

**Exhibit No. ___(JTS-13)
Docket No. UG-060256
Witness: Jon T. Stoltz**

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**CASCADE NATURAL GAS
CORPORATION**

Complainant,

v.

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

Respondent.

DOCKET NO. UG-060256

Exhibit REBUTTAL TESTIMONY OF

Jon T. Stoltz

STAFF OF

Cascade Natural Gas Corporation

September 12, 2006

**Exhibit ___ (JTS 13) Comparison of Staff's Calculated Heat Sensitive Load to Actual
Heat Sensitive Load**

CASCADE NATURAL GAS CORPORATION										
Bellingham R/S 503										
Comparison of Staff's Calculated Heat Sensitive Load to Actual Heat Sensitive Load										
Month	Adjusted Therms	Customers	Staff Base Load Per Cust	Total Base Load	Total Heat Sensitive Load	Actual DD's	Staff HDD Coefficients	Staff's Heat Sensitive Load	Percentage Staff to Actual	
	A	B	C	D	E	F	G	H	G	
Oct-00	3,408,783	54,878	16.09	882,982	2,525,801	452	0.154853	3,841,106	152%	
Nov-00	6,987,999	55,400	16.09	891,381	6,096,618	723	0.179689	7,197,299	118%	
Dec-00	5,950,223	55,819	16.09	898,123	5,052,100	867	0.154115	7,458,407	148%	
Jan-01	6,687,751	56,034	16.09	901,582	5,786,169	767	0.173400	7,452,399	129%	
Feb-01	5,559,159	56,202	16.09	904,285	4,654,874	750	0.138138	5,822,724	125%	
Mar-01	4,784,677	56,282	16.09	905,572	3,879,104	638	0.147411	5,293,222	136%	
Apr-01	3,986,034	56,315	16.09	906,103	3,079,930	524	0.153345	4,525,067	147%	
May-01	2,302,339	56,327	16.09	906,296	1,396,043	374	0.137647	2,899,713	208%	
Jun-01	1,620,462	56,158	16.09	903,577	716,885	264	0.044260	656,186	92%	
Jul-01	1,106,745	56,099	16.09	902,628	204,117	135	0.038395	290,779	142%	
Aug-01	1,265,292	56,229	16.09	904,720	360,572	99	0.039686	220,919	61%	
Sep-01	1,279,872	56,346	16.09	906,602	373,270	253	0.038680	551,404	148%	
Oct-01	4,589,812	56,950	16.09	916,320	3,673,491	514	0.154853	4,532,903	123%	
Nov-01	5,454,409	57,557	16.09	926,087	4,528,322	564	0.179689	5,833,091	129%	
Dec-01	6,393,576	57,979	16.09	932,877	5,460,699	807	0.154115	7,210,895	132%	
Jan-02	6,883,788	58,242	16.09	937,109	5,946,679	798	0.173400	8,059,132	136%	
Feb-02	5,748,920	58,457	16.09	940,568	4,808,352	695	0.138138	5,612,217	117%	
Mar-02	6,981,535	58,610	16.09	943,030	6,038,505	823	0.147411	7,110,521	118%	
Apr-02	3,780,550	58,724	16.09	944,864	2,835,686	537	0.153345	4,835,702	171%	
May-02	2,952,527	58,809	16.09	946,232	2,006,295	416	0.137647	3,367,471	168%	
Jun-02	1,074,716	58,730	16.09	944,960	129,756	171	0.044260	444,496	343%	
Jul-02	1,293,983	58,598	16.09	942,837	351,147	114	0.038395	256,485	73%	
Aug-02	1,135,984	58,746	16.09	945,218	190,766	106	0.039686	247,128	130%	
Sep-02	1,564,375	58,931	16.09	948,194	616,181	251	0.038680	572,142	93%	
Oct-02	3,689,503	59,536	16.09	957,929	2,731,574	529	0.154853	4,877,025	179%	
Nov-02	5,683,849	60,326	16.09	970,640	4,713,209	554	0.179689	6,005,315	127%	
Dec-02	6,121,091	60,762	16.09	977,655	5,143,436	713	0.154115	6,676,771	130%	
Jan-03	6,542,166	60,979	16.09	981,147	5,561,019	665	0.173400	7,031,549	126%	
Feb-03	5,458,831	61,152	16.09	983,930	4,474,901	702	0.138138	5,930,085	133%	
Mar-03	4,877,854	61,351	16.09	987,132	3,890,722	605	0.147411	5,471,506	141%	
Apr-03	4,111,345	61,492	16.09	989,401	3,121,945	464	0.153345	4,375,284	140%	
May-03	2,332,934	61,506	16.09	989,626	1,343,308	367	0.137647	3,107,065	231%	
Jun-03	1,285,387	59,754	16.09	961,436	323,950	157	0.044260	415,220	128%	
Jul-03	1,308,896	62,978	16.09	1,013,310	295,585	58	0.038395	140,246	47%	
Aug-03	1,075,688	61,423	16.09	988,291	87,398	68	0.039686	165,759	190%	
Sep-03	1,488,125	61,628	16.09	991,589	496,536	197	0.038680	469,603	95%	
Oct-03	3,327,605	62,259	16.09	1,001,742	2,325,863	385	0.154853	3,711,782	160%	
Nov-03	7,343,061	63,028	16.09	1,014,115	6,328,946	742	0.179689	8,403,475	133%	
Dec-03	7,408,523	63,893	16.09	1,028,033	6,380,490	757	0.154115	7,454,080	117%	
Jan-04	8,989,012	64,776	16.09	1,042,240	7,946,772	811	0.173400	9,109,280	115%	
Feb-04	4,939,170	63,992	16.09	1,029,626	3,909,544	663	0.138138	5,860,739	150%	
Mar-04	3,999,556	64,087	16.09	1,031,154	2,968,402	577	0.147411	5,450,993	184%	
Apr-04	2,977,093	63,997	16.09	1,029,706	1,947,387	414	0.153345	4,062,839	209%	
May-04	2,016,621	64,288	16.09	1,034,388	982,232	310	0.137647	2,743,206	279%	
Jun-04	1,628,013	63,990	16.09	1,029,593	598,419	146	0.044260	413,501	69%	
Jul-04	1,143,046	63,905	16.09	1,028,226	114,820	45	0.038395	110,413	96%	
Aug-04	1,095,160	64,133	16.09	1,031,894	63,266	41	0.039686	104,352	165%	
Sep-04	1,815,823	64,395	16.09	1,036,110	779,714	265	0.038680	660,062	85%	
Oct-04	3,410,587	65,010	16.09	1,046,005	2,364,582	447	0.154853	4,499,946	190%	
Nov-04	6,365,036	65,594	16.09	1,055,402	5,309,635	648	0.179689	7,637,665	144%	
Dec-04	7,560,426	66,177	16.09	1,064,188	6,505,288	725	0.154115	7,401,627	115%	

