

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, 4<sup>th</sup> 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

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

Sincerely,

Ing harron (Ale) Jeffrey K. Larsen

Vice President, Regulation

cc: Division of Public Utilities Office of Consumer Services

1         Construction         Number of the part	ERC Form		Blundell Plant	Carbon Plant	Dave Johnston	Gadsby Plant	Hunter Unit No.	Hunter Unit No. F	Hunter Unit No.	Hunter Plant	Huntington	Jim Bridger	Little Mountain 🕴	Vaughton Plant	Wyodak Plant	Thermal Plants	FERC
	t.	Kind of Plant (Internal Comb, Gas Turb, Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas - Turbine	Steam	Steam	(map)	
	0	Type of Constr (Conventional, Outdoor, Boiler, etc)	Indoor	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Bailer	Outdoor Bailer	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Conventional		
Normalization         Normalinstation         Normalization         Normal	m •	Year Originally Constructed	1984	1954	1959	1951	1978	1980	1983	1978	1974	1974	1972	1963	1978		
Mark Constraint         No.	4	Year Last Unit was installed	1984	1957	1972	1955	1978	1980	1983	1983	1977	1979	1972	1971	1978		
Market for the formation of the fo	ß	Total Installed Cap (Max Gen Name Plate Ratings-MW)	26.1	188.6	816.7	251.6	418.5	269.2	446.4	1,134.1	892.8	1,494,9	16.0	707.2	289.7	5,817.8	
	9	Net Peak Demand on Plant - MW (60 minutes)	24	182	197	233	404	259	409	1,060	863	1,415	15	692	283	5,576	
Net	7	Plant Hours Connected to Load	8,719	8.754	8,760	8,485	8,370	7,621	8,220	8,760	8,727	8.754	4,468	8,760	7,856		
Norwer         Norwer<	80	Net Continuous Plant Capability (Megawatts)	4	•					•	•	,	•	•	,	,		
Mark Landschaft         Mark Landschand         Mark Landschaft         Mark Lands	თ	When Not Limited by Condenser Water	23	175	772	235	370	238	395	1,004	805	1,387	14	700	268	5,382	
1         Construction	10	When Limited by Condenser Water		•					,	,	,	,	,		,		
	£	Average Number of Employees	18	06	249	81	105	105	104	314	217	455	7	209	119	1 759	
1         Contraction         SCN         S	12	Net Generation, Exclusive of Plant Use - KWh	194,804,000	1,366,958,000	6, 183, 480, 000	639,083,000	3,112,108,000	1,807,385,000	3,184,514,000	8.104.007.000	6.664.839.000	10.821.981.000	63 373 000	4 951 002 000	2 095 027 000	41 084 554 000	
1         5         Control         0.00000         0.00000         0.0000000         0.000000 <th>13</th> <td>Cost of Plant: Land and Land Rights</td> <td>30,974,693</td> <td>956.546</td> <td>10.417.291</td> <td>1 020 271</td> <td>9.872.987</td> <td>9 872 987</td> <td>9 872 987</td> <td>29 618 961</td> <td>2 205 422</td> <td>1 199 736</td> <td>635</td> <td>413 24R</td> <td>210.526</td> <td>77 017 329</td> <td></td>	13	Cost of Plant: Land and Land Rights	30,974,693	956.546	10.417.291	1 020 271	9.872.987	9 872 987	9 872 987	29 618 961	2 205 422	1 199 736	635	413 24R	210.526	77 017 329	
1         Control         2         Control         Contro         Contro	14	Structures and improvements	6,006,725	9.549.421	25.917.317	11.621.141	59.375.576	48.640 543	88.347.491	196 363 610	92 005 281	129 268 575	191 032	50 278 717	39 931 615	561 133 434	
Matrix         Matrix<	15	Equipment Costs	32,060,206	51,282,011	248,302,773	57,569,618	182,918,678	125,112,823	359,588,447	667,619,948	278.648.212	629.516.200	3 197 146	218 058 888	268594280	2.186.255.002	
Turbule         Turbule         Section         Section <t< th=""><th>16</th><th>Asset Retirement Costs</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	16	Asset Retirement Costs															
Current Control (Control (Contr)))	17	Total Cost	\$ 69 041 624	4 787 078	\$ 284 627 381	C 70 211 030	\$ 252 167 241	1 12 22 2C 2C 2	S 457 000 075	, 012 CU3 CO0 .	1 273 858 015	C 760 004 611	t 0 000 C 1	e 160 160 063	*** C** U*	327 304 400 03	
0         0	: ș	Party and Installed Presenter (arrester)	5 7 5 K 77	20100 G	100'100'L04 &	× 10,611,000			01 100 7 9	6 00 TOT	00277		01000000	000'no/002 0	1 1 1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	001 004 470 00	
1         1         1         2	01 003	Contraction of the stated capacity (our sitate)	17:040'7 6	40°170 4		10.8/7 0	00700 0	- 10.700 e	00°070'I *	\$ (B/.93	417.03	12.30c ¢	091LZ \$	200.02	136.36	482.48	
Mark         Mark <thmark< th="">         Mark         Mark         <thm< td=""><th>81 DOS</th><td>Operation Supervision and Engineering</td><td>BCR'NLL</td><td>4/4,831</td><td>2,362,454</td><td>962,586</td><td>381,236</td><td>134,484</td><td>443,980</td><td>959,700</td><td>2,116,206</td><td>2,783,412</td><td>47,176</td><td>1,974,972</td><td>1,248,118</td><td>13,040,414</td><td></td></thm<></thmark<>	81 DOS	Operation Supervision and Engineering	BCR'NLL	4/4,831	2,362,454	962,586	381,236	134,484	443,980	959,700	2,116,206	2,783,412	47,176	1,974,972	1,248,118	13,040,414	
Construction         Construction<	07 L06	146		9,766,561	43,642,707	17,225,265	30,833.902	17,689,177	30,605,484	79,128,563	51,015,131	116,433,297	1,736,840	60,392,238	17,805,722	397,146,324	
State for the state of the state o	5	Coolants and Water (Nuclear Plants Only)	•		•	•		•	•		4		•	•	•		
30         30<	502 22	Steam Expenses	320,481	1,120,685	1,936,876	1,181,130	2,114,917	883,000	2,269,180	5,267,097	2,387,130	6,060,139		3,135,072	1,914,440	23,323,050	
50 3 memory         50 0 memory	503 23	Steam From Other Sources	3,498,961	4	•	,		•					,			3,498,961	
50         Exerc. Former         272,30         107,75         107,15         107,15         249,05         172,305         200,005         200,005         200,005         20	504 24	Steam Transferred (Cr)	,					r	,		1				,		
60         Res. Stantow (solution)         2017         3.4671         2.6073         3.6627         1.705         3.6671         3.705         3.6671         3.6661         3.7724         3.6616         3.7724         3.6616         3.7724         3.6661         3.7724         3.6616         3.7724         3.6616         3.7724         3.6661         3.7724         3.6616         3.7724         3.6616         3.7724         3.6616         3.7724         3.6616         3.7724         3.6616         3.7724         3.6616         3.7724         3.6616         3.7724         3.6616         3.7724         3.6661         3.7724         3.6661 <t< td=""><th>505 25</th><td>Electric Expenses</td><td>252 29R</td><td>1 017 561</td><td>2 151 554</td><td>136 863</td><td>1 242 905</td><td>467 300</td><td>1 387 834</td><td>3 003 030</td><td>1 703 550</td><td>2 108 663</td><td>165 053</td><td>100 037 1</td><td>300 134</td><td>17 823 606</td><td></td></t<>	505 25	Electric Expenses	252 29R	1 017 561	2 151 554	136 863	1 242 905	467 300	1 387 834	3 003 030	1 703 550	2 108 663	165 053	100 037 1	300 134	17 823 606	
900         Production	506.26	Mise Steam (or Nuclear) Power Evnences	201 772	519 8VV 5	2 007 004	1 510 450	1 365 301	700 107	100'700''	000'000'0	NT0 202 6	200,0001,2	000.000	100'705'I	470 360 4	000,000,21	
6000         Consistence	20 205	Rante	370,022	7.00000	100,100,3	PO1-1710.1		170,720	000,420,1		4/0.171.0	0,000,191		200,100,5	*/0'007'I	200,210,22	
5000000000000000000000000000000000000	500 28	Albumbees	000				704	201	140	1, 132		nen'ee		8.100		100.44	
5000         Manual constraint         Constraint <thconstraint< th=""> <thconstraint< th="">         Constrai</thconstraint<></thconstraint<>	510 20	Advertances Maintenance Sussaining and Forisconter		1 070 544	- 000 C		-			1 1 1 1 1 1 1 1 1 1		, 11, OOL ,	- 00 E			-	
50.1         The Manual and Elements         100 Mark         100 Mark </td <th>517 EG</th> <td></td> <td>#10'111</td> <td>110,010,1</td> <td>701'020'7</td> <td>200 001</td> <td>0107760</td> <td>296,240</td> <td>010'056</td> <td>2,087,174</td> <td>2,480,815</td> <td>104,961,3</td> <td>47,084</td> <td>ZLL'L9Z'Z</td> <td>4L/ INL'L</td> <td>14,141,462</td> <td></td>	517 EG		#10'111	110,010,1	701'020'7	200 001	0107760	296,240	010'056	2,087,174	2,480,815	104,961,3	47,084	ZLL'L9Z'Z	4L/ INL'L	14,141,462	
51.7.3         Manual control from         S20,120         Calibration         S20,120         Calibration         S20,120         Calibration         Calibration <thcalibration< th="">         Cal</thcalibration<>	201 30		03, 107	9/7'R01	1,2/10,401	168'971	003,038	2/15,345	665, (53	1,615,/3/	108,115,1	1,677,208	6,910	/61,350	381,957	1,392,170	
Numeric of the field			7/8/701	1,138,560	858'557'1	215.740.4	151.028.1	007.126.2	4,831,1/4	9'Z/8'262	5,938,653	10,419,262	•	6,514,022	2,813,929	48,158,140	
Mathematical metric for Modell Fermi         5         7.2013         7         7.2013         7         7.2013         7         7.2013         7         7.2013	210 02	Maintenance of Electric Plant	97/56	/80./44	2,1/8,121	1,250,338	311,462	610,148	340,878	1,262,488	1,567,721	1,640,795	100,855	1,842,380	754,286	11, 144, 299	
Matrix         Transment         S         Amature	014 33	Maintenance of Misc Steam (or Nuclear) Plant	134,918	231,053	1,330,134	361,313	308,614	121,729	359,117	789,460	2,870,128	2,792,808	86,602	600,211	537,379	9,734,006	
R         Enernes per Marchin         S         Ox03         S         Ox13         S         Ox13 <th< th=""><th>34</th><th>I otal Production Expenses</th><th>\$ 4,947,089</th><th>\$ 19,486,264</th><th>\$ 66,625,779</th><th>\$ 27,573,572</th><th>\$ 39,975,206</th><th>\$ 23,532,680</th><th>\$ 43,389,592</th><th>\$ 106,897,478</th><th>\$ 75,125,024</th><th>\$ 149,607,882</th><th>\$ 2,491,420</th><th>\$ 82,031,699</th><th>\$ 28,243,844</th><th>\$ 563,030,051</th><th></th></th<>	34	I otal Production Expenses	\$ 4,947,089	\$ 19,486,264	\$ 66,625,779	\$ 27,573,572	\$ 39,975,206	\$ 23,532,680	\$ 43,389,592	\$ 106,897,478	\$ 75,125,024	\$ 149,607,882	\$ 2,491,420	\$ 82,031,699	\$ 28,243,844	\$ 563,030,051	
Teral Bustler - SMM         5         -40         5         -40         5         -40         5         -40         5         -130         5         1310         1310<	35	Expenses per Net KWh	\$ 0.0254	\$ 0.0143	\$ 0.0108	\$ 0.0431	\$ 0.0128	\$ 0.0130	\$ 0.0136	\$ 0.0132	\$ 0.0113	\$ 0.0138		\$ 0.0166	\$ 0.0135	\$ 0.0137	
Fund         Terrel         Total         Total <th< th=""><th></th><th>Total Busbar - \$/MWh</th><th>\$ 25.40</th><th>\$ 14.26</th><th>\$ 10.77</th><th>\$ 43.15</th><th>\$ 12.85</th><th>\$ 13.02</th><th>\$ 13.63</th><th>5 13.19</th><th>\$ 11.27</th><th>\$ 13.82</th><th></th><th>\$ 16.57</th><th>\$ 13.48</th><th>\$ 13.70</th><th></th></th<>		Total Busbar - \$/MWh	\$ 25.40	\$ 14.26	\$ 10.77	\$ 43.15	\$ 12.85	\$ 13.02	\$ 13.63	5 13.19	\$ 11.27	\$ 13.82		\$ 16.57	\$ 13.48	\$ 13.70	
Number         Num         Num         Num		Fuel - S/WWh	' \$	\$ 7.14	\$ 7.06	\$ 26.95	\$ 9.91	\$ 9.79	\$ 9.61	5 9.76	\$ 7.65	\$ 10.76	\$ 27.41 .	\$ 12.20	\$ 8.50	S 9.67	
Ymetale GMM (Mile) (effention)         5         148         5         148         5         148         5         148         5         148         5         148         5         148         5         148         5         148         1		Non-tuel - S/MWh	\$ 25.40	\$ 7.11	5 3.72	\$ 16.19	\$ 2.94	\$ 3.23	\$ 4.01	\$ 3.43	\$ 3.62	\$ 3.07	\$ (27.41)	\$ 4.37	\$ 4.98	s 4.04	
Tati Name         Tati Name <thtati name<="" th=""> <thtati name<="" th=""> <tht< th=""><th></th><th>Variable O&amp;M (per RDI definition) - S/MWh</th><th><b>.</b> 1.49</th><th>\$ 1.42</th><th>\$ 0.74</th><th>\$ 324</th><th>\$ 0.59</th><th>S 0.65</th><th>5 0.80</th><th>s 0.69 .</th><th>S 0.72</th><th>s 0.61 .1</th><th>\$ 2.38</th><th>\$ 0.87</th><th>\$ 1.00</th><th>S 0.61</th><th></th></tht<></thtati></thtati>		Variable O&M (per RDI definition) - S/MWh	<b>.</b> 1.49	\$ 1.42	\$ 0.74	\$ 324	\$ 0.59	S 0.65	5 0.80	s 0.69 .	S 0.72	s 0.61 .1	\$ 2.38	\$ 0.87	\$ 1.00	S 0.61	
Fuer for (construction)         S         1.444 (construction)         S         1.444 (construction)         S         1.444 (construction)         S         1.444 (construction)         Construction         Construction <thconstruction< t<="" th=""><th></th><th>Fixed U&amp;M (KUI definition) - \$/kW installed</th><th>5.95</th><th>5.69</th><th>S 2.97</th><th>\$ 12.95</th><th>\$ 2.35</th><th>5 2.59</th><th>\$ 3.21</th><th>5 2.74</th><th>\$ 2.89</th><th>\$ 2.45</th><th>\$ 9.53</th><th>\$ 3.50</th><th>\$ 3.99</th><th>\$ 3.23</th><th></th></thconstruction<>		Fixed U&M (KUI definition) - \$/kW installed	5.95	5.69	S 2.97	\$ 12.95	\$ 2.35	5 2.59	\$ 3.21	5 2.74	\$ 2.89	\$ 2.45	\$ 9.53	\$ 3.50	\$ 3.99	\$ 3.23	
3         Creat Find (Cast) (ass. Oi) or Nuclear)         Coal Toms		Total O&M without Fuel	\$ 1,448,128	\$ 9,719,703	\$ 22,983,072	\$ 10,348,307	\$ 9,141,304	\$ 5,843,503	\$ 12,784,108	\$ 27,768,915	\$ 24,109,893	\$ 33,174,585	\$ 754,580	\$ 21,639,461	\$ 10,438,122	\$ 165,883,727	
37         Out (Contributed Case motivation)         Tons	98	Fuel: Kind (Coal, Gas, Oil, or Nuclear)		Coal	Coal		Coal	Coal	Coal	Coal	Coal	Coal		Coal	Coal	Coal	
38         Quartity (mitr) for the Burned         1455,708         11,557,708         317,59         0,606,828         9,410           41         Average Cast of Fiele Burned         11,387         11,3796         11,387         11,387         11,3796         317,59         9,417           41         Average Cast of Fiele Burned         11,387	37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)		Tons	Tons		Tons	Tons	Tons	Tons	Tons	Tons		Tons	Tons	Tons	
3         Arg det for de larmed (pultificate finuciae)         11,946         7,765         11,336         11,336         11,536         11,353         11,536         9,410           41         Average Cost of Fuel Jern du fillon (11 u)         0,645         0,635         0,336         20,335         13,376         11,353         11,553         11,533         11,553	38	Quantity (units) of Fuel Burned		630,533	4,379,803		1,455,709	819,796	1,434,398	3,709,903	2,818,109	6,006,828		2,649,148	1,564,857	21,759,181	
40         Average Cast of Felie Burned         15,374         15,374         18,945           22         Average Cast of Felie Burned per Millon BTU         0,645         9,216         2,1353         2,1353         2,1353         15,374         18,945           23         Average Cast of Felie Burned per Millon BTU         0,645         9,655         0,635         2,1853         2,1353         2,1353         15,374         19,205           24         Average Cast of Felie Burned per Millon BTU         0,645         0,655         0,655         0,655         0,655         0,764         10,205	39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)		11,949	7,785		11,285	11,379	11,387	11,353	11,759	9.410		9,799	7,948	9,733	
41         Average Cast of Fuel Burnel per Unit Burnel         15,423         9,866         21,133         21,455         21,207         16,204         19,200           42         Average Cast of Fuel Burnel per Million BTU         0545         0,655         0,655         0,655         0,655         0,655         0,655         0,655         0,655         0,655         0,766         1,025         1,025         1,025         1,025         1,025         1,025         1,025         1,025         1,025         1,025         1,025         0,094         0,766         1,025         1,026         1,026         <	40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year		14,002	9.216		20.353	20.353	20.353	20.353	15.374	18.945		22.286	10.977		
42         Average Cstof Fiel Burnel Burnel per Million BTU         0 645         0 635         0 930         0 943         0 756         1 025           38         Firel Burnel Burnel PurN Micra         Morage Cstof Fiel Burnel Burnel PurN Micra         0 930         0 943         0 756         1 025           38         Firel Burnel Burnel PurN Micra         Morage Cstof Fiel Burnel PurN Micra         0 404         0 756         1 025           38         Fuel Kind Ccan         Firel Burnel Durnel PurN Micra         Morage Cstof Fiel Burnel Durnel Durnel PurN Micra         0 403         0 704         0 756         1 025           38         Coanthy Unity Of Fiel Burnel Durnel Durn	41	Average Cost of Fuel per Unit Burned		15.423	9.886		21.133	21.465	21.188	21.227	18.024	19.290		22.430	11.317		
3     Fuer Kind Caal (Sas Ol, or Notean)     Caas Sol, or Notean)     Coal Cas,	42	Average Cost of Fuel Burned per Million BTU		0.645	0.635		0.936	0.943	0.930	0.094	0.766	1.025		1.145	0.712		
9         Free Kind (coad) (basis Cl) on Nuclear)         Gas         Gas         Orient (coad) (basis Cl) on Nuclear)         Gas	54	Average Cost of Fuel Burned per KWh Net Gen		1				,						r			
Image: Signability of the Burned per Millon STU         A MCF         A MCF           38         Outmity Unity of Fuel Burned (purfundeate fit nuclear)         7.40,507         7.40,507         7.40,507         7.40,507         9.44         9.45         9.47         9.47         9.47         9.4	8	Fuel Kind (Coal, Gas, Oil, or Nuclear)				Gas							Gas	Gas		Gas	
B         Commity (mink)         Commity (mink) <thcommity (mink)<="" th="">         Commity (mink)</thcommity>	3/	Unit (Coal-tons/Oil-barrel/Gas-mct/Nuclear-indicate)				MCF							MCF	MCF		MCF	
9         99         99         99         90         91         91         93         93         93         94 </td <th>8</th> <td>Guantity (units) of Fuel Burned</td> <td></td> <td></td> <td></td> <td>7,440,507</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>975,200</td> <td>116,652</td> <td></td> <td>8,532,359</td> <td></td>	8	Guantity (units) of Fuel Burned				7,440,507							975,200	116,652		8,532,359	
40         Warg Gots of Fuelly Burned         2315           41         Average Cost of Fuel Burned per Minn BTU         2315           42         Average Cost of Fuel Burned per Minn BTU         2315           43         Average Cost of Fuel Burned per Minn BTU         2315           44         Average Cost of Fuel Burned per Minn BTU         2315           55         Fuel Kinnd (Coal Gas, Oli, or Nuclear)         01         01         01         01         01           56         Fuel Kinnd (Coal Gas, Oli, or Nuclear)         Barrels	55 S	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)				1,044							1,057	1,033		1,045	
41         Average Cost of the Birunde profilem BTU         2315           23         Average Cost of the Birunde profilem BTU         2315           24         Average Cost of the Birunde profilem BTU         2315           25         Average Cost of the Birunde DTU         01         <	3:	Avg Lost of Fuelfuntt, as Deive t.o.b. during year				2.315							1.781	7.602			
2         Average Cost of Fuel Burned per Million BTU         2.218           35         Fuel Kind Cost of Fuel Burned per Million BTU         001         0022           36         Fuel Kind Cost of So Ol, or Nuclean)         011         001         010         010         011         01	4	Average Cost of Fuel per Unit Burned				2.315							1.781	7.602			
35         Average Cost of rule binned per KWh Net Gan         0027         010         011	4	Average Cost of Fuel Burned per Million BIU				2.218							1.686	7.360			
37         Unit Charlon Solution modelar)         Unit Charlon Solution modelar         Unit Charlon Solution         Unit Charlon Solution <thunit charlon="" solution<="" th=""> <t< td=""><th>5 a c</th><td>Average Cost of Fuel Burned per KWh Net Gen</td><td></td><td>č</td><td></td><td>0.027</td><td>ě</td><td></td><td>i</td><td>i</td><td></td><td></td><td>0.027</td><td>0.012</td><td>ł</td><td>i</td><td></td></t<></thunit>	5 a c	Average Cost of Fuel Burned per KWh Net Gen		č		0.027	ě		i	i			0.027	0.012	ł	i	
3         Outstructure/cast-mork/domeat-indicate)         Barrels         Dirt         Dirt         Dir	8 8	ruer hind (Loai, Gas, Oil, or Nuclear)		5	ō		5	ŝ	ō	ō	ō	ō		ō	ē	5	
38         Quarter Number         7,55         7,60         14,000         <	) C	Unit (Coal-tons/Oil-barrel/Gas-mct/Nuclear-Indicate)		Barrels	Barrels		Barrels	Barrels	Barrels	Barrels	Barrels	Barrels		Barrels	Barrels	Barreis	
Jay         Arg Fast Currit - Hainer (burningeal         140,000 <t< td=""><th>8</th><td>Quantity (units) of Fuel Burned</td><td></td><td>1.55.1</td><td>12, 180</td><td></td><td>2,585</td><td>3,369</td><td>7,580</td><td>13,534</td><td>7,536</td><td>20,201</td><td></td><td>3,138</td><td>3,322</td><td>61,468</td><td></td></t<>	8	Quantity (units) of Fuel Burned		1.55.1	12, 180		2,585	3,369	7,580	13,534	7,536	20,201		3,138	3,322	61,468	
40         Arg cost of healering a bewort on building arr         25.115         28.288         26.707         26.607         27.441         26.607         26.107         26.607         26.101         27.103         27.173         42.173         42.173         42.173         42.173         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.172         47.173         47.173         47.173         47.172	Ŗ ;	Avg hear Cont - Fuel Burned (pturingicate if nuclear)		140,000	141,000		140,000	140,000	140,000	140,000	140,000	140,000		140,000	141,000	140,252	
41 Average Cost of Fuel Burned Per Mit Burned Per Mit Diffeel Burned Per Mit Diffeel Burned Per Mit Diffeel Burned Per KMh Net Gen 4, 739 4, 730 4, 730 4, 663 4, 655 4, 801 4, 739 4, 739 4, 723 4, 7	<del>1</del>	Avg Cost of Fuerkint, as Deiva Lo.D. auring year		GL/ GZ	887.87		26.707	707.92	26.707	26.707	27,441	26.063		26.486	28.543		
42 Average Cost of Free Burneo per Mindrie HU 33 Average Cost of Free Burneo per Mindrie HU 43 Average Cost of Free Burneo per Average Cost of Free Per Average Cost of Free Burneo per Average Cost of Free Burneo per Average Cost of Free Per Average Cost of Free Burneo per Average Cost of Free Burn	- ç	Average cost of Fuel per unit Burned		206.02	28.364		114.12	21.374	28.232	27.863	29,334	21.113		26.976	28.843		
	1 4	Average Cost of Fuel Burred per Million B.t.U		4,0/0	4,790		4.003	600.4	4.801	4.739	4,989	4.125		4.568	4.8/0		
44 Averanda BTII was MAN MA Canadida 44 040 04 45 45 45 40 55 45 40 55 55 45 55 55 55 55 55 55 55 55 55 55	44	Average Cost of Lost puttied per AWIT 1961 Cell	www.ever.cominaik.ever.com	24 020 11	11 040 04	40 464 74	10 623 46	40 000 CD	10 070 04	10 101 01	- 0200			40 E 4 4 40	1 000 70	10 505 05	
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FERC Form (		Biundell Plant	Carbon Plant	Dave Johnston	Gadsby Plant	Hunter Unit No. 1	Hurnter Unit No. H	lunter Unit No.	Hunter Plant	Huntington	Jim Bridger	ittle Mountain N	aughton Plant	Wvodak Plant	hermal Plants	FERC
1	Kind of Plant (Internal Comb, Gas Turb, Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	د Steam	J. Steam	Steam	Steam	Plant Steam	Gas - Turbine	Stearn	Steam	l otal	Icct no.
0.0	Type of Constr (Conventional, Outdoor, Bailer, etc)	indoor	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boller	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Bailer	Conventional		
	Year Unginally Constructed	1964	1954	1959	1951	1978	1980	1983	1978	1974	1974	1972	1963	1978		
rю	Total installed Cap (Max Gen Name Plate Ratinos-MW)	26.1	1881	816.8	021 6 251 6	418.5	769.2	1963	1 134 1	1311 897.8	6/6L 6 707 1	160	1781 702	7.080	£ 817 G	
9	Net Peak Demand on Plant - MVV (60 minutes)	24	183	798	235	409	256	418	1.074	879	1,628	18	716	318	5,882	
~ ~	Plant Hours Connected to Load	6,243	8,736	8,760	7,781	7.735	8,578	8,634	8,760	8,709	8,760	5,765	8,758	7,911		
00	Net Commuous Plant Capability (Megawatts) When Not I imited by Condenser Water	, 60	175	-	- 735	1 085	250	305	1 034	- 508	- 207		- 200	1 90	E 412	
10	When Limited by Condenser Water	· *				200		080	+ 20°.		/ac't	Ŧ,	007	007	0.410	
11	Average Number of Employees	· 60	85	223	46	94	94	94	282	187	426		- 196	114	1.584	
12	Net Generation, Exclusive of Plant Use - KWh	139,742,000	1,352,883,000	5,956,956,000	637,451,000	2,888,717,000	2,054,693,000	3,380,858,000	8,324,268,000	6,810,471,000	0,367,115,000	81,285,000	4,772,109,000	2,008,284,000	10,450,564,000	
13	Cost of Plant: Land and Land Rights	31,026,429	956,546	10,417,291	1.020,271	9,872.826	9,872,826	9,872,826	29.618,478	2,205,422	1,199,736	635	499,478	210,526	77,154,812	
15	structures and Improvements Equipment Costs	5,191,502 32,522,648	9,793,071 51,177,777	29,426,348 250,791,832	12,884,598 55 021 697	59,428,479 187 937 032	48,672,284 126,515,317	87,685,820 356 679 078	195,786,583 671 131 427	91,748,371 285 695 443	129,570,839 830 232 353	191,032 3 197 146	50,607,879 222 266 500	39,766,118 260,284,818	565,966,341 2 462 321 650	
16	Asset Retirement Costs			100.0	100'1 70'00	100° 100° 101	10,000,000		171 101 110	2tt 222	000'Z0Z'000	011 121 10	enr'nn7'777	510°507'007	000,120,204,2	
17	Total Cost	\$ 69,740,579	\$ 61,927,394	\$ 290,635,471	\$ 68,926,566	\$ 257,238,337	\$ 185,060,427 \$	454,237,724	896,536,488 \$	379,649,236	761.002,928 \$	3,388,813 \$	273,373,866 \$	300,261,462	3,105,442,803	
18	Cost per KW of Installed Capacity (our share)	\$ 2,672.05	s 326.28	\$ 355.84	\$ 273.91	5 614.67 S	\$ 687.39 \$	1,017.56 \$	790.51 \$	425.23	\$ 90.06 \$	211.80 \$	386.56 \$	1,036.60	533.78	
500 19	Operation Supervision and Engineering	110,313	625,476	2,587,543	921,086	489,382	173,622	568,899	1,231,903	1,947,130	3,055,916	49,408	2,184,262	1,311,467	14,024,504	500
07 INC	Fuel Coolants and Water (Ninclear Disots Only)	•	9,554,517	45, 163, 353	10,243,850	28,902,680	20,611,914	33,147,253	82,661,847	45,803,547	114,147,043	2,412,499	57,328,318	17,667,306	390,982,280	501
502 22	Steam Expenses	336.600	1 183 685	2 167 143	1 557 768	2 363 184	937 738	2 381 681	5 687 603	2 635 755	5 520 846	> 1	2 955 070	2 100 570	24 145 040	507
503 23	Steam From Other Sources	3,205,843				-	-	-	-		*		-	1	3,205,843	203
504 24	Steam Transferred (Cr)	,	,	1	ł	3	1	,		,	'		,	ł	'	504
505 25 505 25	Electric Expenses	274,631	1,136,368	2,194,646	194,375	1,312,526	507,230	1,491,724	3,311,480	2,168,167	2,062,217	630,616	1,489,330	474,851	13,936,681	505
07 0/05	MISC Stearn (or Nucrear) Hower Expenses Rents	192,338	1,06,810,1	2,201,103	062,812,1	1,2/6.310	458,224	1.380,460	3,114,994	3,850,778	3,588,962		3,549,367	1,294,118	20,095,377	506
509 28	Allowances	'nn'o	• •			76	7¢ '	104	977		31,211	,	1,340	•	43,780	1003
510 29	Maintenance Supervision and Engineering	100,671	1.178.884	2.392.093	814.672	942.350	330.960	1 056 369	2 329 679	2.467.089	2 353 551	49 214	2 450 023	1 267 798	15 403 674	510
551 30	Maintenance of Structures	46,453	126,682	1,006,478	112,056	898,917	276,628	801,515	1,977,060	770,626	1,421,405	508	897,545	357,923	6,716,736	551
512 31	Maintenance of Boiler (or reactor) Plant	227,219	1,903,608	8.030,285	1,372,378	4,379,171	1,056,214	2,579,856	8,015,241	4,664,275	11,899,150	,	6,658,074	2,276,720	45,046,950	512
513 32	Maintenance of Electric Plant	283,945	479,514	1,362,909	584, 135	777.246	140,111	320.450	1,237,807	1.043.540	2,464,814	56,189	2,097,844	380,970	9,991,667	513
90 410 92	Total Production Frances	101,123	235,320	1,9,005,1 2,005,471 2,005,471	808,405	605 223	191,923 5 74 870 506 5	610,744	1 40/ 890	1,//3,305	2,206,936	53,233 2 761 667	8/7,452	446,229	9,485,964	514
- 55 25	Evidences ner Met KOUh	5 0.035A	0.1702,11 0	4 00,011,014	010,120,02 0	0011241	24/013/030 0	0.0434,000 4	5 2010/0/011	0,0000	0.01/00/001 3	2,601,001	0 0100 0010 0	70110,12	0.010,002	
2	Total Busbar - S/MWh	\$ 35.39	5 12.94	<ul> <li>5</li> <li>1152</li> </ul>	5 37 38	4 0.0143 -	10120 3	101010	0.0100	5 98 0 0 88	0.0143	., .	2 2010.0	13 73	13.67	
	Fuel - S/MWh	69	\$ 7.06	\$ 7.58	\$ 25.48	20.01 20.01	10.03	086	8 8 8 8	673	11.01 \$	29.68	12.01	880	9.67	
	Non-fuel - S/MWh	\$ 35.39	\$ 5.87	\$ 3.94	\$ 11.90	\$ 4.52	\$ 1.98 \$	3.31.9	3.40 \$	3.13	3.34 \$	(29.68) 3	4.85	4.93	4.01	
	Ethod OPM (Def KL) definition) - SMWh	<b>5</b> 2.48 2.48	S	5 0.79 5 2.55	<b>5</b> 238	960 9	0.40	800	0.68	0.63	S 290	2,09	\$ 260	660	080	
	Total O&M without Fuel	\$ 1739 120	5 7 94R /94	5 23 454 321	5 7 583 165	3.01 3.01	2 1 1 20 3	2.05	213 813 885 5	21 220 ABK	24 611 008 5	8.30 3 840 168	3.58 3	3.90	3.21	
36	Fuel: Kind (Coal. Gas. Oil. or Nuclear)		Coal	Coal		lan)	Coal	Coal Coal	Coal	Coal				leon	Coal	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)		Tons	Tons		Tons	Tons	Tons	Tons	Tons	Tons		Tons	Tons	Tons	
88	Quantity (units) of Fuel Burned		633, 123	4,256,572		1,356,256	954,175	1,542,322	3,852,753	2,912,250	5,841,050		2,547,318	1,507,834	21,550,900	
98 VU	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)		12,070	7.726		11.479	11,436	11.407	11,440	11,846	9,396		9,810	7,914	9,786	
41	Average Cost of Fuel per Unit Burned		15,035	10.549		21.250	21.568	21.340	21.365	15.621	19.439		21.892	11.628		
42	Average Cost of Fuel Burned per Million BTU		0.623	0.683		0.926	0.943	0.935	0.934	0.659	1.034		1.116	0.735		
43	Average Cost of Fuel Burned per KWh Net Gen		,	1		t	•			,	ł	,		,		
95 E	Fue: Nind (Coal, Cas, Oil, of Nuclear) 1 brit (Coal-tons/Oil-barrel/Gas-mofMurdear-indicate)				Gas							Gas	Gas		Gas	
38	Quantity (units) of Fuel Burned				7.127.720							1.352.646	MUCF 128.467		B.608.833	
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)				1,055							1,053	1,043		1,055	
4	Avg Cost of Fuel/unit, as Deivd Lo.b. during year				2.279							1.784	12.151			
C 7	Average Cost of Fuel per Unit Burned Average Cost of Fuel Burned nor Million DTU				2.279							1.784	12.151			
19	Average Cost of Fuel Burned per KWh Net Gen				2. 138 D 026							030	20010			
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)		IO	0il		IO	io	ΪÖ	Ю	ĪŌ	Oil		IO	NO	Oil	
37	Unit (Coal-tons/Oil-barrel/Gas-mc//Nuclear-indicate)		Barrels	Barrels		Barrels	Barrels	Barrels	Barrels	Barrels	Barrels		Barreis	Barrels	Barreis	
99 DE	Quantity (units) of Fuel Burned Aver Heat Cont - Eval Burned (Huilindicate if auctory)		1,581	10,497		2,974	1,141	8,246	12,361	11,202	23,036		4.1. COO CO F	4,899	63,653	
9 9 9	Avg Cost of Fuel/unit, as Delvd f.o.b. during year		23.546	23,451		28.681	28.681	28.681	28.681	28,208	25.436			23.887	2000/04-1	
41	Average Cost of Fuel per Unit Burned		22.293	24.824		27.810	28.537	28.353	28.240	27.764	26.260		29.218	27.452		
42	Average Cost of Fuel Burned per Million BTU		3.791	4.222		4.730	4.853	4.822	4,803	4.722	4.466		4.969	4.669		
43 44	Average Cost of Fuel Burned per KWN Net Gen Averane BTU per KWN Net Generation	4	11 303 92	11 051 66	11 706 58	10 784 BE	10.624.75	10.421.02	40 508 37	10 140 60	10,600,87		10 501 10	11 808 12	10 R61 46	
F	ATGING ALLY PARTATIN HOL VOIRI BUUN		11,000.04	11,001.00	11,130.00	10,104.04	10,024.10	10,461,36	10,030.01	10,140.00	10,000.01		10,001.15	11,030.14	04-100/01	

