Net Heat Rate (Btu/kWh)

Total budgeted heat input in Btu's divided by the budgeted net generation. This number is the annual goal for the plant personnel to achieve.

4. Overall Plan and Objectives

4.1. Unit 1- Goals for 10-year plan

Figure 1, in the appendix, shows the ten-year heat rate plan for Jim Bridger unit 1. The dip in the Planned Net Heat Rate in the year 2011 is due to the work that is scheduled to take place during the planned outage in 2010 (see section 7).

4.2. Unit 2 - Goals for 10-year Plan

Figure 2, in the appendix, shows the ten-year heat rate plan for Jim Bridger unit 2. The dip in the Planned Net Heat Rate in the year 2014 is due to the work that is scheduled to take place during the planned outage in 2013 (see section 7).

4.3. Unit 3 - Goals for 10-year Plan

Figure 3, in the appendix, shows the ten-year heat rate plan for Jim Bridger unit 3. The dip in the Planned Net Heat Rate in the year 2012 is due to the work that is scheduled to take place during the planned outage in 2011 (see section 7).

4.4. Unit 4 - Goals for 10-year Plan

Figure 4, in the appendix, shows the ten-year heat rate plan for Jim Bridger unit 4. The dip in the Planned Net Heat Rate in the years 2013 is due to the work that is scheduled to take place during the planned outage in 2012 (see section 7).

5. Performance against last year's plan

The 2010 accounting heat rates shown are markedly less than plan. The units benefited by coal pile aerial survey adjustments that resulted in more tons on the pile than were being carried as "book" values. As a result, the unit burn quantities were credited. Additionally, Unit One greatly benefited from a replacement of the HP/IP turbine sections which reduced the unit heat rate. Plans for successive turbine replacements are on hold until subsynchronous resonance issues between LP turbines and the transmission system are resolved.

5.1. Unit 1

Planned Net Heat Rate			10,360
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	148	127	(21)
Turbine Losses	757	239	(518)
Other Losses	(67)	67	134
Actual Net Heat Rate			9,954

Negative numbers in the table above are improvements to heat rate.

5.2. Unit 2

Planned Net Heat Rate			10,448
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	139	165	26
Turbine Losses	673	515	-158
Other Losses	94	59	-35
Actual Net Heat Rate			10,281

Negative numbers in the table above are improvements to heat rate.

5.3. Unit 3

Planned Net Heat Rate			10,351
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	196	213	17
Turbine Losses	579	516	(63)
Other Losses	55	97	42
Actual Net Heat Rate			10,347

Negative numbers in the table above are improvements to heat rate.

5.4. Unit 4

Planned Net Heat Rate			10,366
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	152	189	37
Turbine Losses	640	502	(138)
Other Losses	48	57	9
Actual Net Heat Rate			10,273

Negative numbers in the table above are improvements to heat rate.

6. Major Losses for Current Planned Net Heat Rate

This section of the heat rate plan identifies the reconciliation of the items that have the most impact between the As-built Net Heat Rate and the Planned Net Heat Rate.

6.1. Unit 1

As-Built Net Heat Rate	9,520
Boiler Losses	169
Turbine Losses	613
Other Losses	65
Planned Net Heat Rate	10,367

6.2. Unit 2

As-Built Net Heat Rate	9,538
Boiler Losses	147
Turbine Losses	815
Other Losses	-14
Planned Net Heat Rate	10,487

6.3. Unit 3

As-Built Net Heat Rate	9,529
Boiler Losses	194
Turbine Losses	817
Other Losses	-71
Planned Net Heat Rate	10,469

6.4. Unit 4

As-Built Net Heat Rate	9,526
Boiler Losses	161
Turbine Losses	741
Other Losses	-1
Planned Net Heat Rate	10,427

7. Major Unit Specific Initiatives

This section identifies the major planned capital and operational activities to improve or regain lost heat rate for the current 10-year plan. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.1. Unit 1

Table 1 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate.

7.2. Unit 2

Table 2 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. The turbine project originally planned for 2017 has been changed to a partial project (HP/IP) in 2013.

7.3. Unit 3

Table 3 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. The turbine upgrade planned for 2019 has been deferred indefinitely pending resolution of resonance issues.

7.4. Unit 4

Table 4 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. The turbine upgrade planned for 2016 has been deferred indefinitely pending resolution of resonance issues.