CASCADE NATURAL GAS CORPORATION										
Bremerton R/S 503										
Comparison of Staff's Calculated Heat Sensitive Load to Actual Heat Sensitive Load										
Month	Adjusted Therms	Customers	Staff Base Load Per Cust	Total Base Load	Total Heat Sensitive Load	Actual DD's	Staff HDD Coefficients	Staff's Heat Sensitive Load	Percentage Staff to Actual	
	A	B	C	D	E	F	G	H	G	
Oct-00	1,720,335	29,203	16.26	474,976	1,245,360	375	0.189601	2,076,344	167%	
Nov-00	3,753,411	29,460	16.26	479,156	3,274,255	637	0.208584	3,914,292	120%	
Dec-00	3,091,181	29,747	16.26	483,824	2,607,358	678	0.185041	3,731,993	143%	
Jan-01	3,388,851	29,827	16.26	485,125	2,903,726	658	0.206110	4,045,149	139%	
Feb-01	2,906,113	29,884	16.26	486,052	2,420,062	635	0.168108	3,190,075	132%	
Mar-01	2,483,151	29,875	16.26	485,906	1,997,246	575	0.168555	2,895,459	145%	
Apr-01	2,134,840	29,870	16.26	485,824	1,649,016	551	0.161892	2,664,478	162%	
May-01	1,207,161	29,796	16.26	484,621	722,541	396	0.144825	1,708,821	237%	
Jun-01	817,330	29,734	16.26	483,612	333,718	291	0.036115	312,488	94%	
Jul-01	572,768	29,656	16.26	482,344	90,425	233	0.017894	123,645	137%	
Aug-01	655,775	29,653	16.26	482,295	173,480	163	0.017738	85,736	49%	
Sep-01	653,857	29,765	16.26	484,116	169,740	230	0.038342	262,487	155%	
Oct-01	2,279,080	30,019	16.26	488,248	1,790,832	436	0.189601	2,481,552	139%	
Nov-01	2,815,179	30,315	16.26	493,062	2,322,117	537	0.208584	3,395,571	146%	
Dec-01	3,458,472	30,526	16.26	496,494	2,961,978	701	0.185041	3,959,642	134%	
Jan-02	3,532,267	30,610	16.26	497,860	3,034,407	694	0.206110	4,378,465	144%	
Feb-02	2,932,272	30,696	16.26	499,259	2,433,013	624	0.168108	3,219,992	132%	
Mar-02	3,449,392	30,754	16.26	500,202	2,949,190	691	0.168555	3,581,965	121%	
Apr-02	1,894,986	30,702	16.26	499,356	1,395,630	530	0.161892	2,634,316	189%	
May-02	1,557,201	30,628	16.26	498,153	1,059,048	446	0.144825	1,978,322	187%	
Jun-02	579,804	30,554	16.26	496,949	82,855	239	0.036115	263,726	318%	
Jul-02	654,281	30,395	16.26	494,363	159,918	151	0.017894	82,127	51%	
Aug-02	576,869	30,401	16.26	494,461	82,409	182	0.017738	98,144	119%	
Sep-02	800,460	30,475	16.26	495,664	304,795	222	0.038342	259,401	85%	
Oct-02	1,762,145	30,760	16.26	500,300	1,261,845	432	0.189601	2,519,479	200%	
Nov-02	2,855,083	31,051	16.26	505,033	2,350,050	494	0.208584	3,199,510	136%	
Dec-02	3,205,999	31,228	16.26	507,912	2,698,087	646	0.185041	3,732,885	138%	
Jan-03	3,283,444	31,363	16.26	510,107	2,773,337	543	0.206110	3,510,076	127%	
Feb-03	2,789,083	31,417	16.26	510,986	2,278,097	605	0.168108	3,195,277	140%	
Mar-03	2,414,992	31,459	16.26	511,669	1,903,323	562	0.168555	2,900,045	157%	
Apr-03	2,122,524	31,474	16.26	511,913	1,610,612	506	0.161892	2,578,267	160%	
May-03	1,268,070	31,435	16.26	511,278	756,791	407	0.144825	1,852,898	245%	
Jun-03	669,972	31,331	16.26	509,587	160,385	195	0.036115	220,646	138%	
Jul-03	597,534	31,247	16.26	508,221	89,313	113	0.017894	63,182	71%	
Aug-03	518,717	31,211	16.26	507,635	11,082	127	0.017738	70,310	634%	
Sep-03	717,152	31,323	16.26	509,457	207,696	183	0.038342	219,781	106%	
Oct-03	1,626,310	31,588	16.26	513,767	1,112,543	316	0.189601	1,892,561	170%	
Nov-03	3,664,501	31,948	16.26	519,622	3,144,879	660	0.208584	4,398,135	140%	
Dec-03	3,650,366	32,221	16.26	524,062	3,126,304	698	0.185041	4,161,620	133%	
Jan-04	4,417,624	32,306	16.26	525,445	3,892,179	715	0.206110	4,760,892	122%	
Feb-04	2,555,063	32,374	16.26	526,551	2,028,512	579	0.168108	3,151,108	155%	
Mar-04	2,000,760	32,358	16.26	526,291	1,474,469	533	0.168555	2,907,037	197%	
Apr-04	1,587,998	32,376	16.26	526,583	1,061,415	407	0.161892	2,133,256	201%	
May-04	979,044	32,262	16.26	524,729	454,315	337	0.144825	1,574,580	347%	
Jun-04	821,386	32,192	16.26	523,591	297,796	199	0.036115	231,360	78%	
Jul-04	513,199	30,963	16.26	503,601	9,597	96	0.017894	53,189	554%	
Aug-04	549,463	32,056	16.26	521,379	28,084	76	0.017738	43,214	154%	
Sep-04	846,813	32,184	16.26	523,461	323,352	221	0.038342	272,714	84%	
Oct-04	1,630,207	32,435	16.26	527,543	1,102,664	397	0.189601	2,441,434	221%	
Nov-04	3,218,468	32,766	16.26	532,927	2,685,542	588	0.208584	4,018,664	150%	
Dec-04	3,587,612	32,990	16.26	536,570	3,051,042	652	0.185041	3,980,136	130%	

