

**STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION**

Docket No. DG 20-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities
Winter 2020/2021 Cost of Gas
Summer 2021 Cost of Gas

DIRECT TESTIMONY

OF

DAVID B. SIMEK

AND

CATHERINE A. MCNAMARA

September 1, 2020

1 **I. INTRODUCTION**

2 **Q. Please state your full name and business address.**

3 A. (DS) My name is David B. Simek. My business address is 15 Buttrick Road,
4 Londonderry, New Hampshire.

5 (CM) My name is Catherine A. McNamara. My business address is 15 Buttrick Road,
6 Londonderry, New Hampshire.

7 **Q. Please state by whom you are employed.**

8 A. We are employed by Liberty Utilities Service Corp. (“Liberty”), which provides service
9 to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities
10 (“EnergyNorth” or “the Company”).

11 **Q. Please describe your educational background and your business and professional**
12 **experience.**

13 A. (DS) I graduated from Ferris State University in 1993 with a Bachelor of Science in
14 Finance. I received a Master’s of Science in Finance from Walsh College in 2000. I also
15 received a Master’s of Business Administration from Walsh College in 2001. In 2006, I
16 earned a Graduate Certificate in Power Systems Management from Worcester
17 Polytechnic Institute. In August 2013, I joined Liberty as a Utility Analyst and I was
18 promoted to Manager, Rates and Regulatory Affairs in August 2017. Prior to my
19 employment at Liberty, I was employed by NSTAR Electric & Gas (“NSTAR”) as a
20 Senior Analyst in Energy Supply from 2008 to 2012. Prior to my position in Energy

1 Supply at NSTAR, I was a Senior Financial Analyst within the NSTAR Investment
2 Planning group from 2004 to 2008.

3 (CM) I graduated from the University of Massachusetts, Boston, in 1993 with a Bachelor
4 of Science in Management with a concentration in Accounting. In November 2017, I
5 joined Liberty as an Analyst in Rates and Regulatory Affairs. Prior to my employment at
6 Liberty, I was employed by Eversource as a Senior Analyst in the Investment Planning
7 group from 2015 to 2017. From 2008 to 2015, I was a Supervisor in the Plant
8 Accounting department. Prior to my position in Plant Accounting, I was a Financial
9 Analyst/General Ledger System Administrator within the Accounting group from 2000 to
10 2008.

11 **Q. Have you previously testified in regulatory proceedings before the New Hampshire**
12 **Public Utilities Commission (the “Commission”)?**

13 A. (DS) Yes. I have testified on numerous occasions before the Commission.

14 (CM) Yes. I have testified on multiple occasions before the Commission.

15 **Q. What is the purpose of your testimony?**

16 A. The purpose of our testimony is to explain the Company’s proposed firm sales cost of gas
17 rates for the 2020/2021 Winter (Peak) Period and the Company’s proposed 2020/2021
18 Local Delivery Adjustment Clause, both effective November 1, 2020. Our testimony
19 also explains the Company’s proposed firm sales cost of gas rates for the 2021 Summer
20 (Off-Peak) Period.

1 **II. WINTER 2020/2021 COST OF GAS FACTOR**

2 **Q. What are the proposed firm Winter sales and firm transportation cost of gas rates?**

3 A. The Company proposes a firm sales cost of gas rate of \$0.5571 per therm for residential
4 customers, \$0.5552 per therm for commercial/industrial high winter use customers, and
5 \$0.5660 per therm for commercial/industrial low winter use customers as shown on
6 Proposed Eleventh Revised Page 92 (Bates 047). The Company proposes a firm
7 transportation cost of gas rate of \$0.0001 per therm as shown on Proposed Fourth
8 Revised Page 94 (Bates 049).

9 **Q. Please explain tariff page and Proposed Eleventh Revised Page 92 (Bates 047).**

10 A. Proposed Eleventh Revised Page 92 contains the calculation of the 2020/2021 Winter
11 Period Cost of Gas Rate and summarize the Company's forecast of firm gas costs and
12 firm gas sales. As shown on Page 92, the proposed 2020/2021 Average Cost of Gas of
13 \$0.5571 per therm is derived by adding the Direct Cost of Gas Rate of \$0.5319 per therm
14 to the Indirect Cost of Gas Rate of \$0.0252 per therm. The estimated total Anticipated
15 Direct Cost of Gas, derived on Page 92, is \$46,922,854. The estimated Indirect Cost of
16 Gas, also derived on Page 92, is \$2,220,114. The Direct Cost of Gas Rate of \$0.5319 and
17 the Indirect Cost of Gas Rate of \$0.0252 are determined by dividing each of these total
18 cost figures by the projected winter period firm sales volumes of 88,213,529 therms.

19 To calculate the total Anticipated Direct Cost of Gas, the Company adds a list of
20 allowable adjustments from deferred gas cost accounts to the projected demand and
21 commodity costs for the winter period supply portfolio. These allowable adjustments,
22 shown on Page 92.1, total \$1,012,447. These adjustments are added to the Unadjusted

Anticipated Cost of Gas of \$45,910,407 to determine the Total Anticipated Direct Cost of Gas of \$46,922,854.

Q. What are the components of the Unadjusted Anticipated Cost of Gas?

A. The Unadjusted Anticipated Cost of Gas shown on Proposed Original Page 92.1 consists of the following components:

1. Purchased Gas Demand Costs	\$12,022,922
2. Purchased Gas Commodity Costs	28,276,980
3. Storage Demand and Capacity Costs	955,766
4. Storage Commodity Costs	3,064,149
5. Produced Gas Cost	<u>1,590,589</u>
Total	**\$45,910,406

**Slightly off due to rounding

Q. What are the components of the allowable adjustments to the Cost of Gas?

A. The allowable adjustments to gas costs, listed on Proposed Original Page 92.1, are as follows:

1. Deferred Gas Cost Prior Period Under Collection	\$2,227,421
2. Interest	72,812
3. Fuel Inventory Revenue Requirement	441,037
4. Broker Revenues	(32,725)
5. Transportation COG Revenue	(4,516)
6. Capacity Release Margin	(1,736,581)
7. Fixed Price Administrative Cost	<u>45,000</u>

Total Adjustments ****\$1,012,448**

**Slightly off due to rounding

1 These allowable adjustments are standard adjustments made to the deferred gas cost
2 balance through the operation of the Company's cost of gas adjustment clause. We
3 discuss the factors contributing to the prior period under collection later in this testimony.

4 **Q. How does the proposed average cost of gas rate in this filing compare to the average**
5 **cost of gas rate approved by the Commission in Docket No. DG 19-145 for the**
6 **2019/2020 winter period?**

7 A. The average cost of gas rate proposed in this filing of \$0.5571 per therm is \$0.0632 per
8 therm less than the initial rate of \$0.6203 per therm approved by the Commission in
9 Order No. 26,306 (October 31, 2019) in Docket No. DG 19-145. The \$0.0632 per therm
10 decrease in the rate reflects a \$6,025,265 decrease in the Total Unadjusted Direct Cost of
11 Gas.

12 **Q. How does the proposed firm transportation winter cost of gas rate compare to the**
13 **rate approved by the Commission for the 2019/2020 winter period?**

14 A. The proposed firm transportation winter cost of gas rate is \$0.0001 per therm. The rate
15 approved in Docket No. DG 19-145 was \$0.0009 per therm. The decrease in the rate
16 relates primarily to an estimated \$29,483 decrease in commodity costs and the difference
17 between the winter season 2019/2020 beginning balance of \$29,161 (an over-collection)
18 and the winter season 2020/2021 beginning balance of \$40,053 (an over-collection).

1 **Q. In the calculation of its firm transportation winter cost of gas rate, has the Company**
2 **updated the estimated percentage used for pressure support purposes?**

3 A. No. The Company used, for pressure support purposes, a rate of 8.7% based on the
4 marginal cost study used for the rate design approved in Docket No. DG 17-048.

5 **Q. Did the Company include a fuel inventory revenue requirement calculation in this**
6 **filing?**

7 A. Yes (Bates 198). The Company is proposing to collect \$441,037 in fuel inventory
8 revenue requirement consistent with Order No. 26,156 (July 10, 2018) in Docket No. DG
9 17-048. The impact of this amount to the overall Cost of Gas rate is \$0.0050 per therm
10 which is determined by dividing the \$441,037 by the estimated November 2019 through
11 October 2020 COG sales volumes of 87,788,508 therms.

12 **Q. How was the statutory tax rate of 27.08% calculated (Bates 198)?**

13 A. The statutory rate of 27.08% was calculated by using a 21% federal tax rate and a 7.7%
14 tax rate for the State of New Hampshire $(0.21 + 0.077 - (0.21 \times 0.077) = 0.27083)$.

15 **Q. How was the common equity pre-tax rate of 6.280% calculated (Bates 198)?**

16 A. The common equity pre-tax rate of 6.280% was calculated by dividing the 9.30% rate of
17 return on common equity, approved in Docket No. DG 17-048, by 0.72917 $(1 - 0.27083)$
18 [statutory tax rate – see previous question]) and multiplied by 49.20% (equity component
19 of the capital structure approved in DG 17-048) $[0.093 / 0.72917 \times 0.4920 = 0.0628]$.

1 **Q. Has the bad debt percentage in this filing of 1.11% changed from the bad debt**
2 **percentage calculated in the Winter 2019/2020 Cost of Gas Reconciliation?**

3 A. No. The bad debt percentage of 1.11% used in this filing is the calculated rate for the
4 period of May 2019–April 2020.

5 **Q. What was the actual weighted average firm sales cost of gas rate for the 2019/2020**
6 **winter period?**

7 A. The weighted average cost of gas rate was \$0.4632 per therm (Bates 085 Line 54). This
8 was calculated by applying the actual monthly cost of gas rates for November 2019
9 through April 2020 to the monthly therm usage of an average residential heating
10 customer using 667 therms for the six winter period months.

11 **III. PRIOR WINTER PERIOD UNDER-COLLECTION**

12 **Q. Please explain the prior period under collection of \$1,863,956.**

13 A. The prior period under-collection is detailed in the 2019/2020 winter period
14 reconciliation that was filed with the Commission on July 31, 2020. The \$1,863,956
15 under-collection is the sum of the deferred gas cost, bad debt, and working capital over-
16 and under-collection balances as of April 30, 2020. The under-collection was driven
17 mainly by the lag in the timing of monthly cost of gas rate adjustments as compared to
18 changes in the underlying costs.

1 **IV. FIXED PRICE OPTION**

2 **Q. Has the Company established a winter period fixed price pursuant to its Fixed Price**
3 **Option Program?**

4 A. Yes. Pursuant to Order No. 24,515 in Docket No. DG 05-127, the Fixed Price Option
5 Program (“FPO”) rates are set at \$0.0200 per therm higher than the initial proposed COG
6 rate. Proposed Third Revised Page 91 (Bates 046) contains the FPO rate for the
7 2020/2021 winter period, which is \$0.5771 per therm for residential customers. This
8 compares to the FPO rate approved for the 2019/2020 winter period of \$0.6403 per therm
9 for residential customers. This represents a \$0.0632 per therm or 9.87% decrease in the
10 residential FPO rate. The total bill impact on the winter period bills for an average FPO
11 heating customer using 667 therms is a decrease of approximately \$34.21 or 3.67%
12 compared to last winter. The total bill impact reflects the overall rates in effect following
13 implementation of the increases approved in Docket No. DG 20-049, effective July 1,
14 2020, relating to the cast iron/bare steel main replacement program. The estimated
15 winter period bill for an average residential heating customer opting for the FPO would
16 be approximately \$13.32 (or 1.51%) higher than the bill under the proposed cost of gas
17 rates, assuming no monthly adjustments to the COG rate during the course of the winter.
18 Schedule 23 (Bates 195) contains the historical results of the FPO program.

19 **V. LOCAL DELIVERY ADJUSTMENT CLAUSE (“LDAC”)**

20 **Q. What are the surcharges that will be billed under the LDAC?**

21 A. As shown on Proposed Third Revised Page 97 (Bates 052), the Company is submitting
22 for approval an LDAC of \$0.0603 per therm for the residential non-heating class and

1 residential heating class, and \$0.0549 per therm for the commercial/industrial bundled
2 sales classes, effective November 1, 2020. The surcharges proposed to be billed under
3 the LDAC are the Energy Efficiency Charge, the Revenue Decoupling Adjustment
4 Factor, the Environmental Surcharge for Manufactured Gas Plant (“MGP”) remediation,
5 the Residential Gas Assistance Program charge, and the rate case expense reconciliation
6 surcharge from Docket No. DG 17-048.

7 **Q. Which customers are billed an LDAC?**

8 A. All EnergyNorth customers including those in Keene are billed an LDAC charge. When
9 calculating the LDAC charge, the November 1, 2020, through October 31, 2021,
10 forecasted Keene therm sales of 1,442,013 are added to the EnergyNorth therm sales
11 forecast of 178,132,666 for a total therm sales forecast of 179,574,679.

12 **Q. Please explain the Energy Efficiency Charge.**

13 A. The Energy Efficiency Charge is designed to recover the projected expenses associated
14 with the Company’s energy efficiency programs for the November 2020–October 2021
15 period that will be filed with the Commission in the near future. In the calculation of the
16 Energy Efficiency Charge, the Company has also included the projected prior period
17 under-recovery of the Company’s residential and commercial energy efficiency programs
18 as of October 2020. As shown on Schedule 19 Energy Efficiency (Bates 124-126), the
19 proposed Energy Efficiency charge is \$0.0831 per therm for Residential customers and
20 \$0.0441 per therm for commercial and industrial customers.