8. Annual Review and Update

This plan will be reviewed and updated annually by the Jim Bridger plant management team by April 30.

9. Appendix

Figure 1
Jim Bridger Unit 1
10-year Plan Heat Rate Goals

Jim Bridger 1															
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	9,533	9,520	9,533	9,520	9,521	9,520	9,520	9,520	9,520	9,520	9,520	9,520	9,520	9,520	9,520
Planned Net Heat Rate (2011), Btu/Kwh	10,440	10,408	10,404	10,410	10,734	10,203	10,272	10,281	10,290	10,276	10,273	10,279	10,097	10,088	10,098
Actual Net Heat Rate, Btu/Kwh	10,354	10,336	10,413	10,119	9,980										
Capacity Factor 2011, %	73.5%	88.3%	83.0%	86.9%	65.7%	89.0%	89.3%	87.5%	76.5%	88.2%	88.5%	87.7%	78.4%	88.4%	88.4%

Figure 2
Jim Bridger Unit 2
10-year Plan Heat Rate Goals

Jim Bridger 2															
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	9,535	9,525	9,535	9,533	9,542	9,538	9,538	9,538	9,538	9,538	9,538	9,538	9,538	9,538	9,538
Planned Net Heat Rate (2011), Btu/Kwh	10,460	10,473	10,528	10,417	10,497	10,378	10,446	10,370	10,370	10,370	10,393	10,393	10,393	10,393	10,393
Actual Net Heat Rate, Btu/Kwh	10,342	10,425	10,352	10,164	10,322										
Capacity Factor 2011, %	86.0%	86.1%	85.5%	71.4%	87.4%	87.0%	86.1%	78.1%	89.7%	88.6%	88.0%	77.9%	89.5%	89.4%	88.2%

Figure 3
Jim Bridger Unit 3
10-year Plan Heat Rate Goals

Jim Bridger 3															
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	9,521	9,521	9,521	9,521	9,521	9,529	9,535	9,535	9,535	9,535	9,535	9,535	9,535	9,534	9,534
Planned Net Heat Rate (2011), Btu/Kwh	10,590	10,513	10,479	10,350	10,361	10,372	10,390	10,386	10,377	10,489	10,427	10,311	10,299	10,299	10,299
Actual Net Heat Rate, Btu/Kwh	10,491	10,496	10,300	10,174	10,387										
Capacity Factor 2011, %	83.4%	73.1%	89.2%	90.4%	84.7%	75.0%	90.2%	89.7%	88.5%	66.3%	89.8%	85.2%	88.4%	77.8%	90.2%

Figure 4
Jim Bridger Unit 4
10-year Plan Heat Rate Goals

Jim Bridger 4															
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	9,516	9,515	9,516	9,526	9,526	9,526	9,526	9,526	9,526	9,526	9,526	9,526	9,526	9,526	9,526
Planned Net Heat Rate (2011), Btu/Kwh	10,468	10,539	10,473	10,365	10,346	10,275	10,377	10,375	10,346	10,336	10,147	10,095	10,002	9,992	10,058
Actual Net Heat Rate, Btu/Kwh	10,530	10,571	10,319	10,098											
Capacity Factor 2011, %	81.3%	84.6%	71.1%	90.2%	85.1%	88.1%	77.3%	89.0%	88.4%	89.9%	67.9%	89.7%	84.9%	90.2%	79.8%

Table 1
Jim Bridger Unit 1
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Controls Upgrade	Btu/kWh	-70	-70	-70	-70	-70	-70	-70	-70	-70	-70
Turbine Upgrade Dense Pack	Btu/kWh	-100	-100	-100	-100	-100	-100	-100	-224	-313	-313
Scrubber Upgrade	Btu/kWh	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6
Total adjustments related to Capital Projects	Btu/kWh	-119	-119	-119	-119	-119	-119	-119	-243	-332	-332
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-204	-204	-204	-204	-204	-204	-204	-204	-204	-204
Drag Chain conveyor	KW	-553	-553	-553	-553	-553	-553	-553	-553	-553	-553
Total Auxiliary Load Changes	KW	-757	-757	-757	-757	-757	-757	-757	-757	-757	-757
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Turbine Upgrade Dense Pack	MW	5.6	5.6	5.6	5.6	5.6	5.6	5.6	18	18.0	18.0
Scrubber Upgrade	MW	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1	-3.1
Total Capacity Changes	MW	2.5	2.5	2.5	2.5	2.5	2.5	2.5	14.9	14.9	14.9

