

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**PACIFIC POWER & LIGHT
COMPANY,**

Respondent.

**DOCKETS UE-140762 and UE-140617
(consolidated)**

In the Matter of the Petition of

**PACIFIC POWER & LIGHT
COMPANY,**

**For an Order Approving Deferral of
Costs Related to Colstrip Outage.**

DOCKET UE-131384 (consolidated)

In the Matter of the Petition of

**PACIFIC POWER & LIGHT
COMPANY,**

**For an Order Approving Deferral of
Costs Related to Declining Hydro
Generation.**

DOCKET UE-140094 (consolidated)

PACIFIC POWER & LIGHT COMPANY

EXHIBIT OF JOELLE R. STEWARD

Elasticity Analysis for Proposed Rate Design

November 2014

Elasticity Analysis for Proposed Rate Designs

Short-run Elasticity	0.29
Long-run Elasticity	0.15

Monthly Usage (kWh)	Number of Bills	Total Usage (kWh)	Average Usage	Proposed Increase	Short-run reduction in monthly usage per bill (kWh)	Total first-year reduction, group (MWh)	Long-run reduction in monthly usage, per customer (kWh)	Total long-run annual reduction, group (MWh)	Company Proposal				Staff Proposal revised with Company Revenue Requirement						
									Proposed Increase	Short-run reduction in monthly usage, per bill (kWh)	Total first-year reduction, group (MWh)	Long-run reduction in monthly usage, per customer (kWh)	Total long-run annual reduction, group (MWh)	Proposed Increase	Short-run reduction in monthly usage, per bill (kWh)	Total first-year reduction, group (MWh)	Long-run reduction in monthly usage, per customer (kWh)		
0-100	26,558	1,355,218	51	39.6%	1.60	42.39	3.25	86.39	47.5%	1.92	50.89	3.91	103.72	42.4%	1.71	46.41	3.48	92.55	
101-200	24,633	4,289,444	174	28.8%	3.96	97.48	8.06	198.67	34.8%	4.79	117.93	9.76	240.35	32.7%	4.50	110.74	9.16	225.68	
201-300	34,463	9,354,042	271	23.0%	170.22	170.22	10.07	346.91	28.1%	6.02	203.37	12.26	422.59	27.5%	5.90	203.37	12.03	414.47	
301-400	47,960	17,473,607	364	4.94	5.61	268.99	11.43	548.20	23.9%	6.88	329.73	14.01	671.98	24.3%	7.00	335.84	14.27	684.43	
401-500	61,206	28,195,489	461	17.1%	6.21	380.30	12.66	775.03	21.0%	7.66	468.83	17.06	955.46	22.8%	8.06	493.55	16.43	1,005.84	
501-600	72,717	40,375,339	558	15.3%	6.76	481.26	13.77	1,001.18	19.0%	8.37	608.80	17.06	1,240.72	20.6%	9.07	659.87	18.49	1,344.79	
601-700	79,030	51,815,040	656	6.5%	3.35	264.84	6.83	539.74	16.7%	8.65	683.37	17.62	1,392.68	11.5%	5.96	471.00	12.15	959.89	
701-800	80,966	61,093,974	755	0.3%	14.80	14.80	30.16	1,484.76	15.1%	9.00	728.55	18.34	1,484.76	5.2%	3.09	250.37	6.30	510.25	
801-850	40,276	33,867,002	828	-0.2%	(0.12)	(4.76)	(0.24)	(777.06)	14.5%	9.47	381.29	19.28	777.06	5.0%	3.24	130.55	6.61	266.07	
Total	467,911	227,519,358	828		1,729	1,729	3,577	7,789		3,577	3,577	7,789	7,789		2,701	2,701	6,61	5,500	
851-900	39,639	34,838,275	879	0.6%	(0.23)	(15.61)	(0.85)	(3,804.3)	13.8%	9.65	393.84	18.69	789.43	4.7%	3.30	130.67	6.72	3,653.30	
901-1000	7,277	7,988,424	95	-1.3%	(0.89)	(4.33)	(2.14)	(15,315)	12.3%	9.80	742.32	19.96	1,532.45	4.1%	3.45	252.96	6.77	5,033.33	
1001-1100	70,136	74,101,384	1,052	-1.9%	(1.84)	(108.51)	(4.30)	(2,115)	12.3%	10.22	720.07	20.83	1,467.88	4.1%	3.45	252.96	7.02	4,947.70	
1101-1200	64,942	74,808,788	1,152	-2.3%	(2.09)	(136.02)	(4.27)	(2,720)	11.7%	10.67	692.71	21.74	1,411.73	3.9%	3.71	216.51	7.29	4,734.44	