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1         Constrained         Constraine         Constrained         Cons	RC Form the ne	ر ب <u>ـ</u>	Biundell Plant	Carbon Plant	Dave Johnston Plant	Gadsby Plant	Hunter Unit No. 1	Hunter Unit No. H	unter Unit No.	Hunter Plant	Huntington	Jim Bridger	Little Mountain N	laughton Plant	Wyodak Płant	Thermal Plants Total	FER
	-	Kind of Plant (Internal Comb, Gas Turb, Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas - Turbine	Steam	Steam		
No.         No. <td>0</td> <td>Type of Constr (Conventional, Outdoor, Boiler, etc)</td> <td>indoor</td> <td>Outdoor Boiler</td> <td>Semi-Outdoor</td> <td>Outdoor Boiler</td> <td>Outdoor Boiler</td> <td>Outdoor Bailer</td> <td>Outdoor Boiler</td> <td>Outdoor Boiler</td> <td>Outdoor Boiler</td> <td>Semi-Outdoor</td> <td>Outdoor Boiler</td> <td>Outdoor Boiler</td> <td>Conventional</td> <td></td> <td></td>	0	Type of Constr (Conventional, Outdoor, Boiler, etc)	indoor	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Outdoor Bailer	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Conventional		
	m .	Year Originally Constructed	1984	1954	1959	1951	1978	1980	1983	1978	1974	1974	1972	1963	1978		
	4 i	Year Last Unit was installed	1984	1957	1972	1955	1978	1980	1983	1983	1977	1979	1972	1971	1978		
	n u	Lotal Installed Cap (Max Gen Name Plate Katings-MVV)	1.07	0.381	810.8 804	97107	418.5	7.602	445.4	1,134,1	892.8	1,494.9	16.0	270/	7.89.7	5,81/.9 5,550	
	~ ~	Plant Hours Connected to Load	57 8 586	R 784	B 784	1 986	8.436	8 534	915 g	8 784	2402 B	C87.8	01 7 280	787 8	202	non'r	
1         1         1         2         1         2	60	Net Continuous Plant Capability (Megawatts)								5							
	- <b>n</b>	When Not Limited by Condenser Water	23	175	772	235	389	250	405	1 044	845	1 387	14	700	268	5 463	
	10	When Limited by Condenser Water		,				8	1				,	1	1	-	
1         1	11	Average Number of Employees	16	52	214	<del>6</del> 6	89	88	68	266	184	413	g	186	105	1,508	
Contraction	12	Net Generation, Exclusive of Plant Use - KWh	191,912,000	1,411,250,000	5,958,080,000	155,583,000	3,011,143,000	1,924,874,000	3,150,037,000	8,086,054,000	6,408,968,000	9,908,635,000		5,080,911,000	2,276,898,000	39,478,301,000	
Matrix constraint         Calification         Calification <thcalification< th="">         Calificat</thcalification<>	13	Cost of Plant: Land and Land Rights	31,026,429	956,546	10,417,291	1,020,271	9,870,408	9,870,408	9,870,407	29,611,223	2,205,422	1,199,736	635	544,478	210,526	77,192,557	
No.         No. <td>4</td> <td>Structures and Improvements</td> <td>6,082,870</td> <td>10,175,036</td> <td>29,833,785</td> <td>13,090,439</td> <td>59,529,880</td> <td>48,754,739</td> <td>87,911,287</td> <td>196,195,906</td> <td>91,872,655</td> <td>130,983,405</td> <td>199,034</td> <td>49,690,448</td> <td>40,339,656</td> <td>568,463,234</td> <td></td>	4	Structures and Improvements	6,082,870	10,175,036	29,833,785	13,090,439	59,529,880	48,754,739	87,911,287	196,195,906	91,872,655	130,983,405	199,034	49,690,448	40,339,656	568,463,234	
Markateria         Markate	0	Equipment Costs	049'175'75	52,047,157	C/C LOG /CZ	25,609,481	188,864,939	125,993,854	356,591,359	6/2,450,152	286,551,764	636,298,133	3,268,330	229,917,653	259,920,145	2,486,486,046	
Market in the second of the second	<u>e</u> ț	Asset Retirement Costs	\$ B0 634 445	T 62 470 740	A 100 451 454	PO 100 404	* 050 00F 003	* 105 CAD 001 -	4 010 010 F.J			100 101 001 1	- 000 101 0 4	000 400 400	LOC 027 000 0	200 111 100 000	
0         0	- ?		4 03,001,140	St. 10/100 4	104'20'062 0	4 03/70 131	177'007'007 0	4 100'01 A'00' 4	404,3/3,003 1	197'727'969 4	192,029,041	2 100,461,2/4	3 2'40' AAA	6/0701 007 0	\$ 300,4/0,32/	\$3, 132, 141, 037	
Mark         Mark <th< td=""><td>0 1 00</td><td>Cost her VAN of inistalled capacity (our strate)</td><td>007/D01/7 ¢</td><td>75.400 0</td><td>500.000 e</td><td>007777 ¢</td><td>21.710 \$</td><td>0 000.47 0</td><td>* 09.7L0'L</td><td>192.03 3</td><td>420.33</td><td>2014-DB</td><td>C/ G/ GLZ &amp;</td><td>41.14C</td><td>\$ 1,037.32</td><td>536.37</td><td></td></th<>	0 1 00	Cost her VAN of inistalled capacity (our strate)	007/D01/7 ¢	75.400 0	500.000 e	007777 ¢	21.710 \$	0 000.47 0	* 09.7L0'L	192.03 3	420.33	2014-DB	C/ G/ GLZ &	41.14C	\$ 1,037.32	536.37	
Contraction         Contraction <thcontraction< th=""> <thcontraction< th=""></thcontraction<></thcontraction<>	501 20	Uperation Supervision and Engineering	741'17	050,166 053,107 0	2, 380,093	415,553	2/ / / 194 2/ / 7/2/ 10/2	10,019	50 440,211	70 670 672	1,561,503	2,513,896		2,098,073	1,092,142	79L'C98'LL	
State Finance         State Fi	21	Conjants and Water (Nursear Plants Only)		700'L01'0				100'001'e	201,011,010	eze, eze, ez		212'001'401		107'242'70	21 J' 201 '02'	147'401 '000	
1000000000000000000000000000000000000	502 22	Steam Exnenses	308 743	1 046 152	7 755 275	812 534	2 417 000	067 664	7 306 751	2 777 ADE	2 805 105	E 453 217	•	7 285 240	7 010 373	73 263 180	
5         Start, Turning (c)         255,55         300,10         112,200         255,55         300,10         123,200         214,51         155,200         202,201         214,51         155,200         202,201         214,51         155,200         202,201         214,51         155,200         202,201         214,51         155,200         202,201         214,51         155,200         202,201         214,51         155,200         202,201         214,51         155,200         202,5	503 23	Steam From Other Sources	3 595 449					-			-					3 595 449	
1         22,153         0.601         1,12,206         62.661         1,12,206         62.661         1,12,206         62.661         1,162,006         2,163,00 <td>504 24</td> <td>Steam Transferred (Cr)</td> <td></td> <td></td> <td>,</td> <td>,</td> <td>,</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>,</td> <td></td> <td></td>	504 24	Steam Transferred (Cr)			,	,	,								,		
0.0000         Exercise in the forware prevent         0.010         1.22.200         2.06.01         1.22.200         2.06.01         1.22.200         2.06.01         0.0200         0.000         0.	05 25	Flectric Expenses	292 155	909 669	2 212 657	18 896	1 152 038	425 852	1 280 149	2 858 039	2 180 DEG	207 000 0		1 511 163	467 404	17 476 75R	
0.7         7         7         7         9         1         9         0         1         0 <th0< th="">         0         0         0</th0<>	06 26	Misc Steam (or Nuclear) Power Expenses	260,132	1.232.767	2.205.592	680,792	1.223.236	436.896	1 363 398	3.023.530	3 134 911	4 677 411	,	3 603 168	1 536.537	20.354.840	
All         All <td>07 27</td> <td>Rents</td> <td>4,810</td> <td>,</td> <td>,</td> <td></td> <td>340</td> <td>119</td> <td>380</td> <td>839</td> <td></td> <td>35,811</td> <td>,</td> <td>2.517</td> <td></td> <td>43,977</td> <td></td>	07 27	Rents	4,810	,	,		340	119	380	839		35,811	,	2.517		43,977	
0.1         0.2 <th0.2< th=""> <th0.2< th=""> <th0.2< th=""></th0.2<></th0.2<></th0.2<>	09 28	Allowances			•	,			1	•	,		•	,	,		
51         Mantement of Southurs         101	10 29	Maintenance Supervision and Engineering	66,678	658,119	1,697,226	450,700	801,370	280,435	896,926	1,978,731	1,862,238	2, 153, 971	1	2,532,541	1,097,123	12,497,327	
13         Mantemate of legac (match) Then(         19,160         27,2105         6,172,30         110,166         37,132         210,166         13,132         13,1	51 30	Maintenance of Structures	39,328	130,604	998,331	77,490	507,423	204,642	713,254	1,425,319	675.371	1,515,399	•	502,468	299,774	5,664,084	
13         22         Mattemate of Excit.         13         32         32         31         32         31         32         31         32         31         32         32         31         32         32         31         32         32         32         31         32         32         31         32         32         31         32         32         31         32         31         32         32         32         32         31         32         33         32         33         32         33         32         33         32         33         32         33         32         33 <td>12 31</td> <td>Maintenance of Boiler (or reactor) Plant</td> <td>190,190</td> <td>2,152,015</td> <td>6,872,868</td> <td>791,733</td> <td>2,101,964</td> <td>1, 101,666</td> <td>3,267,400</td> <td>6,471,030</td> <td>4,819,520</td> <td>11,575,790</td> <td>,</td> <td>6,157,648</td> <td>2,318,811</td> <td>41,349,605</td> <td></td>	12 31	Maintenance of Boiler (or reactor) Plant	190,190	2,152,015	6,872,868	791,733	2,101,964	1, 101,666	3,267,400	6,471,030	4,819,520	11,575,790	,	6,157,648	2,318,811	41,349,605	
Mathematical control         Contro         Control <thcontrol< th=""></thcontrol<>	13 32	Maintenance of Electric Plant	113,485	382,693	1,157,984	498,429	324,834	169,207	645,340	1, 139, 381	813,378	2,150,784	,	2,087,181	321,539	8,664,854	
Market for the formation         Market for the formation         Market for the formation         Market formation     <	14 33	Maintenance of Misc Steam (of Nuccear) Hant	E E 105,524	5/1/9/9 2/1/2	2,001,391	301,4//	192,568	342,8/1	1,058,154	2,364,302	2,562,40/	2,500,980		1,484,122	1/1/282	12/,191,15/	
Turbuscher Mithen         2         100	5		00100	1,040,040	1001000	0,010,000	0 40,020,040	5 CIO'070'07 0	5 000'107 7t	5 101 740 COL 0	110'07'00	00,000		10,000	200'110'00	012/10/070 0	
Test Shiftin         Test Shiftin<	3	Total Bushar - SAMAIN	070700 \$	5 0.0123	40 0.0102	40.0041 64.74	4 0.0133	4 00 01 4 4	40100		10.010	4 C.U.140		101010	4 0.010Z	01010	
Namelies - SMV/n         5         210         5         210         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         5         310         310         3         310         5         310         3         310         3         310         3         310         3         310         3         310         3         310         3         310         3         310         3         310         3         310         3         310         3         310         3         310 <th< td=""><td></td><td>Fuel - S/MWh</td><td></td><td>6.88</td><td>5 0<sup>54</sup></td><td>\$ 28.72</td><td>9666 8</td><td>s 10.10 \$</td><td>5 92 6</td><td>595</td><td>7.61</td><td>5 10.51</td><td></td><td>12.25</td><td>\$ 8.87</td><td>2 C C C C C C C C C C C C C C C C C C C</td><td></td></th<>		Fuel - S/MWh		6.88	5 0 <sup>54</sup>	\$ 28.72	9666 8	s 10.10 \$	5 92 6	595	7.61	5 10.51		12.25	\$ 8.87	2 C C C C C C C C C C C C C C C C C C C	
Twend conv (normalized)         5         101         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01         5         0.01		Non-fuel - S/MW/h	\$ 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	
Find Cold         End Cold		Variable O&M (per RDI definition) - S/MWh	\$ 1.57	\$ 1.08	\$ 0.73	\$ 5.20	\$ 0.66	\$ 0.42 \$	1 (110 States of 11)	1 0.65 3	0.64	0.70		0.00	\$ 0.87	\$ D.77	
Ter Kind Code, Michael         5         1,506 style         5         2,100 style         2,101 style         2,111 style         2,112 style         2,112 style         2,128 style         2,128 style         2,128 style         2,128 style         2,128 style         1,282 style         2,128 style         1,282 style <th< td=""><td></td><td>Fixed O&amp;M (RDI definition) - \$/kW installed</td><td>\$ 6.30</td><td>\$ 4.33</td><td>\$ 2.93</td><td>\$ 20.82</td><td>\$ 2.64</td><td>\$ 170 \$</td><td>3.09 4</td><td>2.59 \$</td><td>2.55</td><td>\$ 2.79</td><td>i0//IC#</td><td>3.58</td><td>\$ 3.49</td><td>5 3.09</td><td></td></th<>		Fixed O&M (RDI definition) - \$/kW installed	\$ 6.30	\$ 4.33	\$ 2.93	\$ 20.82	\$ 2.64	\$ 170 \$	3.09 4	2.59 \$	2.55	\$ 2.79	i0//IC#	3.58	\$ 3.49	5 3.09	
35         Trait frank (cal) (Gas) (Gas) (Gas) (Gas)         Coal         Coal <td></td> <td>Total O&amp;M without Fuel</td> <td>\$ 1,509,987</td> <td>\$ 7,639,241</td> <td>\$ 21,847,467</td> <td>\$ 4,048,714</td> <td>\$ 9,950,237</td> <td>\$ 4,090,371 \$</td> <td>12,171,973</td> <td>5 26,212,581 3</td> <td>\$ 20,423,502</td> <td>\$ 34,600,061</td> <td>\$</td> <td>\$ 22,764,120</td> <td>\$ 9,925,885</td> <td>\$ 152,567,007</td> <td></td>		Total O&M without Fuel	\$ 1,509,987	\$ 7,639,241	\$ 21,847,467	\$ 4,048,714	\$ 9,950,237	\$ 4,090,371 \$	12,171,973	5 26,212,581 3	\$ 20,423,502	\$ 34,600,061	\$	\$ 22,764,120	\$ 9,925,885	\$ 152,567,007	
31         Quartify function         Construction	36	Fuel Kind (Coal, Gas, Oit, or Nuclear)		Coal	Coal		Coal	Coal	Coal	Coal	Coal	Coal		Coal	Coal	Coal	
30         Ang Natom, Fue Burner de Mundicate / nuclean         1,1,5,1         1,3,5         1,3,6 </td <td>200</td> <td>Origi (Coar-turis/Or-Darrer/Oas-Fricingueser-Indicate)</td> <td></td> <td>2001 COL 230</td> <td>A 101 050</td> <td></td> <td>2001 BBC F</td> <td>201 002</td> <td>1 200 740</td> <td>2001 000 0</td> <td>1 004 604</td> <td>5001 2 6 4 5 0 5 6</td> <td></td> <td>SU01</td> <td>SH01</td> <td>14 200 407</td> <td></td>	200	Origi (Coar-turis/Or-Darrer/Oas-Fricingueser-Indicate)		2001 COL 230	A 101 050		2001 BBC F	201 002	1 200 740	2001 000 0	1 004 604	5001 2 6 4 5 0 5 6		SU01	SH01	14 200 407	
Mag Cast of Fuel burnel as Device 1.0         Table 1.12         Table 1.12 <thtable 1.12<="" th="">         Table 1.1</thtable>	8 g	Quantury (units) or riger purried Avo Mast Crot - Friel Burned (Attrifudicate if purclear)		207,100 DOF CF	000'121'4		1,300,232	007'AU	1,262,119	3,033,960 11,470	2,804,061	0,040,430 0,302		2,009,934 0,060	7.076	21,300,15/ 235	
41         Average Cost of Fuel Pur Unit Burned         16.67         16.67         16.77         21.633         16.77         16.373         16.77         18.332           23         Average Cost of Fuel Burned per Willmen ETU         0.607         0.592         0.946         0.945         0.723         0.966         18.332           33         Unit (chalt rounders)         0.607         0.592         0.946         0.945         0.723         0.966           34         Morega Cost of Fuel Burned per Willmen ETU         0.607         0.592         0.946         0.945         0.723         0.966           34         Unit (chalt rounders)         0.617         0.592         0.946         0.945         0.723         0.966           35         Average Cost of Fuel Burned         0.617         1.944.006         1.044.006         0.723         0.966         0.723         0.966         0.723         0.966           36         Average Cost of Fuel Burned are Multon ETU         More         1.944.006         1.044.006         0.723         1.926         0.966         0.723         1.9266         0.966         0.723         1.9266         0.966         0.945         0.966         0.946         0.966         0.723         1.9266         0.966 <td>40</td> <td>Avg Cost of Fuel/unit, as Deivd f.o.b. during vear</td> <td></td> <td>13.681</td> <td>8.672</td> <td></td> <td>21.128</td> <td>21.128</td> <td>21.128</td> <td>21.128</td> <td>14,823</td> <td>17.802</td> <td></td> <td>23 240</td> <td>11.330</td> <td></td> <td></td>	40	Avg Cost of Fuel/unit, as Deivd f.o.b. during vear		13.681	8.672		21.128	21.128	21.128	21.128	14,823	17.802		23 240	11.330		
42         Average Cast of Fei Binner an Multion BTU         0.607         0.592         0.945         0.723         0.966           33         Average Cast of Fei Binner an Multion BTU         0.607         0.592         0.945         0.723         0.966           33         Unit (Cast-trans) (noteen)         0.607         0.592         0.945         0.723         0.966           33         Unit (Cast-trans) (noteen)         0.607         0.592         0.945         0.723         0.966           34         Average Cast of Fei Binner         0.607         0.523         0.231         0.721         0.945         0.723         0.946           41         Average Cast of Fei Binner         0.01	41	Average Cost of Fuel per Unit Burned		14.682	9.196		21.603	21.985	21.571	21.683	16.678	18.332		23.344	11.785		
43       Fuel Kind Coal of Fuel Burnel per NVM Red Em       Gas         37       Unit (Coal-torsto) is nuclean;       Unit (Coal-torsto) is nuclean;       Gas         38       Quanty (unit) of Fuel Burnel (humblicate f nuclean;       1,984,906       1,984,906         39       Ang lead (humblicate f nuclean;       1,984,906       1,071       2,251         40       Ang lead (humblicate f nuclean;       1,071       2,251       2,251         41       Average Cost of Fuel Burnel per NMI Net Gan       2,251       2,251       2,251         42       Average Cost of Fuel Burnel per NMI Net Gan       2,251       2,251       2,251         5       Average Cost of Fuel Burnel per NMI Net Gan       0,1       0,1       0,1       0,1         5       Average Cost of Fuel Burnel per NMI Net Gan       2,205       0,1       0,1       0,1       0,1         3       Unit (Costicharei of Cost) (as .0) or Nuclean;       2,205       2,00       0,1       0,1       0,1       0,1         3       Variet Kind (Cost) (as .0) or Nuclean;       3,3,7       2,3,7       1,1,3       2,3,7         4       Average Cost of Fuel Burnel (humbred       1,6,1       1,7       2,7,00       1,1,25       2,3,7       1,1,25       2,3,77	42	Average Cost of Fuel Burned per Million BTU		0.607	0.592		0.933	0.959	0.949	0.945	0.723	0.986		1.171	0.739		
More than (unit of free) Burned are fully (units) of free Burned are fully (	43	Average Cost of Fuel Burned per KWh Net Gen		,		į	;	,			ı	,		ļ	,	Į	
38         Quantity (units) of Fuel Burned         1,884,906           39         Any Fuel Curred         1,021           41         Anverage Cost of Fuel Burned         1,021           42         Anverage Cost of Fuel Burned         2,251           43         Anverage Cost of Fuel Burned         2,251           54         Anverage Cost of Fuel Burned         2,251           2         2,251         2,251           2         Anverage Cost of Fuel Burned         2,251           37         Vult (Cost (cost, Cl) on Nuclear)         0,01           36         Fuel Kunned         0,01         0,01           37         Unit (Cost (cost, Cl) on Nuclear)         1,615         1,3761           38         Cuantity (units) of Fuel Burned         1,610         1,3,761         2,700           38         Cost of Fuel Burned         0,11         0,01         0,01         0,01           39         Quantity (units) of Fuel Burned         1,610         1,3,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000         140,000	37	ruei: Nitu (Coat, Gas, Oil, Uri Nuclear) Unit (Coat-tons/Oil-barrel/Gas-mof/Nuclear-indicate)				MCE								SEO		MOF	
38         Neg Hair Corri: Fuel Burned Rhu/Indicate I nuclear)         1,021           40         Average Cast of Fuel Burned Rhu/Indicate I nuclear)         2,231           41         Average Cast of Fuel Burned Rhu/Indicate I D. Units Dirug         2,231           42         Average Cast of Fuel Burned Bru/Unit Bruned         2,205           53         Average Cast of Fuel Burned Bru/Unit Bruned         2,205           54         Average Cast of Fuel Burned Bru/Unit Bruned         0 01           53         Vancing Cast of Set Runed Brune Bru/Unit Bruned         0 01           53         Vancing Cast of Set Runed Bruned Brune Bru	88	Quantity (units) of Fuel Burned				1.984.906								87 050		2.071 956	
40         Average Cost of Fiell Burnel         2251           41         Average Cost of Fiell Burnel         2251           42         Average Cost of Fiell Burnel         2251           43         Average Cost of Fiell Burnel         2005           44         Average Cost of Fiell Burnel         01	39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)				1,021								1,040		1.022	
41         Average Cost of Heal per / Informed         2251           2         Average Cost of Heal per / Informed         2         2           3         Full Kinned for the Burned per //Informed         0	40	Avg Cost of Fuel/unit. as Delvd f.o.b. during year				2.251								15.181			
42         Average Cost of Fuel Burner en Millon BTU         2.205         2.205           36         Fuel Kind (Cost) Gas. Oli on Nuclear)         01 </td <td>41</td> <td>Average Cost of Firel per Unit Burned</td> <td></td> <td></td> <td></td> <td>2.251</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15.181</td> <td></td> <td></td> <td></td>	41	Average Cost of Firel per Unit Burned				2.251								15.181			
43         Average cost of the liture are XVM red: can         012         012         01	42	Average Cost of Fuel Burned per Million BTU				2.205								14.593			
7         Unit (Creat-low CU)-barrel/Gisa-mc/Muler         Barrels	64 C	Evel Kind (Cost Gas Oil or Nindear)		ĉ	ē	0.028	ē	ö	2	č	ð	č		710.0	ē	Ĉ	
38         Quantity (units) of Fuel Burned         1.681         1.3.761         2.700         866         9.686         1.3.42         11.155         2.3.37           39         Arg Heat Cruth         140,000	37	i hoi: //oal-tons/Oit-barre//Gas.mcf/Ninclear-indicate/		Barrels	Barrels		Barrais	Barrels	Barrals	Barrole	Barrale	Barrole			Barrels	Barrels	
38         Ang Valeti Chr. Lie Burnel (foul/indicate functear)         140,000 </td <td>38</td> <td>Quantity (units) of Fuel Burned</td> <td></td> <td>1.681</td> <td>13.761</td> <td></td> <td>2.700</td> <td>856</td> <td>9.686</td> <td>13 242</td> <td>11.125</td> <td>22.377</td> <td></td> <td></td> <td>4.860</td> <td>67.046</td> <td></td>	38	Quantity (units) of Fuel Burned		1.681	13.761		2.700	856	9.686	13 242	11.125	22.377			4.860	67.046	
40         Arg Cost of Fuelkunt, as Dehvid fo b during year         35.338         30.865         31.280         31.280         31.280         32.357         33.993           41         Areage Cost of Fuel kern         Beinmed         32.282         29.789         31.314         30.220         29.740         30.094           42         Areage Cost of Fuel kern         Beinmed         32.282         29.789         51.314         30.022         32.034         30.084           42         Areage Cost of Fuel kern         Beinmed         5.491         5.066         5.326         5.140         5.058         5.116         5.448         5.116           43         Average Cost of Fuel Burned ber Minnen BTU         5.405         5.056         5.326         5.140         5.056         5.116         5.448         5.116	39	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	
41         Average Cost of Fiele jer Unitationed         32.282         29.789         31.314         30.220         30.682         32.084         30.084           42         Average Cost of Fiele Burned per Million BTU         5.491         5.066         5.326         5.140         5.058         5.118         5.448         5.116           42         Average Cost of Fiele Burned per (Million BTU         5.491         5.066         5.326         5.140         5.058         5.118           42         Average Cost of Fiele Burned per (Million BTU         5.491         5.066         5.326         5.140         5.058         5.118	40	Avg Cost of Fuel/unit, as Detvd f.o.b. during year		35.338	30.895		31.280	31.280	31.280	31.280	32.357	33,993			31.858		
42 Average Cost of Fuel Burneid per Million BTU 5.491 5.066 5.326 5.140 5.056 5.148 5.116 5.448 5.116 4.3 Average Cost of Fuel Burneid per XWh Net Gen 5.118 5.418 5.116 5.116 5.118	41	Average Cost of Fuel per Unit Burned		32.282	29.789		31.314	30.220	29.740	30.092	32.034	30.084			27.165		
45 Average Lost of Fuel burnet Cen	54	Average Cost of Fuel Burned per Million BTU		5.491	5.066		5.326	5.140	5.058	5.118	5.448	5.116			4.620		
A AVANANA BTU AV KANA NA CANANANA	0 4 4	Average Cost of rue! Duilled per AWH Net Gen		17 190 11	10 OAE 47	12 024 04	10 673 61	10 521 02	AC 700 0	10 375 03	10 465 10	10 605 40		10 760 60	11 027 80	40 604 44	

FERC Form 1 Data 2010 (for UT 2011 Fossil Fuel Ethiciency Report ).xisx

1996

FERC Form	÷.,	Blundell Plant	Carbon Plant	Dave Johnston	Gadsby Plant	Hunter Unit No.	Hunter Unit No. H	lunter Unit No.	Hunter Plant	Huntington	Jim Bridger	ittle Mountain N	aughton Plant	Wyodak Plant	hermal Plants	FERC
	Kind of Plant (Internal Comb, Gas Turb, Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas - Turbine	Steam	Steam		
01 0	Type of Constr (Conventional, Outdoor, Boiler, etc)	Indoor 1984	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler 1080	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler 1974	Semi-Outdoor	Outdoor Boiler 1972	Outdoor Boiler 1963	Conventional 1978		
) <b>4</b>	Year 1 ast Unit was Installed	1984	1961	1972	1955	1978	1980	1983	1983	1977	1979	1972	1971	1978		
ŝ	Total Installed Cap (Max Gen Name Plate Ratings-MW)	26.1	188.6	816.8	251.6	418.5	269.2	446.4	1,134.1	892.8	1,518.0	16.0	707.2	289.7	5,840.9	
e	Net Peak Demand on Plant - MW (60 minutes)	24	184	807	225	400	336	421	1,245	857	1,555	16	726	338	5,889	
~ 1	Plant Hours Connected to Load	8,457	8.760	8,760	1,644	8,195	7,423	8,237	8,745	8,760	8,760	5,467	8, 760	8,552		
00	Net Continuous Plant Capability (Megawatts) Writen Nint Limited by Condenser Water	. 50	- 175		735	, 08£	- 05C	405	1 044	945	1 387	- 11	2002	268	5 463	
10	When Limited by Condenser Water	3	2		*			· ·	1			: '				
1	Average Number of Employees	17	77	213	34	87	87	87	261	182	395	9	187	66	1,471	
12	Net Generation, Exclusive of Plant Use - KWh	168,518,000	1,405,087,000	5,983,492,000	181,486,000	2,877,739,000	1,622,550,000	3,217,046,000	7,717,335,000	6,142,165,000	9,786,354,000		5,089,288,000	2,299,922,000	38,773,647,000	
13	Cost of Plant: Land and Land Rights	31,026,429	956,547	10,417,291	1,020,271	9,868,916	9,868,917	9,868,916	29,606,749	2,205,422	1,199,736	635 204 044	544,478 E0 401 908	210,526	77,188,084 501 407 162	
4 4	Structures and Improvements Equipment Costs	6, 135,077 32,608,604	10,010,664 53 358 962	33,051,602,815 768,902,191	13,399,378 55,460,540	59,667.714 189.379.503	48,869,533 127 814 526	88,049,671 357 388 134	190,601,018 674,582,163	92,733,901 296 733,901	643 262 608	3 280.554	234.825.158	251.816.132	2,514,830,813	
9	Asset Retirement Costs	100,000,000	100,000,000			200,000	0.00									
17	Total Cost	\$ 69,770,110	\$ 64,326,173	\$ 312,371,297	\$ 69,880,189	\$ 258,916,133	s 186,573,076 \$	\$ 455,306,721	\$ 900,795,930 \$	391,678,591	5 775,618,668 \$	3,485,233 \$	285,771,534	\$ 299,808,335	\$3,173,506,060	
18	Cost per KW of installed Capacity (our share)	\$ 2,673.18	\$ 341.00	\$ 382.45	\$ 277.70	\$ 618.68	\$ 693.01 3	5 1,019.95	794.27	438.71	510.95 \$	217.83	404.09	\$ 1,035.04	543.32	
500 19	Operation Supervision and Engineering	135,571	710,746	2,654,825	444,128	491,561	172,796	547,289	1,211,646	1,437,778	2,541,423	,	2,319,014	1,031,699	12,486,830 250,020,246	200
501 20	Fuel		10,049,693	39,592,819	4,326,368	28, 165, 475	16,587,719	30,415,127	/5,168,321	42,465,129	104,933,344	ł	03,347.719	579'05N'NZ	G17'076'600	inc
17	Coolarits and Water (Nucrear Prams Only)	770 030	1 060 540	7 765 254	748 370	2 238 374	- 847 509	2 205 456	5 201 429	2 520 241	5 121 727	• •	3 386 420	2 081 439	22 425 806	502
503 23	Steam From Other Sources	3.557.608	-	· · · · · · · · · · · · · · · · · · ·	,	-	-	-				ł	1		3,557,608	503
504 24	Steam Transferred (Cr)							•	4			•	,	•		504
505 25	Electric Expenses	292,165	934,879	2, 148, 411	21,713	1,147,296	436,183	1,145,432	2,728,911	2,142,412	2,128,672		1,517,228	522,694	12,437,085	505
506 26	Misc Steam (or Nuclear) Power Expenses	355,843	1,134,033	2,177,358	516,554	1, 199, 470	547,769	1,333,825	3,081,064	3,312,192	4,841,294	•	3,257,990	1,347,856	20,024,184	506
507 27	Rents	4,655	,	6,000	ł	242	85	273	600		38,604	k	1,236	,	980,16	200
BZ 80G	Allowances Maintenance Summission and Environment	- 80 656	- BRE 181	1 701 150	401 474	- 820.618	786.806	- 355 000	2 N27 959	1 962 507	2 200 929		2 968 317	1 073 434	13, 191, 596	510
551 30	Maintenance of Structures	36.549	94.103	771.331	124,149	411.716	161.469	427.107	1,000,292	790,122	1,615,571	,	482,476	208,946	5,123,539	551
512 31	Maintenance of Boiler (or reactor) Plant	308,758	2,471,311	8,913,547	865,013	2,347,267	2,699,299	2,502,436	7,549,002	7,934,369	10,976,389	•	5,974,263	2,224,450	47,217,102	512
513 32	Maintenance of Electric Plant	88,124	394,698	1,806,021	293,079	338,746	748,568	303,116	1,390,430	1,974,702	2,339,588	1	1,603,011	324,512	10,214,165	513
514 33 34	Maintenance of Misc Steam (or Nuclear) Plant Total Development	228,922	€ 18 152 373	1,813,835	428,600	\$ 38 000 100	491,705 20 879 998	981 /49 8 40 782 345	2, 321,888	2,850,661	2,240,185	1	1 100 096	5 29.656.233	\$ 519.055.595	10
58	Constant of the LANS of the LA	6 0,000,120	0.01.00	¢ 00,070,000	011/2001 3	E 0.0132	00147	20100	0.0127	0.0110	0.0147		0.0169	s 0.0129	S 0.0134	
8	Total Busbar - SAWVh	5 31.68	\$ 0.0128 \$ 12.92	\$ 10.69	\$ 43.36	\$ 13.21 \$	\$ 14.16 S	12.68	13.19 1	10.97	14.20	, .,	16.89	\$ 12.89	5 13.39	
	Fuel - S/MWh		\$ 7.15	\$ 6.62	\$ 23.64	5 2.79	\$ 10.22	9.45	9.74	6.91	5 10.72		12.45	\$ 8.71	\$ 9.28	
	Non-fuel - \$/MWh	\$ 31.68	\$ 5.77	\$ 4.07	\$ 19.52	\$ 3.42	\$ 3.94	\$ 3.22	3.45 1	\$ 4.06	5 3.48	-	4.44	\$ 418	\$ 4.10	
	Variable O&M (per RDI definition) - S/MWh	\$ 2.11	<b>s</b> 1.15	\$ 0.81	390	\$ 0.68	\$ 0.79 \$	0.64	0.69	0.81	5 0.69		0.89	S 084	5 0.82 2.70	
	Fixed O&M (KU) definition) - \$/KW installed Total O&M without Fixet	\$ 1781520	\$ 8102.680	5 24 347 841	\$ 3543.080	\$ 9843724	5 6 392 279	s 10 367 218	5 26.603.221	24 924 984	34.044.382		22.610.653	\$ 9,619,410	\$ 159,135,379	
36	Fuel Kind (Coal Gas Oil or Nuclear)		Coal	Coat	200101-212-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1	Coal	Coal	Coal	Coal	Coal	Coal		Coal	Coal	Coal	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)		Tons	Tons		Tons	Tons	Tons	Tons	Tons	Tons		Tons	Tons	Tons	
38	Quantity (units) of Fuel Burned		653,833	4,297,263	,	1,369,335	793,668	1,472,632	3,635,635	2,686,976	5,463,528		2,761,404	1,725,240	21,223,879	
36	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)		12,081	1,923		106'11	11,569	100,11	207,11	195,11	18,2330		37 31D	100.1	e///e	
0 <del>4</del> 14	Avg Cost of Fuervanit, as Deriva i of auting year Averane Cost of Finel per Linit Runned		15 258	9 120	• •	20.468	20.776	20.477	20.539	15.678	19.117		22 632	11.555		
: 64	Average Cost of Fuel Burned per Million BTU		0.632	0.576	,	0.856	0.896	0.886	0.877	0.689	1.017		1146	0.723		
43	Average Cost of Fuel Burned per KWh Net Gen		,	,	•		,		,	1			, '	·	c	
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)				Gas								Gas		MCE	
75 86	Unit (Coar-tons/Uli-barrek/Cas-mor/Nucreat-Indicate) Ouantity (units) of Fuel Burned		,		2 208 315	,	'		1	,	,		58,005		2,306,320	
33	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)		ł		1,032	,	4	'		1			1,041		1,032	
40	Avg Cost of Fuel/unit, as Deivd f o b. during year			,	1.959	•	,	ı	,	•	1		8.694			
41	Average Cost of Fuel per Unit Burned			4	1.959	,		T		ı	•		8.694			
242	Average Cost of Fuel Burned per Million B (U Average Cost of Fuel Burned her KW/h Net Gen		, 0.007	, 0.007	0 074	010	0.010	010	0.010	0.007	0.011		0.012			
98	Fuel: Kind (Coal. Gas. Oil, or Nuclear)		ō	ĨŌ	40.0	ō	NO	ĨŌ	ō	iõ	0			lio	ΙÖ	
37	Unit (Coal-tons/Oil-barrel/Gas-mc//Nuclear-indicate)		Barrels	Barrels		Barrels	Barrels	Barrels	Barrels	Barrels	Barrels			Barreis	Barrels	
38	Quantity (units) of Fuel Burned		2.204	12,441		4,204	3,062	8,008	15,274	9,929	15,876		٠	3,328	200'86 140 000	
95	Avg Heat Cont - Fuel Burned (bturindicate in nucrear)		32 641	31 690		140,000	32 166	32.166	32 166	33 234	31.396			33,335	200'01-1	
5 4	Average Cost of Fuel per Unit Burned		33,364	32.277	,	32.815	32.245	32,510	32.541	34.077	30.633			30.544		
42	Average Cost of Fuel Burned per Million BTU		5.675	5.489	1	5.581	5.484	5,529	5.534	5.795	5.210		÷	5.195		
43	Average Cost of Fuel Burned per KWh Net Gen		-	10000			02 070 77	- 10 101	24 007 00	, 00% 00	10.400.60		- 10 730 40	10,000	10 774 85	
44	Average BTU per KWh Net Generation		11,252.59	11,392.61	12,551.34	11,351.57	11,348.56	10,595,28	02.750,11	97.706,8	10,433.02		10,138,40	12,000,00	10,114.00	