Table 2
Jim Bridger Unit 2
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Controls Upgrade	Btu/kWh	-17.5	-17.5	-17.5	-17.5	-17.5	-17.5	-17.5	-17.5	-17.5	-17.5
Turbine Upgrade Dense Pack	Btu/kWh			-58	-100	-100	-100	-100	-100	-100	-100
Scrubber Upgrade	Btu/kWh	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
Total adjustments related to Capital Projects	Btu/kWh	64.4	64.4	6.4	-35.6	-35.6	-35.6	-35.6	-35.6	-35.6	-35.6
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-53	-53	-53	-53	-53	-53	-53	-53	-53	-53
Drag Chain Conveyor	KW	-530	-530	-530	-530	-530	-530	-530	-530	-530	-530
Clean Air Initiative - WFGD (90%) LNB	KW	795	795	795	795	795	795	795	795	795	795
Total Auxiliary Load Changes	KW	211	211	211	211	211	211	211	211	211	211
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Turbine Upgrade Dense Pack	MW			4	4	4	4	4	4	4	4
Scrubber Upgrade	MW	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0
Total Capacity Changes	MW	-3.0	-3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table 3
Jim Bridger Unit 3
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Turbine Upgrade Dense Pack	Btu/kWh					0	0.0	0.0	0.0	0	0
Scrubber upgrade	Btu/kWh	32	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1
SCR addition	Btu/kWh					34	57.5	57.5	57.5	57.5	57.5
Total adjustments related to Capital Projects	Btu/kWh	32	54	54	54	88	112	112	112	112	112
Budgeted / Planned Auxiliary Load Changes											
Clean Air Initiative - WFGD (90%) LNB	KW	464	795	795	795	795	795	795	795	795	795
Total Auxiliary Load Changes	KW	464	795	795	795	795	795	795	795	795	795
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Turbine Upgrade Dense Pack	MW									0	0
Scrubber upgrade	MW	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0
SCR addition	MW					-3.2	-3.2	-3.2	-3.2	-3.2	-3.2
Total Capacity Changes	MW	-3.0	-3.0	-3.0	-3.0	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2

Table 4
Jim Bridger Unit 4
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
41 Feedwater heater replacement	Btu/kWh	-70	-70	-70	-70	-70	-70	-70	-70	-70	-70
Turbine Upgrade Dense Pack	Btu/kWh										
SCR	Btu/kWh						30	60	60	60	60
Total adjustments related to Capital Projects	Btu/kWh	-70	-70	-70	-70	-70	-40	-10	-10	-10	-10
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-223	-223	-223	-223	-223	-223	-223	-223	-223	-223
Clean Air Initiative - WFGD (90%) LNB	KW	795	795	795	795	795	795	795	795	795	795
Total Auxiliary Load Changes	KW	572	572	572	572	572	572	572	572	572	572
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Turbine Upgrade Dense Pack	MW										
SCR	MW						-3.3	-3.3	-3.3	-3.3	-3.3
Total Capacity Changes	MW	0	0	0	0	0.00	-3.3	-3.3	-3.3	-3.3	-3.3

10. Required Signatures

Performance Engineer – Jim Bridger Plant		Bernie Caulfield	
Signature:	(on file)	Date:	28 April 2011

Engineering Manager – Jim Bridger Plant		Jim Sedey	
Signature:	(on file)	Date:	28 April 2011

Managing Director – Jim Bridger Plant		Bob Arambel	
Signature:	(on file)	Date:	28 April 2011



Naughton Plant Heat Rate Improvement Plan

Ntn_2011_HRIP

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1. Revision History

Version	Status	Author	Reason for Issue	Date
1			2011 Plan Issue	April 30, 2011

2. Revision Control

This document is maintained by the PacifiCorp Energy Asset Management group.

3. Glossary of Terms

3.1. Actual Net Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual net generation.

3.2. As-built Net Heat Rate (Btu/kWh)

Total guaranteed heat input, from the design heat balances in Btu's divided by the guaranteed net generation, corrected for changes in equipment from design. This is the baseline number for the plant personnel when they make their annual reconciliation.

3.3. British thermal unit (Btu)

British thermal unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

3.4. Gross Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual gross generation.

3.5. Net Generation (kWh)

Gross generation minus auxiliary or station usage

3.6. Planned Net Heat Rate (Btu/kWh)

Total budgeted heat input in Btu's divided by the budgeted net generation. This number is the annual goal for the plant personnel to achieve.

