

Exhibit No. __ (RJA-3)
Docket No. UG-17____
Witness: Ronald J. Amen

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,
Complainant,

v.

CASCADE NATURAL GAS
CORPORATION,
Respondent.

DOCKET UG-17_____

CASCADE NATURAL GAS CORPORATION

EXHIBIT OF RONALD J. AMEN

**FUNCTIONALIZED AND CLASSIFIED RATE BASE AND REVENUE
REQUIREMENT, AND UNIT COSTS BY CUSTOMER CLASS**

August 31, 2017

Cascade Natural Gas - Washington
Proposed Test Year Without Gas
Functional Rate Base

Line No.	Description	Total Company	Res 502, 503	GSC 504, 512	GSI 505	GSLV 511	Interruptible 570, 577	Transport 663	Spl Contracts 9xx
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Supply									
1	Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	Sub-total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transmission									
5	Demand	\$ 3,655,874	\$ 944,950	\$ 615,672	\$ 76,364	\$ 52,929	\$ 13,986	\$ 1,004,179	\$ 947,793
6	Commodity	\$ 4,105,831	\$ 500,388	\$ 338,663	\$ 47,536	\$ 46,242	\$ 16,024	\$ 1,826,052	\$ 1,330,925
7	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Sub-total	\$ 7,761,705	\$ 1,445,338	\$ 954,335	\$ 123,900	\$ 99,172	\$ 30,010	\$ 2,830,232	\$ 2,278,719
Distribution									
9	Demand	\$ 99,765,676	\$ 40,745,173	\$ 26,536,034	\$ 3,238,054	\$ 2,287,178	\$ 272,744	\$ 18,765,942	\$ 7,920,550
10	Commodity	\$ 105,018,715	\$ 29,246,074	\$ 19,784,950	\$ 2,725,025	\$ 2,710,832	\$ 402,863	\$ 40,117,752	\$ 10,031,218
11	Customer	\$ 88,314,629	\$ 67,514,472	\$ 16,709,819	\$ 931,920	\$ 367,972	\$ 99,589	\$ 1,458,515	\$ 1,232,342
12	Sub-total	\$ 293,099,021	\$ 137,505,719	\$ 63,030,804	\$ 6,895,000	\$ 5,365,983	\$ 775,196	\$ 60,342,209	\$ 19,184,111
TOTAL									
13	Demand	\$ 103,421,550	\$ 41,690,123	\$ 27,151,706	\$ 3,314,419	\$ 2,340,107	\$ 286,730	\$ 19,770,122	\$ 8,868,344
14	Commodity	\$ 109,124,546	\$ 29,746,462	\$ 20,123,613	\$ 2,772,561	\$ 2,757,075	\$ 418,888	\$ 41,943,804	\$ 11,362,143
15	Customer	\$ 88,314,629	\$ 67,514,472	\$ 16,709,819	\$ 931,920	\$ 367,972	\$ 99,589	\$ 1,458,515	\$ 1,232,342
16	TOTAL RATE BASE	\$ 300,860,726	\$ 138,951,057	\$ 63,985,139	\$ 7,018,900	\$ 5,465,154	\$ 805,206	\$ 63,172,440	\$ 21,462,829

**Cascade Natural Gas - Washington
Proposed Test Year Without Gas
Functional Revenue Requirement**

Line No.	Description	Total Company	Res 502, 503	GSC 504, 512	GSI 505	GSLV 511	Interruptible 570, 577	Transport 663	Spl Contracts 9xx
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Supply									
1	Demand	\$ 111,571	\$ 39,574	\$ 28,029	\$ 4,008	\$ 3,819	\$ 1,425	\$ 19,229	\$ 15,488
2	Commodity	\$ 108,164,917	\$ 57,286,400	\$ 38,567,277	\$ 5,268,222	\$ 5,124,841	\$ 1,727,601	\$ 122,358	\$ 68,218
3	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	Sub-total	\$ 108,276,488	\$ 57,325,974	\$ 38,595,306	\$ 5,272,229	\$ 5,128,661	\$ 1,729,026	\$ 141,587	\$ 83,706
Transmission									
5	Demand	\$ 579,700	\$ 171,506	\$ 106,725	\$ 12,189	\$ 8,988	\$ 2,438	\$ 151,223	\$ 126,630
6	Commodity	\$ 1,035,335	\$ 189,795	\$ 117,277	\$ 13,832	\$ 13,334	\$ 4,432	\$ 417,111	\$ 279,555
7	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Sub-total	\$ 1,615,035	\$ 361,301	\$ 224,002	\$ 26,021	\$ 22,323	\$ 6,869	\$ 568,333	\$ 406,185
Distribution									
9	Demand	\$ 23,813,170	\$ 10,101,315	\$ 6,402,907	\$ 704,520	\$ 510,924	\$ 75,731	\$ 4,414,188	\$ 1,603,585
10	Commodity	\$ 25,929,188	\$ 8,383,225	\$ 5,419,596	\$ 640,472	\$ 619,660	\$ 117,459	\$ 8,838,961	\$ 1,909,815
11	Customer	\$ 63,443,006	\$ 46,481,402	\$ 11,844,719	\$ 688,354	\$ 412,745	\$ 132,169	\$ 3,236,936	\$ 646,680
12	Sub-total	\$ 113,185,363	\$ 64,965,942	\$ 23,667,221	\$ 2,033,346	\$ 1,543,329	\$ 325,358	\$ 16,490,086	\$ 4,160,080
TOTAL									
13	Demand	\$ 24,504,440	\$ 10,312,395	\$ 6,537,661	\$ 720,717	\$ 523,732	\$ 79,593	\$ 4,584,639	\$ 1,745,703
14	Commodity	\$ 135,129,440	\$ 65,859,419	\$ 44,104,150	\$ 5,922,526	\$ 5,757,836	\$ 1,849,492	\$ 9,378,430	\$ 2,257,587
15	Customer	\$ 63,443,006	\$ 46,481,402	\$ 11,844,719	\$ 688,354	\$ 412,745	\$ 132,169	\$ 3,236,936	\$ 646,680
16	TOTAL REVENUE REQUIREMENT	\$ 223,076,886	\$ 122,653,217	\$ 62,486,530	\$ 7,331,597	\$ 6,694,313	\$ 2,061,254	\$ 17,200,005	\$ 4,649,970