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FERC Form 1 Data 2010 (for UT 2011 Fossil Fuei Efficiency Report ).xisx

FERC Form		Blundell Plant	Carbon Plant	Dave Johnston	Gadsby Plant	Hunter Unit No. H	lunter Unit No. H	unter Unit No.	Hunter Plant	Huntington	Jim Bridger	ittle Mountain N	aughton Plant	Wyodak Plant	hermal Plants	FERC
	Kind of Plant (Internal Comb. Gas ⊺urb, Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	z Steam	J. Steam	Steam	riant Steam	Steam	Gas - Turbine	Steam	Steam	10131	ACCT NO.
2	Type of Constr (Conventional, Outdoor, Boiler, etc)	Indoor	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Bailer	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Conventional		
m •	Year Originally Constructed	1984	1954	1959	1951	1978	1980	1983	1978	1974	1974	1972	1963	1978		
‡ v	Tear Last Unit Was installed Total Installed Can (May Can Nama Dista Dations 1000)	1964	2 0 0 1	2/61 7/61	1955 2 F2C	19/8	1980	1963	1983	4 000	19/91	19/2	1/81 C 702	19/8	0 000	
<b>о</b>	Net Peak Demand on Plant - MW (60 minutes)	23	183	803	0/2/2	412	315	469	1 165	918	1441	16	713	347	0,040.9 5,855	
7	Plant Hours Connected to Load	8,D47	8.714	8,760	3,607	8,342	8,610	6.281	8.760	8,704	8,760	6,718	8,760	8,551		
ac (	Net Continuous Plant Capability (Megawatts)	' 6	1	1	1	•	'		1	1		1	' :	' '		
די ת	When Not Limited by Condenser Water	57	47L	211	235	685	250	405	1,044	845	1,387	14	00/	268	5,463	
3 5	when Limited by Concenser water Average Number of Employees	17	- 12	- 213	34	- 87	, 87	- 87	- 261	- 182	395	· (C	1.87	66	1 471	
12	Net Generation, Exclusive of Plant Use - KWh	160,057,000	1,288,602,000	5,928,660,000	356,380,000	2,947,052,000	2,056,767,000	2,555,684,000	7,552,503,000	6,452,895,000	10,753,560,000	2	5,223,025,000	2,289,651,000	40,012,333,000	
33	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	29,606,749	2,205,422	1,146,361	635	458,257	210,526	77,048,486	
4 V	Structures and Improvements Equinment Costs	6,135,077 32,661,269	10.096.817 54 574 575	33,357,569 272 AND 775	13,344,556 55 805 561	59,906.358 180 764 600	56,101,560	88,151,454 381 761 003	197,159,302 708 607 776	92,955,268 210 500 301	131,995,200	204,044	55,258,763 235,546,718	47,795,340 252 475 574	595,302,006 2 582 673 057	
16	Asset Retirement Costs								0							
17	Total Cost	\$ 69,822,765	\$ 65,577,938	\$ 316,183,885	\$ 70,170,388	\$ 259,539,964 3	\$ 202,972,558 \$	479,781,373 \$	935,293,826	405,669,991	5 790,399,703	\$ 3,460,306 \$	\$ 291,263,238	\$ 300,481,440	\$3,255,323,549	
18	Cost per KW of Installed Capacity (our share)	\$ 2,675.20	\$ 347.64	\$ 387.11	\$ 278.85	\$ 620.17	5 753.93 \$	1,074.78 3	824.69	454.38	520.68	\$ 216.27	3 411.85 5	\$ 1,037.36	557.33	
500 19 501 20	Operation Supervision and Engineering	76,339	641,233 0 565 760	2,507,502	333,383 ° EEO 272	575,567 20 724 676	342,741	512,641 24 770 4E0	1,134,414	1,512,788 51 744 200	2,271,303	1	1,974,540 67 038 266	1,030,346	11,778.383 200 601 667	500
21	Coolants and Water (Nuclear Plants Only)				-	nic'+71'e7		24'12N'173	-		-	. 1		" "	,	ŝ
502 22	Steam Expenses	230,872	1,085,286	1,951,405	657,800	2,356,179	1,695,768	1.765.129	4,892,886	2,703,768	5,729,399	,	3,560,767	2,121,568	23,857,941	502
503 23	Steam From Other Sources	3,607,452		1		8	1	1	-	,	,	1	1		3,607,452	503
504 24	Steam Transferred (Cr)						-					,		-		504
506 26 506 26	mier Steam (or Nijeleer) Dower Evnencee	213,210	1 110 281	1,942,512	C87,20	1020,175,1	000'0/0	5/5/5/11/L	2,090,424 7 857 306	2, 122,001 2, 531, 080	Z,U30,133 A 585 066	1	1054,6UC,1	190,120	18,200,062	606 903
507 27	Rents	3.900	109/2011	2.209	100'010	170	118	180	396	385	(450)		1,236		7.748	507
509 28	Allowances		4		1		. '					4		,		503
510 29	Maintenance Supervision and Engineering	163,362	683,602	1,596,913	358,662	738.387	513,474	780,407	1,720,751	1,796,855	1,877,569	,	1,560,212	727,742	10,797,185	510
551 30	Maintenance of Structures	28,663	138,672	721,814	77,830	423,754	326,329	570,729	1.046,474	767,934	1,239,745	1	412,418	177,516	4,885,404	551
512 31	Maintenance of Bolier (or reactor) Plant	121,650	2,343,288	7,094,033	757,688	2,351,871	1,976,289	4,097,509	7,403,436	7,264,178	8,394,122	1	5,629,938	2,659,468	42,690,034	512
514 33	Maintenance of Misc Steam (or Nuclear) Plant	206 927	712 122	7 122 746	CDE 202	679 612	541 276	1250,02,1	1,030,124	3 105 988	2.645.883	: ,	1 908 376	456 960	a,uzu,40a 13.661.685	514
34	Total Production Expenses	\$ 5,247,705	\$ 17,687,565	\$ 62,009,163	\$ 11,982,785	\$ 39,467,609	\$ 27,687,777 \$	37,180,334 1	100,067,461	75,154,077	\$ 152,542,551		6 83, 361, 059 3	\$ 28,644,286	\$ 540,964,911	
35	Expenses per Net KWh	\$ 0.0328	\$ 0.0137	\$ 0.0105	\$ 0.0336	\$ 0.0134 3	5 0.0135 \$	0.0145	0.0132 9	0.0116	5 0.0142		0.0160	\$ 0.0125	\$ 0,0135	
	Total Busbar - S/MWh	\$ 32.79	\$ 13.73	\$ 10.46	\$ 33.62	\$ 13.39	5 13.46 \$	14.55 5	13.25	11.65	5 14.19		15.96	\$ 12.51	\$ 13.52	
	Fuel - \$/MVVh	•	5 7.44	\$ 6.93	\$ 24.02	\$ 10.09	9.85 \$	9.67 \$	6, 99, 9	8.02	5 11.38		12.05	\$ 8.70	5 9.77	
	Non-fuel - S/MVVh Variahia (78M (nar PD) riatinition) - SMWh	\$ 32.79	5 6.29 5 1.26	5 3.53 5 0.71	\$ 9.61 • • • • •	S 3.31	5 361 3 5 0 70 4	4.88	5 3.36 3 5 0 67 1	3.63	5 2.81	S -	3.91 3 0.78	S 3.81	5 3.75	
	Fixed O&M (RDI definition) - \$/kW installed	\$ 8.20	5.03	\$ 2.82	\$ 7.69	s 2.64	2.89 \$	06.0	2.69	2.90	2 25	i0//i0#	3.13.1	s 3.05	3 00	
	Total O&M without Fuel	\$ 1.640,253	\$ 8,101,796	\$ 20,920,069	\$ 3,423,562	\$ 9,743,033 3	\$ 7,423,306 \$	12,460,175 5	s 25,358,344 %	23,409,789	5 30,186,886 <b>3</b>	3	5 20,422,703	\$ 8,734,030	\$ 150,073,054	
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)		Coal	Coal		Coal	Coat	Coal	Coal	Coal	Coal		Coal	Coal	Coal	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)		tons	tons		Tons	Tons	tet con n	tons	tons tons	tons concernes		tons	tons	Tons 24 555 454	
90 90	Quantity (units) or rulei surned Avo Heat Cont - Fuel Burned (bhuilindicate if nuclear)		11 291	4,190,252 7 937		1, 308,335	10 703	1,132,777	3,441,456	2,914,093	0,065,679 10,529		2127,180,2	1,690,697 8,052	104/020/17	
40	Avg Cost of Fuel/unit, as Devd f.o.b. during year		15.071	9.038		20.846	20.846	20.846	20.846	17.075	19.781		21.094	11.379		
41	Average Cost of Fuel per Unit Burned		15.805	9.719		21.541	21.551	21.564	21.551	17.643	20.032		23.097	11.686		
C1 0	Average Cost of Fuel Burned per Million BTU		001.0	0.431		1.005	1.007	1.007	1.007	0.868	0.951		1.109	8/9/0		
3 F	Fuel: Kind (Coal, Gas, Oil, or Nuclear)			•	Gas		,		,	,			Gas	ı	Gas	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)				MCF								MCF		MCF	
88	Quantity (units) of Fuel Burned				3,784,798								76,841		3,861,639	
80 140	Ave Cost of Fuel Burned (prunnicate in ruclear) Ave Cost of Fuelkingt as Delvel f o hi during year				1,U44								1,0444 B.310		1,044	
41	Average Cost of Fuel per Unit Burned				2.261								8,310			
42	Average Cost of Fuel Burned per Million BTU				2.166								7.960			
43	Average Cost of Fuel Burned per KWh Net Gen				0.025	1			i	i			0.012	i	i	
9£ ;	Fuel Kind (Coal, Gas, Oil, or Nuclear)		ō	ō		ō	ō	ō	ō	ō	ō			ō	ō -	
ic er	Unit (Coar-Cons/Oir-Darrei/Gas-mor/Nuclear-Indicate) Duantity (rimite) of Fluet Rumay		3 350	13 224		2 711	1 217	tarreis	17 150	10 ZOG	18 301			2 920	67 745	
36	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	
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year		25.845	22.728		24.116	24.116	24.116	24.116	24 371	16.163			25.339		
41	Average Cost of Fuel per Unit Burned		26.479	23.196		37.679	32.339	22.169	25.340	25.288	23.660			28.191		
43	Average Cost of Fuel Burned per Million B t U Averane Cost of Fuel Burned per KWh Net Gen		4.003	3.940 -		0.400	0,000	3.110	4.310		4.024			101.1		
44	Average BTU per KWh Net Generation		10,535,49	11,248.59	11,087.40	9,945.80	9,850.56	9,518.40	9,784.46	9,188.65	11,927.64	-	10,769.26	11,941.02	10,728.20	
		A REAL PROPERTY OF A REAL PROPER					And a second sec								And in the second se	

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FERC Form 1 Data 2010 (for UT 2011 Fossil Fuel Efficiency Report ).XIsx

ERC Form 1		Blundell Plant	Carbon Plant	Dave Johnston	Gadsby Plant	Hunter Unit No.	Hunter Unit No. 1	funter Unit No.	Hunter Plant	Huntington	Jim Bridger L	ittle Mountain N	aughton Plant	Wyodak Piant	hermal Plants	FERC
-	Kind of Plant (Internal Comb, Gas Turb, Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	- Steam	Steam	Steam	Steam	Steam	Gas - Turbine	Steam	Steam	10101	
CN 177	Type of Constr (Conventional, Outdoor, Boiler, etc) Year Originally Constructed	Indoor 1984	Outdoor Boiler	Semi-Outdoor	Outdoor Boller	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Bailer	Semi-Outdoor 1074	Outdoor Boiler	Outdoor Boiler	Conventional 1078		
4	Year Last Unit was installed	1984	1957	1972	1955	1978	1980	1983	1983	1977	1979	1972	1971	1978		
5	Total Installed Cap (Max Gen Name Plate Ratings-MW)	26.1	188.6	816.8	251.6	418.5	269.2	446.4	1,134.1	892.8	1,518.0	16.0	707.2	289.7	5,840.9	
91	Net Peak Demand on Plant - MW (60 minutes)	20	188	786	218	425	270	470	1,330	922	1,435	16	746	288	5,784	
~ 0	Plant Hours Connected to Load	8,576	8,628	8,760	4,929	7,294	8,279	7,551	8,760	8,743	8,760	4,488	8,760	8,328		
00	When Not Limited by Condenser Water	23	175	- 222	235	389	259	460	1 108	595	1 387	. 14	7007	268	5 577	
10	When Limited by Condenser Water									'	1	1				
11	Average Number of Employees	17	11	213	ž	87	87	87	261	182	395	9	187	66	1,471	
5	Net Generation, Exclusive of Plant Use - KWh	155,529,000	1,220,255,000	5,233,793,000	363,093,000	2,723,760,000	1,995,925,000	3,311,109,000	8,030,794,000	7,131,471,000	10,605,981,000		4,703,429,000	2,260,895,000	19,705,240,000	
51	Cost of Plant: Land and Land Rights Structures and Immonoments	31,026,429 6 146 555	956,546	10,417,291	1,020,271	9,868,916 59,456,595	9,868,916 47 664 717	9,868,916	29,606,749	2,362,219	1,146,361	635	458,248 66 246 270	210,526	77,205,274	
1 £	enductores and improvements Equipment Costs	0, 140,000 32,731,843	60.741.030	45,003,550 314,425,428	56.029.499	201.940.916	136.024.852	91, 149,801 386 525,233	724 491 000	315.483.485	132,009,7376 653,398,776	3 254 927	253 150 338	4/,801,13/ 252 847,894	2.666.554.221	
16	Asset Retirement Costs															
17	Total Cost	\$ 69,904,827	\$ 71,878,044	\$ 370,526,255	\$ 70,676,352	\$ 270,276,417	\$ 193,555,485	\$ 487,543,950	\$ 951,375,852 \$	411,172,697	5 786,614,934 \$	3,459,606	308,928,364	s 300,859,557	3,345,396,488	
18	Cost per KW of Installed Capacity (our share)	\$ 2,678.35	\$ 381.03	\$ 453.65	\$ 280.86	\$ 645.82	\$ 718.95	5 1,092.17	\$ 838.87	460.54	5 518.19 \$	216.23	436.83	5 1,038.66	572.75	
501 20	Uperation Supervision and Engineering	996'CN7	1,933,801	3,796,217	747 240	74 305 445	165,271	772,351	2,317,053	2,218,245	112 624 400	ı	2,739,124 50 781 450	- 053 CEO	14,51/,/52	200
21 20	Coolants and Water (Nuclear Plants Only)	, ,	9,20,102,0	20.141,121	010,4441,11	= =			000'/08'10	44,572,322		• •	30, / B I , 403	neo'7e9'17	500'0/7'Stc	inc
502 22	Steam Expenses	101,262	41.470	999.644	2.902	1.546.465	438.881	1.062.614	3 047,960	1.121.984	4.731.412		300.844	870.903	11.818.381	502
503 23	Steam From Other Sources	3,696,102	,				,	1			1	,		, ,	3,696,102	503
504 24	Steam Transferred (Cr)	1	•	4	ŀ	,	1	,		1	1	,	1	1	ł	504
505 25 Ene 26	Electric Expenses	-	-					, c.L.	1 01 010 07	1 00 000 01		•				505
507 27	MISC Stearti (or INUCREAR) POWER EXPENSES Rents	1,130,021,1	4,032,202 645	12,788,571	2,802,020	0,020,499 15,171	0,021,934 15,171	202.114.0	19,009,160 74,513	10,488,004	14,653,345	ŧ	0,/92,//D 2 311	110,261,5	52,096,001 336,561	202 202
509 28	Allowances		2	-	, uto	-		-	0-0-0+		-				100,000	200
510 29	Maintenance Supervision and Engineering		'	•	1	•	f	,	4		,	1	1	•		510
551 30	Maintenance of Structures	,	,				,	,	'		•	ı			,	551
512 31	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	1.965.677	3,719,557	5,375,988	·	4,693,917	1,834,801	26,727,277	512
513 32 514 33	Maintenance of Ejectric Plant Maintenance of Mice Steam for Nuclear) Diant	118,182	1,558,230 59,601	1,613,689 7,690,647	204,877	1,178,296 060 006	93,195 FOR 000	455,842 604 noo	1,727,333	990,995 1 1 77 666	1,703,452 6 002 000		1,527,848	399,871	9,844,477	513
34	Total Production Expenses	\$ 5,412,526	\$ 18,664,439	\$ 57,398,368	\$ 15,882,926	\$ 35,605,893	\$ 20.905,863	5 36.468.411	\$ 92,980,165	69.098.362	5 147,988,500 \$		75,157,409	29,840,165	512,422,862	<u>t</u>
35	Expenses per Net KWh	\$ 0.0348	\$ 0.0153	\$ 0.0110	\$ 0.0437	\$ 0.0131	\$ 0.0105	5 0.0110	\$ 0.0116 \$	2600.0	5 0.0140		0.0160	5 0.0132	0.0129	
	Total Busbar - S/MWh	\$ 34.80	\$ 15.30	\$ 10.97	\$ 43.74	\$ 13.07	\$ 10.47	11.01	11.58	69.6	13.95	1 47)	15.98	13.20	12.91	
	Fuel - \$/MWh	, 5	\$ 6.72	\$ 5.49	\$ 32.35	\$ 7.84	\$ 7.81	\$ 7.55	\$ 7.72	6.22	5 10.71	64	12.50	5 9.67	8.80	
	Non-fuel - S/MWh	\$ 34.80	\$ 8.57	S 5.47	\$ 11.40	\$ 5.23	\$ 2.66	\$ 3.46	5 3.86	3.47	5 3.24 \$	,	3.48	3.53	4,11	
	Eived O&M (per KLJ demition) - 3/WVN Eived O&M (PDI definition) - 3/WY installed	5 2.47 2.82	8 1.C.	S 1.09 S 1.09	5 5738 9 728	S. 1105	5 0.53 6 7 2 3 2	608 24 2	2 0 1/1 2 0 0 1/1	90'0	000 990		0.70	5 0.0	3 20	
	Total O&M without Fuel	\$ 1,716,424	\$ 10,463,411	\$ 28,651,241	\$ 4,138,616	\$ 14,249,478	\$ 5,311,453	\$ 11.461.375	\$ 31,022,305	24,725,440	34,367,002 \$		16.375.940	5 7,987,515	163,143,997	
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	The second se	Coal	Coal		Coal	Coal	Coal	Coal	Coal	Coal		Coal	Coal	Coal	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-Indicate)		Tons	Tons		Tons	Tons	Tons	Tons	Tons	Tons		Tons	Tons	Tons	
89.59	Quantity (units) of Fuel Burned		552,590	3,705,527		1,229,578	903,720	1,439.073	3,572,372	2,956,251	6,083,607		2.509,133	1.663,390	21.042,869	
8° 4	Avg near John - Fuel burneo (pruringicate it nuclear) Avg Cost of Fuel/inpit as Deivol ( o h. divring year		14 177	5/8'/ 5/2'/		11,901 16,817	11,828	100,11	11,780	11,983	672,8		33 053	8,024 11 911	2012	
41	Average Cost of Fuel per Unit Burned		14.615	7.423		17.261	17.196	17.183	17.213	14.937	18.584		23.169	13.054		
42	Average Cost of Fuel Burned per Million BTU		0.602	0.465		0.725	0.727	0.737	0.730	0.623	1.001		1.163	0.814		
43	Average Cost of Fuel Burned per KWh Net Gen			ı	(		1	2		1	1		, (	1	č	
2°	ruer Mila (Coat, Gas, Oil, Ur Nuclear) 1 hit (Coal-tone/Oil-berrel/Cas-mrf/Min/sar-indicate)				Sea W								SPO		SED N	
38	Quantity (units) of Fuel Burned				4,501,029		,	,					168,304		4,669,333	
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)				1,038	•	,	1					1,035		1,038	
4;	Avg Cost of Fuel/unit, as Delvd f o b. during year												3.850			
42	Average Cost of Fuel Per Unit Burned Average Cost of Fuel Burned ner Million RTEE				2.609	,	1	ŀ					3,850			
43	Average Cost of Fuel Burned per KWh Net Gen				0.032	0.008	0.008	0.008					0.013			
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear).		ō	īō		jio	īō	ō	Ð	ΪŌ	ö			N	õ	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)		Barrel	Barrel		Barrel	Barrei	Barrel	Barrel	Barrel	Barrel			Barrel	Barrels	
2 G C	Quantity (units) or Fuel Burned Ave Heat Cent - Fuel Burned (htti/indicate if nuclear)		4,687 140 000	10,281		5,084 140 000	2,050	10,110 000 040	17,247	8,408 140 000	23,732			000 071	140 000	
94	Avg Cost of Fuel/unit, as Delvd for b during year		26.685	24,664		25,972	26.378	27.574	26.960	25.599	23.627			27.513	100.01	
41	Average Cost of Fuel per Unit Burned		26.685	24,664		25.972	26.378	27.574	26.960	25.599	23.627			27.513		
42	Average Cost of Fuel Burned per Million BTU		4.538	4.195		4.417	4.486	4.690	4,585	4.354	4.018			4.679		
44 44	Average Cost of Fuel Burned per KVVh Net Gen Averana RTII ner KWh Net Generation		11 104 34	11 300 82	10 867 41	10 755 83	10 717 06	0.000 10.15/1.16	- 10 AGR 26	0 041 70	10 658 05		10 669 07	11 ROU 01	10 645 36	
ţ	AVERAGE DIO PER LAWRING CONCIDENT	•	11,134.01	11,303.04	12,000,21	00'001'NI	10,117,01	10, 104, 10	10,430.20	3,341.10	10,000.04		10,003.01	1 1,020,11	20.010.01	

FERC Form 1 Data 2010 (for UT 2011 Fossil Fuel Efficiency Report ).xisx

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FERC Form		Biundell Plant	Carbon Plant	Dave Johnston	Gadsby Plant	Hunter Unit No.	Hunter Unit No. H	unter Unit No.	Hunter Plant	Huntington	Jim Bridger	ittle Mountain N	aughton Plant	Wyodak Plant	hermal Plants	FERC
1	Kind of Plant (Internal Comb. Gas Turb, Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	<ul> <li>Steam</li> </ul>	Steam	Steam	Steam	Steam	Gas - Turbine	Steam	Steam	10101	
2	Type of Constr (Conventional, Outdoor, Boiler, etc)	Indoor	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Bailer	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boller	Semi-Outdoor	Outdoor Bailer	Outdoor Bailer	Conventional		
m	Year Originally Constructed	1984	1954	1959	1951	1978	1980	1983	1978	1974	1974	1972	1963	1978		
শ	Year Last Unit was Installed	1984	1957	1972	1955	1978	1980	1983	1983	1977	1979	1972	1971	1978		
<u>م</u>	I otal Installed Cap (Max Gen Name Plate Katings-MW)	1.97	188.6	816.8	251.6	443.0	285.0	495.6	1,223.5	1966	0,1441,0	16.0	10/.2	7.882	6,056,5	
0 1	Net reak Demand on Flant - MVV (b0 minutes)	07	190	518 277 0 '	177.	114	197	404	1,304	606 705	1,436		11/	0.97	791'C	
~ 0	Net Continuous Contrected to Load Net Continuous Plant Canability (Manawatte)	740'0	0'10#	0,111	716'1	102.7	001.0	0,120	0'/04	- 07'0	- 10 <del>1</del>	•	0'110	C70'J		
0	When Not Limited by Condenser Water	53	175	762	235	403	259	460	1.122	895	1,413	14	700	268	5,607	
10	When Limited by Condenser Water	1	*				ĩ	1	4	1	1	1	,	4	•	
E	Average Number of Employees	12	72	181	35	76	76	75	227	165	350	7	159	76	1,284	
12	Net Generation, Exclusive of Plant Use - KWh	151,736,000	1,372,236,000	5,667,267,000	718,120,000	2,722,089 000	1,918,169,000	3,430,372,000	8,070,630,000	7,053,195,000	0,776,247,000		5,368,410,000	2,135,036,000	1,312,877,000	
Ω.;	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	29,606,749	2,364,398	1,146,361	635	458,248	210,526	77,207,453	
4 ¥	Structures and improvements Enuinment Crists	1,146,757 37,645,637	FL 815 522	316 781 384	13,403,934 53 622 212	59,900,532 202 052 812	49, 101,004 138 532 740	387 037 045	19/.339,824 703 518 407	33,700,731 310 328 895	6/4/2/1/261 662/601/365	2 254 027	250.052.091	47,801,109 253 238 495	2 670 909 020	
9	Asset Retirement Costs	100,000,000		100	7) 7'770'00	310,300,303	AL	ALA, 400, 400		200.040.012		140.004.0				
17	Total Cost	\$ 69,868,818	\$ 76.144.262	\$ 372 972 823	\$ 68.046.417	\$ 271,888,260	\$ 197,563,320 \$	481.013.489 \$	950.465.070 \$	406.394.024 \$	795,920,201 \$	3.459.606 \$	306.229.475 \$	\$ 301.250.130	3.350.750.825	
18	Cost ner KW of Installed Canacity (our share)	S 267697	S 403.65	\$ 456.64	\$ 270.41	\$ 613.78	S 693.30 S	970.63 \$	776.84 \$	408.03 \$	516 50 3	216.23 \$	433.02 \$	1 040 01	553 25	
500 19	Operation Supervision and Engineering	220,740	1,558,985	3,635,082	415,875	(39.757)	(39.714)	(39,714)	(119,185)	1,125,694	2,513,551	,	1,424,388	1,241,387	12,016,521	500
501 20	Fuei	•	9,089,823	30, 161, 510	35,661,055	19,713,495	14,302,133	25,240,417	59,256,046	45,525,425	118,240,371	95,969	64,675,128	20,381,980	383,087,306	501
21	Coolants and Water (Nuclear Plants Only)			•		•	3		•	*	1,855,148		•		1,855,148	
502 22	Stearn Expenses	139,920	127,095	1,020,850	'	1,527,200	398,506	1.021,748	2,947,454	1,571,532	2	4	2,832,367	94,684	8,733,902	502
503 23	Steam From Other Sources	3,660,711		•	ŀ	•	,	•	•	4	•		•		3,660,711	203
504 24 605 75	Steam Iransferred (Ur) Elaotric Evnancias		F I		•	ř				•					• •	505
506 26	Misc Steam (or Nuclear) Power Expenses	720.145	2 935 247	7 436 300	2 083 115	774 637	766.117	895 706	2 436 461	9.284.631	14.052.911		7.535.889	2.484,162	48.968.855	506
507 27	Rents		2,133	(13.224)	,	168	168	168	504	86.716	13	,		•	76,142	507
509 28	Allowances	,	,		,			,				,	,			509
510 29	Maintenance Supervision and Engineering	1			ĸ	ı	,		ı		•	•	,	•		510
551 30	Maintenance of Structures		'	'	,				•	,	3	1	,		4	551
512 31	Maintenance of Boiler (or reactor) Plant	7,268	2.739.910	4,869,031	971,664	7,205,175	3,753,102	7,426,324	18,384,601	4,647,948	6,331,620	•	3,348.072	3,347,297	44,647,411	512
513 32	Maintenance of Electric Plant	42,039	1,343,814	1,294,272	1,093,920	495,521	200,457	406,865	1,102,843	1,084,300	1.399,120	,	497,837	1,727,806	9,585,951	513
514 33	Maintenance of Misc Steam (or Nuclear) Plant	302,704	1,009,421	6,276,128	1,093,520	122,975	22,933	131,811	277,718	2,698,665	6,451,932		3,602,613	1,139,998	23,453,100	514
秀:	I otal Production Expenses	\$ 0,093,527	18,806,42/	\$ 24'0'B'848	\$ 41,319,549	\$ 29,/99,414	2 19,403,/02 3	\$2,083,322	64,280,442	116,420,00	2 000 444 DCL	C ROR CR	02,910,284	410/10 4	140,000,050	
35	Expenses per Net KWh	\$ 0.0336	\$ 0.0137	5 0.0096	\$ 0.0575	\$ 0.0109	\$ 0.0101 \$	0.0102 \$	0.0104 \$	0.0094	0.0140	99 (	0.0156 5	0.0145	0510.0	
	Total Busbar - S/MVVN	4 33.5/	5 13.70	996 8 8	5 57.54 5 40 57	4 10.95 10.95	21.01 2	10.23 5	10.44 \$		14.00	<i>я</i> 6	20.02	14:00	12.98	
	FUEL - 2/MVVN		5 0.07 e	75'0 4	49,00 9 49,00	47.1 A	4 047 4 997 0	4 45./ 60.0	9 45.7 9 67 0	04.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0	3 03 5	<i>в</i> 4	20 2 C		9.21	
	Variable O&M (cer RD) definition) - SMWh	5 180	String 143	s 0.87	s 158	Sedminute 12 14 14	5 023 3	2.01 2	0.0.5	0.58	0.61		0.72	5. Sec. 1. 00	0.74	
	Fixed O&M (RDI definition) - \$/kW installed	\$ 7.55	\$ 5.66	\$ 3.46	<b>\$</b> 6.30	\$ 2.96	\$ 2.13 \$	2.30 \$	2.48 \$	2.33	2.42	#DIV/0.	2.87 \$	3.99	2.96	
	Total O&M without Fuel	\$ 1,432,816	\$ 9,716,604	\$ 24,518,439	\$ 5,658,494	\$ 10,085,919	\$ 5,101,569 \$	9,842,908 \$	25,030,396 \$	20,499,486	32,604,295 3	5	19,241,166 \$	\$ 10,635,334	152,997,741	
. 36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)		Coal	Coal		Coal	Coal	Coal	Coal	Coal	Coal		Coal	Coal	Coal	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)		Tons	Tons		Tons	Tons	Tons	Tons	Tons	Tons		Tons	Tons	Tons	
88.6	Quantity (units) of Fuel Burned		630,164	3,864,082	•	1,189,403	860,448	1,525,118	3,574,969	3,028,902	6.021,643 0.767		2,828,964	791,770,1 2010,0	0/9'67'6'L7	
n Cr	Avg meat yont - Fuel burned (pturinotcate it nuclear) Avn Cost of Fuelkinit, as Delvid fig bi during vaar		15,050	2,230	,	15.137	16,031	16,540	16.54D	14,340	3,202		3,090 21 265	12 566	0.000 °C	
4	Average Cost of Fuel per Unit Burned		14.346	7.656		16.411	16.506	16.309	16,390	14.895	19.498		22.026	12.820		
42	Average Cost of Fuel Burned per Million BTU		0.581	0.465		0.676	0.686	0.686	0.683	0.625	1.053		1.114	0.796		
43	Average Cost of Fuel Burned per KWh Net Gen		,	,	. '		,	,	ı	1	,		, č	ı	Ċ	
86	Fuel: Kind (Coat, Gas, Oll, of Nuclear) This (Coat there?)! hereol/Coar mo/Musicoar indicate/				Gas								29S		MOF	
6	Out (Out-total-total endage: not and endage (induced)		,		REA 130			,					596 148	c	9 460 287	
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)		4	'	1,049	ţ	1	,	4	,	1		1,044	0	1,049	
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year		,	,		5				1	1		,	1		
41	Average Cost of Fuel per Unit Burned		t	4	4.023	4	,	,		,			3.782			
42	Average Cost of Fuel Burned per Million BTU		' '		3,835					1000			3.622			
4 C	Average Cost of Fuel Burneo per KWN Net Gen Even Kind (Cost Cost Cut or Musicon)		/nn/o	enn:n	nen'n	/00/0	POD'D	100.0	100170	100.0	i č		N IC	200	ē	
37	ruer Mire (Coar, Gas, Ori, Ur Mucrear) Unit (Coal-tons/Oil-barret/Gas-mof/Muclear-indicate)		Barrel	Barrel		Barrel	Barrel	Barrel	Barrel	Barrel	Barrel		Barrel	Barrel	Barrels	
8	Quantity (units) of Fuel Burned		1.335	15.154	,	4,939	2.423	9.215	16.576	10.736	23.062		2.900	4,696	74,460	
39	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	
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year		37.102	38.066	,	39.428	41.079	39.892	39.927	38.217	35.977		38.008	34.688		
41	Average Cost of Fuel per Unit Burned		37.102	38.066		39.428	41.079	39.892	39.927	38.276	35.977		38.008	34.688		
247 2 C K	Average Cost of Fuel Burned per Million BTU Average Post of Eucl Burned and Milh Not Con		6.310	6.4/4	,	e./0e	0.986	b. / 64	6.790	010.0	0.114		D.404	- 1989 -		
34	Average Cost of Lust public yes INVITIAN Cont Average BTU per KWh Net Generation	,	11.350.40	11 249.46	12 948 37	10.617.07	10.801.11	10.581.98	10.645.78	10.237.28	10.363.58		10.542.48	11,908.96	10,661.45	
ŗ		-	·····	× '>L*'1 -	· · · · · · · · · · · · · · · · · · ·			~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~				and the second se				

