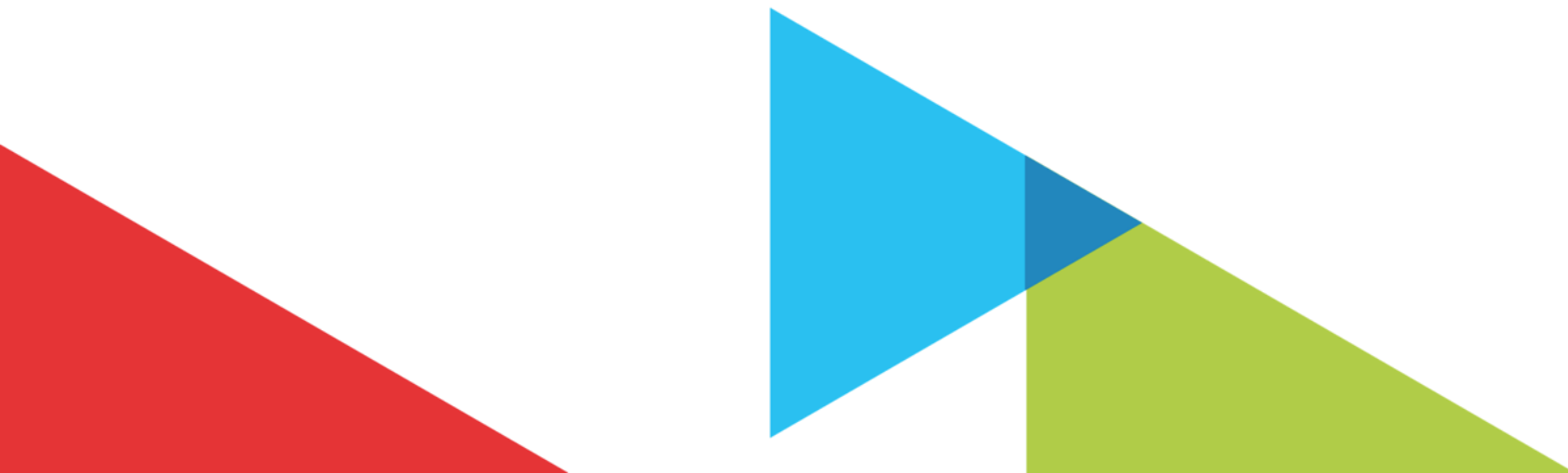


Nicor Gas Adjustable Savings Goals & Weighted Average Measure Life (WAML)

SAG Presentation

February 4, 2020



Overview



Adjustable Savings Goals 2020 Updates

- Approved Plan Goals
- Measures Affected
- Key Calculations Updates and Errata Review
- Adjusted Savings Goals

Adjustable Weighted Average Measure Life (WAML)

- Measure Life Assumptions based on TRMv8 & Custom EUL Update
- Adjusted WAML Based on TRMv8 Measure Life Updates
- Custom EUL Measure Life Updates

Note: All Adjustable Savings Goals and Weighted Average Measure Life updates presented have been reviewed and confirmed by Third Party Evaluator (Guidehouse).

Approved Plan Goals



Year	Net Therms	Life Cycle Net Therms
2018	16,509,650	213,084,028
2019	16,509,650	213,084,028
2020	16,509,650	213,084,028
2021	16,509,650	213,084,028
4 Year	66,038,600	852,335,980
Weighted Average Measure Life (WAML)		12.91
Stipulated WAML Minimum		11.91

Measures by Program



Program	No TRMv8 Measure Change	TRMv8 Measure Change	“Customized” TRM Measures	“Customized” TRM Measures Change	Custom Measures	Total
BEER	74	24	5	2	6	111
BNC	0	0	0	0	3	3
Custom	0	0	0	0	13	13
HEER	10	0	0	0	0	10
HES	25	0	1	0	3	29
IQ	26	2	2	0	5	35
MF	25	9	2	0	6	42
Outreach	6	0	0	0	1	7
RNC	0	0	0	0	1	1
SB	23	14	3	2	4	46
SEM	0	0	0	0	3	3
Total	189	49	13	4	45	300

Customized TRM Measures



For Nicor Gas E3 model purposes, “Customized TRM” measure is a measure that utilizes the TRM methodology to calculate savings, in conjunction with:

- past program verified savings history & methodologies
- Nicor Gas specific market research and/or weighted average savings calculations
- other workpaper research/methodologies to determine specific Nicor Gas plan savings estimates.

