

PROGRAM YEAR		CASCADE NATURAL GAS CORPORATION																					
BY		FURNISHING PROGRAM TO THE FOLLOWING: (List of names and addresses)																					
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CASCADE NATURAL GAS CORPORATION

2016 INTEGRATED RESOURCE PLAN

BASECASE - MEDIUM FORECAST - AVERAGE WEATHER

45 YEAR RESOURCE SUMMARY COSTS - MELED COST PER THERM

	YEAR	IRP ANNUAL PORTFOLIO COST PER THERM (PV)*	NOMINAL COST PER THERM	PV OF RESOURCE PORTFOLIO COST/THERM	NON ENERGY BENEFIT	PORTFOLIO COSTS WITH CONSERVATION CREDIT	COST-EFFECTIVENESS LIMIT
2017	1	\$0.50	\$0.53	\$0.53	5%	\$0.5524	\$0.58
2018	2	\$0.48	\$0.53	\$1.05	5%	\$1.1038	\$0.59
2019	3	\$0.46	\$0.52	\$1.58	5%	\$1.6548	\$0.6
2020	4	\$0.44	\$0.52	\$2.10	5%	\$2.2029	\$0.61
2021	5	\$0.43	\$0.54	\$2.63	7.5%	\$2.8317	\$0.64
2022	6	\$0.43	\$0.56	\$3.20	7.5%	\$3.4349	\$0.66
2023	7	\$0.41	\$0.56	\$3.75	7.5%	\$4.0334	\$0.68
2024	8	\$0.41	\$0.58	\$4.33	7.5%	\$4.6584	\$0.7
2025	9	\$0.40	\$0.59	\$4.92	7.5%	\$5.2915	\$0.72
2026	10	\$0.39	\$0.60	\$5.52	10.0%	\$6.0701	\$0.75
2027	11	\$0.38	\$0.61	\$6.13	10%	\$6.7453	\$0.78
2028	12	\$0.38	\$0.64	\$6.77	10%	\$7.4511	\$0.8
2029	13	\$0.37	\$0.65	\$7.42	10%	\$8.1642	\$0.83
2030	14	\$0.37	\$0.68	\$8.10	10%	\$8.9121	\$0.85
2031	15	\$0.37	\$0.71	\$8.81	12.5%	\$9.9081	\$0.9
2032	16	\$0.36	\$0.71	\$9.52	12.5%	\$10.7078	\$0.93
2033	17	\$0.36	\$0.75	\$10.27	12.5%	\$11.5494	\$0.96
2034	18	\$0.35	\$0.76	\$11.02	12.5%	\$12.3993	\$0.99
2035	19	\$0.34	\$0.77	\$11.79	12.5%	\$13.2671	\$1.02
2036	20	\$0.33	\$0.79	\$12.59	12.5%	\$14.1596	\$1.06
2037	21	\$0.32	\$0.80	\$13.39	15%	\$15.3957	\$1.11
2038	22	\$0.31	\$0.81	\$14.20	15%	\$16.3263	\$1.15
2039	23	\$0.30	\$0.82	\$15.01	15%	\$17.2662	\$1.18
2040	24	\$0.29	\$0.83	\$15.84	15%	\$18.2156	\$1.22
2041	25	\$0.28	\$0.83	\$16.67	15%	\$19.1744	\$1.25
2042	26	\$0.27	\$0.84	\$17.52	17.5%	\$20.5807	\$1.31
2043	27	\$0.26	\$0.85	\$18.37	17.5%	\$21.5801	\$1.35
2044	28	\$0.26	\$0.86	\$19.23	17.5%	\$22.5894	\$1.38
2045	29	\$0.25	\$0.87	\$20.09	17.5%	\$23.6089	\$1.42
2046	30	\$0.24	\$0.88	\$20.97	17.5%	\$24.6385	\$1.45
2047	31	\$0.23	\$0.89	\$21.85	20%	\$26.2248	\$1.52
2048	32	\$0.22	\$0.89	\$22.75	20%	\$27.2975	\$1.56
2049	33	\$0.22	\$0.90	\$23.65	20%	\$28.3809	\$1.6
2050	34	\$0.21	\$0.91	\$24.56	20%	\$29.4752	\$1.64
2051	35	\$0.20	\$0.92	\$25.48	20%	\$30.5804	\$1.68
2052	36	\$0.20	\$0.93	\$26.41	20%	\$31.6966	\$1.72
2053	37	\$0.19	\$0.94	\$27.35	20%	\$32.8241	\$1.76
2054	38	\$0.18	\$0.95	\$28.30	20%	\$33.9627	\$1.8
2055	39	\$0.18	\$0.96	\$29.26	20%	\$35.1128	\$1.84
2056	40	\$0.17	\$0.97	\$30.23	20%	\$36.2744	\$1.88
2057	41	\$0.17	\$0.98	\$31.21	20%	\$37.4476	\$1.92
2058	42	\$0.16	\$0.99	\$32.19	20%	\$38.6325	\$1.96

2059	43	\$0.15	\$1.00	\$33.19	20%	\$39.8293	\$2.01
2060	44	\$0.15	\$1.01	\$34.20	20%	\$41.0380	\$2.05
2061	45	\$0.14	\$1.02	\$35.22	20%	\$42.2588	\$2.1

	Cascade's Long Term Real Discount Rate:	4.43%	
	IRP Discount Rate :	4.43%	
	Years 21-45 Escalation:	2.00%	(EIA Inflation Rate)