4. Overall Plan and Objectives

4.1. Unit 1- Goals for 10-year plan

Figure 1, in the appendix, shows the ten-year heat rate plan for Naughton Unit 1. The dips in the Planned Net Heat Rate in the years 2012 and 2016 are due to the work that is scheduled to take place during the planned outages in 2012 and 2016 (see section 7).

4.2. Unit 2- Goals for 10-year plan

Figure 2, in the appendix, shows the ten-year heat rate plan for Naughton Unit 2. The dips in the Planned Net Heat Rate in the years 2011 and 2015 are due to the work that is scheduled to take place during the planned outages in 2011 and 2015 (see section 7).

4.3. Unit 3- Goals for 10-year plan

Figure 3, in the appendix, shows the ten-year heat rate plan for Naughton Unit 3. The dips in the Planned Net Heat Rate in the years 2009 and 2014 are due to the work that is scheduled to take place during the planned outages in 2010 and 2014 (see section 7).

5. Performance against last year's plan

5.1. Unit 1

Planned Net Heat Rate			10,298
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	9	84	75
Turbine Losses	340	172	(168)
Other Losses	(8)	77	85
Actual Net Heat Rate			10,290

Negative numbers in the table above are improvements to heat rate.

5.2. Unit 2

Planned Net Heat Rate			10,383
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	27	148	121
Turbine Losses	345	171	(174)
Other Losses	67	(55)	(122)
Actual Net Heat Rate			10,208

Negative numbers in the table above are improvements to heat rate.

5.3. Unit 3

Planned Net Heat Rate			10,234
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	57	(20)	(77)
Turbine Losses	295	811	516
Other Losses	25	60	35
Actual Net Heat Rate			10,708

Negative numbers in the table above are improvements to heat rate.

6. Major Losses for Current Planned Net Heat Rate

This section of the heat rate plan identifies the reconciliation of the items that have the most impact between the As-built Net Heat Rate and the Planned Net Heat Rate.

6.1. Unit 1

As-Built Net Heat Rate	9,957
Boiler Losses	9
Turbine Losses	499
Other Losses	(110)
Planned Net Heat Rate	10,355

6.2. Unit 2

As-Built Net Heat Rate	9,963
Boiler Losses	26
Turbine Losses	552
Other Losses	-53
Planned Net Heat Rate	10,488

6.3. Unit 3

As-Built Net Heat Rate	9,857
Boiler Losses	57
Turbine Losses	333
Other Losses	97
Planned Net Heat Rate	10,344

7. Major Unit Specific Initiatives

This section identifies the major planned capital and operational activities to improve or regain lost heat rate for the current 10-year plan.

7.1. Unit 1

Table 1 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.2. Unit 2

Table 2 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

7.3. Unit 3

Table 3 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

8. Annual Review and Update

This plan will be reviewed and updated annually by the Naughton plant management team by April 30.

9. Appendix

Figure 1
Naughton Unit 1
10-year Plan Heat Rate Goals

		Naughton 1														
	Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh		9,960	9,959	9,960	9,959	9,957	9,957	9,963	9,960	9,960	9,960	9,959	9,959	9,959	9,959	9,959
Planned Net Heat Rate 2011, Btu/Kwh		10,720	10,332	10,219	10,346	10,298	10,289	10,115	10,156	10,248	10,238	10,121	10,121	10,199	10,238	10,121
Actual Net Heat Rate, Btu/Kwh		10,740	10,206	10,417	10,263	10,290										
Capacity Factor 2011, %		78.4%	79.7%	88.6%	88.4%	87.9%	87.8%	76.1%	90.7%	89.9%	89.5%	81.5%	91.3%	90.5%	89.7%	81.8%

Figure 2
Naughton Unit 2
10-year Plan Heat Rate Goals

		Naughton 2														
Year		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh		9,958	9,958	9,955	9,950	9,944	9,963	9,962	9,962	9,962	9,962	9,962	9,962	9,962	9,962	9,962
Planned Net Heat Rate 2011, Btu/Kwh		10,480	10,350	10,364	10,445	10,383	10,406	10,445	10,505	10,558	10,346	10,319	10,393	10,452	10,324	10,229
Actual Net Heat Rate, Btu/Kwh		10,672	10,810	10,848	10,128	10,208										
Capacity Factor 2011, %		73.5%	89.3%	84.7%	82.8%	88.2%	72.2%	90.3%	90.0%	88.9%	79.5%	91.2%	90.4%	89.6%	80.2%	91.1%