FERC Form 1 Data 2010 (for UT 2011 Fossil Fuel Efficiency Report ).xisx

FERC Form 1		Blundell Plant	Carbon Plant	Dave Johnston	Gadsby Plant	Hunter Unit No. F	Hunter Unit No. H	unter Unit No.	Hunter Plant	Huntington	Jim Bridger	ittle Mountain N	aughton Plant	Wyodak Plant	hermal Plants	FERC
-	Kind of Plant (Internal Comb, Gas Turb, Nuclear	Steam - Geo	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Steam	Gas Turbine	Steam	Steam	1014	
2	Type of Constr (Conventional, Outdoor, Boiler, etc)	Indoor	Outdoor Boiler	Semi-Outdoor	Outdoor	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Conventional		
e	Year Originally Constructed	1984	1954	1959	1951	1978	1980	1963	1978	1974	1974	1972	1963	1978		
4	Year Last Unit was Installed	1984	1957	1972	1955	1978	1980	1983	1983	1977	1979	1972	1971	1978		
ŝ	Total Installed Cap (Max Gen Name Plate Ratings-MW)	26.0	188.6	816.7	251.6	472.5	472.5	495.5	1,440.5	0.996	2,311.2	16.0	707.2	362.0	7,115.8	
ę	Net Peak Demand on Plant - MVV (60 minutes)	25	181	778	224	407	267	462	1,307	898	1.430	16	724	283	5,695	
2	Plant Hours Connected to Load	7,966	8,742	8,760	8,239	5,430	7,831	7,629	8,699	8,523	8,757	2,419	8,760	8,362		
w 1	Net Continuous Plant Capability (Megawatts)		•			•	•			'	,	,		,		
on <sup>1</sup>	When Not Limited by Condenser Water	23	175	762	235	430	430	460	1,320	895	2,120	14	700	335	6,579	
10	When Limited by Condenser Water	' 0 T	- 06	- 000	- 30	' F	- 27	' F	- 000			• 6	' 5	' r		
	Not Generation Evolution of Dlant Hea - KMh	152 742 DDD	1 372 715 000	5 633 776 000	000 450 000	1 801 376 000	1 005 104 000	2 722 066 000	010 575 000	- 000 000 FPC 9	000 100 007 01	000 000 10	E 240 607 000	7 764 847 000	170 100 100 001 00	
i E	Cost of Plant: Land and Land Rights	31 026 429	956 546	10 417 291	1 020 271	9.848.778	9 848 778	0,200,000,000 9 848 778	29 546 333	2 405 337	1 146 361	21,300,000	458 748	210 526	77 187 978	
14	Structures and Improvements	6,147,415	10,526,349	47,008,149	13,415,332	59, 991, 962	49, 197, 168	88,271,615	197,460,746	94,218,124	132,302,948	204,044	55,997,239	48,034,185	605,314,530	
15	Equipment Costs	33,234,489	65,600,601	324,474,185	53,803,281	208,945,987	138,383,936	378,066,384	725,396,306	322,667,378	667,812,545	3,993,905	253,228,898	248,089,104	2,698,300,693	
16	Asset Retirement Costs															
11	Total Cost	\$ 70,408,333	\$ 77,083,496	\$ 381,899,625	\$ 68,238,884	\$ 278,786,727	\$ 197,429,882 \$	476,186,777	952,403,385 \$	419,290,839	801,261,854 \$	4,198,584 3	309,684,385	296,333,815	53,380,803,201	
18	Cost per KW of Installed Capacity (our share)	\$ 2,708.01	\$ 408.71	\$ 467.61	\$ 271.22	\$ 590.02	\$ 417.84 \$	961.02	66116 \$	420.97	346.69 \$	262.41	437.90 \$	818.60	6 475.11	
500 19	Operation Supervision and Engineering	34,417	259,931	984,092	21,326,984	(18,085)	(18,085)	(18,085)	(54,256)	105,967	845,388	1	284,671	253,867	24,041,062	200
N7 100	Pues Contrasts and Mater Alivelants Diants Onlink	•	G14'897'S	77°C'N/C'SC	124,988,431	585,107,11	16,121,002	30,497,460	DD, 320, 73U	45,854,963	501,702,711	1,886,021	51,855,783	19,304,310	426,343,339	LAG
1 7 22	CUDIDING AND VALUE (MUCHERI FIBING UNIY)	- 10 2 3 3 3 0 V	10 645	- are toc	. 20	- 01C UD2	- 005 YUE	- 000	- 100 001		- 000 0011		-	- 0.75	- 1004 -	502
503 23	Steam From Other Sources	3 698 736	n+n-n	- -	100	047.801	001,400	1,000,000,1	166'001'7	810'HOC	(+,020,024)	•	2023,830		3, 129, 310	202
504 24	Steam Transferred (Cr)		,	,											-	202
505 25	Electric Expenses		,	,		134 952	98 707	98 7U7	330 366		166 139	407 760			906 265	505
506 26	Misc Steam (or Nuclear) Power Expenses	1,015,406	4,350,207	11,366,394	3,146,605	4,510,852	2.070.572	4,639,208	11.220.632	9.299.028	9.253.007		9.522.781	3.019.118	62.193.178	506
507 27	Rents	11,700	15,150	326	3,447	276	176	2,738	3,189	77,980	174,264	•	(1,644)	•	284,413	507
509 28	Allowances	5	•	1		•	,	•	•					•	•	505
510 29	Maintenance Supervision and Engineering				•		•	1			5	r		12,017	12,017	510
551 30	Maintenance of Structures	102,559	155,043	717,475	51,650	567,423	497,721	550,517	1,605,662	653,259	5,453,726	•	637,326	298,405	9,675,104	551
512 31	Maintenance of Boiler (or reactor) Plant	284,028	1,731,574	8,824,776	834,730	4,531,094	3,764,109	9,407,727	17.702,929	10.237,738	13,759,240		5,146,383	3,566,145	62,087,544	512
513 32	Maintenance of Electric Plant	731,568	516,174	2, 194, 480	1,244,867	112,219	1,196,241	1,456,000	2,764,460	5,570,761	3,110,095	÷	968.418	380,358	17,481,181	513
514 33	Maintenance of Misc Steam (or Nuclear) Plant	256,908	1,204,483	3,291,956	528,219	61,060	116,973	134,024	312,056	2,724,202	4,528,019	-	2,430,947	1,744,037	17,020,828	514
A.	Total Production Expenses	\$ 6,131,992	\$ 17,540,682	\$ 67,151,399	\$ 96,125,797	\$ 28,386,622	\$ 26,242,784	47,768,363	102,397,765 \$	74,888,517	\$ 152,800,387 \$	2,293,781	79,468,621	5 28,674,232	627,473,177	
35	Expenses per Net KWh	\$ 0.0401	\$ 0.0128	\$ 0.0119	\$ 0.0973	\$ 0.0158	\$ 0.0138	0.0148	0.0148 \$	0.0120	0.0146	67	0.0149 5	0.0127	0.0159	
	Total Busbar - S/MWh	5 40.15 5	s 12.78	5 11.92 5 71.92	\$ 97.35 e 27.35	5 15.76	5 13.77	14.77	14.76	12.00	14.60	- - - -	14.85	12.73	15.91	
	FLICE - SUMVYIT	- C	2.0 6.11	20.7	007.000 107.000	9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	~	9755 9755				19.90 0	10.61	0.00 1	10.61	
	Variable O&M (ther RDI definition) - SAWh	s 317	-001 S	5 DB 4 90	5 550 5	07.0 07.1	5 4-20 5 5 0 85 5		2 70 2 70	0.04	0.40 0	2 22 C		0.83	100	
	Fixed O&M (RDI definition) - S/MWh	\$ 12.76	\$ 481	s 392	21.99	5 474	341 5	2 2 2 2	416.5	3.75	2 27 2	10.20 5	3.23	3.31	4 08	
	Total O&M without Fuel	\$ 2,433,256	\$ 8,251,207	\$ 27,580,877	\$ 27,137,366	\$ 10,679,039	\$ 8,121,122 \$	17,270,877	36,071,035 \$	29,033,554	5 35,593,284 \$	407,760	21,612,838	5 9,309,922	\$ 201,129,838	
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)		Coal	Coal		Coal	Coal	Coal	Coal	Coaf	Coal		Coal	Coal	Coal	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)		Tons	Tons		Tons	Fons	Tons	Tons	Tons	Tons		Tons	Tons	Tons	
38	Quantity (units) of Fuel Burned		623,905	3,811,627		794,683	836,722	1,442,935	3,074,339	2,668,054	5,909,654		2,853,666	1,690,683	20,631,929	
99	Avg Heat Cont - Fuel Burned (btu/indicate if huclear)		12,226	8,247		12,006	11,910	11,835	11,903	12,094	9,267		9,897	8,072	9,915	
	AND COST OF FURNING AS LOND LOUD. DURING YEAR		14,0/5	8.000		20.707	201.02	20.400	10/ 22	16.603	676.8L		10.503	177.11		
42	Average Cost of Fuel Burned per Million BTU		0.604	0.623		0.915	0.900	0.883	0 895	0.695	1 060		1 018	0.703		
43	Average Cost of Fuel Burned per KWh Net Gen		0.007	0.007		0.010	0.010	0.009	0.010	0.007	0.011		0.011	0.009		
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)				Gas							Gas			Gas	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)				MCF							MCF			MCF	
89 F	Quantity (units) of Fuel Burned				11,514,747							568,820			12,083,567	
6 4 4	Ave freet contrained burned (outminicate it indicest) Ave freet of Fueldinit, as Delvet for birding vear				con':							con'i			con'i	
41	Average Cost of Fuel per Unit Burned				5,991							3 316				
42	Average Cost of Fuel Burned per Million BTU				5.690							3.149				
43	Average Cost of Fuel Burned per KWh Net Gen				0.070							0.059				
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)		lio	ΡŪ		lio	ō	ō	Ō	ĨŌ	ĪŌ		Ю	ō	, IO	
/E	Unit (Coal-tons/Oil-barrel/Gas-mc//Nuclear-indicate)		Barrel	Barre		Barrel	Barrel	Barrel	Barrel	Barrel	Barrel		Barrel	Barrel	Barrels	
20	Quantity (units) of Fuel Burned		2728'L	8,944		5,082 1 40 000	4,405	679'/	18,117	23,213	26,049		3,5,50	4,382	90,853	
	Avg meat Cont - Fuel putitieu (pturingicate it indicear) Avg Cost of Fuelvinit, as Delvid for bi during year		41 597	45,371		000,041	140,000	140,000	140,000	140,000	140,000		140,000	41 546	140,000	
41	Average Cost of Fuel per Unit Burned		41.597	45.371		43.393	43.393	43.393	43.393	42.183	44.273		44.491	41,546		
42	Average Cost of Fuel Burned per Million BTU		7.074	7.716		7.212	7.181	7.629	7.380	7.174	7.529		7.567	7.066		
43	Average Cost of Fuel Burned per KWh Net Gen			-		and the second	-		5		,		÷			
44	Average BTU per KWh Net Generation	×	11, 121, 35	11,168.73	12,279.02	10,612,83	10,474.85	10,577.96	10,561.70	10,360.83	10,477.64	18,727.68	10,567.78	12,132,49	10,712.52	

FERC Form 1 Data 2010 (for UT 2011 Fossil Fuel Efficiency Report ).xisx

2001

FERC Form		Blundell Plant	Carbon Plant <sup>E</sup>	Dave Johnston	Gadsby Plant	Gadsby F	lumter Unit No. H	lunter Unit No. H	funter Unit No.	Hunter Plant	Huntington	Jim Bridger Li	ittie Mountain N	aughton Plant	West Valley	Wyodak Plant	fhermal Plants	FERC
	Kind of Plant (Internal Comb. Gas Turb, Nuclear	Steam - Geo	Stearn	Steam	Stearn	Gas Turbine	Steam	Steam	Steam	Steam	Steam	Steam	Gas Turbine	Steam	Gas Turbine	Stearn	-	
2	Type of Constr (Conventional, Outdoor, Boiler, etc.)	Indoor	Outdoor Boiler	Semi-Outdoor	Outdoor	Outchor	Dutdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outrioor Boiler	Semi-Outdoor	Outdoor Boiler	Outdoor Boiler	Outrioor	Convertional		
м	Year Originally Constructed	1984	1964	1950	1951	cuuc	1978	1 GMD	1083	1978	1974	1974	1977	1063	cuuc.	1978		
. 42	Year Last Unit was installed	1984	1967	1977	1056	2000	87.01	Clair 1	10.01	1083	101	0201	CT01	1971	2002	19791		
- uri	Total Installed Can (Max Gen Name Plate Rations-MW)	26.0	188.6	816 7	261 F	141 0	4775	5021	106.5	1 440 5	0.900	2 345 2	18.0	202	2022	3K2 D	7 473 8	
- cc	Net Peak Demand on Plant ~ MW (60 minutes)	8	177	787	218	133	ACK.	296	AFT	1 311	806	1 404	4	210	218	CAC	5 077	
7	Plant Hours Connected to Load	8.599	8 653	8 760	6 285	3 651	8 031	6 787	8 D99	8 760	8 510	8 760	6 127	8 760	2 493	8 570		
80	Net Continuous Plant Capability (Megawatts)		'		-		,	,	1	,	,	1	ſ	,	1			
ຫ	When Not Limited by Condenser Water	8	175	762	235	131	430	430	460	1,320	895	2,120	14	2002	185	335	6.895	
10	When Limited by Condenser Water	•	,	•	•		ı			•				,				
11	Average Number of Employees	13	75	219	37		22	11	11	231	162	359	9	153	10	71	1,336	
12	Net Generation, Exclusive of Plant Use - KWh	184,449,000	1,323,395,000	5,759,784,000	495,453,000	162,366,000	3,027,001,000	1,670,598,000	3,418,272,000	8,115,871,000	5,977,919,000	9,630,089,000	80,803,000	5,019,304,000	373,926,000	2.289,062,000	39,412,431,000	
5	Cost of Plant: Land and Land Rights	31,026,429	956,546	10,417,291	1,020,271	,	9,646,568	9,646,568	10,253,198	29,546,333	2,405,337	1.146,361	635	458,248		210,526	77,187,978	
14	Structures and improvements	6.150.130	10,867,218	47,257,355	13,415,332	- -	60.088,408	49,284,908	88,364,297	197,737,614 704 000 000	94,498,627 724 860 205	132,803,837	204,044	55,589,785		48.028.460	606,552,401 7,600 5,40 400	
ī ā	Arrest Detrement Parts	000'0'10'00	880'N00'n0	200'071'870		200°0/7'0/	CC7.410.117	167'007'041	010,010,010	COC'OC7'15/	265,000,455	D60'700'700	1000, 200,4	C10'R0H'007	,	707'110'047	2,000,040,130	
5 0	Total Doef	3 110 0KC 01 3	70.001.107	a 002 102 000 .	0145 040			200 247 770 E	a and cut off	050 500 340 4	4 010 UTL 101	9 000 000 000 t	A 1770 000 C	010 713 LCC		- 700 0EC 730	007 010 217 6	
	Contended Contended Contended Contended Contended	0 30 F30 0 0		anc'in/'ooc a	5 04 L 10		5 10 10 10 107 a	2 00101 000 0	4 000'00+7/+ 4	* 010'070'000	C 2000/174	* 00010000000	4 500'717'4	0+0'110'+70 0		2 200'000'00 4	000/210/114/00	
500 10	Cost per AVV or installed uspacing (our sitiate)	7 DC-#00'0 m		1 04: / nc 0	4 01.110 4			4 76-97 9	003.01 2	1002.41	+ 1479.40 +	040.01	* +0./07	400.00 1		2 020.04	N7.104 0	22
61 M05	Uperation outpervision and Engineering E	7001'1	R/C'RC1	105,581	(766,001)		010,54 are care of	010.04 10 10 10 10	010,54 200 000 00	130,544	13,52/1	3,993,621	104). 030 000 a	/06/015	. 101 DE	070'A00'I	0.3/8.045	200
3 8	Protein Contants and Water (Norriear Plants Only)		1001 MAX 11	770'004'74	at i 'noc'ne	2,401,512	C/#/0001 '#7	470,404,21	CO.U1 2,034	761, 100, 20	0%0.6/0.0#	110,990,878	pon'een'e	100'071'10	101.101.01		CD.007.004	5
500 22	Steam Fynanses	27 BU7	705 774	770 613		,	2 670 079	1 710 565	2 GND 775	7 740 810	5 A12 50A	1017 3101		4 BU7 154			16 ATA GA7	503
503 23	Steam From Other Sources	3 800 080										1010° 110' 71					3 800 080	202
504 24	Steam Transferred (Cr)				•													202
105 25 25	Glastin Fanansia (C)		1 332 017	916 5			1.26.8.36	131 012	121 010	300 860		- 104 440	061 137	088.8	7 746 000		10 067 666	5 2
506 26	Mise Steam (or Nuclear) Power Frrences	1 483 244	4 048 857	11 872 454	3 077 005		1 687 630	10,620,6531	2 603 040	776 076	7 064 560	2 076 61 A	701'100	R R00 1/13		1 032 783	43 BDE 471	997
507 77	Parts Joseph (or received) - center Experiates	LEN'ROL'I	200,000,5	C01 210	0.00 A 661		370 3700 7	(conc'nzo'7)	21000'340	120,021,2	000°±00°	410'01C'0	345	140 V1	200 004	10.20	14,000,044	202
47 DO	Allowances		100'21	701'11	ŝ		040'00	10000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	110.07	10.007	1.22	2	100.101	100,500		100 011 1	005
200 20	Maintonance Summision and Environmentan				,					4	1 047 007	000 YLL	4 ·	1 367 677		3 6 1 8	7 667 470	
551 20	Maintanance of Structures	30 530	97A CA1	1 GEA 214	100 401		100010101	4 044 640	- 240 282	2 4N7 466	1,011,001	000'#17		100 PCC 1			17 741 505	565
512 31	Maintenance of Boiler (or reactor) Plant	55 F. F. F.	2 592 516	ACT 015 8	1 220 594		3 357 106	7.001 077	UC7 UD2 Y	15 224 ED6	10 259 518	197409,220		11 660 823		3 483 601	77 229 902	512
512 37	Maintenance of Electric Plant	78,000	871 343	7 474 624	1 487 804		2,212,100	1 046 806	721 845	3 182 PGU	A AD5 88A	E 710 307		A 767 70A		100'00L'P	73 074 081	4 6 4
514 33	Maintenance of Misc Steam (or Nuclear) Plant	16.027	408.147	1 017 498	122,233,331	• •	SOLA FOR	110 003	242 F21	458.18G	1 079 620	1 626 374	1 704	1 102 615		576 420	6.505.925	514
8	Total Production Expenses	\$ 5,513,359 \$	21 464 743 \$	1 68 254 518 3	37,599,633		35 365 347 \$	22 731 674 \$	3 39 186 909 5	97 303 927 \$	80.430.356 \$	157 567 396 \$	5.997.638 \$	85.786.173		\$ 24,883,177	611,250,895	
25	Evnences her Net KMh	C 00200	0.0167	00410	0.0750	AND ADDRESS OF A DESCRIPTION OF A DESCRI	0.0117	3 30 10 0	0.0115 6	2 UC1UU	0.0125 6	0.0164	3	0.0171	A CONTRACTOR OF	0.0100	0.0165	
}	Total Busbar - S/MWh	5 98 62 5	16.27 5	11.85 5	25,000	. •		13.64	1146 4	11.99	13.45 \$	16.36	• •	17.09		10.87	15.51	
	Fuel - S/MWh	- •1 - •1	846	138 5	5 52 69	24.32		7 44 5		242	8.21.5	12.05 5	\$ 50.09	10.78 \$	40.60	718	10.31	
	Non-fuel - \$rMWh	5 98 92 5	776	447 \$	1416 5	102.10	120	6 16 6	2 98 E	207	5 24 5	133	162 231	6.24	(40.60)	99.69	5 20	
	Variable O&M (per RD) definition) - \$7MWh	<b>1.86</b>	1.55	Contraction O Reality	2 83 2	(4 26)	0.74 5	123 5	S 920	STORES IN	Ville State 10 Control of the	0.86 \$	2.39.5	S SE LA SUCCESS	S    AD    S   (B. 42)	s 0.74	103	
	Fixed O&M (RDI definition) - S/MWh	\$ 743 \$	6.21 5	358 5	11.33 5	(17.05) 1	\$ 787 \$	4.94 \$	3.07 5	3.42 5	4.21 \$	3.46 \$	9.55 \$	5.05 \$	(32.18)	\$ 2.95	4.17	
	Total O&M without Fuel	\$ 1,713,279 \$	10,264,063 \$	\$ 25,765,996	5 7,014,514		5 11,228,872 \$	10,296,850 \$	5 13,114,015 \$	34,639,735 \$	31,351,331 \$	41,558,417 \$	964,582 \$	31,657,789		\$ 8,437,772	204,984,264	
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)		Coal	Coal		THE REAL PROPERTY AND ADDRESS OF A DESCRIPTION OF A DESCR	Coal	Coal	Coal	Coal	Coal	Coal		Coal		Coal	Coal	
37	Unit (Coal-tons/Oil-barrei/Gas-mcf/Nuclear-indicate)		Tons	Coal			Tons	Tons	Tons	Tons	Tons	Tons		Tons		Tons	Tons	
88	Quantity (units) of Fuel Burned		606,830	3,845,637			1,372,925	745,564	1,593,913	3,712,402	2,696,708	5,495,620		2,639,187		1.695,517	20.691,901	
gg :	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)		12,264	8,299			11,521	11,504	11,490	11,505	11.321	9,116		10,024		8,110	9,806	
8:	Avg Cost of Fuel/unit, as Delvd t.o.b during year		18.087	10.508			16.360	16.360	16.360	16,360	17.533	20.674		20.179		9.624		
1	Average cost of nuel per unit purped Automore Onet of Dual Burned nor Million 27(1		105.01	10201			0.760	102.01	201-01 0-7002	10.731	0767.0	20.530		20.13U		0.602		
14	Average Cost of Fuel Burned per KWh Net Gen		0.008	0.007			0.008	2000	0.008	0.008	0.008	0.012		0.011		0000		
36	Fuel Kind (Coal, Gas, Oil, or Nuclear)				Gas	Gas							Gas	Gas	Gas		Gas	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)				MCF	MCF							MCF	MCF	MCF		MCF	
38	Quantity (units) of Fuel Burned				5,839,878	1,728,306							1,377,981	241,663	3.697.709		12,885,537	
g :	Avg Heat Cont - Fuel Burned (btu/indicate if ruclear)				1,058	1,058							1,053	1,084	1,034		1,051	
94	AVG COST OF FUERUNTR, 25 UEVO T.O.D. QUTING Year				, 504										- 1			
64	Average Cost of Fire Burned ner Million RTI)				100° 4	4 DD6							300.0	3 7201	4 007			
4	Average Cost of Fuel Burned per KWh Net Gen				0.062	0.021							0.062		0.041			
36	Fuel' Kind (Coal, Gas, Oil, or Nuclear)		50	iō			oi	Ю	70	PO	ð	ĩõ				ю	io	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)		Barrel	Barrels			Barrels	Barrel	Barrel	Barrels	Barels	Barrels				Barrels	Barrels	
38	Quantity (units) of Fuel Burned		2,688	9,577			4.797	2,139	9,019	15,956	22,832	26,972				3,735	81,759	
8	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				151.224	140,513	
9	Avg Cost of Fuel/unit, as Delvd f o.b. during year		35.472	32.884			34,656	34,656	34.656	34.656	32.614	33.716				40.716		
41	Average Cost of Fuel per Unit Burned		35.472	32.884			34,656	34.656	34.656	34.656	32.614	33.716				40./16		
<b>5</b> 6	Average Cost of Fuel Burned per Million 8 r U		6.U35	090.0			6.024	0,640.0	5.885	P-R2-C	140.0	500				0.4 %		
54	Average cost of Fuel burned per KWM Net Gen		11 760 00		47 470 60	11 201 00	FC VOT OF	10 725 67	10.054.01	10 520 04	10 130 61	10 400 00	17 067 49	10 502 19	10 000 10	10,004 50	10 004 00	
ŧ	Average biu per Aven wet venerauon		7/7RC7 11	17.160,11	12,4/0.55	AQ 107'11	10,480.24	10,272,01	16/02/01	10,000,01	70.007'01	10,420.35	CH-1CR/11	C1 78C'01	10,420 10	12,024.30	50 100'NI	

