# Schedule 1 of 3

# CASCADE NATURAL GAS CORPORATION BENCH REQUEST #5 ATTACHMENT

	<u>2008</u>	<u> 2009</u>	<u> 2010</u>
Residential Programs	210,578	245,850	273,948
Commercial/Industrial Programs	157,095	227,380	329,996
Combined Utility Programs	367,673	473,230	603,944
Bestcase	370,000	475,000	605,000
Conservative	277,500	355,000	455,000

Conservative scenario is 75% of best case

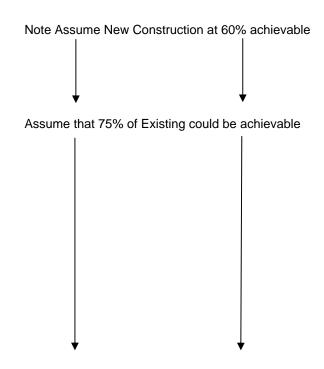
#### CASCADE NATURAL GAS CORPORATION BENCH REQUEST #5 **ATTACHMENT**

#### RESIDENTIAL TARGET DEVELOPMENT

Technical Achievable Potential by Potential by 2025 2025

Table 14 Stellar Summary

Table 14	Stellar Summary		2025	2025
			Gas	
Measure			Savings	Gas Savings
Code	Measure Description	Program	Therms	Therms
N-H101	E* Insulation, Ducts, Zone 1	NewPkg	1,765,328	1,059,197
N-H102	E* Insulation, Ducts, Zone 2	NewPkg	3,830,256	2,298,154
N-H103	E* Insulation, Ducts, Zone 3	NewPkg	3,488,895	2,093,337
N-H104	Heating upgrade (AFUE 90), Zone 1	NewPkg	600,917	360,550
N-H105	Heating upgrade (AFUE 90), Zone 2	NewPkg	1,598,275	958,965
N-H106	Heating upgrade (AFUE 90), Zone 3	NewPkg	951,793	571,076
R-H101	Duct Sealing, Zone 1	HVACExist	87,228	65,421
R-H102	Duct Sealing, Zone 2	HVACExist	154,826	116,120
R-H103	Duct Sealing, Zone 3	HVACExist	167,703	125,777
R-H104	AFUE 90+ Furnace, Zone 1	HVACExist	763,055	572,291
R-H105	AFUE 90+ Furnace, Zone 2	HVACExist	1,424,214	1,068,161
R-H106	AFUE 90+ Furnace, Zone 3	HVACExist	1,375,074	1,031,306
R-H113	Duct Sealing and AFUE 90+, Zone 1	HVACExist	124,877	93,658
R-H114	Duct Sealing and AFUE 90+, Zone 2	HVACExist	233,830	175,373
R-H115	Duct Sealing and AFUE 90+, Zone 3	HVACExist	225,677	169,258
R-WG101	Wx insulation 2 measures Zone 1	WxExist	454,544	340,908
R-WG102	Wx insulation 2 measures Zone 2	WxExist	888,592	666,444
R-WG103	Wx insulation 2 measures Zone 3	WxExist	766,849	575,137
R-WG104	Wx insulation 1 added measure Zone 1	WxExist	276,226	207,170
R-WG105	Wx insulation 1 added measure Zone 2	WxExist	539,741	404,806
R-WG106	Wx insulation 1 added measure Zone 3	WxExist	467,920	350,940
	Total Residential Potential		20,185,820	13,304,049



Therm Savings targets: **Energy Trust** 

Residential Existing Year 1 99,380

108703

**New Construction** 91,766 101875 Year 1 191,145 210578 Total Residential Best Case

Assume that therms savings would be acquired over 15 year period. 1st year would have 25% participation of annual amount

Only 1/20th of 2025 figures could occur because this is new construction over planning horizon. During the 1st year, assumed 20% of eligible population will participate.

#### Schedule 2 of 3

# CASCADE NATURAL GAS CORPORATION BENCH REQUEST #5 ATTACHMENT

# RESIDENTIAL TARGET DEVELOPMENT

Year 2	Residential Existing	127,774	126992	Assume that therms savings would be acquired over 14 year period. 2nd year would have 30% participation of annual amount
Year 2	New Construction Total Residential Best Case	110,119 237,893	118858 245850	Only 1/20th of 2025 figures could occur because this is new construction over planning horizon. During the 2nd year, assumed 30% of eligible population will participate.
Year 3	Residential Existing	137,602	141526	Assume that therms savings would be acquired over 13 year period. 3rd yr would have 30% participation of annual amount Only 1/20th of 2025 figures could occur because this is new construction over planning horizon. During the 3rd year,
Year 3	New Construction Total Residential Best Case	128,472 266,075	132422 273948	assumed 35% of eligible population will participate.

# Schedule 3 of 3

#### CASCADE NATURAL GAS CORPORATION BENCH REQUEST #5 ATTACHMENT

#### **COMMERCIAL/INDUSTRIAL TARGET DEVELOPMENT**

	Technical Potential @ 2025 (Table 1) (in 000's of	by 2025 at 70%
1 Shell Measures	12,084	8,459
2 Refer Heat Reclaim	11,926	8,348
3 Cooking	3,399	2,379
4 O&M and Controls	1,458	1,021
5 Replace Heaters	1,660	1,162
6 DHW Measures	1,076	753
7 Solar Pool Heat	215	151
8 Replace Boiler	491	344
9 New Refer Heat Reclaim	5,471	3,830
10 New Windows	3,264	2,285
11 New Cooking	945	662
12 New Heaters	737	516
13 New DHW Measures	377	264
14 New Boilers	514	360
15 New Solar Pool Heat	32	22
16 Total Commercial	43,650	30,556
17 Shell Measures	400	280
18 Boilers	291	204
19 Unit Heater	251	176
20 Process Hot Water	68	48
21 Specialty Hot Water	52	36
22 Total Industrial	1,061	744
Excluded Heat Reclaim & Solar for 2008 & 2009	47.644	40.254
23 targets	-17,644	-12,351
Total		
24 Commercial/Industrial	27,067	18,949

Excluded from target development since no one in NW is currently offering such a program. Will work to develop program for inclusion in 2010 targets

# Schedule 3 of 3

# CASCADE NATURAL GAS CORPORATION BENCH REQUEST #5 ATTACHMENT

#### COMMERCIAL/INDUSTRIAL TARGET DEVELOPMENT

		Е	TO Estimate	
YR 1	New	40,870	45,179	Only 1/20th of 2025 figures could occur because this is new construction over planning horizon. During the 1st year, assumed 20% of eligible population will participate.
YR 1	Replacement Total Business Therm Savings	99,080 139,950	111,916 157,095	Assume that therms savings would be acquired over 15 year period. 1st year would have 10% participation
YR 2	New	51,088	59,516	Only 1/20th of 2025 figures could occur because this is new construction over planning horizon. During the 1st year, assumed 25% of eligible population will participate.
YR 2 YR 2	Replacement Total Business Therm Savings	159,236 210,324	167,864 227,380	Assume that therms savings would be acquired over 14 year remaining. 2nd year would have 15% participation
YR 3	New	91,958	94,946	Only 1/20th of 2025 figures could occur because this is new construction over planning horizon. During the 1st year, assumed 45% of eligible population will participate.
YR 3	Replacement Total Business Therm Savings	228,646 320,604	235,050 329,996	Assume that therms savings would be acquired over 13 year remaining. 3rd year would have 20% participation