1 **Q. Please explain the Revenue Decoupling Adjustment Factor (“RDAF”).**

2 A. The purpose of the RDAF is to recover or refund, on an annual basis, the difference
3 between the Actual Base Revenue per Customer and the Benchmark Base Revenue per
4 Customer. Schedule 19 RDAF (Bates 109-123) shows the proposed Actual Base
5 Revenue per Customer and the Benchmark Base Revenue per Customer calculation of a
6 total over-collection of \$4,965,947 effective November 1, 2020, through October 31,
7 2021. Schedule 19 RDAF also includes a proposed September 2019 through August
8 2020 reconciliation. The reconciliation is new to this filing and calculates a remaining
9 refund of \$1,010,099 effective November 1, 2020, through October 31, 2021.

10 **Q. What is the proposed Residential Gas Assistance Program charge?**

11 A. As shown on Schedule 19 Gas Assistance (Bates 127-128), the proposed Residential Gas
12 Assistance charge is \$0.0121 per therm. It is designed to recover administrative costs,
13 revenue shortfall, and the prior period reconciliation adjustment relating to this program.
14 For the 2020/2021 winter period, the Company is providing a 45% base rate and cost of
15 gas discount, consistent with the settlement agreement approved by the Commission in
16 Order No. 26,397 (August 27, 2020) in Docket No. DG 20-013. The proposed
17 Residential Gas Assistance charge is designed to recover \$2,165,954, of which
18 \$1,689,200 is for the revenue shortfall resulting from 4,880 customers receiving a 45%
19 discount off their base and cost of gas rates, and \$476,754 for the prior year reconciling
20 adjustment.

21 **Q. In Order No. 24,824 (Feb. 29, 2008) in Docket No. DG 06-122 relating to short-term**
22 **debt issues, the Company agreed to adjust its short-term debt limits each year as**

1 **part of the Company's Winter Period Cost of Gas filing. Did the Company**
2 **calculate the short-term debt limit for fuel and non-fuel purposes in accordance**
3 **with this settlement?**

4 A. Yes, the Company included in Schedule 24 (Bates 196) the short-term debt limit for fuel
5 and non-fuel purposes for the 2020/2021 winter period. As shown, the short-term debt
6 limit for fuel inventory financing for the period November 1, 2020, through October 31,
7 2021, is calculated to be \$14,702,768 and the limit for non-fuel purposes is calculated to
8 be \$105,567,204.

9 **Q. Has the Company updated the Environmental Surcharge (Tariff Page 95)?**

10 A. Yes, it has. The costs submitted for recovery through the MGP remediation cost recovery
11 mechanism, as well as the third party recoveries, are included in the Environmental Cost
12 Summary in Schedule 20 (Bates 130) of this filing. The environmental investigation and
13 remediation costs that underlie these expenses are the result of efforts by the Company to
14 respond to its legal obligations with regard to these sites, as described by Ms. Casey in
15 her pre-filed direct testimony in this proceeding and as set forth in the MGP site
16 summaries included in this filing under Schedule 20. The Summary included in Schedule
17 20 shows the remediation cost pools for the Concord Pond, Concord MGP, Manchester,
18 Nashua, and Laconia sites, and a General Pool for costs that cannot be directly assigned
19 to a specific site.

20 A summary sheet and detailed backup spreadsheets that support the 2019/2020 costs are
21 provided in Schedule 20 of this filing. Ms. Casey's testimony describes the Company's
22 activities with regard to all five sites.

1 **Q. Please describe how the Company calculated the Environmental Surcharge included**
2 **in this filing.**

3 A. The proposed Manufactured Gas Plant Remediation surcharge for the period beginning
4 November 1, 2020, and ending October 31, 2021, is \$0.0197 per therm. Consistent with
5 filings made over the past few years, this surcharge will recover a total of \$2,864,179 in
6 amortized remediation costs. New to this filing are amortized actual to forecast true-up
7 recovery costs through June 2019 of \$341,389 (total amount is \$1,024,167 which is
8 proposed to be amortized over three years). The \$1,024,167 is the recommended amount
9 provided by Audit Staff in the DG 19-145 Final Audit Report dated April 9, 2020. Also,
10 new to this filing are actual to forecast true-up recovery cost for the period July 2019
11 through June 2020 of \$338,564. The costs submitted for recovery are shown in the
12 Environmental Cost Summary included in Schedule 20 of this filing.

13 **Q. Did the Company include a Rate Case Expense (RCE) surcharge in this filing?**

14 A. Yes. As shown on Schedule 19 RCE (Bates 107-108), the Company is proposing to
15 collect \$44,619 in uncollected rate case expense consistent with Order No. 26,122 (April
16 27, 2018) in Docket No. DG 17-048. The RCE rate of \$0.0002 per therm is determined
17 by dividing the \$44,619 by the estimated November 2020 through October 2021 sales
18 volumes of 179,574,679 therms.

1 **Q. Has the Company also updated its Company Allowance percentage for the period**
2 **November 2020 through October 2021 in accordance with Section 8 of the**
3 **Company's Delivery Terms and Condition?**

4 A. Yes, in Schedule 25 (Bates 197) the Company has recalculated its Company Allowance
5 for the period November 2020 through October 2021. The Company calculated the
6 Company Allowance of 1.61% based on sendout and throughput data for the twelve-
7 month period ending June 2020. The Company proposes to apply this recalculated
8 Company Allowance to all supplier deliveries beginning in November 2020.

9 **VI. CUSTOMER BILL IMPACTS**

10 **Q. What are the estimated impacts of the proposed firm sales cost of gas rate and**
11 **proposed LDAC surcharges on an average heating customer's winter bill as**
12 **compared to the winter rates in effect last year?**

13 A. The bill impact analysis is presented in Schedule 8 (Bates 085) of this filing. These bill
14 impacts reflect the implementation of the increases approved in Docket No. DG 20-049
15 effective July 1, 2020, relating to the cast iron/bare steel main replacement program. The
16 total bill impact over the winter period for an average residential heating customer is an
17 increase of approximately \$91.21 or 11.51%. The total bill impact over the winter period
18 for an average commercial/industrial G-41 customer is an increase of approximately
19 \$223.46, or 11.0% (Bates 086). Schedule 8 of this filing provides more detail of the
20 impact of the proposed rate adjustments on heating customers.

VII. OTHER TARIFF CHANGES

Q. Is the Company updating its Delivery Terms and Conditions in the filing?

A. Yes. The Company is submitting Proposed Third Revised Page 147 (Bates 053) relating to Supplier Balancing and Peaking Demand Charges and Proposed Third Revised Page 148 (Bates 054) relating to Capacity Allocation.

Q. Please describe the changes to tariff Page 147.

A. In Proposed Third Revised Page 147, the Company is updating the Peaking Demand Charge from \$18.12 per MMBtu of Peak MDQ to \$17.32 per MMBtu of Peak MDQ. This calculation is also presented in Schedule 21 (Bates 178-188).

Q. Please describe the changes to tariff Page 148.

A. Proposed Second Revised Page 148 updates the Capacity Allocator percentages used to allocate pipeline, storage, and local peaking capacity to high and low load factor customers under the mandatory capacity assignment requirement for firm transportation service. Schedule 22 (Bates 189-194) contains the six-page worksheet that backs up the calculations for the updated allocators.

VIII. SUMMER 2020 COST OF GAS FACTOR

Q. What are the proposed 2020 summer firm sales cost of gas rates?

A. The Company proposes a firm sales cost of gas rate of \$0.3148 per therm for residential customers, \$0.3109 per therm for commercial/industrial high winter use customers, and \$0.3199 per therm for commercial/industrial low winter use customers as shown on Proposed Eighth Revised Page 89 (Bates 207).

1 **Q. Please explain tariff pages Proposed Third Revised Page 88 and Proposed**
2 **Thirteenth Revised Page 89.**

3 A. Proposed Third Revised Page 88 (Bates 206) and Proposed Thirteenth Revised Page 89
4 (Bates 207) contain the calculation of the 2020 Summer Period Cost of Gas Rate and
5 summarize the Company's forecast of firm gas sales, firm gas sendout, and gas costs. On
6 Proposed Thirteenth Revised Page 89, the 2021 Average Cost of Gas of \$0.3148 per
7 therm is derived by adding the Direct Cost of Gas Rate of \$0.3257 per therm to the
8 Indirect Cost of Gas Rate of (\$0.0109) per therm. The estimated total Anticipated Direct
9 Cost of gas is \$7,386,965 and the estimated Indirect Cost of Gas is (\$246,190). The
10 Direct Cost of Gas Rate and the Indirect Cost of Gas Rates are determined by dividing
11 each of these total cost figures by the projected Summer firm sales volumes of
12 22,681,422 therms. Proposed Thirteenth Revised Page 89 further shows that the
13 Residential Cost of Gas Rate of \$0.3148 per therm is equal to the Average Cost of Gas
14 for all firm sales customers. It also shows the calculation of the Commercial/Industrial
15 High Winter Use Cost of Gas Rate of \$0.3109 per therm and the Commercial/Industrial
16 Low Winter Use Cost of Gas Rate of \$0.3199 per therm.

17 The calculation of the Anticipated Direct Cost of Gas is shown on Proposed Third
18 Revised Page 88. To derive the total Anticipated Direct Cost of Gas of \$7,386,965, the
19 Company starts with the Unadjusted Anticipated Cost of Gas of \$7,284,571 and adds the
20 Net Adjustment totaling \$102,394.

Q. What are the components of the Unadjusted Anticipated Cost of Gas?

A. The Unadjusted Anticipated Cost of Gas consists of the following:

1. Purchased Gas Demand Costs	\$2,868,280
2. Purchased Gas Supply Costs	4,387,278
3. Produced Gas Costs	<u>29,014</u>
Total Unadjusted Anticipated Cost of Gas	<u>**\$7,284,572</u>

**Slightly off due to rounding

Q. What are the components of the adjustments to the cost of gas?

A. The adjustments to gas costs, listed on proposed Third Revised Page 88, are as follows:

1. Prior Period (Over)/Under Collection	\$105,886
2. Interest	<u>\$(3,492)</u>
Total Adjustments	<u>\$102,394</u>

Q. How does the proposed average Residential Summer cost of gas rate in this filing compare to the initial cost of gas rate approved by the Commission for the 2020 Summer Period?

A. The cost of gas rate proposed in this filing is \$0.1372 per therm lower than the initial rate approved by the Commission for the 2019 Summer Period (\$0.4520 vs. \$0.3148) (Schedule 8, Bates 229). This decrease is primarily due to a \$1,779,560 lower estimated under-collection compared to the under-collection from the prior summer period.

Q. Does this conclude your testimony?

A. Yes, it does.

Program Cost-Effectiveness - 2021 PLAN

	Benefit/Cost Ratios			Benefits (\$000)			Utility Costs (\$000 - 2021\$) ²	Customer Costs (\$000 - 2021\$) ²	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
	Granite State Test	Utility Cost Test	Secondary Granite State Test	Granite State Test	Utility Cost Test	Secondary Granite State Test ¹									
Residential Programs															
B1 - Home Energy Assistance	1.70	0.83	1.57	921.3	451.9	850.1	542.7	-	-	-	-	-	84	2,442.2	52,284.1
A1 - Energy Star Homes	2.17	1.85	1.82	665.8	569.6	729.0	307.4	93.8	-	-	-	-	100	2,748.5	66,927.5
A2 - Home Performance with Energy	1.29	1.06	1.19	311.8	256.9	348.6	242.3	51.4	2.4	55.4	-	1.3	75	1,407.8	29,706.1
A3 - Energy Star Products	2.19	1.94	1.30	1,067.6	945.1	1,200.2	488.0	436.1	(3.4)	(65.4)	(0.3)	(0.2)	9,593	6,427.0	109,021.0
A4 - Residential Behavior	1.09	1.02	1.30	34.3	31.8	40.8	31.3	-	-	-	-	-	9,100	3,221.6	3,221.6
A6c - Res Education	-	-	-	-	-	-	26.8	-	-	-	-	-	-	-	-
A6e - Res Financing	-	-	-	-	-	-	7.5	-	-	-	-	-	-	-	-
Sub-Total Residential	1.82	1.37	1.42	3,000.7	2,255.3	3,168.7	1,646.1	581.3	(1.1)	(9.9)	(0.3)	1.1	18,952	16,247.1	261,160.3
Commercial, Industrial & Municipal															
C1 - Large Business Energy Solutions	2.90	2.49	2.11	2,514.8	2,157.1	2,759.7	867.1	437.8	-	-	-	-	84	19,613.2	281,808.3
C2 - Small Business Energy Solutions	2.09	1.74	1.54	1,121.2	934.4	1,225.2	537.5	256.5	0.5	7.5	0.1	0.1	131	8,289.8	121,478.0
C6c - C&I Education	-	-	-	-	-	-	25.6	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	2.54	2.16	1.88	3,636.0	3,091.5	3,984.9	1,430.2	694.3	0.5	7.5	0.1	0.1	215	27,903.0	403,286.3
Total	2.16	1.74	1.64	6,636.7	5,346.8	7,153.6	3,076.3	1,275.6	(0.6)	(2.5)	(0.2)	1.3	19,167	44,150.1	664,446.5

Notes:
(1) For the Secondary Granite State Test a 10% NEI adder is applied to total benefits excluding water.
(2) Utility and Customer Costs in 2021 Dollars

Annual Savings as a % of 2018 Sales		0.58%	Spending per Customer			Low-Income	\$	428.68
						Residential	\$	43.38
						C&I	\$	203.94

