Docket No. UE-001878
PacifiCorp Exhibit ___, GND-5
Witness: Duvall

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Joint Application of PACIFICORP and PACIFICORP, WASHINGTON, INC. for an Order Approving (1) the Transfer of Distribution Property from PacifiCorp to an Affiliate, PacifiCorp, Washington, Inc., (2) the Transfer by PacifiCorp of Certain Utility Property to an Affiliate, the Service Company, and (3) the Proposed Accounting Treatment for Regulatory Assets and Liabilities, and an Order Granting an Exemption under RCW 80.08.047 for the Issuance or Assumption of Securities and Encumbrance of Assets by PacifiCorp, Washington, Inc. and/or PacifiCorp	Docket No. UE-001878

PACIFICORP

EXHIBIT TO SUPPLEMENTAL DIRECT TESTIMONY OF GREGORY N. DUVALL

June 2001

Exhibit A --Thermal Pricing Elements and Dedicated New Resources
Washington

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
		Thermal Energy Share (MWh)																							
		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT .		NOV		DEC	
Thermal Elements	End Year	1/HLH	1/LLH	2/HLH	2/LLH	3/HLH	3/LLH	4/HLH	4/LLH	5/HLH	5/LLH	6/HLH	6/LLH	7/HLH	7/LLH	8/HLH	8/LLH	9/HLH	9/LLH	10/HLH	10/LLH	11/HLH	11/LLH	12/HLH	12/LLH
Blundell	2013	809	603	654	478	420	316	640	439	721	528	640	483	639	467	658	495	672	522	792	570	694	591	723	567
Carbon	2010	6,435	4,794	5,206	3,803	3,467	2,698	3,472	2,269	5,733	4,197	5,088	3,842	5,082	3,719	5,239	3,937	5,350	4,153	6,304	4,536	5,523	4,698	5,754	4,510
Cholla	2025	5,927	4,416	5,296	3,892	10,212	7,700	10,382	7,132	11,694	8,562	10,170	7,663	10,365	7,586	10,685	8,030	10,913	8,472	7,158	4,981	11,266	9,583	11,737	9,199
Colstrip	2029	5,102	3,801	2,056	1,502	2,286	1,724	4,036	2,772	4,532	3,342	4,062	3,021	4,029	2,949	4,154	3,121	4,242	3,293	4,999	3,597	4,379	3,725	4,563	3,576
Craig	2024	6,442	4,799	5,212	3,807	3,713	2,799	5,145	3,453	5,781	4,163	5,094	3,847	5,087	3,723	5,244	3,941	5,356	4,158	6,311	4,541	5,529	4,703	4,738	3,714
Dave Johnston	2020	27,625	20,582	22,350	16,327	24,677	18,607	17,660	11,984	21,309	15,554	21,845	16,496	21,816	15,967	22,490	16,900	22,991	17,808	17,379	12,387	23,711	20,169	24,702	19,362
Gadsby (Oct - Jun)	2007	2,629	223	1,845	413	1,407	1,006	1,223	914	1,404	993	1,300	258	0	0	0	0	0	0	2,201	1,658	2,217	1,430	2,120	1,555
Gadsby (Jul - Sep)	2007	0	0	0	0	0	0	0	0	0	0	0	0	5,658	4	6,335	2	7,197	2	0	0	0	0	0	0
Hayden	2024	2,857	2,128	2,311	1,688	1,091	823	1,268	871	2,545	1,863	2,259	1,706	2,256	1,651	2,326	1,748	2,375	1,844	2,894	1,919	2,488	2,051	1,532	1,201
Hermiston (<= 80%)	2031	9,259	6,899	7,559	5,407	8,271	6,237	8,067	4,331	11,359	6,727	8,814	5,577	7,536	3,929	7,932	0	0	0	0	0	8,065	6,647	8,318	6,452
Hermiston (> 80%)	2031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,919	8,389	5,307	9,866	5,738	0	0	0	0
Hunter	2025	24,195	18,099	25,827	18,943	31,272	23,221	32,283	22,297	36,219	26,896	32,292	24,481	32,250	23,695	33,247	25,081	33,953	26,461	40,010	28,901	30,108	25,712	36,517	28,734
Huntington	2019	32,327	24,085	26,154	19,106	28,798	21,851	13,003	8,933	16,518	12,094	25,564	19,304	25,529	18,685	26,319	19,777	26,878	20,866	31,670	22,787	27,747	23,602	28,907	22,657
Jim Bridger	2020	51,825	38,612	41,929	30,630	34,543	26,046	30,527	20,972	45,950	34,015	33,551	25,335	40,927	29,954	42,192	31,706	43,089	33,451	51,005	36,300	35,436	29,730	46,343	36,323
Naughton	2021	25,634	19,098	20,739	15,150	16,586	12,241	16,436	11,291	20,287	15,169	19,824	14,949	19,821	14,507	21,304	16,009	21,757	16,890	25,287	18,195	22,155	18,845	23,081	18,091
Wyodak	2022	10,443	7,781	8,449	6,172	7,523	5,673	8,260	5,675	9,305	6,812	8,258	6,236	8,247	6,036	8,502	6,389	8,683	6,741	10,231	7,361	8,964	7,625	9,338	7,319

Exhibit A -
Washingto

A	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
Thermal Elements	Plant Location East or West	Start $/Month	$/Month Thermal O&M	$/Month A&G	$/Month Fuel Cost	$/Month Start Plant in Service	$/Month Book Depreciation	$/Month Tax Depreciation	$/Month Capital Investment	$/Month Start-Year Fuel and M&S	$/Month After -Tax Return on Rate Base	$/Month Escalation
Blundell	East	$53,110	$17,185	$9,063	$0.00	$560,682	Exhibit K	Exhibit M	Exhibit L	$2,931	$26,863	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Carbon	East	$138,069	$74,771	$45,192	$0.00	$590,643	Exhibit K	Exhibit M	Exhibit L	$22,670	$18,105	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Cholla	East	$222,315	$120,968	$16,280	$0.00	$2,657,112	Exhibit K	Exhibit M	Exhibit L	$23,293	$85,068	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Colstrip	West	$1,621,043	$47,508	$5,552	$0.00	$1,516,645	Exhibit K	Exhibit M	Exhibit L	$1,070	$50,268	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Craig	East	$174,993	$81,080	$8,067	$0.00	$1,659,981	Exhibit K	Exhibit M	Exhibit L	$8,980	$85,846	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Dave Johnston	West	$561,329	$259,995	$152,676	$0.00	$3,554,470	Exhibit K	Exhibit M	Exhibit L	$50,722	$148,658	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Gadsby (Oct - Jun)	East	$80,027	$44,483	$27,406	$0.00	$549,385	Exhibit K	Exhibit M	Exhibit L	$9,211	$8,138	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Gadsby (Jul - Sep)	East	$344,320	$44,483	$27,406	$264,293	$549,385	Exhibit K	Exhibit M	Exhibit L	$9,211	$8,138	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Hayden	East	$78,235	$34,895	$3,878	$0.00	$710,560	Exhibit K	Exhibit M	Exhibit L	$5,005	$39,461	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Hermiston (<= 80%)	West	$270,355	$54,182	$6,659	$131,588	$1,165,124	Exhibit K	Exhibit M	Exhibit L	$0	$77,925	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Hermiston (> 80%)	West	$199,166	$54,182	$6,659	$60,399	$1,165,124	Exhibit K	Exhibit M	Exhibit L	$0	$77,925	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Hunter	East	$680,319	$276,732	$144,609	$0.00	$6,648,843	Exhibit K	Exhibit M	Exhibit L	$288,554	$258,978	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Huntington	East	$430,321	$206,133	$117,749	$0.00	$2,930,194	Exhibit K	Exhibit M	Exhibit L	$87,600	$106,439	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Jim Bridger	West	$804,952	$359,739	$211,124	$0.00	$6,499,982	Exhibit K	Exhibit M	Exhibit L	$106,722	$234,088	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Naughton	East	$415,618	$204,103	$122,745	$0.00	$2,367,664	Exhibit K	Exhibit M	Exhibit L	$53,680	$88,770	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)
Wyodak	West	$301,107	$114,622	$66,383	$0.00	$2,729,142	Exhibit K	Exhibit M	Exhibit L	$22,132	$120,102	(Thermal O&M*Esc. A)+(A&G*Esc.B)+(Data from Exhibits K, M, L)+(RORB)