- 17 measures identified in original Adjustable Savings Goal template as “Custom” calculate savings using the TRM
- Savings for these Customized TRM measures could potentially be impacted by future TRM version changes.
- Measure Life changes in the TRM will also impact these Customized TRM measures.

Adjustable Savings Goal - Calculations Updates



Measure Updates based on TRMv8

- 4.4 EFLH Table Updates (C&I):
 - Boiler
 - Furnace
 - Boiler Tune Up
- 4.2.11 Spray valve (C&I)
- 4.3.3 Showerheads (C&I)
- 4.4.10 Boiler (C&I)
- 4.4.48 Small Commercial Thermostat (C&I) – was 4.4.18
- 5.6.3 Floor Insulation Above Crawlspace (Res)

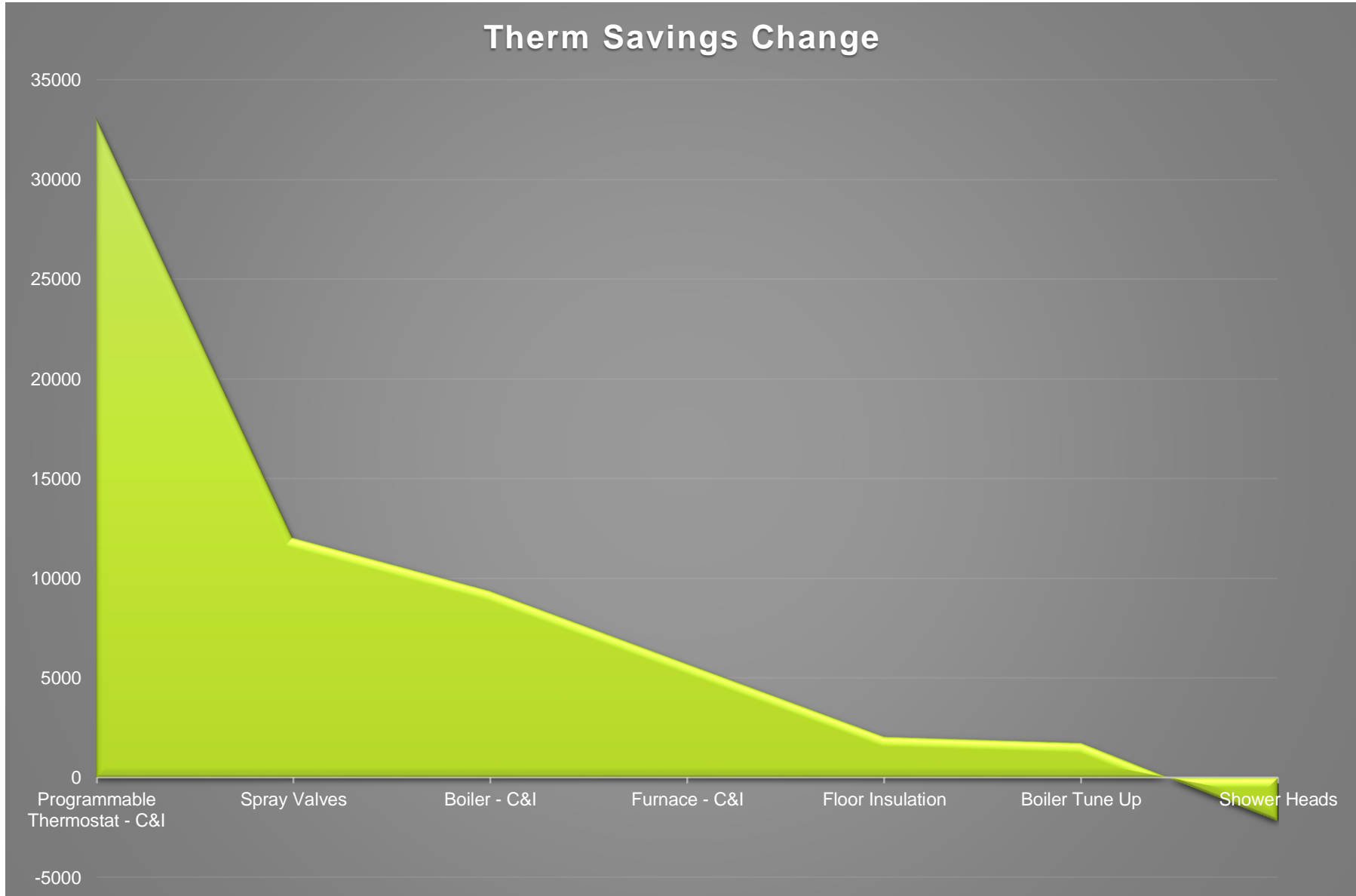
V7.0 Errata Reviewed – No impact to the measures in the Adjustable Savings Goals

