Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - Portfolio

BENCOST - Portfolio			
Input Data			2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$7,495,941
2500 at of Trace	110570	16 b) Incentive Costs =	\$4,153,287
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$11,649,229
Escalation Rate =	3.59%	, , ,	
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$151
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	13.31
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	3.77
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
Ol Man Can Final Land Factors	7.70%	23) Number of Participants =	121,737
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual Dth Saved =	459,252
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	24) Total Allifual Dtil Saveu =	455,252
Escalation Rate =	2.30%	25) Incentive/Participant =	\$34.12
Escalation nate	2.50%	25, meentive, randopant	\$5 1.22
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

			2023	2023
Cost Summary	2023	Test Results	NPV	B/C
Utility Cost per Participant =	\$95.69	Ratepayer Impact Measure Test	(\$24,445,082)	0.55
Cost per Participant per Dth =	65.30652566	I Military Coate Took	\$18,459,220	2.58
Lifetime Energy Reduction (Dth)	6,114,223	Utility Cost Test	\$16,459,220	2.58
		Societal Test	\$24,223,964	1.94
Societal Cost per Dth	\$0.68	Participant Test	\$38,958,620	3.12

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - LIW

BENCOST - LIW			
Input Data			2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$497,858
		16 b) Incentive Costs =	\$0
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$497,858
Escalation Rate =	3.59%		
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$0
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	23.97
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	23.03
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	23) Number of Participants =	128
8) Non-Gas Fuel Loss Factor	7.70%	23) Number of Farticipants =	120
of Non dus ruer 2003 ruetor	7.7070	24) Total Annual Dth Saved =	2,948
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	,	_,
Escalation Rate =	2.30%	25) Incentive/Participant =	\$0.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

			2023	2023
Cost Summary	2023	Test Results	NPV	B/C
Utility Cost per Participant =	\$3,889.52	Ratepayer Impact Measure Test	(\$642,191)	0.35
Cost per Participant per Dth =	168.8743944	Utility Cost Test	(\$158,247)	0.68
Lifetime Energy Reduction (Dth)	70,672	Societal Test	\$99,917	1.20
Societal Cost per Dth	\$7	Societai rest	\$33,317	1.20
		Participant Test	\$645,841 n/a	

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - 4U2

BENCOST -	- 402		
Input Data		-	2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$1,003,036
		16 b) Incentive Costs =	\$0
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$1,003,036
Escalation Rate =	3.59%		
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$0
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	18.69
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	15.29
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	2214	270
9) Non Cos Fuel Less Fester	7.70%	23) Number of Participants =	270
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Annual Dth Saved =	4,129
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	24) Total Allifual Dtfl Saveu =	4,123
Escalation Rate =	2.30%	25) Incentive/Participant =	\$0.00
250ddion nace	2.50%	25) meentive, rantalpane	\$0.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

			2023	2023
Cost Summary	2023	Test Results	NPV	B/C
Utility Cost per Participant =	\$3,714.95	Ratepayer Impact Measure Test	(\$1,163,880)	0.25
Cost per Participant per Dth =	242.8978089			
		Utility Cost Test	(\$624,574)	0.38
Lifetime Energy Reduction (Dth)	77,197			
		Societal Test	(\$367,676)	0.63
Societal Cost per Dth	12.99328373			
		Participant Test	\$676,559 n/a	

BENEFIT COST FOR GAS -- Cost-Effectiveness Analysis

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - Res Support

BENCOST -	Res Support		
Input Data			2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$170,386
		16 b) Incentive Costs =	\$0
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$170,386
Escalation Rate =	3.59%		
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$0
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	8.16
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	2.12
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	1,249
8) Non-Gas Fuel Loss Factor	7.70%		
0) 0 5	40.07	24) Total Annual Dth Saved =	2,649
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	25) /2	40.00
Escalation Rate =	2.30%	25) Incentive/Participant =	\$0.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - LI Total

BENCOST -	- LI Total		
Input Data			2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$1,552,430
		16 b) Incentive Costs =	\$200
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$1,552,630
Escalation Rate =	3.59%		
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$0
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	19.09
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	11.96
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%	22) Number of Posticionate	722
8) Non-Gas Fuel Loss Factor	7.70%	23) Number of Participants =	723
8) NOTI-GAS FUEL LOSS FACTOR	7.70%	24) Total Annual Dth Saved =	8,648
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	24) Total Allitual Dill Saveu –	0,040
Escalation Rate =	2.30%	25) Incentive/Participant =	\$0.28
		,,	,
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - RES Total

