



STATE OF RHODE ISLAND

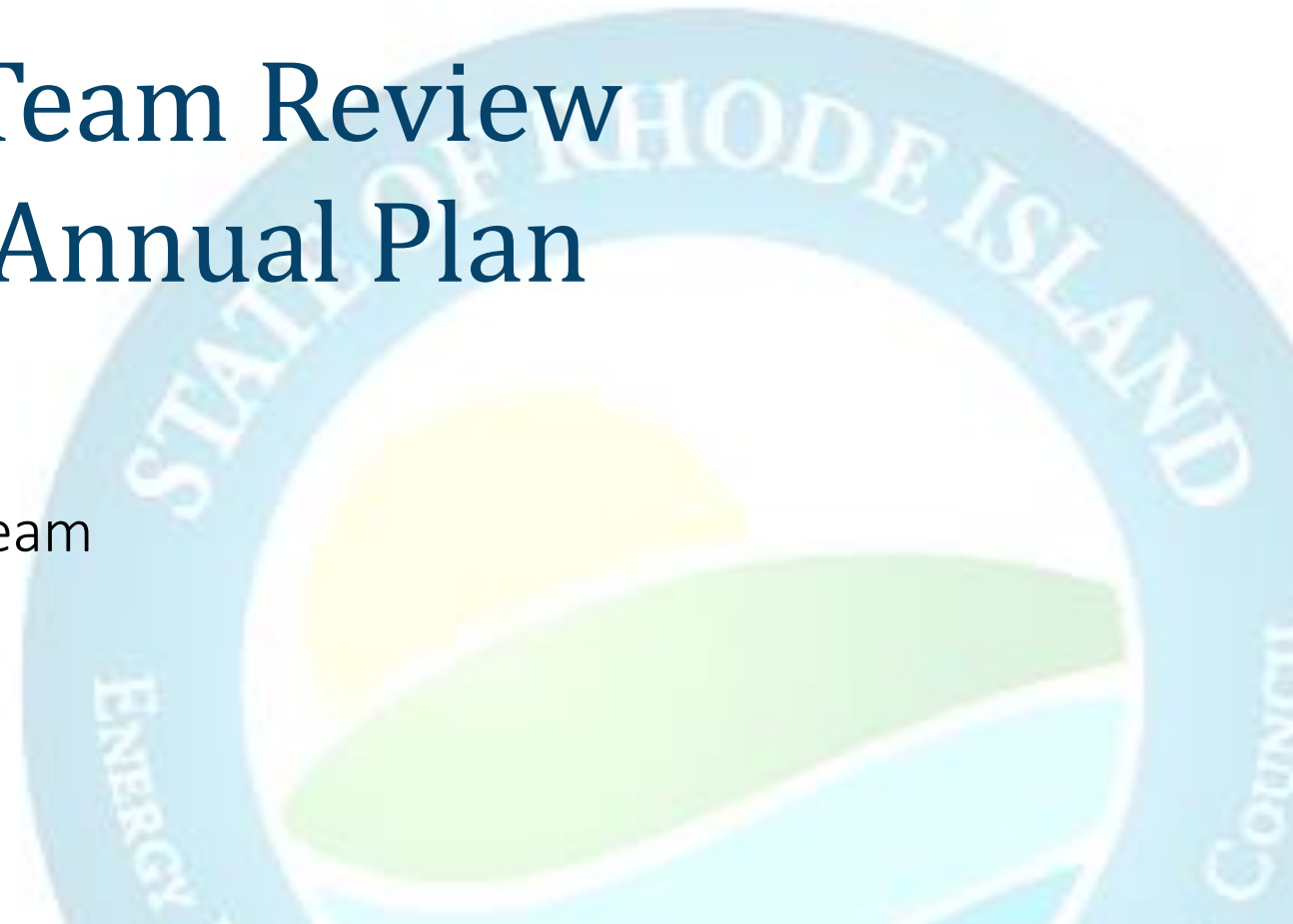
**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

CONSULTANT TEAM

Consultant Team Review Filed 2023 Annual Plan

Presented By: EERMC Consultant Team

Date: October 20, 2022





Outline

Overview of Regulatory Review Process

Changes from 3rd Draft to Filed Plan

Key Topics for Pre-filed Testimony

Looking Forward



OVERVIEW OF REGULATORY PROCESS





Docket Schedule

10/17/2022 – Deadline to file for intervention

10/21/2022 – Objections to Motions to Intervene due

10/26/2022 – EERMC's testimony and documentation regarding budget due

11/4/2022 – Intervenor's/Division's Pre-filed Testimony/Comments due

11/14/2022 – Rhode Island Energy's Reply Testimony/Comments due

12/6/2022, 12/8/2022, and 12/16/2022 – Hearing Dates



CHANGES FROM 3RD DRAFT TO FILED PLAN





Discussion Points

Fuel cell project was removed from the filed Plan & BC models

- This was associated with some minor changes in non-incentive spending as well

C-Team undertook final review of BC Models and Plan narrative after filing

The following slide summarizes the final Plan numbers



Changes from 3rd Draft to Filed Plan

Key Takeaway Changes between drafts driven by the removal of the Large C&I Retrofit fuel cell project from the electric portfolio. No changes to the gas portfolio.

Electric Portfolio	2023 Plan (3 rd Draft)	2023 Plan (Filed)	Difference	Difference (%)
Lifetime Savings (MWh)	794,122	685,209	-108,913	-14%
Implementation Spending	\$103,720,738	\$102,018,013	-\$1,702,725	-2%
Acquisition Cost (\$/Lifetime kWh)	\$0.13	\$0.15	\$0.02	12%
Non-Incentive Spending	\$25,850,197	\$25,812,807	-\$37,390	-0.1%



TOPICS FOR PRE-FILED TESTIMONY





C-Team Recommendations

Summary of **Council's budget** development process in 2022

Summary of **Council engagement** during EE Plan development

Remaining areas where **year-over-year cost increases** have not been adequately justified

- May include cost benchmarking to other jurisdictions

Potential **comments on TRM** (final draft still pending)



Other Areas to Consider

Summary of **comments on equity** progress in 2022 (potentially applied to equity commitments for 2023)

RIE choice to set the **Social Cost of Carbon** based on marginal damages (\$393 per short ton) in place of marginal abatement cost (\$125 per short ton)

RIE resource constraints during plan development

Reduced budget between 3rd draft and final draft of 2023 EE Plan



LOOKING FORWARD





2024-2026 Three-Year Plan Development

Development of the 2024-2026 Three-Year Plan in 2023 represents an opportunity to reassess high-level program goals and implementation strategies

The EERMC will set EE and SRP priorities to guide the Company, C-Team, Technical Working Group, and other stakeholders in development and review of the 2024-2026 Three-Year Plan

Priorities are designed to be consistent with the EERMC's legislated role in supporting Least-Cost Procurement



Council LEAD Session Brainstorm

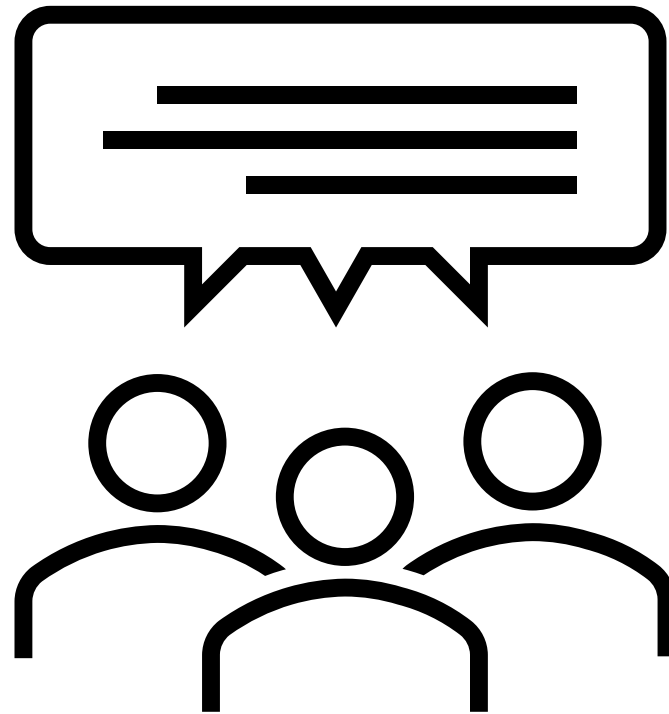
Council Learning, Education and Advancement Discussion (LEAD) session should provide information, but include ample time for Councilor discussion

Potential topics could include:

- 2024-2026 Three Year Plan early priorities
- Jurisdictional comparisons
- Income eligible deep dive
- Council support for equity work in 2023
- Evaluation Measurement and Verification (EM&V) primer
- Other topics?



