

WUTC UG-950326,		
DOCKET NO. -951415		
EXHIBIT # 31		
ADMIT <input checked="" type="checkbox"/>	W/D <input type="checkbox"/>	REJECT <input type="checkbox"/>

CASCADE NATURAL GAS CORPORATION

Docket No. UG-951415

**1995 WASHINGTON GENERAL RATE CASE**

**WUTC Request #309**

Date prepared: 3-13-96

Preparer: Lamar Maxwell Dickey

Telephone: (206) 624-3900

**RE: Cost of Service after Proposed Revenue Shifts and Increases**

**Please provide a cost of service study showing the effects on each class' rate of return after the company's proposed margin increase and margin shift.**

Response:

Enclosed are Pages 1 thru 8 containing the results of the cost of service study using the proposed margin increase and margin shift.

Cascade Natural Gas Corporation  
**SUMMARY OF OPERATIONS**  
 State of Washington

Line No.	Name	Total Company	Residential General Service 501	Residential Optional Service 503	Proposed Residential Service 503	Space Heating Rental 545	Commercial General Service 504	Compressed Natural Gas 512	Dry Out Service 502	Gas Air Conditioning Service 541
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	Rate Sched Rev	59,801,348	9,356,112	12,578,921	21,935,033	33,833	16,142,155	11,154	348,670	110,770
2	Other Oper Rev	127,270	51,113	54,635	105,748		19,267	12	1,537	206
3	B&O Tax Rev	3,970,141	627,412	731,661	1,359,073		1,321,987	98	17,791	12,294
4	Total Revenue	63,898,759	10,034,637	13,365,217	23,399,854	33,833	17,483,409	11,264	367,998	123,270
5										
6	Manf Gas Prod Exp	7,495	1,430	1,915	3,345		2,725	2	56	25
7	Dist O&M Exp	6,943,962	1,244,422	1,412,663	2,657,085	37,453	2,433,495	1,479	43,717	15,236
8	Cust Exp	6,211,271	2,315,147	2,495,721	4,810,868		981,965	1,520	70,188	10,044
9	Admin & General	11,751,921	1,729,064	2,069,911	3,798,975		3,057,848	2,207	61,254	21,973
10	Depr & Amort Exp	8,363,662	1,342,933	1,598,050	2,940,983		2,618,480	1,605	48,554	18,482
11	Taxes Oth Than Inc	9,798,646	1,577,956	1,934,211	3,512,166		3,084,618	1,239	52,774	24,738
12	Total Exp less Income Tax	43,076,957	8,210,952	9,512,471	17,723,423	37,453	12,179,131	8,053	276,543	90,499
13	Total Income Taxes	5,007,370	301,494	959,383	1,260,877	2,662	1,189,389	715	19,945	6,752
14	Return	15,814,432	1,522,190	2,893,363	4,415,553	(6,283)	4,114,890	2,497	71,510	26,020
15	Rate Base	162,049,719	23,963,996	28,629,094	52,593,090	(270,040)	48,382,602	29,662	872,545	339,634
16	Rate of Return	9.759%	6.352%	10.106%	8.396%	2.327%	8.505%	8.416%	8.196%	7.661%
17	Relative Rate of Return	100.00%	65.09%	103.56%	86.03%	23.84%	87.15%	86.24%	83.98%	78.50%

Cascade Natural Gas Corporation  
**SUMMARY OF OPERATIONS**  
 State of Washington

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Line No.	Name	Large Volume Service 511	Industrial General Service 505	Interrupt General Service 570	Interrupt Institution Service 577	Total Core Market	Distribution System Trans Service 663	Interr Elec General Gas Service 678	Special Contract Service 901	Optional Gas Supply Service 681-690
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	Rate Sched Rev	3,485,512	1,087,261	868,133	272,396	44,294,916	6,824,500	1,494,179	7,187,753	
2	Other Oper Rev	162	228	25	10	127,195	75			
3	B&O Tax Rev	380,750	145,806	66,621	17,951	3,322,371	555,432		92,338	
4	Total Revenue	3,866,424	1,233,295	934,779	290,358	47,744,482	7,380,007	1,494,179	7,280,091	
5										
6	Manf Gas Prod Exp	1,052	290			7,495				
7	Dist O&M Exp	429,566	131,151	119,811	35,164	5,904,158	917,580	10,314	111,910	
8	Cust Exp	64,929	24,874	20,587	6,074	5,991,049	207,434	8,820	3,968	
9	Admin & General	734,194	223,297	211,775	62,457	8,173,981	3,548,805	29,135		
10	Depr & Amort Exp	584,114	177,131	159,035	43,312	6,591,697	617,965	188,038	965,962	
11	Taxes Oth Than Inc	767,620	267,467	167,860	46,967	7,925,450	1,095,486	67,489	710,221	
12	Total Exp less Income Tax	2,581,475	824,210	679,067	193,976	34,593,830	6,387,270	303,796	1,792,061	
13	Total Income Taxes	308,281	98,232	49,839	23,152	2,959,843	247,781	441,743	1,358,003	
14	Return	976,668	310,853	205,873	73,230	10,190,810	744,955	748,640	4,130,027	
15	Rate Base	10,345,603	3,287,827	2,844,146	774,052	119,199,122	7,337,492	3,533,616	31,979,489	
16	Rate of Return	9.440%	9.455%	7.238%	9.461%	8.549%	10.153%	21.186%	12.915%	
17	Relative Rate of Return	96.74%	96.88%	74.17%	96.94%	87.61%	104.03%	217.09%	132.34%	