1201-1300	58,845	73,039,372	1,252	-2.7%	(2.64)	(154.17)	(5.39)	(3,120)	10.8%	11.12	648.68	22.66	1,321.99	3.8%	3.84	201.16	7.56	4,412.25	
1301-1400	52,824	70,687,521	1,351	-3.0%	(3.18)	(174.54)	(6.49)	(3,954)	10.2%	11.57	605.28	23.58	1,233.55	3.6%	3.84	201.16	7.84	4,093.96	
1401-1500	46,872	67,998,849	1,451	-3.2%	(3.72)	(197.21)	(7.59)	(4,571)	10.5%	12.03	563.80	24.51	1,149.01	3.5%	3.98	186.63	8.11	3,803.35	
1501-1600	41,594	64,488,790	1,550	-3.5%	(4.26)	(177.21)	(8.68)	(5,115)	10.2%	12.49	519.59	25.46	1,058.92	3.4%	4.12	171.37	8.40	3,482.25	
1601-1700	36,878	60,854,643	1,650	-3.7%	(4.79)	(176.83)	(9.77)	(5,637)	9.9%	12.96	477.89	26.41	973.92	3.3%	4.26	157.08	8.68	3,201.14	
1701-1800	32,675	57,011,983	1,750	-2.1%	(2.93)	(95.37)	(5.97)	(1,943)	9.7%	13.43	437.48	27.37	891.57	3.2%	4.26	157.08	14.72	4,793.57	
1801-1900	28,083	51,947,326	1,850	-0.7%	(1.07)	(30.13)	(2.19)	(614.3)	9.5%	13.90	390.35	28.33	795.52	3.1%	4.26	157.08	20.73	5,823.03	
1901-1950	12,827	24,651,477	1,925	-0.1%	(0.15)	(1.95)	(0.31)	(3,988)	9.4%	14.32	357.74	29.19	374	2.8%	4.26	157.08	24.03	6,308.26	
Total	560,291	726,657,292	1,925		(1,312)	(1,312)	6,365	12,971		6,365	6,365	12,971	12,971		2,462	2,462	5,038		
1950-2000	12,575	24,839,718	1,975	0.5%	0.78	9.81	1.59	20.00	9.3%	14.56	381.13	29.68	373	8.5%	13.28	166.93	27.05	340	
2001-2100	22,268	45,549,933	2,050	1.6%	2.60	58.00	5.31	118.20	9.2%	14.85	330.73	30.27	674.01	9.9%	16.03	356.90	32.66	727.36	
2101-2200	17,238	36,819,774	1,616	2.5%	6.25	131.26	12.73	225.74	8.9%	15.20	285.37	31.20	572.43	11.2%	17.83	378.49	38.36	793.43	
2201-2300	16,145	37,930,380	1,549	4.3%	8.06	130.16	16.43	265.27	8.8%	15.80	263.86	33.18	535.71	13.3%	24.83	368.49	44.38	793.43	
2301-2400	13,997	34,273,351	2,449	5.1%	9.87	138.11	20.11	281.47	8.7%	16.76	234.54	34.15	477.98	14.3%	27.62	386.55	56.28	813.84	
2401-2500	13,023	33,193,713	2,549	5.8%	11.67	152.00	23.79	309.78	8.6%	17.24	224.49	35.13	457.51	15.4%	30.50	397.24	62.16	809.57	
2501-2600	11,298	29,920,440	2,648	6.4%	15.27	177.45	27.45	310.11	8.5%	17.72	200.15	36.10	407.90	16.0%	33.38	372.10	68.02	768.46	
2601-2700	10,262	28,210,880	2,749	7.0%	15.27	156.69	31.12	319.32	8.4%	18.20	186.79	37.09	380.67	16.7%	36.26	372.10	73.90	758.33	
2701-2800	9,012	25,665,636	2,848	7.6%	17.06	153.70	34.76	313.24	8.3%	18.68	168.31	38.06	343.02	17.4%	39.12	372.10	79.72	718.40	
2801-2900	8,245	24,289,074	2,946	8.1%	18.83	155.27	38.38	316.44	8.2%	19.15	157.86	39.02	321.71	18.0%	41.95	345.91	85.50	704.95	
2901-3000	29,933	96,457,446	3,222	9.4%	23.95	716.76	48.80	1,460.74	8.0%	20.46	612.30	41.69	1,247.85	19.7%	50.09	1,499.26	102.08	3,055.46	
3001-3500+	40,453	181,925,271	4,497	12.1%	43.15	1,745.48	87.93	3,557.25	7.6%	27.13	1,097.52	55.29	2,236.73	23.1%	82.10	3,321.31	167.32	6,768.74	
Total	212,585	620,837,464	3,759		4,182	4,182	8,285	28,919		8,285	8,285	28,919	28,919		13,908	13,908	6,578	17,482	
Grand Total	1,253,262	1,619,853,829	1,619,853,829	0.6%	Reduction	Reduction	Reduction	Reduction		Reduction	Reduction	Reduction	Reduction		Reduction	Reduction	Reduction	Reduction	
Total class usage (kWh)	1,619,854,022	1,619,854,022	1,619,854,022	0.53%	Reduction	Reduction	Reduction	Reduction		Reduction	Reduction	Reduction	Reduction		Reduction	Reduction	Reduction	Reduction	
																			1.75%

Total class usage (kWh) 1,619,854,022 Reduction 0.53%