Council Member Discussion





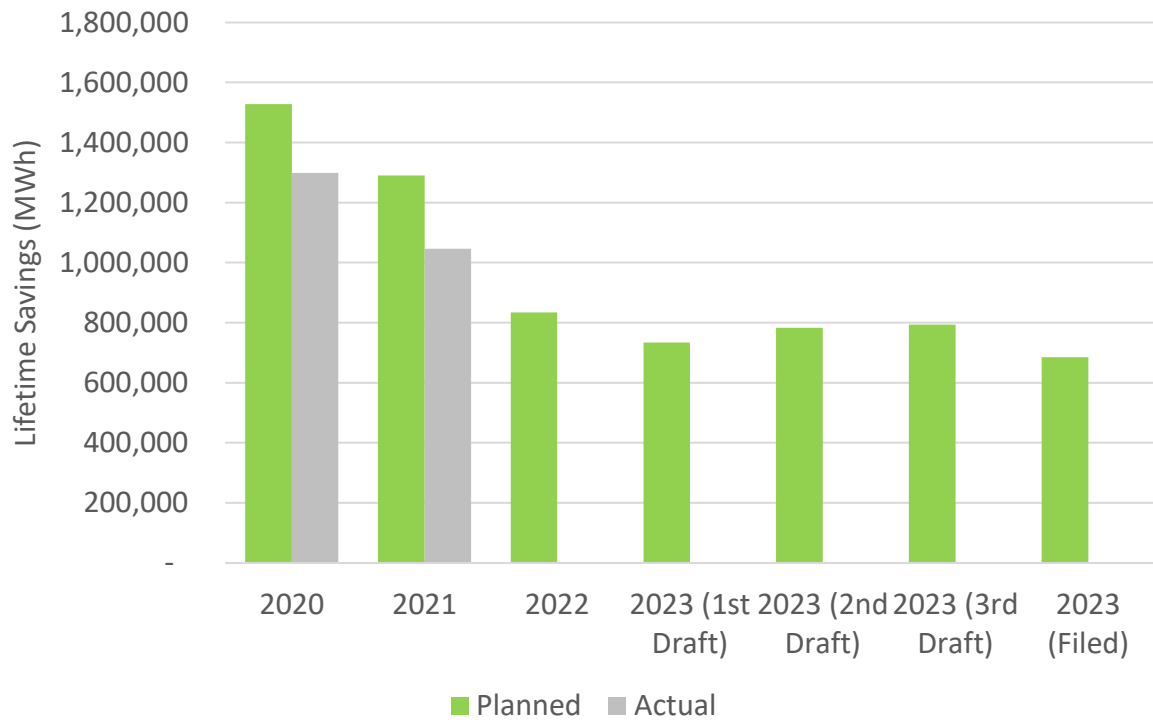
APPENDICES



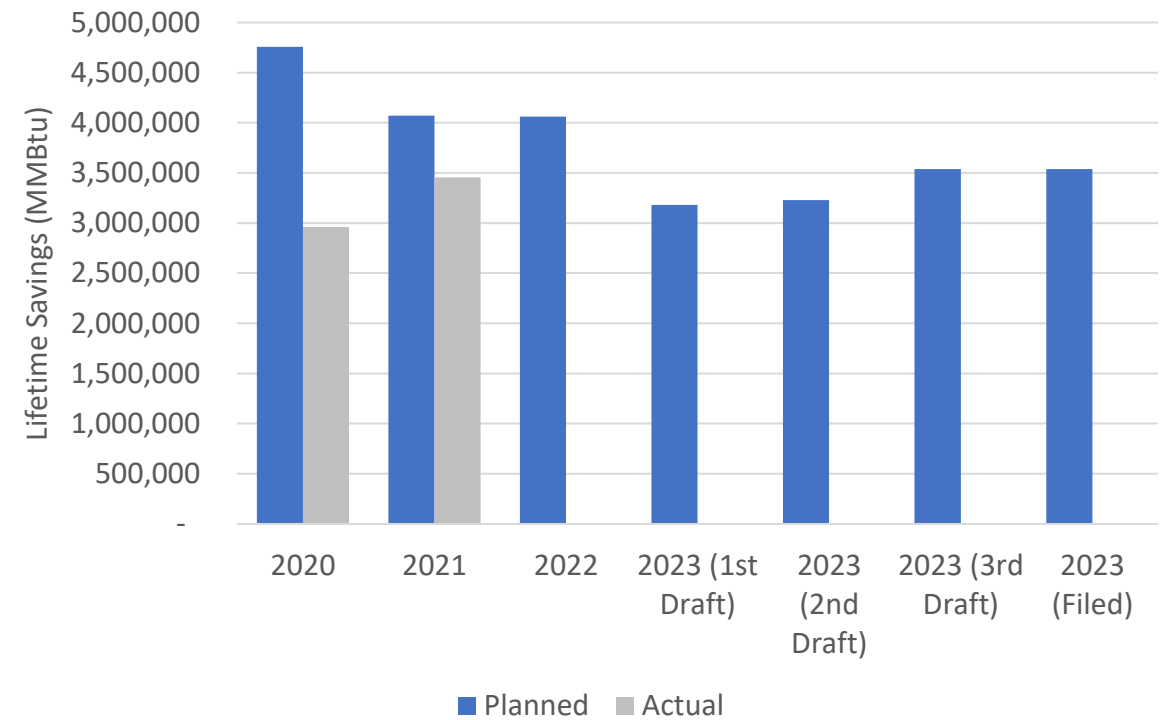


Portfolio Lifetime Savings

Electric Lifetime Savings (MWh) - Portfolio Total



Gas Lifetime Savings (MMBtu) - Portfolio Total

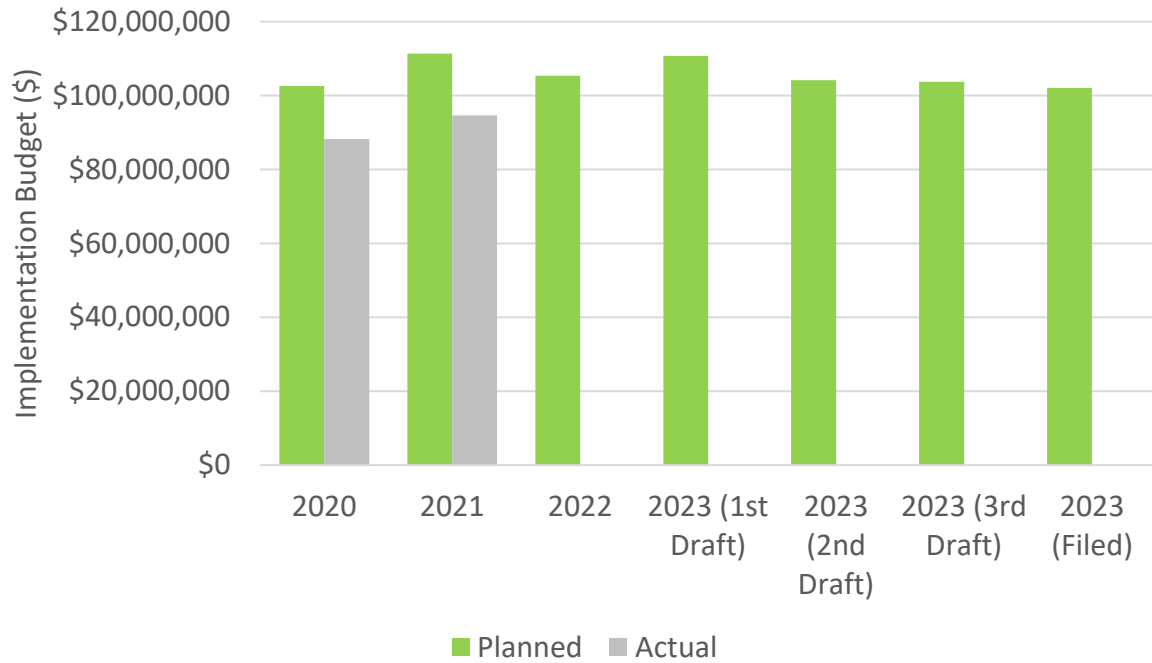




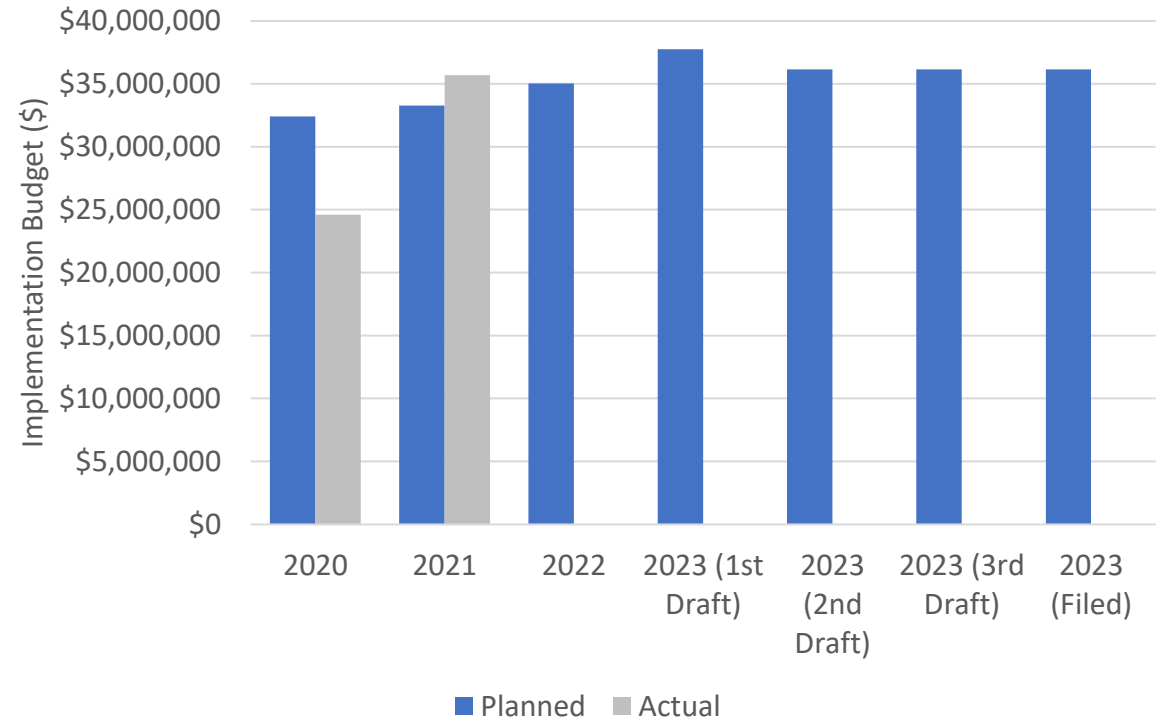
Portfolio Implementation Budget



Electric Implementation Budget (\$) - Portfolio Total



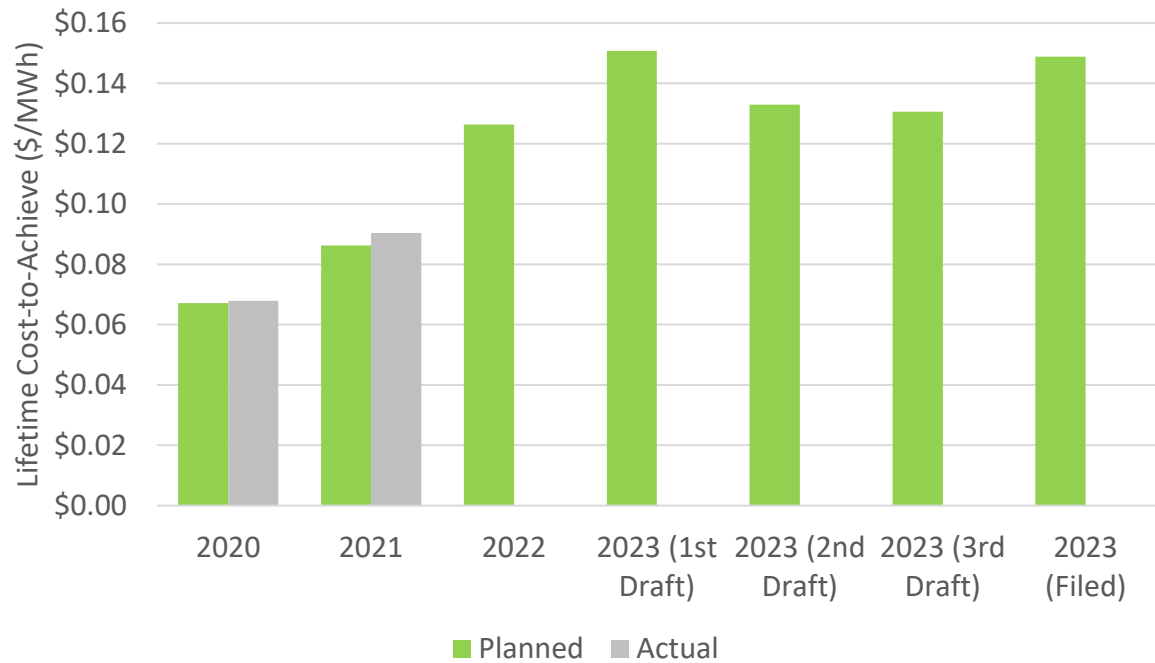
Gas Implementation Budget (\$) - Portfolio Total