Present Value Benefits - 2021 PLAN

	Total Benefits (\$000)			Resource Benefits (\$000)								Non-Resource Benefits (\$000)			Environ- mental Benefits (\$000)
				Electric	Gas Benefit			Other Benefit		Total Resource Benefits	Fossil Emissions	Other Non- Resource Benefits	Total Non- Resource Benefits		
	Granite State Test	Utility Cost Test	Secondary Granite State Test	Total Electric Benefit	Gas Benefit	Gas DRIPE	Total Gas Benefit	Other Fuels	Water Benefit						
Residential Programs															
B1 - Home Energy Assistance	\$ 921	\$ 452	\$ 850	\$ -	\$ 440	\$ 12	\$ 452	\$ 452	\$ 3	\$ 455	\$ 71	\$ 395	\$ 466	\$ -	
A1 - Energy Star Homes	\$ 666	\$ 570	\$ 729	\$ -	\$ 556	\$ 14	\$ 570	\$ 570	\$ -	\$ 570	\$ 96	\$ 159	\$ 256	\$ -	
A2 - Home Performance with Energy Star	\$ 312	\$ 257	\$ 349	\$ 11	\$ 250	\$ 7	\$ 257	\$ 257	\$ 3	\$ 271	\$ 40	\$ 75	\$ 115	\$ 2	
A3 - Energy Star Products	\$ 1,068	\$ 945	\$ 1,200	\$ (5)	\$ 916	\$ 29	\$ 945	\$ 945	\$ -	\$ 940	\$ 128	\$ 263	\$ 391	\$ (3)	
A4 - Residential Behavior	\$ 34	\$ 32	\$ 41	\$ -	\$ 30	\$ 2	\$ 32	\$ 32	\$ -	\$ 32	\$ 2	\$ 9	\$ 11	\$ -	
A6c - Res Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total Residential	\$ 3,001	\$ 2,255	\$ 3,169	\$ 6	\$ 2,191	\$ 64	\$ 2,255	\$ 2,255	\$ 6	\$ 2,268	\$ 338	\$ 902	\$ 1,240	\$ (1)	
Commercial/Industrial Programs															
C1 - Large Business Energy Solutions	\$ 2,515	\$ 2,157	\$ 2,760	\$ -	\$ 2,075	\$ 82	\$ 2,157	\$ 2,157	\$ 42	\$ 2,199	\$ 316	\$ 561	\$ 877	\$ -	
C2 - Small Business Energy Solutions	\$ 1,121	\$ 934	\$ 1,225	\$ 1	\$ 901	\$ 34	\$ 934	\$ 934	\$ 46	\$ 982	\$ 140	\$ 243	\$ 383	\$ 0	
C6c - C&I Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total Commercial & Industrial	\$ 3,636	\$ 3,092	\$ 3,985	\$ 1	\$ 2,976	\$ 115	\$ 3,092	\$ 3,092	\$ 88	\$ 3,181	\$ 455	\$ 804	\$ 1,260	\$ 0	
Total	\$ 6,637	\$ 5,347	\$ 7,154	\$ 7	\$ 5,168	\$ 179	\$ 5,347	\$ 5,347	\$ 94	\$ 5,448	\$ 794	\$ 1,706	\$ 2,499	\$ (0)	

Portfolio Planned Versus Actual Performance - 2021										
Portfolio	Planned	Threshold	Actual	% of Plan	Design Coefficient	Actual Coefficient	Planned PI	125% of Planned PI	Actual PI	Source
1 Lifetime MMBtu Savings	664,447	431,890		-	2.475%	-	\$ 76,139	\$ 95,174	\$ -	Planned and Actual from Cost Eff Tab
2 Annual MMBtu Savings	44,150	28,698		-	1.100%	-	\$ 33,840	\$ 42,300	\$ -	Planned and Actual from Cost Eff Tab
3 Total Resource Benefits	\$ 5,448,112			-						Planned and Actual from Benefits Tab
4 Total Utility Costs ¹	\$ 3,076,332			-						Planned and Actual from Cost Eff Tab
5 Net Benefits	\$ 2,371,781	\$ 1,541,657	\$ -	-	1.925%	-	\$ 59,219	\$ 74,024	\$ -	Line 5 minus line 6
6 Total					5.500%	-	\$ 169,198	\$ 211,498	\$ -	

	Granite State Test		Source
	Planned	Actual	
7 Total Benefits (GST)	\$ 6,636,722		Planned and Actual from Cost Eff Tab
8 Performance Incentive	\$ 169,198	\$ -	from row 6 above
9 Total Utility Costs	\$ 3,076,332	\$ -	from row 4 above
10 Portfolio GST BCR	2.04	-	Row 7 Divided by Rows 8+9

Utility Costs expressed in 2021 dollars.

¹ Note that in order to avoid a circular reference in the calculation of performance incentive, "Total Utility Costs" does not include the value of PI.

Program Cost-Effectiveness - 2022 PLAN

	Benefit/Cost Ratios			Benefits (\$000)			Utility Costs (\$000 - 2021\$) ²	Customer Costs (\$000 - 2021\$) ²	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
	Granite State Test	Utility Cost Test	Secondary Granite State Test	Granite State Test	Utility Cost Test	Secondary Granite State Test ¹									
Residential Programs															
B1 - Home Energy Assistance	1.64	0.83	1.50	1,154.1	583.8	1,056.6	705.7	-	-	-	-	-	105	3,085.4	66,078.4
A1 - Energy Star Homes	2.33	1.98	1.94	955.3	810.3	1,037.2	410.1	124.9	-	-	-	-	140	3,825.0	93,175.0
A2 - Home Performance with Energy	1.24	1.01	1.15	352.9	287.6	392.5	284.2	56.9	7.0	68.8	3.2	3.5	85	1,552.5	32,524.4
A3 - Energy Star Products	2.35	2.07	1.38	1,328.9	1,168.1	1,484.1	565.5	508.1	(3.9)	(73.5)	(0.4)	(0.2)	11,187	7,829.4	131,753.2
A4 - Residential Behavior	1.44	1.34	1.71	45.1	41.7	53.4	31.2	-	-	-	-	-	9,100	4,177.5	4,177.5
A6c - Res Education	-	-	-	-	-	-	26.9	-	-	-	-	-	-	-	-
A6e - Res Financing	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-	-
Sub-Total Residential	1.89	1.42	1.48	3,836.3	2,891.5	4,023.9	2,031.7	689.9	3.2	(4.7)	2.9	3.3	20,617	20,469.8	327,708.5
Commercial, Industrial & Municipal															
C1 - Large Business Energy Solutions	3.13	2.66	2.23	4,061.6	3,448.4	4,432.4	1,298.6	685.9	-	-	-	-	167	31,335.6	438,083.7
C2 - Small Business Energy Solutions	2.21	1.83	1.61	1,420.4	1,177.8	1,541.7	644.0	314.9	0.6	9.3	0.1	0.2	160	10,132.3	149,164.2
C6c - C&I Education	-	-	-	-	-	-	29.1	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	2.78	2.35	2.01	5,482.0	4,626.3	5,974.1	1,971.6	1,000.8	0.6	9.3	0.1	0.2	327	41,467.9	587,248.0
Total	2.33	1.88	1.76	9,318.4	7,517.8	9,997.9	4,003.3	1,690.8	3.8	4.6	3.0	3.5	20,943	61,937.8	914,956.4

Notes:
(1) For the Secondary Granite State Test a 10% NEI adder is applied to total benefits excluding water.
(2) Utility and Customer Costs in 2021 Dollars and will not equal the nominal costs presented in the Costs and Performance Incentive tabs.

Annual Savings as a % of 2018 Sales		0.82%	Spending per Customer		Low-Income	\$	557.44
					Residential	\$	52.14
					C&I	\$	281.13

Present Value Benefits - 2022 PLAN

	Total Benefits (\$000)			Resource Benefits (\$000)								Non-Resource Benefits (\$000)			Environ- mental Benefits (\$000)
				Electric	Gas Benefit			Non-Electric		Total Resource Benefits	Fossil Emissions	Other Non- Resource Benefits	Total Non- Resource Benefits		
	Granite State Test	Utility Cost Test	Secondary Granite State Test	Total Electric Benefit	Gas Benefit	Gas DRIPE	Total Gas Benefit	Other Fuels	Water Benefit						
Residential Programs															
B1 - Home Energy Assistance	\$ 1,154	\$ 584	\$ 1,057	\$ -	\$ 568	\$ 16	\$ 584	\$ 584	\$ 3	\$ 587	\$ 97	\$ 469	\$ 567	\$ -	
A1 - Energy Star Homes	\$ 955	\$ 810	\$ 1,037	\$ -	\$ 791	\$ 19	\$ 810	\$ 810	\$ -	\$ 810	\$ 145	\$ 227	\$ 372	\$ -	
A2 - Home Performance with Energy Star	\$ 353	\$ 288	\$ 392	\$ 14	\$ 280	\$ 8	\$ 288	\$ 288	\$ 4	\$ 305	\$ 48	\$ 84	\$ 132	\$ 3	
A3 - Energy Star Products	\$ 1,329	\$ 1,168	\$ 1,484	\$ (6)	\$ 1,132	\$ 36	\$ 1,168	\$ 1,168	\$ -	\$ 1,162	\$ 167	\$ 325	\$ 492	\$ (3)	
A4 - Residential Behavior	\$ 45	\$ 42	\$ 53	\$ -	\$ 40	\$ 2	\$ 42	\$ 42	\$ -	\$ 42	\$ 3	\$ 12	\$ 15	\$ -	
A6c - Res Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total Residential	\$ 3,836	\$ 2,892	\$ 4,024	\$ 8	\$ 2,810	\$ 81	\$ 2,892	\$ 2,892	\$ 7	\$ 2,906	\$ 461	\$ 1,118	\$ 1,578	\$ (0)	
Commercial/Industrial Programs															
C1 - Large Business Energy Solutions	\$ 4,062	\$ 3,448	\$ 4,432	\$ -	\$ 3,316	\$ 133	\$ 3,448	\$ 3,448	\$ 87	\$ 3,536	\$ 526	\$ 897	\$ 1,422	\$ -	
C2 - Small Business Energy Solutions	\$ 1,420	\$ 1,178	\$ 1,542	\$ 1	\$ 1,135	\$ 42	\$ 1,178	\$ 1,178	\$ 56	\$ 1,235	\$ 186	\$ 307	\$ 492	\$ 0	
C6c - C&I Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total Commercial & Industrial	\$ 5,482	\$ 4,626	\$ 5,974	\$ 1	\$ 4,451	\$ 175	\$ 4,626	\$ 4,626	\$ 143	\$ 4,771	\$ 712	\$ 1,203	\$ 1,915	\$ 0	
Total	\$ 9,318	\$ 7,518	\$ 9,998	\$ 9	\$ 7,261	\$ 257	\$ 7,518	\$ 7,518	\$ 150	\$ 7,677	\$ 1,172	\$ 2,321	\$ 3,493	\$ 0	

Portfolio Planned Versus Actual Performance - 2022										
Portfolio	Planned	Threshold	Actual	% of Plan	Design Coefficient	Actual Coefficient	Planned PI	125% of Planned PI	Actual PI	Source
1 Lifetime MMBtu Savings	914,956	594,722		-	2.475%	-	\$ 99,083	\$ 123,853	\$ -	Planned and Actual from Cost Eff Tab
2 Annual MMBtu Savings	61,938	40,260		-	1.100%	-	\$ 44,037	\$ 55,046	\$ -	Planned and Actual from Cost Eff Tab
3 Total Resource Benefits	\$ 7,676,935			-						Planned and Actual from Benefits Tab
4 Total Utility Costs ¹	\$ 4,003,345			-						Planned and Actual from Cost Eff Tab
5 Net Benefits	\$ 3,673,590	\$ 2,387,833	\$ -	-	1.925%	-	\$ 77,064	\$ 96,330	\$ -	Line 5 minus line 6
6 Total					5.500%	-	\$ 220,184	\$ 275,230	\$ -	

	Granite State Test		Source
	Planned	Actual	
7 Total Benefits (GST)	\$ 9,318,374		Planned and Actual from Cost Eff Tab
8 Performance Incentive	\$ 220,184	\$ -	from row 6 above
9 Total Utility Costs	\$ 4,003,345	\$ -	from row 4 above
10 Portfolio GST BCR	2.21	-	Row 7 Divided by Rows 8+9

Costs, Benefits and PI Expressed in 2021 dollars. Nominal PI (2022\$) is \$227,339.95.

¹ Note that in order to avoid a circular reference in the calculation of performance incentive, "Total Utility Costs" does not include the value of PI.

Program Cost-Effectiveness - 2023 PLAN

	Benefit/Cost Ratios			Benefits (\$000)			Utility Costs (\$000 - 2021\$) ²	Customer Costs (\$000 - 2021\$) ²	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
	Granite State Test	Utility Cost Test	Secondary Granite State Test	Granite State Test	Utility Cost Test	Secondary Granite State Test ¹									
Residential Programs															
B1 - Home Energy Assistance	1.71	0.87	1.55	1,471.5	752.3	1,339.7	862.6	-	1.2	22.0	0.4	-	130	3,889.9	83,213.0
A1 - Energy Star Homes	2.70	2.28	2.27	1,389.6	1,169.9	1,497.4	514.1	144.4	-	-	-	-	180	5,524.4	131,913.3
A2 - Home Performance with Energy	1.28	1.04	0.81	393.3	319.1	433.3	306.7	230.2	2.8	64.4	-	1.5	104	1,693.7	35,275.5
A3 - Energy Star Products	2.38	2.08	1.49	1,593.4	1,390.2	1,766.9	668.2	519.9	(4.3)	(81.7)	(0.4)	(0.2)	11,453	9,146.2	153,257.7
A4 - Residential Behavior	2.30	2.12	2.71	71.8	66.1	84.7	31.2	-	-	-	-	-	9,100	6,500.0	6,500.0
A6c - Res Education	-	-	-	-	-	-	18.6	-	-	-	-	-	-	-	-
A6e - Res Financing	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-	-
Sub-Total Residential	2.04	1.53	1.55	4,919.5	3,697.6	5,122.0	2,409.4	894.6	(0.3)	4.7	(0.0)	1.3	20,967	26,754.2	410,159.5
Commercial, Industrial & Municipal															
C1 - Large Business Energy Solutions	3.19	2.70	2.53	5,779.7	4,891.9	6,265.9	1,810.8	669.1	-	-	-	-	200	43,109.6	603,542.6
C2 - Small Business Energy Solutions	1.82	1.51	1.78	1,798.1	1,484.6	1,936.0	986.4	101.3	-	-	-	-	189	12,450.3	183,538.8
C6c - C&I Education	-	-	-	-	-	-	30.5	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	2.68	2.26	2.28	7,577.9	6,376.5	8,201.9	2,827.7	770.4	-	-	-	-	389	55,559.9	787,081.4
Total	2.39	1.92	1.93	12,497.4	10,074.1	13,323.9	5,237.1	1,665.0	(0.3)	4.7	(0.0)	1.3	21,356	82,314.1	1,197,240.9

Notes:
(1) For the Secondary Granite State Test a 10% NEI adder is applied to total benefits excluding water.
(2) Utility and Customer Costs in 2021 Dollars and will not equal the nominal costs presented in the Costs and Performance Incentive tabs.