Cascade Natural Gas Corporation  
**RATE BASE REPORT**  
State of Washington

Line No.	Name	Description	Total Company	Residential General Service 501	Residential Optional Service 503	Proposed Residential Service 503	Space Heating Rental 545	Commercial General Service 504	Compressed Natural Gas 512	Dry Out Service 502	Gas Air Conditioning Service 541
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1		INTANGIBLE PLANT									
2	301	Organization	119,959	21,741	26,120	47,861		42,576	26	791	307
3	302	Franch & Consents	50,394	9,133	10,973	20,106		17,886	11	332	129
4	304	Land & Land Rights	45,276	8,638	11,570	20,208		16,459	10	336	154
5	305	Struct & Imprv (788)	(788)	(150)	(201)	(352)		(287)	(0)	(6)	(3)
6		PRODUCTION PLANT									
7	311	LP Gas Equip	(2,687)	(513)	(687)	(1,199)		(977)	(1)	(20)	(9)
8	320	Other Equip	1,828	349	467	816		664	0	14	6
9		TRANSMISSION PLANT									
10	365	Land & Land Rights	586,700	49,831	66,800	116,631		95,041	60	1,939	888
11	367	Mains	4,000,202	199,477	267,402	466,879		380,453	239	7,761	3,556
12	369	M&R Sta Equip	15,971	2,553	3,422	5,974		4,868	3	99	46
13	370	Commun Equip	(182)	(33)	(44)	(77)		(63)	(0)	(1)	(1)
14		DISTRIBUTION PLANT									
15	374	Land & Land Rights	2,085,497	151,499	181,309	332,808		296,945	182	5,501	2,120
16	375	Struct & Imprv	568,615	115,580	138,323	253,903		226,543	139	4,197	1,618
17	376	Mains	94,565,140	10,907,605	14,621,826	25,529,431		20,803,581	13,069	424,374	194,473
18	378	M&R Sta Equip - Gen	2,582,738	205,290	275,195	480,485		391,541	246	7,987	3,660
19	380	Serv	43,095,297	9,158,406	9,789,513	18,947,919		21,024,664	12,643	317,730	107,568
20	381	Meter	7,333,109	1,561,458	1,669,059	3,230,517		3,584,591	2,156	54,171	18,340
21	382	Meter Inst	4,576,109	924,932	988,669	1,913,601		2,123,337	1,277	32,088	10,864
22	383	House Reg	2,228,030	895,321	957,018	1,852,339		337,498	203	26,928	3,607
23	384	House Reg Inst	(6,905)	(2,775)	(2,966)	(5,740)		(1,046)	(1)	(83)	(11)
24	385	Ind M&R Sta Equip	2,212,260								
25	386	Other Prop	487,508	304,416	325,394	629,810	(270,040)	114,752	69	9,156	1,226
26		GENERAL PLANT									
27	389	Land & Land Rights	1,728,711	313,305	376,417	689,723		613,555	377	11,402	4,424
28	390	Struct & Imprv	2,670,607	484,011	581,510	1,065,521		947,854	582	17,615	6,834
29	391	Office Furn & Equip	662,715	120,108	144,303	264,411		235,211	144	4,371	1,696
30	392	Trans Equip	826,332	149,761	179,929	329,691		293,282	180	5,450	2,115
31	393	Stores Equip	(6,286)	(1,139)	(1,369)	(2,508)		(2,231)	(1)	(41)	(16)
32	394	Tools Shop & Gar Eq	973,307	176,399	211,932	388,331		345,447	212	6,420	2,491
33	395	Lab Equip	65,992	11,960	14,369	26,329		23,422	14	435	169
34	396	Power Oper Equip	(98,157)	(17,790)	(21,373)	(39,163)		(34,838)	(21)	(647)	(251)
35	397	Commun Equip	522,266	52,222	62,741	114,963		102,267	63	1,901	737
36	398	Misc Equip	28,299	5,129	6,162	11,291		10,044	6	187	72
37		RATE BASE OTHER									
38	252	Cust Adv for Const	(850,576)	(158,113)	(189,963)	(348,076)		(309,637)	(190)	(5,754)	(2,232)
39	253	Contrib in Aid of Cons	(60,589)	(11,263)	(13,532)	(24,794)		(22,056)	(14)	(410)	(159)
40	282-3&186	Defer Income Taxes	(13,457,363)	(2,501,578)	(3,005,494)	(5,507,072)		(4,898,917)	(3,008)	(91,040)	(35,321)
41	154	Working Capital	3,366,567	617,547	701,182	1,318,729		1,207,592	734	21,698	7,565
42	ADJRB	Res & Prof Rate Base Adj	1,115,137	207,292	249,049	456,340		405,946	249	7,544	2,927
43	WK03	Other Accum Deprec	18,686	3,387	4,069	7,455		6,632	4	123	48
44											
45	RB	Rate Base	162,049,719	23,963,996	28,629,094	52,593,090	(270,040)	48,382,602	29,662	872,545	339,634