Figure 3
Naughton Unit 3
10-year Plan Heat Rate Goals

		Naughton 3														
Year		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh		9,863	9,863	9,863	9,857	9,857	9,857	9,857	9,856	9,857	9,858	9,858	9,858	9,858	9,858	9,858
Planned Net Heat Rate 2011, Btu/Kwh		10,350	10,366	10,393	10,111	10,234	10,267	10,319	10,377	10,376	10,328	10,375	10,422	10,334	10,334	10,385
Actual Net Heat Rate, Btu/Kwh		10,198	10,506	10,683	10,859	10,708										
Capacity Factor 2011, %		85.7%	84.7%	79.6%	68.0%	89.7%	85.7%	87.4%	86.3%	66.5%	89.8%	86.1%	87.3%	80.5%	90.3%	86.3%

Table 1
Naughton Unit 1
10-year Plan Heat Rate Improvement Projects

Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											2019	2020
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Install Intelligent soot blowing (2016)												
CO&O2 Grid (2012)												
Condenser Replacement (2016)												
SO3 Injection System (2010)												
Scrubber Addition (-2.58Mw Aux Load) (2012)												
Total adjustments related to Capital Projects												
	Btu/kWh	0	0	0	0	-25	-25	-25	-25	-25	-25	-25
	Btu/kWh	0	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13
	Btu/kWh	0	0	0	0	-30	-30	-30	-30	-30	-30	-30
	Btu/kWh	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
	Btu/kWh	0	163.2	163.2	163.2	163.2	163.2	163.2	163.2	163.2	163.2	163.2
	Btu/kWh	-25	138.2	138.2	138.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2

Budgeted / Planned Auxiliary Load Changes											2019	2020
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes												
Air Compressor Upgrade (2009)												
Total Auxiliary Load Changes												
	KW	-26	146	146	146	74	74	74	74	74	74	74
	KW	-27	-27	-27	-27	-27	-27	-27	-27	-27	-27	-27
	KW	-53	119	119	119	48	48	-27	-27	-27	-27	-27

Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											2019	2020
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Scrubber Addition (-2.58Mw Aux Load) (2012)												
Total Capacity Changes												
	MW	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58
	MW	0	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58

Table 2
Naughton Unit 2
10-year Plan Heat Rate Improvement Projects

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)										
Install intelligent soot blowing (2012)	Btu/kWh	0	-25	-25	-25	-25	-25	-25	-25	-25
CO&O2 grid (2011)	Btu/kWh	-5	-13	-13	-13	-13	-13	-13	-13	-13
SO3 Injection System (2010)	Btu/kWh	-25	-25	-25	-25	-25	-25	-25	-25	-25
Scrubber Addition (2011 -4.71MW)	Btu/kWh	228	228	228	228	228	228	228	228	228
Total adjustments related to Capital Projects	Btu/kWh	178	178	178	178	165	165	165	165	165
Budgeted / Planned Auxiliary Load Changes										
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	266	266	266	266	247	247	247	247	247
Cooling Tower VFD optimization (2012)	KW	-134	-134	-134	-134	-134	-134	-134	-134	-134
Air Compressor Upgrade (2009)	KW	-27	-27	-27	-27	-27	-27	-27	-27	-27
Total Auxiliary Load Changes	KW	105	105	105	105	86	86	86	86	86
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)										
Scrubber Addition (2011 -4.71MW)	MW	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71
Total Capacity Changes	MW	-4.7	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71

Table 3
Naughton Unit 3
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
CO&O2 grid (2014)	Btu/kWh	0	0	0	-12	-25	-25	-25	-25	-25	-25
Install intelligent soot blowing (2014)	Btu/kWh	0	0	0	-12	-25	-25	-25	-25	-25	-25
Increased CAI load (-4.55MW 2014)	Btu/kWh	0	0	0	80	137.8	137.8	137.8	137.8	137.8	137.8
Total adjustments related to Capital Projects	Btu/kWh	0	0	0	56	88	88	88	88	88	88
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	0	0	0	110	172	172	172	172	172	172
Condensate Pump Upgrade (2011)	KW	-100	-160	-160	-160	-160	-160	-160	-160	-160	-160
Air Compressor Upgrade (2009)	KW	-27	-27	-27	-27	-27	-27	-27	-27	-27	-27
Total Auxiliary Load Changes	KW	-127	-187	-187	-76	-15	-15	-15	-15	-15	-15
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
Increased CAI load (-4.55MW 2014)	MW				-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6
Total Capacity Changes	MW	0.0	0.0	0.0	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6