Customized TRM Measures – Calculations Updates

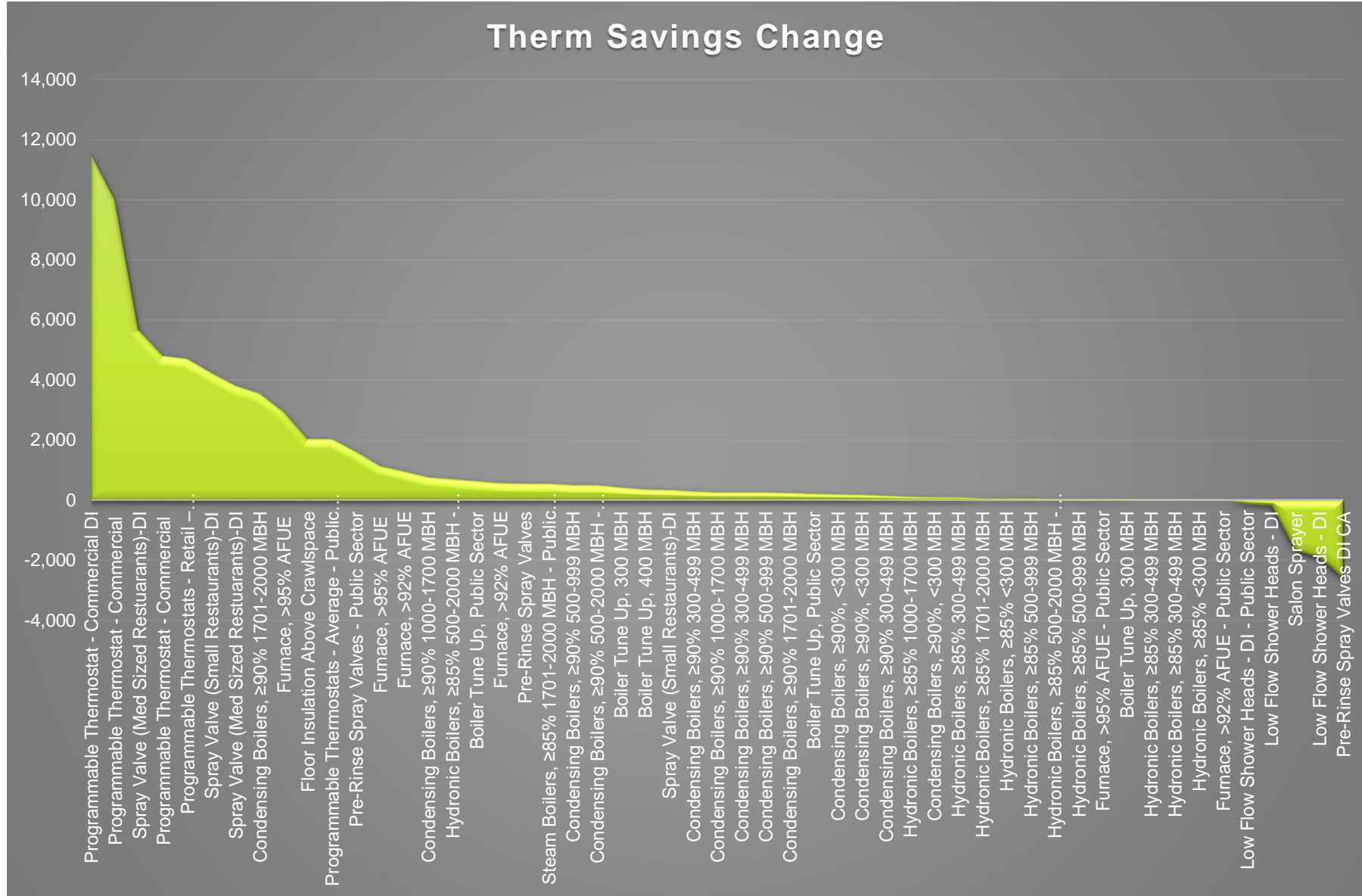


- Customized TRM 4.2.11 Pre-Rinse Spray Valve (Salon Sprayer)
 - Spray valve baseline flow rate has been updated to 1.23 GPM
 - New spray valve flow rate has been updated to 0.98 GPM
- Programmable Thermostat – Commercial (Small Commercial Thermostat)
 - Was Customized TRM 4.4.18, and now is Customized TRM 4.4.48
 - New Algorithm & EFLH Table Updates

Change In Savings Goal By Measure Group



Change in Savings Goal by Measure



Adjustable Savings Goals - 2020



Nicor Gas Net Therm Savings Goals based on TRMv8 Update

	Plan Energy Savings Goal (Therms)	Adjusted Energy Savings Goal (Therms)	Energy Savings Adjustment to Plan Goal (Therms)	Brief Explanation of Significant Adjustments
Program	2020	2020	2020	2020
BEER	2,859,285	2,890,190	30,905	Programmable Thermostat, Showerhead, Spray Valves, Boiler, Furnace & EFLH Table
BNC	314,272	314,272	0	
Custom	3,517,892	3,517,892	0	
Outreach	1,569,325	1,609,226	39,901	2019 Changes
HEER	3,706,226	3,582,999	-123,228	2019 Changes
HES	537,661	506,317	-31,343	2019 Changes
IQ	1,816,459	1,839,354	22,896	Boiler & Floor Insulation Above Crawlspace
MF	573,562	571,667	-1,895	Programmable Thermostat, Spray Valves, Boiler, Boiler Tune Up
RNC	162,338	162,338	0	
SB	486,827	508,716	21,889	Programmable Thermostat, Showerhead, Spray Valves, Boiler, Furnace & EFLH Table
SEM	965,804	965,804	0	
Portfolio Total (Therms)	16,509,650	16,468,775	-40,875	