BENCOST -	· RES Total		
Input Data			2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$3,002,776
Escalation Nate -	4.0370	16 b) Incentive Costs =	\$2,438,689
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$5,441,465
Escalation Rate =	3.59%	10 c) Total Othicy Project costs =	43,441,403
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$51
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	11.01
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	2.12
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	116,741
8) Non-Gas Fuel Loss Factor	7.70%		
		24) Total Annual Dth Saved =	247,577
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07		
Escalation Rate =	2.30%	25) Incentive/Participant =	\$20.89
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - CI Total

BENCOST - CI Total			
Input Data			2023
1) Retail Rate (\$/Dth) =	\$5.72	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$1,339,713
Escalation Nate -	4.0370	16 b) Incentive Costs =	\$1,714,398
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$3,054,111
Escalation Rate =	3.59%	10 c/ rotal othicy rioject costs =	43,034,111
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$2,908
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	15.87
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	47.51
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
0.11 0.5 11 5 1	7.700/	23) Number of Participants =	4,273
8) Non-Gas Fuel Loss Factor	7.70%	24) Total Appual Dth County	202.027
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	24) Total Annual Dth Saved =	203,027
Escalation Rate =	2.30%	25) Incentive/Participant =	\$401.22
Liscalation Nate -	2.30%	23) incentive/raiticipant =	3401.22
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - LI Blitz

BENCOSI -	- LI Blitz		
Input Data			2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$51,535
		16 b) Incentive Costs =	\$200
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$51,735
Escalation Rate =	3.59%		70-7:00
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$0
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	10.98
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	4.83
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	325
8) Non-Gas Fuel Loss Factor	7.70%		
		24) Total Annual Dth Saved =	1,571
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07		
Escalation Rate =	2.30%	25) Incentive/Participant =	\$0.62
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - Res Rebate

BENCOST -	- Res Rebate		
Input Data			2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$1,134,027
		16 b) Incentive Costs =	\$1,814,689
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$2,948,716
Escalation Rate =	3.59%		
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$328
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	16.35
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	7.61
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	15,548
8) Non-Gas Fuel Loss Factor	7.70%	24) 7	440.050
O) Coo Environmental Damaga Factor (¢/Dth) -	¢2.07	24) Total Annual Dth Saved =	118,250
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	35) Inconting / Doubising at -	¢116.72
Escalation Rate =	2.30%	25) Incentive/Participant =	\$116.72
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - HEE

BENCOST - HEE				
Input Data			2023	
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs		
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$1,206,153	
		16 b) Incentive Costs =	\$624,000	
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$1,830,153	
Escalation Rate =	3.59%	,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$686	
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00	
Escalation Rate =	4.69%	Escalation Rate =	2.30%	
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00	
Escalation Rate =	4.69%	Escalation Rate =	2.30%	
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	20.00	
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	28.44	
Escalation Rate =	4.69%			
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh	
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh	
Escalation Rate =	3.59%			
		23) Number of Participants =	1,194	
8) Non-Gas Fuel Loss Factor	7.70%			
		24) Total Annual Dth Saved =	33,960	
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07			
Escalation Rate =	2.30%	25) Incentive/Participant =	\$522.61	
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984			
Escalation Rate =	2.30%			
11) Participant Discount Rate =	3.02%			
12) ECO Utility Discount Rate =	5.57%			
13) Societal Discount Rate =	3.02%			
14) General Input Data Year =	2020			
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023			

Company: Minnesota Energy Resources Project: Total Portfolio w/ ECO BENCOST - HER

BENCOST - HER			
Input Data			2023
1) Retail Rate (\$/Dth) =	\$6.57	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$492,210
Escalation Nate =	4.0570	16 b) Incentive Costs =	\$0
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$492,210
Escalation Rate =	3.59%		¥ 10-1/
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$0
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	1.00
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	0.94
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	98,750
8) Non-Gas Fuel Loss Factor	7.70%		
0) 0 5	40.07	24) Total Annual Dth Saved =	92,719
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	25) In continu / Double in cont	ć0.00
Escalation Rate =	2.30%	25) Incentive/Participant =	\$0.00
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - CI Support