CASCADE NATURAL GAS CORPORATION										
Walla Walla R/S 503										
Comparison of Staff's Calculated Heat Sensitive Load to Actual Heat Sensitive Load										
Month	Adjusted Therms	Customers	Staff Base Load Per Cust	Total Base Load	Total Heat Sensitive Load	Actual DD's	Staff HDD Coefficients	Staff's Heat Sensitive Load	Percentage Staff to Actual	
	A	B	C	D	E	F	G	H	G	
Oct-00	781,852	16,127	12.70	204,853	576,999	407	0.102153	670,501	116%	
Nov-00	1,959,618	16,400	12.70	208,321	1,751,297	871	0.119250	1,703,415	97%	
Dec-00	1,862,995	16,592	12.70	210,760	1,652,235	1063	0.112627	1,986,436	120%	
Jan-01	2,128,396	16,675	12.70	211,814	1,916,581	972	0.133526	2,164,203	113%	
Feb-01	1,642,561	16,720	12.70	212,386	1,430,175	790	0.117154	1,547,464	108%	
Mar-01	1,221,127	16,723	12.70	212,424	1,008,703	584	0.125212	1,222,849	121%	
Apr-01	870,085	16,680	12.70	211,878	658,207	473	0.116293	917,510	139%	
May-01	427,256	16,594	12.70	210,785	216,470	196	0.135148	439,559	203%	
Jun-01	262,152	16,474	12.70	209,261	52,890	100	0.031650	52,140	99%	
Jul-01	210,444	16,481	12.70	209,350	1,094	6	0.056757	5,612	513%	
Aug-01	247,803	16,498	12.70	209,566	38,237	1	0.052205	861	2%	
Sep-01	240,532	16,564	12.70	210,404	30,127	33	0.033055	18,068	60%	
Oct-01	794,703	16,851	12.70	214,050	580,653	381	0.102153	655,846	113%	
Nov-01	1,331,093	17,207	12.70	218,572	1,112,521	647	0.119250	1,327,602	119%	
Dec-01	1,683,734	17,399	12.70	221,011	1,462,723	848	0.112627	1,661,738	114%	
Jan-02	1,974,038	17,526	12.70	222,624	1,751,414	827	0.133526	1,935,326	111%	
Feb-02	1,482,138	17,531	12.70	222,688	1,259,450	690	0.117154	1,417,140	113%	
Mar-02	1,685,600	17,650	12.70	224,199	1,461,401	701	0.125212	1,549,204	106%	
Apr-02	753,980	17,631	12.70	223,958	530,022	392	0.116293	803,742	152%	
May-02	520,383	17,542	12.70	222,827	297,556	252	0.135148	597,433	201%	
Jun-02	214,751	17,493	12.70	222,205	-7,454	63	0.031650	34,880	-468%	
Jul-02	266,981	17,515	12.70	222,484	44,497	3	0.056757	2,982	7%	
Aug-02	244,632	17,410	12.70	221,151	23,481	5	0.052205	4,544	19%	
Sep-02	320,764	17,738	12.70	225,317	95,447	79	0.033055	46,320	49%	
Oct-02	734,214	18,080	12.70	229,661	504,553	447	0.102153	825,576	164%	
Nov-02	1,733,885	18,506	12.70	235,073	1,498,812	702	0.119250	1,549,202	103%	
Dec-02	1,935,513	18,727	12.70	237,880	1,697,633	781	0.112627	1,647,259	97%	
Jan-03	1,861,277	18,831	12.70	239,201	1,622,076	737	0.133526	1,853,134	114%	
Feb-03	1,572,935	18,949	12.70	240,700	1,332,235	710	0.117154	1,576,165	118%	
Mar-03	1,195,060	19,048	12.70	241,957	953,102	478	0.125212	1,140,048	120%	
Apr-03	798,552	19,052	12.70	242,008	556,543	408	0.116293	903,971	162%	
May-03	464,886	19,079	12.70	242,351	222,534	210	0.135148	541,483	243%	
Jun-03	268,972	19,030	12.70	241,729	27,244	17	0.031650	10,239	38%	
Jul-03	263,874	19,023	12.70	241,640	22,234	0	0.056757	0	0%	
Aug-03	241,185	19,039	12.70	241,843	-658	0	0.052205	0	0%	
Sep-03	319,248	19,214	12.70	244,066	75,182	58	0.033055	36,837	49%	
Oct-03	627,727	19,506	12.70	247,775	379,952	262	0.102153	522,060	137%	
Nov-03	1,933,324	19,969	12.70	253,656	1,679,667	759	0.119250	1,807,409	108%	
Dec-03	2,123,021	20,265	12.70	257,416	1,865,605	911	0.112627	2,079,254	111%	
Jan-04	3,028,966	20,426	12.70	259,461	2,769,504	1044	0.133526	2,847,408	103%	
Feb-04	1,689,929	20,544	12.70	260,960	1,428,969	676	0.117154	1,627,005	114%	
Mar-04	1,169,910	20,560	12.70	261,164	908,746	384	0.125212	988,554	109%	
Apr-04	674,773	20,535	12.70	260,846	413,927	273	0.116293	651,945	158%	
May-04	468,926	20,445	12.70	259,703	209,224	211	0.135148	583,014	279%	
Jun-04	350,098	20,484	12.70	260,198	89,900	73	0.031650	47,327	53%	
Jul-04	259,876	20,576	12.70	261,367	-1,491	0	0.056757	0	0%	
Aug-04	252,951	20,654	12.70	262,358	-9,407	3	0.052205	3,235	-34%	
Sep-04	404,850	20,588	12.70	261,519	143,331	70	0.033055	47,638	33%	
Oct-04	614,883	21,138	12.70	268,506	346,378	306	0.102153	660,749	191%	
Nov-04	1,598,244	21,554	12.70	273,790	1,324,454	674	0.119250	1,732,392	131%	
Dec-04	2,316,813	21,993	12.70	278,223	2,038,590	830	0.112627	2,047,501	100%	