After-Tax Return on Rate Base = [(P + I - Retirements) - (AD Previous Year + D - Retirements) - (T Previous Year + ((D - T) x Tax Rate)) - F] x R

Exhibit A -
Washingto

A	AM	AN	AO	AP	AQ
Thermal Elements	Start $/MWh	$/MWh Coal Fuel	$/MWh Natural Gas Fuel	$/MWh Escalation	Buyers Share
Blundell	$20.59	$20.59	N/A	(Coal Fuel*Esc.D)	8.03%
Carbon	$7.81	$7.81	N/A	(Coal Fuel*Esc.D)	8.79%
Cholla	$12.29	$12.29	N/A	(Coal Fuel*Esc.D)	8.80%
Colstrip	$6.26	$6.26	N/A	(Coal Fuel*Esc.D)	10.29%
Craig	$10.38	$10.38	N/A	(Coal Fuel*Esc.D)	8.81%
Dave Johnston	$5.36	$5.36	N/A	(Coal Fuel*Esc.D)	9.13%
Gadsby (Oct - Jun)	$41.30	N/A	$41.30	(Natural Gas Fuel*Esc.E)	8.81%
Gadsby (Jul - Sep)	$0.00	N/A	$0	(Natural Gas Fuel*Esc.E)	8.81%
Hayden	$11.07	$11.07	N/A	(Coal Fuel*Esc.D)	8.84%
Hermiston (<= 80%)	$14.24	N/A	$14.24	(Natural Gas Fuel*Esc.E)	8.59%
Hermiston (> 80%)	$18.84	N/A	$18.84	(Natural Gas Fuel*Esc.E)	8.59%
Hunter	$8.90	$8.90	N/A	(Coal Fuel*Esc.D)	7.72%
Huntington	$6.87	$6.87	N/A	(Coal Fuel*Esc.D)	8.25%
Jim Bridger	$9.09	$9.09	N/A	(Coal Fuel*Esc.D)	9.36%
Naughton	$11.37	$11.37	N/A	(Coal Fuel*Esc.D)	8.39%
Wyodak	$9.99	$9.99	N/A	(Coal Fuel*Esc.D)	9.97%

Exhibit B -- Power Sales Contracts
Washington

Wholesale Power Sale Contract	Location East or West	Buyers Share	Power Sales Energy Shares -- Percent of Actual MWh																							
			JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC	
			1/HLH	1/LLH	2/HLH	2/LLH	3/HLH	3/LLH	4/HLH	4/LLH	5/HLH	5/LLH	6/HLH	6/LLH	7/HLH	7/LLH	8/HLH	8/LLH	9/HLH	9/LLH	10/HLH	10/LLH	11/HLH	11/LLH	12/HLH	12/LLH
Black Hills	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
So Cal Edison (P)	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
So Cal Edison (U)	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
SMUD	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
IPP Sale	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Puget Power II	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Sierra Pacific II	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
UMPA Sale	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
CDWR Sale	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
WAPA Sale	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
WAPA II Sale	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
PSCo Sale	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Clark Sale	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Black Hills Capacity	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Springfield	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
PNGC	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Deseret Supplemental	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Okanogan	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
UMPA II Sale	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Springfield II	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Cowlitz-BHP	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Clark-WT	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Hurricane Sales	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
APPA-AEPCO	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Citizens Power	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Green Mountain	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Flathead Sale	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
BPA Wind Sale	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%

Exhibit C -- Indices

A DRI Electric Ultilty Operations and Maintenance Index - Steam Production Plants

B DRI Electric Ultilty Administrative and General Index - Steam Production Plants

C 30-Year Bond Index

D DRI Price of Coal Fuel to Electric Utilties Index - Mountain Region / Pacific Region (As appropriate)

E For Hermiston: 5.5% increase per year until October 31, 2011; establish market price for November 1, 2012; then as below.

Except Hermiston and Hermiston after 2012:
DRI Price of Natural Gas Fuel to Electric Utilties Index - Mountain Region / Pacific Region (As appropriate)

Exhibit D -- Buyer Hydro and Purchased Power Contract Entitlements
Washington

Resource Element	Location East or West	Buyers Share	Purchase Power Energy Shares -- Percent of Actual MWh																							
			JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC	
			1/HLH	1/LLH	2/HLH	2/LLH	3/HLH	3/LLH	4/HLH	4/LLH	5/HLH	5/LLH	6/HLH	6/LLH	7/HLH	7/LLH	8/HLH	8/LLH	9/HLH	9/LLH	10/HLH	10/LLH	11/HLH	11/LLH	12/HLH	12/LLH
Hydro Elements West	West	9.65%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Hydro Elements East	East	8.46%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Purchase Power Contracts																										
BPA Capacity Purchase	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
BPA Supplemental Capacity	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Black Hills Capacity	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
CoGen/James River	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Mid Columbia	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Canadian Entitlement	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
CSPE	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Colockum	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Grant_County	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
PGE_Cove	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
IPC_Return	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Q.F. Contracts - PP&L	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
TriState Purchase	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
South Idaho Exchange	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
APS Purchase	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Tri State Exchange	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
SCE Purchase	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
BPA Exchange	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Avista Summer Purchase	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Avista Exchange	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Gem State	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
GSLM	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
QF Contracts - UP&L	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
IPP Purchase	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Hermiston Purchase	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Deseret Annual	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Deseret Monthly	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Deseret Expansion	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Deseret NF Purchase	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
APS Exchange	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Hurricane Purchase	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Redding Exchange	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
TransAlta Purchase	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
Enron Purchase	East	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%
LTF Reserves Purchases	West	8.33%	9.66%	9.13%	8.47%	8.25%	8.63%	8.25%	7.64%	7.21%	8.61%	7.99%	7.95%	7.50%	7.63%	7.08%	7.87%	7.50%	8.35%	8.11%	9.11%	9.05%	8.98%	8.73%	8.64%	8.59%

Exhibit E Mines
Washington

Mine Name	Plant(s) Served	Percent to Washington
Jim Bridger Mine active	Jim Bridger Plant	8.3287%
Deer Creek Mine active	Carbon, Hunter, Huntington Plants	8.3287%
DesBeeDove Mine closed, final reclamation in progress	Hunter Plant	8.3287%
Dave Johnston Mine closed, reclamation to be completed March 2004	Dave Johnston Plant	8.3287%
Centralia Mine contingent liabilities related to pre-existing environmental conditions	Centralia Plant	15.40%
Trapper Mine active	Craig Plant	8.3287%

Note: Other mines that are fully closed down or otherwise inactive and incurring no cost are not included.