10. Required Signatures

Performance Engineer – Naughton Plant		Ryan Witbeck
Signature:		Date: 22 April 2011
Manager, Engineering – Naughton Plant		Rodger Holt
Signature:		Date: 22 April 2011
Managing Director – Naughton Plant		Bruce Vinnola
Signature:		Date: 22 April 2011



Pacificorp Energy Heat Rate Improvement Plan

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1. Revision History

Version	Status	Author	Reason for Issue	Date
1			Original Submittal	April 26, 2011

2. Revision Control

This document is maintained by the PacifiCorp Energy Asset Management group.

3. Glossary of Terms**3.1. Actual Net Heat Rate (Btu/kWh)**

Total actual heat input in Btu's divided by actual net generation.

3.2. As-built Net Heat Rate (Btu/kWh)

Total guaranteed heat input, from the design heat balances in Btu's divided by the guaranteed net generation, corrected for changes in equipment from design. This is the baseline number for the plant personnel when they make their annual reconciliation.

3.3. British thermal unit (Btu)

British thermal unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

3.4. Gross Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual gross generation.

3.5. Net Generation (kWh)

Gross generation minus auxiliary or station usage

3.6. Planned Net Heat Rate (Btu/kWh)

Total budgeted heat input in Btu's divided by the budgeted net generation. This number is the annual goal for the plant personnel to achieve.

4. Overall Plan and Objectives

The overall heat rate strategy is to 1) minimize heat rate losses in our operating plants, 2) add new resources that are more heat rate efficient.

4.1. Turbine Upgrades

Improve PacifiCorp Energy overall system heat rate by replacement of major turbine components. Technology improvements in turbine steam path design should result in 1-3% more generated megawatts for the same amount of steam energy supplied. No changes to the boiler capacity, fuel consumed, or stack emissions are expected. These replacements are economical on the larger units, generally those over 350 MW. Turbine

replacements will be done on the regular turbine / boiler outage cycle by unit.

4.2. Availability Improvements

Improvement in unit availability and reduction of forced outages will contribute to less low load operation (higher heat rate) and offline fuel use of offline electrical power use. This will affect overall heat rate less than 0.5 %.

4.3. New Resources

Increased demand will be met with natural gas fueled units. Coal fueled units are already near their capacity, so any increase in demand will be provided by increasing capacity factors at the gas fueled units. Fossil-fueled system heat rate does not include the contribution of gas plant operation.

5. Performance against last year's plan

Comparison of the planned heat rate and the actual heat rate is shown in Figure 1 in the Appendix.

6. Major Losses for Current Planned Net Heat Rate

This section of the heat rate plan identifies the system influences that will affect the Planned Net Heat Rate.

6.1. Increase in Demand Energy

Increases in demand electrical energy will probably be made up with gas-fueled generation.

6.2. Displacement of Fossil-Fueled Generation with Non-Fossil Generation

Increases in available generation from non-fossil sources (Wind, Hydro, Geothermal, and Solar) will displace fossil-fueled generation. The displaced generation will tend to be gas-fueled generation due to fuel costs and the rapid response of gas-fueled generation to variable displacement. This will result in higher (worse) system fossil-fueled heat rate. The opposite of this effect is also possible, that less non-fossil generation available will result in lower (better) fossil-fueled system heat rate.

6.3. Environmental Plan Projects

Environmental projects will increase the unit's auxiliary load, which will result in an increase (worse) in heat rate. There are several environmental projects scheduled over the next 10 years.

7. Major Initiatives

This section identifies the major planned capital and operational activities to improve or regain lost heat rate for the current 10-year plan. See Table 1.