Annual Savings as a % of 2018 Sales		1.09%	

Spending per Customer	Low-Income	\$	681.35
	Residential	\$	60.82
	C&I	\$	403.21

Present Value Benefits - 2023 PLAN

	Total Benefits (\$000)			Resource Benefits (\$000)								Non-Resource Benefits (\$000)			Environ- mental Benefits (\$000)
				Electric	Gas Benefit			Non-Electric		Total Resource Benefits	Fossil Emissions		Other Non- Resource Benefits	Total Non- Resource Benefits	
	Granite State Test	Utility Cost Test	Secondary Granite State Test	Total Electric Benefit	Gas Benefit	Gas DRIPE	Total Gas Benefit	Other Fuels	Water Benefit						
Residential Programs															
B1 - Home Energy Assistance	\$ 1,471	\$ 752	\$ 1,340	\$ 2	\$ 732	\$ 20	\$ 752	\$ 752	\$ 4	\$ 758	\$ 133	\$ 581	\$ 714	\$ 1	
A1 - Energy Star Homes	\$ 1,390	\$ 1,170	\$ 1,497	\$ -	\$ 1,142	\$ 28	\$ 1,170	\$ 1,170	\$ -	\$ 1,170	\$ 220	\$ 328	\$ 547	\$ -	
A2 - Home Performance with Energy Star	\$ 393	\$ 319	\$ 433	\$ 14	\$ 310	\$ 9	\$ 319	\$ 319	\$ 4	\$ 338	\$ 56	\$ 93	\$ 149	\$ 2	
A3 - Energy Star Products	\$ 1,593	\$ 1,390	\$ 1,767	\$ (7)	\$ 1,347	\$ 43	\$ 1,390	\$ 1,390	\$ -	\$ 1,383	\$ 210	\$ 387	\$ 598	\$ (3)	
A4 - Residential Behavior	\$ 72	\$ 66	\$ 85	\$ -	\$ 63	\$ 3	\$ 66	\$ 66	\$ -	\$ 66	\$ 6	\$ 19	\$ 24	\$ -	
A6c - Res Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total Residential	\$ 4,920	\$ 3,698	\$ 5,122	\$ 9	\$ 3,594	\$ 104	\$ 3,698	\$ 3,698	\$ 8	\$ 3,714	\$ 624	\$ 1,408	\$ 2,032	\$ 0	
Commercial/Industrial Programs															
C1 - Large Business Energy Solutions	\$ 5,780	\$ 4,892	\$ 6,266	\$ -	\$ 4,702	\$ 190	\$ 4,892	\$ 4,892	\$ 102	\$ 4,994	\$ 786	\$ 1,272	\$ 2,058	\$ -	
C2 - Small Business Energy Solutions	\$ 1,798	\$ 1,485	\$ 1,936	\$ -	\$ 1,432	\$ 53	\$ 1,485	\$ 1,485	\$ 65	\$ 1,550	\$ 248	\$ 386	\$ 634	\$ -	
C6c - C&I Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total Commercial & Industrial	\$ 7,578	\$ 6,377	\$ 8,202	\$ -	\$ 6,134	\$ 243	\$ 6,377	\$ 6,377	\$ 167	\$ 6,544	\$ 1,034	\$ 1,658	\$ 2,692	\$ -	
Total	\$ 12,497	\$ 10,074	\$ 13,324	\$ 9	\$ 9,728	\$ 346	\$ 10,074	\$ 10,074	\$ 175	\$ 10,258	\$ 1,658	\$ 3,066	\$ 4,724	\$ 0	

Portfolio Planned Versus Actual Performance - 2023										
Portfolio	Planned	Threshold	Actual	% of Plan	Design Coefficient	Actual Coefficient	Planned PI	125% of Planned PI	Actual PI	Source
1 Lifetime MMBtu Savings	1,197,241	778,207		-	2.475%	-	\$ 129,617	\$ 162,022	\$ -	Planned and Actual from Cost Eff Tab
2 Annual MMBtu Savings	82,314	53,504		-	1.100%	-	\$ 57,608	\$ 72,010	\$ -	Planned and Actual from Cost Eff Tab
3 Total Resource Benefits	\$ 10,258,176			-						Planned and Actual from Benefits Tab
4 Total Utility Costs ¹	\$ 5,237,061			-						Planned and Actual from Cost Eff Tab
5 Net Benefits	\$ 5,021,115	\$ 3,263,725	\$ -	-	1.925%	-	\$ 100,813	\$ 126,017	\$ -	Line 5 minus line 6
6 Total					5.500%	-	\$ 288,038	\$ 360,048	\$ -	

	Granite State Test		Source
	Planned	Actual	
7 Total Benefits (GST)	\$ 12,497,391		Planned and Actual from Cost Eff Tab
8 Performance Incentive	\$ 288,038	\$ -	from row 8 above
9 Total Utility Costs	\$ 5,237,061	\$ -	from row 6 above
10 Portfolio GST BCR	2.26	-	Row 7 Divided by Rows 8+9

Costs, Benefits and PI Expressed in 2021 dollars. Nominal PI (2023\$) is \$307,065.08.

¹ Note that in order to avoid a circular reference in the calculation of performance incentive, "Total Utility Costs" does not include the value of PI.

Program Cost-Effectiveness - 2021-2023 PLAN

	Benefit/Cost Ratios			Benefits (\$000)			Utility Costs (\$000 - 2021\$) ²	Customer Costs (\$000 - 2021\$) ²	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
	Granite State Test	Utility Cost Test	Secondary Granite State Test	Granite State Test	Utility Cost Test	Secondary Granite State Test ¹									
Residential Programs															
B1 - Home Energy Assistance	1.68	0.85	1.54	3,546.9	1,788.0	3,246.4	2,111.005	-	1.2	22.0	0.4	-	319	9,417.5	201,575.5
A1 - Energy Star Homes	2.44	2.07	2.05	3,010.6	2,549.8	3,263.7	1,231.678	363.1	-	-	-	-	420	12,097.9	292,015.8
A2 - Home Performance with Energy	1.27	1.04	1.00	1,058.1	863.5	1,174.4	833.290	338.6	12.2	188.6	3.2	6.3	264	4,654.0	97,506.0
A3 - Energy Star Products	2.32	2.03	1.40	3,989.8	3,503.4	4,451.3	1,721.646	1,464.1	(11.6)	(220.6)	(1.1)	(0.6)	32,232	23,402.7	394,031.8
A4 - Residential Behavior	1.61	1.49	1.91	151.154	139.7	178.8	93.771	-	-	-	-	-	9,100	13,899.1	13,899.1
A6c - Res Education	-	-	-	-	-	-	72.298	-	-	-	-	-	-	-	-
Sub-Total Residential	1.93	1.45	1.49	11,756.6	8,844.4	12,314.5	6,087.199	2,165.8	1.8	(10.0)	2.5	5.8	42,335	63,471.2	999,028.2
Commercial, Industrial & Municipal															
C1 - Large Business Energy Solutions	3.11	2.64	2.33	12,356.2	10,497.4	13,458.0	3,976.533	1,792.9	-	-	-	-	451	94,058.4	1,323,434.6
C2 - Small Business Energy Solutions	2.00	1.66	1.66	4,339.7	3,596.9	4,702.8	2,167.914	672.7	1.1	16.8	0.2	0.3	480	30,872.4	454,181.0
C6c - C&I Education	-	-	-	-	-	-	85.092	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	2.68	2.26	2.09	16,695.9	14,094.3	18,160.8	6,229.539	2,465.6	1.1	16.8	0.2	0.3	931	124,930.8	1,777,615.6
Total	2.31	1.86	1.80	28,452.5	22,938.7	30,475.4	12,316.738	4,631.4	2.9	6.8	2.7	6.0	43,266	188,402.0	2,776,643.9

Notes:
(1) For the Secondary Granite State Test a 10% NEI adder is applied to total benefits excluding water.
(2) Utility and Customer Costs in 2021 Dollars and will not equal the nominal costs presented in the Costs and Performance Incentive tabs.

Cumulative Savings as a % of 2019 Sales		2.49%	Spending per Customer			Low-Income	\$	1,667.46
						Residential	\$	156.34
						C&I	\$	888.28

Present Value Benefits - 2021-2023 PLAN

	Total Benefits (\$000)			Resource Benefits (\$000)								Non-Resource Benefits (\$000)			Environ- mental Benefits (\$000)
				Electric	Gas Benefit			Non-Electric		Total Resource Benefits	Fossil Emissions	Other Non- Resource Benefits	Total Non- Resource Benefits		
	Granite State Test	Utility Cost Test	Secondary Granite State Test	Total Electric Benefit	Gas Benefit	Gas DRIPE	Total Gas Benefit	Other Fuels	Water Benefit						
Residential Programs															
B1 - Home Energy Assistance	\$ 3,547	\$ 1,788	\$ 3,246	\$ 2	\$ 1,740	\$ 48	\$ 1,788	\$ 1,788	\$ 10	\$ 1,800	\$ 301	\$ 1,446	\$ 1,747	\$ 1	
A1 - Energy Star Homes	\$ 3,011	\$ 2,550	\$ 3,264	\$ -	\$ 2,489	\$ 61	\$ 2,550	\$ 2,550	\$ -	\$ 2,550	\$ 461	\$ 714	\$ 1,175	\$ -	
A2 - Home Performance with Energy Star	\$ 1,058	\$ 864	\$ 1,174	\$ 40	\$ 840	\$ 24	\$ 864	\$ 864	\$ 11	\$ 914	\$ 144	\$ 253	\$ 397	\$ 7	
A3 - Energy Star Products	\$ 3,990	\$ 3,503	\$ 4,451	\$ (19)	\$ 3,394	\$ 109	\$ 3,503	\$ 3,503	\$ -	\$ 3,485	\$ 505	\$ 976	\$ 1,481	\$ (9)	
A4 - Residential Behavior	\$ 151	\$ 140	\$ 179	\$ -	\$ 133	\$ 7	\$ 140	\$ 140	\$ -	\$ 140	\$ 11	\$ 39	\$ 51	\$ -	
A6c - Res Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total Residential	\$ 11,757	\$ 8,844	\$ 12,315	\$ 23	\$ 8,595	\$ 249	\$ 8,844	\$ 8,844	\$ 21	\$ 8,888	\$ 1,423	\$ 3,427	\$ 4,850	\$ (1)	
Commercial/Industrial Programs															
C1 - Large Business Energy Solutions	\$ 12,356	\$ 10,497	\$ 13,458	\$ -	\$ 10,093	\$ 404	\$ 10,497	\$ 10,497	\$ 231	\$ 10,729	\$ 1,627	\$ 2,729	\$ 4,357	\$ -	
C2 - Small Business Energy Solutions	\$ 4,340	\$ 3,597	\$ 4,703	\$ 2	\$ 3,468	\$ 129	\$ 3,597	\$ 3,597	\$ 167	\$ 3,766	\$ 573	\$ 936	\$ 1,509	\$ 1	
C6c - C&I Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total Commercial & Industrial	\$ 16,696	\$ 14,094	\$ 18,161	\$ 2	\$ 13,561	\$ 533	\$ 14,094	\$ 14,094	\$ 398	\$ 14,495	\$ 2,201	\$ 3,665	\$ 5,866	\$ 1	
Total	\$ 28,452	\$ 22,939	\$ 30,475	\$ 25	\$ 22,157	\$ 782	\$ 22,939	\$ 22,939	\$ 420	\$ 23,383	\$ 3,624	\$ 7,092	\$ 10,716	\$ (0)	

Portfolio Planned Versus Actual Performance - 2021-2023										
Portfolio	Planned	Threshold	Actual	% of Plan	Design Coefficient	Actual Coefficient	Planned PI	125% of Planned PI	Actual PI	Source
1 Lifetime MMBtu Savings	2,776,644	1,804,819		-	2.475%	-	\$ 304,839	\$ 381,049	\$ -	Planned and Actual from Cost Eff Tab
2 Annual MMBtu Savings	188,402	122,461		-	1.100%	-	\$ 135,484	\$ 169,355	\$ -	Planned and Actual from Cost Eff Tab
3 Total Resource Benefits	\$ 23,383,223			-						Planned and Actual from Benefits Tab
4 Total Utility Costs ¹	\$ 12,316,738			-						Planned and Actual from Cost Eff Tab
5 Net Benefits	\$ 11,066,485	\$ 7,193,215	\$ -	-	1.925%	-	\$ 237,097	\$ 296,371	\$ -	Line 5 minus line 6
6 Total					5.500%	-	\$ 677,421	\$ 846,776	\$ -	

	Granite State Test		Source
	Planned	Actual	
7 Total Benefits (GST)	\$ 28,452,488		Planned and Actual from Cost Eff Tab
8 Performance Incentive	\$ 677,421	\$ -	from row 8 above
9 Total Utility Costs	\$ 12,316,738	\$ -	from row 6 above
10 Portfolio GST BCR	2.19	-	Row 7 Divided by Rows 8+9

Costs, Benefits and PI Expressed in 2021 dollars. Nominal PI is \$703,603.28.