EXHIBIT F
TO THE
SHORT-TERM POWER PURCHASE AGREEMENT
BETWEEN
PACIFICORP GENERATION COMPANY
AND
PACIFICORP, WASHINGTON, INC.

POINTS OF DELIVERY AND POINTS OF INJECTION

This Exhibit F identifies the Points of Delivery at which Power will be delivered by Seller to meet Buyer's Retail Load and the Points of Injection at which Power will be delivered for loads under Wholesale Contracts.

These Points of Delivery and Points of Injection may be modified from time to time by mutual agreement of the Parties. Seller will use the Transmission Contracts and Replacement Contracts to deliver energy at these Points of Delivery.

Deliveries to Buyer's Retail Load

Delivery of energy for Buyer's Retail Load will be provided at the Points of Delivery associated with the substations where Buyer can accept such energy into its distribution system. The amount of energy provided under this Agreement for Buyer's Retail Load will be delivered to the Points of Delivery listed below in an amount equal to Buyer's Retail Load subject to the Delivery Limit for each such Point of Delivery.

Point of Delivery	Delivery Limit (MW)
ATTALIA	25
BOWMAN STREET	45
CASCADE KRAFT	118
CENTRAL	26
CENTRALIA COAL HANDLING	1
CENTRALIA COAL MINE	31
CLINTON	25
DAYTON	10
DODD RD	25
GRANDVIEW	42
HOPLAND	34
MILLCREEK	45
NOB HILL	42
NORTH PARK	45
ORCHARD	45

Point of Delivery	Delivery Limit (MW)
PACIFIC	28
PASCO	15
POMEROY	6
PROSPECT POINT	40
PUNKIN CENTER	19
RIVER ROAD	51
SELAH	40
SUNNYSIDE	45
TIETON	22
TOPPENISH	50
TOUCHET	6
UNION GAP	348
VOELKER	25
WAITSBURG	6
WAPATO	45
WENAS	13
WHITE SWAN	21
WILEY	45

Deliveries to Wholesale Contract Loads

Delivery of energy for Wholesale Contracts will be provided at the Points of Injection associated with the Seller's Thermal Elements and Hydro-Electric Generating Plants. The amount of energy provided under this Agreement for Wholesale Contract loads will be delivered to each of the Points of Injection listed below in an amount that is the ratio of the Delivery Limit of such Point of Injection to the sum of the Delivery Limits for all of the Points of Injection listed below.

Point of Injection*	Delivery Limit (MW)
Blundell	23
Bridger	1,407
Carbon	175
Cholla	380
Colstrip	144
Craig	165
Dave Johnston	772
Gadsby	235
Hayden	78
Hermiston	245
Hunter	1,122
Huntington	895
Naughton	700
Wyodak	268

Point of Injection*	Delivery Limit (MW)
American Fork	0.95
Ashton	6.85
Bend	1.11
Bigfork	4.15
Clearwater 1	15.00
Clearwater 2	26.00
Cline Falls	1.00
Condit	9.60
Copco 1	20.00
Copco 2	27.00
Cove	7.50
Cutler	30.00
Eagle Point	2.81
East Side	3.20
Fall Creek	2.20
Fish Creek	11.00
Fountain Green	0.16
Grace	33.00
Granite	2.00
Gunlock	0.75
Iron Gate	18.00
JC Boyle	79.99
Last Chance	1.73
Lemolo 1	29.00
Lemolo 2	33.00
Merwin	136.00
Naches	6.37
Naches Drop	1.40
Olmsted	10.30
Oneida	30.00
Paris	0.72
Pioneer	5.00
Powerdale	6.00
Prospect 1	3.76
Prospect 2	32.00
Prospect 3	7.20
Prospect 4	1.00
Sand Cove	0.80
Skookumchuck	1.55
Slide Creek	18.00
Snake Creek	1.18
Soda	14.00
Soda Springs	11.00
St Anthony	0.50
Stairs	1.00
Swift 1	240.00
Toketee	42.50
Upper Beaver	2.52
Veyo	0.50

Point of Injection*	Delivery Limit (MW)
Viva Naughton	0.77
Wallowa Falls	1.10
Weber	3.85
West Side	0.60
Yale	134.00

*Point of Injection is at Generator Bus Bar

PacifiCorp Generation Company Auction Protocols

I. Retention of Advisor

These protocols will govern the auction sale of Thermal Plants and associated facilities pursuant to Subsections 13.3 and 13.4 of the Long-Term Power Purchase Agreement ("Agreement").

As soon as practicable after it is determined that an auction will occur, PacifiCorp Generation Company (Seller") shall retain a nationally-recognized investment banking company with substantial experience conducting auctions of generating facilities in the United States to act as the auction advisor ("Advisor"). Following the retention of the Advisor, Seller shall have no further contact with the Advisor except to provide information to the Advisor with respect to the assets being sold. Seller shall cooperate fully with the Advisor during all phases of the auction. Seller shall make no effort to influence decisions made by the Advisor or in any respect attempt to compromise the Advisor's independence.

II. Solicitation of Interested Buyers

The Advisor will structure an auction process designed to encourage all likely buyers to participate. The Advisor will conduct an active solicitation (mailings, calls and conferences/technical workshops) of all companies likely to have an interest in the assets being auctioned and the capability to purchase them. The Advisor will maintain a potential buyer database which will include all relevant information on potential buyers (contacts, addresses, bidding history) and will track all communications/ correspondence with interested buyers.

- The Advisor will make initial contact with a broad universe of potential buyers through the distribution of a "Sale Summary" (1-2 page summary of assets and process) which:
  - ⇒ Will be prepared by the Advisor and distributed to interested buyers by the Advisor on behalf of the Seller
  - ⇒ Will describe the assets for sale in general terms (asset name, number of units, location, primary fuel type, installed capacity, ownership interest)
  - ⇒ Will set forth initial transaction parameters

- Parties who express interest in the assets after receiving the Sale Summary will be required to submit qualification information and execute a Confidentiality and Access Agreement ("CA") in order to participate in the first round of the auction process.
- The solicitation process will continue throughout the auction process as potential buyers may register their interest up until shortly before the Advisor accepts non-binding, preliminary bids
- The Advisor will be in on-going contact with potential buyers to maintain their interest and address issues as they arise with the goal of causing likely buyers to submit preliminary bids

III. Qualification Process

The qualification process assures that the Advisor's resources and attention will be focused on potential buyers who are most likely to submit fully-financed bids rather than those simply interested in obtaining information. Bidders will be required to submit the following information which the Advisor will evaluate to determine if a particular bidder is qualified to participate in the auction process:

(i) a brief description of the bidding company or consortium;

(ii) a summary of operating experience in the energy industry for the prospective bidding group, focusing on experience involving similarly sized generating plant (number of plants operated, size of those plants, and operating data including capacity factors, availability factors, heat rates, etc.) or, if the group does not have specific operating experience, an operating plan for the business unit(s) if acquired;

(iii) demonstrated and/or prospective ability to close an acquisition transaction of the magnitude contemplated. In this regard, an audited balance sheet showing sufficient equity or cash on hand or evidence of a financing commitment from a bank(s) will be sufficient; and

(iv) attributes of the bidder that bear upon the likelihood of prompt approval of the bidder as a buyer by applicable regulatory authorities. Such attributes may include operating record, environmental stewardship, labor relations, lack of market power, corporate citizenship and other matters which the Advisor believes may increase the likelihood of prompt approval by such regulatory authorities.