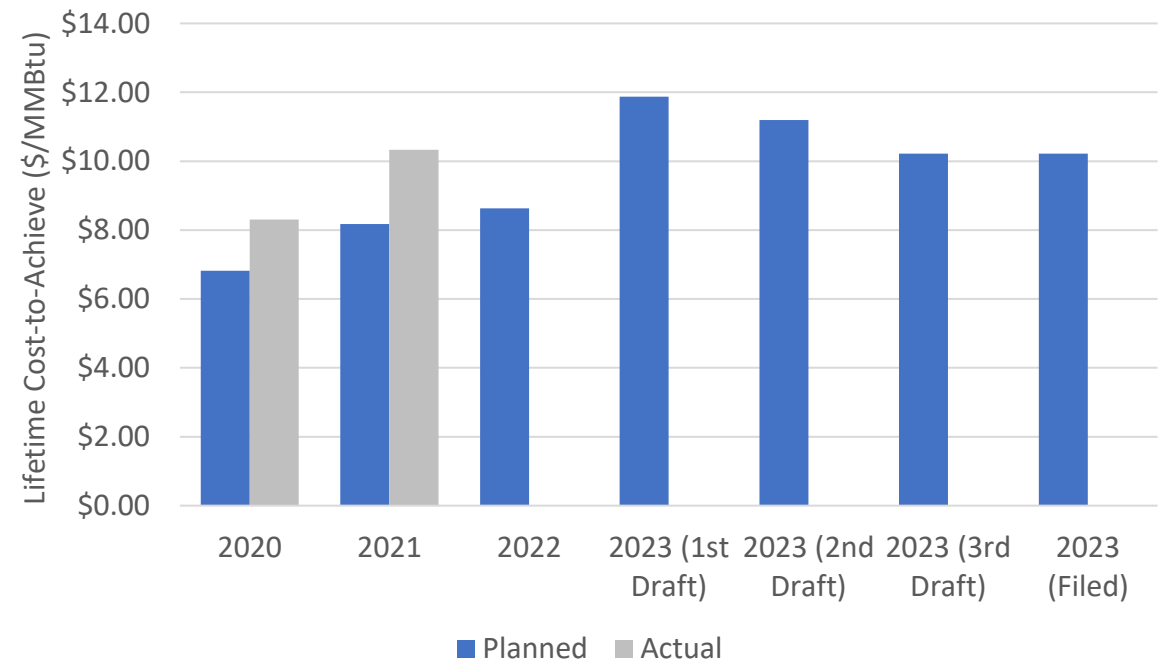


Portfolio Cost to Achieve

Electric Cost to Achieve (\$/Lifetime kWh) - Portfolio Total

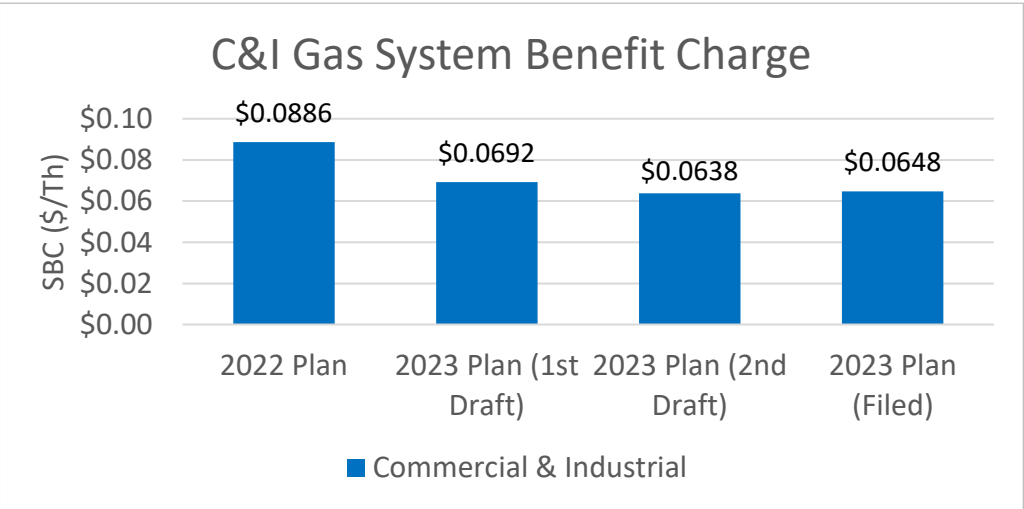
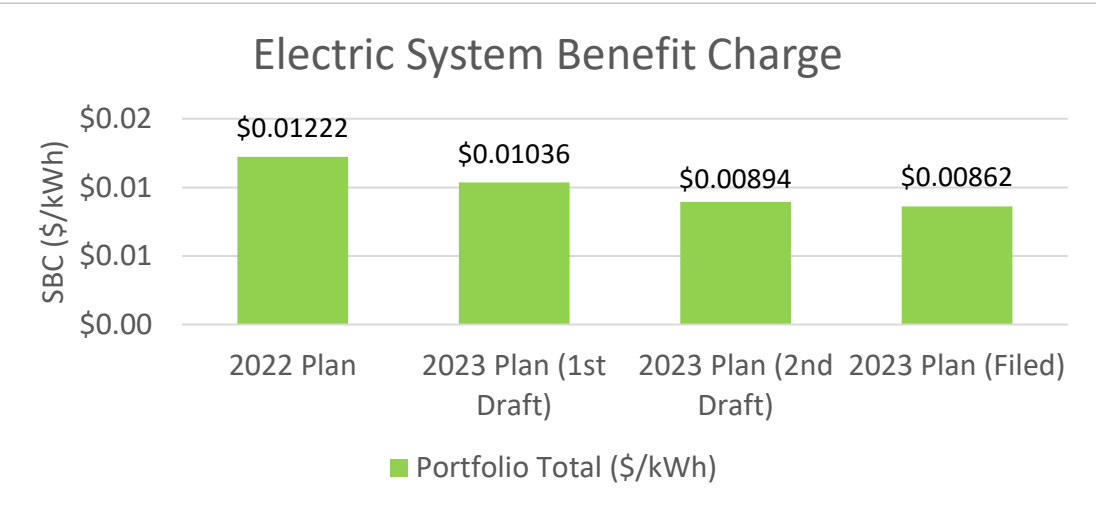


Gas Cost to Achieve (\$/Lifetime MMBtu) - Portfolio Total

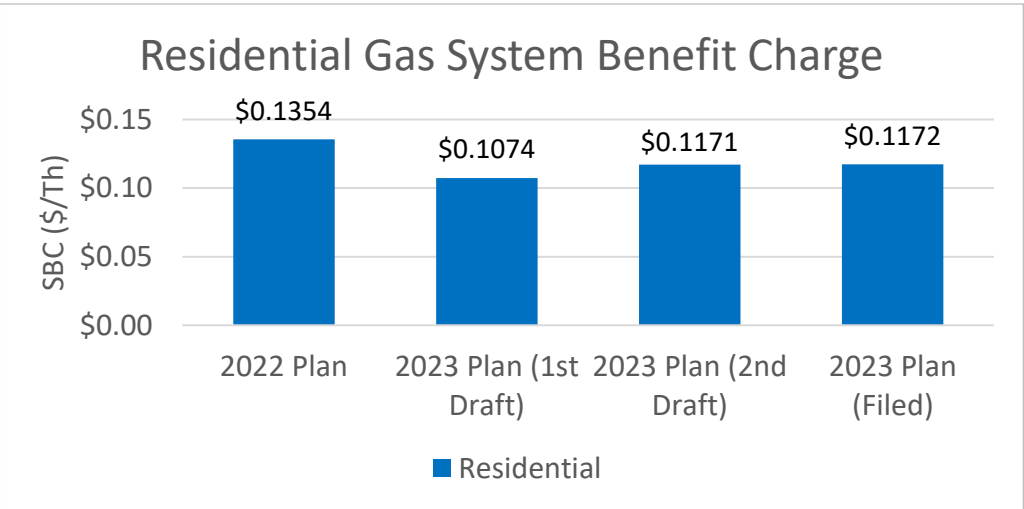




System Benefit Charge



Decrease in System Benefit Charge (SBC) across both portfolios partially attributable to high forecasted underspending in 2022





Electric Lifetime MWhs

LIFETIME MWhs

% of 2023 Portfolio	Program	2023 (3rd Draft)	2023 (Filed)	2023 (Filed) Compared to 2023 (3rd Draft)	
				Value	Percentage
8%	Small Business Direct Install	57,778	57,778	0	0%
23%	Large Commercial New Construction	157,598	157,598	0	0%
38%	Large Commercial Retrofit	370,933	262,020	-108,913	-29%
70%	C&I Total	586,309	477,396	-108,913	-19%
3%	Single Family - Income Eligible Services	22,187	22,187	0	0%
2%	Income Eligible Multifamily	16,728	16,728	0	0%
6%	Income Eligible Total	38,915	38,915	0	0%
2%	Residential New Construction	15,377	15,377	0	0%
10%	ENERGY STAR® HVAC	71,055	71,055	0	0%
2%	EnergyWise	16,940	16,940	0	0%
1%	EnergyWise Multifamily	9,493	9,493	0	0%
4%	Home Energy Reports	24,350	24,350	0	0%
0%	ENERGY STAR® Lighting	0	0	0	0%
5%	Residential Consumer Products	31,684	31,684	0	0%
25%	Residential Total	168,898	168,898	0	0%
100%	Portfolio Total	794,122	685,209	-108,913	-14%



Electric Annual MWhs

		ANNUAL MWhs		2023 (Filed) Compared to 2023 (3rd Draft)	
% of 2023 Portfolio	Program	2023 (3rd Draft)	2023 (Filed)		
9%	Small Business Direct Install	9,260	9,260	0	0%
11%	Large Commercial New Construction	10,481	10,481	0	0%
39%	Large Commercial Retrofit	49,227	38,335	-10,891	-22%
58%	C&I Total	68,967	58,076	-10,891	-16%
2%	Single Family - Income Eligible Services	2,433	2,433	0	0%
1%	Income Eligible Multifamily	1,245	1,245	0	0%
4%	Income Eligible Total	3,679	3,679	0	0%
1%	Residential New Construction	779	779	0	0%
4%	ENERGY STAR® HVAC	4,175	4,175	0	0%
3%	EnergyWise	3,147	3,147	0	0%
1%	EnergyWise Multifamily	680	680	0	0%
25%	Home Energy Reports	24,350	24,350	0	0%
0%	ENERGY STAR® Lighting	0	0	0	
5%	Residential Consumer Products	4,473	4,473	0	0%
38%	Residential Total	37,603	37,603	0	0%
100%	Portfolio Total	110,249	99,358	-10,891	-10%



Electric Budget

IMPLEMENTATION BUDGET

% of 2023 Portfolio	Program	2023 (3rd Draft)	2023 (Filed)	2023 (Filed) Compared to 2023 (3rd Draft)	
8%	Small Business Direct Install	\$7,764,404	\$7,767,357	\$2,953	0%
8%	Large Commercial New Construction	\$8,468,889	\$8,471,353	\$2,465	0%
24%	Large Commercial Retrofit	\$26,136,531	\$24,453,235	-\$1,683,296	-6%
2%	C&I Financing	\$2,000,000	\$2,000,000	\$0	0%
0%	Community Based Initiatives - C&I	\$93,461	\$93,461	\$0	0%
0%	Commercial Pilots	\$0	\$0	\$0	
6%	Commercial ConnectedSolutions	\$5,680,819	\$5,683,113	\$2,294	0%
0%	Commercial Workforce Development	\$157,500	\$157,500	\$0	0%
48%	C&I Total	\$50,301,605	\$48,626,020	-\$1,675,584	-3%
12%	Single Family - Income Eligible Services	\$12,069,498	\$12,072,444	\$2,947	0%
4%	Income Eligible Multifamily	\$4,257,730	\$4,258,817	\$1,087	0%
0%	Income Eligible Workforce Development	\$0	\$0	\$0	
16%	Income Eligible Total	\$16,327,228	\$16,331,261	\$4,033	0%
2%	Residential New Construction	\$1,608,910	\$1,609,170	\$259	0%
5%	ENERGY STAR® HVAC	\$5,535,634	\$5,536,597	\$963	0%
15%	EnergyWise	\$15,670,418	\$15,674,283	\$3,865	0%
1%	EnergyWise Multifamily	\$1,346,761	\$1,347,041	\$281	0%
2%	Home Energy Reports	\$2,147,183	\$2,147,183	\$0	0%
0%	ENERGY STAR® Lighting		\$0	\$0	
2%	Residential Consumer Products	\$2,494,131	\$2,494,513	\$382	0%
0%	Energy Efficiency Education	\$0	\$0	\$0	
0%	Comprehensive Marketing - Residential	\$310,484	\$310,484	\$0	0%
0%	Community Based Initiatives - Residential	\$280,564	\$280,564	\$0	0%
2%	Residential ConnectedSolutions	\$1,970,926	\$1,971,393	\$467	0%
0%	Residential Pilots	\$0	\$0	\$0	
0%	Residential Workforce Development	\$0	\$0	\$0	
31%	Residential Total	\$31,365,011	\$31,371,228	\$6,217	0%
1%	EERMC	\$850,331	\$850,331	\$0	0%
1%	OER	\$1,139,073	\$1,101,682	-\$37,390	-3%
	Rhode Island Infrastructure Bank	\$3,737,491	\$3,737,491	\$0	0%
6%	Regulatory Total	\$5,726,895	\$5,689,504	-\$37,390	-1%
100%	Portfolio Total	\$103,720,738	\$102,018,013	-\$1,702,725	-2%



Electric Lifetime Cost to Achieve (\$/kWh)

\$/LIFETIME kWh

Program	2023 (3rd Draft)	2023 (Filed)	2023 (Filed) Compared to 2023 (3rd Draft)	
			Change (\$)	Change (%)
Small Business Direct Install	\$0.13	\$0.13	\$0.00	0%
Large Commercial New Construction	\$0.05	\$0.05	\$0.00	0%
Large Commercial Retrofit	\$0.07	\$0.09	\$0.02	24%
C&I Total	\$0.09	\$0.10	\$0.02	16%
Single Family - Income Eligible Services	\$0.54	\$0.54	\$0.00	0%
Income Eligible Multifamily	\$0.25	\$0.25	\$0.00	0%
Income Eligible Total	\$0.42	\$0.42	\$0.00	0%
Residential New Construction	\$0.10	\$0.10	\$0.00	0%
ENERGY STAR® HVAC	\$0.08	\$0.08	\$0.00	0%
EnergyWise	\$0.93	\$0.93	\$0.00	0%
EnergyWise Multifamily	\$0.14	\$0.14	\$0.00	0%
Home Energy Reports	\$0.09	\$0.09	\$0.00	0%
ENERGY STAR® Lighting			\$0.00	
Residential Consumer Products	\$0.08	\$0.08	\$0.00	0%
Residential Total	\$0.19	\$0.19	\$0.00	0%
Portfolio Total	\$0.13	\$0.15	\$0.02	12%



Electric Annual Cost to Achieve (\$/kWh)

\$/ANNUAL kWh

Program	2023 (3rd Draft)	2023 (Filed)	2023 (Filed) Compared to 2023 (3rd Draft)	
Small Business Direct Install	\$0.84	\$0.84	\$0.00	0%
Large Commercial New Construction	\$0.81	\$0.81	\$0.00	0%
Large Commercial Retrofit	\$0.53	\$0.64	\$0.11	17%
C&I Total	\$0.73	\$0.84	\$0.11	13%
Single Family - Income Eligible Services	\$4.96	\$4.96	\$0.00	0%
Income Eligible Multifamily	\$3.42	\$3.42	\$0.00	0%
Income Eligible Total	\$4.44	\$4.44	\$0.00	0%
Residential New Construction	\$2.07	\$2.07	\$0.00	0%
ENERGY STAR® HVAC	\$1.33	\$1.33	\$0.00	0%
EnergyWise	\$4.98	\$4.98	\$0.00	0%
EnergyWise Multifamily	\$1.98	\$1.98	\$0.00	0%
Home Energy Reports	\$0.09	\$0.09	\$0.00	0%
ENERGY STAR® Lighting			\$0.00	
Residential Consumer Products	\$0.56	\$0.56	\$0.00	0%
Residential Total	\$0.83	\$0.83	\$0.00	0%
Portfolio Total	\$0.94	\$1.03	\$0.09	8%



