

Rocky Mountain Power
Exhibit RMP__(GND-1)
Docket No. 20000-__-ER-11
Witness: Gregory N. Duvall

BEFORE THE WYOMING PUBLIC SERVICE
COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Gregory N. Duvall

Net Power Cost Study

December 2011

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	Net Power Cost Analysis												
	04/12-03/13	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
	\$												
PacificCorp													
12 months ended March 2013													
Special Sales For Resale													
Long Term Firm Sales													
Black Hills s27013s28160	12,703,175	1,073,718	983,237	961,828	1,076,131	1,090,402	1,067,022	1,082,877	1,071,705	1,080,498	1,090,828	1,040,969	1,083,959
BPA Wind s42818	2,792,864	225,936	213,294	173,000	129,745	122,984	161,736	236,385	297,740	349,112	333,182	279,306	270,443
Hurricane Sale s393046	5,550	1,110	1,110	1,110	1,110	1,110	-	-	-	-	-	-	-
LADJWP (JPP Layoff)	30,104,809	1,748,673	2,645,460	2,594,592	2,776,554	2,767,022	1,979,348	3,229,887	2,315,320	2,579,523	2,762,963	2,413,655	2,301,815
NVE s811489	23,161,581	2,953,560	2,905,562	1,765,080	1,023,000	1,043,460	2,397,381	3,811,761	3,547,423	3,714,354	-	-	-
Pacific Gas & Electric s524491	12,962,146	1,394,000	1,364,084	1,280,068	-	-	-	2,611,764	2,675,100	2,897,130	-	-	-
PSCO s100035	-	-	-	-	-	-	-	-	-	-	-	-	-
SCE s513948	6,657,071	984,520	968,516	1,012,844	-	-	-	1,270,593	1,182,480	1,238,118	-	-	-
SMUD s24296	12,964,800	-	-	-	695,600	1,413,400	1,517,000	1,298,700	1,779,700	1,820,400	1,813,000	1,480,000	1,147,000
UMPA II s45631	9,358,242	501,775	511,071	854,896	1,779,848	1,400,150	792,640	593,283	582,825	593,283	593,283	581,909	593,283
Total Long Term Firm Sales	110,710,238	9,423,292	9,792,334	8,643,418	7,481,988	7,828,528	7,915,126	14,135,250	13,452,292	14,272,417	6,593,255	5,775,839	5,996,499
Short Term Firm Sales													
COB	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Corners	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-
Mead	-	-	-	-	-	-	-	-	-	-	-	-	-
Mid Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-
Mona	-	-	-	-	-	-	-	-	-	-	-	-	-
NOB	-	-	-	-	-	-	-	-	-	-	-	-	-
Palo Verde	72,545,120	4,260,000	5,261,000	4,990,800	2,196,900	2,087,700	4,965,000	16,570,350	14,380,000	14,499,250	1,366,940	1,200,240	1,966,940
Utah	-	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-
West Main	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-
Electric Swaps Sales	37,718,303	3,466,440	3,811,978	3,494,312	4,435,690	3,541,323	3,536,028	3,308,808	3,318,158	3,253,210	1,514,786	1,538,064	2,499,506
STF Index Trades	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Short Term Firm Sales	110,263,423	7,726,440	9,072,978	7,885,112	6,632,590	5,629,023	8,501,028	19,879,158	17,698,158	17,752,460	2,881,726	2,738,304	3,866,446
System Balancing Sales													
COB	42,691,670	2,245,586	428,930	436,813	2,365,006	3,222,749	4,849,340	4,365,616	5,725,959	6,192,973	5,311,408	3,682,199	3,865,091
Four Corners	85,242,178	3,478,486	3,434,093	3,542,968	10,132,449	11,853,707	10,460,971	7,622,183	7,308,582	6,533,542	7,805,527	6,821,037	6,248,624
Mead	16,324,239	221,028	213,801	794,032	2,389,909	2,296,234	1,313,694	273,885	232,637	226,307	2,927,298	2,687,085	2,728,129
Mid Columbia	55,115,996	2,954,730	895,986	95,555	345,179	2,039,896	4,724,271	7,059,634	13,544,186	13,481,080	4,800,434	4,141,349	996,497
Mona	20,941,425	880,238	551,599	872,839	2,995,113	4,210,637	2,617,330	2,306,515	1,031,751	941,445	1,508,291	1,307,351	1,718,301
NOB	-	-	-	-	-	-	-	-	-	-	-	-	-
Palo Verde	84,479,016	6,211,242	6,116,405	7,715,809	8,252,018	7,093,055	5,387,170	2,812,255	3,399,786	3,297,384	10,907,796	11,300,557	11,985,541
SP15	-	-	-	-	-	-	-	-	-	-	-	-	-
Trapped Energy	-	-	-	-	-	-	-	-	-	-	-	-	-
Total System Balancing Sales	304,794,524	15,991,319	11,641,813	13,458,015	26,479,674	30,716,278	29,352,976	24,476,287	31,262,916	30,672,792	33,260,752	29,939,578	27,542,183
Total Special Sales For Resale	525,768,184	33,141,051	30,507,125	29,986,545	40,594,252	44,173,829	45,769,130	58,490,695	62,413,366	62,697,608	42,735,733	38,453,721	36,805,128