CASCADE NATURAL GAS CORPORATION
 Yakima R/S 503
 Comparison of Staff's Calculated Heat Sensitive Load to Actual Heat Sensitive Load

Month	Adjusted Therms A	Customers B	Staff Base Load Per Cust C	Total Base Load D	Total Heat Sensitive Load E	Actual DD's F	Staff HDD Coefficients G	Staff's Heat Sensitive Load H	Percentage Staff to Actual G
Oct-00	1,095,982	24,126	13.20	318,558	777,423	498	0.064106	770,217	99%
Nov-00	3,111,654	24,844	13.20	328,039	2,783,615	1006	0.125794	3,143,977	113%
Dec-00	2,959,263	25,354	13.20	334,773	2,624,490	1136	0.115453	3,325,294	127%
Jan-01	3,292,007	25,428	13.20	335,750	2,956,257	1003	0.132095	3,368,988	114%
Feb-01	2,511,368	25,386	13.20	335,195	2,176,173	850	0.106898	2,306,656	106%
Mar-01	1,892,296	25,273	13.20	333,703	1,558,593	653	0.109354	1,804,698	116%
Apr-01	1,268,798	24,912	13.20	328,937	939,861	521	0.083647	1,085,667	116%
May-01	594,163	24,433	13.20	322,612	271,551	246	0.065671	394,717	145%
Jun-01	350,628	23,983	13.20	316,670	33,958	127	0.010850	33,047	97%
Jul-01	259,351	23,666	13.20	312,485	-53,134	20	0.323081	152,921	-288%
Aug-01	311,018	23,490	13.20	310,161	857	13	-0.342037	-104,448	-12181%
Sep-01	298,419	23,418	13.20	309,210	-10,791	85	0.088693	176,546	-1636%
Oct-01	1,175,308	24,014	13.20	317,080	858,229	491	0.064106	755,866	88%
Nov-01	2,000,692	24,906	13.20	328,858	1,671,834	749	0.125794	2,346,636	140%
Dec-01	2,763,357	25,247	13.20	333,360	2,429,996	988	0.115453	2,879,864	119%
Jan-02	2,978,720	25,379	13.20	335,103	2,643,617	928	0.132095	3,111,063	118%
Feb-02	2,249,156	25,375	13.20	335,050	1,914,106	780	0.106898	2,115,779	111%
Mar-02	2,381,518	25,269	13.20	333,651	2,047,867	790	0.109354	2,182,980	107%
Apr-02	1,102,635	25,038	13.20	330,601	772,034	482	0.083647	1,009,478	131%
May-02	712,005	24,513	13.20	323,668	388,337	300	0.065671	482,938	124%
Jun-02	255,071	24,057	13.20	317,647	-62,576	79	0.010850	20,620	-33%
Jul-02	309,791	23,764	13.20	313,779	-3,988	21	0.323081	161,232	-4043%
Aug-02	282,371	23,610	13.20	311,745	-29,374	31	-0.342037	-250,340	852%
Sep-02	376,904	23,605	13.20	311,679	65,225	166	0.088693	347,537	533%
Oct-02	937,649	24,219	13.20	319,786	617,863	568	0.064106	881,867	143%
Nov-02	2,360,126	25,091	13.20	331,300	2,028,826	808	0.125794	2,550,288	126%
Dec-02	2,795,450	25,947	13.20	342,603	2,452,847	915	0.115453	2,741,028	112%
Jan-03	2,843,547	25,602	13.20	338,048	2,505,500	870	0.132095	2,942,250	117%
Feb-03	2,214,871	25,588	13.20	337,863	1,877,008	746	0.106898	2,040,538	109%
Mar-03	1,633,864	25,463	13.20	336,212	1,297,652	591	0.109354	1,645,628	127%
Apr-03	1,130,210	25,165	13.20	332,277	797,932	474	0.083647	997,759	125%
May-03	612,941	24,784	13.20	327,247	285,695	274	0.065671	445,960	156%
Jun-03	308,023	24,082	13.20	317,978	-9,955	37	0.010850	9,668	-97%
Jul-03	301,789	24,402	13.20	322,203	-20,414	8	0.323081	63,071	-309%
Aug-03	264,376	23,965	13.20	316,433	-52,057	0	-0.342037	0	0%
Sep-03	363,871	24,012	13.20	317,053	46,818	111	0.088693	236,396	505%
Oct-03	724,026	24,449	13.20	322,823	401,203	354	0.064106	554,834	138%
Nov-03	2,563,736	25,463	13.20	336,212	2,227,523	933	0.125794	2,988,485	134%
Dec-03	3,054,469	25,898	13.20	341,956	2,712,513	1085	0.115453	3,244,152	120%
Jan-04	3,980,837	26,556	13.20	350,644	3,630,193	1132	0.132095	3,970,960	109%
Feb-04	2,141,879	26,110	13.20	344,755	1,797,124	822	0.106898	2,294,290	128%
Mar-04	1,498,558	25,929	13.20	342,365	1,156,193	576	0.109354	1,633,213	141%
Apr-04	865,576	25,400	13.20	335,380	530,195	397	0.083647	843,480	159%
May-04	515,330	24,858	13.20	328,224	187,106	239	0.065671	390,155	209%
Jun-04	361,753	24,541	13.20	324,038	37,715	98	0.010850	26,094	69%
Jul-04	273,316	24,350	13.20	321,516	-48,201	11	0.323081	86,537	-180%
Aug-04	270,011	24,225	13.20	319,866	-49,855	14	-0.342037	-116,002	233%
Sep-04	396,746	23,760	13.20	313,726	83,020	157	0.088693	330,853	399%
Oct-04	588,741	24,810	13.20	327,590	261,151	420	0.064106	667,997	256%
Nov-04	1,868,198	25,554	13.20	337,414	1,530,784	819	0.125794	2,632,708	172%
Dec-04	3,013,203	26,266	13.20	346,815	2,666,477	940	0.115453	2,850,530	107%