**Cascade Natural Gas - Washington
Proposed Test Year Without Gas**

Unit Costs

Line No.	Description	Total Company	Res 502, 503	GSC 504, 512	GSI 505	GSLV 511	Interruptible 570, 577	Transport 663	Spl Contracts 9xx
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Supply									
1	Demand (per Peak Day therm per month) \$	0.0018	\$ 0.0023	\$ 0.0026	\$ 0.0029	\$ 0.0040	\$ 0.0057	\$ 0.0011	\$ 0.0011
2	Commodity (per therm) \$	0.1135	\$ 0.4766	\$ 0.4741	\$ 0.4614	\$ 0.4614	\$ 0.4489	\$ 0.0003	\$ 0.0002
3	Customer (per customer per month) \$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	Demand and Commodity (per therm) \$	0.1136	\$ 0.4770	\$ 0.4745	\$ 0.4618	\$ 0.4617	\$ 0.4492	\$ 0.0003	\$ 0.0003
Transmission									
5	Demand (per Peak Day therm per month) \$	0.0092	\$ 0.0102	\$ 0.0097	\$ 0.0089	\$ 0.0095	\$ 0.0098	\$ 0.0084	\$ 0.0088
6	Commodity (per therm) \$	0.0011	\$ 0.001579	\$ 0.0014	\$ 0.0012	\$ 0.0012	\$ 0.0012	\$ 0.0010	\$ 0.0010
7	Customer (per customer per month) \$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Demand and Commodity (per therm) \$	0.0017	\$ 0.0030	\$ 0.0028	\$ 0.0023	\$ 0.0020	\$ 0.0018	\$ 0.0013	\$ 0.0014
Distribution									
9	Demand (per Peak Day therm per month) \$	0.3794	\$ 0.5990	\$ 0.5828	\$ 0.5170	\$ 0.5409	\$ 0.3034	\$ 0.2463	\$ 0.1110
10	Commodity (per therm) \$	0.0272	\$ 0.0698	\$ 0.0666	\$ 0.0561	\$ 0.0558	\$ 0.0305	\$ 0.0202	\$ 0.0067
11	Customer (per customer per month) \$	25.43	\$ 21.32	\$ 38.77	\$ 127.28	\$ 396.11	\$ 1,101.41	\$ 1,406.14	\$ 4,825.97
12	Demand and Commodity (per therm) \$	0.0522	\$ 0.1538	\$ 0.1453	\$ 0.1178	\$ 0.1018	\$ 0.0502	\$ 0.0302	\$ 0.0123
TOTAL									
13	Demand (per Peak Day therm per month) \$	0.3904	\$ 0.6116	\$ 0.5951	\$ 0.5289	\$ 0.5545	\$ 0.3189	\$ 0.2559	\$ 0.1208
14	Commodity (per therm) \$	0.1418	\$ 0.5480	\$ 0.5422	\$ 0.5187	\$ 0.5184	\$ 0.4805	\$ 0.0214	\$ 0.0079
15	Customer (per customer per month) \$	25.43	\$ 21.32	\$ 38.77	\$ 127.28	\$ 396.11	\$ 1,101.41	\$ 1,406.14	\$ 4,825.97
16	Demand and Commodity (per therm) \$	0.1675	\$ 0.6338	\$ 0.6226	\$ 0.5818	\$ 0.5655	\$ 0.5012	\$ 0.0318	\$ 0.0140
17	PDAY-MONTHS	62,772,414	16,862,303	10,986,457	1,362,697	944,504	249,572	17,919,240	14,447,640
18	THRUPUT	953,112,274	120,189,407	81,344,242	11,417,671	11,107,096	3,848,935	438,603,935	286,600,988
19	CUST-MONTHS	2,494,421	2,179,888	305,527	5,408	1,042	120	2,302	134