Electric Portfolio Net Benefits

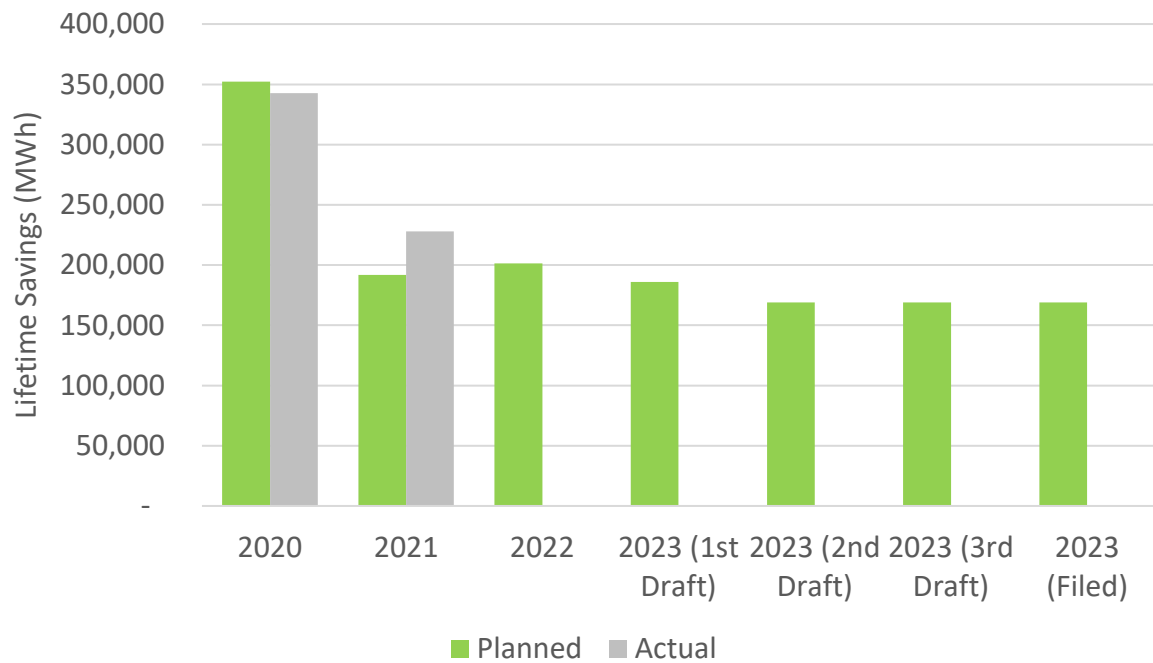
Electric Total Benefits

% of 2023 Portfolio	Program	2023 (1st Draft) - Net Benefits	2023 (Filed) - Net Benefits	2023 (Filed) Compared to 2023 (1st Draft)	
				Amount	Percentage
6%	Small Business Direct Install	\$2,983,230	\$10,897,554	\$7,914,324	265%
16%	Large Commercial New Construction	\$17,982,417	\$43,431,622	\$25,449,204	142%
33%	Large Commercial Retrofit	\$46,198,667	\$78,196,680	\$31,998,014	69%
4%	Commercial ConnectedSolutions	\$6,175,100	\$6,636,967	\$461,866	7%
59%	C&I Total	\$73,339,414	\$139,162,823	\$65,823,408	90%
9%	Single Family - Income Eligible Services	\$8,797,764	\$16,316,650	\$7,518,886	85%
2%	Income Eligible Multifamily	\$986,868	\$2,418,192	\$1,431,324	145%
11%	Income Eligible Total	\$9,784,632	\$18,734,841	\$8,950,210	91%
3%	Residential New Construction	\$3,700,101	\$6,621,911	\$2,921,810	79%
9%	ENERGY STAR® HVAC	\$16,170,307	\$22,218,792	\$6,048,485	37%
10%	EnergyWise	\$4,285,666	\$16,878,109	\$12,592,442	294%
1%	EnergyWise Multifamily	\$1,422,614	\$3,368,219	\$1,945,606	137%
2%	Home Energy Reports	\$4,418,293	\$5,059,171	\$640,878	15%
0%	ENERGY STAR® Lighting	\$0	\$0	\$0	
3%	Residential Consumer Products	\$6,380,034	\$8,158,690	\$1,778,656	28%
1%	Residential ConnectedSolutions	\$1,517,595	\$1,090,503	-\$427,092	-28%
30%	Residential Total	\$37,894,610	\$63,395,395	\$25,500,785	67%
100%	Portfolio Total	\$121,018,656	\$221,293,060	\$100,274,404	83%

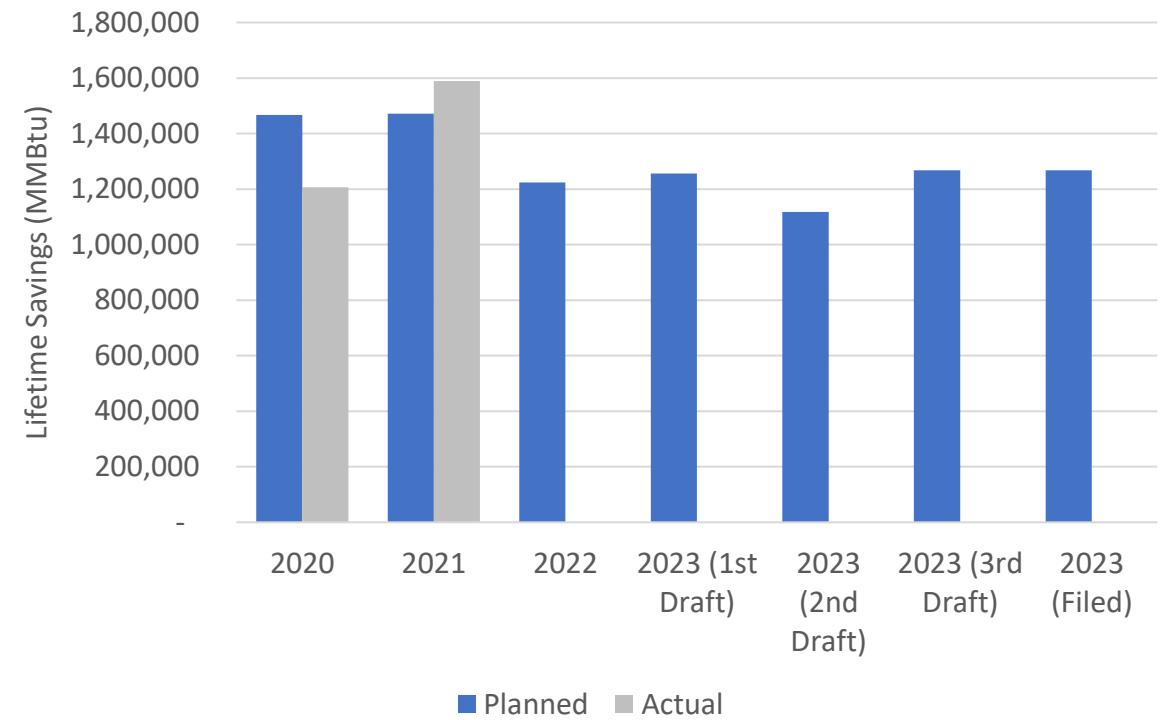


Residential Lifetime Savings

Electric Lifetime Savings (MWh) - Residential Total



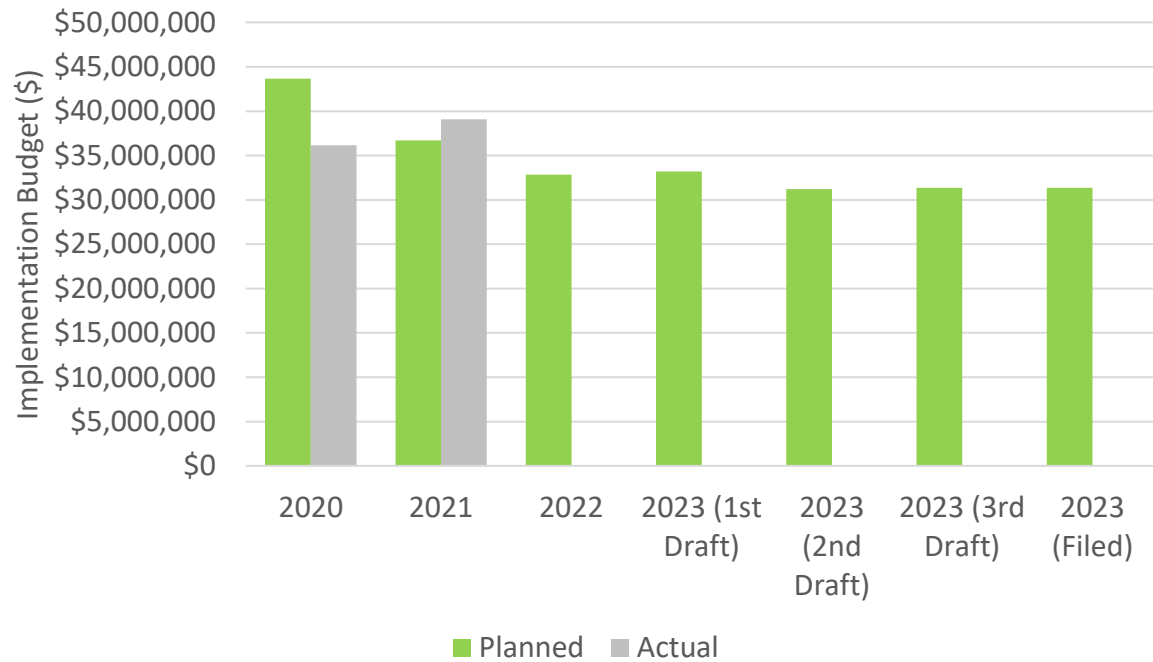
Gas Lifetime Savings (MMBtu) - Residential Total