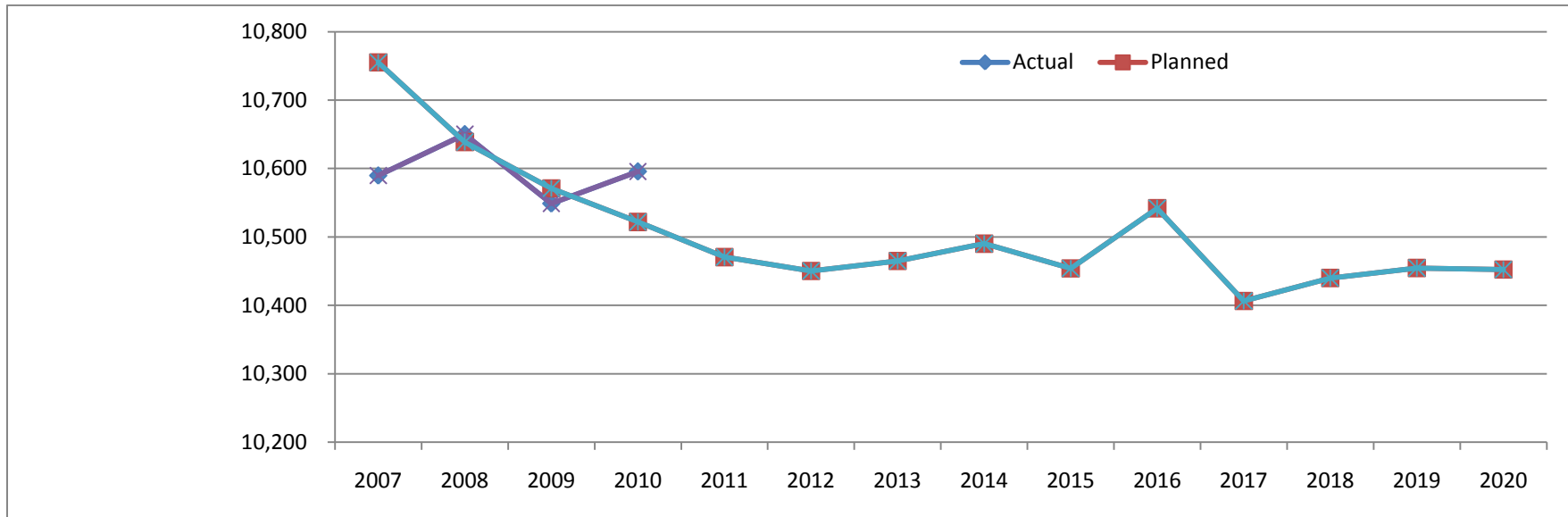
8. Annual Review and Update

This plan will be reviewed and updated annually by the Pacificorp Energy management team by April 30.

9. Appendix

Figure 1
PacifiCorp Energy
10-year Plan Heat Rate Goals

Fossil-Fueled System



Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Planned Net Heat Rate, Btu/Kwh	10,755	10,639	10,571	10,522	10,471	10,450	10,465	10,490	10,454	10,542	10,406	10,440	10,455	10,452
Actual Net Heat Rate, Btu/Kwh	10,590	10,650	10,549	10,596										

Table 1
Pacificorp Energy
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
System HR benefit of Turbine Upgrades	Btu/kWh	-57	-81	-87	-87	-91	-110	-115	-115	-115	-115
System HR effect of Environmental Projects	Btu/kWh	28	39	41	46	50	53	55	55	57	57
System HR effect of Other Heat Rate Improvement Projects	Btu/kWh	-25	-24	-24	-24	-27	-29	-30	-29	-29	-29
Total Adjustments from Heat Rate Improvement Projects	Btu/kWh	-55	-65	-70	-66	-67	-86	-90	-89	-87	-87

10. Required Signatures

Corporate Heat Rate Engineer		Alan Jackson	
Signature:	(on file)	Date:	28 April 2011

Manager, Engineering/Environmental		Greg Hunter	
Signature:	(on file)	Date:	28 April, 2011

Managing Director, Generation Support		Rod Roberts	
Signature:	(on file)	Date:	28 April, 2011



Wyodak Plant Heat Rate Improvement Plan

Wyd_2011_HRIP

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1. Revision History

Version	Status	Author	Reason for Issue	Date
1			2011 Plan Issue	April 30, 2011

2. Revision Control

This document is maintained by the PacifiCorp Energy Asset Management group.

3. Glossary of Terms**3.1. Actual Net Heat Rate (Btu/kWh)**

Total actual heat input in Btu's divided by actual net generation.

