

Exhibit No. __ (RJA-7)
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

DETERMINATION OF GAS RESOURCE DEMAND COSTS BY CUSTOMER CLASS

July 31, 2017

Cascade Natural Gas Corporation (WA Jurisdiction)
Gas Resource Demand Cost Allocation
Test Year Ended Dec 31, 2016

	A	B	C	D	E	F	G	H	I	J
	Description	Units	Total	Res 502, 503	GSC 504	GSI 505, 512	GSLV 511	Interruptible 570, 577	Transport 663	Spl Contracts
1										
2	Annual Throughput	(Therms)	932,694,745	106,836,539	75,664,947	10,823,803	10,315,598	3,848,935	438,603,935	286,600,988
3	Percent			11.45%	8.11%	1.16%	1.11%	0.41%	47.03%	30.73%
4										
5	Annual Sales	(Therms)	207,489,822	106,836,539	75,664,947	10,823,803	10,315,598	3,848,935		
6	Percent			51.49%	36.47%	5.22%	4.97%	1.85%	0.00%	0.00%
7										
8	Winter Throughput	(Therms)	452,648,204	75,273,389	50,217,479	6,139,893	6,186,860	2,086,018	192,208,744	120,535,821
9	Percent			16.63%	11.09%	1.36%	1.37%	0.46%	42.46%	26.63%
10										
11	Winter Sales	(Therms)	139,903,639	75,273,389	50,217,479	6,139,893	6,186,860	2,086,018		
12	Percent			53.80%	35.89%	4.39%	4.42%	1.49%	0.00%	0.00%
13										
14	Design Day	(Therms)	2,512,997	1,405,192	915,538	113,558	78,709			
15	Percent			55.92%	36.43%	4.52%	3.13%	0.00%	0.00%	0.00%

16 **Cost Allocations**

Description	Indication	Total	Annual Sales	Winter Sales	Design Peak	Sys.Balanc'g
18 Williams Northwest Pipeline plus Gas Transmission Northwest	TF-1 + GTN	100.0%	10.8%	24.2%	65.1%	0.0%
19 Jackson Prairie Storage plus Williams Northwest Pipeline TF-2	JP + TF-2	100.0%		11.4%	68.6%	20.0%
20 Plymouth LNG plus TF-2	LS + TF-2	100.0%			100%	0.0%
21		0.0%				
22		0.0%				

23 **Illustrative Costs**

Description	Indication	Total	Annual Sales	Winter Sales	Design Peak	Sys.Balanc'g
25 Williams Northwest Pipeline plus Gas Transmission Northwest	TF-1 + GTN	\$ 45,549,957	\$ 4,912,343	\$ 11,003,769	\$ 29,633,845	\$ -
26 Jackson Prairie Storage plus Williams Northwest Pipeline TF-2	JP + TF-2	\$ 1,785,872	\$ -	\$ 204,474	\$ 1,224,224	\$ 357,174
27 Plymouth LNG plus TF-2	LS + TF-2	\$ 1,906,246	\$ -	\$ -	\$ 1,906,246	\$ -
28						
29						
30 Total		\$ 49,242,075	\$ 4,912,343	\$ 11,208,243	\$ 32,764,315	\$ 357,174

Description	Total	Res 502, 503	GSC 504	GSI 505, 512	GSLV 511	Interruptible 570, 577	Transport 663	Spl Contracts
33 Annual Sales	\$ 4,912,343	\$ 2,529,366	\$ 1,791,376	\$ 256,255	\$ 244,223	\$ 91,124	\$ -	\$ -
34 Winter Sales	\$ 11,208,243	\$ 6,030,454	\$ 4,023,124	\$ 491,892	\$ 495,654	\$ 167,119	\$ -	\$ -
35 Design Peak	\$ 32,764,315	\$ 18,320,816	\$ 11,936,736	\$ 1,480,565	\$ 1,026,199	\$ -	\$ -	\$ -
36 Sys.Balanc'g	\$ 357,174	\$ 40,913	\$ 28,976	\$ 4,145	\$ 3,950	\$ 1,474	\$ 167,963	\$ 109,754
37								
38 Total	\$ 49,242,075	\$ 26,921,548	\$ 17,780,211	\$ 2,232,856	\$ 1,770,026	\$ 259,717	\$ 167,963	\$ 109,754

39 Projected Sales	953,112,274	120,189,407	81,344,242	11,417,671	11,107,096	3,848,935	438,603,935	286,600,988
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40 **Illustrative Demand Component**

41 PGA Demand Component	\$ 0.2237	\$ 0.2182	\$ 0.1952	\$ 0.1590	\$ 0.0671			
42 PGA System Balancing Component	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004
43 Total	\$ 0.2240	\$ 0.2186	\$ 0.1956	\$ 0.1594	\$ 0.0675	\$ 0.0004	\$ 0.0004	\$ 0.0004

Cascade Natural Gas Corporation (WA Jurisdiction)
Gas Resource Demand Cost Allocation
Test Year Ended Dec 31, 2016

Capacity Utilization (Dth / day)

A	B	C	D	E	F	G	H	I	J	
	Williams Northwest Pipeline plus Gas Transmission Northwest				Jackson Prairie Storage plus Williams Northwest Pipeline TF-2				Plymouth LNG plus TF-2	Other
Description	Annual Sales	Winter Sales	Design Peak	Total	Sys.Balan c'g	Winter Sales	Design Peak	Total	Design Peak	Winter Sales
Based on Summer Sales Load	29,975			29,975				-		
Based on Summer JP 1and 2 Injection Load		4,100		4,100				-		
Based on Summer JP 3 Injection Load		1,314		1,314				-		
Based on Summer LS Injection Load		2,845		2,845				-		
Based on Winter Sales Only		58,886		58,886		1,371		1,371		
Based on Design Peak Day			180,827	180,827			8,206	8,206	68,722	
Total	29,975	67,145	180,827	277,948	N/A	1,371	8,206	9,577	68,722	
Percent	10.8%	24.2%	65.1%	100.0%	20.0%	11.4%	68.6%	100.0%	100.0%	100.0%