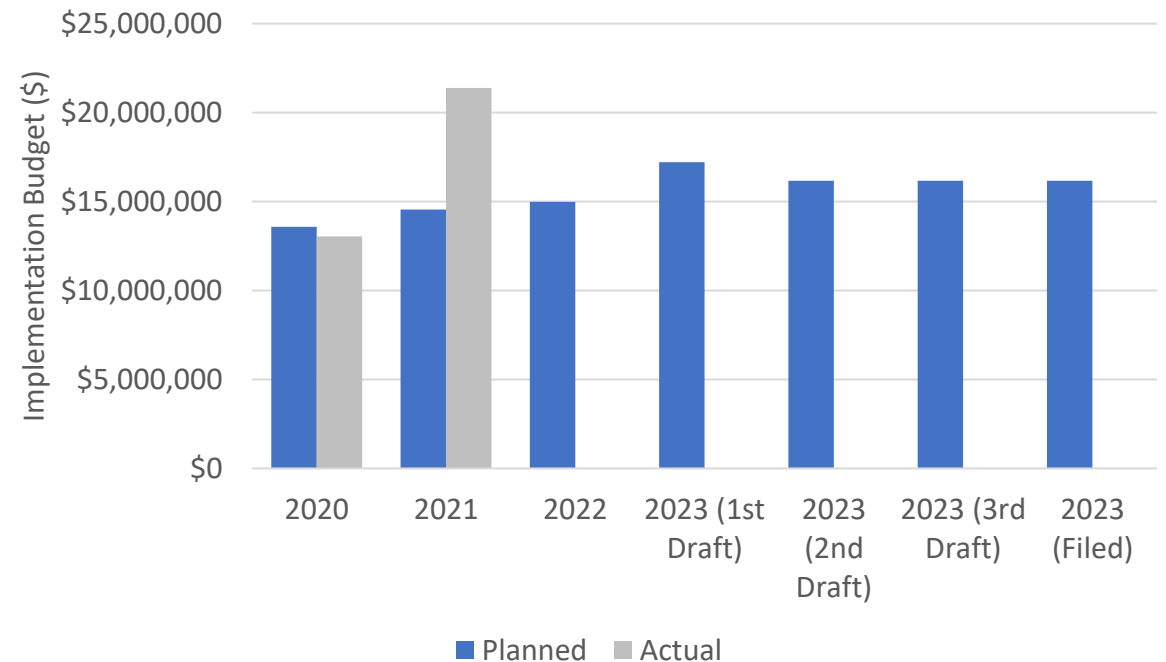


Residential Implementation Budget

Electric Implementation Budget (\$) - Residential Total



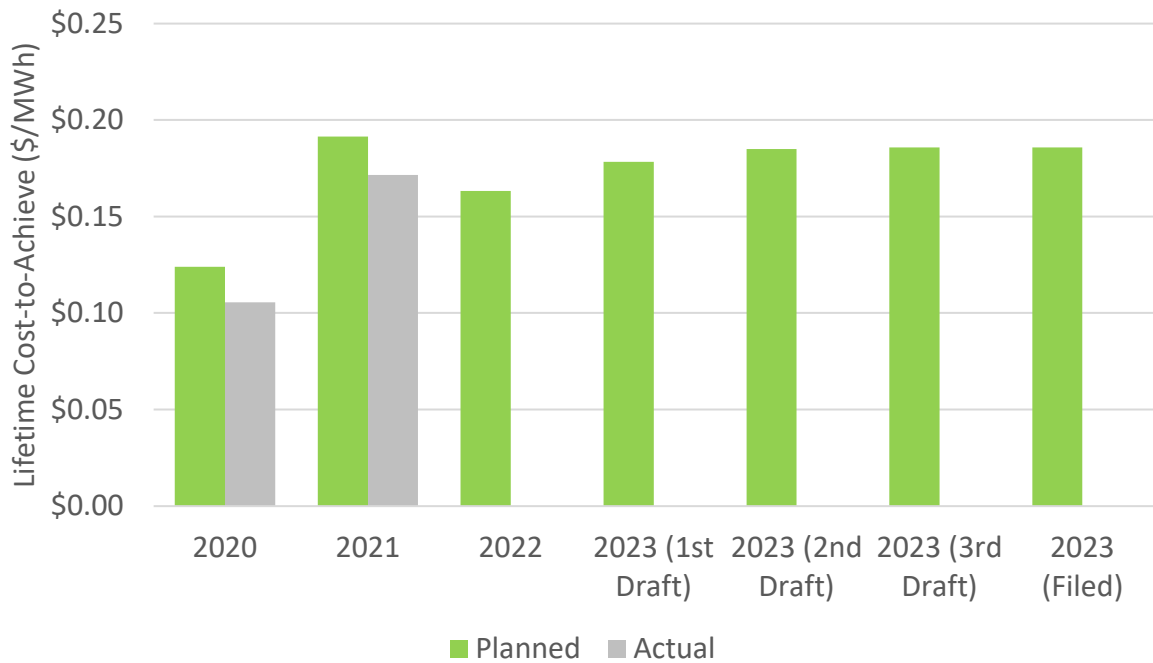
Gas Implementation Budget (\$) - Residential Total



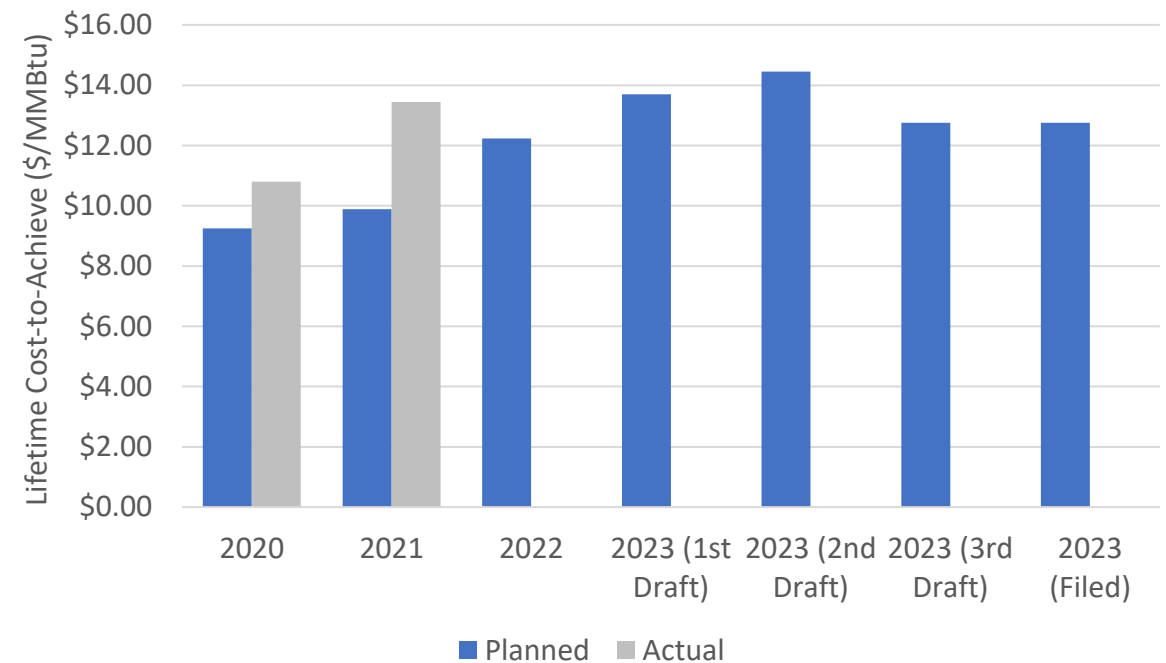


Residential Lifetime Cost-to-Achieve

Electric Cost to Achieve (\$/Lifetime kWh) - Residential Total



Gas Cost to Achieve (\$/Lifetime MMBtu) - Residential Total

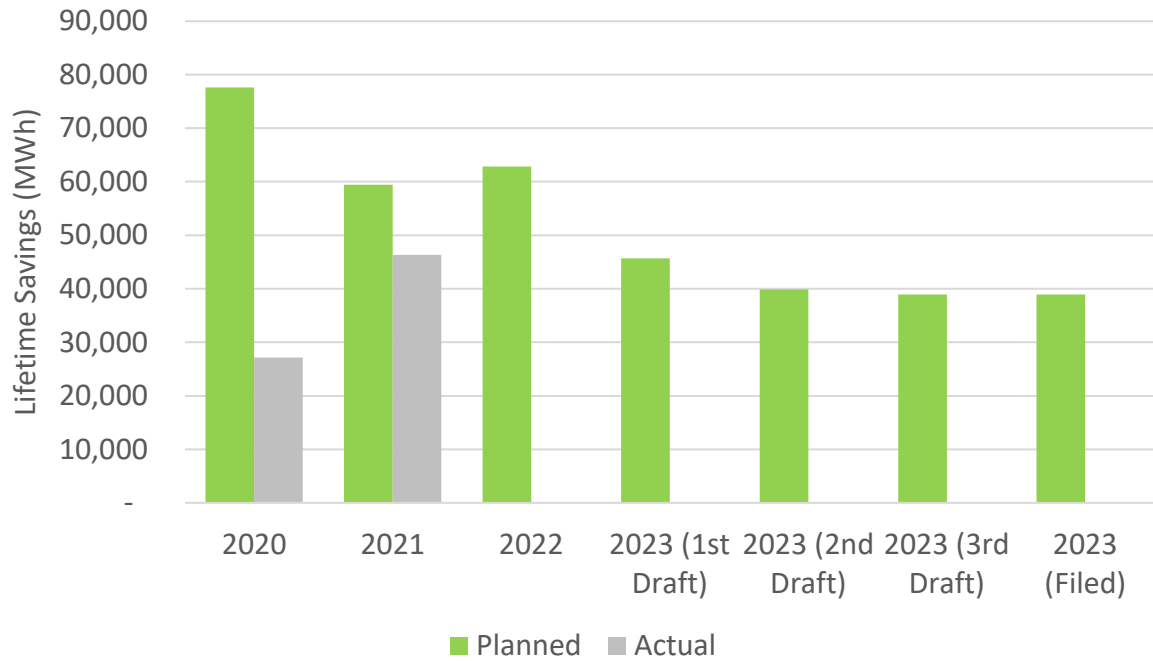




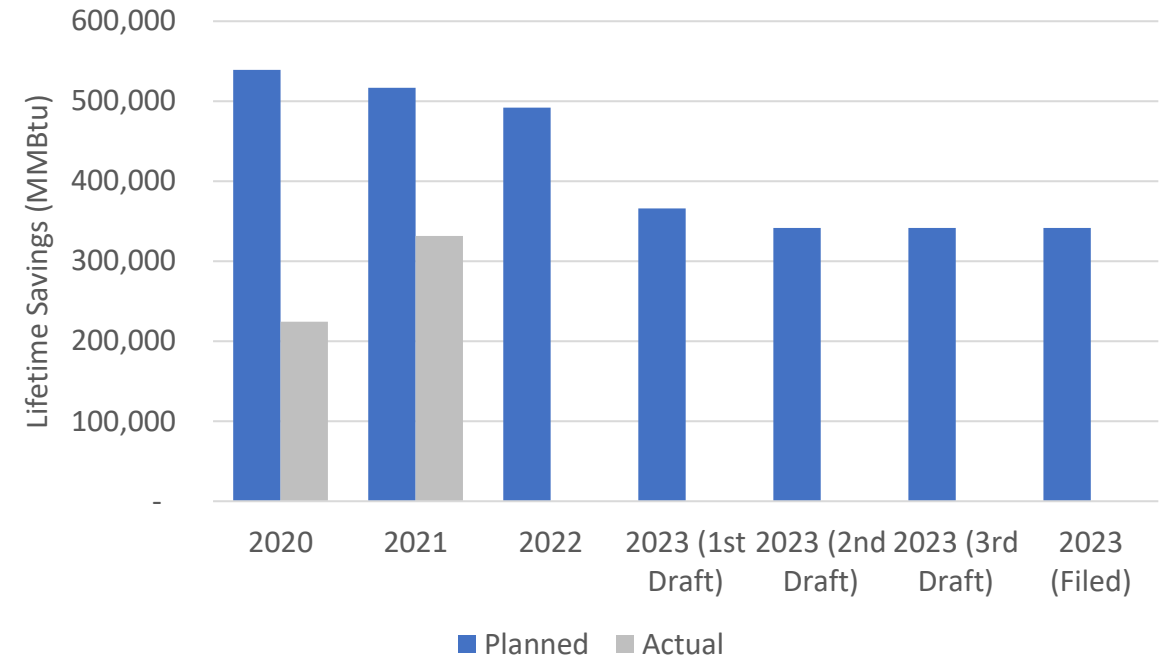
Income Eligible Lifetime Savings



Electric Lifetime Savings (MWh) - Income Eligible Total



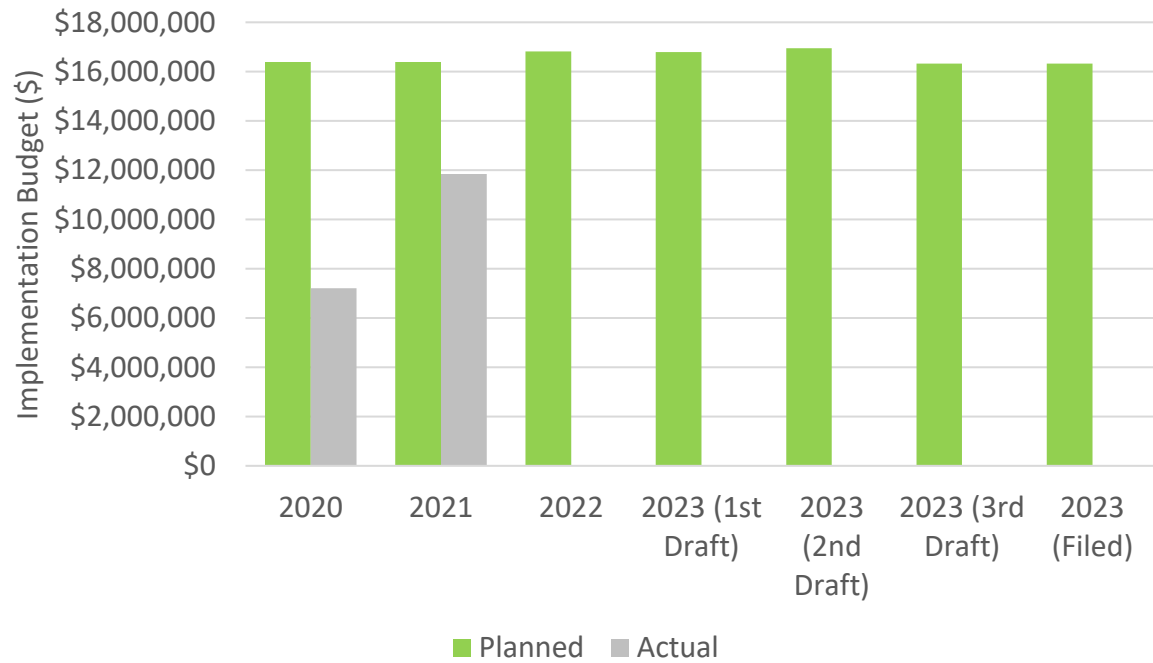
Gas Lifetime Savings (MMBtu) - Income Eligible Total