BENCOST - CI Support			
Input Data			2023
1) Retail Rate (\$/Dth) =	\$5.72	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$4,833
		16 b) Incentive Costs =	\$10,927
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$15,759
Escalation Rate =	3.59%		
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$9
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	9.27
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	2.07
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	345
8) Non-Gas Fuel Loss Factor	7.70%	24) Tatal Associal Dali Count	745
0) Cas Environmental Damage Easter (\$ /Dth) =	\$2.07	24) Total Annual Dth Saved =	715
9) Gas Environmental Damage Factor (\$/Dth) = Escalation Rate =	\$2.07 2.30%	35) Inconting/Participant =	\$31.67
ESCAIATION RATE =	2.30%	25) Incentive/Participant =	\$31.07
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - EDAM

BENCOST - EDAM			
Input Data			2023
1) Retail Rate (\$/Dth) =	\$5.72	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$79,913
		16 b) Incentive Costs =	\$2,624
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$82,538
Escalation Rate =	3.59%	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$3,828
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	16.00
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	83.31
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	9
8) Non-Gas Fuel Loss Factor	7.70%		
0) 0 5 :	40.07	24) Total Annual Dth Saved =	750
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	25) /2	4004.50
Escalation Rate =	2.30%	25) Incentive/Participant =	\$291.59
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources
Project: Total Portfolio w/ ECO
BENCOST - CI Rebate

BENCOST - CI Repate			
Input Data			2023
1) Retail Rate (\$/Dth) =	\$5.72	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$1,102,539
Escalation nate -	4.0576	16 b) Incentive Costs =	\$1,461,421
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$2,563,960
Escalation Rate =	3.59%		+-//
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$13,402
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	15.93
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	217.26
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	887
8) Non-Gas Fuel Loss Factor	7.70%		
		24) Total Annual Dth Saved =	192,710
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07		
Escalation Rate =	2.30%	25) Incentive/Participant =	\$1,647.60
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		

Company: Minnesota Energy Resources Project: Total Portfolio w/ ECO BENCOST - MFDI

BENCOST - MFDI			
Input Data			2023
1) Retail Rate (\$/Dth) =	\$5.72	16 Utility Project Costs	
Escalation Rate =	4.69%	16 a) Administrative & Operating Costs =	\$152,428
Escaration nate -	4.0370	16 b) Incentive Costs =	\$239,427
2) Non-Gas Fuel Retail Rate (\$/Fuel Unit) =	\$0.00	16 c) Total Utility Project Costs =	\$391,855
Escalation Rate =	3.59%	10 c) rotal othic, respect costs	4032,003
Non-Gas Fuel Units (ie. kWh,Gallons, etc) =	kWh	17) Direct Participant Costs (\$/Part.) =	\$164
3) Commodity Cost (\$/Dth) =	\$3.25	18) Participant Non-Energy Costs (Annual \$/Part.) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
4) Demand Cost (\$/Dth/Yr) =	\$131.24	19) Participant Non-Energy Savings (Annual \$/Part) =	\$0.00
Escalation Rate =	4.69%	Escalation Rate =	2.30%
5) Peak Reduction Factor =	1.00%	20) Project Life (Years) =	15.12
6) Variable O&M (\$/Dth) =	\$0.05	21) Avg. Dth/Part. Saved =	2.92
Escalation Rate =	4.69%		
		22) Avg Non-Gas Fuel Units/Part. Saved =	0 kWh
7) Non-Gas Fuel Cost (\$/Fuel Unit) =	\$0.02657	22a) Avg Additional Non-Gas Fuel Units/ Part. Used =	0 kWh
Escalation Rate =	3.59%		
		23) Number of Participants =	3,032
8) Non-Gas Fuel Loss Factor	7.70%		
0) Con Francisco and Dominion Franks (6 / Dale)	ć2.07	24) Total Annual Dth Saved =	8,852
9) Gas Environmental Damage Factor (\$/Dth) =	\$2.07	25) la contina / Doubisia aut	670.07
Escalation Rate =	2.30%	25) Incentive/Participant =	\$78.97
10) Non Gas Fuel Enviro. Damage Factor (\$/Unit) =	\$0.01984		
Escalation Rate =	2.30%		
11) Participant Discount Rate =	3.02%		
12) ECO Utility Discount Rate =	5.57%		
13) Societal Discount Rate =	3.02%		
14) General Input Data Year =	2020		
15a) Project Analysis Year 1 = 15b) Project Analysis Year 2 = 15c) Project Analysis Year 3 =	2023		