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Qualifying Facilities	Net Power Cost Analysis													
	04/12-03/13	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	
PacificCorp														
12 months ended March 2013														
Qualifying Facilities														
OF California	4,309,725	735,298	743,739	545,960	182,819	101,324	88,663	85,221	115,698	234,835	417,107	488,537	560,525	
OF Idaho	5,570,225	464,242	583,647	645,862	558,928	449,500	413,219	438,549	426,311	408,080	391,783	356,961	433,144	
OF Oregon	20,294,155	1,919,975	2,043,993	1,827,759	1,564,560	1,473,231	1,469,327	1,346,023	1,363,721	1,669,791	1,862,159	1,713,119	2,020,497	
OF Utah	1,062,434	91,025	97,670	92,022	78,991	84,172	72,709	92,632	96,670	79,308	86,313	93,376	98,551	
OF Washington	1,945,437	212,703	238,807	224,654	231,006	217,761	210,248	204,225	207,124	198,908	1	0	1	
OF Wyoming	752,180	45,567	98,698	99,497	106,633	106,570	98,339	52,764	28,660	28,267	30,681	29,444	29,059	
Biomass p234159 QF	3,398,605	-	-	-	-	-	-	-	-	41,735	1,232,895	1,116,403	1,007,573	
Blue Mountain Wind QF	2,911,168	127,371	146,116	156,038	141,061	229,675	187,180	294,081	298,132	334,128	344,288	323,250	329,848	
Chevron Wind p499335 QF	30,487	2,264	2,327	967	1,013	1,650	2,723	5,878	5,323	2,366	1,637	1,075	3,264	
DCFP p316701 QF	2,707,563	195,965	230,632	193,327	222,020	297,490	286,696	313,335	211,701	147,950	219,448	187,958	200,842	
Evergreen BioPower p351030 QF	-	-	-	-	-	-	-	-	-	-	-	-	-	
ExxonMobil p255042 QF	209,796	-	-	-	103,197	106,599	-	-	-	-	-	-	-	
Kennecott Refinery QF	795,922	-	-	-	399,571	396,351	-	-	-	-	-	-	-	
Kennecott Smelter QF	8,429,709	588,918	500,215	362,562	401,438	544,170	623,963	716,405	830,352	1,106,712	1,204,043	766,008	784,904	
Mountain Wind 1 p367721 QF	12,211,726	802,467	872,009	693,947	787,868	848,297	788,553	851,849	1,114,887	1,504,852	1,757,305	1,072,022	1,117,670	
Mountain Wind 2 p398449 QF	10,923,080	1,084,359	1,107,713	1,280,930	1,297,180	1,004,046	805,100	827,935	958,913	332,279	635,255	698,771	890,599	
Oregon Wind Farm QF	6,396,406	-	-	-	-	-	-	150,450	1,284,901	1,346,075	1,262,584	1,237,746	1,114,650	
Pioneer Wind Park I QF	3,772,711	-	-	-	-	-	-	-	-	44,550	1,300,105	1,276,791	1,151,266	
Pioneer Wind Park II QF	3,507,689	263,436	209,932	202,850	196,719	207,290	240,907	303,791	348,582	471,304	376,217	340,290	346,372	
Power County North Wind QF p5756	3,337,768	250,112	199,201	191,247	183,178	192,789	227,346	287,010	334,961	450,327	363,485	325,372	332,739	
Power County South Wind QF p5756	1,214,173	13,028	-	-	140,682	174,130	175,417	34,051	72,079	188,858	187,228	178,820	49,880	
Roseburg Dillard QF	4,800,266	416,184	350,762	408,406	459,541	450,449	445,569	467,423	359,364	352,026	353,563	328,110	408,849	
SF Phosphates	2,757,152	160,811	166,684	239,704	263,545	342,200	274,672	224,329	247,796	270,067	179,943	195,205	172,236	
Spanish Fork Wind 2 p311881 QF	26,419,268	1,541,031	2,022,472	2,310,985	2,327,394	2,355,055	2,275,059	1,975,068	2,300,509	2,356,367	2,369,193	2,262,077	2,332,058	
Sunnyside p85957/p59665 QF	1,306,540	123,086	110,292	107,683	182,012	180,127	168,618	144,114	141,205	151,403	-	-	-	
Tesorco QF	2,330,018	-	-	-	379,061	405,908	392,388	406,755	333,629	412,276	-	-	-	
Threemile Canyon Wind QF p500133	-	-	-	-	-	-	-	-	-	-	-	-	-	
US Magnesium QF	131,394,202	9,037,841	9,724,908	9,584,419	10,228,419	10,168,785	9,242,897	9,221,887	11,100,478	12,134,455	14,567,253	13,001,335	13,381,525	
Qualifying Facilities Total														
Mid-Columbia Contracts														
Canadian Entitlement p60828	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chelan - Rocky Reach p60627	3,587,744	296,144	296,144	296,144	296,144	296,144	301,003	301,003	301,003	301,003	301,003	301,003	301,003	
Douglas - Wells p60828	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grant Displacement p270294	(6,723,320)	(588,496)	(588,496)	(588,496)	(588,496)	(588,496)	(588,496)	(588,496)	(588,496)	(588,496)	(475,620)	(475,620)	(475,620)	
Grant Reasonable	2,298,983	197,476	197,476	197,476	197,476	197,476	197,476	197,476	197,476	197,476	173,900	173,900	173,900	
Grant Surplus p258851	(836,593)	(94,876)	(94,876)	(94,876)	(94,876)	(94,876)	(94,876)	(94,876)	(94,876)	(94,876)	(717)	(717)	(717)	
Mid-Columbia Contracts Total														
Total Long Term Firm Purchases	446,360,551	31,781,522	30,920,255	30,043,588	36,540,157	37,707,928	34,455,273	35,681,759	39,110,316	42,444,168	45,899,855	40,055,763	41,719,969	