¹ Note that in order to avoid a circular reference in the calculation of performance incentive, "Total Utility Costs" does not include the value of PI.

Program Summary - 2021 - 2023 PLAN

Home Energy Assistance			Quantity			Measure Life			Net to Gross			In Service Rate			Non-Electric Realization Rate			Net Annual MMBtu Savings			Net Lifetime MMBtu Savings		
Subprogram	Measure	Measure ID	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
B1a - HEA (Weatherization)	Air Sealing, Gas	G21B1a001	67	84	104	15	15	15	100%	100%	100%	100%	100%	100%	91%	91%	91%	610	764	946	9,146	11,466	14,196
B1a - HEA (Weatherization)	Faucet Aerator, Gas	G21B1a002	100	110	115	7	7	7	100%	100%	100%	100%	100%	100%	91%	91%	91%	14	16	16	99	109	114
B1a - HEA (Weatherization)	Hand Held Showerhead, Gas	G21B1a003	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	Insulation, Gas	G21B1a004	67	84	104	25	25	25	100%	100%	100%	100%	100%	100%	91%	91%	91%	1,524	1,911	2,366	38,106	47,775	59,150
B1a - HEA (Weatherization)	LED Bulb, General Service Lamps	G21B1a005	-	-	-	2	2	2	100%	100%	100%	98%	98%	98%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	LED Bulb, Linear	G21B1a006	-	-	-	10	10	10	100%	100%	100%	98%	98%	98%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	LED Bulb, Other Specialty	G21B1a007	-	-	-	2	2	2	100%	100%	100%	98%	98%	98%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	LED Bulb, Reflector	G21B1a008	-	-	-	2	2	2	100%	100%	100%	98%	98%	98%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	LED Fixture	G21B1a009	-	-	-	2	2	2	100%	100%	100%	98%	98%	98%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	Low Flow Showerhead, Gas	G21B1a010	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	Pipe Insulation - Hot Water, Gas	G21B1a011	34	40	45	15	15	15	100%	100%	100%	100%	100%	100%	91%	91%	91%	93	109	123	1,392	1,638	1,843
B1a - HEA (Weatherization)	Visual Audit	G21B1a012	-	-	-	1	1	1	100%	100%	100%	100%	100%	100%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	Baseload Audit - SF	G21B1a013	50	60	70	1	1	1	100%	100%	100%	100%	100%	100%	91%	91%	91%	-	-	-	-	-	-
B1a - HEA (Weatherization)	Baseload Audit - MF	G21B1a014	-	-	-	1	1	1	100%	100%	100%	100%	100%	100%	91%	91%	91%	-	-	-	-	-	-
B1b - HEA (HVAC Systems)	Boiler Replacement, Gas	G21B1b001	4	6	10	20	20	20	100%	100%	100%	100%	100%	100%	91%	91%	91%	71	106	177	1,412	2,118	3,531
B1b - HEA (HVAC Systems)	Furnace Replacement, Gas	G21B1b002	3	5	8	18	18	18	100%	100%	100%	100%	100%	100%	91%	91%	91%	57	94	151	1,017	1,695	2,713
B1b - HEA (HVAC Systems)	Programmable Thermostat, Gas	G21B1b003	4	5	6	15	15	15	100%	100%	100%	100%	100%	100%	91%	91%	91%	24	30	36	360	450	541
B1b - HEA (HVAC Systems)	Wifi Thermostat, Gas	G21B1b004	10	11	15	15	15	15	100%	100%	100%	100%	100%	100%	91%	91%	91%	50	55	75	751	826	1,126
Home Energy Assistance Subtotal																		2,442	3,085	3,890	52,284	66,078	83,213

Energy Star Homes			Quantity			Measure Life			Net to Gross			In Service Rate			Non-Electric Realization Rate			Net Annual MMBtu Savings			Net Lifetime MMBtu Savings		
Subprogram	Measure	Measure ID	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
A1a - ES Homes	Cooling, Electric, SF	G21A1a001	-	-	-	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
A1a - ES Homes	Heating, Gas, SF	G21A1a002	35	40	50	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	945	1,080	1,350	23,625	27,000	33,750
A1a - ES Homes	Hot Water, Gas, SF	G21A1a003	18	20	25	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	63	70	88	945	1,050	1,313
A1a - ES Homes	Cooling, Electric, MF	G21A1a002	-	-	-	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
A1a - ES Homes	Heating, Gas, MF	G21A1a005	65	100	130	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,625	2,500	3,250	40,625	62,500	81,250
A1a - ES Homes	Hot Water, Gas, MF	G21A1a006	33	50	65	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	116	175	228	1,733	2,625	3,413
A1a - ES Homes	LED Bulb	G21A1a007	-	-	-	5	5	5	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
A1a - ES Homes	LED Fixture	G21A1a008	-	-	-	5	5	5	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
A1a - ES Homes	Clothes Washer	G21A1a009	-	-	-	14	14	14	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
A1a - ES Homes	Residential New Construction Code Compliant	G21A1a010	1	1	1	20	20	20	100%	100%	100%	100%	100%	100%	35%	100%	35%	-	-	609	-	-	12,188
Energy Star Homes Subtotal																		2,749	3,825	5,524	66,928	93,175	131,913

Home Performance with Energy Star			Quantity			Measure Life			Net to Gross			In Service Rate			Non-Electric Realization Rate			Net Annual MMBtu Savings			Net Lifetime MMBtu Savings		
Subprogram	Measure	Measure ID	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
A2a - HPwES (Weatherization)	Air Sealing, Gas	G21A2a001	40	45	50	15	15	15	100%	100%	100%	99%	99%	99%	100%	100%	100%	317	356	396	4,752	5,346	5,940
A2a - HPwES (Weatherization)	Faucet Aerator, Gas	G21A2a002	100	100	120	7	7	7	100%	100%	100%	99%	99%	99%	100%	104%	100%	15	16	19	108	112	130
A2a - HPwES (Weatherization)	Hand Held Showerhead, Gas	G21A2a003	-	-	-	7	7	7	100%	100%	100%	99%	99%	99%	100%	104%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	Insulation, Gas	G21A2a004	40	43	46	25	25	25	100%	100%	100%	99%	99%	99%	100%	100%	100%	871	937	1,002	21,780	23,414	25,047
A2a - HPwES (Weatherization)	LED Bulb, General Service Lamps	G21A2a005	-	129	-	2	2	2	100%	100%	100%	98%	98%	98%	100%	100%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	LED Bulb, Linear	G21A2a006	-	-	-	10	10	10	100%	100%	100%	98%	98%	98%	100%	100%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	LED Bulb, Other Specialty	G21A2a007	-	-	-	2	2	2	100%	100%	100%	98%	98%	98%	100%	100%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	LED Bulb, Reflector	G21A2a008	-	-	-	2	2	2	100%	100%	100%	98%	98%	98%	100%	100%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	LED Fixture	G21A2a009	-	-	-	2	2	2	100%	100%	100%	98%	98%	98%	100%	100%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	Low Flow Showerhead, Gas	G21A2a010	-	-	-	7	7	7	100%	100%	100%	99%	99%	99%	100%	104%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	Pipe Insulation - Hot Water, Gas	G21A2a011	20	23	25	15	15	15	100%	100%	100%	99%	99%	99%	100%	104%	100%	59	69	74	891	1,042	1,114
A2a - HPwES (Weatherization)	Baseload Audit - Electric Savings	G21A2a012	-	-	-	1	1	1	100%	100%	100%	99%	99%	99%	100%	100%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	Baseload Audit - Thermal Savings	G21A2a013	-	-	-	1	1	1	100%	100%	100%	99%	99%	99%	100%	100%	100%	-	-	-	-	-	-
A2a - HPwES (Weatherization)	Visual Audit	G21A2a014	35	40	54	15	15	15	100%	100%	100%	99%	99%	99%	100%	100%	100%	-	-	-	-	-	-
			-	-	-	-	-	-	100%	0%	100%	99%	0%	99%	100%	0%	100%	-	-	-	-	-	-
A2b - HPwES (HVAC Systems)	Boiler Replacement, Gas	G21A2b001	-	-	-	25	25	25	100%	100%	100%	99%	99%	99%	100%	100%	100%	-	-	-	-	-	-
A2b - HPwES (HVAC Systems)	Furnace Replacement, Gas	G21A2b002	-	-	-	20	20	20	100%	100%	100%	99%	99%	99%	100%	100%	100%	-	-	-	-	-	-
A2b - HPwES (HVAC Systems)	Programmable Thermostat, Gas	G21A2b003	-	-	-	15	15	15	100%	100%	100%	99%	99%	99%	100%	100%	100%	-	-	-	-	-	-
A2b - HPwES (HVAC Systems)	Wifi Thermostat, Gas	G21A2b004	25	30	35	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	145	174	203	2,175	2,610	3,045
Home Performance with Energy Star Subtotal																		1,408	1,552	1,694	29,706	32,524	35,275

Energy Start Appliances			Quantity			Measure Life			Net to Gross			In Service Rate			Non-Electric Realization Rate			Net Annual MMBtu Savings			Net Lifetime MMBtu Savings		
Subprogram	Measure	Measure ID	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
A3b - ES Appliances	Early Replacement Boiler, FHW - EE 90 A	G21A3b001	-	-	-	20	20	20	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-			
A3b - ES Appliances	Early Replacement Boiler, FHW - Retirement	G21A3b002	-	-	-	10	10	10	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-			
A3b - ES Appliances	Early Replacement Boiler, Steam - EE: 82	G21A3b003	-	-	-	20	20	20	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-			
A3b - ES Appliances	Early Replacement Boiler, Steam - Retirement	G21A3b004	-	-	-	10	10	10	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-			
A3b - ES Appliances	Boiler Reset Controls	G21A3b005	4	6	10	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	20	31	51	306	459	765
A3b - ES Appliances	Condensing Boiler >= 90% AFUE (Up to 3	G21A3b006	15	18	20	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	182	218	242	3,267	3,920	4,356
A3b - ES Appliances	Condensing Boiler >= 95% AFUE (Up to 3	G21A3b007	65	75	80	19	19	19	100%	100%	100%	100%	100%	100%	100%	100%	100%	962	1,110	1,184	18,278	21,090	22,496
A3b - ES Appliances	Furnace 95+ AFUE (<150) w/ECM Motor	G21A3b008	60	77	85	17	17	17	100%	100%	100%	100%	100%	100%	100%	100%	100%	588	755	830	9,996	12,828	14,111
A3b - ES Appliances	Furnace 97+ AFUE (<150) w/ECM Motor	G21A3b009	50	20	22	17	17	17	100%	100%	100%	100%	100%	100%	100%	100%	100%	515	204	224	8,755	3,467	3,814
A3b - ES Appliances	Heat Recovery Ventilator (~133 kWh pena	G21A3b010	7	8	8	20	20	20	100%	100%	100%	100%	100%	100%	100%	100%	100%	54	59	65	1,078	1,186	1,304
A3b - ES Appliances	Programmable Thermostat	G21A3b011	50	80	100	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	175	280	350	2,625	4,200	5,250
A3b - ES Appliances	Indirect Water Heater (attached to ES FH	G21A3b012	15	22	24	20	20	20	100%	100%	100%	100%	100%	100%	100%	100%	100%	60	88	97	1,200	1,760	1,936
A3b - ES Appliances	Integrated Water Heater w/Condensing B	G21A3b013	5	6	6	19	19	19	100%	100%	100%	100%	100%	100%	100%	100%	100%	42	46	51	798	878	966
A3b - ES Appliances	Integrated Water Heater w/Condensing B	G21A3b014	80	100	120	19	19	19	100%	100%	100%	100%	100%	100%	100%	100%	100%	880	1,100	1,320	16,720	20,900	25,080
A3b - ES Appliances	Condensing Water Heater (EF 0.95)	G21A3b015	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-			
A3b - ES Appliances	Stand Alone Storage Tank Water Heater	G21A3b016	-	-	-	13	13	13	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-			
A3b - ES Appliances	Tankless On-Demand Water Heater, >=	G21A3b017	-	-	-	19	19	19	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-			
A3b - ES Appliances	Tankless On-Demand Water Heater, >=	G21A3b018	80	90	100	19	19	19	100%	100%	100%	100%	100%	100%	100%	100%	100%	440	495	550	8,360	9,405	10,450
A3b - ES Appliances	WiFi Thermostat (Heating Only)	G21A3b019	510	700	850	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	2,509	3,444	4,182	37,638	51,660	62,730
A3b - ES Appliances	WiFi Thermostat (Heating & Cooling)	G21A3b020	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-			
Energy Star Appliances Subtotal																		6,427	7,829	9,146	109,021	131,753	153,258

Home Energy Reports			Quantity			Measure Life			Net to Gross			In Service Rate			Non-Electric Realization Rate			Net Annual MMBtu Savings			Net Lifetime MMBtu Savings		
Subprogram	Measure	Measure ID	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
A4a - Residential Behavior	Home Energy Reports	G21A4a001	9,100	9,100	9,100	1	1	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	3,222	4,178	6,500	3,222	4,178	6,500
	Home Energy Reports Subtotal																	3,222	4,178	6,500	3,222	4,178	6,500