Note: All Adjustable Savings Goals presented has been reviewed and confirmed by Third Party Evaluator (Guidehouse).

Adjusted Savings Goals



Nicor Gas's Net Therm Savings Goals based on TRMv8 Update
(2021 data provided for information only)

Year	2018 Plan Goal Net Therms	Adjusted Goal Net Therms	Difference
2018	16,509,650	16,509,650	0
2019	16,509,650	16,406,931	(102,719)
2020	16,509,650	16,468,775	(40,875)
2021	16,509,650	16,468,775	(40,875)
4 Year Total	66,038,601	65,854,131	(184,470)

Measure Life TRMv8 Updates



Measures affected by TRMv8 Measure Life(ML) updates

Program	TRM Measures		Customized TRM Measures		Custom Measures		Total
	TRMv8 Adjusted ML (No)	TRMv8 Adjusted ML (Yes)	TRMv8 Adjusted ML (No)	TRMv8 Adjusted ML (Yes)	TRMv8 Adjusted ML (No)	TRMv8 Adjusted ML (Yes)	
BEER	84	14	5	2	6	0	111
BNC	0	0	0	0	3	0	3
Custom	0	0	0	0	8	5	13
HEER	10	0	0	0	0	0	10
HES	25	0	1	0	3	0	29
IQ	27	1	2	0	5	0	35
MF	27	7	2	0	6	0	42
Outreach	6	0	0	0	1	0	7
RNC	0	0	0	0	1	0	1
SB	32	5	4	1	4	0	46
SEM	0	0	0	0	3	0	3
Total	211	27	14	3	40	5	300

Adjustable Savings Goal – TRM Measure Life Updates



- Measure Life Updates based on TRMv8
 - 4.4.10 High Efficiency Boiler ML increases from 20 to 25 years
 - 4.4.48 Small Commercial Thermostats (Programmable Thermostats)
 - ML increases from 8 to 11 years

Custom Measure Life Updates



- Custom Project Measure Life Updates based on Custom EUL research/ TRMv8 updates
 - Project level measure life details highlighted in Adjustable Savings Goal file under “**Custom ML Segments**” tab