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PacifiCorp	Net Power Cost Analysis												
	04/12-03/13	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
Storage & Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-
APG/ColoColum s191690	-	-	-	-	-	-	-	-	-	-	-	-	-
APS Exchange p68118/s68119	-	-	-	-	-	-	-	-	-	-	-	-	-
Black Hills CT's p64676	313,466	66,039	124,497	122,929	-	-	-	-	-	-	-	-	-
BPA Exchange p64706/p64888	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA FC II Wind p63507	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA FC IV Wind p79207	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA Peaking p59820	-	-	-	-	-	-	-	-	-	-	-	-	-
BPA So. Idaho p64885/p63975/p6471	(3,647)	(8)	(2)	(2,303)	-	-	-	-	-	-	-	-	-
Cargill p483225/s6 p485390/s89	1,398,400	-	460,000	496,800	441,600	-	-	-	-	-	-	-	-
Cowiltz Swift p65787	-	-	-	-	-	-	-	-	-	-	-	-	-
EWEB FC I p63506/p63510	-	-	-	-	-	-	-	-	-	-	-	-	-
PSCo Exchange p340325	5,400,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000
PSCo FC III p63362/s63361	-	-	-	-	-	-	-	-	-	-	-	-	-
Redding Exchange p66276	-	-	-	-	-	-	-	-	-	-	-	-	-
SCL State Line p105228	364,800	-	-	120,000	128,600	115,200	-	-	-	-	-	-	-
Shell p489963/s489962	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Storage & Exchange	7,473,018	516,039	574,489	571,594	1,029,998	1,074,097	1,006,800	450,000	450,000	450,000	450,000	450,000	450,000
Short Term Firm Purchases													
COB	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Corners	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-
Mead	-	-	-	-	-	-	-	-	-	-	-	-	-
Mid Columbia	64,493,520	6,607,300	9,622,840	5,846,560	1,038,450	941,850	3,738,780	12,552,690	10,731,000	10,823,850	887,900	788,400	897,900
Mona	-	-	-	-	-	-	-	-	-	-	-	-	-
NOB	9,651,050	1,290,500	1,330,450	1,272,100	953,250	953,250	922,500	953,250	922,500	953,250	-	-	-
Palo Verde	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-	-	-	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-
West Main	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-
STF Electric Swaps	13,422,896	309,120	555,304	431,072	4,321,250	4,040,550	3,765,600	-	-	-	-	-	-
STF Index Trades	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Short Term Firm Purchases	87,467,466	8,206,920	11,508,594	7,549,732	6,312,950	5,935,650	8,426,880	13,505,940	11,653,500	11,783,100	887,900	788,400	897,900
System Balancing Purchases													
COB	24,376,885	1,619,800	6,501,253	5,479,834	2,934,471	2,041,175	368,722	1,371,639	1,450,839	550,050	450,208	1,108,414	500,481
Four Corners	13,506,020	3,082,472	1,294,132	818,176	1,667,893	993,262	386,035	264,519	1,099,365	1,328,419	679,597	953,747	1,078,403
Mead	2,182,922	-	66,411	13,562	126,651	216,332	16,500	124,712	71,873	1,140,501	204,542	25,208	176,608
Mid Columbia	74,366,448	6,948,842	4,374,594	5,561,203	15,644,923	16,417,143	6,430,850	2,124,913	45,014	139,312	3,449,604	3,653,852	9,576,200
Mona	36,037,759	3,922,930	4,277,713	2,483,964	1,375,995	395,231	1,741,448	2,124,691	5,183,845	5,110,697	3,375,886	3,806,999	2,205,360
NOB	4,643,640	69,959	2,174,729	729,236	291,521	43,783	692,590	51,725	171,736	352,859	9,816	55,688	-
Palo Verde	17,055,341	63,961	121,952	-	248,566	351,894	517,741	5,365,286	4,854,928	5,530,995	-	-	-
SP15	-	-	-	-	-	-	-	-	-	-	-	-	-
Emergency Purchases	62,821	-	61,440	1,382	-	-	-	-	-	-	-	-	-
Total System Balancing Purchases	172,231,937	15,657,983	18,872,222	15,087,376	22,290,020	20,368,820	10,153,886	11,460,485	12,877,600	14,152,832	8,169,653	9,603,908	13,537,052
Total Purchased Power & Net Inte	713,532,872	56,162,465	61,875,560	53,252,290	66,173,125	65,086,494	54,042,839	61,098,184	64,091,416	68,830,100	55,417,408	50,898,071	56,804,921