Large Commercial and Industrial			Quantity			Measure Life			Net to Gross			In Service Rate			Non-Electric Realization Rate			Net Annual MMBtu Savings			Net Lifetime MMBtu Savings		
Subprogram	Measure	Measure ID	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
C1a - LCI Retrofit	Custom Large Hot Water Retro	G21C1a001	4	5	6	10	10	10	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,600	1,900	2,208	16,000	19,000	22,080
C1a - LCI Retrofit	Custom Large HVAC Retro	G21C1a002	4	6	8	20	20	20	100%	100%	100%	100%	100%	100%	100%	100%	100%	2,667	3,800	4,907	53,333	76,000	98,133
C1a - LCI Retrofit	Custom Large Other Retro	G21C1a003	6	10	17	13	13	13	100%	100%	100%	100%	100%	100%	100%	100%	100%	5,373	8,507	14,006	69,851	110,597	182,078
C1a - LCI Retrofit	Custom Large Process Retro	G21C1a004	3	4	6	13	13	13	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,800	2,280	3,312	23,400	29,640	43,056
C1a - LCI Retrofit	Faucet Aerator, Gas	G21C1a005	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	Low Flow Showerhead With Thermostatic	G21C1a006	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	Low Flow Showerhead, Gas	G21C1a007	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	Pipe Wrap - Hot Water, Gas	G21C1a008	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	Pre Rinse Spray Valve, Gas	G21C1a009	-	-	-	8	8	8	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	Boiler Reset Controls, Gas	G21C1a010	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	Boiler Tune-Ups	G21C1a011	-	-	-	1	1	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	Energy Management System, Gas	G21C1a012	-	1	2	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	750	1,500	11,250	22,500	-
C1a - LCI Retrofit	Pipe Insulation - Heating, Gas	G21C1a013	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	Steam Trap, Gas	G21C1a014	30	35	45	6	6	6	100%	100%	100%	100%	100%	100%	100%	100%	100%	366	427	549	2,196	2,562	3,294
C1a - LCI Retrofit	Programmable Thermostat, Gas	G21C1a015	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1a - LCI Retrofit	WiFi Thermostat (Heating & Cooling)	G21C1a016	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Custom Large Hot Water New	G21C1b001	1	4	5	10	10	10	100%	100%	100%	100%	100%	100%	100%	100%	100%	600	2,280	2,760	6,000	22,800	27,600
C1b - LCI New Equipment and Cons	Custom Large HVAC New	G21C1b002	2	3	4	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,200	1,710	2,208	21,600	30,780	39,744
C1b - LCI New Equipment and Cons	Custom Large Other New	G21C1b003	2	4	5	13	13	13	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,200	2,280	2,760	15,600	29,640	35,880
C1b - LCI New Equipment and Cons	Custom Large Process New	G21C1b004	-	-	-	13	13	13	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Boiler 1701 to 2000 MBH 90 AFUE, Gas	G21C1b005	1	1	2	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	165	165	331	4,133	4,133	8,265
C1b - LCI New Equipment and Cons	Boiler 1000 to 1700 MBH 90 AFUE, Gas	G21C1b006	2	2	2	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	189	208	229	4,725	5,198	5,717
C1b - LCI New Equipment and Cons	Boiler 500 to 999 MBH 90 AFUE, Gas	G21C1b007	4	4	6	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	206	226	308	5,140	5,654	7,710
C1b - LCI New Equipment and Cons	Boiler 301 to 499 MBH 90 AFUE, Gas	G21C1b008	8	8	10	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	224	224	280	5,600	5,600	7,000
C1b - LCI New Equipment and Cons	Boiler to 300 MBH 90 AFUE, Gas	G21C1b009	-	-	-	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Boiler to 300 MBH 95 AFUE, Gas	G21C1b010	-	-	-	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Combo Condensing Boiler / Water Heater	G21C1b011	-	-	-	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Combo Furnace / Water Heater, Gas	G21C1b012	-	-	-	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Condensing Unit Heater, Gas	G21C1b013	-	-	-	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Furnace w/ ECM 95 AFUE, Gas	G21C1b014	-	-	-	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Furnace w/ ECM 97 AFUE, Gas	G21C1b015	-	-	-	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Infrared Heater, Gas	G21C1b016	8	9	10	17	17	17	100%	100%	100%	100%	100%	100%	100%	100%	100%	96	106	116	1,632	1,795	1,975
C1b - LCI New Equipment and Cons	Faucet Aerator, Gas	G21C1b017	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Low Flow Showerhead With Thermostatic	G21C1b018	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Low Flow Showerhead, Gas	G21C1b019	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Pre Rinse Spray Valve, Gas	G21C1b020	-	55	61	8	8	8	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	627	690	5,016	5,518	-
C1b - LCI New Equipment and Cons	Combination Oven, Gas	G21C1b021	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Convection Oven, Gas	G21C1b022	2	2	1	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	68	68	34	811	811	406
C1b - LCI New Equipment and Cons	Conveyor Oven, Gas	G21C1b023	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Fryer, Gas	G21C1b024	4	4	4	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	313	313	313	3,758	3,758	3,758
C1b - LCI New Equipment and Cons	Griddle, Gas	G21C1b025	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Rack Oven, Gas	G21C1b026	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	Steam Cooker, Gas	G21C1b027	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1b - LCI New Equipment and Cons	C&I Large New Construction Code Compl	G21C1b028	1	1	1	20	20	20	100%	100%	100%	100%	100%	100%	36%	100%	36%	-	-	42	-	-	839
C1c - LCI Midstream	Midstream Water Heater, Condensing Ga	G21C1c012	6	-	10	20	-	20	60%	0%	60%	100%	0%	100%	100%	0%	100%	108	-	181	2,167	-	3,612
C1c - LCI Midstream	Midstream Combination Oven, Gas	G21C1c001	8	12	14	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	747	1,121	1,307	8,964	13,447	15,688
C1c - LCI Midstream	Midstream Convection Oven, Gas	G21C1c002	6	9	10	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	169	253	282	2,027	3,041	3,379
C1c - LCI Midstream	Midstream Conveyor Oven, Gas	G21C1c003	-	-	2	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	-	257	-	-	3,085
C1c - LCI Midstream	Midstream Fryer, Gas	G21C1c004	18	20	22	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	1,174	1,304	1,435	14,088	15,654	17,219
C1c - LCI Midstream	Midstream Griddle, Gas	G21C1c005	-	2	2	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	63	63	-	758	758
C1c - LCI Midstream	Midstream Pre-Rinse Spray Valve, Gas	G21C1c006	-	-	-	8	8	8	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1c - LCI Midstream	Midstream Rack Oven, Gas	G21C1c007	-	1	2	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	176	352	-	2,112	4,224
C1c - LCI Midstream	Midstream Steam Cooker, Gas	G21C1c008	-	-	-	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C1c - LCI Midstream	Midstream Indirect Water Heater, Gas	G21C1c009	6	9	10	15	15	15	89%	89%	89%	100%	100%	100%	100%	100%	100%	102	149	164	1,529	2,242	2,466
C1c - LCI Midstream	Midstream On Demand Tankless Water H	G21C1c010	14	16	18	20	20	20	89%	89%	89%	100%	100%	100%	100%	100%	100%	111	127	143	2,228	2,546	2,864
C1c - LCI Midstream	Midstream Volume Water Heater, Gas	G21C1c011	4	8	9	15	15	15	89%	89%	89%	100%	100%	100%	100%	100%	100%	1,135	2,270	2,554	17,025	34,051	38,307
Large Commercial & Industrial Subtotal																		19,613	31,336	43,290	281,808	438,084	607,155

Small Commercial and Industrial			Quantity			Measure Life			Net to Gross			In Service Rate			Non-Electric Realization Rate			Net Annual MMBtu Savings			Net Lifetime MMBtu Savings		
Subprogram	Measure	Measure ID	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
C2a - SCI Retrofit	Custom Small Hot Water Retro	G21C2a001	4	3	6	10	10	10	100%	100%	100%	100%	100%	100%	100%	100%	100%	462	329	637	4,615	3,288	6,369
C2a - SCI Retrofit	Custom Small HVAC Retro	G21C2a002	6	9	12	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,500	2,138	2,760	22,500	32,063	41,400
C2a - SCI Retrofit	Custom Small Other Retro	G21C2a003	-	-	-	-	-	-	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Custom Small Process Retro	G21C2a004	-	-	-	-	-	-	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Faucet Aerator, Gas	G21C2a005	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Low Flow Showerhead With Thermostatic	G21C2a006	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Low Flow Showerhead, Gas	G21C2a007	35	40	45	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	93	106	119	649	742	835
C2a - SCI Retrofit	Pipe Wrap - Hot Water, Gas	G21C2a008	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Pre Rinse Spray Valve, Gas	G21C2a009	-	-	-	8	8	8	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Boiler Reset Controls, Gas	G21C2a010	12	15	18	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	426	533	639	6,390	7,988	9,585
C2a - SCI Retrofit	Boiler Tune-Ups	G21C2a011	-	-	-	-	-	-	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Energy Management System, Gas	G21C2a012	-	-	-	-	-	-	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Pipe Insulation - Heating, Gas	G21C2a013	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	Steam Trap, Gas	G21C2a014	35	39	42	6	6	6	100%	100%	100%	100%	100%	100%	100%	100%	100%	294	323	356	1,764	1,940	2,134
C2a - SCI Retrofit	Programmable Thermostat, Gas	G21C2a015	-	-	-	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2a - SCI Retrofit	WiFi Thermostat (Heating & Cooling)	G21C2a016	20	25	30	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	62	78	93	933	1,166	1,400
C2b - SCI New Equipment and Cont	Custom Small Hot Water New	G21C2b001	20	28	35	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,067	1,419	1,717	12,800	17,024	20,608
C2b - SCI New Equipment and Cont	Custom Small HVAC New	G21C2b002	3	4	5	15	15	15	100%	100%	100%	100%	100%	100%	100%	100%	100%	1,050	1,330	1,610	15,750	19,950	24,150
C2b - SCI New Equipment and Cont	Custom Small Other New	G21C2b003	-	-	-	-	-	-	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Custom Small Process New	G21C2b004	-	-	-	-	-	-	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Boiler 1701 to 2000 MBH 90 AFUE, Gas	G21C2b005	-	-	-	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Boiler 1000 to 1700 MBH 90 AFUE, Gas	G21C2b006	3	3	5	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	284	312	473	7,088	7,796	11,813
C2b - SCI New Equipment and Cont	Boiler 500 to 999 MBH 90 AFUE, Gas	G21C2b007	8	9	10	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	411	452	498	10,280	11,308	12,439
C2b - SCI New Equipment and Cont	Boiler 301 to 499 MBH 90 AFUE, Gas	G21C2b008	4	4	5	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	112	123	136	2,800	3,080	3,388
C2b - SCI New Equipment and Cont	Boiler to 300 MBH 90 AFUE, Gas	G21C2b009	-	-	-	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Boiler to 300 MBH 95 AFUE, Gas	G21C2b010	15	20	25	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	266	354	443	6,638	8,850	11,063
C2b - SCI New Equipment and Cont	Combo Condensing Boiler / Water Heater	G21C2b011	-	-	-	25	25	25	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Combo Furnace / Water Heater, Gas	G21C2b012	-	-	-	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Condensing Unit Heater, Gas	G21C2b013	4	4	5	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	164	180	198	2,945	3,239	3,563
C2b - SCI New Equipment and Cont	Furnace w/ ECM 95 AFUE, Gas	G21C2b014	-	-	-	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Furnace w/ ECM 97 AFUE, Gas	G21C2b015	-	-	-	18	18	18	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Infrared Heater, Gas	G21C2b016	15	18	20	17	17	17	100%	100%	100%	100%	100%	100%	100%	100%	100%	180	216	240	3,060	3,672	4,080
C2b - SCI New Equipment and Cont	Faucet Aerator, Gas	G21C2b017	100	120	140	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	170	204	238	1,190	1,428	1,666
C2b - SCI New Equipment and Cont	Low Flow Showerhead With Thermostatic	G21C2b018	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Low Flow Showerhead, Gas	G21C2b019	-	-	-	7	7	7	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Pre Rinse Spray Valve, Gas	G21C2b020	-	-	-	8	8	8	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Combination Oven, Gas	G21C2b021	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Convection Oven, Gas	G21C2b022	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Conveyor Oven, Gas	G21C2b023	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Fryer, Gas	G21C2b024	1	2	3	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	78	157	235	940	1,879	2,819
C2b - SCI New Equipment and Cont	Griddle, Gas	G21C2b025	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Rack Oven, Gas	G21C2b026	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	Steam Cooker, Gas	G21C2b027	-	-	-	12	12	12	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2b - SCI New Equipment and Cont	C&I Small New Construction Code Compl	G21C2b028	1	1	1	20	20	20	100%	100%	100%	100%	100%	100%	36%	100%	36%	-	-	23	-	-	452
C2c - SCI Midstream	Midstream Combination Oven, Gas	G21C2c001	-	-	-	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2c - SCI Midstream	Midstream Convection Oven, Gas	G21C2c002	8	9	10	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	225	248	273	2,703	2,973	3,271
C2c - SCI Midstream	Midstream Conveyor Oven, Gas	G21C2c003	-	-	-	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2c - SCI Midstream	Midstream Fryer, Gas	G21C2c004	15	17	18	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	978	1,109	1,184	11,740	13,306	14,206
C2c - SCI Midstream	Midstream Griddle, Gas	G21C2c005	-	-	-	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2c - SCI Midstream	Midstream Pre-Rinse Spray Valve, Gas	G21C2c006	-	-	-	8	8	8	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2c - SCI Midstream	Midstream Rack Oven, Gas	G21C2c007	1	1	1	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	176	194	213	2,112	2,323	2,556
C2c - SCI Midstream	Midstream Steam Cooker, Gas	G21C2c008	-	-	-	12	12	12	83%	83%	83%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2c - SCI Midstream	Midstream Indirect Water Heater, Gas	G21C2c009	-	-	-	15	15	15	31%	31%	31%	100%	100%	100%	100%	100%	100%	-	-	-	-	-	-
C2c - SCI Midstream	Midstream On Demand Tankless Water H	G21C2c010	7	8	8	20	20	20	60%	60%	60%	100%	100%	100%	100%	100%	100%	37	41	45	748	822	905
C2c - SCI Midstream	Midstream Volume Water Heater, Gas	G21C2c011	3	3	4	15	15	15	60%	60%	60%	100%	100%	100%	100%	100%	100%	147	162	178	2,209	2,429	2,672
C2c - SCI Midstream	Midstream Water Heater, Condensing Ga	G21C2c012	6	7	8	15	15	15	60%	60%	60%	100%	100%	100%	100%	100%	100%	108	126	144	1,625	1,896	2,167
Small Commercial & Industrial Subtotal																		8,290	10,132	12,450	121,478	149,164	183,539