3.2. As-built Net Heat Rate (Btu/kWh)

Total guaranteed heat input, from the design heat balances in Btu's divided by the guaranteed net generation, corrected for changes in equipment from design. This is the baseline number for the plant personnel when they make their annual reconciliation.

3.3. British thermal unit (Btu)

British thermal unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

3.4. Gross Heat Rate (Btu/kWh)

Total actual heat input in Btu's divided by actual gross generation.

3.5. Net Generation (kWh)

Gross generation minus auxiliary or station usage

3.6. Planned Net Heat Rate (Btu/kWh)

Total budgeted heat input in Btu's divided by the budgeted net generation. This number is the annual goal for the plant personnel to achieve.

4. Overall Plan and Objectives**4.1. Unit 1- Goals for 10-year plan**

Figure 1, in the appendix, shows the ten-year heat rate plan for Wyodak unit 1. The decrease in Heat Rate for 2016 reflects the capital overhaul improvement projects. In 2011 the installation of a bag house will increase aux load for the plant causing a heat rate increase of 88 Btu/Kwh. In 2016 the major projects are air heater basket changeout and repairs and a turbine overhaul).

5. Performance against last year's plan**5.1. Unit 1**

Planned Net Heat Rate	11,743		
Reconciliation to Planned Net Heat Rate	Planned	Actual	
Boiler Losses	120	(89)	(209)
Turbine Losses	301	395	94
Other Losses	(4)	124	128
Actual Net Heat Rate	11,756		
Negative numbers in the table above are improvements to heat rate.			

6. Major Losses for Current Planned Net Heat Rate

This section of the heat rate plan identifies the reconciliation of the items that have the most impact between the As-built Net Heat Rate and the Planned Net Heat Rate.

6.1. Unit 1

As-Built Net Heat Rate	11,331
Boiler Losses	120
Turbine Losses	476
Other Losses	203
Planned Net Heat Rate	12,129

7. Major Unit Specific Initiatives

This section identifies the major planned capital and operational activities to improve or regain lost heat rate for the current 10-year plan.

7.1. Unit 1

Table 1 shows the capital projects included in the 10-year plan that contribute to the recovery of lost heat rate. Numbers inside parentheses are negative impact on heat rate and represent improvement to the overall unit efficiency.

8. Annual Review and Update

This plan will be reviewed and updated annually by the Wyodak plant management team by April 30.

9. Appendix

Figure 1
Wyodak Unit 1
10-year Plan Heat Rate Goals

	Wyodak														
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
As-Built Net Heat Rate, Btu/Kwh	11,329	11,278	11,329	11,324	11,326	11,337	11,342	11,342	11,342	11,342	11,340	11,340	11,340	11,341	11,341
Planned Net Heat Rate 2011, Btu/Kwh	12,110	11,921	12,009	11,704	11,743	12,129	11,916	11,941	11,952	11,967	11,592	11,598	11,635	11,717	11,709
Actual Net Heat Rate, Btu/Kwh	11,644	11,535	11,511	11,780	11,756										
Capacity Factor 2011, %	80.2%	96.0%	95.6%	93.7%	96.2%	79.4%	91.3%	91.2%	91.2%	91.2%	82.4%	91.2%	94.1%	93.9%	93.8%

Table 1
Wyodak Unit 1
10-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvements are negative)											
Low NOx burners installation	Btu/kWh	50	75	75	75	75	75	75	75	75	75
Air Heater Basket Replacement (hot and cold end)	Btu/kWh						-15	-25	-15	-10	-10
Major Pulverizer Overhauls	Btu/kWh	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30
CAI Upgrades DFGD, LNB, Baghouse	Btu/kWh	58.8	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
Total adjustments related to Capital Projects	Btu/kWh	79	133	133	133	133	118	108	118	123	123
Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	64	145	145	145	145	96	64	96	113	113
Total Auxiliary Load Changes	KW	64	145	145	145	145	96	64	96	113	113
Budgeted / Planned Net Dependable Rating Changes, (Net Basis)											
CAI Upgrades DFGD, LNB, Baghouse	MW	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6
Total Capacity Changes	MW	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6

10. Required Signatures

Performance Engineer – Wyodak Plant			
Signature:	(on file)	Date:	08Apr11

Manager, Engineering – Wyodak Plant		Cory Bryngelson	
Signature:	(on file)	Date:	08Apr11

Managing Director, Wyodak Plant		Gary Harris	
Signature:	(on file)	Date:	08Apr11