Program	Measure	2018 Measure Life	2019 Measure Life	2020 Measure Life	2021 Measure Life
(a)	(b)	(bn)	(bo)	(bp)	(bq)
Custom	Custom Project - Industrial & Manufacturing	20.1	20.1	19.2	19.2
Custom	Custom Project - Commercial	20.4	20.4	18.5	18.5
Custom	Custom Project - Healthcare	20.0	20.0	19.7	19.7
Custom	Custom Project - Education	23.0	23.0	20.8	20.8
Custom	Custom Project - Hospitality	19.0	19.0	18.2	18.2

Adjusted Weighted Average Measure Life Updates



	Plan Life Cycle Savings					Adjusted Life Cycle Savings				
	Plan Life Cycle Savings (Therms)	Plan Life Cycle Savings (Therms)	Plan Life Cycle Savings (Therms)	Plan Life Cycle Savings (Therms)	Total Plan Life Cycle Savings (Therms)	Adjusted Life Cycle Savings (Therms)	Adjusted Life Cycle Savings (Therms)	Adjusted Life Cycle Savings (Therms)	Adjusted Life Cycle Savings (Therms)	Total Adjusted Life Cycle Savings (Therms)
Program	2018	2019	2020	2021	Plan Period	2018	2019	2020	2021	Plan Period
(a)	(u)	(v)	(w)	(x)	(y)	(z)	(aa)	(ab)	(ac)	(ad)
BEER	28,313,928	28,313,928	28,313,928	28,313,928	113,255,711	28,313,928	28,397,308	29,209,255	29,209,255	115,129,746
BNC	7,856,808	7,856,808	7,856,808	7,856,808	31,427,232	7,856,808	6,474,010	6,474,010	6,474,010	27,278,838
Custom	57,132,950	57,132,950	57,132,950	57,132,950	228,531,798	57,132,950	57,132,950	52,341,940	52,341,940	218,949,779
Outreach	6,076,011	6,076,011	6,076,011	6,076,011	24,304,043	6,076,011	6,709,273	6,709,273	6,709,273	26,203,831
HEER	54,892,272	54,892,272	54,892,272	54,892,272	219,569,089	54,892,272	54,349,363	54,349,363	54,349,363	217,940,362
HES	8,244,396	8,244,396	8,244,396	8,244,396	32,977,583	8,244,396	7,929,419	7,929,419	7,929,419	32,032,654
IQ	31,539,683	31,539,683	31,539,683	31,539,683	126,158,734	31,539,683	31,516,697	32,199,104	32,199,104	127,454,587
MF	6,352,344	6,352,344	6,352,344	6,352,344	25,409,378	6,352,344	6,452,351	6,763,079	6,763,079	26,330,853
RNC	4,870,125	4,870,125	4,870,125	4,870,125	19,480,500	4,870,125	4,870,125	4,870,125	4,870,125	19,480,500
SB	4,908,099	4,908,099	4,908,099	4,908,099	19,632,396	4,908,099	4,964,865	5,421,137	5,421,137	20,715,238
SEM	2,897,412	2,897,412	2,897,412	2,897,412	11,589,648	2,897,412	4,829,020	4,829,020	4,829,020	17,384,472
Portfolio Total	213,084,028	213,084,028	213,084,028	213,084,028	852,336,113	213,084,028	213,625,381	211,095,725	211,095,725	848,900,859
					Plan WAML 12.91					Adjusted WAML 12.89

Note: All weighted average measure life updates presented have been reviewed and confirmed by Third Party Evaluator (Guidehouse).

Adjusted Weighted Average Measure Life Updates



Year	Plan Net Therms	Plan Life Cycle Therms	Adjusted Net Therms	Adjusted Life Cycle Therms	Life Cycle Therm Change
2018	16,509,650	213,084,028	16,509,650	213,084,028	
2019	16,509,650	213,084,028	16,406,931	213,625,381	541,353
2020	16,509,650	213,084,028	16,468,775	211,095,725	(1,988,303)
2021	16,509,650	213,084,028	16,468,775	211,095,725	(1,988,303)
Total	66,038,601	852,336,113	65,854,131	848,900,859	
Difference to Plan	-	-	(184,470)	(3,435,254)	-
WAML	12.91		12.89		-
Stipulated WAML Minimum	11.91		11.89		-

Adjustable Savings Goals with WAML

Questions & Next Steps



Nicor Gas

Energy
Efficiency
Program