2002

FERC Form 1		Rindal Dant	Carbon Blant	Dave Johnston	Gadehy Plant	Gadsby	furtter Unit No. H	unter Unit No. H	unter Unit No.	forther Plant	Huntington	Jim Bridger	ittie Mountain N	auchton Plant	West Valley	Wvodak Plant	Thermal Plants	FERC
Acct no. Line no.				Plant	une i farman	Peakers	-	2			Plant	Plant			Peakers	2	Total	Acct no.
~ (	Kind of Plant (internal Comb. Gas Turb. Nuclear Turb of Comb. (Comb. Castron Buller and	Steam - Geo	Outdoor Boilor	Steam Sound Outdoor	Ctean	Gas lurbine	Outdoor Bollor	Outdoor Boilor	Outdoor Bollor	Outdoor Boiler	Orthoor Boiler	Sami-Outdoor	Gas Lurpine Orthinne Roller	Outdoor Boiler	Outdoor	Conventional		
4 69	Type of consul (convertional, coloro), coller, ell.) Year Originally Constructed	1984	1954 1954	1959	1951	2002	1978	1980	1983 1983	1978	1974	1974	1972	1963	2002	1978		
9 4	Year Last Unit was installed	1984	1957	1972	1955	2002	1978	1980	1983	1983	1977	1979	1972	1971	2002	1978		
\$	Total Installed Cap (Max Gen Name Plate Ratinos-MW)	26.0	188.6	816.7	251.6	141.0	443.0	285.0	495.6	1,223.6	996.0	1,541.1	16.0	707.2	217.0	289.6	6,414.4	
9	Net Peak Demand on Plant - MW (60 minutes)	25	176	759	215	123	413	268	482	1.256	206	1,392	16	716	213	280	5,985	
7	Plant Hours Connected to Load	8,598	8,760	8,760	2,001	4.345	8,275	7,610	8,016	8,760	8,754	8,759	6,224	8,760	4,461	8,405		
80	Net Continuous Plant Capability (Megawatts)	' :	'	'	' !	1	• ;		•				•	-		- 55	5 000	
ъ <sup>!</sup>	When Not Limited by Condenser Water	3	0	79/	Q27	114	403	RC7	460	771'1	680	0.14.	Ţ	101/	n Y	2007	00000	
6 1	When Limited by Condenser Water	'ų	- 24	- rec			' 5	2	' 'B		. 174	- 736	• «	175	Υ.	' 99	1 262	
5 5	Not Generation Exclusivees	198 465 000	1 371 293 000	5 307 493 000	158 301 000	345 069 000	3 131 772 000	1 887 215 000	3 475 795 000	3 494 782 000	7 213 219 000	9.653.111.000	86.653.000	4.799.139.000	580,823,000	2,197,461,000	40,440,809,000	
1 23	Cost of Plant 1 and and 1 and Richts	31.026.429	956.546	10.417.290	1.259.170		9.646.568	9.646.568	10.253.197	29,546,333	2,406,337	1,161,925	635	607,076	-	210,526	77,591,267	
14	Structures and Improvements	6,157,166	11,008,869	47,645,465	13,694,061	3.072,740	60,248.862	49,449,482	88,549,262	198.247,606	98,158,682	133,477,806	204,044	56,654,425	ł	48.156.801	616,477,654	
15	Equipment Costs	33,085,417	67,022,648	345,587,612	55.138.519	74,728,584	213.229.259	142,967,004	378,220,778	734,437,041	333,608,477	693,807,839	4,681,772	290,152,981	1	249,469,349	2,881,720,239	
16	Asset Retirement Costs			581,138			441,134	441,134	441,134	1.323,402	813,996	8,012,755		3,982,418	-	-	14,713,709	
17	Total Cost	\$ 70,269,011	\$ 78,998,063	\$ 404,231,505	\$ 70,091,740	77,801,324	\$ 283,565,823 \$	202,524,188 \$	477,464,371 \$	963,554,382 \$	434,986,492 \$	836,460,325 \$	4,886,451 \$	351,396,900 \$	1	\$ 297,836,676	\$3,590,502,869	
18	Cost per KW of Installed Capacity (our share)	\$ 2,702.65	\$ 418.81	\$ 494.96	\$ 278.54	551.78	5 640.10 5	710.61 \$	963.41 \$	787.47 \$	436.73 \$	542.77 \$	305.40	496.88 \$	,	5 1,028.44	\$ 559.75 21.15.000	002
500 19	Operation Supervision and Engineering	2,730	238,813	718,931	78.202		88.245	88.245	88.245 24 200 200	264.735	36,242	15,347,831	4,125	189,118		4, 20U, 105	21,140,832	202
501 20 21	Fuel	8,057	10,521,512	33,562,596	6,075,862	11,979,586	28,081,013	17,237,543	31,185,256	768,506,87	188'908'19	113, 139, 90, 90	131,440	1/5'5#7'70	18,040,700	C70'++C'0!	#/7'0/0'CO#	Ř
17	Coolants and vvater (Nuclear Flamts Univ)		1 Not 532	102 535			3 GR2 B/JS	3 174 156	4 090 704	10 947 667	CF7457	(118 833)		6 601 457		,	27.178.886	502
504 23	Steam From Other Sciences	(13 641)	-				-	1	-	-	-	-	,		,		(19,641)	503
504 24	Steam Transferred (Cr)	4 095 133	,													•	4,095,133	504
505 25	Electric Evolusies		1 536 116	88 927		2 698	87 324	87.324	87.324	261.973			530,741	1,065	2.389,897	'	4,811,416	205
506.26	Misc Steam (or Nuclear) Power Expenses		4.170.854	11.680.712	4.760.622	-	2.421.397	(1.684,510)	2.324,742	3,061,629	8,360,681	(8,171,422)	363	5,110,850	1.084	(510,112)	28,465,261	506
507 27	Rents	1,523,579	13,713	88,207		•	41,540	40,827	45,394	127,761	3,167,478	206,638	,	116	17,001,296	3,102	22,131,889	507
509 28	Aliowances	163	,			1	•	•	,	•			,	•	,		163	509
510 29	Maintenance Supervision and Engineering	•	,	537,995		•		•			1,332,658	581,437		2,094,629	,	1,157	4,547,876	510
551 30	Maintenance of Structures	•	279.786	1,940,427	185,659	57,058	2,130,001	2,299,859	2,236,797	6,666,657	1,124,038	5,320,251	r	1.086,805		482,693	17,143,374	551
512 31	Maintenance of Boller (or reactor) Plant	56,371	2,513,158	12,831,603	1,395,605	'	3,654,579	3,611,021	5,278,400	12,544,000	5,285,008	21,270,104	•	11,635,097		4,358,208	CC1,858.17	215
513 32	Maintenance of Electric Plant	144,910	620,297	6,754,045	1,697,852	229,371	625,491	872,152	1,058,634	2,556,277	2,782,997	196,009,8	1 623	0477767	24,195	263,63U	20,002,004	210
514 333	Maintenance of Misc Steam (or Nuclear) Plant Trifel Development Evenese	195,502 A A A 768 A 2	420.054	C 60.632 1140	212,233 5 14 ADS D25	10 375 322	240,020 X	5 202 P80 54 3	245,000 AR 645 121 S	113 687 936 5	80 697 011 S	159 519 288 \$	5374746 5	82.426.085 \$	38,961,009	\$ 26.944.456	\$ 640,572,561	ŗ
5 4	Economic LAPCINGS	5000000 S	0.0157	0.0131	0.0010		0.0121	0.0128	0.0134 5	0.0134 5	2 7C100	0.0165		0.0172 \$	0.0671	s 0.0123	5 0.0158	
Ŗ	Expenses per Net AVV: Trital Bushar - SIMWVh	5 30.62	5 15.66	s 1313	0016 \$		13.11 3	13.77 5	13.42 5	13.38 5	12.44 5	16.53	, ,,	17.18 \$	67.08	\$ 12.26	\$ 15.84	
	Evel - S/MWh	\$ 0.04	\$ 7.67	5 6.33	\$ 38.38	31.11	\$ 8.97	9.13 5	\$ 25.8	8.01 \$	8.03	11.78 \$	55.37	10.89 \$	33.65	\$ 7.71	\$ 9.99	
	Non-fuel - \$/MWh	\$ 30.58	\$ 7.99	\$ 6.80	\$ 52.62	(31.11)	\$ 414	4.64 \$	\$ 4.45 \$	4,38 \$	4.40 \$	5 4.74 \$	(55.37) 3	6.29 \$	33.43	\$ 4.55	5.85	
	Variable O&M (per RDI definition) - \$/MMh	\$ 0.46	\$ 1.60	1.36	\$ 10.52	6-10-10- <b>21</b> -0	\$ 0.83	s 0.92 \$	5 00 S	0.87 \$	\$ 620	\$ 0.0 <del>4</del>		126	0.83	Surrent control of the	<b>1.06</b>	
	Fixed O&M (RDI definition) - \$/MWh	5 9.52	5 6.39 5 10 DEC 20	5 5.45	<b>\$</b> 42.10	0.82	\$ 3.32 \$	3.71 5	3.56 5	3.50 5	3.61 5	AE 770 283 6	55.0 576 801	2 112 21 12 2	10 71 7 19	0 0 000 K33	236 604 287	
	I OTAI UGAN WITHOUT FLUEI	4 1.4/0,400	* 10,800,304	010/00/00 0	5/1/0CC/0 ¢		5 17'0'1' C	C7 1710	t 070'00+'01 4	4 000 HO1 1/2	+10.041.10	Total and	, inclusion ,		Coal	Coal	Coal	
R (?	rues Nitu (Coas, Cas, Os, V. Nucuear) Unit (Costtone(Oit-barrai/Cas.morf/Nuclear.indicate)	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Torris	Toris	Toris	Tons	
: 8	Quantity (units) of Fuel Burned	•	657,352	3,515,011			1,434,834	859,657	1,588,324	3,882,816	3,150,798	5,473,298		2,571,603	•	1.657.446	20,908,323	
98	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	•	11,828	8,380	•	•	11,458	11,410	11.453	11,445	11,562	9,326		6,900		8,059	9,946	
40	Avg Cost of Fuel/unit, as Delvd f o b during year	ŀ	15.723	8.877		I	19.754	19.754	19.754	19.754	18.727	20.950		20.02	,	10.100		
<del>2</del> ĉ	Average Cost of Fuel per Unit Burned		578'CL	9.431			0.9400	242.21	404/01 8988 C	19-309 0 855	0.788	1 104		1.026		0.626		
4 4	Average Cost of Fuel Burned per KWh Net Gen	,	0.008	0,006			0000	0.009	600.0	0.009	0.008	0.012		0.011		0.008		
98	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gats	Gas	Gas	Gas	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	4 252 274	MCF 230.310	MCF E EED ED1	MCF	MCF 12 073 482	
R 8	Quantity (units) of Fuel Burned		•	ŀ	2.003.008	3,005,262						¢ 1	1.00,200,1	1 058	1.034		1.052	
9 9	Avg Cost of Fueldunit, as Delvd f o.b. during year	,			-			,	1	,	,	,			,	,		
41	Average Cost of Fuel per Unit Burned		•	•	3.033	3.099			,	,	,		3.548	3.380	3,548	•		
42	Average Cost of Fuel Burned per Milion BTU	ŀ	ı	,	2.844	2.909	ı	,			,	,	3.341	3.291	3.341			
43	Average Cost of Fuel Burned per KWh Net Gen	,			,	ļ		ŀ	, ë	, Ĉ	,	č.	7	,	, ĉ	, ē	ĉ	
8	Fuel Kind (Coa) Gas, OF, or Nuclear)	5	5	5 ł	5	5	5	5 opened	a) one	Borrole	Borrele	Barrale	Barrak	Barrade	Barrale	Barrels	Rarrels	
25 972	Unit (Cosh-tons/Oil-Darrey Cass-mony vuccear-moncate) Ourantity (unite) of Fuel Runnad	Dat 16	1 337	11 063	-	SHATEC .	3 274	2 061	6.989	12.323	13.544	24.586	-	-	,	5,754	68,608	
8	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	,	140,000	140,000	1	•	140,000	140,000	140,000	140,000	140,000	140,000	•	•	1	140,000	140,000	
40	Avg Cost of Fuel/unit, as Delvd t o b. during year		40.862	37.224			45.557	45.557	45.557	45.557	40.645	41.641	ı	,	,	40.412		
41	Average Cost of Fuel per Unit Burned	T	40.862	37.224		•	45.557	45.557	45.557	45.557	40.645	41.641 7.062				40.41.Z 6.873		
4 4	Average Cost of Fuel Burned per Million B1U		6.950	6.331		. ,	/./tus	r. rer	sU')	1.145	218'S	7.UD.2		, ,		· ·		
3 3	Average Cost of ruer purities per Average Cost		11.345.63	11.122.44	13.513.58	10 710 38	10.505.21	10 401 30	10.479.11	10.471.15	10,111,81	10,590.63	16,574 36	10,662.52	9,904.38	12,172.48	10,633.58	

2003

FERC Form 1	-			Dave Johnston		Gadsby	unter Unit No. H	unter Unit No. H	unter Unit No.		Huntington	Jim Bridger			West Valley		Thermal Plants	FERC
Acct no. Line no		NURTH HADUNG	Variation Plant	Plant	addapy Plant	Peakers	٣	2		HIPH LINKIN	Plant	Plant	N UPRINOW ANY	augmon ream	Peakers	Wyoudh Flain	Total	Acct no.
- (	Kind of Plant (Internal Comb, Gas Turb, Nuclear	Stearn - Geo	Steam	Steam	Steam	Gas Turbine	Steam	Steam	Steam	Steam	Steam	Steam	Gas lurbine	Steam	Gas lurbine	Steam		
VP	Type of Constit (Convertiourial, Cutatoor, Boolef, Bio)	1000		34/11-04(0000	1000		Outdoor polier	CULIDADE DOINER		ULIDOOR DONEL	Uutaour Doller	100000-0000000000000000000000000000000	100000000000000000000000000000000000000	CURRENT DURIER		1078		
	Vons I and Tink und Installad	1001	1051	C701	1051	2002	13/3	1080	00001	1083	10701	0/01	2701	1021	2002	1978		
r va	Total Installed Can (Max Gen Name Plate Ratings-MVV)	261	188.6	816.8	251.6	141 0	443.0	285.0	495.6	1 223.6	996.0	1.541.1	16.0	707 2	217.0	289.6	6.414.7	
9	Net Peak Demand on Plant - MW (60 minutes)	8	174	6/.2	216	126	407	268	468	1.256	206	1.391	16	705	206	278	5,966	
7	Plant Hours Connected to Load	8,538	8.772	8,784	. 961	3,382	7.750	8,239	8,469	8,784	8,629	8,784	6,621	8,784	3,529	8,140		
00	Net Continuous Plant Capability (Megawatts)		•	•	•	r	,	•	•	•		1	ŀ		•	•		
Ð	When Not Limited by Condenser Water	53	172	762	235	120	403	269	460	1,122	895	1,413	14	2002	215	268	5,939	
2	When Limited by Concienser Water	· ;	' ř		' ;		' f	, ł		* ucc		- 976	· .	' C 7	'ç	1 1	* 17E	
= \$	Average Number of Employees	104 876 000	1 126 002 000	501 EA3 000	SS FOR COD	UND BYO BSC	7 000 EV3 COD	2 010 041 000	3 575 200 000	000 477 677 8	5 388 534 000	545 5 820 371 000	01 005 000	245 831 000	305 480 000	2 153 135 MM	000 907 810 00	
2 5	Pret Generation, Exclusive of Flam Use - NYM	21 797 915	000 500 100	0,024,044,040	1 260 170	000'046'007	2,002,040,000	0.676.522	000,052,010,0	00,410,100,00	2 405 337	1 161 005	51,300,000	1 243 555		210 526	78.424 096	
2 2	Statetures and immovements	F 218 337	11 578 130	48 232 859	13 811 541	4 111 BG4	ADE 2020/2	49 803 203	RR 931 493	100 336 068	99 455 311	133 679 404	2009 660	57 155 058	48.460	48.377.029	622 220 751	
ι÷	Equipment Costs	33,692,461	73,322,778	352,305,858	55,921,836	75,114,903	221,344,932	142,213,710	375,949,702	739.508.344	339,245,256	711.525,469	4,688,107	289,661,534	81,813	250,111,165	2,925,179,524	
16	Asset Retirement Costs	557,911		6,172,882			1,571,858	1,571,858	1,571,858	4,715,575	652,406	9,787,188		3,578,619			25,464,580	
17	Total Cost	\$ 71,751,524	85,857,463	\$ 417,133,889	\$ 70,992,547	79,226,767	293,146,715 \$	203,215,303 \$	476,686,215 \$	973,048,233 \$	441,758,310 \$	856,153,986 \$	4,898,402 \$	351,638,777 \$	130,273	298,698,720	53,651,288,891	
18	Cost per KW of Installed Capacity (our share)	\$ 2,749.10	6 455.14 5	510.71	5 282.12 5	561.89	661.73 \$	713.04 \$	961.84 \$	795.23 \$	443.53 \$	565.55 \$	306.15 \$	497.23 \$	0.60	1,031.42	569.21	
500 19	Operation Supervision and Engineering	630	133,906	305,193	27,872	•	126,116	126,116	126,116	378,348	29,644	12,667,637	,	237,513	,	3,001,485	16,782,228	80
501 20	Fuel		11.442.174	36,943,321	1,676,796	2,660,791	26,482,093	18,564,845	32,098,512	77,145,452	63,752,592	120,577,466	6,439,344	60,497,565	10,916,009	13,659,494	405.711.002	203
52	Coolants and Water (Nuclear Plants Only)		-		•	4			- 100 COT 4					-	•	,		6
502 22	Steam Expenses	6,661	682,262	210,184			3,473,239	3,112,262	3,782,881	10,368,362	8,464,770	536,259		1,449,228	ŀ		04/////////	20
22 23	Steam From Other Sources	4,158.192	•				1	1		•							4,100,182	33
24 25 25 25 25 25	Steam Iransferred (Lr) Etwatter Evanation		CBC 750	BCC LE		2014 162	COF 711	- COF 741	147 300	- 176				12 975	1 897 674	. ,	4 344 300	5 5
2000 2007 2007	Electric Capteriaetes Miser Staarm (or Nurchaar) Provide Extremeses	1 525 679	5311683	12 430 434	4 160 091	701.1400	1 566 991	(5 194 293)	1 998 056	1 370 754	6.527.143	(8) 323 909)	-	4 389 599	-	719.752	27.111.226	28
507 27	Rents	145	40,453	(4,857)	5,928	943	24,340	13,683	17,561	55,584	890,671	452,888	184	584,478	17,064,416	7,096	19.097,929	202
509 28	Allowances												1	•	,	1	•	209
510 29	Maintenance Supervision and Engineering	,	,	(570)	•	•	'		•	1	781,611	1,323.097	'	2,333,073	'	5,902	4,443,113	510
551 30	Maintenance of Structures	77.962	492.808	2.012.260	107,246	100.049	1,753,206	1,809,906	1,718,934	5,282,046	1,231,569	6,104,073		908,142	677	420,801	16,737,633	551
512 31	Maintenance of Boiler (or reactor) Plant	275.223	4,292,805	10,337,182	903,378	,	4,606,061	3,177,022	5,410,664	13,253,766	7,970,197	24,371,327	1	6,910,552	4	4,658,589	72,973,020	512
513 32	Maintenance of Electric Plant	91.018	2,548,794	5,168,676	1,621,966	437,423	1,021,553	629,626	945,171	2,596,350	2,539,773	9.045.648		179.728	47,415	1,290,171	26,315,211	513
514 33	Maintenance of Misc Steam (or Nuclear) Plant	22,424	206,026	1,203,100	254,338	151,677	122,452	102 754	139,028	364,234	1.095.126	1.11.6//	305	/06/138 05 047 340 6	9, /UH	394,079 4/0	0,030,253	510
55	I otal Production Expenses	\$ 6,15/,834	26 308 333	201750980	010'/C/ R 0	CH0,CC0,C	38,303,403	4 212'AAA'CZ	40,304,315 \$	< 760'/07'LLL	83,203,050 \$	10/,4/2,103	6 000/7/1/7	¢ 047'/10'00	100,000,000	C 24/0//00	00000000	
8	Expenses per Net KWh	5 0.0316	0.0232	810.0	C151.0 2		8E10.0	\$ 17L0.0	02000	0,0132	0:U146	17.05	~ ~	4 7910/0	10/01/0	11 37	15.80	
		no	07.07	0.11 1.70	20101	0° 0	0.0			0 1 1 0 0 1 1 0			2 CU UZ			5.4	1014	
	Fuel - Storyer	. U9 12	13.15		106.34 s	(10.28)	5 C5 7	5 976	\$ 00 P	5 70 7	4.67 \$	4 78	(70.02) S	4.67 \$	60.64	4.97	1 80	
	Variable O&M (per RDI definition) - S/MWh	\$ 2.05	2.62	s 1.09	5 2125	0.77	090	\$ 690 <b>\$</b>	080 \$	0.81	0.90 \$	0.95	1.89	0.91 \$	. 660	9650	1.04	
	Fixed O&M (RD) definition) - \$/MWh	\$ 8.21	\$ 10.53	\$ 4.35	\$ 85.09	3.07	3.62	2.76 \$	3.20 \$	3.24 \$	3.73 \$	3.83	6.38	3.76 \$	47 10	3.98	<b>5</b> 4.62	
	Total O&M without Fuel	\$ 1,999,742	\$ 14,926,119	5 31,698,831	\$ 7,080,820		12,901,370	6,924,468 \$	14,205,803 \$	34,111,640 \$	29,530,504 \$	46,894,697	733,294 \$	24,519,675 \$	19,019,841	10,711,271	\$ 226,378,881	
36	Fuel: Kind (Coat, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Teno	
3/	Unit (Coal-tons/Oil-barrel/Gas-mct/Nuclear-Indicate)	SUG I	1 ONS	SU01	+ ons	lons	SUO!	5001 CC3 C30	1 of 1 ac	0015 CUID	2001 000 C	1005 E E 70 367	1013	2 900 272	SUD	1 615 107	21 171 021	
8 8	Quarkity (units) of Fuel burned Avo Heat Cont - Fuel Burned (httufnoficate if purclear)		118.41	3.021.412 8.316		, ,	11 404	11 289	11 282	0.949.500 11.322	11.179	9,352		9.838	• •	8,019	5,819	
9	Avg Cost of Fuel/unit, as Delva f.o.b. during year	,	19.951	9.426		,	19.294	19.294	19.294	19.294	21.889	21.778		21.498	,	8.283		
41	Average Cost of Fuel per Unit Burned		20.114	9,556			19.460	19.372	19,151	19.310	21.745	21.519		21.425		8.249		
42	Average Cost of Fuel Burned per Million BTU	,	0.849	0.575	,	,	0.853	0.858	0.849	0.853	0.973	1 151		1.068		0.514		
67 98	Average Cost of Fuel burned per KVVh Iver Gen Ervic Kind (Covil Cov. Cill or Number)	, Gae	0.010	0000 980		- 1.	0.009 Gae	0.000	and in	e conce	1946	Gae	Gas	Gas	Gas	Gas	Gas	
8 16	Unit (Coal-tons/Oil-barral/Gas-mcf/Nuclear-indicate)	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MOF	MCF	MCF	MCF	MCF	MCF	MCF	
; R	Quantity (units) of Fuei Burned	'	'	1	935,228	2,660,164	,	'	,	1	,	•	1,457,433	137,410	3,762,657	1	8,952,892	
98	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)				1,050	1,061	•	•	•				1,063	1,080	1,049	•	1.055	
Q4 :	Avg Cost of Fuel/unit, as Defvd f.o.b. during year			•		, ,	,		,	ı	•		- 440	-	- 000			
14	Average Cost of Fuel per Unit Burned				1708	000.1	5 1	, ,	, ,	, ,			4.155	2114	2 766			
4 64	Average Cost of Fuel Burned per KWh Net Gen				0.025	0,010		1	. ,	,			0.070	•	0.028	1		
96	Fuel Kind (Coal, Gas, Oil, or Nuclear)	ō	IO	0	5	ō	io	Ð	0	ō	Ð	ð	0i	₽O	ð	ō	10	
37	Unit (Coal-tons/Oil-barre//Gas-mcf/Nuclear-indicate)	Barrel	Barrel	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barreis	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	
38	Quantity (units) of Fuel Burned		3.564	7.543	1	•	5,954	2,175	10,010	18,139	18,285	34,064		•		100,7	88,596	
BE OF	Avg Heat Cont - Fuel Burned (btuindicate if nuclear) Aven Cont of Fuelfundi as Dated for high mine vear		140,000	140,000	, ,	,	140,000	40,000	48,175	140,000	14U,UUU 52126	140.000 51 108	• ,	,	•	48.046	200,041	
} ₽	Average Crist of Fuel per Unit Burned	,	52 190	48.647		,	48.175	48,175	48,175	48,175	52 126	51.108			,	48.046		
- 74	Average Cost of Fuel Burned per Million BTU		8.876	8.273	,		8.373	8.546	8.009	8.193	8.865	8.692				8.171		
43	Average Cost of Fuel Burned per KWh Net Gen		_	-	-	_		-							4 222 22	, , ,	10 000 60	
44	Average BTU per KWh Net Generation	•	11,694,36	10,936,61	14,747.69	10,899.62	10,772,90	10,707.35	10,438,94	10,612.73	10,123,89	10,538.35	16,846.10	10,629.39	9,980.35	12,050.19	10,639,56	

FERC F	xm 1	Blundeli Plant	Carbon Plant	Currant Creek	Dave Johnston	Gadishy Plane Ga	deby Peakers	unter Unit No. H	unter Unit No. H	Inter Unit No.	turder Plant	Huntington	Jim Bridger	the Mountain No	unhton Diant	Nest Vailey w	T Daries Diarre	hermal Plants	FERC
Acct no. Lk	<b>ne nó</b> . Kind of Plant Internal Comb. Gae Turb. Muclear	Clasm Can	Channel	Total Hard	Plant			-	2			Plant	Plant		num a normán	Peakers	in the second	Totai	Acct no.
- 7	Type of Constr (Conventional, Outdoor, Boiler, etc)	indoor	Outdoor Boiler	Outdoor	Semi-Outdoor	Outdoor	Cab Luidine	Outdoor Boller	Outdoor Boiler	Outdoor Roller	Outdoor Boiler	Outdoor Boiler	Semi-Outdow	Gas Luroine Orthon Boiler	Outhoor Boiler	Cass Lurpine	Conventional		
1 (7)	Year Originally Constructed	1964	1954	2005	1959	1961	2002	1978	1980	1083	1078	1024	1074	1020	1063		1078		
4	Year Last Unit was installed	1984	1957		1972	1955	2002	1978	1980	1963	1983	1977	5/61	1972	1261	2002	1978		
3	Total installed Cap (Max Gen Name Plate Ratings-MW)	26.1	188.6	292.4	816.8	257.6	141.0	443.D	285.0	495.6	1,223.5	0.966	1.541.1	16.0	707.2	217.0	289.7	6,713,1	
9	Net Peak Demand on Plant - MW (60 minutes)	K.	179	292	773	210	ä	413	263	467	1.132	906	1,403	16	705	202	276	6,252	
r~ a	Plant Hours Connected to Load	8.584	8,748	1.946	8,760	431	2.512	7,540	8.113	7.933	8.736	8,287	8,760	7.031	8,760	3,346	8,162		
0 00	When Not Limited by Condenser Water	. 23	, 211 ,	407	767	2385	121	403	. 950	460	- 1123	Roff	- 1413	. 1	. 002	, ,	, 88C	5,027	
10	When Limited by Condenser Water					1	! '			,		· '	,	<u>,</u> ,	2	-	} ,		
11	Average Number of Employees	13	70	24	193	38	•	75	75	76	226	163	346	9	145	10	75	1,309	
12	Net Generation, Exclusive of Plant Use - KWh	184,820,000	1,349,858,000	124,119,000	5,684,004,000	32,595,000	166,168,000	2,891,251,000	1 970,448,000	3,382,957,000	8,244,656,000 (	381,332,000	0.837,629,000	94,667,000	5,238,417,000	343,889,000 2	143,956,000	9,826,110,000	
13	Cost of Plant' Land and Land Rights	31,282,815	956.546	3.362.684	10.451.083	1.259.170		9.632,717	9,632,717	10,239,347	29,504,781	2.386,782	1,161,925	635	1.243,566	,	210,526	81,820,513	
4 4 4	Structures and Improvements Equipment Costs	6.206.229	11,774,653	27.748.874	48.654.284	13,837,867	4,111,865	61,232,885	50,220,853	89.290.155	200,743,893	99,598,120	131,861,354	208.871	59.637.601	400,164	48.477,838	653.261.613	
2 9	Asset Retrement Crists	557 911	011'+21'11	126,080,451	C88 C21 9	2017-041-0440	13,121,000	000° 600° 677	000,080,441	3/8.114.154	CL7'667'7C/	300,164,190	0.740.036	4,66/,036	06/1967667	9CF / 11	Z65'775'00Z	5,131,006,392	
17	Total Cost	\$ 71,589,922	\$ 90.525.317	\$ 156.072.767	\$ 430,600,650 \$	71 301 483 \$	2 ETB CEB TT	302 499 808 5	206 489 076	479 688 547 \$	988.677.476 \$	464 587 048 S	RAD CRA RES 4	4 897 042 \$	3 FE 275 284 5	517 522 S	209.010 756 5	3 805 817 745	
18	Cost per KW of Installed Capacity (our share)	\$ 2,742.91	\$ 479.99	533.76	5 527.18 5	276.79 \$	552.01	682.84 \$	724.52 \$	967.89 \$	808.07 \$	466.45 \$	571.66 5	306.07 \$	507.95 \$	2.36 \$	1 032 14 \$	580.33	
500 19	Operation Supervision and Engineering	3,344	109.279	586,268	625,305	62,823	,	24,447	24.447	24,447	73,341	26,434	16,254,215		196,891		1,084,609	19.022,509	9 <u>9</u>
501 20	Fuel	'	12.068.189	4,346,449	38,577,929	875,554	2.724.847	30,077,230	20,877,150	34.266.820	85.221.200	65.320,583	119,814,412	(3.753.218)	60,584,487	8,536,686	16.221.252	410,538,370	501
21	Coolants and Water (Nuclear Plants Only)		, , ,			, , , , , , , , , , , , , , , , , , , ,	•	,					•			•			
27 709	Stearn Expenses	6,169	1.406.446	•		9.215		3,450,122	3.356.185	3,579,703	10.386.010	8.203.547	280,141	•	7,045,921		•	27,339,449	502
57 50G	Steam From Uther Sources Steam Transferred (C+)	4,211,469		•		,			•		•	,	•			•	•	4,211,469	33
22 505 22 505	Electric Expension		1 821 362	- 570.776	• •	•	1 645 477	155 074	155 074	155 074	- UC US		•		- -	- 467 300	,	- COD 870	202
506 26	Misc Steam (or Nuclear) Power Expenses	1 540 315	2 523 227	21/212	12 470 872	2 322 003		173 841	1102 888 01	1 668 1 20	141 7511	3 178 075	110 133 4531	710 662	20.942	nec' (c+'7	- 143 743	0.889.019	89
507 27	Rents	840	13,981	4.876	163,410	(3.049)		2365.27	72.703	80.318	232,386	123.100	336.870	-	(38.817)	16.986.014	40.844	17.860 455	202
509 28	Aliowances						,					,		961		,		961	208
510 29	Maintenance Supervision and Engineering			'	,	,	,		,	,	,	1,284,420	1.289.676		1,368,892	,		3,942,968	510
551 30	Maintenance of Structures	124,081	253.701	4.833	2.069.773	197.205	176,063	1,374,385	1,254,382	1,241,582	3,670,349	1,517,616	6.271,663	ı	766.762	10,376	344,015	15,606,437	55
512 31	Maintenance of Boiler (or reactor) Plant	225,965	2,461,483		10,677,930	398.365	•	8,693,182	4,624,149	5,530,965	19.048,296	10,968,477	25,844,500		7,633,839	•	3,904,036	81,162,911	512
513 32	Maintenance of Electric Plant	105.308	415,668	306,360	7,040.108	639,435	599,763	3,134,671	766,636	1.499.013	5,400,320	4.205.130	9,300,772	1	1.240.636	518.726	1.217.400	30,989,626	513
014 03	Maimenance of Misc Steam (or Nuclear) Plant	38,061	284,482	6.316	1 114 040	407.436	147,657	148.964	170.808	143,331	463.103	1.776.487	1,789,784	66,653	284,518	28,766	430,067	6,837,390	514
まき		7/0000 0	000'A00'17 4	9/9/229/6	\$ 100°40'17'	4,909,007	0,283,807	48/01/2194	28,918,/13 \$	48,190,262	\$ 9/1/171/021	300'00' 123 2	162,048,581 \$	(2.9/4,942) \$	84,248,513 \$	26,537,958 \$	\$ 9967'082'97	636,355,460	
8	Experises per ret KAVR Total Rushar - CAMAN	000000 C	4 0.U130	60b0.0		4 90cl.0	21 55	4 0010.0	0.0147 5	0.0142 5	0.0152 \$	0.0151 5	0.0165 5	(0.0314) \$	0.0161 5	0.0830 5	EZIO.0	0.0150	
	Fuel - \$MWVh		8.94	3603	5 629 S	26.86 5	6 9 9 9	10.40	10.60	1013 5	10.34 \$	5 17 U 24	10.47 5 10.18 5	2 (50 BC)	\$ 2511	\$ CX7C	5 1071	10.30	
	Non-fuel - S/MVVh	\$ 33.85	5.85	11.97	5 601 5	123.74 5	15.46	620 5	4 0.6	412 \$	484 5	101	4 02 V	8 22 5	4 55 4	59195	474	587	
	Variable O&M (per RDI definition) - \$MWh	\$ 221	\$ 1.37	2.36	\$ 120 <b>1</b>	24.77 \$	309	24 24 24 24 24 24 24 24 24 24 24 24 24 2	0.81 \$	0.82 \$	0.96	\$ 960	8 SOO	1.65	060	1.75 \$	\$ 160	19	
	Fixed O&M (RDI definition) - \$/MWh	S 8.85	5.51	\$ 9.54	\$ 4.81 \$	86.96	12.37	4.97 \$	3.27 \$	3.30 \$	3.88 \$	3.93 \$	3.44 \$	6.57 \$	3.61 \$	56.41 \$	3.80 \$	463	
	Total O&M without Fuel	\$ 2,044,103	\$ 9,291,659	5 1,479,429	\$ 34,161,438 \$	4,033,453 \$	2,568,960	17,934,951 \$	8,041,563 \$	13,923,462 \$	39,899,976 \$	31,284,146 \$	42,234,169 \$	778,276 \$	23,664,026 \$	20,001,272 \$	10,164,714 5	225,817,090	
8	Fuel: Kind (Cosl, Gas, Oli, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coat	Coal	Coal	Coal	Coal	
5	Unit (Coar-Ions/Ori-Darter/Gas-mor/Nuclear-indicate) Orimotiv / mite) of Erical Driveroi	1 015	9001 67.9	SUO	500)	( ons	Lons	1 270 GTS	Tons of the	10ns	1 OTS 0	Tons 2 010 Tre	T T OTS	1 ons	Tons	Tons	1 005 100	1 ons	
8 R	Avd Heat Cont - Fuel Burned (btu/indicate if nuclear)		11.514		8 193			C10/010/1	074-acta 051-11	11111	11 156	11 048	005/040/0		810.01		1990 7	21.103,014 9 786	
40	Avg Cost of Fuel/unit, as Delvd f o b during year		17.159	,	9:938				,	,	21.226	20.634	21.001		22.484		10.152		
41	Average Cost of Fuel per Unit Burned		17.552		9.937			21,597	21.603	21 576	21,590	22.036	21.370		22.307		10.203		
44	Average Loss of Fuel Burned per Million 510		79/70		0.607			0.566	0.965	1/6/0	0.968	1997	1.140		111.1		0.639		
7 8	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Gas	Gas	Gas	Gas	Sas	Gas	and	o n n n	U.U.U	Gas	o o o o	CUU12 Gate	Sae	210.U	Gae	1000	ae G	
37	Unit (Coal-tons/Oll-barrel/Gas-mcf/Nuclear-indicate)	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	
38	Quantity (units) of Fuei Burned		•	1,312,477		358,806	1.823,779							1,516,478	97,562	3,518,586		8,627,668	
8 S	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	•		1.043		1,053	1.053							1.060	1.052	1.045		1,049	
5 ÷	Avg Cost of Fuel/UNIT, 85 Delval to D. during year Aversion Cost of Event real that Burnard			2.510			, 404								, perex				
4	Average Cost of Fuel Burned ber Million BTU			3371		2.318	1.419							(2322)	1000011	2 321			
43	Average Cost of Fuel Burned per KWh Net Gen	,	,	0.037		0.027	0.016							(0.040)		0.025			
36	Fuel: Kind (Coal, Gas, Olf, or Nuclear)	O	Oil	Ō	0	9i	ō	0	ð	Ю	Ю	0	ð	Ю	ĩ	0I	ы	Ю	
37	Unit (Coal-tons/Oil-barrel/Gas-mc//Nuclear-Indicate)	Barrel	Barrei	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	
8 8	Queroury (united of Fuel Burned Aver Haat Cont - Fluel Burned Philipethete if nuclear)	• •	140.000		6,193			1 AT COD	002.1	10.747	10,000	407'HI	110,000				0,018	140,000	
4	Avg Cost of Fuel/unit, as Deivd f o b during year		74.408		64.342			-			79.017	79,894	59.571				55,647	200.00	
41	Average Cost of Fuel per Unit Burned	·	•							,	•	•					,		
4	Average Cost of Fuel Burned per Million BTU		12.655		10.943			12.719	13.868	13.785	13.438	13.588	10.131				9.464		
54 44	Average Lost of Fuel Burned per KWN Net Cen		11 407 50	- 10 000 11	11 046 98	11 601 43	11 667 74	10.015.07	CF FUE 01	10 10E OV	-0 ENG ED	-0.000 e4	0.000.01	1000 JU	FF 3CF U,	10 600 18	10211	10 600 01	
1	Average 610 per riwin Net Generation	-	NC:/R4'LL	11,029,04	11,045,80	11,591.43	11,557,21	10,615,62	10,904,42	10,185.89	10,508.52	10,098.81	10,569.20	16,980.22	10,425.14	10,692,18	11,597.31	10,590.91	