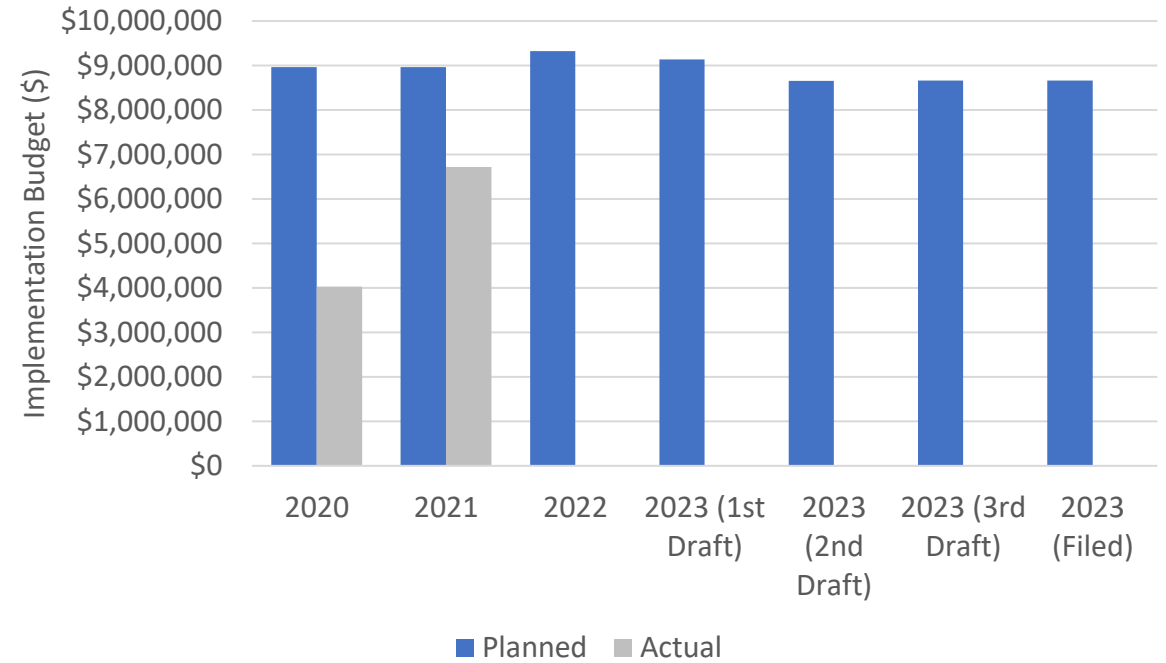


Income Eligible Implementation Budget

Electric Implementation Budget (\$) - Income Eligible Total



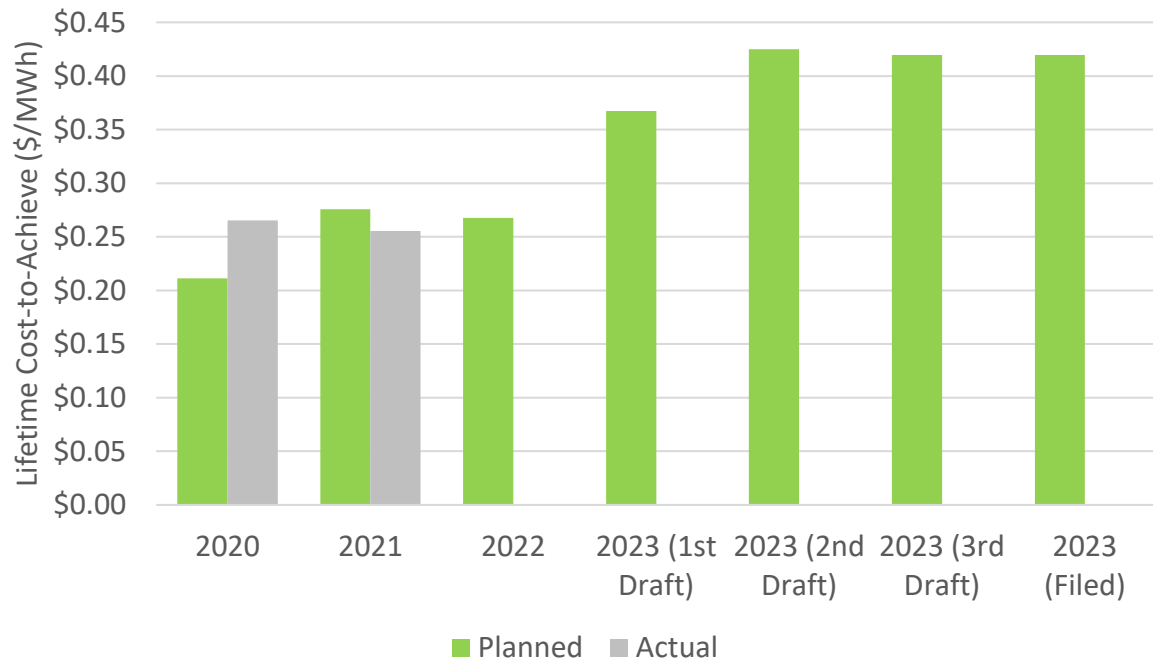
Gas Implementation Budget (\$) - Income Eligible Total