The qualification process will work in the following manner:

- The Advisor will send a Request for Qualifications ("RFQ") letter and a CA to all interested parties who register their interest after receiving the Sale Summary
- In the RFQ, interested parties will be instructed that if they are interested in receiving additional information an officer of the potential bidder must execute and return the CA to the Advisor
- Potential bidders will have the opportunity to discuss the provisions of the CA with the Advisor's counsel and to make any revisions deemed appropriate and necessary by the Advisor's counsel to allow the bidder to participate; however, potential bidders should not expect material variations in the terms and conditions of the CAs, which are intended to be substantially uniform for all bidders
- The RFQ will specify the qualification information listed above that must be submitted to the Advisor before any additional information can be received
- Potential bidders will be informed in the RFQ that the Advisor will evaluate all of the qualification information, but primary emphasis will be placed upon demonstrated financial wherewithal to complete a purchase of the magnitude contemplated
- Potential bidders may be disqualified if it appears to the Advisor that they have engaged in material misconduct in previous auctions of generating plants
- The Advisor will inform potential bidders within several days of receiving their information if they are qualified
    - ⇒ There is no limit to how many bidders can be qualified
    - ⇒ For those parties who do not qualify, the Advisor will send a letter delineating the areas in which their qualification submissions fell short and will allow them to address these shortcomings

IV. First (Preliminary, Non-Binding) Bidding Round

A. Information Memorandum

The first round will allow all interested parties who have been qualified pursuant to the procedures discussed above, to receive an Information Memorandum ("IM") containing detailed technical and operating data on the assets for sale, a description of relevant power markets, financial information on the assets and facilities, key selling parameters and preliminary proposal requirements.

B. Due Diligence - Data Room

Interested, qualified bidders will have access to the Data Room. Where feasible, in lieu of establishing a Data Room, all relevant information will be recorded on a compact disk provided to all qualified bidders. The Data Room will serve as the primary source of information for qualified first round bidders, providing the opportunity to review documents containing detailed technical data and operating history and information on the generating assets. Access will be highly controlled and monitored by the Advisor. Bidders will schedule visits to the Data Room with the Advisor and will not be permitted access to the Data Room unless they have previously arranged for the visit. The Advisor will compile all information to be contained in the Data Room with the assistance of the Seller.

⇒ The Advisor will inform the Seller of the type of information that bidders require based on prior experience in similar processes

⇒ The Advisor will assemble and catalog all information required by bidders to perform their evaluation of the assets

- To the extent that the use of a compact disk proves not to be feasible, the Data Room will be established in an accessible location in Salt Lake City, Utah with staff from the Advisor.

  ⇒ The Data Room Manager will supervise the activities within the Data Room and maintain confidentiality of Data Room visitors

- Data Room staff will have the following responsibilities:

  ⇒ Assist bidders in finding information describing Seller's assets

  ⇒ Document bidder questions which cannot be addressed by the Data Room Information and refer them to the Advisor

⇒ Maintain presence in the Data Room to monitor the bidders and assist them generally

⇒ Keep confidential all information related to bidders

- The Data Room will contain multiple rooms so that several bidders can visit at the same time

  ⇒ Each room will be fully "stocked" with copies of the Information (so that bidders are unaware of others visiting simultaneously)

  ⇒ Each room will contain telephones and a copy machine; copies can be made by the visiting bidder or by the Advisor's staff (logs will be maintained)

- Data Room staff will be instructed not to provide any information not in the Data Room or to respond to substantive questions from the bidders about the assets. All such inquiries will be referred to the Advisor

- The Data Room will remain open from the time the IM is distributed up to approximately one week before the preliminary, non-binding bids are due (approximately two months).

C. Preliminary Proposal Requirements

Prospective buyers will be required to submit preliminary, non-binding proposals about eight to ten weeks after receiving the IM.

Bidders will be asked to make certain assumptions in preparing their preliminary proposals. Furthermore, bidders will be informed of any need to enter into contracts with Seller for certain ancillary services. These assumptions will be set forth in the IM.

Requirements for the preliminary proposals will include at least:

- Description of the bidding entity or group, including all equity participants;
- Proposed purchase price;
- A description of the financing plan contemplated for the potential acquisition;
- A list of additional information and/or due diligence required to submit a binding bid;
- Operating plan for the business units;

- Confirmation that existing labor agreements will be assumed and intentions with respect to Seller's employees in both plant and support functions.
- A list of corporate, shareholder and regulatory approvals required to close a transaction and the estimated time frame for such approvals;
- Any exceptions to the definitive documents or transaction parameters outlined in the IM; and
- Confirmation that the proposal is not subject to any financing contingencies

The Advisor may also request data from bidders regarding their ownership of generating assets in the relevant markets to ensure that there are no obvious market power issues.

V. Final Bidding Round

A. "Short-Listing of Bidders"

Within five business days of receipt of preliminary proposals, the Advisors will inform parties that provided such preliminary proposals whether they have been selected to offer final bids. All parties selected to offer final bids will be informed of any changes in the definitive documents or transaction parameters that have occurred as a result of preliminary proposals. Final bids will be due approximately one month following the selection of parties eligible to make final bids.

B. Selection of Winning Final Bid

Within two business days of receiving the final bids, the Advisor will determine which party offered the highest amount for the assets. If the auction is being conducted pursuant to Subsection 13.3 of the Agreement and the high bid is in excess of the Reserve Amount, or if the auction is being conducted pursuant to Subsection 13.4 of the Agreement, the winning bidder will be expected to execute definitive transaction agreements within two business days of being selected. Any party not timely executing definitive transaction agreements will be disqualified from further participation in the auction and may be disqualified from participation in future auctions conducted on behalf of the Seller.

SYSTEM LOAD BALANCING COST DETERMINATION METHODOLOGY

This Exhibit describes the algorithm for determining the average price of Base Supplemental Power, Premium Supplemental Power, Base Excess Power and Premium Excess Power. Capitalized Terms used herein that are not defined herein shall have meaning ascribed to them in Section 1 of the Short-Term Power Purchase Agreement or Exhibit J to the Short-Term Power Purchase Agreement.

Definitions:

- "Net Resources" means, for any Period, the sum of the Total Entitlement Amount together with energy from Dedicated New Resources less the Power Sales Contract Energy Amount.
- "Reference Net Resources" means, in respect to any Period, the sum of: a)Energy available in 2002 from Active Thermal Elements, 2) normalized energy from Hydro-Electric Generating Plants (as shown on Schedule II), 3) energy available in 2002 from Purchased Power Contracts less the 2002 Power Sales Contract Energy Amount
- "Net Resource Adjustment" means, in respect to any Period, Net Resources less Reference Net Resources
- "Reference Contract Load" means, in reference to any Period for any Buyer, the 2002 Load of all Buyers for that Period multiplied by the Buyer's Monthly Share for that Period
- "Base Contract Load" means in respect to any Period, for any Buyer, Reference Load plus Net Resource Adjustment
- "Premium Contract Load" means in respect to the total system or each buyer, the positive or negative difference in any hour or any Period between the Contract Load and the Base Contract Load. When the Premium Contract Load is Positive, it shall be deemed Premium Supplemental Power, and when the Premium Contract Load is negative, it shall be deemed Premium Excess Power.
- "Contract Load" means Buyer's Net Load. .
- "Direct Access Load" means the difference between Distribution Load and Contract Load.
- "Base Contract Load Ratio" = Base Contract Load / Contract Load
- "Base Hourly Load" = Base Contract Load Ratio for the Period * Actual Hourly Load

After the Fact Determination of Base and Premium Energy and Cost

Step One: Import of Total System Data from System Balancing Sequences set forth in Exhibit J. For each hour, import total system data for energy and costs of Base Supplemental Power, Base Excess Power, Premium Supplemental Power and Premium Excess Power.