2005

FERC Form		Bi-molell Binne	Carbon Blanc	for Create	Dave Johnston	Codebut Blance	H materia	unter Unit No. Hi	inter Unit No. Hu	nter Unit No.	H House	untington J	im Bridger 1 in	te Mountain Na	V transform Distance	Vest Valley W	T Plant Diane	ermai Plants	ERC
Acct no. Line n					Plant		ciouna i frien	۰.	2	~		Plant	Plant			Peakers		Total A	ct no.
	Kind of Plant (internal Comb. Gas Turb, Nuclear	Steam - Geo	Steam	Gas Turbine	Steam	Steam	Gas Turbine	Steam	Steam	Steam	Steam	Steam	Steam	Gas Jurbine	Steam	Gas lurbine	Steam		
N	type of Constr (Conventional Outdoor Boiler, etc)	Indoor	Outdoor Bolier	Cutdoor	Serm-Outdoor	Cuttoor	Outdoor	Outdoor Holler	Outdoor Boiler	Uutdoor Boller	JUIGOOT BOILET	UTGOOT BOHER	semi-Outdoor	Jutacor Boller	Jakos Joobinc	Cutator	CONVENTIONAL		
m	Year Originally Constructed	1984	1954	2005	1959	1951	2002	1978	1980	1983	19/8	1974	19/4	27.61	1963	2002	9/61		
4	Year Last Unit was installed	1984	1957	2006	1972	1955	2002	1978	0861	1983	1983	1977	5/61	19/2	1971	2002	8/61		
5	Total installed Cap (Max Gen Name Plate Ratings-MW)	26.1	158.6	566.9	816.8	257.6	141 D	443.0	285.0	495.5	1,223.5	396.0	1,541.1	16.0	/0/ 2	217.0	/ 692	6,987.5	
9	Net Peak Demand on Plant - MW (60 minutes)	52	175	568	761	213	127	413	271	459	1.143	916	1,400	9	404	SS S	2/8	6,531	
-	Plant Hours Connected to Load	8.578	8.718	6,596	8.760	1.651	2,795	8.285	7.288	8,129	8,760	8.729	8.760	7,545	8,760	3.724	7.207		
ω¢	Net Continuous Plant Capability (Megawatts)	, 5			, wer				- 550	· Ş		- 200		' -	. 002	. 55	- 9 <i>3</i> %	2 466	
n (	When Not Limited by Congenser water	52	271	19 27	70/	8	071	403	R	460	271.1	82	1.413	*	00/	777	007	0.400	
2;	When Limited by Condenser water Austrace Mirmbur of Emolouries	۰÷	' F	- cc	. 901	. 76	,	- 76		. k	, šŕ	167		· 12	145	, ĉ	. 15	1 310	
= 5	Net Generation. Exclusive of Plant Use - KWh	190.608.000	1312553000	1 760 645 000	5 776 846 000	130 819 000	214 071 000	3 215 261 000	828.040.000 3	433 975 000 8	477 276 000 6	139 007 000 10	060 478 000	100 523 000 4	929.400.000	456 624 000 1	886.039.000 4	434,889,000	
1	Cost of Plant 1 and and 1 and Richts	31 282 815	856.546	3 402 550	10.451.083	1 252 090		9 688 975	9 688 975	10 275 400	29 653 350	2 386 782	1 161 925	635	4.290.776		210.526	85.049.078	
4	Structures and improvements	6.663.493	12.195.375	28 120 692	50.207.724	13.877 760	4 121 643	61 599 431	50 557 997	89.608.334	201.765.762	100.385.029	133, 223, 694	217,599	60,389,753	116,354	49.345,431	660,650,309	
ιų	Equipment Costs	33,868,041	78.255.924	300.721.130	369.677.242	56,496,749	73.768.723	231,281,082	153,975,955	376,666,393	764,145,430	511,645,641	762,621,386	5,009,047	314,227,168	607,789	278,145,860	1549,190,130	
16	Asset Retirement Costs	420.763	313,308	219.922	6,412,602	746.792		1,893,538	1,893,538	1,893,538	5,680,614	2,709,703	9,171,815	•	4,359,064	•	301,453	30,336,036	
17	Total Cost	\$ 72,255,112	\$ 91,721,153	5 332 464 294	\$ 436,748,651 \$	72.373.391 \$	77.890.366 \$	304,463,026 \$	216,116,465 \$	480,665,665 \$1	001,245,156 \$	517,127,155 \$	906,178,820 \$	5,227,281 \$	383,266,761 \$	724,143 \$	328,003,270 \$	325,225,553	
18	Cost per KW of installed Capacity (our share)	\$ 2.768.40	s 486.33	5 586.46	s 53471 \$	280.95 \$	552.41 \$	687.28 \$	758.30 \$	970.06 \$	818.35 \$	619.61 \$	588.01 \$	326.71 \$	541.95 \$	3.34 \$	1,132.22 \$	618.99	
500 19	Operation Supervision and Engineering	20.065	103.478	1.169.836	609.319	46.172				,		12,960	16,749,677		501.341	•	2,544,249	21,757,097	200
501 20	Fuel		13,633,123	53,417,221	41,977,590	7,793,183	9,393,270	32,952,944	18.608.228	34,932,246	86,493,418	56,823,628	134,687 486	4,698,778	65.409.065	17,668,753	15.020.362	507.035.877	501
21	Coolants and Water (Nuclear Plants Only)				•	•	1		•		,		÷	1	,	,		,	
502 22	Steam Expenses	(13,481)	1,235,100		44,903			2,952,013	2,945,176	2,961,088	8,858.277	6,056,760	3.541.899	1	7,378,618			27.102.076	502
503 23	Steam From Other Sources	3,110,724								,	ŀ			•		,		3.110.724	503
504 24	Steam Transferred (Cr)		'			,	•			,									504
505 25	Electric Expenses		1.897.270	1.410.522		•	1.768.800	41,300	41,300	41,300	123,900		132,186	762,636	41,914	2,131,781		8.269,009	90 <u>9</u>
506 26	Misc Steam (or Nuclear) Power Expenses	1,624,844	3,853,893		14,615,932	2.718.842	,	2,178,819	(4,669,798)	2,791,516	300,537	9.627.725	(15,298,152)		7,102,076		991,108	25.536,805	506
507 27	Rents	1.013	32 377	201 118	63.611	1 219	3 999	38.319	31.237	35,829	105.385	89.768	728.304	293	2,000	13.072.156	7,796	14,308,984	507
509.28	Allowances		'				1		,										8 <u>8</u>
510.20	Maintenance Supervision and Endineering	754									,	1 343 614	1 361 822		1.490.534	404	46	4.197.374	510
551 20	Reintenence of Structures	73 55	233 347	100 230	2 5.43 768	7.4 205	120 301	1 465 213	1 783 200	1 446 610	4 ROK 037	1 274 744	7 673 456		1 064 394		407-401	18.376.600	5
512 21	Meintenence of Boller for reactor) Plant	175 465	002 EUV C	200,001	6 508 314	531 660	707.001	5 138,856	PAT COR 7	5 787 350	18 813 058	10.468.573	24 789 11		8178136		9 158 158	81 117 12B	515
10 210	Maintenance of Electric Plant	736,685	BEA ANA	100 100 1	E OIS BRG	513 311	ACR 012	817 GRS	7 475 100	884 164	5 173 677	5 011 360	7 067 362	222	3 005 603	305 306	2 952 695	33.396.215	513
514 33	Maintenance of Misc Stasm /or Nuclear) Plant	78,960	345 705	47 866	1 180 612	1000	166 281	362.184	258 000	309.695	930.875	1 188.364	2 174513	210 337	564 437	11 609	902 250	8.252.761	514
NE LO	Total Production Excenses	5 5 56 501	5 24 612 408	£ 57 070 733	5 73 640 015 S	12 260 656 5	12 048 656 4	45 047 329	30 312 749 \$	40 184 816 5	125 444 904 5	91 997 655 5	183 607 666 \$	5 672 261 5	94 738 113 5	33 209 007 \$	31 984 065 \$	752 460 650	
5 %	Connecte har Mat MAR	e 0.0776	0.0180	0.0320	2010101 3	2 0000 C		S EVIUL	00166 6	0.0143 6	0.0148 5	0.0150 \$	0.0183 5	0.0564	0.0162 \$	0.0777 \$	0.0170 \$	0.0182	
3	Total Bushar - Showh	5 27 58	18.75	00022	12122	2 0/2 20	4 LT 45	\$ 56.71	16.58	14.37 \$	1480 5	14 99 5	18.25 5	56.43 \$	2 02 61	5 62 62	16.96 \$	18.16	
	Find - SAMUP		10.00	201-202	10.1	12 95	43.88	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1018	10.17 \$	10.20	\$ 96.6	13.39	46.74 5	1327 5	38.74 \$	7.96 5	12.24	
	Non-fixed - SMMVh	\$ 27.58	836	256	5.48	34.22	10201	4 04 5	6.40 5	4 15 4	459 \$	5 73 \$	4.86 5	9.68 \$	5.95 5	33.99 \$	\$ 66.8	5.92	
	Variable O&M (per RDI definition) - SMWh	\$ 225	S 11 1 1 1 1 1 1 1 1	S 0.49	5 1 09 3	6.64 \$	251 \$	0.81 \$	1.28 \$	0.83 \$	0.92 \$	\$ 114 \$	0.96 \$	194 \$	119 \$	1.07 \$	1.80 \$	1,12	
	Fixed O&M (RD) definition) - SAMWh	S 9.01	5 6.70	\$ 2.07	s 439	27.38 \$	10.08 \$	3.24 \$	5.13 \$	3.32 \$	3.68 \$	4.59 \$	3.90 \$	7.75 \$	4.76 \$	32.92 \$	7.20 \$	4.81	
	Total O&M without Fuel	\$ 2,145,867	\$ 10,979,285	\$ 4.512.512	\$ 31,672,345	4,476,473 \$	2,695,396 \$	12,994,385 \$	11.704,531 \$	14,252,570 \$	38,951,486 \$	35,174,027 \$	48,920,180 \$	973,483 \$	29,329,048 \$	15,520,254 \$	16,963,703 \$	245,424,773	
8	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
37	Unit (Coal-tons/Oil-barrel/Gas-mct/Nuclear-indicate)	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	
38	Quantity (units) of Fuel Burned	•	632,354		4,037,028			1,532,085	841436	1,580,669	3,954,190	2,621,873	5.695.821		2,603,974		1,357,141	20.902,381	
92	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)		11,709	3	8,080			11.180	11335	11,185	11,215	11.219	9.219		9,852		7,979	9.701	
4	Avg Cost of Fuel/unit, as Delvd f.o.b. during year	ŧ	20.548		8,990			•	0	,	21.402	21 255	23.586		25.037		10.589		
43	Average Cost of Fuel per Unit Burned		21.203		10.280			21,429	21.81	21.426	21.509	21 273	23.252		24,870		10.3/6		
4	Average Cost of Fuel Burned per Million 61U	,	0.905	,	0.636			2020	7967 5 5 5 1	805.0	805.0	0.948	1971		7071				
£ 2	Average Cost of Fuel Burned per KVVh Net Gen	ļ	0.010		100.0	į	c	0.010	5	0.010		ann o	0.013	and of	200	1	900 D	ð	
R ;	FUEL Kind (COB), CdS, Cri, OF NUCHER) (148 //141 (1000///14 home///140 mod///1414-1 (nuther))	101	SED LOT		200	SB2	1011	SB0	500	and n	ACE ACE	200	ACE COR	MCF ACF	acm	MCE	MCF	acon	
ñ P	Offic (COMPTOTIS) OFFICIAL SOLOGISS STOLING CONTRACTS	1041		10 400 110	L) M	1 BING 776	1 1 1 2 2 C C			I NICL		interior in		1 658 896	153 975	4 676 710	5	27 963 190	
8 8	Ava Heat Cont - Fuel Burned (btu/indicate if nuclear)		• •	1.052		1.056	1 056							1.056	1,057	1.052		1,053	
4	Ava Cost of Fuel/unit, as Delva f o.b. during year		,												•				
41	Average Cost of Fuel per Unit Burned			4.308		4.313	4.144							2.832	4.214	3.782			
42	Average Cost of Fuel Burned per Million BTU			4.094		4.087	3.923							2.682	3.906	3.593			
\$ :	Average Cost of Fuel Burned per KWh Net Gen			0.030		0.060	0.044	ě			č	ė	è	0.047	č	660.0	ð	č	
81	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	5	ō	ð.	5.	5.	ē	<u>5</u> -	5 -	5	5 1	5	5	E of	5	D quad	D dorred	D north	
3/	Unit (Cost-tons/Ult-Darreir/Gas-mor/Nuclear-morcate)	barrel	Darrel 2 One	Darrets	barreis e 236	<b>DBITESS</b>	traneis	Darrers 1 pao	59/1615 7 0/10	5arreis	16 EDE	10.810	24 DOR	SELIPC	Ddifeis		10.067	77 636	
3 F	Ave Heat Cont - Filel Rismed (htufindicate if nuclear)		140 000		140 000			140.000	140,000	140.000	140 000	140.000	140 000				140,000	140.000	
}	Ave Cost of Fuel/unit, as Devid f.o.b. during year		77,503	,	75.212			1			87.456	81.877	93.706				93.308		
4	Average Cost of Fuel per Unit Burned		,	,	. •				,	r	,	,							
42	Average Cost of Fuel Burned per Million BTU	1	13.181		12.791			11.346	14.774	15.449	14.874	13.925	15.936				15.869		
64	Average Cost of Fuel Burned per KWh Net Gen	,	•	+														20 100 U.	
44	Average BTU per KWh Net Generation		11,295.21	7,409,17	11,299.53	14,584,70	11,181,57	10,657,98	10,444,35	10,317.06	10,473.83	9,595.19	10,452,85	17,426.80	10,441.73	10,774.51	11,514.32	10,381,65	

2006

	ERC Form		Blundell Plant	Carbon Plant	Currant Creek D	ave Johnston G	adsby Plant	Gadsby Hu	nter Unit No. Hur	ster Unit No. Hum	tter Unit No. H	unter Plant	luntington	lim Bridger	ake Side Litt	le Mountain Nau	ohtoo Plant W	fest Valley W	vodak Plant T	termai Plants	FERC
	30 100 LUDB 1	oo. Kind of Plant (Internal Comb. Gae Turkh Nuclear	Steam - Geo	Steam	Gae Turbine	Plant	Ctorner	Peakers Ger Turbine	Ctores	2 Character	5		Plant	Plant .				Peakers		Total A	icct no.
	2	Type of Constr (Conventional, Outdoor, Boiler, etc)	Indoor	Outdoor Boiler	Outdoor	Semi-Outdoor	Outdoor	Outdoor	Outdoor Boiler C	Dutdoor Boiler O	utdoor Boiler (	Jutdnor Boller	Jutchor Boiler	Semi-Outdoor	Cuttinor O	oda rurome utdoor Boilar D	oteam atrioor Boiler	Cass Lurbine	Conventional		
	ю	Year Originally Constructed	1984	1954	2005	1959	1951	2002	1978	1980	1983	1976	1974	1974	2007	1972	1963	2002	1978		
	ব	Year Last Unit was installed	1984	1957	2006	1972	1955	2002	1978	1930	1983	1983	1977	1979	2007	1972	1971	2002	1978		
		lotal installed Cap (Max Gen Name Plate Ratings-MVV)	1.85	188.6	566.9	816.8	257.6	141.0	443.0	285.0	495.6	1.223.6	996 D	1,541,1	548.0	16.0	707.2	217.0	289.7	7,547.6	
	o r-	Plant Hours Connected to Load	1C REV 7	B 661	000	8C/ 872 B	961 UC3-E	1/4	114	407 o	483	1.130	918	1,414	2.94	21 COL 0	706	215	278	7,155	
	- 60	Net Continuous Plant Capability (Megawatts)	-		-	-	-			-	210.2	- 190 -	6C/0	- ·	204.2	702'a	- /00	198.0			
	ۍ ا	When Not Limited by Condenser Water	345	172	540	762	235	120	403	250	460	1,122	895	1.413	548	14	700	202	268	7,025	
	2 :	When Limited by Condenser Water Average Mumber of Emologicae	ιų	· 09	' F	' <b>0</b>		,	. ;	· ;	, ;				' ?	' '	• •	• •	· 1		
	5	Net Generation, Exclusive of Plant Use - KWh	163.875.000	1.339.343.000	3.605.071.000	696.860.000	305 832 000	27 217 000 3	035 550 000 2	052 174 000 2 9	8 000 CPG 050	038 666 000 7	127 084 000 #	1 140	IRE RET DOD	17 602 000 5 2	140	887 031 000 2	246 168 DOD 4	ADD. I	
	13	Cost of Plant: Land and Land Rights	41,195.596	956.546	3,403,030	10.451.083	1,252,090		9.668.975	9,688,975	10.275.401	29,653,351	2.386.782	1,161,925	17.296.760	635	4,290,794	-	210,526	112,259,118	
	4 1	Structures and Improvements	6,698,624	12,437,266	42,374,901	50,697,737	14.068.046	4,121,643	61.926,142	50,727,551	89,910,667	202,564,360	112.015.877	134,968,247	41,901,000	217.599	64.349,044	116,354	47.920,904	734,451,602	
	<u>n</u> fr	Equipment Custs Assat Batimment Crets	94,420,120	1001212.00	747,058,462	263,510.279	909/20.00	11,981,641	409'679'677	4 000,309,304 4	102.956.162	786.095.320	507.906.766	/85.821.165	284,392,458	5.071.833	323,952,614	622,401	271.746.601 3	(,915,373,164	
	17	Total Cost	\$ 113 656 676	23 458 0HG 3	340 909 021	A51 353 374 C	77 534 770 5	76 103 284 6	2 100 201 SOL	14 782 753 6 F	1,002,3423	3, 100,705	2.300,034	0,003,301	143 600 719 6	5 + 100 CS	2,841,654	730 755 6	/61.615	26,554,549	
Matrix and the state of the state	18	Cost per KW of Installed Capacity (our share)	\$ 2,983.11	5 495.54 5	601.36 \$	552.59 \$	28158 \$	539.74 \$	632.86 \$	753.64 \$	1.017.36 5	834.83 \$	627.32 \$	602.57 \$	626.99 \$	330.63 5	559 15 \$	340 \$	1 106 80 5	634 46	
0         0	500 19	Operation Supervision and Engineering	31,426	101,996	698,439	695,975	39.175	,	6	e	e	(3)	13,432	17,855,550	31,314	,	435,688		558,023	20,461,015	500
No.         No. <th>501 20</th> <th>Fuel</th> <th>•</th> <th>16,105,801</th> <th>151.425.146</th> <th>42,371,196</th> <th>26.414.704</th> <th>22,993,864</th> <th>37,892,177</th> <th>24,841,550</th> <th>34,651,787</th> <th>97,385,514</th> <th>82,679,450</th> <th>139.077,086</th> <th>45,771,901</th> <th>11.906.700</th> <th>77.343.857</th> <th>41.701.673</th> <th>18,167,354</th> <th>773,344,246</th> <th>501</th>	501 20	Fuel	•	16,105,801	151.425.146	42,371,196	26.414.704	22,993,864	37,892,177	24,841,550	34,651,787	97,385,514	82,679,450	139.077,086	45,771,901	11.906.700	77.343.857	41.701.673	18,167,354	773,344,246	501
	507 77	Coolams and water (Nuclear Plants Univ) Steam Evnences	, 10CC 8/	1 126 021	•	,	- 270	,	- 076 964	- 046 867			- 000 T			,	- 000 -000	·	•	- 101 00	500
Note         Note <th< th=""><th>503 23</th><th>Steam From Other Sources</th><th>4 845 079</th><th>-</th><th></th><th></th><th>a '</th><th></th><th>100/02012</th><th></th><th>D&amp;C' 108'7</th><th>0,010,010</th><th>C#J'076'J</th><th>c71'100'c</th><th></th><th>, .</th><th>0.0US_2UM</th><th>•</th><th></th><th>20.407.030</th><th>202</th></th<>	503 23	Steam From Other Sources	4 845 079	-			a '		100/02012		D&C' 108'7	0,010,010	C#J'076'J	c71'100'c		, .	0.0US_2UM	•		20.407.030	202
No.         No. <th>504 24</th> <th>Steam Transferred (Cr)</th> <th>-</th> <th></th> <th>,</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>. ,</th> <th>, ,</th> <th>,</th> <th>, <b>,</b></th> <th>, ,</th> <th></th> <th></th> <th>• •</th> <th>n /0.040'#</th> <th>202</th>	504 24	Steam Transferred (Cr)	-		,							. ,	, ,	,	, <b>,</b>	, ,			• •	n /0.040'#	202
	505 25	Electric Expenses		1,917,701	1.819.594	,		1.636,826			1		•	8,038	1,253,357	955,208	9.184	8,999,446	,	16,599,354	505
	506 26	Misc Steam (or Nuclear) Power Expenses	1,579,607	4.730,820	16,093	14,956,185	3.325,222	,	2,633,887	139,052	3,070,682	5.843,621	10.301.575	(16,196,118)			9,409,653	1	4,081,478	38.048.136	506
Matrix for the form         Matrix for the form <thmatrix form<="" th=""> <thmatrix form<="" th="">         Matrix</thmatrix></thmatrix>	12 106	Rents Allowerson	1,458	16,554	2.123	212.751			1,522	1,522	2.691	5,735	34,384	432.434	,	1	2.000	10.977,690	9.934	11,695,063	507
1         1	510.29	Maintenance Sumervision and Frommaring	• •			,	,	,					. 200 4				- 404 600	,		-	806
10.1         10.1 <th< th=""><th>551 30</th><th>Maintenance of Structures</th><th>158.507</th><th>224.407</th><th>323.875</th><th>2 345 496</th><th>157 495</th><th>183.422</th><th>1 975 615</th><th>1 828 705</th><th>ARA PCC C</th><th>6 D34 2D8</th><th>757 709 1</th><th>7 908 487</th><th>15 979</th><th>, ,</th><th>1.104,338</th><th>808 CD</th><th>407 413</th><th>21 510 330</th><th>1910</th></th<>	551 30	Maintenance of Structures	158.507	224.407	323.875	2 345 496	157 495	183.422	1 975 615	1 828 705	ARA PCC C	6 D34 2D8	757 709 1	7 908 487	15 979	, ,	1.104,338	808 CD	407 413	21 510 330	1910
10.1         10.0         7.000         7	512 31	Maintenance of Bolier (or reactor) Plant	319,944	1,973,419	1	8.945,570	1.227,508		5,620,197	4,665,389	12,660,913	22.946.499	6.275,922	29,006,768		, ,	8,573,325	~ ~	4,922,299	84,191,274	512
Matrix constraint         Constraint <thc< th=""><th>513 32</th><th>Maintenance of Electric Plant</th><th>1,450,796</th><th>708,098</th><th>2,813,553</th><th>7.651.191</th><th>939,500</th><th>646,701</th><th>795,557</th><th>537,187</th><th>3,711,889</th><th>5,444,633</th><th>1.298.451</th><th>7,703,496</th><th>545,625</th><th></th><th>3.422.281</th><th>624,790</th><th>958,974</th><th>34,208,089</th><th>513</th></thc<>	513 32	Maintenance of Electric Plant	1,450,796	708,098	2,813,553	7.651.191	939,500	646,701	795,557	537,187	3,711,889	5,444,633	1.298.451	7,703,496	545,625		3.422.281	624,790	958,974	34,208,089	513
	514 33 34	Maintenance of Misc Steam (or Nuclear) Plant	66,958	373,684	51,664	1.554.039	572,389	145,817	221,234	117,679	119,882	458.795	1,263,732	2,144,172	1,081	59.927	980.042	136,817	554,950	8,364,067	514
	r k	Evences for high thinks	4 0,440,340	115 00 17 0	4 104 001 701	10,132,403 \$	\$ 2/0/0/25 \$	< 0.00000000	<ul> <li>ASU,000,20</li> </ul>	50,4///30 \$	\$ 175'005'AC	140,929,102 \$	112, //0, 8/3 \$	< L/L'7AC'7AL	\$ /07/AL9//#	12.921,830 \$	10,004,439 \$	62,533,114 \$	# 600'LC/'87	*******	
New state         New state <t< th=""><th>}</th><th>Total Bushar - S/MWh</th><th>5154 S</th><th>5 H02000 1</th><th>43.50</th><th>5 CS 51</th><th>106.84</th><th>CO/UCO</th><th>10.012</th><th>4 5/10/0</th><th>* 107000</th><th>4 5010/0 4 90 01</th><th>* 001070 * 001170</th><th>4 76 10 1 10 15 6</th><th>4 704070</th><th>U.1148 3</th><th></th><th>4 /SRU/U</th><th>1210.0</th><th>1770.0</th><th></th></t<>	}	Total Bushar - S/MWh	5154 S	5 H02000 1	43.50	5 CS 51	106.84	CO/UCO	10.012	4 5/10/0	* 107000	4 5010/0 4 90 01	* 001070 * 001170	4 76 10 1 10 15 6	4 704070	U.1148 3		4 /SRU/U	1210.0	1770.0	
Witcher Strutt         3		Fuel - S/MWh		12 03	42.00	7.44 \$	86.37 \$	70.27 \$	12.48 \$	12.10 \$	11.74 \$	12.11 \$	11.60 \$	13,83 \$	38.60 \$	105.74 5	14.84 \$	62.52 <b>\$</b>	8.05 \$	16.78	
Network (MI)         5         101         1003         1013		Non-fuel - \$/MWh	\$ 51.54	5 8.32 <b>3</b>	1.59 \$	6.38 \$	20.47 \$	7.98 \$	4.67 \$	5.18 \$	8.38 \$	6.16 \$	4 22 \$	5.32 \$	1.56 5	9.02 \$	6.28 \$	31.23 \$	5,13 \$	5,90	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Variable O&M (per RDI definition) - \$/MWh	\$ 4.39	1.67	0.32 5	1.27	4.05 \$	1.60 \$	\$ 660	1.04 \$	168 \$	123 \$	0.84 \$	1.06 \$	0.31 \$	1.80 \$	1.26 \$	2.86	1.03 \$	1.13	
Not explore         Constrained         Constrained <thconstrained< th=""> <thconstrained< th=""></thconstrained<></thconstrained<>		Total ORM without Ecual	5 1/ 56 5 1 600 487	5 019 0100 1	K 778 241 6	5 11.0 2 201 107 5	6 161 600 6	6.39 5	3.74 5	4.15 5	6.71 5	4.93 5	3.38 \$	4.27 \$	1 25 5	121 \$	5.02 \$	28.28 \$	4.11 5	4.77	
37         1	36	Fuel Kind (Coal Gae Oil or Mirciaar)	Coat	Cont	Coal		Cost Cost		a more than the		6 01-00-1-5 0-0-1-0-1-5	* 0001010181	30,091,323 \$	00'010'00 \$	* 000/1001	6 CC1 CI O1	• 700'01 /70	4 144 100/07	11.000,000 4	Control 117	
3         Antrink (mich of Falle Refinding)         5         342.41         1/13/34         87/14         7.333.43         3.733.43         3.77,16         7.16,13 <th>37</th> <th>Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)</th> <th>Tons</th> <th>Tons</th> <th>Toris</th> <th>Tons</th> <th>Toris</th> <th>Tons</th> <th>Tons</th> <th>Tons</th> <th></th>	37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Tons	Tons	Toris	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Toris	Tons	Tons	Tons	
Not class fraction         12/15         11/26 <th>38</th> <th>Quantity (units) of Fuel Burned</th> <th>4</th> <th>640,585</th> <th>•</th> <th>3,942,421</th> <th></th> <th></th> <th>1,479,754</th> <th>970140</th> <th>1,329,439</th> <th>3.779.332</th> <th>3.221.777</th> <th>5,709,196</th> <th></th> <th></th> <th>2.772.108</th> <th></th> <th>1.651,101</th> <th>21.716.521</th> <th></th>	38	Quantity (units) of Fuel Burned	4	640,585	•	3,942,421			1,479,754	970140	1,329,439	3.779.332	3.221.777	5,709,196			2.772.108		1.651,101	21.716.521	
1         2000         2010         20	8 Q	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear) Avg Cont of Evolving on Dobid 6 of the draine more		12,115	•	8,052			11,290	11356	11,260	11,296	11,318	9,136			9.929		7,830	9.729	
42         Averance Cast of Table Binner wer Minke FTU         101         112         112         103         103         003	4	Average Cost of Fuel per Unit Burned	. 1	24.621		10.595			25.266	25.437	C64.45	25 038	25,388	798.82			27.461		10.812		
3         3         4         001	6	Average Cost of Fuei Burned per Million BTU	•	1.016	,	0.658			1.119	1.12	1.088	1,108	1.122	1.308			1.383		0.690		
7         Value (consideration)         Vist         Vist <th>2 P</th> <th>Average Cost of Fuel Burned per KWh Net Gen</th> <th>, 2</th> <th>0.011</th> <th></th> <th>0.007</th> <th>d</th> <th>č</th> <th>0.012</th> <th>0.012</th> <th>0.011</th> <th>0.012</th> <th>0.011</th> <th>0.014</th> <th>•</th> <th>e</th> <th>0.015</th> <th></th> <th>0.008</th> <th></th> <th></th>	2 P	Average Cost of Fuel Burned per KWh Net Gen	, 2	0.011		0.007	d	č	0.012	0.012	0.011	0.012	0.011	0.014	•	e	0.015		0.008		
38         Quantial frequent         2.613.35         4.163.10         3.764.35         4.163.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         4.065.10         3.764.35         3.764.35         3.764.35         3.764.35         3.764.35         3.764.35         3.765.15	37	Unit (Coal-tons/Oli-barrel/Gas-mof/Nuclear-indicate)	MCF	MCF	MCF	MC.F	and a C M	See FCM	HCM	LCW	ano ucm	LCM	and ACM	MCF	MCF	SIED IL	SED	1000	and	SHED N	
3         Name factor (-rise) and factor)         1043         1047         1043         1043         1043         1043         1043         1043         1043         1043         1044         1055         1041         <	38	Quantity (units) of Fuel Burned	4		24,810,285		4.118,910	3.736.433					5		7.761.318	1.945 941	188 191	7 097 553	5	49.658.631	
Interface of a final production of the part	er :	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	•	'	1.045		1,053	1,047							1.050	1,014	1,065	1,041		1,045	
Circle         Constraint         Constraint<	0 <del>1</del>	Avg Cost of Fuel/unit, as Delvd 1.o.b. during year Averane Cost of Euclinear Itali Burnod			, 1			- 1E1							- 202			, 1			
4         Review Case of a field Binner are why lived Case         0.02         0.03         0.	; Q	Average Cost of Fuel Burned per Million BTU			5.842		6.09(3	6.134 5.879							188.5	6.115 6.034	6.4/8 6.311	5/8/C			
37         Out (Accidence) (accidence)         OI         OI <t< th=""><th>43</th><th>Average Cost of Fuel Burned per KWh Net Gen</th><th></th><th></th><th>0.042</th><th></th><th>0.086</th><th>0.070</th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.039</th><th>0.106</th><th></th><th>0.063</th><th></th><th></th><th></th></t<>	43	Average Cost of Fuel Burned per KWh Net Gen			0.042		0.086	0.070							0.039	0.106		0.063			
J         Underformed learning         Barrels	36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	6	õ	ð	Ð	ð	ō	ð	₹	ō	ō	90	Ю	10	õ	ð	ō	õ	ō	
Structure         1.0.3V         0.2.5V         0.2.5V <th0.2.5v< th=""> <th0.2.5v< th=""> <th0.2.5v<< th=""><th>3/</th><th>Unit (Coal-tons/Oli-barrel/Gas-mc//Nuclear-indicate)</th><th>Barrei</th><th>Barrel</th><th>Barrels</th><th>Barrels</th><th>Barreis</th><th>Barrels</th><th>Barrels r 645</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th>Barrels</th><th></th></th0.2.5v<<></th0.2.5v<></th0.2.5v<>	3/	Unit (Coal-tons/Oli-barrel/Gas-mc//Nuclear-indicate)	Barrei	Barrel	Barrels	Barrels	Barreis	Barrels	Barrels r 645	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	
4 Average for field manual and field and marker 20.736 95.166 91.12 25.24 92.253 92.253 94.502 94.502 15.504 14.502 14.502 15.504 14.502 15.504 14.502 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 14.502 15.504 15.504 14.502 15.504 15.50	8	Avg Heat Cont - Fuel Burned (btuindicate if nuclear)		140.000		140.000			140.000	140.000	140.000	140.000	0.557/	140.000					3,34U	197'6/	
4.1         Annexe cast of the Barner of Barner         16.72         16.85         16.76         15.34         16.72           4.2         Annexe cast of the Barner of Barner         16.82         17.139         16.816         16.72         16.856         16.76         15.34         16.72           4.3         Annexe cast of the Barner of Barner         11.033.49         17.110         16.816         0.0273         16.826         16.76         15.34         16.72           4.3         Annexe cast of the Barner of Annexe cast         10.037.76         0.0271         17.835.33         10.607.76         11.668.66         10.203.66           4.3         Annexe cast of the Barner of Annexe cast         11.033.48         11.151.02         4.161.66         10.0277         10.637.71         17.535.33         10.602.76         11.030.56	40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year	•	98.736	•	95.166				•	•	99.112	98.288	90.283					94,502		
42 Average Cast File Burning bill 10 15 Jack 10 15 Jack 10 15 Jack 10 12 Jack	44	Average Cost of Fuel per Unit Burned	,		1						-		, 1	-					, 10,000		
44 Average BTU and Second 11(803.49 7)(14)11(10) 41(16) 10,143(16) 10,147(16)	18	Average Cost of Fuel Burned per Mittion 51 U Average Cost of Fuel Burned per KWh Net Gen	1 )	205.01	, ,	161.185 ,			951./T	316.91	16.792 D.001	16.856	16.716	15.364					16.072		
	44	Average BTU per KWh Net Generation	,	11,603.49	7,191.74	11,151.02	14,181,68	11,965.51	11,016.89	10,741.58	10,187.75	10,641,87	10,239.96	10,392.32	6,872.12	17,523.53	10,603.15	11,076,78	11 468.95	10,303.56	

