

**EXHIBIT NO. \_\_\_(JAP-4C)**  
**DOCKET NO. UE-14\_\_\_**  
**2014 PSE COST OF SERVICE AND RATE**  
**DESIGN FILING**  
**WITNESS: JON A. PILIARIS**

**BEFORE THE**  
**WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Petition of  
PUGET SOUND ENERGY, INC.  
To Update Methodologies Used To  
Allocate Electric Cost of Service and For  
Electric Rate Design Purposes

**Docket No. UE-14\_\_\_**

**THIRD EXHIBIT (CONFIDENTIAL) TO THE**  
**PREFILED DIRECT TESTIMONY OF**  
**JON A. PILIARIS**  
**ON BEHALF OF PUGET SOUND ENERGY, INC.**

**REDACTED**  
**VERSION**

**JULY 1, 2014**

PUGET SOUND ENERGY  
PEAK CREDIT METHOD FOR 2014 FILING  
COMPANY PROPOSAL

	Peaker	CCCT	Peak Credit
Levelized Cost (\$/MWh)		99	
Levelized Cost (\$/kW-yr)	171	659	24.7%

**Assumptions**

---

	Plant Assumptions		
	Peaker	CCCT	Notes
1 Capital Costs (\$/kW-yr)	\$915	\$1,540	2012 Dollars
2 Fixed Charge Rate	10.79%	10.79%	
3 Fixed O&M (\$/kW-yr)	\$19.91	\$65.29	2012 Dollars
4 Variable O&M (\$/MWh)	\$0.68	\$0.46	2012 Dollars
5 Heat Rate (Btu/kWh)	10,231	6,822	
6 Weighted Cost of Capital	7.77%	7.77%	
7 Capacity Factor	0%	80.0%	
8 Reserve Margin	7.0%	7.0%	
9a Planning Margin 2014-15	13.5%	13.5%	
9b Planning Margin 2018-19	14.0%	14.0%	
9c Planning Margin 2023-2024	16.0%	16.0%	
10 CO <sub>2</sub> Emissions (tons/GWh)	592.9	395.3	

	Weighted Cost of Capital		
	Pro Forma Capital %	Cost %	Cost of Capital
11 Short-Term Debt	4.00%	2.68%	0.11%
12 Long-Term Debt	48.00%	6.16%	2.96%
13 Common Equity	48.00%	9.80%	4.70%
14 TOTAL	100.00%		7.77%

---

**Combined Cycle Plant (Nominal \$)**

Year	Capital Cost \$/MWh	Fixed O&M \$/MWh	Variable O&M \$/MWh	Natural Gas \$/MWh	Emissions \$/MWh	Margin \$/MWh	Total \$/MWh	Annual Inflation
2014	\$24.91	\$9.79	\$0.48	XXXXXX	0.67	\$7.11	XXXXXX	2.50%
2015	\$24.91	\$10.03	\$0.49	XXXXXX	0.71	\$7.16	XXXXXX	2.50%
2016	\$24.91	\$10.28	\$0.50	XXXXXX	0.76	\$7.21	XXXXXX	2.50%
2017	\$24.91	\$10.54	\$0.51	XXXXXX	4.02	\$7.27	XXXXXX	2.50%
2018	\$24.91	\$10.80	\$0.52	XXXXXX	4.32	\$7.50	XXXXXX	2.50%
2019	\$24.91	\$11.07	\$0.53	XXXXXX	4.65	\$7.56	XXXXXX	2.50%
2020	\$24.91	\$11.35	\$0.54	XXXXXX	5.00	\$7.61	XXXXXX	2.50%
2021	\$24.91	\$11.63	\$0.55	XXXXXX	5.36	\$7.67	XXXXXX	2.50%
2022	\$24.91	\$11.92	\$0.56	XXXXXX	5.75	\$7.73	XXXXXX	2.50%
2023	\$24.91	\$12.22	\$0.57	XXXXXX	6.17	\$8.54	XXXXXX	2.50%
2024	\$24.91	\$12.53	\$0.58	XXXXXX	6.62	\$8.61	XXXXXX	2.50%
2025	\$24.91	\$12.84	\$0.59	XXXXXX	7.11	\$8.68	XXXXXX	2.50%
2026	\$24.91	\$13.16	\$0.60	XXXXXX	7.63	\$8.76	XXXXXX	2.50%
2027	\$24.91	\$13.49	\$0.62	XXXXXX	8.19	\$8.83	XXXXXX	2.50%
2028	\$24.91	\$13.83	\$0.64	XXXXXX	8.79	\$8.91	XXXXXX	2.50%
2029	\$24.91	\$14.18	\$0.66	XXXXXX	9.42	\$8.99	XXXXXX	2.50%
2030	\$24.91	\$14.53	\$0.68	XXXXXX	10.11	\$9.07	XXXXXX	2.50%
2031	\$24.91	\$14.89	\$0.70	XXXXXX	10.85	\$9.15	XXXXXX	2.50%
2032	\$24.91	\$15.26	\$0.72	XXXXXX	11.63	\$9.24	XXXXXX	2.50%
2033	\$24.91	\$15.64	\$0.74	XXXXXX	12.47	\$9.33	XXXXXX	2.50%
2034	\$24.91	\$16.03	\$0.76	XXXXXX	\$12.78	\$9.42	XXXXXX	2.50%
2035	\$24.91	\$16.43	\$0.78	XXXXXX	\$13.10	\$9.51	XXXXXX	2.50%
2036	\$24.91	\$16.84	\$0.80	XXXXXX	\$13.43	\$9.60	XXXXXX	2.50%
2037	\$24.91	\$17.26	\$0.82	XXXXXX	\$13.77	\$9.70	XXXXXX	2.50%
2038	\$24.91	\$17.69	\$0.84	XXXXXX	\$14.11	\$9.80	XXXXXX	2.50%
2039	\$24.91	\$18.13	\$0.86	XXXXXX	\$14.46	\$9.90	XXXXXX	2.50%
2040	\$24.91	\$18.58	\$0.88	XXXXXX	\$14.82	\$10.00	XXXXXX	2.50%
2041	\$24.91	\$19.04	\$0.90	XXXXXX	\$15.19	\$10.11	XXXXXX	2.50%
2042	\$24.91	\$19.52	\$0.92	XXXXXX	\$15.57	\$10.22	XXXXXX	2.50%
2043	\$24.91	\$20.01	\$0.94	XXXXXX	\$15.96	\$10.33	XXXXXX	2.50%