CASCADE NATURAL GAS CORPORATION
 Bellingham R/S 504
 Comparison of Staff's Calculated Heat Sensitive Load to Actual Heat Sensitive Load

Month	Adjusted Therms	Customers	Staff Base Load Per Cust	Total Base Load	Total Heat Sensitive Load	Actual DD's	Staff HDD Coefficients	Staff's Heat Sensitive Load	Percentage Staff to Actual
	A	B	C	D	E	F	G	H	G
Oct-00	1,856,609	7,364	99.10	729,749	1,126,860	452	0.579600	1,929,215	171%
Nov-00	3,370,490	7,426	99.10	735,893	2,634,597	723	0.623419	3,347,135	127%
Dec-00	3,164,274	7,508	99.10	744,019	2,420,256	867	0.570704	3,714,961	153%
Jan-01	3,466,712	7,571	99.10	750,262	2,716,450	767	0.644002	3,739,692	138%
Feb-01	2,827,499	7,582	99.10	751,352	2,076,147	750	0.528481	3,005,207	145%
Mar-01	2,462,472	7,565	99.10	749,667	1,712,805	638	0.546971	2,639,939	154%
Apr-01	2,025,964	7,557	99.10	748,874	1,277,090	524	0.560954	2,221,304	174%
May-01	1,222,735	7,552	99.10	748,379	474,356	374	0.540144	1,525,609	322%
Jun-01	995,060	7,519	99.10	745,109	249,952	264	0.118909	236,036	94%
Jul-01	793,822	7,477	99.10	740,947	52,875	135	0.096387	97,293	184%
Aug-01	934,059	7,457	99.10	738,965	195,094	99	0.182302	134,583	69%
Sep-01	845,721	7,452	99.10	738,469	107,252	253	0.131213	247,383	231%
Oct-01	2,290,755	7,462	99.10	739,460	1,551,295	514	0.579600	2,223,037	143%
Nov-01	2,408,577	7,532	99.10	746,397	1,662,180	564	0.623419	2,648,314	159%
Dec-01	3,040,150	7,611	99.10	754,226	2,285,925	807	0.570704	3,505,308	153%
Jan-02	3,362,690	7,657	99.10	758,784	2,603,906	798	0.644002	3,935,036	151%
Feb-02	2,927,387	7,707	99.10	763,739	2,163,648	695	0.528481	2,830,737	131%
Mar-02	3,547,592	7,704	99.10	763,442	2,784,150	823	0.546971	3,468,011	125%
Apr-02	1,893,140	7,690	99.10	762,054	1,131,086	537	0.560954	2,316,476	205%
May-02	1,553,636	7,692	99.10	762,252	791,383	416	0.540144	1,728,392	218%
Jun-02	844,281	7,656	99.10	758,685	85,596	171	0.118909	155,673	182%
Jul-02	917,303	7,620	99.10	755,117	162,186	114	0.096387	83,729	52%
Aug-02	883,777	7,635	99.10	756,604	127,173	106	0.182302	147,539	116%
Sep-02	1,044,474	7,616	99.10	754,721	289,753	251	0.131213	250,829	87%
Oct-02	1,888,522	7,654	99.10	758,487	1,130,035	529	0.579600	2,346,781	208%
Nov-02	2,623,665	7,742	99.10	767,207	1,856,458	554	0.623419	2,673,886	144%
Dec-02	2,917,364	7,793	99.10	772,261	2,145,103	713	0.570704	3,171,065	148%
Jan-03	3,157,032	7,871	99.10	779,991	2,377,041	665	0.644002	3,370,845	142%
Feb-03	2,762,933	7,870	99.10	779,892	1,983,041	702	0.528481	2,919,720	147%
Mar-03	2,363,047	7,884	99.10	781,279	1,581,768	605	0.546971	2,608,953	165%
Apr-03	1,950,501	7,879	99.10	780,783	1,169,717	464	0.560954	2,050,767	175%
May-03	1,260,675	7,881	99.10	780,982	479,694	367	0.540144	1,562,273	326%
Jun-03	868,442	7,766	99.10	769,586	98,857	157	0.118909	144,981	147%
Jul-03	919,621	7,905	99.10	783,360	136,261	58	0.096387	44,192	32%
Aug-03	831,205	7,813	99.10	774,243	56,962	68	0.182302	96,854	170%
Sep-03	986,864	7,799	99.10	772,856	214,008	197	0.131213	201,596	94%
Oct-03	1,699,358	7,825	99.10	775,432	923,925	385	0.579600	1,746,117	189%
Nov-03	3,280,690	8,022	99.10	794,954	2,485,736	742	0.623419	3,710,792	149%
Dec-03	3,581,552	8,112	99.10	803,873	2,777,679	757	0.570704	3,504,570	126%
Jan-04	4,394,389	8,240	99.10	816,557	3,577,832	811	0.644002	4,303,634	120%
Feb-04	2,517,204	8,151	99.10	807,738	1,709,466	663	0.528481	2,855,971	167%
Mar-04	1,893,141	8,098	99.10	802,486	1,090,655	577	0.546971	2,555,747	234%
Apr-04	1,548,718	8,242	99.10	816,756	731,963	414	0.560954	1,914,081	261%
May-04	1,126,919	8,040	99.10	796,738	330,181	310	0.540144	1,346,255	408%
Jun-04	984,850	8,062	99.10	798,918	185,932	146	0.118909	139,962	75%
Jul-04	809,682	8,029	99.10	795,648	14,034	45	0.096387	34,825	248%
Aug-04	872,395	8,018	99.10	794,558	77,837	41	0.182302	59,930	77%
Sep-04	1,127,390	8,097	99.10	802,387	325,004	265	0.131213	281,544	87%
Oct-04	1,613,163	8,135	99.10	806,152	807,011	447	0.579600	2,107,626	261%
Nov-04	2,811,686	8,216	99.10	814,179	1,997,507	648	0.623419	3,319,063	166%
Dec-04	2,621,085	8,207	99.10	822,107	2,768,788	735	0.570704	3,481,516	125%