2007

4/28/2011

- 12	Vind of Diver Antamol Comb. Gas Turb. Abreland								3		,		Constant	0 1000	and Deeper Country	Cash Table	a	1 - F	Cherry C	
2	AID DE PORTE ( REPORTED ADDID, ARD I MID, REAMIN	Steam - Geo	Steam (	Combined Cycle	Gas Turbine	Stearn	Steam	Gas Lurbme	FILEOIC	Linearo	Steam	Steam	Cleater	> Unestro	ombined Lyciv	Cass Furnine	Eleans,	OBS LUTDING	Lingue	
	Type of Constr (Conventional Outdoor, Boller, etc)	Indoor	Outdoor Bailer	Outdoor	Outdoor	Semi-Outdoor	Dufidoor	Outdoor	Outdoor Bailer	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Outdoor Boiler	Semi-Outdoor	Outdoor	Outdoor Boiler	Outdoor Boiler	Outdoor	Conventional	
<b>n</b> •	Year Originally Constructed	1981		2002	2002	1909	1951	2002	8/61	0951	1983	9/61	4/6L	4/51	1002	2/61	1961	2002	9/61	
<b>3</b> 4	Tear Last Orst Was insigned Tear Installed Can May Can Name Dista Battan 1980	1.04	3885	5002	9007	7/61	0051	7007	0/61	ODE:	1303	2001	1/21	10/01	2007	7/62	C 7.02	2002	578L	8 DE7 6
) (c	Net Poak Demand on Plant - MW (60 minutes)	12	174	505	573	76.4	010	801	406	751	1.1.4	3011	906	1 405	601	22	205	194	780	7 666
~	Plant Hours Connected to Load	8.338	8.625	1 686	7 757	8 784	P70 %	4156	8,323	8.617	8 269	A 781	8 770	B 784	7 734	R DAD	R 784	1221	8.454	
- 00	Net Continuous Plant Capability (Megawatts)					,	,	'						,		,	'			
<b>б</b>	When Not Limited by Condenser Water	25	172	520	540	762	235	120	403	259	460	1.122	895	1,413	548	14	2002	202	268	7,545
10	When Limited by Condenser Water							,	,		,					,	,			
1	Average Number of Employees	22	70	17	21	191	65				,	220	164	345	19	9	144	9	8	1.113
12	Net Generation Exclusive of Plant Lise . KWh	254 277 000	1 204 942 000	588 459 000	2 799 585 000	5 638 A06 000	232 078 000	740 518 000	114 957 000	000 296 200 2	533 797 000 B	F 000 1 CT 199	146 850 000	10000000000	2 BE1 722 000	100 548 000	114 409 000	126 285 000	252 799 000	20000000000
ę	Cost of Plant I and and I and Richts	41 195 595	956 546		3 403 777	10.451.083	1 252 000		9 688 975	9 688 975	20.275.401	29 653 351	2 3AE 782	1 161 925	17 296 760	635	4 290 826	-	210.526	112 259 397
1	Structures and Immovements	7 404 973	14 151 830		43 236 674	67 148 636	15,055,364	4 171 643	CT28.680	51 6K1 74R	780 958 06	206 229 267	111 555 714	135,138,580	27.057.001	787 331	R5 636 170		49 014 021	730.016.703
÷	Fouriment Costs	56 334 766	91 596 954		304 844 265	404 891 475	57 658 039	71 880 691	731 867 809	154 914 045	407 601 588	789 178 538	516 465 783	814 872 756	205 014 470	5 002 337	331 940 962		274 990 749	222 128 950
ų	desat Patientiant Costs	1 326 278	7 061 381		124 848	0.874.431	800,000,00		1003 654	1 073 554	1 023 554	2 070 663	2 351 855	6 663 361			7 650 767		813 828	27 233 918
2.0	Total Cost	4 116 771 102	110 858 711 1		741 610 064	104'5/0'0 1 1 1	2 102 C22 FC	75 COT 21 4	200 100 100 SOL	a 838 786 736	FOA 720 020		C17 7ED 636 C	067 836 627 6	A LEC SOL OVE	5 200 201 E	A 202.0202		174 870 177	100000000000000000000000000000000000000
	1041	+ 110,271,100		The function of the second sec	100/210/100	170,000,010	100.200.1		070 400 000	t 000'00'117	1 009/90/100	* **********	+ 000 801 700	* 770 000 100	C 102'000'640		C77'01C'-0+	Contraction of the owner	77 670 470	
2 9	Cost per NAV or inscalled Lapacity (our snate)		74100 0		07/07g	0//noc	1 04/207 4	70'800	11:000	C 14720/	4 1010 H	¢ 00'800	t 00'000	t 00120 01	e 007/00	¢ 70'000	* nn/7/c	,	1,121,20	70.100
5 0	Uperation Supervision and Engineering	52,0/55	202,215		82.344	/10/09/	18,893		1506/01	1008.03	(208.5)	190/./10	107-01	18,003,015	771.971		461,800	, 000 01	000,002	970 171 07
NZ 1	Fuel		16.28.823	42.286,408	15/.0/4.310	50,187,768	26,301,622	222 / 66' 62	213.011.612	ZZ1,600,0Z	43,074,989	108,421,723	61.271.664	149.060.097	050,211,761	160,877,86	16.503,802	10,992.115	59L'L7C'EL	200,040,862
5	Coolants and Water (Nuclear Plants Only)	•	•	•	•	,				•			•	• •		•	•			,
22	Staam Expenses	(234,842)	1.229.297		,	5,679			3.014.808	3.015.203	3,004,795	9,034,806	8.595.373	3.610.169	•		7.377.173			23.61/1625
3 23	Steam From Other Sources	3,371,385	•	•		•	•	•	•				,	•	•	•	•		•	3371.385
4 24	Steam Transferred (Cr)	•			•			•	•		•	•		•	•				•	'
5 25	Electric Expenses		1.860,316	1,301,982	2.503.145	•		1,555,365				,		2.475	2.712.172	947,555	920	3.006,572		13,890,502
5 26	Misc Steam (or Nuclear) Power Expenses	2.291.026	5,188,701			15.340.716	3.446.842		2.244.196	(2.248.468)	2.740.942	2.736.670	10.267.855	(15,463,153)	•		8,591,754		4,112,755	36,513,166
7 27	Rents	3.024	13,989	27.423	1.206	31.348			52	62	28	87	14,493	186,164				4,583,304	4.958	4.865,996
1 28	Allowances							•					,		•					,
0 29	Maintenance Supervision and Engineering			,	,					·	,		1 245.563	500.548		,	1.206.951		8	2,953,110
30	Maintenance of Structures	295 344	224 153	9.978	405 205	1 861 787	245 773	113.442	2 206 000	2 064 150	1 839 573	6 109 773	1 550 871	11 080 899	585 449		1 139 518	166 275	356 591	24.145.958
5	Maintenance of Roiler (or reactor) Plant	3.48 PUE	2 713 R2D			10 190 226	1 201 713		5 245 970	5 230 491	7 864 514	18 340 975	G REG REG	23 148 750		•	976.276.5		5 548 421	74 373 905
: 6	Maintanance of Electric Diant	ASC 224	1 673 870	515 DEG	7 0/0 153	a 175 756	1 221 612	015 0AE	CAN FEE 1	1 747 336	EA1 722	2022 525	1 244 964	7 676 140	1 850 854	01 555	1 703 006	314 603	1.053.128	059 494 CF
18	Maintenance of Misc Steam for Nuclear's Plant	195.53	412 789		-	1 434 677	767 675		157 798	164.245	267 578	584 671	1 212 418	2 726 422			636 100		366 653	7 700 243
. 2	Total Production Expenses	\$ 6,560,482	\$ 32,159,270	44142.850 \$	1 162,982,363	5 87 842 574	32 850 127	26 581 975 \$	53.807.972	35 002 205 \$	59.323.255 \$	148.133.431 \$	112,285,991 \$	200,582,345	162,186,627 \$	17.817.202 \$	103.686.240 \$	19.062.878 \$	31,170,088	**********
36	Generation and the Most Michtle Michter Street and State Street and Stre Street and Street and Stre	C 0.0768	COCO	0.0750	00587	¢ 0.015.6	0 1 4 4 5	0.1061	0.0172	0.0175 6	0.0568 \$	0.0170	0.0157 6	0.0107	0.0567 \$	0 1676 \$	\$ 5000 ¢	01510 5	0.0138 5	0.0750
3	Control Distribution of Addition	0.000 P	10700	25.01	700000	00100 t		- 1001-0	× 2110/0	1212 0	5 0L 21	* 00100	10,000	10.72 6	50 67 6	+ 07070 +	5 20 UC	150.05	ARE!	AD 86
	Even Statistic		15.38	71 86	12.33			06.70	ALC:	99.61			1 2 1	14.66	54.00	10,000	14 06	87.04	867	14 77
	Northand South	25.80	11.35			1 0.00		2 CE US			101	194	1 2 4 2	201		- 24.00		1029	21.7	5.77
	Underka Orac has DDI Augustoni Chatth	The second second second			STREET BY AN ADDREED			STRUE AND NO.	. 000	CHINESS TREE A CARD DATE	A LAND ROOM OF	WERE RED WINDOW AND A	A DATE OF A	のないないでは、「「	5 X4 4	a tot a	CONTRACTOR STORES	. CH 8	1.03	Victorial Contraction
	THE FULL TRANSMOND COME SUBSECTION CONTINUES IN THE FULL STATE STATE AND THE PARTICULAR STATES	s 10.04	200	252		5 524 (		8.75 5	2 60	171 5	2 68 5	2 98 C	2.47	106	S CF +	1 22 1 1 22 1	4 26 4	58.30 S	414	474
	Total O&M without Fuel	\$ 3189 097	\$ 13.629.447	1 854 442	5.908.053	37654 806	6 548 505	2 584 753 5	13 996 360 3	9 467 083 5	16 248 266 1	39 711 708 5	31 014 107 5	51 522 248	5 074 597	1.039.111 \$	27,182,438 \$	8.070.759 \$	11 648 919	250.004.376
36	Eral: Vind (Cast Cast Oil an Minimut)	100000		Summer Street Street	Concreasion of the second	2000-000-00			Contraction of the local division of the loc	- Contractor	11-0	The second se	Contraction of the second	Loci Contra	Conf	Cont	Land Carl	1000 Coal	Contraction of the local sectors and the loc	Coal
88	Tuer, Mind (Cost, Gas, Cit, of Nuclear)	1 10		1002	neo,	in con	EON A	2007		L Coll		1000	1907	1997 -	Terrar	1001	100	in the second	Tang	Tour
ò ?	Unit Look-tury of First Success-manyuplear-ingitate)	1018	SID!	8001	5110 1	2001	1012	STIDI	8101 - 185 - 200	510 L	2001	1012	101		85	101	6101 LUID 2.32 L	25	1 057 696	2101 202 10
5	Huaritity (units) of Fuel Burned		0/0/00			4,024,867			1.460.350	9/4/70%	F27"A94"	401.100.4	3,004,101	C#H/0000'C			206.101.2		000,100,1	100'07/17
50	Avg Heat Cont - Fuel Burned (btu/indicate if huclear)		ŝ			5965'1			1,563	109111	040,11	D/CIL	100111	247.4			8,656		1707/	1000
4	Ava Cost of Fuel/unit, as Delvd f.o.b. during year		31.135			12.167				,	•	26.252	25,199	29.790			27.315		11011	
41	Average Cost of Fuel per Unit Burned		31,355			12.135			26,498	26.709	26,493	26.546	26./05	919'67			111.12		661	
4	Average Cost of Fuel Burned per Miltion B (U		7971			0.756			1.129	671.1	251.1	671.1	760.1	1.00			1.3/4		967.0	
7	Average Cost of Fuel Burned per KWh Net Gen		cun n			0.009			710.0	210.0	210.0	ZLO:0	1100	410'0			sto a		0.000	,
£	Fuel: Kind (Coal, Gas, Dif, or Nuclear)	682	535	1935	Gas	282	202	33	SH2	585	123	582	282	202	202	100	Cas	1.035	585	SRO
10	Unit (Loai-tons/Orbarrel/Gas-mot/Nuclear-indicate)	MC <sup>+</sup>	MCF		ACP . LO CI	MC <sup>+</sup>	DW -	MUT NUC	RCF BCF	MCF	MCF	MCF	NC1	MC	1010	nur 1 and top	100 001	1,100 400		PUICT NO.
8:	Cuantity (units) of Fuel Burned			4,166,260	(gl.,600.,61		COC.971.5	7/0/7007							000.014.01	2,025,700	100'001	004/20#/1		661'70C'7C
2	Avg Heat Cont - Fuel Burned (bhuindicate 4 nuclear)			0501L	1,054		1001	1901							7.042	ACU, I	140°L	9CD'1		040.1
\$	Avg Cost of Fuedunit, as Deivo Lo b. during year				F.															
41	Average Cost of Fuel per Unit Burned			10,017	8.103		8.418	8.325							8.090	8.279	8.863	9637/		
4	Average Cost of Fuel Burned per Million BTU			13.478	7.686		7.961	7,878							1.767	7.827	8.448	7.485		
43	Average Cost of Fuel Burned per KWh Net Gen			0.072	0.056		0,113	0.096					;	;	0.055	0.153		0.087	i	ł
55	Fuel: Mind (Coal), Gas, CE, or Nuclear)	5	5	5	3	5	<u></u>	5	5	5	5	5	5 1	5	5	5 /	5	5 1	5	5
5	Control (Control Control Control Section Control Contr	MAINO D		Million .	Salled	CONTROL OF	SUBJERCE STREET	Datratio	201100	Ciario Ciario	CINING P	an one		10 140	המנופוס				000 0	ED E77
8 8	Cuartery (units) or ruel builted		0.62.0			100000			001.0	000 07 7	160'21	000'01 1	007 0	000007					000.0	100007
R 9	And rear Cont - rue burned (burndicate in nuclear)		1000,0451			000.041			000,0441	000'0#1	140,000	140,000	366.304	000.044					201001	200,041
₹	And wood of a benefits, as particle function, during year Assessor front of Erical next ( hait Brunned					EDD'771						000000	000000	-						
: 9	Average Cost of Fuel Burned rec Million RTL		23.662			20,896			195.25	21 656	23,009	212.62	21.486	20.406					20.780	
4	Average Cost of Final Rumaci ner KWh Nat Can																			
•														,						

FERC Form 1 Data 2010 (for UT 2011 Fossil Fuel Efficiency Report ).xtxx

2008

FERC Form	**	Bi undell Biand	Carbon Bland	Packalie Birert	ă și c	ave Johnston	tote bu Bland	Gadsby Hu	mter Unit No. Hur	nter Unit No. Hun	ter Unit No. H.	nter Plant HL	ntington Jin	n Bridger	aka Sida   itti	o Morentain Nau	obton Plant - Wvoc	dak Plant Th	ermal Plants	FERC
Acct no. Line 1	ja L					Plant		Peakers	r	2	3		Plant	Plant					Total A	cct no.
- n	Ture of Constructional Course (345 Lord, Moures) Ture of Constructional Cuidoor Roller etcl	Dec - Linearc	Outdoor Boiler	Control Cycle C	Curdeor	Semi-Outrinor	Ounder	Outdoor v	Outrione Boilier C	Distrinor Boiler OL	steam Boiler Or	steart stdoor Boller Ou	tráckar Boriter Sa	mi-Outdoor	Outdoor Ot	utdoor Boiler O	utdoor Boiler Co	onventional		
u m	Year Originally Constructed	1984	1954	2003	2005	1969	1951	2002	1978	1980	1983	1978	1974	1974	2007	1972	1963	1978		
4	Year Last Unit was Installed	2007	1957	2003	2006	1972	1965	2002	1978	1980	1983	1983	1377	1979	2007	1972	1971	1978		
ۍ ۱	Total Installed Cap (Max Gen Name Plate Ratings-MW)	38.1	188.6	593,3	566,9	816.8	251.6	181.1	457.7	294.5	495.6	1247.8	986	1545.1	591.3	9	707.2	289.7	8,029.5	
21	Net Peak Demand on Plant - MVV (60 minutes)	8 2	9/L	916	200	49/ 93/09	200	121	9 <u>7</u>	197	405 7070	0111	0220	1241	120	11	017	2007	1 447 /	
~ α	Plant nuors connected to Load Not Continuous Plant Canability (Menawatte)	4600	C /0	7004	#C0/	00/0	5C/5	7060		G	B/00	00/0	ę c	0	10	0	20	20		
00	When Not Limited by Condenser Water	34	172	520	550	762	231	122	403	259	450	1122	895	1411	558	14	700	268	7,359	
₽:	When Limited by Condenser Water	0	o ș	•	o ç	0 0	0 8	0	0 0	0	0 0	0	0	0	o ;	0	0	0 19	1014	
= ;	Average Number of Employees	770 101 070	1 111 076 000	91 CHC 111 1	A COLLEGE AND P	016 734 000	30 200 000 000 000	000 212 072	1 000 C17 880	010 185 000 3.1	63 484 000 B 0	71 187 000 87 17	V3 764 000 4444	OFC HARMANAN	36.013.000 38	00 300 000 47	52 642 000 2 17	3 325 000	5 498 965 000	
2 2	Cost of Plant' 1 and and 1 and Dinhte	41 105 505	975 920	1 073 701	3 403 277	10.451.083	1 252 000		0 698 075	0 688 975	10.275 404	70 653 351	2 386 787	1 161 925	17 296 760	635	4 290 826	210.526	114 233 188	
2 1	Structures and improvements	7 900 337	14 711 875	23 230 141	43 802 097	57 419 130	15.072.596	4 241 952	63 073 096	51 902 741	91 D48 170 2	05.974.007	14.795.130 10	39,315,508	27,700,094	337.028	68,909,211 5(	0.622.963	774,032,004	
15	Equipment Costs	68,774,244	103,555,029	313,849,140	305.516.243	478.527.178	58.376.560	72.822.026	232,879,738	155.835.995	109,607,088	98.322,821 5	19,092,603 84	42,656,040 3	06,701,044	5,211,774 3	66.019.199 278	8,115,837	4,517,539,738	
16	Asset Retirement Costs	1.336,278	6,527,359	689.117	134,848	11.441.950	587.008		953,193	953,193	953,193	2,859,579	2.528,174	4.672.990	-		6,618,388	613,826	38,009,517	
17	Total Cost	\$ 119,206,450	\$ 125,750,759	339,742,189	\$ 352,856,465 \$	557,839,341 \$	75,288,254 \$	77,063,978 \$	306,545,002 \$	218,380,904 \$ 5	511,883,852 ##	########## 2 B	38,802,689 \$ 94	87,806,463 \$ 3	51,697,898 \$	5,549,437 \$ 4	45,837,624 \$ 32	9,563,142 \$	5,443,814,447	
18	Cost per KW of Installed Capacity (our share)	\$ 3,128.78	\$ 666.76	572.63 \$	\$ 622.43 \$	682.96 \$	299.24 \$	425.53 \$	\$ 52.699	741.53 \$	1,032.86 \$	830.91 \$	641.37 \$	639.32 \$	594.79 \$	346.84 \$	630.43 \$	1,137.60 \$	677.98	
500 19	Operation Supervision and Engineering	50,045	61,684	83,486 no 420 arc	99.940	709,742	112.089	-	6			9	27,278	18.005.919	133,539 18 830 AGE	- 744 503	324,827 74 0.45 306 41	230.568 a 341 ae1	19.839,126 032 341 037	000
07.104			#RR'719'RL	5C5.U24,E8	147.818.351	8FL.186.C4	256,951,96	021,489,05	558,504,89	UC2,589,C2	410,218,80	160,000,401	ACC'077'71	101,000,00	000,800,0	CRC ++ 7.11	22 DOC"DWD"#1	06'100'8	100,140,200	2
L7 003	Coolarits and vvater (Nuccear Marits Univ) Chorm Evinences	, 907 3	- 205 207	•		140.6181		•	7 885 015	2 R70 761	- 2 ROK 780	RED FAR	7 937 097	3 055 019	. ,		5 333 061		27 247 633	604
202 22	Otenti LAPPINGS	2 607 676	707'000'1			(010-01-)			C10,000.7	171/010/7	no / 'ceo''?		100° 100° 1						3 597 576	503
27 000	Steam Transferred (Crt	0/n' /en'n				. ,	, ,	• •						,	·	,		r		504
505 25	Fiedric Expenses		1 810 205	7 661 898	2 351 396	,		1 641 160						6.741	2,606.241	906.225	9,228		11,993,094	505
506 26	Misc Steam (or Nuclear) Power Expenses	1,806,790	4 934.749			17 159,533	4 077 590	-	1 866.496	(3.012.030)	2.495.825	1.350.291	10,861,739 (.	14,874,547)		,	9.224.358	4.272.348	38,812,851	506
507 27	Rents	9,640	170	15,909	6,149	148,543	,		36	8	99	108	99,829	162.397				6.288	449,033	507
509 28	Altowances	,		,	. •	. •								,	,			,		503
510 29	Maintenance Supervision and Engineering	,			,		,					,	1,148,565	565,038	,	•	1,225,396	5,556	2,944,555	510
551 30	Maintenance of Structures	162,048	336,038	10,917	250,824	2,442,564	220.739	193,326	2.020.238	1,949,545	1,841,148	5,810,931	2.102.720	8.014.043	1.088.964		1.439.317	474.208	22,546,639	55
512 31	Maintenance of Boller (or reactor) Plant	153,519	2,988,372	, ,		12,629,287	1,772,321	,	5,066,533	5,095,985	8,726,696	18,889,214	8.062,385	24.007.785		¢	10,677,987	5,398,045	84,578,915	512
513 32	Maintenance of Electric Plant	403.022	1,556,410	2,875,548	6.436.998	8,595,794	850,210	2,966,597	1,066,457	1,170,308	1,187,195	3,423,960	2.080.488	8.326.771	1.885.555	712.185	4.789.264	1,451,664	46,354,466	513
514 33	Maintenance of Misc Steam (or Nuclear) Plant	55,291	294.454	,		1,702,185	188,443	-	92,204	115,600	211.740	419,544	1.211,100	2,904,601		-	1.024,574	288,544	8,088,736	514
34	Total Production Expenses	\$ 6,243,357	\$ 32,991,278	5 95,068,111 1	5 156,963,664 \$	88,734,148 \$	41,361,384 \$	40,290,203 \$	52,450,921 \$	33,682,445 \$	57,277,934 \$	143,411,300 \$ 1	05,756,560 \$ 2	04,954 768 \$ 1	24,553,365 \$	18,863,003 \$ 1	08,093,318 \$ 3	1,509,202 \$	1,198,793,661	
8	Expenses per Net KWh	\$ 0.0224	\$ 0.0272	5 0.0544 \$	\$ 0.0637 \$	0.0177 \$	0.1615 \$	0.1152 \$	0.0176 \$	0.0176 \$	0.0181 \$	0.0178 \$	0.0157 \$	0.0201 \$	0.0593 \$	0.1724 5	0.0227 \$	0.0145 \$	0.0264	
	Total Busbar - \$/MWh	\$ 22.37	\$ 27.22	54.41	2 83 63 63 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	17.69 \$	161.50 \$	115.21 \$	17,55 \$	17.55 \$	18.11 \$	\$ 11.11	10,66 8 00,01	80.2	4 15 BC	24.271	22.14	* DC 7	02.02	
	Fuel - S/MWh		\$ 16.18	51.18	26.93	308 308	133.31 5	101.48 5	2 13 20 2	5 87.51 5 20 5	12.62	* 86.71 * 94.71	\$ 50 P	4 80.0 4 80.0	20:00 20:00	6 CG / CI	e 90.01	4 • • • 26.5	98.9	
	NOR-TUBI - SIMIWO Visitatio Areas (ner Brit andiothon) - Catada	2.23/	1 10 C	5 57 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 1/5 A	2 C C C C C C C C C C C C C C C C C C C	\$ 797 \$	13.73 3	5 20 5 U 87 5	4.2/ S	010 C	\$ 90°5	2 98 C	100 \$	0.54 \$	2.88.6	143 5	Contraction Section	117	
	Fixed O.S.M. (PD) definition) - S.M.M.F.	4 150	A BRANCHARE BAR 1	010	S 20 C 3	600 6	* 93 CC	1080 1080 1080	9 87 8 3 75	2.42 S. 242 S.	S 5E P	3.63	397 \$	4 01 5	2 18 5	11.83 \$	5.73 \$	4.46 \$	4 69	
	Total OBM without Fuel	\$ 2.645.781	\$ 13.378.284	5 647 758 3	5 9 145 307 S	43.347.030 \$	7 221 392 \$	4.801.083 \$	12,996,988 \$	8,199,195 \$	17,358,420 \$	38,554,603 \$	33,531,201 \$	51,074,667 \$	5,714,299 \$	1,618,410 \$	34,048,012 \$ 1;	2,127,221 \$	266,452,624	
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coai	Coal	Coal	Coal	Coal	Coal	Coal	Coat	Coal	Coal	Coal	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Tons	Tons	Tons	Tons	Tons	Tons	Tans	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	
38	Quantity (units) of Fuel Burned		561,433			3,561,945			1.429.788	916.714	1,429,028	3,775,530	2,742,685	5.605.754			2,494,866	1,608,054	20,3390,267	
R	Avg Heat Cont - Fuel Burned (bturindicate if nuclear)		12.079			7,986			11.494	11,613	11.414	11,508	12.329	817/8			108.8	2025./	205'5	
9	Avg Cost of Fuel/unit, as Delvd f o b during year		34.043			12.288			020 20	0.0		484.17 74 540	208.02	21,430			363 BL	10/11		
<del>,</del> 2	Average cost of rule per unst burned Average Cost of Fuel Burned and Million 8711		101.10 VCN V			022.71			1 101	1 387	202.12	1168	1 053	1473			-1.443	0.732		
19	Average Cost of Fuel Burney per KWh Net Gen		0.016			600.0			0.013	0.013	0.012	0.013	0.011	0.015			0.015	0.009		
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gats	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	MCF	MCF	MCF	MCF	MOF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	MCF	
38	Quantity (units) of Fuel Burned			12,530,185	17,314,372		3,628,836	4,019,844							14,857,205	1,977,227	409.757		54,737,426	
8; :	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)			1,032	1,052		1,043	1,046							2000 2	040/ I	500'I		5	
₹:	Avg Lost of Fuelding, as Derval to p during year			991.7	190.8		304.6	070.0							7 000	227.0	5.65A			
1.5	Average Cost of Fuel Burned ner Million BTU			6.918	6.135/ 8.118		9.0409 9.074	8 442							7.754	8.339	6.440			
14	Average Cost of Fuel Burned per KWh Net Gen			0.051	0,060		0.133	0.101							0.057	0.158	0.001			
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	lio	8	5	ō	ð	8	δ	ē	ð	ō	5	đ	ð	5	04	6	ō	ō	
37	Unit (Coal-tons/Oil-barrel/Gas-mof/Nuclear-indicate)	Barrel	Barrel	Barrel	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barreis	Barreis	Barrels	Barrels	
8	Quantity (units) of Fuel Burned		3,456			18,425			3,447	3,490	10,817	46/'/1	10.980	17,613 000 044				5,243 140,000	14/0/000	
89	Avg Heat Coru - Fuer Durried (Diturnation - Housen) Ava Cost of Fuerking as Dataof for historian waar		26 065			2010 1941 2012 2015			000-061	200'04-1	200.041	90.181	93.715	94.516				98,704		
4	Average Cost of Firel per Marked		86.065			85,805						90,181	93.715	94,516				98.704		
42	Average Cost of Fuel Burned per Millon BTU		14,637			14.593			15.797	15.598	15.106	15.337	15,938	16.074				16.787		
43	Average Cost of Fuel Burned per KWh Net Gen												11 12 12	10 101	- 201 20	20100	00 000 07		66 504 0F	
4	Average BTU per KWh Net Generation	-	11,208.60	7,400.85	7,390.95	11,365,32	14,778.67	12,023.45	11,005.25	11,104.77	10,331.78	10,779.34	10,023.11	10,137 63	7,304,69	18,904.9Z	10,490.30	11,808.02	10,127.33	