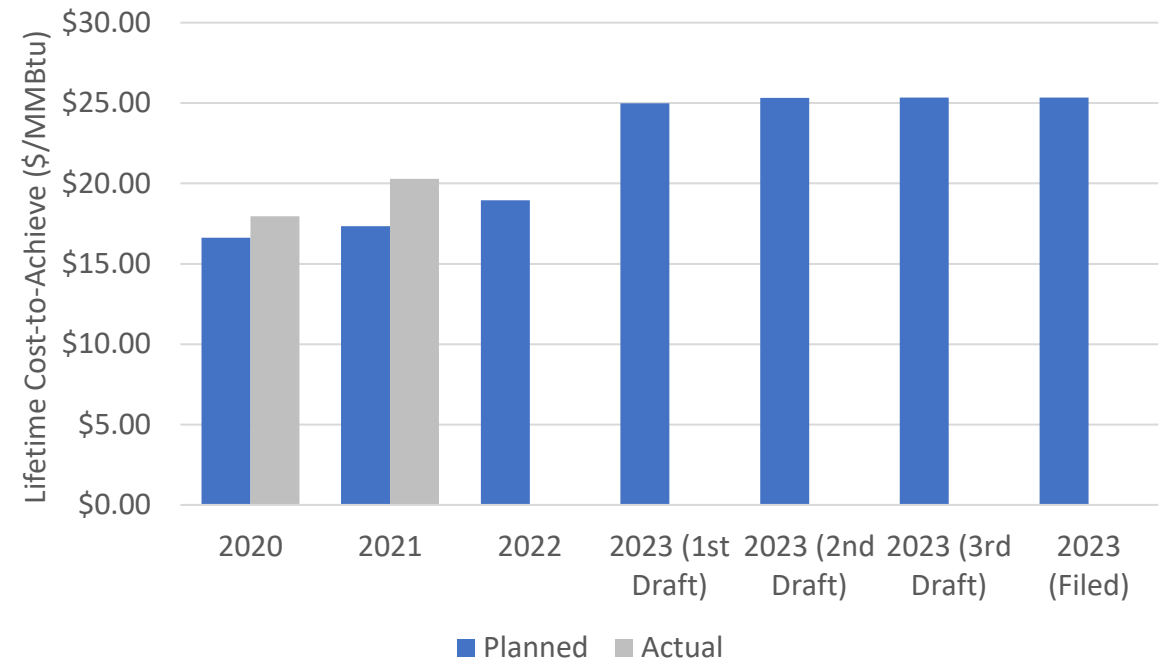


Income Eligible Lifetime Cost-to-Achieve

Electric Cost to Achieve (\$/Lifetime kWh) - Income Eligible Total



Gas Cost to Achieve (\$/Lifetime MMBtu) - Income Eligible Total

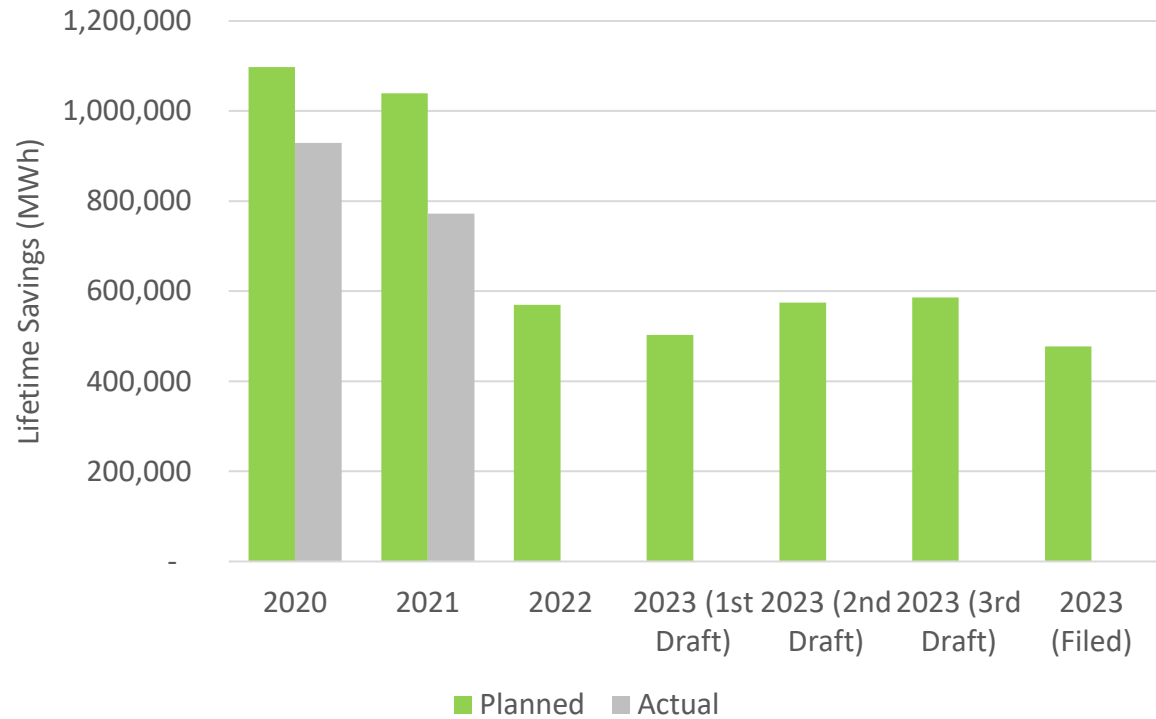




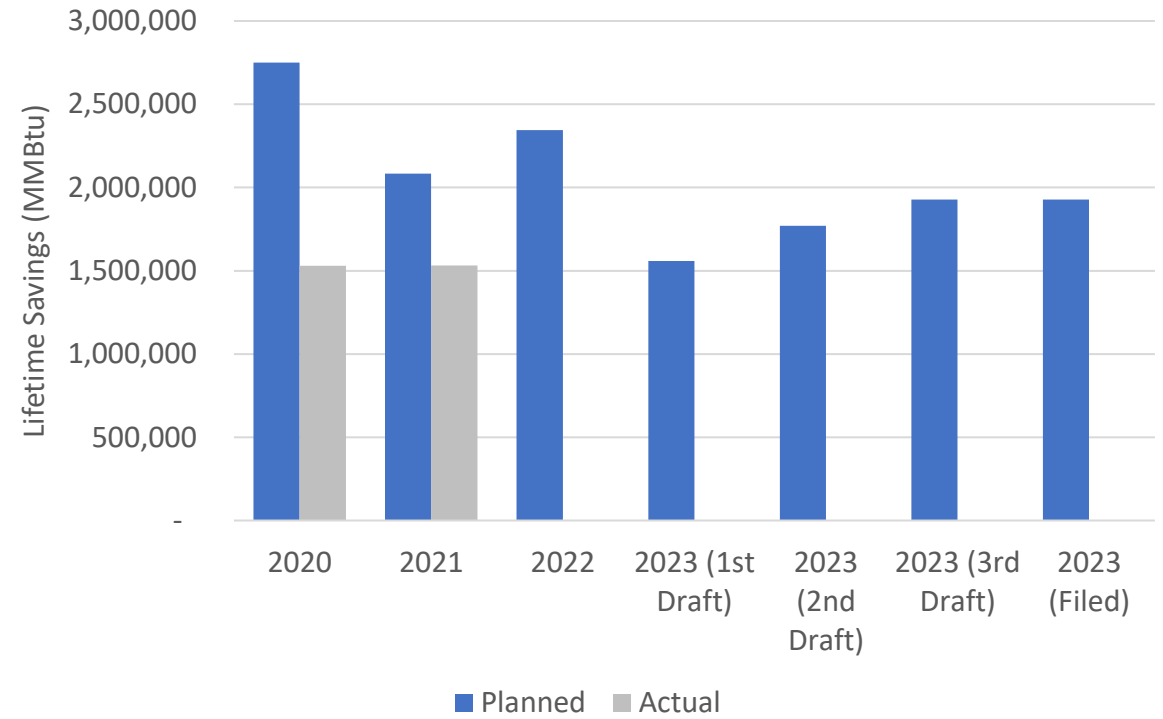
C&I Lifetime Savings



Electric Lifetime Savings (MWh) - C&I Total



Gas Lifetime Savings (MMBtu) - C&I Total

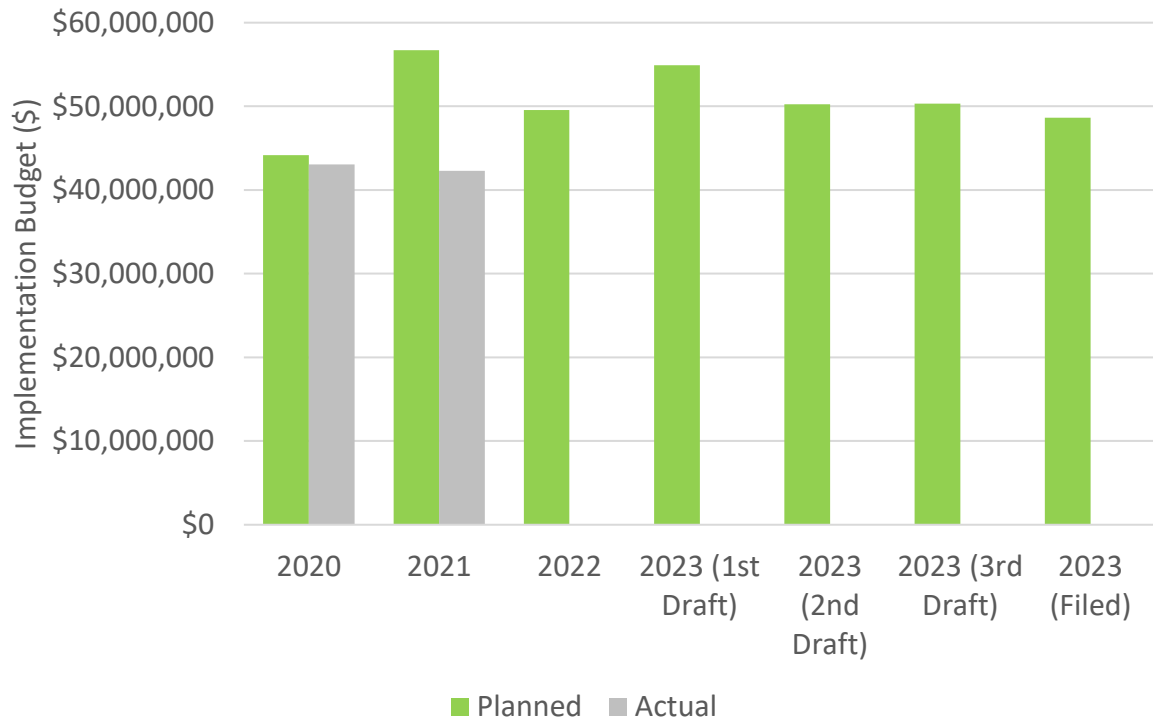




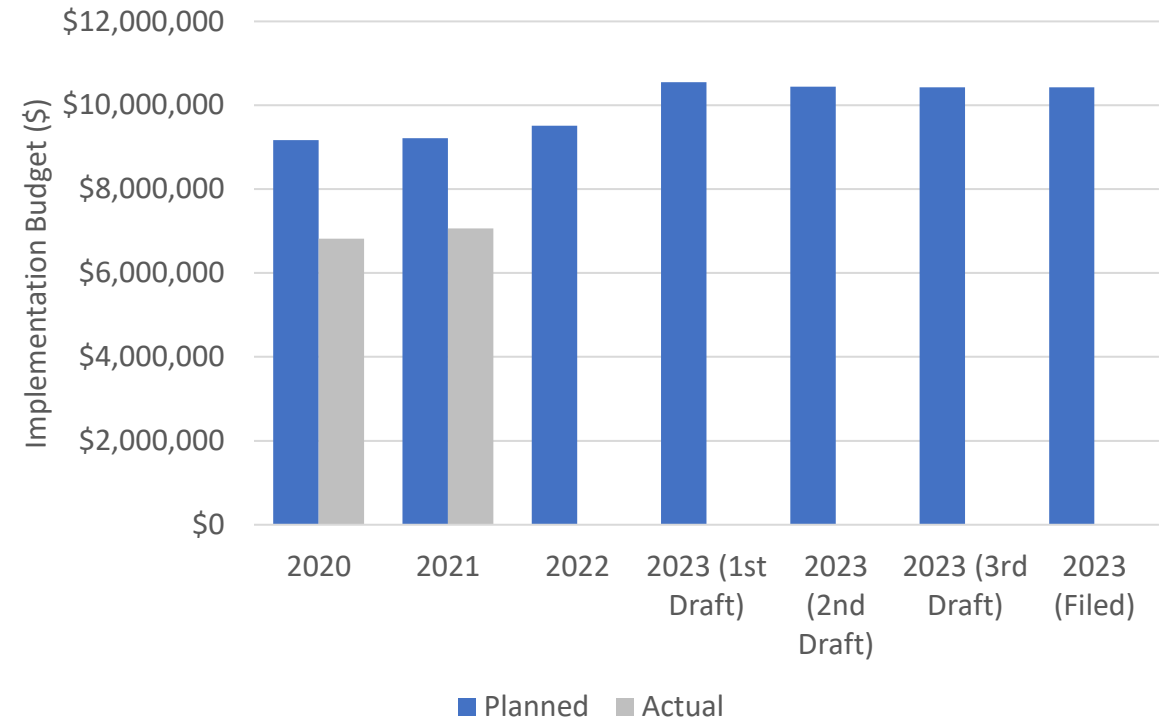
C&I Implementation Budget



Electric Implementation Budget (\$) - C&I Total

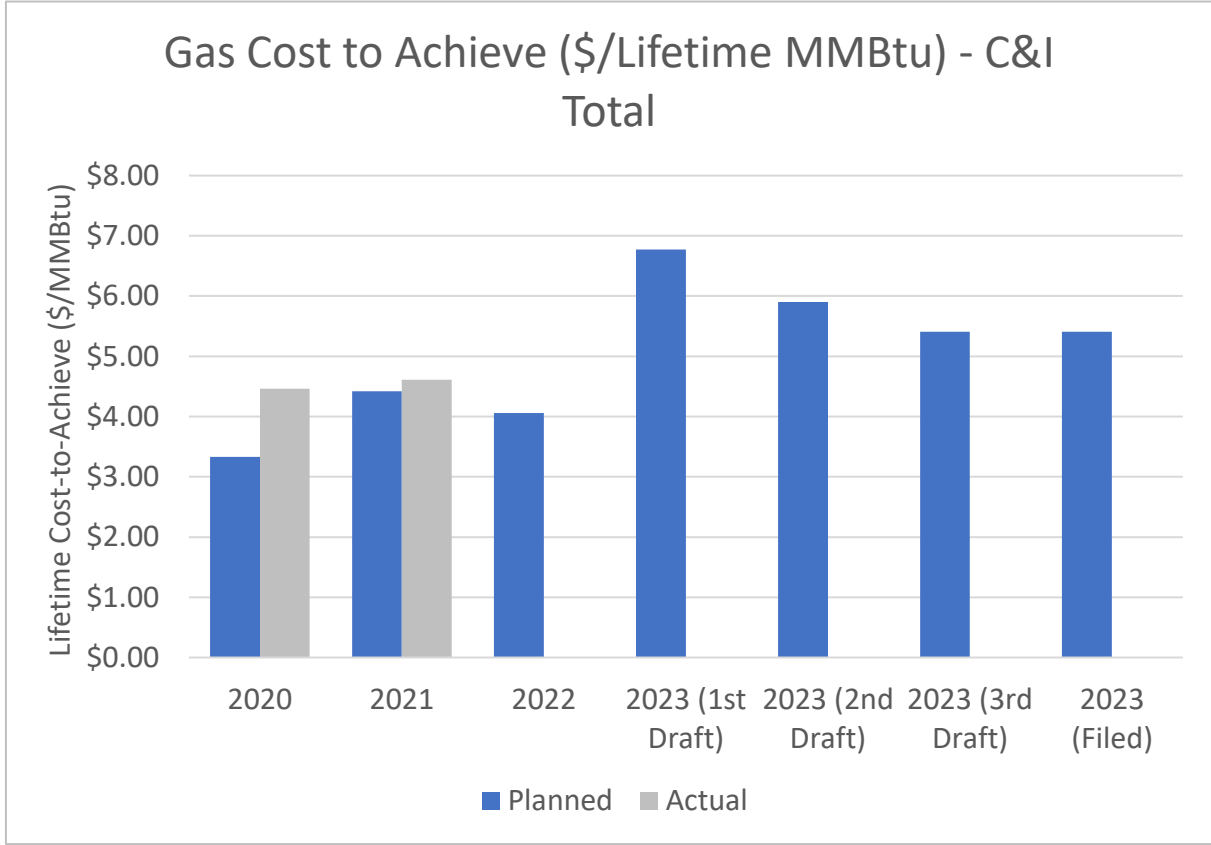
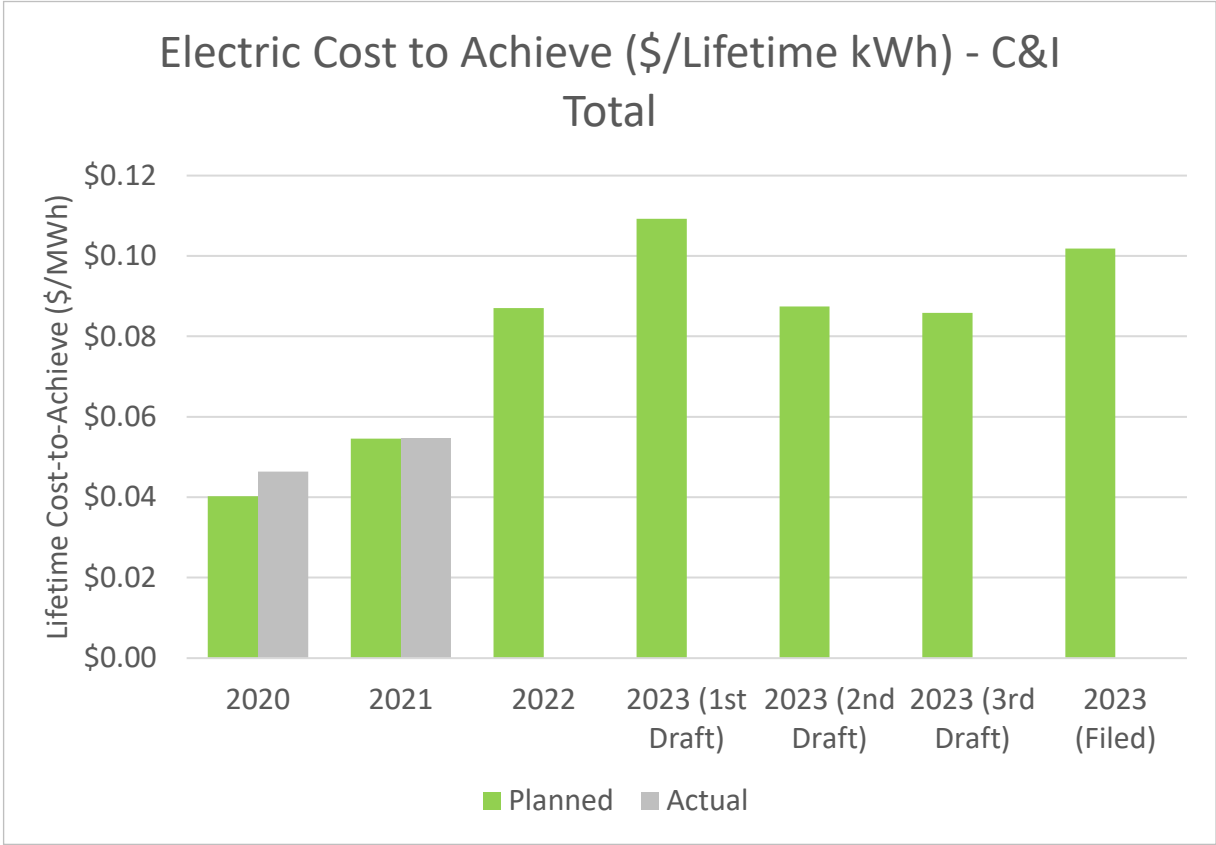


