

EXHIBIT NO. ___(CEP-10)
DOCKET NO. UE-04___/UG-04___
2004 PSE GENERAL RATE CASE
WITNESS: COLLEEN E. PAULSON

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

Docket No. UE-04___
Docket No. UG-04___

**NINTH EXHIBIT TO PREFILED DIRECT TESTIMONY
OF COLLEEN E. PAULSON (NONCONFIDENTIAL)
ON BEHALF OF PUGET SOUND ENERGY, INC.**

APRIL 5, 2004

Puget Sound Energy
Electric Cost of Service
Derivation of Peak Credit

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Combined Cycle Plant (Nominal \$)

Year	Capital Cost \$/MWH Yr	Fixed O&M \$/MWH	Ins / Prop Tc \$/MWH	Variable O&M \$/MWH	Gas \$/MMBTU	Gas \$/MWH	Total \$/MWH	Annual Inflation
2004	\$8.91	5.7	1.2	2	\$3.86	26.63	44.44	0.00%
2005	\$8.91	5.84	1.23	2.05	\$4.46	26.63	44.66	2.50%
2006	\$8.91	5.99	1.26	2.1	\$4.63	30.80	49.06	2.50%
2007	\$8.91	6.14	1.29	2.15	\$4.55	31.94	50.43	2.50%
2008	\$8.91	6.29	1.32	2.2	\$4.54	31.38	50.10	2.50%
2009	\$8.91	6.45	1.35	2.26	\$3.58	31.35	50.32	2.50%
2010	\$8.91	6.61	1.38	2.32	\$3.51	24.68	43.90	2.50%
2011	\$8.91	6.78	1.41	2.38	\$4.55	24.20	43.68	2.50%
2012	\$8.91	6.95	1.45	2.44	\$5.18	31.41	51.16	2.50%
2013	\$8.91	7.12	1.49	2.5	\$5.49	35.76	55.78	2.50%
2014	\$8.91	7.3	1.53	2.56	\$5.94	37.86	58.16	2.50%
2015	\$8.91	7.48	1.57	2.62	\$5.74	41.01	61.59	2.50%
2016	\$8.91	7.67	1.61	2.69	\$5.32	39.63	60.51	2.50%
2017	\$8.91	7.86	1.65	2.76	\$5.92	36.67	57.85	2.50%
2018	\$8.91	8.06	1.69	2.83	\$5.95	40.86	62.35	2.50%
2019	\$8.91	8.26	1.73	2.9	\$6.21	41.08	62.88	2.50%
2020	\$8.91	8.47	1.77	2.97	\$6.26	42.87	64.99	2.50%
2021	\$8.91	8.68	1.81	3.04	\$6.47	43.18	65.62	2.50%
2022	\$8.91	8.9	1.86	3.12	\$6.63	44.62	67.41	2.50%
2023	\$8.91	9.12	1.91	3.2	\$6.79	45.74	68.88	2.50%
2024	\$8.91	9.35	1.96	3.28	\$6.96	46.88	70.38	2.50%
2025	\$8.91	9.58	2.01	3.36	\$7.14	48.06	71.92	2.50%
2026	\$8.91	9.82	2.06	3.44	\$7.32	49.26	73.49	2.50%
2027	\$8.91	10.07	2.11	3.53	\$7.50	50.49	75.11	2.50%
2028	\$8.91	10.32	2.16	3.62	\$7.69	51.75	76.76	2.50%
2029	\$8.91	10.58	2.21	3.71	\$7.84	53.04	78.45	2.50%
2030	\$8.91	10.84	2.27	3.8	\$8.00	54.11	79.93	2.50%
2031	\$8.91	11.11	2.33	3.9	\$8.16	55.19	81.44	2.50%
2032	\$8.91	11.39	2.39	4	\$8.32	56.29	82.98	2.50%
2033	\$8.91	11.67	2.45	4.1	\$8.49	57.42	84.55	2.50%