FERC Form 1 Data 2010 (for UT 2011 Fossil Fuel Efficiency Report ).xlsx

2009

FERC Act no	Form 1 irre no	Blundell Plant	Carbon Plant C	hehalis Plant C	urrant Creek Da	ve Johnston Gi	adsby Plant	Gadisby Hum Doctore	ter Unit No. Hunte	er Unit No. Hunte	er Unit No. Hu	nter Plant HL	Intington Jir	n Bridger L	ake Side Litt	le Mountain Nau	ghton Plant Wyc	dak Plant The	mai Plants Totol
	Kind of Plant (Internal Comb. Gas Turb. Nuclear	Steam - Geo	Steam C	combined Cycle	Gas Turbine	Steam	Steam	Gas Turbine	Steam	Steam	Steam	Steam	Steam	Steam Con	abined Cycle	Gas Turbine	Steam	Steam	
4	Type of Constr (Conventional, Outdoor, Boiler, etc)	Indoor	Outdoor Boller	Outdoor	Outdoor	Semi-Outdoor	Outdoor	Outdoor Or	utdoor Bolier Out	tdoor Boiler Out	Idoor Bolier Ou	tdoor Boiler Ot	Itdoor Boiler St	erre-Outdoor	Outdoor O	utdoor Boiler Or	Adoor Boiler C	onventional	
ia.	Year Originally Constructed	1984	1954	2003	2005	1959	1951	2002	1978	1980	1983	1978	1974	1974	2007	1972	1963	1978	
41	Year Last Unit was installed	2007	1957	2003	2006	1972	1955	2002	1978	1980	1983	1963	1977	1979	2007	1972	1971	1978	
., 0	I otal (ristalied Cab (Max Gen Name Plate Katings-MVV) Mi-t David Community on three Additional Community (2010)	- F	37.891	5.584	566.9	816.8	251.6	1.181	457.7	294.5	495.6	1247.8	366	1545.1	591.3	16	707.2	289.7	8,029.5
	<ul> <li>Net reak Definition of Flairi - Myy (ou minutes)</li> <li>Plant Hours Connected to Load</li> </ul>	90 2028	8750	3651	70C	1.39 R760	194	124 8760	429	29787	4/0	7913	893	1425	7660 77680	15	760 108	278	114.7
ŝ	1 Net Continuous Plant Capability (Megawatts)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	90	0	
ы - -	When Not Limited by Condenser Water	35	172	520	550	762	231	120	418	259	460	1137	911	1412	558	14	700	268	7,389
	<ol> <li>VVnen Limited by Condenser water</li> <li>Average Number of Employees</li> </ol>	9 6	n g	0 1	D ĝ	0 g	o y	00	0 0	0 0	00	0 0	0 į	326	0 7	0 4	o ç	0 6	, nes
-	2 Net Generation, Exclusive of Plant Use - KWh	247,359,000	1.296.004,000	1,288,256,000	2,536,660,000 4,	699,767,000	104,123,000	255,281,000 2,5	72,955,000 1,66	7,003,000 3.29	6,437,000 7,5	36,395,000 6,1	07.379,000 9,8	33,000,000 2.5	37,046,000 1	00.773.000 5.3	39,603,000 2,04	7,508,000 42	929,154,000
¢n.	13 Cost of Plant: Land and Land Rights	41,195,596	956,546	1,973,791	3,403.277	10.449.793	1,252,090	-	9,688,975	9,688,975 1	0,275,401	29,653,351	2.386.782	1,161,925	17,296,760	635	4,290,826	210.526	114,231,898
~ *	14 Structures and improvements	7,906,027	15,099,265	23.249.210	43,827,265	136,781,636	15.053.899	4.241.952	63,087,853 5	1.968.521 9	11,113,950 21	36.170.324 1	15.210.321 1	39,527,507	27,697,517	337,028	69,837,827	0,594,075	855,533,853
- +	15 Equipment Costs 6 Accel Retirement Crets	C/9,CU8,80	103,140.699 6 487 076	317,858,946 680 117	307.413.223	720.141.128	63,130,224 697 006	74,726.370 2	70.326.440 15	7.360,861 40	8.450.822 8: 0.49.100	37,138,123 6	89.981,960 8 2.347.106	90.582.328 3	D6,449,096	5.219,987 3	70,503,279 28	1.199.857 5	036,290,895
***	7 Total Cost	\$ 119,243,576	\$ 125,784,486	343,771,064 \$	354,778,613 \$	878,687,658 \$	80.023.221 \$	78,968,322 \$ 3	44.051.467 \$ 21	9,966,556 \$ 51	1.766.372 ##4	2.044,007	09,921,249 ##	00//100/+	51,443,373 \$	5.557.650 \$ 4	56.270.958 \$ 3	2,494,911 \$ 6	048,581,019
ę	8 Cost per KW of Installed Capacity (our share)	\$ 3,129.75	\$ 666.94 \$	579.42 \$	625.82 \$	1,075.77 \$	318.06 \$	436.05 \$	751.70 \$	746.92 \$	1,032.66 \$	862.16 \$	813.17 \$	670.40 S	594.36 \$	347.35 \$	645.18 \$	1,147.72 \$	753.29
5005	19 Operation Supervision and Engineering Control Control Co	56,831	45.596	191.030	79.852	571,600	97,491						25.706	16.396.216	87.746	•	192.179	299.719	18.043.966
	20 Fuel		20.657.109	79,197,671	131,063,441	45,364,783	12.131.762	21.345.038	35,497,583 2	4.501.492 4	3,724,944 1	03.724.019	86.524,665	71.454,601 1	29,282.273	13,355,445	91,410.507	8,768,172	924.279,486
507 2	C) COORTINS AND WARE (NUCIONAL FIGURE ORIV) C) Staam Fynantees	ACT A	- 1 ARG MON	•	,	34 070	, <b>9</b>	,	017 019	365 000 0	3 905 DEE		0.76 010	- 100 TO		•	- C 40 41E	,	-
503 2	3 Steam From Other Sources	3.655,727			. ,	,	2 ,		-	-		-	-	-			-		3,656,727
504 2	24 Steam Transferred (Cr)						,	,			,	,	4		•				,
505 1	25 Electric Expenses		2.113.830	2,392.798	2,617,822	-		1.314.264					-	5,958	2.935.756	971,137	27,718		12.379.283
507 2	co Misc Stearn (or Nuclear) POWER Expenses	6 246	4,554,0/b	54 2 AS	574	37.178	3,661,887		3,650,831 (	2,612,52b) 3,850	3.006.567	2,085,072	3 311	12.919.410) 263 196			10,584,401	4.081.592	42.169.853 360.842
509 2	8 Allowances					,	,		-	-	,	-		-	,		-		
510 2	9 Maintenance Supervision and Engineering			,			,	,	ł	,	,		1.346,600	539,711	,	,	1,511,638	5,028	3,402.977
551	30 Maintenance of Structures	225,755	416,124	3,045	500,930	3,141,444	209.753	164.471	2,681,686	2.406.766	2.140.085	7.230.537	2.296.785	8,534,063	552,149		1,441,379	515.248	25,251,683
2720	51 Maintenance of Boller (or reactor) Plant *2 Maintanance of Electric Plant	164.458 771.856	2,448,463	1 785 471	- 746 A35	15,993,970	1,788,302	7 503 345	11,140,805	5.719.032 1 An7 ROF	B.712.884	25,572,721 9.063.505	13.486.036 A 313 7AD	23.962.462 7 s17 040	1 057 086	177 184	7.944.104	7.060,084	98.420.600 43.484.510
514 3	3 Maintenance of Misc Steam (or Nuclear) Plant	64,240	266,812	1 14100071		1.078.857	124.725	-	165.029	264.114	316.315	745.458	1.237.313	2,669,801	-	to://	1.182.830	289.616	7 659 652
-9	4 Total Production Expenses	\$ 6,641,823	\$ 32,791,830	5 83,104,258 \$	135,509,354 \$	94,266,832 \$	18,989,350 \$	25,437,118 \$	56,455,233 \$ 3	4,502,100 \$ 8	1 \$ 621,773 \$ 1	55,855,106 \$ 1	28,207,959 \$ 2	22,934,266 \$ 1	34,810,010 \$	14,503,766 \$ 1	21,444,840 \$	2,706,296 \$ 1	207,202,808
0	35 Expenses per Net KWh	\$ 0.0269	s 0.0253	5 0.0645 1	0.0534 \$	0.0201 \$	0.1824 \$	0.0996 \$	0.0227 \$	0.0207 \$	0.0191 \$	0.0207 \$	0.0210 \$	0.0227 \$	0.0531 \$	0.1439 \$	0.0227 \$	0.0160 \$	0.0275
	Fuel Standt - 20MVD	89 89 89	2 105-02 2 105-02 2 2 2 2 3 10	64.03 V	23.42	20.05	182.37 \$	29.64 29.65	22.72	20.02	19.08 8 30 51	8 92 92 72 92	20.99	22.67 5	53.14 \$	143.93 5	22.74	15.97 \$	27.48
	Non-fuel - S/MWh	\$ 26.85	- 926 - 926 - 5	3.03.5	. 1010 ·	10.41 5	65.86 S	16.03 \$	\$ 00 \$	6.00 5	* 68 4 7 19	6.92 S	6.83 5	524 S	2.18 \$	11.40 \$	5.62 S	6 51 9 6 51 9	5.44 5.44
	Variable O&M (per RDI definition) - \$/MWh	1.2.41	\$ 1.87 \$	1 0.60 \$	0.35 \$	2.08 \$	13.17 \$	321 \$	1.78 \$	120 \$	1.16 \$	1.38 \$	1.36 \$	1.04 \$	0.44 \$	228 \$	1.12 \$	1.36 \$	129
	Fixed O&M (RDI definition) - \$/MWh	\$ 9.66	\$ 7.49	5 2.43 \$	1.40 \$	8 33 \$	52.69 \$	12.82 \$	7.14 \$	4.80 \$	4.65 \$	5.53 \$	5.46 \$	4.19 \$	1.74 \$	9.12 \$	4.50 \$	5.45 \$	5.15
	Total O&M without Fuel	\$ 2,966,096	5 12,134,721	3,906,587 4	4,445,913 \$	48,902,049 \$	6,857,588 \$	4,092,080 \$	22,957,650 \$ 1	0,000,608 \$ 1	9,172,829 \$	52,131,087 \$	41,683,294 \$	51,479,665 \$	5,527,737 \$	1,148,321 \$	30,034,333 \$	3,938,124 \$	282,923,322
	55 Fruel: Kind (Coal, Gas, Oli, of Nuclear) 77 List (Coal, two (Oli, herwit) an motivi informate)	- Coal	Tope	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal Tom	Coal	Logal	Coal	Coal	e co	Coal	Coal
, m	6 Guantity (units) of Fuel Burned		595,236	eno ,	eron ,	3,309,283	R ,	ê.,	1.210.133	830.460	1 490.676	3.531.269	2.687.375	5.450.917	e ,	e .	2.817.478	1537.341	19.928.899
4)	39 Avg Heat Cont - Fuel Burned (blu/indicate if nuclear)	•	11.941	,		7,956	,	,	11.272	11,397	11.179	11,262	11,923	9.227	,	ł	5,858	7.776	9,798
~ •	10 Avg Cost of Fuel/unit, as Delvd f.o.b. during year Automot Cost of Eucline Burneyd		33,592	,		12.786	,		-	, 220 070		29.640	32,847	32,259		ŀ	32.477	11.858	i.
. 4	2 Average Cost of Fuel Burned per Million BTU		1430	. ,		0.782	, ,		1 269	1.267	1 281	1.273	1 330	1688	, <i>,</i>		1614	0 759	
4	13 Average Cost of Fuel Burned per KWh Net Gen	•	0.016	,	,	600.0			0.013	0.014	0.013	0.013	0.014	0.017			0.017	0.009	,
	56 Fuel: Kind (Coat, Gas, Oil, or Nuclear)	Gas	Sep.	Gas	Gas	Sas	Gas	Gas	80 10	and loss	Gas	80 L	Gas	Gas	Gas	Gas	580 101	Gas	Gas
, m	<ol> <li>Out (Comparison Section (Comparison Section (Comparison Section (Comparison Section Secti</li></ol>	5.	b.	9 348 871	17 850 615	Ļ,	1 569 575	2 903 816	-	L).≱	- 10	L) N	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	L) E -	17 932 546	1 822 511	747 D58	505	51.674.992
•7	39 Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	·		1.035	1,059	,	1,045	1.044		,			•		1,030	1,044	1.029	,	1,043
4.	t0 Avg Cost of Fuel/unit, as Deivid f.o.b. during year	¢	,	8.471	7.342	,	7.729	7.351			,				7.209	7.328	7.083		,
	Average Cost of Fuel per Unit Burned Decrade Cost of Fuel Runned ner Million RT1			5.471 8.182	1.342		6777	105.7			,		,	,	2007 /	7.018	6 996		
. 4	Average Cost of Fuel Burned per KWh Net Gen 3 Average Cost of Fuel Burned per KWh Net Gen			0.061	0.052		0.117	0.084							0.051	0,133	00000		
-03	16 Fuel: Kind (Coal, Gas, Oil, or Nuclear)	ð	ō	ī	ō	ō	Ð	ð	Ю	đ	Ю	io	ĨŌ	ĩō	ð	Ð	0	õ	ð
6	37 Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrets	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels
, m	20 Cuanting furning of the Burned (btu/indicate if nuclear) 9 Ava Heat Cont - Fuel Burned (btu/indicate if nuclear)		138.000			136.000		• •	5,074 138 D0D	138,000	5,650 138,000	138,000	138,000	138.000			. ,	0.245	138,000
4	10 Avg Cost of Fuel/unit, as Deivd f.o.b. during year		103.502			99.452			,			103.202	105.056	93.298				98.961	,
4	Average Cost of Fuel per Unit Burned	•	103.502	1		99.452	ŗ	1	,	۰.	,	103.202	105.056	93.298		,	•	98.961	,
. 4	K2 Average Cost of Fuel Burned per Million 810 3 Average Cost of Fuel Burned per KWh Net Gen		17.858			17.159 0.001			17.759	17.612	17.947	17.806	18.126	16.097				17.074	
4	Average BTU per KWh Net Generation		10,977.51	7,510.99	7,452.24	11,255,99	15,812.88	11,875.48	10,622.48	11,373.20	10,127,79	10,572.03	10,504.33	10,240.43	7,280.33	18,881.06	10,450.89	11,694.67	10 130.66
	Line 44 - per FERC Form No. 1	0	10977.45	7512.959	7454 884	11256.372	15811.771	11877.508	10622.736	11373.481	10127.544	10572.197	10504 018	10240 466	7277.198	18884.155	10451_236	11694.176	
			0.06	(1.97)	(2.64)	(0.38)	111	(2.03)	(0.26)	(0.28)	0.25	(0.17)	0.31	(0.03)	3,13	(3.09)	(0.34)	0.49	

2018

#### FERC Acct no

4/28/2011

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Installed Cap (Max Gen Name Plate Ratings-MW) Net Peak Demand on Plant - MW (60 minutes)	5,817,8 5,576	5,817.9 5,887	5,817.9 5.660	5,840.9	5,840,9 5,855	5,840.9	6,056.5 5 732	7,115.8 5,695	7,473.8	6,414,4 5 985	6,414.7 5 066	6,713.1 6.752	6,987.5 R 531	7,547.6	8,067.6 7 665	8,029.5	8.030
Plant Hours Connected to Load		1		1		,	1	-	'	1	-	-				1	-
Net Continuous Plant Capability (Megawatts)	, car n						, 100 r	, t		-			' : : :				
When Limited by Condenser Water	700'0		5.94°C	- 407	- 403 -	- -	- -	, , ,	0,659.0	058.C	- -	, 128.c	6,466 -	c7n' <i>1</i>	646.1 -	ACC'/	/,389 -
Average Number of Employees	1,759	1,584	1.508	1,471	1,471	1.471	1,284	1,327	1.336	1,262	1,275	1,309	1,310	1,306	1,113	1.107	1,065
Net Generation, Exclusive of Plant Use - KWh	41,084,554,000 4	0,450,564,000 3	9,478,301,000 3	8,773,647,000 4	0,012,333,000 35	705,240,000 41	312,877,000 39	429,934,000 39	412,431,000 40	440,809,000 40	013,426,000 39	826,110,000 4	,434,889,000 46	.090.925.000 47	438,891,000 45	488,865,000 4	3,929,154,000
Cost or Flant: Lano and Lang Kignis Structures and Improvements	71, U17, 329 561 133 434	565 G66 347	100,281,11 ARC FAR 487	//,188,084 581 AB7 163	77,048,486 404 307 DDE	77,205,274 601 636 003	77,207,453 602.634.362	77,187,978 ens 314 530	77,187,978 606,552,403	77,591,267 616 477 654	78.424.036	81,820,513 e62 2e4 613	85.049.078 660.650.200	112.259.118 734 464 603	112,259,397 730,016,703	114,233,188 774 633 004	114.231,898
Equipment Costs	2.186,255,002	2,462,321,650	2.486.486.046	2,514,830,813	2,582,973,057	666,554,221	670,909,020 2	.,698,300,693 2	803,548,198 2	2.881.720.239	925,179,524 3	131,068,392	1,549,190,130 3	915,373,164 4	034,971,272 4	517,539,738	6,036,290,895
Asset Retirement Costs										14,713,709	25,464,580	29,667,227	30,336,036	26,554,549	27,233,918	38,009,517	42,524,373
I otal Cost	\$2,824 402 /62 \$	3,105,442,803	3,132,141,837 \$	3,173,506,060 \$	3,255,323,549 \$	345,396,488 \$	, 350, 750, 825 <b>\$</b> 3	1,380,803,201 \$3	417,012,068 \$3	3,590,502,869 \$	651,288,891 \$3	1,895,817,745 <b>\$</b> 4	1,325,225,553 \$4	788,638,433 \$4	904,481,290 \$5	443,814,447 \$	5,048,581,019
Cost per KW of installed Capacity (our share) Decetion Sumanicion and Environation	485.48 5	533.78 \$	11 906 157 5	543.32 \$	557.33 \$	572.75 S	553.25 \$	475.11 5	457.20 \$	559.75 \$	569.21 \$	580.33 \$	618.99 \$	634.46 \$	607.92 \$	677.98 \$	753.29
Operatori oupervisioni and Engineering Fuel	397,146,324	390.982.280	368 184 241	359 920 216	390 891 857	767,110,41	383.087.306	24.041.002	0,378,043 406 266 631	Z1.140,032 Ang 878 774	405 711 002	800,220,81 A10,538,370	180,101,12 507 035 877	2U,461,U15 773 344 246	438 040 068	19,839,126 030 341 037	18,043,966 924 279 ARG
Coolants and Water (Nuclear Plants Only)		-			,	-	1.855,148		-	-		-	-	-	-	-	
Steam Expenses	23,323,050	24,145,040	23,263,189	22,425,806	23,857,941	11,818,381	8,733,902	3,729,510	16,414,942	27.178.886	27.717.746	27,339,449	27.102,076	28,482,855	29.617,655	27,247,633	28.094.229
Steam From Other Sources	3.498,961	3,205,843	3,595,449	3,557,608	3,607,452	3,696,102	3,660,711	3,698,736	3,800,080	(19,641)	4,158,192	4,211,469	3.110.724	4,845.079	3.371,385	3,597,576	3.655.727
Steam Transferred (Cr)	, one crears			,		*	,	- 100 000		4,095,133							-
diec Steam /ar Nijelaar) Power Evnenses	000'000'71 222 632	100,000,01	001/0/4/71	12,437,083	2200,000,21	- 000 001	- 120 020 01	C07'906	1000, YCU,UT	4,611,415 Para ac	4,344,300	6,939,879	800'R97'S	16,599,354	13,690,502	11.993.094	12,3/9,283
Rents	44.387	43 786	43 977	zu.uz4.164 51 095	7 748	az,usa,uuri 336.551	40,300,000	02,133,170 284.413	4.5,000,471 1.448 094	22,405,201	19 097 929	11.843.010	20202022	38,048,130 11.695.063	4 865 996	36,812,851	42,109,633 360,842
Allowances				-	2 '		4 <sup>1</sup>		-	163	-	961		-	-	-	· ·
Maintenance Supervision and Engineering	14,141,462	15,403,674	12,497,327	13,191,596	10,797,185	,	1	12.017	2,657,470	4,547,876	4,443,113	3,942,988	4,197,374	3,329,271	2,953,110	2,944,555	3.402,977
Maintenance of Structures	7,392,770	6,716,736	5,664,084	5,123,539	4,885,404		,	9.675.104	17.711.698	17,143,374	16.737.633	15,606,437	18,376,600	21,510,330	24,145,958	22,546,639	25.251.683
Maintenance of Boiler (or reactor) Plant	48,158,140	45,046,950	41,349,605	47,217,102	42,690,034	26.727.277	44,647,411	62.087.544	72.229.902	71.889,155	72,973,020	81,162,911	81,117,128	84,191,274	74,323,905	84,578,915	98,420,600
Maintenance of Electric Plant Mointenance of Mice Steem (or Nuclear) Discu	11.144.299 0.724.006	9,991,667	8,664,854	10,214,165	8,020,408	9.844,477	9,585,951	17,481,181	23,974,081	28.062.004	26,315,211	30,989,626	33,396,215	34,208.089	32,494,930	46,354,466	43,484,510
Total Production Expenses	\$ 563 030 051 \$	553 078 507 5	520.751.24R \$	519 055 595 \$	540 064 911 S	512 427 862 5	536.085.047 S	627 473 477 5	611 250 805 ¢	8 193 CT2 141	632 080 202	636,355,390	767 ARD RAD RAD	0.304,U0/ 0.45.078.770 €1	1.100.243	108 703 661 6	202,800,1
Expenses per Net kWh	S 0.0137 S	0.0137 5	0.0132 \$	0.0134 \$	0.0135 \$	0.0120 5	0.0130 5	0.0159	0.0155 5	0.0158 €	0.0158 €	0.0160 \$	A CRIMIN	\$ 2000 U	3 USCU U	0 00564 S	0.075
Totai Busbar - S/MWh	5 13.70 \$	13.67 \$	13.19 5	13,39 \$	13.52 \$	12.91 \$	12.98 \$	15.91 \$	15.51 &	15,84 \$	15,80 \$	15.98 \$	18.16 \$	22.67 \$	25.04 \$	26.35 \$	27.48
Fuel - \$/MWh	\$ 9.67 \$	9.67 \$	9.33 \$	9.28 \$	9.77 \$	8.80 \$	9.27 S	10.81 \$	10.31 \$	6.93 \$	10.14 \$	10.31 \$	12.24 \$	16.78 \$	19.77 \$	20.50 \$	21.04
Non-fuel - \$/MWh	S 4.04 S	4 01	3.86	4,10 5	3.75 \$	4.11 \$	3.70 \$	5.10 \$	5.20 5	5,85 \$	5.66 \$	5.67 \$	5.92 \$	5.90 \$	5.27 \$	5.86 \$	6.44
Operations - S/M/VIN Maintenance - S/M/VIN	2 197 S	18.	2 19 L	1.83 5	1./5	2.83	1.82 5	241 5	2.08 5	2.67 5	2.48 \$	2.19 5	2.42 5	2.61 \$	2.28 5	2.24 5	2 38
Variable O&M (per RDI definition) - S/MVh	5 081 S	2.12	\$ 440	0.82 \$	0.75 5	0.82 \$	0.74 \$	2 //2 1 02 \$	5 77 5 103 5	5 90 C	3.10 104 S	1.04 5	112 5	5 57 5 1 13 5	2 39 3	5 20 C	129
Fixed O&M (RDI definition) - \$/MWh	\$ 3.23 \$	3.21 \$	3.09 \$	3.28 \$	3.00 \$	3.29 \$	2.96 \$	4.08 \$	4.17 S	4 79 \$	4.62 \$	4.63 \$	4.81 \$	4.77 \$	4 24 5	4.69 \$	5.15
Total O&M without Fuel	\$ 165,883,727 \$	162,096,222	152,567,007 \$	159,135,379 \$	150,073,054 \$	163,143,997 \$	152,997,741 \$	201,129,838 \$	204,984,264 \$	236,694,287 \$	226,378,881 \$	225,817,090 \$	245,424,773 \$	271,734,533 \$	250,004,376 \$	266,452,624 \$	282,923,322
Fuel: Kind (Coai, Gas, Oil, or Nuclear)	Coal	Coat	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coat
Unit (Coal-tons/Uli-barrevCas-monuclear-indicate) Dirantity (unite) of Eural Rivmand	1015 1015 1015	1015 1C	1015 107 107	21 212 212 210	1078 520 404	10ns run tr	1005 005 005	1005 100 DC	20 E01 DOS	2001 200 200 0C	Tons 174 por	1015 PC	Tons and an	lons 24 746 E24	Tons 21 726 B07	1005 OC	10 005 800
Ave Heat Cont - Fuel Runed (httrificticate if nuclear)	9 737 88	2 786 36	101'00C'17	210,222,12 0 777 05	21,030,401 0,816,56	21.042,009 0.018 38	0/0/07C'17	20,031,323 0 015 11	20,031,301 0 805,77	20.305.323	176,111,12	21.1U9.014	0 701 15	120.017,12	100,021,12	20,330,257	13.320.039 0 708 45
Avg Cost of Fuel/unit, as Delvd f o b during year	-		-		-	-	100.00	-	3 (°nn)'n		10/01/01/0	-	· · · ·		-	-	-
Average Cost of Fuel per Unit Burned		,	,	•	,					,			,	,	,		
Average Cost of Fuel Burned per Million BTU		,						,		÷		ı	•	+	•	,	,
Average Cost of rulei burned per Kivni Net Gen Evol: Kind (Cost, Cost, Oil, or Nicional)	, ł	į	. 2		, 5	,	,		,	, (	, <sup>1</sup>		, <sup>:</sup>	,	, -	ļ	
ruei: rueid (Coal, Oas, Oa, Orivocraal) Unit (Coal-tons/Oil-barre/Gas-mcf/Nuclear-indicate)	HCM HCM	A LCM	B L L L L L L L L L L L L L L L L L L L	MCF	Sec MOM	MOF.	MCF	NCR ACR	2002 WCF	Cds MCF	Cas MCF	MOR	Seeo Trow	NCN CN	acw	Seo UCM	1 Cas
Quantity (units) of Fuel Burned	8,532,359	8,608,833	2,071,956	2.306,320	3,861,639	4,669,333	9,460,287	12.083,567	12,885,537	13,023,482	8,952,892	8,627,688	22,963,190	49.658,631	52,592,199	54,737,426	51,674,992
Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	1.045	1,055	1.022	1,032	1,044	1,038	1,049	1.053	1.051	1,052	1.055	1,049	1,053	1,045	1.048	1,041	1.043
Avg Cost of Fuedunit, as Deive r.o.o. outing year Average Cost of Final per Unit Burned		• •		, .				,			,					1	
Average Cost of Fuel Burned per Million BTU			· ·		. ,					• •	. ,				. ,		
Average Cost of Fuel Burned per KWh Net Gen		,		ŀ	,	,	,		,		,	,	,	,	ł	ŀ	•
Fuel: Kind (Coal, Gas, Oil, or Nuclear)	NO	Ν	Ю	Ю	ō	ō	ю	Ð	Ю	Ð	Ð	ō	ō	ĨŌ	ō	θ	PO
Unit (Coal-tons/Oil-barre/Gas-mc//Nuclear-indicate)	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels
exemuty (units) or nee purree Ave Heat Cont - Fuel Runned (bhuindicate if nuclear)	140.252	000,001	140.000	700'RC	01/10	140.000	14,400	000 001	51.738 140.512	140.000	00,090 140 000	140.000	140,000	107'67	1/0.80	14,4/3	138,000
Avg Cost of Fuel/unit, as Delvd f.o.b. during year						,	-	-	-		1	1	1	-	,		-
Average Cost of Fuel per Unit Burned			•		,	•		,		,	,	ı					
Average Cost of Fuel Burned per Million BTU Average Cost of Euclid Burned per Million Mor Con	,	,		,		ł		,			,	•	,		,		
Averane BTil ner KWh Net Generation	10 535 35	10 661 26	10.601.14	10 774 85	10 728 20	10 645 36	10.661.45	10 712 62	10.651.80	10.623.58	10 630 56	10 500 01	10 381 65	10 303 56	10 187 68	10 127 33	10 120 66
		and the second se			121 P. 121	00-72-01A		70.71.70	201000	N. 000 101	2000 A	12.000101	22.122.2	20.000	00.201.01	101 121 121 121	

Summary



# Carbon Plant Heat Rate Improvement Plan Car\_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 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 in	mprovements	to heat rat	te.

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 Planned Net Heat Rate 2011	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
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%

# Table 1Carbon Unit 110-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

# Table 2Carbon Unit 210-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 Engi	ineer – Carbon Plant	April Haynes					
Signature:	{on file]		Date:	4/15/11			
Manager, Enginee	ering – Carbon Plant						
Signature:			Date:				
Managing Directo	or, Carbon Plant	Shawn Smit	th				

00			
Signature:	{on file}	Date:	4/15/11



# Dave Johnston Plant Heat Rate Improvement Plan DJ\_2011\_HRIP

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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)
Nother Losses	355	633	278
Actual Net Heat Rate			11,272
5			

ative 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
Planned Net Heat Rate	11,083

### 6.3. Unit 3

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

### 6.4. Unit 4

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

## 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** 2008 2012 2007 2009 2010 2013 2014 2015 2016 2017 2019 2006 2011 2018 2020 Year 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 10,459 10,383 Planned Net Heat Rate 2011, Btu/Kwh 11,080 11,062 10,758 10,563 10,576 10,612 10,145 10,282 10,431 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 1Dave Johnston Unit 110-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
<i>,</i>	1										
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										

0

0

0

0

0

0

0

0

0

Total Capacity Changes

0

MW

## Table 2Dave Johnston Unit 210-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										

0

0

0

0

0

0

0

0

0

0

**Total Capacity Changes** 

MW

## Table 3Dave Johnston Unit 310-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											

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 4Dave Johnston Unit 410-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

-4

-4

-4

**Total Capacity Changes** 

0

MW

-4

-4

-4

-4

-4

-4

## 10. Required Signatures

Performance Eng	ineer – Dave Johnston Plant	Teresa Jorri	S	
Signature:	{ signature on file }		Date:	30Apr11

Engineering Man	ager – Dave Johnston Plant		
Signature:		Date:	

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



## Huntington Plant Heat Rate Improvement Plan Htg\_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 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
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
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
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
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

## 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** 2013 2006 2007 2008 2009 2010 2011 2012 2014 2015 2016 2017 2018 2019 2020 Year As-Built Net Heat Rate, 9,701 9,701 9,702 9,702 9,701 9,702 9,702 9,701 9,692 Btu/Kwh 9,742 9,702 9,692 9,692 9,692 9,692 Planned Net Heat Rate 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 2011, Btu/Kwh Actual Net Heat Rate, Btu/Kwh 9,774 10,214 9,940 10,034 10,573 Capacity Factor 2011, % 87.4% 88.0% 91.9% 88.8% 67.1% 93.7% 94.6% 89.9% 77.9% 92.7% 91.5% 90.5% 81.3% 91.6% 92.9%

# Table 1Huntington Unit 110-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											
Budgeted / Planned Auxiliary LoadChangesReduced auxiliary load benefit of Budgeted											
Budgeted / Planned Auxiliary LoadChangesReduced auxiliary load benefit of Budgeted/ Planned Heat Rate Changes	KW	-14	-14	-14	-14	-126	-126	-126	-126	-126	-126
Budgeted / Planned Auxiliary Load ChangesReduced auxiliary load benefit of Budgeted / Planned Heat Rate ChangesTotal Auxiliary Load Changes	KW KW	-14 -14	-14 -14	-14 -14	-14 -14	-126 -126	-126 -126	-126 -126	-126 -126	-126 -126	-126 -126
Budgeted / Planned Auxiliary Load ChangesReduced auxiliary load benefit of Budgeted / Planned Heat Rate ChangesTotal Auxiliary Load Changes	KW KW	-14 -14	-14 -14	-14 -14	-14 -14	-126 -126	-126 -126	-126 -126	-126 -126	-126 -126	-126 -126
Budgeted / Planned Auxiliary Load     Changes     Reduced auxiliary load benefit of Budgeted     / Planned Heat Rate Changes     Total Auxiliary Load Changes     Budgeted / Planned Net Dependable     Rating Changes, (Net Basis)	KW KW	-14 -14	-14 -14	-14 -14	-14 -14	-126 -126	-126 -126	-126 -126	-126 -126	-126 -126	-126 -126
Budgeted / Planned Auxiliary Load     Changes     Reduced auxiliary load benefit of Budgeted     / Planned Heat Rate Changes     Total Auxiliary Load Changes     Budgeted / Planned Net Dependable     Rating Changes, (Net Basis)     Clean Air Initative Additions (1.48MW 2010)	KW KW MW	-14 -14 -1.48	-14 -14 -1.48	-14 -14 -1.48	-14 -14 -1.48	-126 -126 -1.48	-126 -126 -1.48	-126 -126 -1.48	-126 -126 -1.48	-126 -126 -1.48	-126 -126 -1.48
Budgeted / Planned Auxiliary Load     Changes     Reduced auxiliary load benefit of Budgeted     / Planned Heat Rate Changes     Total Auxiliary Load Changes     Budgeted / Planned Net Dependable     Rating Changes, (Net Basis)     Clean Air Initative Additions (1.48MW 2010)     Turbine upgrade Dense Pack (18nMW	KW KW MW	-14 -14 -1.48	-14 -14 -1.48	-14 -14 -1.48	-14 -14 -1.48	-126 -126 -1.48	-126 -126 -1.48	-126 -126 -1.48	-126 -126 -1.48	-126 -126 -1.48	-126 -126 -1.48
Budgeted / Planned Auxiliary Load     Changes     Reduced auxiliary load benefit of Budgeted     / Planned Heat Rate Changes     Total Auxiliary Load Changes     Budgeted / Planned Net Dependable     Rating Changes, (Net Basis)     Clean Air Initative Additions (1.48MW 2010)     Turbine upgrade Dense Pack (18nMW 2010)     2010)	KW KW MW	-14 -14 -1.48 18	-14 -14 -1.48 -1.48	-14 -14 -1.48 -1.48	-14 -14 -1.48 -1.48	-126 -126 -1.48 18	-126 -126 -1.48 18	-126 -126 -1.48 18	-126 -126 -1.48 18	-126 -126 -1.48 18	-126 -126 -1.48 -1.48

# Table 2Huntington Unit 210-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 Eng	ineer – Huntington Plant	Ron Hall		
Signature:	(on file)		Date:	15Apr11

Manager, Engine	Glenn Pinte	rich		
Signature:	(on file)		Date:	15Apr11

Managing Directo	ham			
Signature:	(on file)		Date:	15Apr11



## Hunter Plant Heat Rate Improvement Plan Htr\_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 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 (Improvemen	ts are nega	tive)									
Plant controls replacement/Optimization systems in place	Btu/kWh	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Feedwater Heater ReplacementHP 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 2Hunter Unit 210-year Plan Heat Rate Improvement Projects

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Budgeted / Planned Heat Rate Changes, Net basis (Improvement	nts are nega	tive)									
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 3Hunter Unit 310-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 Gi						
( on file )		Date:	<mark>30Mar10</mark>			
ering – Hunter Plant	Larry Bruno					
( on file )		Date:	<mark>30Mar10</mark>			
	( on file ) ering – Hunter Plant ( on file )	ineer – Hunter Plant Kent Gilber ( on file ) ering – Hunter Plant Larry Brunc ( on file )	Ineer – Hunter Plant Kent Gilbert   ( on file ) Date:   ering – Hunter Plant Larry Bruno   ( on file ) Date:			

Managing Directo	sman			
Signature:	( on file )		Date:	<mark>31Mar10</mark>



## Jim Bridger Plant Heat Rate Improvement Plan JB\_2011\_HRIP
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#### 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 Planned Net Heat Rate (2011),	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
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
(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 Planned Net Heat Rate (2011),	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
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 1Jim Bridger Unit 110-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											

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 2Jim Bridger Unit 210-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)		1			1				1		
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 3Jim Bridger Unit 310-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											

Budgotou / Flamou / uxinal y Loud Onangoo											
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 4Jim Bridger Unit 410-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
Clean Air Initiative - WFGD (90%) LNB Total Auxiliary Load Changes	KW KW	795 572									
Clean Air Initiative - WFGD (90%) LNB Total Auxiliary Load Changes	KW KW	795 572									

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 Engl	ineer – Jim Bridger Plant	Bernie Caul	field		
Signature:	(on file)		Date:	28	April
				2011	

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

Managing Directo	or – Jim Bridger Plant	Bob Aramb	el		
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 im	provements	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 im	provements	to heat rate	<b>:</b> .
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

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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	096'6	9,959	9,957	9,957	9,963	096'6	096'6	9,960	9,959	9,959	9,959	9,959	9,955
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%

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

# Naughton 2

Year	As-Built Net Heat Rate, Btu/Kwh	Planned Net Heat Rate 2011, Btu/Kwh	Actual Net Heat Rate, Btu/Kwh	Capacity Factor 2011, %
2006	9,958	10,480	10,672	73.5%
2007	9,958	10,350	10,810	89.3%
2008	9,955	10,364	10,848	84.7%
2009	9,950	10,445	10,128	82.8%
2010	9,944	10,383	10,208	88.2%
2011	9,963	10,406		72.2%
2012	9,962	10,445		90.3%
2013	9,962	10,505		%0.06
2014	9,962	10,558		88.9%
2015	9,962	10,346		79.5%
2016	9,962	10,319		91.2%
2017	9,962	10,393		90.4%
2018	9,962	10,452		89.6%
2019	9,962	10,324		80.2%
2020	9,962	10,229		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%

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Table 1 Naughton 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)											
Install Intelligent soot blowing (2016)	Btu/kWh	0	0	0	0	0	-25	-25	-25	-25	-25
CO&O2 Grid (2012)	Btu/kWh	0	-13	-13	-13	-13	-13	-13	-13	-13	-13
Condenser Replacement (2016)	Btu/kWh	0	0	0	0	0	-30	-30	-30	-30	-30
SO3 Injection System (2010)	Btu/kWh	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Scrubber Addition (-2.58Mw Aux Load) (2012)	Btu/kWh	0	163.2	163.2	163.2	163.2	163.2	163.2	163.2	163.2	163.2
Total adjustments related to Capital Projects	Btu/kWh	-25	138.2	138.2	138.2	138.2	70.2	70.2	70.2	70.2	70.2

Budgeted / Planned Auxiliary Load Changes											
Reduced auxiliary load benefit of Budgeted / Planned Heat Rate Changes	KW	-26	146	146	146	146	74	74	74	74	74
Air Compressor Upgrade (2009)	KW	-27	-27	-27	-27	-27	-27	-27	-27	-27	-27
Total Auxiliary Load Changes	Ϋ́	-53	119	119	119	119	48	48	-27	-27	-27

Budgeted / Planned Net Dependable Rating Ghanges, (Net Basis)											
Scrubber Addition (-2.58Mw Aux Load) (2012)	MM	New York	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58
Total Capacity Changes	MW	0	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58	-2.58

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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)											How and
Install intelligent soot blowing (2012)	Btu/kWh	0	-25	-25	-25	-25	-25	-25	-25	-25	-25
CO&O2 grid (2011)	Btu/kWh	-5	-13	-13	-13	-13	-13	-13	-13	-13	-13
SO3 Injection System (2010)	Btu/kWh	-25	-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	228
Total adjustments related to Capital Projects	Btu/kWh	178	178	178	178	173	165	165	165	165	165

Reduced auxiliary load benefit of Budgeted /									
Planned Heat Rate Changes KW 266	266	266	266	259	247	247	247	247	247
Cooling Tower VFD optimization (2012) KW -134	-134	-134	-134	-134	-134	-134	-134	-134	-134
Air Compressor Upgrade (2009) KW -27	-27	-27	-27	-27	-27	-27	-27	-27	-27
Total Auxiliary Load Changes KW 105	105	105	105	98	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	4.71
Total Capacity Changes	MW	-4.7	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71	-4.71

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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							E CAR				
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	¥۷	-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	<b>4</b> .6	-4.6	4.6	-4.6	4.6	4.6

Issued: April 30, 2011

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# 10. Required Signatures

Performance Engineer – Naughton Plant Ryan Witbeck	
Signature: Julie Childrell	Date: 22 April 2011
Manager, Engineering – Naughton Plant Rodger Holt	
Signature: Roda & Hold	Date: 22 April 2011
Managing Director – Naughton Plant Bruce Vinnola	
Signature: Low White	Date: 22 April 2011

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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. Fossilfueled 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 gasfueled 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**

### Table 1Pacificorp Energy10-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 R	ate Engineer	Alan Jackso	n		
Signature:	(on file)		Date:	28	April
				2011	
Manager, Engine	ering/Environmental	Greg Hunte	r		

Signature:	(on file)	Date:	28 201	April, l

Managing Directo	or, Generation Support	Rod Robert	S		
Signature:	(on file)		Date:	28	April,
				201	1



#### 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 Planned Net Heat Rate 2011.	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
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 1Wyodak Unit 110-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, Enginee	ering – Wyodak Plant	Cory Bryngelson		
Signature:	(on file)	Γ	Date:	08Apr11

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