**Peaker Plant (Nominal \$)**

Year	Capital Cost \$/kW-yr	Fixed O&M \$/kW-yr	Variable O&M \$/kW-yr	Natural Gas \$/kW-yr	Emissions \$/kW-yr	Margin \$/kW-yr	Total \$/kW-yr	Annual Inflation
2014	\$103.73	\$20.92	\$0.00	XXXXXX	\$0.00	\$25.55	XXXXXX	2.50%
2015	\$103.73	\$21.44	\$0.00	XXXXXX	\$0.00	\$25.66	XXXXXX	2.50%
2016	\$103.73	\$21.98	\$0.00	XXXXXX	\$0.00	\$25.77	XXXXXX	2.50%
2017	\$103.73	\$22.53	\$0.00	XXXXXX	\$0.00	\$25.88	XXXXXX	2.50%
2018	\$103.73	\$23.09	\$0.00	XXXXXX	\$0.00	\$26.63	XXXXXX	2.50%
2019	\$103.73	\$23.67	\$0.00	XXXXXX	\$0.00	\$26.75	XXXXXX	2.50%
2020	\$103.73	\$24.26	\$0.00	XXXXXX	\$0.00	\$26.88	XXXXXX	2.50%
2021	\$103.73	\$24.87	\$0.00	XXXXXX	\$0.00	\$27.01	XXXXXX	2.50%
2022	\$103.73	\$25.49	\$0.00	XXXXXX	\$0.00	\$27.14	XXXXXX	2.50%
2023	\$103.73	\$26.13	\$0.00	XXXXXX	\$0.00	\$29.87	XXXXXX	2.50%
2024	\$103.73	\$26.78	\$0.00	XXXXXX	\$0.00	\$30.02	XXXXXX	2.50%
2025	\$103.73	\$27.45	\$0.00	XXXXXX	\$0.00	\$30.17	XXXXXX	2.50%
2026	\$103.73	\$28.14	\$0.00	XXXXXX	\$0.00	\$30.33	XXXXXX	2.50%
2027	\$103.73	\$28.84	\$0.00	XXXXXX	\$0.00	\$30.49	XXXXXX	2.50%
2028	\$103.73	\$29.56	\$0.00	XXXXXX	\$0.00	\$30.66	XXXXXX	2.50%
2029	\$103.73	\$30.30	\$0.00	XXXXXX	\$0.00	\$30.83	XXXXXX	2.50%
2030	\$103.73	\$31.06	\$0.00	XXXXXX	\$0.00	\$31.00	XXXXXX	2.50%
2031	\$103.73	\$31.84	\$0.00	XXXXXX	\$0.00	\$31.18	XXXXXX	2.50%
2032	\$103.73	\$32.64	\$0.00	XXXXXX	\$0.00	\$31.37	XXXXXX	2.50%
2033	\$103.73	\$33.46	\$0.00	XXXXXX	\$0.00	\$31.55	XXXXXX	2.50%
2034	\$103.73	\$34.30	\$0.00	XXXXXX	\$0.00	\$31.75	XXXXXX	2.50%
2035	\$103.73	\$35.16	\$0.00	XXXXXX	\$0.00	\$31.94	XXXXXX	2.50%
2036	\$103.73	\$36.04	\$0.00	XXXXXX	\$0.00	\$32.15	XXXXXX	2.50%
2037	\$103.73	\$36.94	\$0.00	XXXXXX	\$0.00	\$32.35	XXXXXX	2.50%
2038	\$103.73	\$37.86	\$0.00	XXXXXX	\$0.00	\$32.57	XXXXXX	2.50%
2039	\$103.73	\$38.81	\$0.00	XXXXXX	\$0.00	\$32.78	XXXXXX	2.50%
2040	\$103.73	\$39.78	\$0.00	XXXXXX	\$0.00	\$33.01	XXXXXX	2.50%
2041	\$103.73	\$40.77	\$0.00	XXXXXX	\$0.00	\$33.24	XXXXXX	2.50%
2042	\$103.73	\$41.79	\$0.00	XXXXXX	\$0.00	\$33.47	XXXXXX	2.50%
2043	\$103.73	\$42.83	\$0.00	XXXXXX	\$0.00	\$33.71	XXXXXX	2.50%