Northern Utilities, Inc. -- New Hampshire Division

EEC Budget

	Residential	Low-Income	Gen Service	Total
July-20	\$51,728	\$9,161	\$58,020	\$118,909
August-20	\$59,199	\$33,463	\$66,401	\$159,063
September-20	\$66,096	\$37,362	\$80,013	\$183,471
October-20	\$73,568	\$41,585	\$82,518	\$197,671
November-20	\$81,040	\$45,809	\$90,898	\$217,747
December-20	\$88,512	\$50,032	\$105,155	\$243,699
January-21	\$33,101	\$16,281	\$57,210	\$106,592
February-21	\$55,169	\$27,135	\$57,210	\$139,514
March-21	\$66,203	\$32,562	\$85,815	\$184,580
April-21	\$77,237	\$37,989	\$100,117	\$215,343
May-21	\$77,237	\$37,989	\$57,210	\$172,436
June-21	\$132,406	\$65,125	\$71,512	\$269,043
July-21	\$143,440	\$70,552	\$100,117	\$314,108
August-21	\$77,237	\$37,989	\$157,327	\$272,553
September-21	\$154,473	\$75,979	\$171,629	\$402,082
October-21	\$110,338	\$54,271	\$185,932	\$350,541
Total	\$1,346,983	\$673,283	\$1,527,084	\$3,547,351

**Budget with Low-Income Costs Allocated
to Residential and General Service Classes**

	Residential	Low-Income	Gen Service	Total
July-20	\$56,539	0	\$62,370	\$118,909
August-20	\$63,760	0	\$95,304	\$159,063
September-20	\$71,689	0	\$111,782	\$183,471
October-20	\$80,185	0	\$117,486	\$197,671
November-20	\$92,872	0	\$124,875	\$217,747
December-20	\$104,446	0	\$139,252	\$243,699
January-21	\$38,314	0	\$68,279	\$106,592
February-21	\$64,133	0	\$75,381	\$139,514
March-21	\$76,417	0	\$108,163	\$184,580
April-21	\$88,503	0	\$126,840	\$215,343
May-21	\$86,905	0	\$85,531	\$172,436
June-21	\$145,513	0	\$123,530	\$269,043
July-21	\$154,320	0	\$159,788	\$314,108
August-21	\$82,237	0	\$190,316	\$272,553
September-21	\$165,211	0	\$236,870	\$402,082
October-21	\$118,650	0	\$231,891	\$350,541
Total	\$1,489,693	\$0	\$2,057,658	\$3,547,351

EEC Charge Factor Calculation**EEC Charge Factors for Residential Customers**

	November 1, 2020	Effective November 1, 2021	November 1, 2022	
EEC Reconciliation Adjustment	\$276,963	(\$7,185)	\$0	Attachment J3 Page 3 Nov '20 Beginning Balance; Oct '21 Ending Balance
EEC Costs	\$1,096,392	\$1,326,609	\$1,604,183	Attachment J3 Page 3 Nov '20 - Oct '21 Totals; Company Budget
EEC Performance Incentive	\$56,430	\$72,866	\$88,127	Attachment J3 Page 3 Nov '20 - Oct '21 Totals; Company Budget-
EEC Low-Income Costs	\$121,129	\$147,759	\$189,074	Attachment J3 Page 3 Nov '20 - Oct '21 Totals; Company Budget-
EEC Allocated Low-Income Performance Incentive	\$6,532	\$8,943	\$11,401	Attachment J3 Page 3 Nov '20 - Oct '21 Totals; Company Budget-
Total	\$1,557,446	\$1,548,992	\$1,892,786	
Forecasted Annual Throughput Volumes for Residential Customers	20,133,234	20,341,869	20,727,239	Attachment J3 Page 3 Nov '20 - Oct '21 Totals; Company Forecast

Energy Efficiency Charge Factor for Residential Customers	\$0.0774	\$0.0761	\$0.0913
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EEC Charge Factors for Commercial and Industrial Customers (C&I)

EEC Reconciliation Adjustment	(\$60,459)	(\$10,794)	\$0	Attachment J3 Page 4 Nov '20 Beginning Balance; Oct '21 Ending Balance
EEC Costs	\$1,240,133	\$1,872,209	\$2,750,204	Attachment J3 Page 4 Nov '20 - Oct '21 Totals; Company Budget
EEC Performance Incentive	\$73,557	\$106,412	\$156,824	Attachment J3 Page 4 Nov '20 - Oct '21 Totals; Company Budget
EEC Low-Income Costs	\$430,584	\$551,139	\$699,944	Attachment J3 Page 4 Nov '20 - Oct '21 Totals; Company Budget
EEC Allocated Low-Income Performance Incentive	\$21,181	\$29,428	\$37,425	Attachment J3 Page 4 Nov '20 - Oct '21 Totals; Company Budget
Total	\$1,704,995	\$2,548,396	\$3,644,397	
Forecasted Annual Throughput Volumes for C&I Customers	52,446,711	54,440,281	55,734,520	Attachment J3 Page 4 Nov '20 - Oct '21 Totals; Company Forecast

Energy Efficiency Charge Factor for C&I Customers	\$0.0337	\$0.0470	\$0.0654
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Northern Utilities, Inc.																
New Hampshire Division																
Calculation of the EEC Charge, a Component of the Local Distribution Adjustment Charge																
To Be Effective November 1, 2020 through October 31, 2021																
Residential Customers																
		Beginning Balance (Over)/Under		EEC Rate per Therm	EEC Collections	EEC Costs	DSM PI	Allocated Low Income Costs	Allocated Low Income PI	Ending Balance (Over)/Under	Average Balance (Over)/Under	Interest Prime Rate	Interest @ Prime Rate	Ending Balance plus Interest (Over)/Under	Therm Sales	# of Days
August-19	Actual	\$107,098		\$0.0501	\$16,801	\$37,242	\$3,633	\$1,184	\$69	\$132,424	\$119,761	5.50%	\$559.430	\$132,983	335,427	31
September-19	Actual	\$132,983		\$0.0501	\$16,810	\$21,383	\$3,633	\$11,591	\$675	\$153,455	\$143,219	5.50%	\$647.430	\$154,102	335,597	30
October-19	Actual	\$154,102		\$0.0501	\$30,568	\$57,526	\$3,633	\$1,339	\$78	\$186,110	\$170,106	5.25%	\$758.490	\$186,868	610,233	31
November-19	Actual	\$186,868		\$0.0499	\$68,678	\$20,599	\$3,633	\$20,128	\$1,171	\$163,721	\$175,295	5.25%	\$1,262.240	\$164,984	1,373,589	30
December-19	Actual	\$164,984		\$0.0499	\$137,485	\$32,245	\$3,633	\$4,023	\$234	\$67,634	\$116,309	5.25%	\$518.610	\$68,152	2,755,471	31
January-20	Actual	\$68,152		\$0.0499	\$154,006	\$19,025	\$3,906	\$3,272	\$190	(\$59,461)	\$4,346	4.75%	\$17.480	(\$59,444)	3,086,303	31
February-20	Actual	\$556		\$0.0499	\$156,856	\$111,389	\$3,906	\$7,729	\$450	(\$32,826)	(\$16,135)	4.75%	\$3,668.730	(\$29,158)	3,143,380	29
March-20	Actual	\$45,842		\$0.0499	\$133,675	\$132,910	\$15,890	\$25,651	\$1,493	\$88,111	\$66,977	4.75%	\$1,674.790	\$89,786	2,678,854	31
April-20	Actual	\$89,786		\$0.0499	\$93,387	\$84,604	\$3,906	\$11,124	\$647	\$96,680	\$93,233	4.75%	\$413.570	\$97,093	1,871,517	30
May-20	Actual	\$97,093		\$0.0499	\$66,832	\$18,542	(\$976)	\$3,996	\$233	\$52,056	\$74,575	4.75%	\$300.030	\$52,356	1,339,252	31
June-20	Actual	\$52,356		\$0.0499	\$28,689	\$43,423	\$2,929	\$1,527	\$89	\$71,635	\$61,996	4.75%	\$241.380	\$71,877	574,945	30
July-20	Forecast	\$71,877		\$0.0499	\$20,894	\$51,728	\$2,929	\$4,811	\$234	\$110,685	\$91,281	3.25%	\$251.270	\$110,936	418,711	31
August-20	Forecast	\$110,936		\$0.0499	\$16,527	\$59,199	\$2,929	\$4,560	\$193	\$161,292	\$136,114	3.25%	\$374.690	\$161,666	331,195	31
September-20	Forecast	\$161,666		\$0.0499	\$18,846	\$66,096	\$2,929	\$5,592	\$212	\$217,651	\$189,659	3.25%	\$505.240	\$218,156	377,676	30
October-20	Forecast	\$218,156		\$0.0499	\$25,214	\$73,568	\$2,929	\$6,617	\$226	\$276,283	\$247,219	3.25%	\$680.530	\$276,963	505,288	31
November-20	Forecast	\$276,963		\$0.0774	\$115,178	\$81,040	\$2,929	\$11,832	\$367	\$257,953	\$267,458	3.25%	\$712.490	\$258,665	1,488,092	30
December-20	Forecast	\$258,665		\$0.0774	\$212,948	\$88,512	\$2,929	\$15,935	\$452	\$153,546	\$206,105	3.25%	\$567.350	\$154,113	2,751,261	31
January-21	Forecast	\$154,113		\$0.0774	\$261,213	\$33,101	\$5,057	\$5,212	\$796	(\$62,933)	\$45,590	3.25%	\$125.840	(\$62,807)	3,374,845	31
February-21	Forecast	(\$62,807)		\$0.0774	\$291,762	\$55,169	\$5,057	\$8,964	\$822	(\$284,557)	(\$173,682)	3.25%	(\$433.020)	(\$284,990)	3,769,530	28
March-21	Forecast	(\$284,990)		\$0.0774	\$245,174	\$66,203	\$5,057	\$10,214	\$780	(\$447,910)	(\$366,450)	3.25%	(\$1,011.500)	(\$448,921)	3,167,624	31
April-21	Forecast	(\$448,921)		\$0.0774	\$165,238	\$77,237	\$5,057	\$11,267	\$738	(\$519,861)	(\$484,391)	3.25%	(\$1,293.920)	(\$521,155)	2,134,862	30
May-21	Forecast	(\$521,155)		\$0.0774	\$93,796	\$77,237	\$5,057	\$9,668	\$633	(\$522,357)	(\$521,756)	3.25%	(\$1,440.190)	(\$523,797)	1,211,836	31
June-21	Forecast	(\$523,797)		\$0.0774	\$48,120	\$132,406	\$5,057	\$13,107	\$501	(\$420,846)	(\$472,321)	3.25%	(\$1,261.680)	(\$422,108)	621,702	30
July-21	Forecast	(\$422,108)		\$0.0774	\$30,763	\$143,440	\$5,057	\$10,880	\$384	(\$293,110)	(\$357,609)	3.25%	(\$987.100)	(\$294,097)	397,455	31
August-21	Forecast	(\$294,097)		\$0.0774	\$26,040	\$77,237	\$5,057	\$5,000	\$327	(\$232,516)	(\$263,306)	3.25%	(\$726.800)	(\$233,243)	336,440	31
September-21	Forecast	(\$233,243)		\$0.0774	\$28,829	\$154,473	\$5,057	\$10,738	\$352	(\$91,451)	(\$162,347)	3.25%	(\$433.670)	(\$91,885)	372,462	30
October-21	Forecast	(\$91,885)		\$0.0774	\$39,252	\$110,338	\$5,057	\$8,312	\$381	(\$7,049)	(\$49,467)	3.25%	(\$136.540)	(\$7,185)	507,126	31
Nov 20 thru Oct 21 Totals					\$1,558,312	\$1,096,392	\$56,430	\$121,129	\$6,532						20,133,234	

Forecast therm Sales from Company Forecast as seen in Attachment 2 to Schedule 10 B, Page 2 of 3, filed on September 17, 2019 in the Cost of Gas Docket.