CASCADE NATURAL GAS CORPORATION									
Bremerton R/S 504									
Comparison of Staff's Calculated Heat Sensitive Load to Actual Heat Sensitive Load									
Month	Adjusted Therms	Customers	Staff Base Load Per Cust	Total Base Load	Total Heat Sensitive Load	Actual DD's	Staff HDD Coefficients	Staff's Heat Sensitive Load	Percentage Staff to Actual
	A	B	C	D	E	F	G	H	G
Oct-00	1,267,056	4,104	145.07	595,386	671,670	375	0.815502	1,255,058	187%
Nov-00	2,392,651	4,139	145.07	600,463	1,792,188	637	0.834996	2,201,503	123%
Dec-00	2,144,252	4,192	145.07	608,152	1,536,100	678	0.774558	2,201,430	143%
Jan-01	2,229,674	4,206	145.07	610,183	1,619,491	658	0.867991	2,402,207	148%
Feb-01	1,905,018	4,193	145.07	608,297	1,296,720	635	0.699141	1,861,501	144%
Mar-01	1,632,804	4,181	145.07	606,556	1,026,248	575	0.668515	1,607,160	157%
Apr-01	1,361,718	4,172	145.07	605,251	756,467	551	0.635076	1,459,895	193%
May-01	870,845	4,174	145.07	605,541	265,304	396	0.595101	983,645	371%
Jun-01	726,269	4,150	145.07	602,059	124,210	291	0.092909	112,202	90%
Jul-01	596,529	4,137	145.07	600,173	-3,645	233	-0.005135	-4,950	136%
Aug-01	699,555	4,128	145.07	598,868	100,687	163	0.068173	45,871	46%
Sep-01	629,607	4,118	145.07	597,417	32,191	230	0.150550	142,592	443%
Oct-01	1,623,755	4,133	145.07	599,593	1,024,162	436	0.815502	1,469,525	143%
Nov-01	1,673,415	4,171	145.07	605,106	1,068,309	537	0.834996	1,870,247	175%
Dec-01	2,108,114	4,204	145.07	609,893	1,498,221	701	0.774558	2,282,626	152%
Jan-02	2,236,171	4,248	145.07	616,276	1,619,894	694	0.867991	2,558,935	158%
Feb-02	1,810,773	4,278	145.07	620,629	1,190,144	624	0.699141	1,866,337	157%
Mar-02	2,120,723	4,277	145.07	620,484	1,500,239	691	0.668515	1,975,734	132%
Apr-02	1,171,098	4,260	145.07	618,017	553,081	530	0.635076	1,433,875	259%
May-02	1,021,072	4,233	145.07	614,100	406,972	446	0.595101	1,123,502	276%
Jun-02	607,496	4,242	145.07	615,406	-7,910	239	0.092909	94,195	-1191%
Jul-02	645,632	4,192	145.07	608,152	37,480	151	-0.005135	-3,250	-9%
Aug-02	616,987	4,200	145.07	609,313	7,674	182	0.068173	52,111	679%
Sep-02	766,577	4,202	145.07	609,603	156,974	222	0.150550	140,440	89%
Oct-02	1,220,583	4,206	145.07	610,183	610,400	432	0.815502	1,481,761	243%
Nov-02	1,715,348	4,274	145.07	620,048	1,095,300	494	0.834996	1,762,974	161%
Dec-02	1,925,033	4,295	145.07	623,095	1,301,938	646	0.774558	2,149,065	165%
Jan-03	1,990,282	4,325	145.07	627,447	1,362,835	543	0.867991	2,038,455	150%
Feb-03	1,760,681	4,332	145.07	628,463	1,132,218	605	0.699141	1,832,351	162%
Mar-03	1,451,092	4,325	145.07	627,447	823,644	562	0.668515	1,624,926	197%
Apr-03	1,311,063	4,323	145.07	627,157	683,906	506	0.635076	1,389,189	203%
May-03	906,116	4,305	145.07	624,546	281,570	407	0.595101	1,042,697	370%
Jun-03	660,620	4,303	145.07	624,256	36,365	195	0.092909	77,959	214%
Jul-03	628,996	4,288	145.07	622,079	6,916	113	-0.005135	-2,488	-36%
Aug-03	697,351	4,282	145.07	621,209	76,142	127	0.068173	37,073	49%
Sep-03	725,687	4,283	145.07	621,354	104,333	183	0.150550	117,999	113%
Oct-03	1,178,559	4,291	145.07	622,515	556,045	316	0.815502	1,105,785	199%
Nov-03	2,191,797	4,336	145.07	629,043	1,562,754	660	0.834996	2,389,558	153%
Dec-03	2,275,146	4,376	145.07	634,846	1,640,300	698	0.774558	2,365,847	144%
Jan-04	2,751,649	4,363	145.07	632,960	2,118,689	715	0.867991	2,707,737	128%
Feb-04	1,710,534	4,378	145.07	635,136	1,075,398	579	0.699141	1,772,226	165%
Mar-04	1,228,782	4,418	145.07	640,939	587,843	533	0.668515	1,574,215	268%
Apr-04	1,060,871	4,387	145.07	636,442	424,429	407	0.635076	1,133,934	267%
May-04	780,293	4,365	145.07	633,250	147,043	337	0.595101	875,397	595%
Jun-04	746,711	4,391	145.07	637,022	109,689	199	0.092909	81,185	74%
Jul-04	550,115	4,132	145.07	599,448	-49,333	96	-0.005135	-2,037	4%
Aug-04	657,131	4,307	145.07	624,836	32,295	76	0.068173	22,315	69%
Sep-04	835,238	4,307	145.07	624,836	210,402	221	0.150550	143,301	68%
Oct-04	1,089,213	4,332	145.07	628,463	460,750	397	0.815502	1,402,504	304%
Nov-04	1,896,238	4,383	145.07	635,862	1,260,376	588	0.834996	2,151,955	171%
Dec-04	2,318,407	4,411	145.07	639,024	1,678,483	652	0.774558	2,227,607	132%