Gas Implementation Budget (\$) - C&I Total





C&I Lifetime Cost-to-Achieve

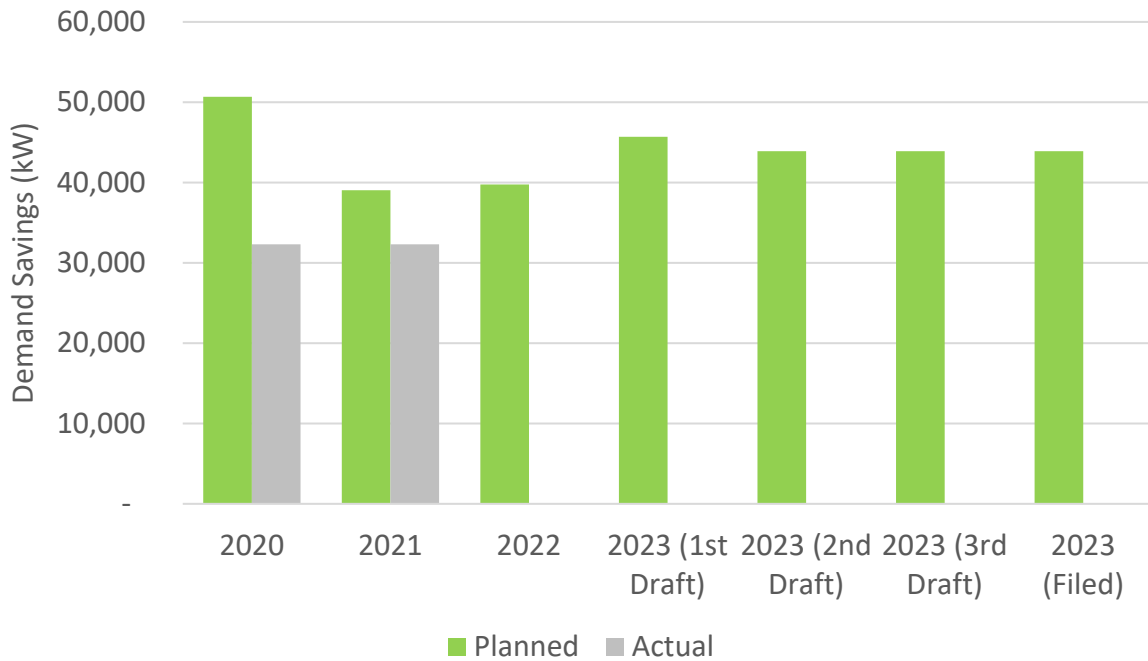




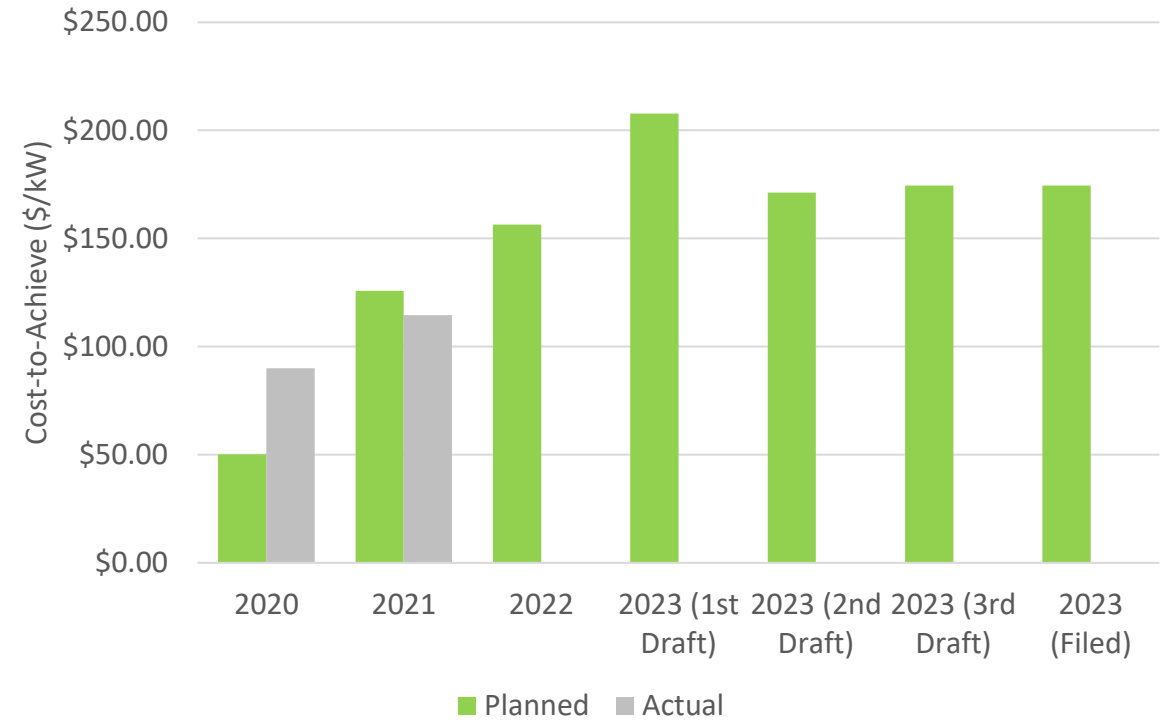
Active Demand – Electric Portfolio



Electric Demand Savings (kW) - Portfolio Total



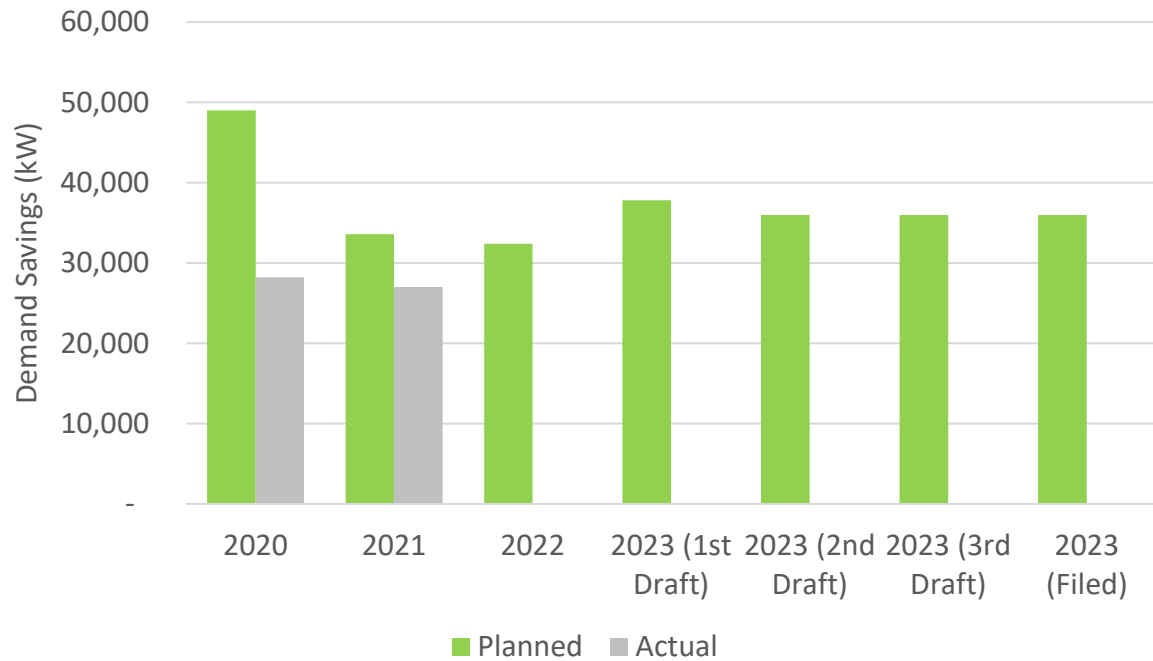
Electric Cost to Achieve (\$/kW) - Portfolio Total



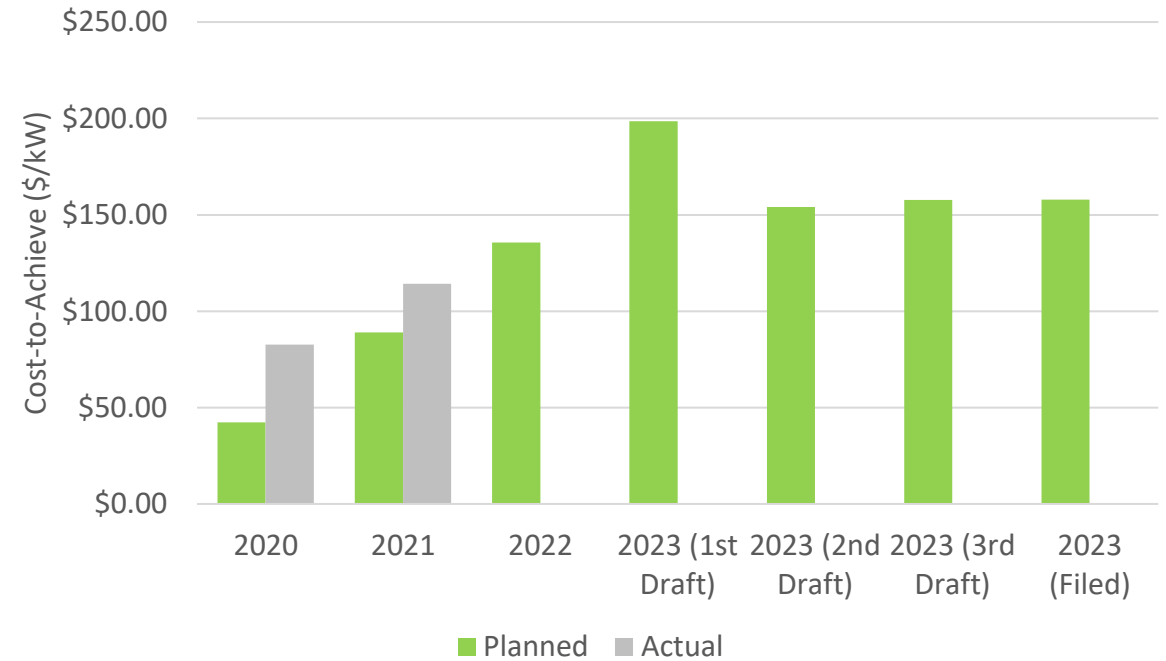


Active Demand – C&I Connected Solutions

Electric Demand Savings (kW) - Commercial Connected Solutions



Electric Cost to Achieve (\$/kW) - Commercial Connected Solutions

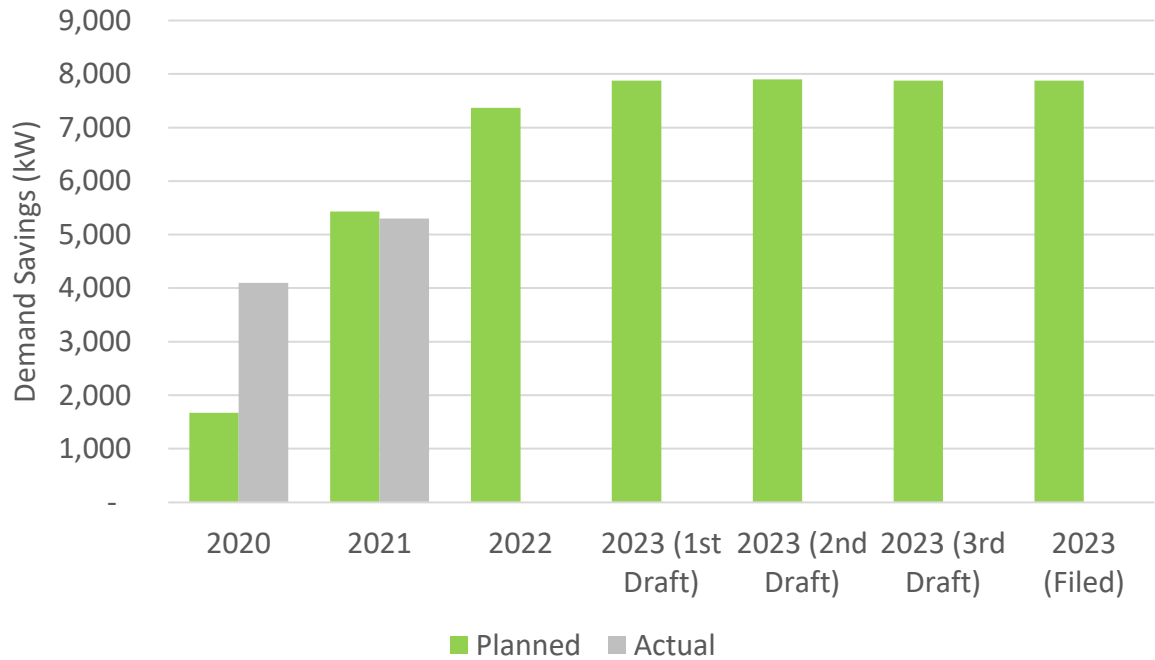




Active Demand – Res Connected Solutions



Electric Demand Savings Savings (kW) - Residential Connected Solutions



Electric Cost to Achieve (\$/kW) - Residential Connected Solutions