Cascade Natural Gas Corporation											
RATE BASE REPORT											
State of Washington											
Line No.	Name	Description	Large Volume Service 511	Industrial General Service 505	Interruptible General Service 570	Interruptible Institutional Service 577	Total Core Market	Distribution System Trans Service 663	Interr Elec General Gas Service 678	Special Contract Service 901	Optional Gas Supply Service 681-690
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1		INTANGIBLE PLANT									
2	301	Organization	9,498	2,997	2,587	695	107,340	9,617	3,003		
3	302	Franch & Consents	3,990	1,259	1,087	292	45,093	4,040	1,261		
4	304	Land & Land Rights	6,355	1,753			45,276				
5	305	Struct & Imprv	(111)	(31)			(788)				
6		PRODUCTION PLANT									
7	311	LP Gas Equip	(377)	(104)			(2,687)				
8	320	Other Equip	257	71			1,828				
9		TRANSMISSION PLANT									
10	365	Land & Land Rights	36,749	10,145	9,990	2,431	273,873	114,964	195,301	2,562	
11	367	Mains	147,110	40,611	39,989	9,730	1,096,329	218,128	2,615,111	70,634	
12	369	M&R Sta Equip	1,882	520	512	125	14,029			1,942	
13	370	Commun Equip	(24)	(7)	(7)	(2)	(182)				
14		DISTRIBUTION PLANT									
15	374	Land & Land Rights	64,659	20,553	17,757	4,795	745,321	6,315		1,333,861	
16	375	Struct & Imprv	49,329	15,680	13,547	3,658	568,615				
17	376	Mains	8,044,111	2,220,667	2,186,617	532,042	59,948,364	5,862,634	296,420	28,457,721	
18	378	M&R Sta Equip - Gen	151,397	41,795	41,154	10,013	1,128,278	483,896	105,466	865,097	
19	380	Serv	1,278,587	803,962	367,472	150,264	43,010,808	84,489			
20	381	Meter	217,992	137,071	62,652	25,619	7,333,109				
21	382	Meter Inst	129,128	81,194	37,112	15,176	4,343,776	229,058		3,276	
22	383	House Reg	2,837	3,992	446	182	2,228,030				
23	384	House Reg Inst	(9)	(12)	(1)	(1)	(6,905)				
24	385	Ind M&R Sta Equip	497,371		142,460	38,840	678,671	296,417	150,415	1,086,757	
25	386	Other Prop	964	1,357	152	62	487,508				
26		GENERAL PLANT									
27	389	Land & Land Rights	136,879	43,196	37,276	10,020	1,546,851	138,590	43,270		
28	390	Struct & Imprv	211,458	66,731	57,587	15,479	2,389,660	214,102	66,845		
29	391	Office Furn & Equip	52,474	16,559	14,290	3,841	592,998	53,130	16,588		
30	392	Trans Equip	65,429	20,648	17,818	4,790	739,402	66,247	20,683		
31	393	Stores Equip	(498)	(157)	(136)	(36)	(5,624)	(504)	(157)		
32	394	Tools Shop & Gar Eq	77,066	24,320	20,988	5,641	870,915	78,030	24,362		
33	395	Lab Equip	5,225	1,649	1,423	382	59,050	5,291	1,652		
34	396	Power Oper Equip	(7,772)	(2,453)	(2,117)	(569)	(87,831)	(7,869)	(2,457)		
35	397	Commun Equip	22,815	7,200	6,213	1,670	257,829	112,122	(5,323)	157,639	
36	398	Misc Equip	2,241	707	610	164	25,322	2,269	708		
37		RATE BASE OTHER									
38	252	Cust Adv for Const	(69,077)	(21,799)	(18,812)	(5,057)	(780,635)	(69,941)			
39	253	Contrib in Aid of Cons	(4,921)	(1,553)	(1,340)	(360)	(55,607)	(4,982)			
40	282-3&186	Defer Income Taxes	(1,092,904)	(344,895)	(297,632)	(80,003)	(12,350,792)	(1,106,571)			
41	154	Working Capital	213,450	65,153	59,388	17,430	2,911,738	454,829			
42	ADJRB	Res & Prof Rate Base Adj	90,563	28,580	24,663	6,629	1,023,442	91,695			
43	WK03	Other Accum Deprec	1,480	467	403	108	16,720	1,498	468		
44											
45	RB	Rate Base	10,345,603	3,287,827	2,844,146	774,052	119,199,122	7,337,492	3,533,616	31,979,489	