CASCADE NATURAL GAS CORPORATION										
Walla Walla R/S 504										
Comparison of Staff's Calculated Heat Sensitive Load to Actual Heat Sensitive Load										
Month	Adjusted Therms	Customers	Staff Base Load Per Cust	Total Base Load	Total Heat Sensitive Load	Actual DD's	Staff HDD Coefficients	Staff's Heat Sensitive Load	Percentage Staff to Actual	
	A	B	C	D	E	F	G	H	G	
Oct-00	884,326	3,113	122.94	382,704	501,623	407	0.585072	741,281	148%	
Nov-00	1,909,801	3,164	122.94	388,974	1,520,827	871	0.581739	1,603,182	105%	
Dec-00	2,027,812	3,213	122.94	394,998	1,632,815	1063	0.577191	1,971,349	121%	
Jan-01	2,315,124	3,242	122.94	398,563	1,916,561	972	0.689820	2,173,777	113%	
Feb-01	1,773,791	3,242	122.94	398,563	1,375,228	790	0.622524	1,594,396	116%	
Mar-01	1,303,289	3,231	122.94	397,210	906,078	584	0.613920	1,158,408	128%	
Apr-01	900,466	3,208	122.94	394,383	506,083	473	0.568163	862,121	170%	
May-01	503,792	3,197	122.94	393,031	110,761	196	0.675732	423,422	382%	
Jun-01	422,714	3,181	122.94	391,064	31,651	100	0.128511	40,879	129%	
Jul-01	373,948	3,183	122.94	391,309	-17,362	6	0.175019	3,343	-19%	
Aug-01	442,796	3,171	122.94	389,834	52,962	1	0.468022	1,484	3%	
Sep-01	392,184	3,179	122.94	390,818	1,367	33	0.247997	26,017	1904%	
Oct-01	998,292	3,198	122.94	393,153	605,138	381	0.585072	712,874	118%	
Nov-01	1,240,544	3,239	122.94	398,194	842,350	647	0.581739	1,219,111	145%	
Dec-01	1,677,536	3,289	122.94	404,341	1,273,195	848	0.577191	1,609,827	126%	
Jan-02	2,041,296	3,313	122.94	407,291	1,634,005	827	0.689820	1,890,004	116%	
Feb-02	1,526,767	3,338	122.94	410,365	1,116,402	690	0.622524	1,433,810	128%	
Mar-02	1,678,833	3,321	122.94	408,275	1,270,558	701	0.613920	1,429,219	112%	
Apr-02	779,846	3,297	122.94	405,324	374,522	392	0.568163	734,307	196%	
May-02	587,799	3,274	122.94	402,497	185,302	252	0.675732	557,511	301%	
Jun-02	377,285	3,260	122.94	400,776	-23,490	63	0.128511	26,394	-112%	
Jul-02	441,120	3,261	122.94	400,899	40,221	3	0.175019	1,712	4%	
Aug-02	431,882	3,251	122.94	399,669	32,213	5	0.468022	7,608	24%	
Sep-02	541,451	3,248	122.94	399,300	142,150	79	0.247997	63,634	45%	
Oct-02	912,246	3,288	122.94	404,218	508,028	447	0.585072	859,901	169%	
Nov-02	1,706,219	3,351	122.94	411,963	1,294,256	702	0.581739	1,368,484	106%	
Dec-02	1,900,828	3,365	122.94	413,684	1,487,144	781	0.577191	1,516,895	102%	
Jan-03	1,776,285	3,372	122.94	414,545	1,361,740	737	0.689820	1,714,316	126%	
Feb-03	1,611,044	3,385	122.94	416,143	1,194,902	710	0.622524	1,496,143	125%	
Mar-03	1,147,941	3,406	122.94	418,724	429,216	478	0.613920	999,504	137%	
Apr-03	857,274	3,376	122.94	415,036	442,238	408	0.568163	782,592	177%	
May-03	545,424	3,368	122.94	414,053	131,371	210	0.675732	477,932	364%	
Jun-03	417,396	3,369	122.94	414,176	3,220	17	0.128511	7,360	229%	
Jul-03	447,918	3,345	122.94	411,225	36,692	0	0.175019	0	0%	
Aug-03	401,358	3,344	122.94	411,102	-9,744	0	0.468022	0	0%	
Sep-03	501,655	3,350	122.94	411,840	89,816	58	0.247997	48,186	54%	
Oct-03	831,112	3,373	122.94	414,668	416,445	262	0.585072	517,043	124%	
Nov-03	1,832,126	3,432	122.94	421,921	1,410,205	759	0.581739	1,515,365	107%	
Dec-03	2,015,606	3,503	122.94	430,649	1,584,957	911	0.577191	1,841,951	116%	
Jan-04	2,867,771	3,540	122.94	435,198	2,432,573	1044	0.689820	2,549,409	105%	
Feb-04	1,750,397	3,504	122.94	430,772	1,319,625	676	0.622524	1,474,575	112%	
Mar-04	1,059,725	3,518	122.94	432,493	627,231	384	0.613920	829,352	132%	
Apr-04	692,128	3,496	122.94	429,789	262,339	273	0.568163	542,259	207%	
May-04	550,417	3,464	122.94	425,855	124,562	211	0.675732	493,895	397%	
Jun-04	487,327	3,557	122.94	437,288	50,039	73	0.128511	33,369	67%	
Jul-04	431,214	3,472	122.94	426,838	4,376	0	0.175019	0	0%	
Aug-04	435,235	3,440	122.94	422,904	12,331	3	0.468022	4,830	39%	
Sep-04	618,222	3,446	122.94	423,642	194,580	70	0.247997	59,822	31%	
Oct-04	695,205	3,471	122.94	426,715	268,489	306	0.585072	621,420	231%	
Nov-04	1,401,816	3,525	122.94	433,354	968,462	674	0.581739	1,382,125	143%	
Dec-04	2,118,107	3,506	122.94	442,083	1,676,115	830	0.577191	1,722,730	103%	