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Combustion Turbine

Year	Capital Cost \$/kW Yr	Fixed O&M \$/kW Yr	Ins / Prop T ₂ \$/kW Yr	Variable O&M \$/kW Yr	Fuel Oil \$/MMBTU	Fuel Oil \$/kW Yr	Gas \$/kW Yr	Total \$/kW Yr	Peak Credit \$/kW Yr	Inflation
2004	\$44.45	19.21	5.56	0.4	6.90	4.03	6.77	80.43	47.81	0.00%
2005	\$44.45	19.69	5.7	0.41	6.50	3.80	7.83	81.89	48.93	2.50%
2006	\$44.45	20.18	5.7	0.42	4.85	2.84	8.12	81.71	48.54	2.50%
2007	\$44.45	20.68	5.7	0.43	4.86	2.84	7.98	82.09	48.70	2.50%
2008	\$44.45	21.2	5.7	0.44	4.87	2.85	7.98	82.61	49.01	2.50%
2009	\$44.45	21.73	5.7	0.45	4.87	2.85	6.28	81.46	47.63	2.50%
2010	\$44.45	22.27	5.7	0.46	4.87	2.85	6.15	81.88	47.82	2.50%
2011	\$44.45	22.83	5.7	0.47	4.91	2.87	7.99	84.31	50.02	2.50%
2012	\$44.45	23.4	5.7	0.48	4.95	2.89	9.10	86.02	51.48	2.50%
2013	\$44.45	23.99	5.7	0.49	4.99	2.92	9.63	87.18	52.39	2.50%
2014	\$44.45	24.59	5.7	0.5	5.02	2.94	10.43	88.61	53.57	2.50%
2015	\$44.45	25.2	5.7	0.51	5.04	2.95	10.08	88.89	53.59	2.50%
2016	\$44.45	25.83	5.7	0.52	5.09	2.98	9.33	88.81	53.24	2.50%
2017	\$44.45	26.48	5.7	0.53	5.13	3.00	10.39	90.56	54.71	2.50%
2018	\$44.45	27.14	5.7	0.54	5.17	3.02	10.45	91.30	55.18	2.50%
2019	\$44.45	27.82	5.7	0.55	5.20	3.04	10.90	92.47	56.05	2.50%
2020	\$44.45	28.52	5.7	0.56	5.23	3.06	10.98	93.27	56.56	2.50%
2021	\$44.45	29.23	5.7	0.57	5.33	3.12	11.35	94.42	57.41	2.50%
2022	\$44.45	29.96	5.7	0.58	5.44	3.18	11.63	95.51	58.18	2.50%
2023	\$44.45	30.71	5.7	0.59	5.55	3.25	11.92	96.62	58.98	2.50%
2024	\$44.45	31.48	5.7	0.6	5.66	3.31	12.22	97.76	59.79	2.50%
2025	\$44.45	32.27	5.7	0.62	5.77	3.38	12.53	98.94	60.64	2.50%
2026	\$44.45	33.08	5.7	0.64	5.89	3.44	12.84	100.16	61.51	2.50%
2027	\$44.45	33.91	5.7	0.66	6.00	3.51	13.16	101.40	62.39	2.50%
2028	\$44.45	34.76	5.7	0.68	6.12	3.58	13.49	102.66	63.30	2.50%
2029	\$44.45	35.63	5.7	0.7	6.25	3.65	13.76	103.90	64.16	2.50%
2030	\$44.45	36.52	5.7	0.72	6.37	3.73	14.04	105.15	65.04	2.50%
2031	\$44.45	37.43	5.7	0.74	6.50	3.80	14.32	106.44	65.94	2.50%
2032	\$44.45	38.37	5.7	0.76	6.63	3.88	14.60	107.76	66.86	2.50%
2033	\$44.45	39.33	5.7	0.78	6.76	3.96	14.90	109.11	67.81	2.50%

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	Combustion Turbine	Peak CT	CC CT	Peak Credit
Levelized Cost \$/mWh			59.80	
Levelized Cost \$/kW Yr	94.98	56.95	445.27	13%

Assumptions

1 Fixed Charge Rate CC:	9.12%			
2 Fixed Charge Rate CT:	9.83%			
2 Hours/Year CT Peak Operati	200	Oil (hours):	50	
3 CCCT Capacity Factor:	85%			
4 Weighted Cost of Capital CC:	9.12%			
4 Weighted Cost of Capital CT:	9.12%			
5 1/2 of Capital & Fixed O&M For CT Used For Peak Credit Cost				
6 Fixed & variable O&M, gas, and fuel escalation rate beyond 2015:			2.80%	

	Capital \$/kW	Fixed O&M \$/kW/yr	Ins / Prop Tax \$/kW/yr	Var O&M \$/ MWH	Heat Rate BTU/kWh
7 Combined Cycle Combustion Turbine Plant	\$728	\$42.47	\$8.95	2.0	6,900
8 Simple Cycle Combustion Turbine Plant	\$452	\$19.21	\$5.56	2	11,700
9 Reserve margin	15%				
10 Debt	54.96%	6.96%	3.83%		
11 Preferred	0.04%	8.51%	0.00%		
12 Common Equity	<u>45.00%</u>	<u>11.75%</u>	<u>5.29%</u>		
13 TOTAL	100%		9.12%		