Step Two: Assign Base Amounts to Buyer

For each hour, take the total Base Excess Power and Base Excess Revenues and the total Base Supplemental Power and Base Supplemental Costs from Step One and allocate among Buyers based on the Monthly Buyer's Share for that Period.

Step Three: Determine Buyer's Share of Premium Amounts

After allocating the Base Excess Power and Base Supplemental Power to the Buyer, compare the sum of these plus Buyer's share of Net Resources for the hour to the Buyer's Load for the hour. If the sum of resources exceeds Load, Buyer has Premium Excess Power in that hour. If the sum of resources is less than Load, Buyer has Premium Supplemental Power.

Step Four: Determine Buyer's Costs/Revenues related to Premium Amounts

The Premium Price in each Period will be calculated by comparing the two sequences described in Exhibit J. Buyer's Premium Excess Power and Premium Supplemental Power will be priced at the system weighted average price for Premium Power. In the case that the total system does not have a price for Premium Power, the Buyer's Premium Power will be priced at the average price of Long positions in the sequences in Exhibit J. In the further event that there are no system-wide purchases in the Period, the Premium Power price will be the average price of Short positions in the sequences in Exhibit J.

Step Five: Compile results

These steps will establish the Buyer's share for each hour of energy and costs/revenues related to Base Supplemental Power, Base Excess Power, Premium Supplemental Power and Premium Excess Power.

Normalized Hydro Energy, Power Purchase Contracts and Power Sales Contracts

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
System-Wide Resources MWh													
Hydro East	LLH	10,509	9,525	14,494	16,584	18,504	17,592	18,244	14,813	10,943	9,853	11,153	11,165
	HLH	24,132	21,559	28,247	30,519	36,803	30,945	29,015	29,467	24,659	23,205	22,591	23,187
Hydro West	LLH	142,414	145,840	153,830	120,672	96,702	98,412	89,976	63,907	63,616	85,904	151,669	166,289
	HLH	327,037	330,080	299,800	222,071	192,327	173,112	143,096	127,126	143,353	202,310	307,213	345,325
Power Purchase Contracts East	LLH	38,132	33,620	38,732	39,476	45,277	45,418	47,101	45,560	35,866	35,367	37,940	36,860
	HLH	193,066	113,569	48,573	48,037	-20,835	-76,957	-82,978	-81,979	-8,935	127,077	181,713	188,329
Power Purchase Contracts West	LLH	337,525	299,706	274,934	262,611	248,301	304,070	361,670	278,942	236,204	256,220	285,797	322,366
	HLH	884,170	811,848	840,329	757,269	676,363	741,660	887,219	856,914	728,329	812,978	738,311	827,359
Power Sales Contracts East	LLH	-139,081	-121,032	-117,566	-106,012	-118,652	-130,166	-115,669	-127,270	-117,689	-103,115	-143,001	-141,657
	HLH	-227,045	-215,871	-218,663	-219,506	-220,067	-218,535	-245,280	-247,856	-225,343	-235,170	-217,349	-232,303
Power Sales Contracts West	LLH	-618,606	-537,805	-550,552	-538,415	-561,480	-558,241	-521,740	-540,198	-485,439	-518,420	-530,990	-523,300
	HLH	-351,998	-308,826	-328,696	-305,334	-295,537	-288,414	-332,657	-320,253	-344,423	-340,361	-228,432	-240,930
System-Wide Resources - Average MW													
Hydro East	LLH	32	33	44	55	56	55	56	47	33	32	35	32
	HLH	58	56	68	73	88	77	70	68	64	54	56	58
Hydro West	LLH	434	506	469	397	295	308	274	205	189	275	474	483
	HLH	786	860	721	534	462	433	344	294	373	468	768	863
Power Purchase Contracts East	LLH	116	117	118	130	138	142	144	146	107	113	119	107
	HLH	464	296	117	115	-50	-192	-199	-190	-23	294	454	471
Power Purchase Contracts West	LLH	1,029	1,041	838	864	757	950	1,103	894	703	821	893	937
	HLH	2,125	2,114	2,020	1,820	1,626	1,854	2,133	1,984	1,897	1,882	1,846	2,068
Power Sales Contracts East	LLH	-424	-420	-358	-349	-362	-407	-353	-408	-350	-330	-447	-412
	HLH	-546	-562	-526	-528	-529	-546	-590	-574	-587	-544	-543	-581
Power Sales Contracts West	LLH	-1,886	-1,867	-1,679	-1,771	-1,712	-1,745	-1,591	-1,731	-1,445	-1,662	-1,659	-1,521
	HLH	-846	-804	-790	-734	-710	-721	-800	-741	-897	-788	-571	-602

Note: Negative Numbers Denote Load
Note: BPA Peaking Take Included in Power Purchase Contracts; Return Included in Power Sales Contracts

SCHEDULE 11

This Exhibit sets forth the algorithm to be used for determining the amount of Base Supplemental Power, Premium Supplemental Power, Base Excess Power and Premium Excess Power to be reflected in the calculation of the hourly Variable Charge pursuant to Subsection 6.4 of the Short-Term Power Purchase Agreement. Capitalized terms used herein, that are not defined herein, have the meaning ascribed to them in Section 1 of the Short-Term Power Purchase Agreement.

DEFINITIONS:

"East Side" means the east side of PacifiCorp Generation's system including the states of Utah, Wyoming, Arizona, Colorado and Idaho (but not including the Jim Bridger Plant which is deemed to be on the West Side).

"West Side" means the west side of PacifiCorp Generation's system including the states of Oregon, Washington Montana and California.

"Side" means either the East Side or the West Side

"East-Side Loads" means the loads of PacifiCorp, Utah , PacifiCorp, Wyoming, and PacifiCorp, Idaho.

"West Side Loads" means the loads of PacifiCorp, Oregon, PacifiCorp, Washington and PacifiCorp, California.

"East Side Elements" means those Thermal Elements. Hydro-Electric Generating Plants Power Purchase Contracts, and Power Sales Contracts assigned to the East Side of the Transmission System as reflected on Exhibits A, B and D.

"East Side Resources" means energy deemed available from East Side Elements.

"West Side Elements" means those Thermal Elements. Hydro-Electric Generating Plants, Power Purchase Contracts, and Power Sales Contracts assigned to the West Side of the Transmission System as reflected on Exhibits A, B and D.

"West Side Resources" means the power available from East Side Elements under the terms of this contract

"East-West Transmission Capacity" means, with respect to any Period, the available capacity for transmission of power from the East Side to the West Side as reflected on Schedule I.

"West-East Transmission Capacity" means, with respect to any Period, the available capacity for transmission of power from the West Side to the East Side as reflected on Schedule I.

"Capacity to Sell" means, in respect to any Liquid Hub, the Transmission Capacity to that Liquid Hub adjusted for transmission losses in accordance with Schedule I, and in respect to either Side, the total Capacity to Sell with respect to the Liquid Market Hubs assigned to that Side

"Liquid Hub" means liquid trading hubs as specified herein, and as amended from time to time by mutual agreement of the Parties. The West Side Hubs shall be the California-Oregon Border (COB) and the Mid-Columbia (MidC). The East Side Hub shall be Palo Verde/Desert South West (PV).