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Net Power Cost Analysis

	04/12-03/13	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13
PacificCorp													
12 months ended March 2013													
Wheeling & U. of F. Expense													
Firm Wheeling	134,191,429	12,037,328	11,611,034	12,113,381	11,163,221	10,514,321	10,452,202	10,767,061	11,493,403	10,915,705	10,938,259	11,367,795	10,817,780
SI Firm & Non-Firm	149,677	-	1,879	11,959	7,664	12,040	10,699	19,689	20,851	17,804	20,426	13,774	13,053
Total Wheeling & U. of F. Expense	134,341,106	12,037,328	11,612,913	12,124,981	11,170,884	10,526,361	10,462,901	10,786,951	11,514,254	10,933,508	10,958,685	11,381,508	10,830,833
Coal Fuel Burn Expense													
Carbon	21,785,306	959,388	1,563,120	1,621,145	1,911,543	2,031,112	1,918,476	2,032,547	1,914,232	2,006,927	2,030,538	1,763,541	2,030,737
Cholla	55,631,171	2,339,673	4,534,506	4,399,117	5,012,410	5,177,205	4,901,564	5,076,713	4,896,685	5,021,717	5,098,225	4,511,212	4,666,146
Colstrip	22,986,049	1,965,494	1,233,292	1,831,591	1,279,812	1,279,072	1,234,967	1,279,072	1,279,466	1,279,924	1,279,072	1,154,316	1,276,553
Craig	57,170,511	3,592,479	4,989,047	5,073,296	5,681,976	5,966,179	5,366,179	5,301,454	4,967,260	2,032,924	2,032,924	1,835,932	2,032,259
Dave Johnston	13,809,639	573,264	1,152,912	1,020,586	1,369,976	1,299,480	1,224,613	1,275,426	1,217,160	1,311,441	3,973,264	4,272,153	4,495,467
Hayden	146,355,944	10,795,468	10,858,653	10,584,240	12,428,144	13,942,452	12,749,136	13,416,347	12,870,635	13,362,046	13,565,125	11,972,088	10,111,610
Hunter	102,924,245	8,046,610	7,804,214	7,638,237	8,800,959	9,000,192	8,899,726	6,694,308	9,126,479	9,273,868	9,402,238	8,368,373	9,269,039
Jim Bridger	201,332,915	14,912,218	12,103,689	14,066,135	18,837,256	18,856,729	18,227,343	18,855,123	17,839,330	18,192,220	17,244,572	15,568,969	16,629,327
Naughton	108,629,995	9,157,220	9,261,907	9,102,957	9,526,275	9,333,163	9,169,207	9,484,511	9,207,451	9,498,635	9,324,792	8,297,861	6,877,016
Ramp Loss	(986,621)	(68,178)	(103,492)	(67,240)	(87,148)	(87,148)	(69,983)	(92,569)	(92,056)	(82,252)	(98,112)	(89,895)	(82,083)
Wyodak	20,132,682	1,733,182	1,020,388	1,699,348	1,756,159	1,756,716	1,699,791	1,755,654	1,735,356	1,785,488	1,762,430	1,619,362	1,789,807
Total Coal Fuel Burn Expense	764,069,583	54,962,639	55,486,644	57,938,051	68,307,496	70,920,708	67,306,613	67,081,510	66,500,963	67,822,084	67,192,744	60,473,827	60,176,353