CASCADE NATURAL GAS CORPORATION
 Yakima R/S 504
 Comparison of Staff's Calculated Heat Sensitive Load to Actual Heat Sensitive Load

Month	Adjusted Therms	Customers	Staff Base Load Per Cust	Total Base Load	Total Heat Sensitive Load	Actual DD's	Staff HDD Coefficients	Staff's Heat Sensitive Load	Percentage Staff to Actual
	A	B	C	D	E	F	G	H	G
Oct-00	1,495,338	5,493	112.73	619,204	876,134	498	0.356632	975,572	111%
Nov-00	3,202,197	5,574	112.73	628,335	2,573,862	1006	0.542008	3,039,280	118%
Dec-00	3,576,312	5,641	112.73	635,887	2,940,425	1136	0.552972	3,543,542	121%
Jan-01	3,898,591	5,676	112.73	639,833	3,258,759	1003	0.633440	3,606,192	111%
Feb-01	2,944,674	5,688	112.73	641,185	2,303,489	850	0.516843	2,498,833	108%
Mar-01	2,308,745	5,675	112.73	639,720	1,669,025	653	0.499742	1,851,931	111%
Apr-01	1,514,718	5,645	112.73	636,338	878,380	521	0.331126	973,856	111%
May-01	833,355	5,607	112.73	632,055	201,300	246	0.243981	336,528	167%
Jun-01	686,585	5,517	112.73	621,909	64,676	127	0.112873	79,085	122%
Jul-01	582,552	5,470	112.73	616,611	-34,060	20	2.998184	328,001	-963%
Aug-01	680,989	5,452	112.73	614,582	66,407	13	0.871973	61,802	93%
Sep-01	590,617	5,423	112.73	611,313	-20,696	85	0.784164	361,464	-1747%
Oct-01	1,618,241	5,464	112.73	615,935	1,002,306	491	0.356632	956,781	95%
Nov-01	2,045,085	5,580	112.73	629,011	1,416,074	749	0.542008	2,265,279	160%
Dec-01	3,068,098	5,642	112.73	636,000	2,432,098	988	0.552972	3,082,430	127%
Jan-02	3,416,518	5,689	112.73	641,298	2,775,220	928	0.633440	3,344,178	121%
Feb-02	2,623,954	5,695	112.73	641,975	1,981,979	780	0.516843	2,295,868	116%
Mar-02	2,821,394	5,690	112.73	641,411	2,179,983	790	0.499742	2,246,390	103%
Apr-02	1,358,616	5,648	112.73	636,676	721,940	482	0.331126	901,436	125%
May-02	954,496	5,582	112.73	629,237	325,260	300	0.243981	408,571	126%
Jun-02	566,405	5,557	112.73	626,418	-60,013	79	0.112873	49,552	-83%
Jul-02	661,069	5,519	112.73	622,135	38,934	21	2.998184	347,487	893%
Aug-02	630,849	5,497	112.73	619,655	11,194	31	0.871973	148,590	1327%
Sep-02	902,054	5,473	112.73	616,949	285,104	166	0.784164	712,427	250%
Oct-02	1,394,392	5,517	112.73	621,909	772,483	568	0.356632	1,117,562	145%
Nov-02	2,626,806	5,648	112.73	636,676	1,990,130	808	0.542008	2,473,499	124%
Dec-02	3,105,651	5,702	112.73	642,764	2,462,887	915	0.552972	2,885,037	117%
Jan-03	3,136,706	5,740	112.73	647,047	2,489,659	870	0.633440	3,163,273	127%
Feb-03	2,706,686	5,758	112.73	649,076	2,057,610	746	0.516843	2,220,083	108%
Mar-03	1,907,923	5,747	112.73	647,836	1,260,086	591	0.499742	1,697,362	135%
Apr-03	1,337,699	5,721	112.73	644,905	692,794	474	0.331126	897,932	130%
May-03	848,201	5,675	112.73	639,720	208,481	274	0.243981	379,378	182%
Jun-03	618,579	5,645	112.73	636,338	-17,759	37	0.112873	23,575	-133%
Jul-03	676,761	5,608	112.73	632,167	44,593	8	2.998184	134,511	302%
Aug-03	574,035	5,585	112.73	629,575	-55,539	0	0.871973	0	0%
Sep-03	715,636	5,580	112.73	629,011	86,625	111	0.784164	485,695	561%
Oct-03	1,160,679	5,588	112.73	629,913	530,766	354	0.356632	705,472	133%
Nov-03	2,749,423	5,698	112.73	642,313	2,107,110	933	0.542008	2,881,441	137%
Dec-03	3,523,676	5,754	112.73	648,625	2,875,050	1085	0.552972	3,452,254	120%
Jan-04	4,577,689	5,964	112.73	672,298	3,905,391	1132	0.633440	4,276,511	110%
Feb-04	2,678,911	5,823	112.73	656,403	2,022,507	822	0.516843	2,473,872	122%
Mar-04	1,755,108	5,811	112.73	655,051	1,100,057	576	0.499742	1,672,704	152%
Apr-04	1,097,712	5,750	112.73	648,175	449,538	397	0.331126	755,878	168%
May-04	787,583	5,684	112.73	640,735	146,848	239	0.243981	331,442	226%
Jun-04	713,238	5,646	112.73	636,451	76,787	98	0.112873	62,454	81%
Jul-04	592,778	5,632	112.73	634,873	-42,095	11	2.998184	185,743	-441%
Aug-04	602,421	5,621	112.73	633,633	-31,212	14	0.871973	68,619	-220%
Sep-04	845,931	5,433	112.73	612,440	233,491	157	0.784164	668,877	286%
Oct-04	1,088,619	5,630	112.73	634,647	453,971	420	0.356632	843,292	186%
Nov-04	2,221,562	5,749	112.73	648,062	1,573,500	819	0.542008	2,552,007	162%
Dec-04	3,588,834	5,833	112.73	657,531	2,938,303	940	0.552972	3,031,057	104%