

CASCADE NATURAL GAS CORPORATION
Program Participant Cost Effectiveness Estimate Summary

PROGRAM	MEASURE/ PARTICIPANTS	TOTAL ANNUAL THERM SAVINGS	TOTAL INSTALLED COSTS	NON-ENERGY BENEFITS (10% of cost)	WEIGHTED MEASURE LIFE	DISCOUNTED THERM SAVINGS	PROGRAM DELIVERY & ADMIN	TOTAL PROGRAM REBATE	PROGRAM UTILITY COST	UC W/DELIVERY & ADMIN	BENEFIT COST RATIO		PROGRAM TOTAL RESOURCE COST	TRC W/DELIVERY & ADMIN	BENEFIT COST RATIO
RESIDENTIAL	2,854	219,596	\$ 2,021,757	\$ 202,176	32.60	3,704,041	\$ 790,451	\$ 781,929	0.211	\$ 0.425	1.708		\$ 0.491	\$ 0.705	1.029
COMMERCIAL*	212,355	467,657	\$ 2,161,494	\$ 216,149	17.60	5,622,610	\$ 751,214	\$ 862,058	0.153	\$ 0.287	2.441		\$ 0.346	\$ 0.480	1.460
LOW INCOME*	259	24,130	\$ 378,067	\$ 37,807	27.55	356,075	\$ 55,189	\$ 248,844	0.699	\$ 0.854	0.883		\$ 0.956	\$ 1.111	0.679
TOTAL	215,468	711,383	\$ 4,561,318	\$ 456,132	22.57	9,682,726	\$ 1,596,854	\$ 1,892,831	\$ 0.195	\$ 0.360	2.016		\$ 0.424	\$ 0.589	1.234

*Low Income and Commercial Program figures are on a "By Measure" basis. See the Low Income Program cost effectiveness calculation sheet for more details.
Commercial also includes units of insulation.

**CASCADE NATURAL GAS CORPORATION
INTEGRATED RESOURCE PLAN
BASECASE - MEDIUM FORECAST - AVERAGE WEATHER
45 YEAR RESOURCE SUMMARY COSTS - MELDED COST PER THERM**

YEAR	IRP ANNUAL PORTFOLIO COST PER THERM (PV)*	NOMINAL COST PER THERM	RESOURCE PORTFOLIO COST - % CHANGE	PV OF RESOURCE PORTFOLIO COST/THERM	PORTFOLIO COSTS WITH 10% CONSERVATION CREDIT	COST- EFFECTIVENESS LIMIT
2011	1				\$ 0.61	
2012	2				\$ 1.22	
2013	3				\$ 1.82	
2014	4				\$ 2.43	
2015	5				\$ 3.11	
2016	6				\$ 3.68	
2017	7				\$ 4.22	\$0.7072
2018	8				\$ 4.73	
2019	9				\$ 5.21	
2020	10				\$ 5.78	\$0.7190
2021	11				\$ 6.20	
2022	12				\$ 6.60	
2023	13				\$ 6.99	
2024	14				\$ 7.34	
2025	15				\$ 7.83	
2026	16				\$ 8.13	
2027	17				\$ 8.42	
2028	18				\$ 8.70	
2029	19				\$ 8.96	
2030	20				\$ 9.21	\$0.6877
2031	21				\$ 9.65	
2032	22				\$ 9.89	
2033	23				\$ 10.11	
2034	24				\$ 10.32	
2035	25				\$ 10.52	
2036	26				\$ 10.95	
2037	27				\$ 11.14	
2038	28				\$ 11.32	
2039	29				\$ 11.49	
2040	30				\$ 11.66	\$0.6884
2041	31				\$ 12.07	
2042	32				\$ 12.23	
2043	33				\$ 12.38	
2044	34				\$ 12.52	
2045	35				\$ 12.65	
2046	36				\$ 12.78	
2047	37				\$ 12.91	
2048	38				\$ 13.03	
2049	39				\$ 13.14	
2050	40				\$ 13.25	
2051	41				\$ 13.36	
2052	42				\$ 13.46	
2053	43				\$ 13.55	
2054	44				\$ 13.64	
2055	45				\$ 13.73	

Cascade's Long Term Real Discount Rate: 4.170%
 IRP Discount Rate = 7.631%
 Revised Discount Rate= 7.631%
 Years 21-45 Escalation = 2.60% (EIA Inflation Rate)

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