Gas Fuel Burn Expense													
Chenails	32,936,686	-	-	-	5,405,443	7,972,414	7,369,888	8,164,910	1,724,543	1,889,196	410,291	-	-
Current Creek	81,063,715	6,107,912	6,244,862	6,148,061	6,573,918	6,645,805	5,965,276	6,273,127	6,846,216	7,639,616	8,055,279	7,080,203	7,484,441
Gadsby	2,977,235	-	-	-	1,214,633	1,445,946	316,655	-	-	-	-	-	-
Gadsby CT	14,338,558	1,086,248	1,133,354	1,108,170	1,158,638	1,166,876	1,129,512	1,177,745	1,183,958	1,322,418	1,358,572	1,177,492	1,335,575
Hermiston	48,039,481	3,052,546	1,149,183	1,113,372	3,703,099	4,863,530	4,523,966	5,182,322	4,578,910	5,195,364	5,246,052	4,777,530	4,649,607
Lake Side	65,594,748	795,044	1,563,795	1,811,294	6,679,264	8,768,957	6,999,929	4,183,281	6,875,175	7,173,748	7,423,901	5,623,049	7,697,312
Little Mountain	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Gas Fuel Burn Expense	244,950,423	11,041,750	10,091,194	10,180,896	24,734,995	30,863,529	26,305,226	24,981,385	21,207,803	23,224,341	22,494,094	18,658,274	21,166,935
Other Generation													
Gas Physical	(34,416)	(4,020)	(4,501)	(4,647)	(5,093)	(5,258)	(5,077)	(5,821)	-	-	-	-	-
Gas Swaps	129,682,392	11,795,550	15,910,083	16,123,665	13,931,090	13,821,195	13,120,725	11,729,176	9,148,710	7,483,230	6,195,668	4,896,234	5,527,088
Clay Basin Gas Storage	45,060	51,523	51,523	51,523	51,523	51,523	51,523	51,523	5,189	(66,018)	(92,039)	(87,258)	(75,475)
Pipeline Reservation Fees	26,298,704	2,173,797	2,214,787	2,173,797	2,214,787	2,214,787	2,173,797	2,214,787	2,173,797	2,214,787	2,214,787	2,100,006	2,214,787
Total Gas Fuel Burn Expense	400,942,162	25,068,600	28,263,086	28,525,234	40,927,303	46,945,776	41,646,194	38,971,050	32,535,499	32,856,339	30,812,510	25,567,256	28,833,315
Other Generation													
Blundell	3,560,080	277,523	288,306	279,947	288,644	288,593	288,410	307,212	306,325	316,632	316,522	285,933	316,632
Wind Integration Charge	5,145,314	330,260	320,729	297,048	258,293	258,278	272,405	328,296	399,232	430,214	827,504	655,609	767,387
Total Other Generation	8,705,394	607,783	609,035	576,995	546,936	546,871	560,815	635,508	705,617	746,846	1,144,026	941,542	1,084,019
Net Power Cost	1,495,822,933	115,687,764	127,940,113	122,430,405	146,531,492	149,752,381	128,250,232	120,082,508	112,934,383	118,491,219	122,769,640	110,808,482	120,724,313
Net Power Cost/Net System Load	25.38	25.31	26.64	25.94	27.10	27.98	27.22	25.31	23.75	23.13	23.57	23.95	24.50