"Long Position" means, with respect to any hour and with respect to either Side, the positive difference between the Loads and the Resources for that Side

"Excess Long Position" means, with respect to either side, the positive difference between the Long Position and the Capacity to Sell.

"Marginal Cost" means, with respect to either side, the Variable Charge of the most expensive Thermal Element deemed dispatched on that Side in that Hour

"Short Position" means, with respect to any hour and with respect to either Side, the negative difference between the Loads and the Resources for that Side

"Market Price" means the Adjusted Market Price Index for the hour established in accordance with Exhibit N.

"Period" means the High Load Hours or Low Load Hours for each month constituting 24 Periods per year.

Hourly Base Load Balancing Calculation

The following steps are completed twice. The first sequence compares the sum of the Buyers' Base Contract Load to Net Resources to produce the cost and energy associated with Base Supplemental Power and Base Excess Power for the total system. The second sequence compares the sum of the Buyers' Contract Load to Net Resource. The difference between the first sequence and the second sequence is the cost and energy associated with Premium Supplemental Power and Premium Excess Power for the total system.

Step One: Calculate Starting Long Position and Short Position for Each Side

For each hour of each Period, the Seller will calculate:

The starting Long Position or Short Position for the East Side by subtracting East Side Loads from East Side Resources. A negative result is a Short Position and a positive result is a Long Position.

The starting Long Position or Short Position for the West Side by subtracting West Side Loads from West Side Resources. A negative result is a Short Position and a positive Result is a Long Position.

Step Two: Transfer Excess Long Position and Recalculate Positions for each Side

If the result of Step One place one Side in an Excess Long Position (a Long Position in excess of that Side's Capability to Sell), the model will transfer power from the Side with the Excess Long Position to the Side without an Excess Long position in an amount equal to the lesser of: 1) either the East-West Transmission Capacity or the West-East Transmission Capacity whichever is relevant, or 2) the Excess Long Position, in either case, taking into account the relevant transmission losses described in Schedule I. In no case will the transfer place the other side in an Excess Long Position.

Then, the model will recalculate the Long Position or the Short Position for each Side net of Excess Power transfers.

Step Three: Optimize Value of Long Positions subject to ability to move power and ability to sell power

If one Side has a Long Position, and if the Market Price for that Side is lower than the Market Price for the other Side, then power will be transferred from that Side to the other Side in the amount equal to the lesser of: 1) the positive difference between the Capacity to Sell and the Long Position or Short Position on the other Side, 2) either the East-West Transmission Capacity or the West-East Transmission Capacity whichever is relevant, and taking account of transfers already made in Step Two, and 3) the Long Position on that Side.

Then, the model will recalculate the final Long Position or Short Position for each Side net of all transfers.

Step Four: Establish Market Value of Long Position or Market Cost of Short Position for Each Side

For each Side, a Long Position will be deemed to have been sold at the highest available Liquid Hub on that Side, up to the Capacity to Sell for that Liquid Hub, then at the next

highest available Liquid Hub, until either the entire Long Position has been deemed to be sold or all available Capacity to Sell on that Side has been used. If the Side has an Excess Long Position, it will be priced in descending order of Variable Charge for each Active Thermal Element deemed "Dispatched" in that hour on that Side, until the Excess Long Position is priced. This replicates the economics of backing down each Thermal Element based on its variable cost.

For each side, a Short Position will be deemed to have been covered at the lowest available Liquid Hub on that Side up to the Capacity to Buy for that Liquid Hub, then at the next lowest available Liquid Hub, until either the entire Short Position has been deemed to be purchased, or there is no available Capacity to Buy on that Side. In the case where the Short Position exceeds the Capacity to Buy, the difference between the Short Position and the Capacity to Buy will be priced at the highest Liquid Hub on that Side.

Step Five: Establish Energy and Costs

The first sequence produces the total system energy and costs associated with Base Supplemental Power and Base Excess Power. The second sequence produces the total system energy and costs for Base Supplemental Power and Premium Supplemental Power and Base Excess Power and Premium Excess Power. Subtracting the results of the first sequence from the second sequence produces discrete values for energy and costs of Premium Supplemental Power and Premium Excess Power.

Schedules:

Final Transmission Capacity Constraints

HLH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
PV to East	-	263	159	116	116	162	116	129	103	-	-	-
East to PV	446	299	594	639	453	240	282	287	455	626	617	635
COB to West	222	222	222	222	222	222	222	222	222	222	222	222
West to COB	99	118	113	87	84	94	52	62	-	26	73	50
MidC to West	97	83	79	79	79	66	29	0	8	79	79	110
West to MidC	-	106	130	250	175	185	160	247	172	76	267	206
West to East	672	672	672	672	672	672	672	672	672	672	672	672
East to West	92	92	92	92	92	92	92	92	92	92	92	92

LLH

PV to East	296	443	159	117	116	162	116	100	132	115	100	132
East to PV	492	364	659	716	709	648	719	716	696	722	682	658
COB to West	222	222	222	222	222	222	222	222	222	222	222	222
West to COB	186	262	240	298	272	261	301	251	265	280	140	169
MidC to West	79	79	79	79	79	62	32	0	19	79	79	81
West to MidC	312	376	380	513	455	456	485	449	442	409	425	399
West to East	672	672	672	672	672	672	672	672	672	672	672	672
East to West	92	92	92	92	92	92	92	92	92	92	92	92

SCHEDULE I, P. 1

Transmission Losses (Only applies to sales)

PV	3.73%
COB	5.32%
East/West	3.73%
West/East	3.73%

Exhibit K Plant Depreciation Schedule
($000/Month)
Washington

Thermal Plant	Slicing Factors	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Blundell	0.08030	19	19	20	20	20	20	20	20	20	21	23	24	26	28	30
Carbon	0.08792	25	36	46	49	52	64	77	70	113	-	-	-	-	-	-
Cholla	0.08801	61	62	64	64	65	65	68	69	69	71	72	74	76	78	80
Colstrip	0.10286	41	42	42	44	48	52	54	58	62	65	68	71	74	78	83
Craig	0.08814	42	43	43	44	44	45	45	46	47	48	48	49	51	52	53
Dave Johnston	0.09128	100	112	117	128	132	146	153	159	164	179	196	215	239	267	301
Gadsby	0.08808	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Hayden	0.08840	22	22	22	23	23	24	24	25	25	26	27	28	29	30	31
Hermiston	0.08592	33	34	34	34	35	35	36	36	37	37	38	39	39	40	41
Hunter	0.07716	166	170	171	175	178	180	182	186	188	193	198	204	210	217	225
Huntingtn	0.08246	103	106	110	115	124	130	135	149	164	176	190	207	227	252	277
Jim Bridger	0.09362	202	215	220	228	233	238	246	253	260	273	287	304	323	347	376
Naughton	0.08394	113	120	122	125	132	142	146	150	155	164	174	186	199	215	227
Wyodak	0.09973	79	79	79	81	83	86	87	88	92	94	96	99	102	105	109

Thermal Plant	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Blundell	33	37	40	43	43	-	-	-	-	-	-	-	-	-	-
Carbon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholla	83	86	90	94	99	82	52	58	175	-	-	-	-	-	-
Colstrip	87	93	98	105	113	122	132	144	160	176	192	209	138	-	-
Craig	55	57	59	62	65	68	71	247	-	-	-	-	-	-	-
Dave Johnston	336	372	410	589	-	-	-	-	-	-	-	-	-	-	-
Gadsby	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Hayden	33	34	36	39	41	44	47	100	-	-	-	-	-	-	-
Hermiston	42	43	44	45	47	49	50	53	55	58	62	66	70	55	68
Hunter	235	245	258	273	291	310	330	350	309	-	-	-	-	-	-
Huntingtn	303	330	375	-	-	-	-	-	-	-	-	-	-	-	-
Jim Bridger	405	436	467	476	-	-	-	-	-	-	-	-	-	-	-
Naughton	156	180	204	230	(65)	-	-	-	-	-	-	-	-	-	-
Wyodak	114	120	126	133	139	94	-	-	-	-	-	-	-	-	-

Exhibit L Plant Additions Schedule
($000/Month)
Washington

Thermal Plant	Slicing Factors	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Blundell	0.08030	64	3	7	1	1	1	1	5	1	13	13	14	14	14	15
Carbon	0.08792	9	85	72	15	15	50	38	7	55	-	-	-	-	-	-
Cholla	0.08801	6	5	46	12	11	8	54	10	10	20	21	22	22	23	23
Colstrip	0.10286	5	8	10	50	103	80	53	78	80	52	54	55	57	58	60
Craig	0.08814	6	10	10	6	11	16	7	12	10	11	12	12	12	13	13
Dave Johnston	0.09128	221	217	74	172	65	196	88	82	46	150	154	158	163	167	172
Gadsby	0.08808	6	6	5	7	5	71	-	-	-	-	-	-	-	-	-
Hayden	0.08840	10	7	6	8	10	7	8	10	10	10	10	10	11	11	11
Hermiston	0.08592	9	10	10	10	11	11	11	11	12	12	12	13	13	14	14
Hunter	0.07716	110	84	34	69	65	43	31	81	29	70	72	74	76	78	81
Huntingtn	0.08246	125	46	64	86	114	86	60	149	152	110	113	116	120	123	101
Jim Bridger	0.09362	131	220	93	119	74	76	104	80	82	126	129	133	137	141	144
Naughton	0.08394	97	145	40	48	111	141	60	57	59	99	102	104	107	110	113
Wyodak	0.09973	7	7	9	24	43	48	12	13	48	25	26	26	27	28	29

Thermal Plant	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Blundell	15	12	10	7	10	-	-	-	-	-	-	-	-	-	-
Carbon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholla	24	25	25	26	27	22	17	12	117	-	-	-	-	-	-
Colstrip	62	63	65	67	69	71	73	75	77	63	49	33	67	-	-
Craig	13	14	14	14	12	9	6	52	-	-	-	-	-	-	-
Dave Johnston	141	109	75	273	-	-	-	-	-	-	-	-	-	-	-
Gadsby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hayden	12	12	12	13	10	8	6	26	-	-	-	-	-	-	-
Hermiston	14	15	15	16	16	16	17	17	18	18	19	16	12	8	26
Hunter	83	85	87	90	92	76	59	40	309	-	-	-	-	-	-
Huntingtn	78	53	273	-	-	-	-	-	-	-	-	-	-	-	-
Jim Bridger	119	92	63	471	-	-	-	-	-	-	-	-	-	-	-
Naughton	117	96	74	51	222	-	-	-	-	-	-	-	-	-	-
Wyodak	29	30	25	19	13	96	-	-	-	-	-	-	-	-	-

Exhibit M Tax Depreciation Schedule
($000/Month)
Washington

Thermal Plant	Slicing Factors	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Blundell	0.08030	8	10	10	9	9	8	8	8	8	8	9	9	8	9	10
Carbon	0.08792	16	19	24	26	25	27	29	29	351	-	-	-	-	-	-
Cholla	0.08801	22	22	24	25	25	26	27	29	29	22	16	17	18	18	19
Colstrip	0.10286	6	6	6	8	14	20	23	26	30	33	35	36	38	40	42
Craig	0.08814	69	70	70	71	71	72	72	73	73	74	42	10	10	10	10
Dave Johnston	0.09128	93	100	105	109	113	115	116	115	114	116	121	125	129	135	141
Gadsby	0.08808	11	11	11	11	12	187	-	-	-	-	-	-	-	-	-
Hayden	0.08840	28	28	27	27	27	27	28	28	29	29	23	17	17	17	17
Hermiston	0.08592	59	55	55	55	56	56	57	57	58	58	58	59	59	60	37
Hunter	0.07716	60	63	64	66	68	68	67	67	67	65	64	65	67	68	71
Huntingtn	0.08246	52	55	56	59	64	68	70	74	81	84	84	88	92	96	99
Jim Bridger	0.09362	142	139	147	140	124	122	123	118	110	93	95	98	102	108	112
Naughton	0.08394	56	63	67	68	71	77	81	82	82	83	84	86	84	84	87
Wyodak	0.09973	89	90	90	91	93	95	96	85	83	84	84	56	25	21	22

Thermal Plant	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Blundell	10	11	11	11	250	0	-	-	-	-	-	-	-	-	-
Carbon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholla	20	20	21	21	21	22	22	21	319	-	-	-	-	-	-
Colstrip	44	47	50	53	56	59	62	65	67	67	65	63	643	-	-
Craig	10	11	11	11	12	12	11	159	-	-	-	-	-	-	-
Dave Johnston	144	145	140	1,608	-	-	-	-	-	-	-	-	-	-	-
Gadsby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hayden	18	16	12	10	10	10	10	120	-	-	-	-	-	-	-
Hermiston	12	12	12	12	13	13	13	14	14	14	15	15	15	15	166
Hunter	74	73	70	70	73	73	71	69	1,105	-	-	-	-	-	-
Huntingtn	99	96	1,203	-	-	-	-	-	-	-	-	-	-	-	-
Jim Bridger	114	114	113	1,679	-	-	-	-	-	-	-	-	-	-	-
Naughton	90	94	93	91	1,060	(0)	-	-	-	-	-	-	-	-	-
Wyodak	23	24	25	25	24	330	(0)	-	-	-	-	-	-	-	-

Exhibit N

ADJUSTED MARKET PRICE INDEX

Market price indices are developed and published by Dow Jones™ in the Wall Street Journal for the California-Oregon/Nevada-Oregon Border (COB), Mid-Columbia, and Palo Verde trading hubs, among other hubs. These market price indices are volume weighted daily averages of specifically-defined bilateral, wholesale, physical transactions. These indices are not seasonal hourly prices as necessitated by the Short-Term Power Purchase Agreement This Exhibit establishes a method to develop Hourly Shaping Factors that translate the daily market price indices to seasonal hourly prices. This Exhibit also establishes a basis for determining what Thermal Elements are deemed to have been dispatched in any hour.

Capitalized terms that are defined herein shall have the meaning ascribed to them in Section 1 of the Short-Term Power Purchase Agreement or in Exhibit J, thereto.

Definitions

- "HE" means hour ending.
- "HLH" means HE 0700 through HE 2200 (6 a.m. – 10 p.m.) Pacific prevailing time. HLH includes the same hours of a day as "on-peak", as Dow Jones currently defines that term in its "Daily On-Peak Index".
- "LLH" means HE 0001 through HE 0600 and HE 2300 and HE 2400 (10 p.m. – 6 a.m.) Pacific prevailing time. LLH includes the same hours of a day as "off-peak", as Dow Jones currently defines that term in its "Daily Off-Peak Index".
- "Sunday/Holiday" means for all hours on Sundays and NERC-defined Holidays.
- "Daily On-Peak Index" means the Dow Jones™ COB, Mid-Columbia, or Palo Verde Firm On-Peak index as reported in the Wall Street Journal for each Monday through Saturday, except NERC-defined holidays. In the event the trading hub's "Daily On-Peak Index" is not

reported for any given day then the non-zero value posted from the previous like day shall be used.

- "Daily Off-Peak Index" means the Dow Jones™ COB, Mid-Columbia, or Palo Verde Firm Off-Peak index as reported in the Wall Street Journal for each Monday through Saturday, except NERC-defined holidays. In the event the "Daily Off-Peak Index" is not reported for any given day then the non-zero value posted from the previous like day shall be used.
- "Sunday and Holiday Index" means the Dow Jones™ COB, Mid-Columbia, or Palo Verde 24-Hour Firm index as reported in the Wall Street Journal for each Sunday and NERC-defined holiday. In the event the "Sunday and Holiday Index" is not reported for any given day then the non-zero value posted from the previous like day shall be used.
- "Hourly Index Price" means a price, expressed in dollars per megawatt-hour, that is derived by the application of Hourly Shaping Factors to the appropriate Inde.
- "Summer Season" means all days within the 7-month period, April 1 through October 31.
- "Winter Season" means all days within the 5-month period, November 1 through March 31.

Creating Hourly Shaping Factors

Hourly Shaping Factors are used to convert market prices for each day in the published indices to hourly prices. These factors were developed for each trading hub and for each Summer and Winter season. They take the form of fixed hourly percentages, and are multiplied against the prevailing market price in the applicable Daily On-Peak Index, Daily Off-Peak Index, or Sunday and Holiday Index to yield Hourly Index Prices.

$D(S_i)$ = Hourly Index Price

Where:

D is the published market price index for appropriate trading hub and day

S_i is applicable Hourly Shaping Factor for appropriate hour and season

The Hourly Shaping Factors may be changed with mutual agreement of the Parties.

Method for formulating Hourly Shaping Factors:

- Factors for each Summer or Winter Season were formulated using market price quotes received for each hour of each day of the most recently concluded Summer and Winter Season, respectively.
- The hourly price quotes for each Monday through Saturday, excluding NERC-approved Holidays, of the most recently concluded Season are grouped by HLH and LLH period for each such day. The hourly price quotes for each Sunday/Holiday are grouped separately.
- The hourly price quotes are then averaged across like hours within either the HLH period for each Monday through Saturday, except Holidays; the LLH period for each Monday through Saturday, except Holidays; or the 24-hour period for each Sunday/Holiday.
- The hourly price quote for each HLH hour are then be divided by the average HLH period price, the hourly price quote for each LLH hour are divided by the average LLH period price, and the hourly price quote for each Sunday and Holiday are divided by the average 24-hour Sunday/Holiday price . The result is the daily HLH or LLH hourly percentages and the Sunday/Holiday percentages.
- The daily HLH hourly percentages for each hour are then summed across the Mondays through Saturdays, excluding Holidays, of the Season. Each of these hourly percentage sums is then divided by the number of Mondays through Saturdays, excluding Holidays, in the Season.
- In the same manner, the daily LLH hourly percentages or each hour are then summed across the Mondays through Saturdays, excluding Holidays, of the Season. Each of these hourly percentage sums are then be divided by the Mondays through Saturdays, excluding Holidays, in the Season.
- Also in the same manner, the Sunday/Holiday hourly percentages for each hour are then summed across the Sunday/Holiday days of the Season. Each of these hourly percentage sums are then be divided by the appropriate number of Sundays/Holidays in the Season.
- These steps results in Hourly Shaping Factors for each applicable time period reported by Dow Jones.

Replacement Price Indices

If an hourly Dow Jones COB, Mid-Columbia, or Palo Verde pre-schedule index (or other hourly index mutually-agreeable to the Parties) becomes available during the term of this Agreement that is indicative of the price of firm power delivered to the COB, Mid-Columbia or Palo Verde on an hourly basis, respectively, it shall be substituted for the hourly-weighted daily index created

pursuant to this Exhibit. If a new market hub develops for which a new, relevant Dow Jones daily index (or other daily index mutually agreeable to the Parties) becomes available during the term of this Agreement that is indicative of the equivalent power product, it shall substitute in whole or in part the daily indices, with mutual agreement of the Parties. If an index that is being relied upon for establishing the Hourly Index Price is discontinued during the term of this Agreement, the Parties shall endeavor in good faith to agree on a substitute index which accurately reflects the market value of firm power delivered to the respective market hub. If any index or methodology used herein is proposed to be replaced by either Party, and mutual agreement is not reached between the Parties with respect to the replacement of such index, the Parties shall submit the index replacement issue to binding arbitration.

Dispatch of Thermal Elements

If the Variable Thermal Charge Pricing Element associated with a East-Side Resource is less than the Hourly Index Price, it shall be deemed to have been dispatched for purposes of Subsection 6.3 of the Short-Term Power Purchase Agreement.

If the Variable Thermal Charge Pricing Element associated with a West-Side Resource is less than the result of the following formula (the Western Dispatch Target Price), it shall be deemed to have been dispatched for purposes of Section 6.3 of the Short-Term Power Purchase Agreement:

.25 (C) + .75 (M) = Western Dispatch Target Price

Where:

C = Hourly Index Price for the California Oregon Border

M= Hourly Index Price for the Mid-Columbia

Hourly Shaping Factors

Winter Season

Hour of Day	COB			Mid Columbia			Palo Verde		
	Monday-Saturday except NERC Holidays		Sundays and NERC Holidays	Monday-Saturday except NERC Holidays		Sundays and NERC Holidays	Monday-Saturday except NERC Holidays		Sundays and NERC Holidays
	HLH	LLH		HLH	LLH		HLH	LLH	
1		100.12%	75.00%		100.72%	76.00%		99.99%	86.00%
2		99.18%	73.00%		98.54%	72.00%		98.41%	86.00%
3		97.05%	71.00%		97.68%	72.00%		97.48%	85.00%
4		97.24%	72.00%		97.92%	71.00%		98.59%	85.00%
5		98.99%	72.00%		99.16%	72.00%		99.78%	87.00%
6		100.02%	77.00%		99.38%	77.00%		101.60%	94.00%
7	97.46%		81.00%	97.21%		81.00%	97.27%		102.00%
8	99.47%		92.00%	99.66%		91.00%	101.58%		107.00%
9	98.89%		95.00%	98.61%		96.00%	101.91%		106.00%
10	99.51%		100.00%	98.94%		100.00%	101.12%		105.00%
11	99.33%		106.00%	98.35%		106.00%	100.57%		103.00%
12	99.74%		110.00%	99.47%		110.00%	99.13%		102.00%
13	100.38%		116.00%	100.57%		116.00%	99.35%		100.00%
14	100.44%		122.00%	100.30%		122.00%	98.83%		100.00%
15	100.51%		126.00%	100.03%		126.00%	97.53%		100.00%
16	100.11%		129.00%	100.64%		129.00%	97.29%		100.00%
17	99.24%		126.00%	98.88%		127.00%	96.92%		106.00%
18	100.85%		127.00%	101.34%		126.00%	100.40%		114.00%
19	101.47%		123.00%	101.83%		123.00%	102.40%		117.00%
20	101.09%		116.00%	100.96%		116.00%	102.75%		114.00%
21	99.91%		109.00%	99.65%		109.00%	101.87%		108.00%
22	101.62%		101.00%	103.59%		101.00%	101.09%		104.00%
23		106.05%	90.00%		104.96%	91.00%		103.43%	96.00%
24		101.35%	91.00%		101.64%	90.00%		100.72%	94.00%