Actual Performance Incentives includes reconciliations from prior year(s).

footnote transfers

Northern Utilities, Inc. New Hampshire Division Calculation of the EEC Charge, a Component of the Local Distribution Adjustment Charge To Be Effective November 1, 2020 through October 31, 2021 General Service Customers															
		Beginning Balance (Over)/Under	EEC Rate per Therm	EEC Collections	EEC Costs	DSM PI	Allocated Low Income Costs	Allocated Low Income PI	Ending Balance (Over)/Under	Average Balance (Over)/Under	Interest Prime Rate	Interest @ Prime Rate	Ending Balance plus Interest (Over)/Under	Therm Sales	# of Days
August-19	Actual	(\$704,375)	\$0.0264	\$63,986	\$29,331	\$4,684	\$8,553	\$498	(\$725,295)	(\$714,835)	5.50%	(\$3,339.16)	(\$728,634)	2,423,706	31
September-19	Actual	(\$728,634)	\$0.0264	\$62,483	\$110,426	\$4,684	\$81,746	\$4,758	(\$589,503)	(\$659,069)	5.50%	(\$2,979.35)	(\$592,483)	2,366,753	30
October-19	Actual	(\$592,483)	\$0.0264	\$83,920	\$220,316	\$4,684	\$6,982	\$406	(\$444,015)	(\$518,249)	5.25%	(\$2,310.82)	(\$446,326)	3,182,362	31
November-19	Actual	(\$446,326)	\$0.0247	\$114,869	\$248,775	\$4,684	\$66,982	\$3,898	(\$236,854)	(\$341,590)	5.25%	(\$1,458.61)	(\$238,312)	4,571,040	30
December-19	Actual	(\$238,312)	\$0.0247	\$158,016	\$190,099	\$4,684	\$9,339	\$544	(\$191,662)	(\$214,987)	5.25%	(\$958.61)	(\$192,621)	6,397,368	31
January-20	Actual	(\$192,621)	\$0.0247	\$177,242	\$53,455	\$5,336	\$7,606	\$443	(\$303,024)	(\$247,822)	4.75%	(\$997.04)	(\$304,021)	7,174,996	31
February-20	Actual	(\$198,021)	\$0.0247	\$177,778	\$72,005	\$5,336	\$17,680	\$1,029	(\$279,749)	(\$238,885)	4.75%	\$4,653.65	(\$275,096)	7,197,470	29
March-20	Actual	(\$125,096)	\$0.0247	\$155,281	\$54,638	(\$3,397)	\$60,197	\$3,504	(\$165,435)	(\$145,265)	4.75%	\$564.14	(\$164,871)	6,286,658	31
April-20	Actual	(\$164,871)	\$0.0247	\$112,351	\$30,445	\$5,336	\$27,036	\$1,574	(\$212,832)	(\$188,852)	4.75%	(\$735.28)	(\$213,567)	4,548,589	30
May-20	Actual	(\$213,567)	\$0.0247	\$87,004	\$71,762	(\$1,334)	\$10,511	\$612	(\$219,021)	(\$216,294)	4.75%	(\$870.20)	(\$219,891)	3,522,410	31
June-20	Actual	(\$219,891)	\$0.0247	\$60,861	\$41,870	\$4,002	\$6,546	\$381	(\$227,954)	(\$223,923)	4.75%	(\$871.83)	(\$228,826)	2,463,920	30
July-20	Forecast	(\$228,826)	\$0.0247	\$65,835	\$58,020	\$4,002	\$4,350	\$253	(\$228,035)	(\$228,431)	3.25%	(\$628.81)	(\$228,664)	2,125,963	31
August-20	Forecast	(\$228,664)	\$0.0247	\$51,849	\$66,401	\$4,002	\$28,903	\$1,226	(\$179,981)	(\$204,323)	3.25%	(\$562.45)	(\$180,544)	2,099,142	31
September-20	Forecast	(\$180,544)	\$0.0247	\$52,996	\$80,013	\$4,002	\$31,769	\$1,207	(\$116,548)	(\$148,546)	3.25%	(\$395.72)	(\$116,944)	2,145,572	30
October-20	Forecast	(\$116,944)	\$0.0247	\$65,953	\$82,518	\$4,002	\$34,968	\$1,194	(\$60,216)	(\$88,580)	3.25%	(\$243.84)	(\$60,459)	2,670,168	31
November-20	Forecast	(\$60,459)	\$0.0325	\$138,874	\$90,898	\$4,002	\$33,976	\$1,053	(\$69,404)	(\$64,932)	3.25%	(\$172.97)	(\$69,577)	4,273,046	30
December-20	Forecast	(\$69,577)	\$0.0325	\$191,330	\$105,155	\$4,002	\$34,097	\$968	(\$116,685)	(\$93,131)	3.25%	(\$256.36)	(\$116,941)	5,887,088	31
January-21	Forecast	(\$116,941)	\$0.0325	\$232,929	\$57,210	\$6,555	\$11,069	\$1,691	(\$273,345)	(\$195,143)	3.25%	(\$538.65)	(\$273,884)	7,167,043	31
February-21	Forecast	(\$273,884)	\$0.0325	\$248,358	\$57,210	\$6,555	\$18,172	\$1,666	(\$438,639)	(\$356,262)	3.25%	(\$888.21)	(\$439,528)	7,641,797	28
March-21	Forecast	(\$439,528)	\$0.0325	\$225,235	\$85,815	\$6,555	\$22,348	\$1,707	(\$548,338)	(\$493,933)	3.25%	(\$1,363.39)	(\$549,701)	6,930,321	31
April-21	Forecast	(\$549,701)	\$0.0325	\$164,566	\$100,117	\$6,555	\$26,723	\$1,750	(\$579,122)	(\$564,412)	3.25%	(\$1,507.68)	(\$580,630)	5,063,577	30
May-21	Forecast	(\$580,630)	\$0.0325	\$115,374	\$57,210	\$6,555	\$28,321	\$1,854	(\$602,063)	(\$591,346)	3.25%	(\$1,632.28)	(\$603,695)	3,549,981	31
June-21	Forecast	(\$603,695)	\$0.0325	\$80,188	\$71,512	\$6,555	\$52,018	\$1,987	(\$551,811)	(\$577,753)	3.25%	(\$1,543.31)	(\$553,354)	2,467,336	30
July-21	Forecast	(\$553,354)	\$0.0325	\$70,840	\$100,117	\$6,555	\$59,671	\$2,104	(\$455,747)	(\$504,551)	3.25%	(\$1,392.70)	(\$457,140)	2,179,685	31
August-21	Forecast	(\$457,140)	\$0.0325	\$72,143	\$157,327	\$6,555	\$32,989	\$2,160	(\$330,251)	(\$393,695)	3.25%	(\$1,086.71)	(\$331,338)	2,219,780	31
September-21	Forecast	(\$331,338)	\$0.0325	\$73,543	\$171,629	\$6,555	\$65,241	\$2,136	(\$159,320)	(\$245,329)	3.25%	(\$655.33)	(\$159,975)	2,262,857	30
October-21	Forecast	(\$159,975)	\$0.0325	\$91,136	\$185,932	\$6,555	\$45,959	\$2,106	(\$10,558)	(\$85,267)	3.25%	(\$235.36)	(\$10,794)	2,804,200	31

Nov 20 thru Oct 21 Totals

\$1,704,516 \$1,240,133 \$73,557 \$430,584 \$21,181

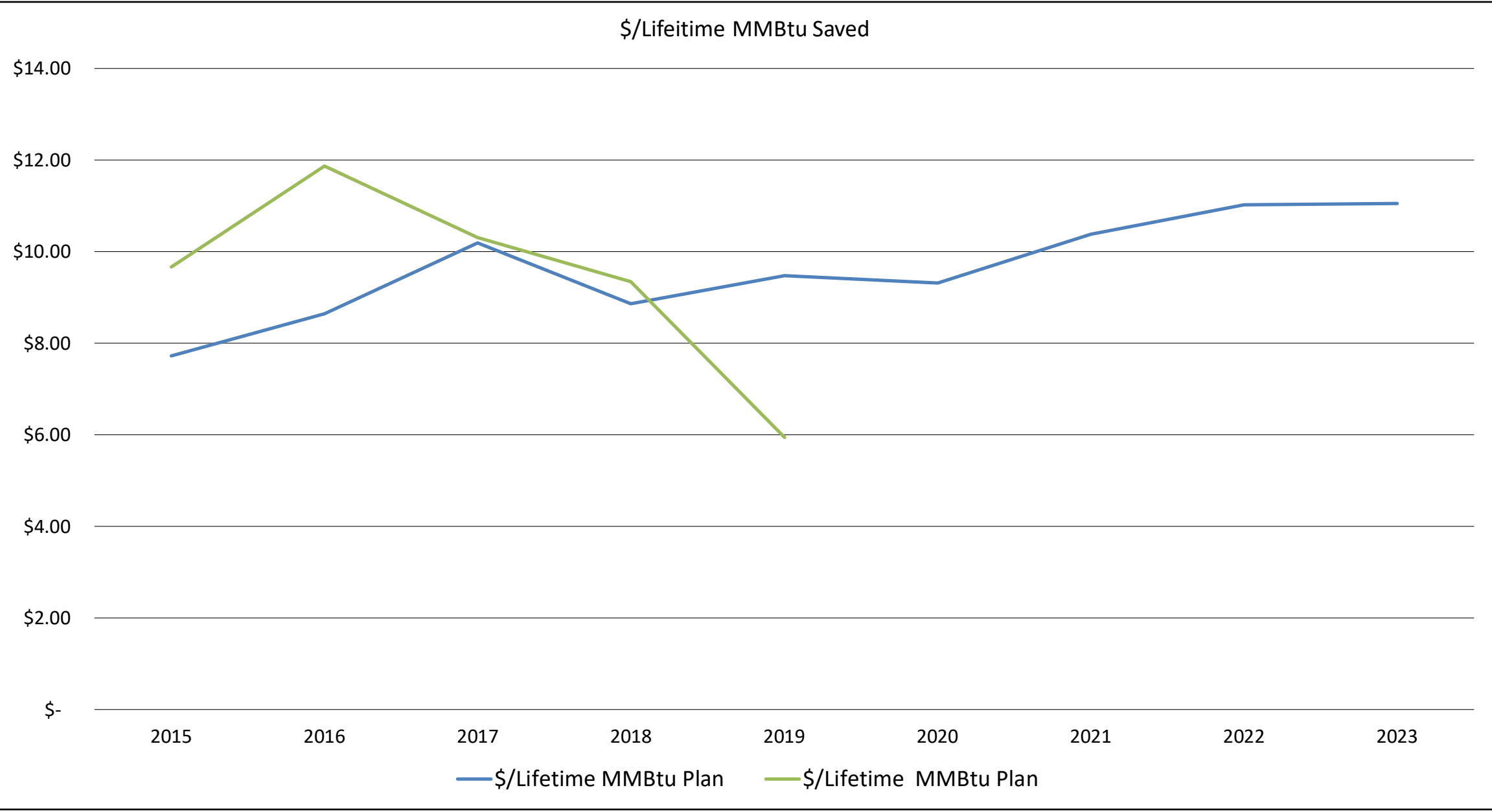
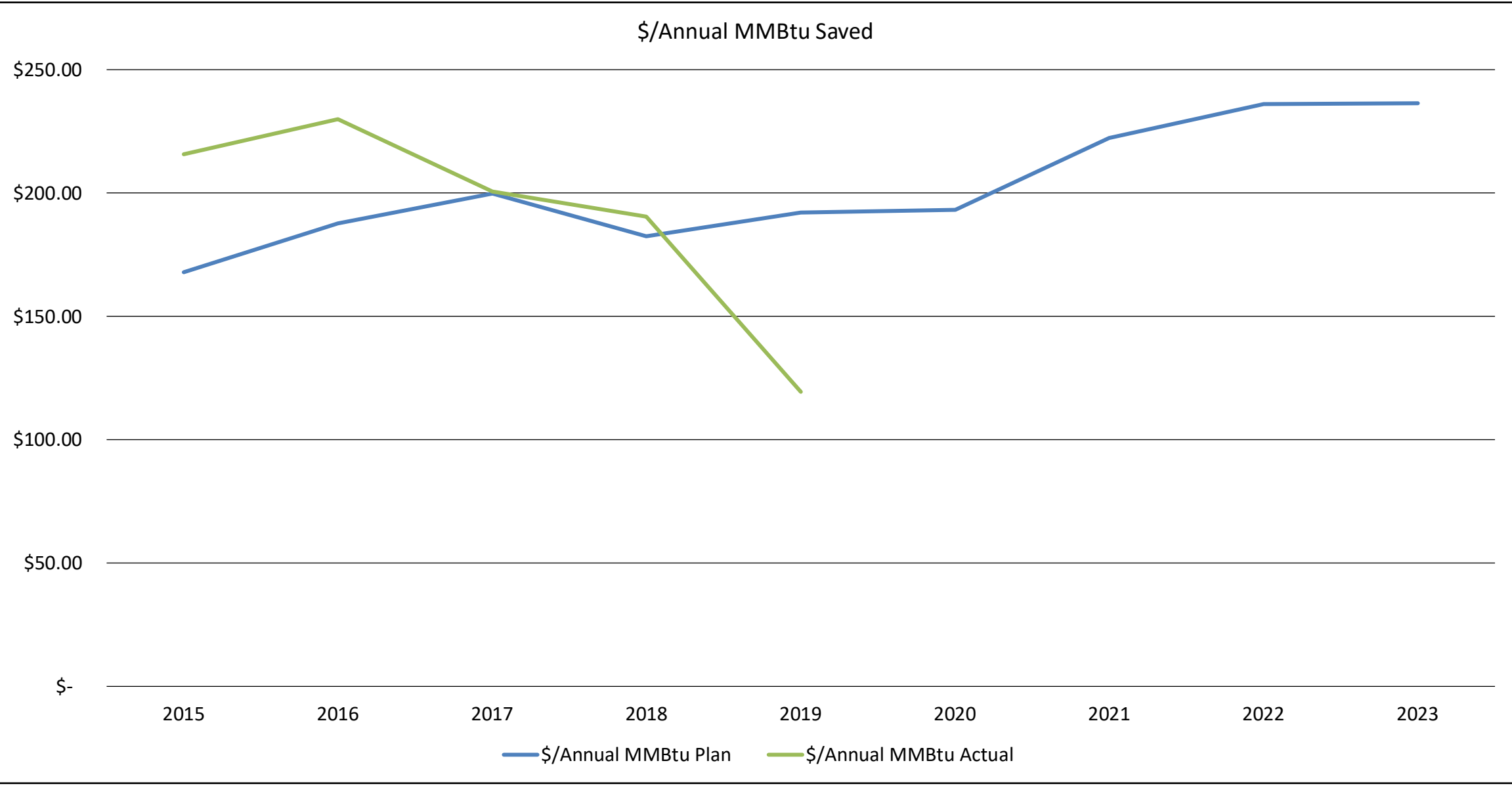
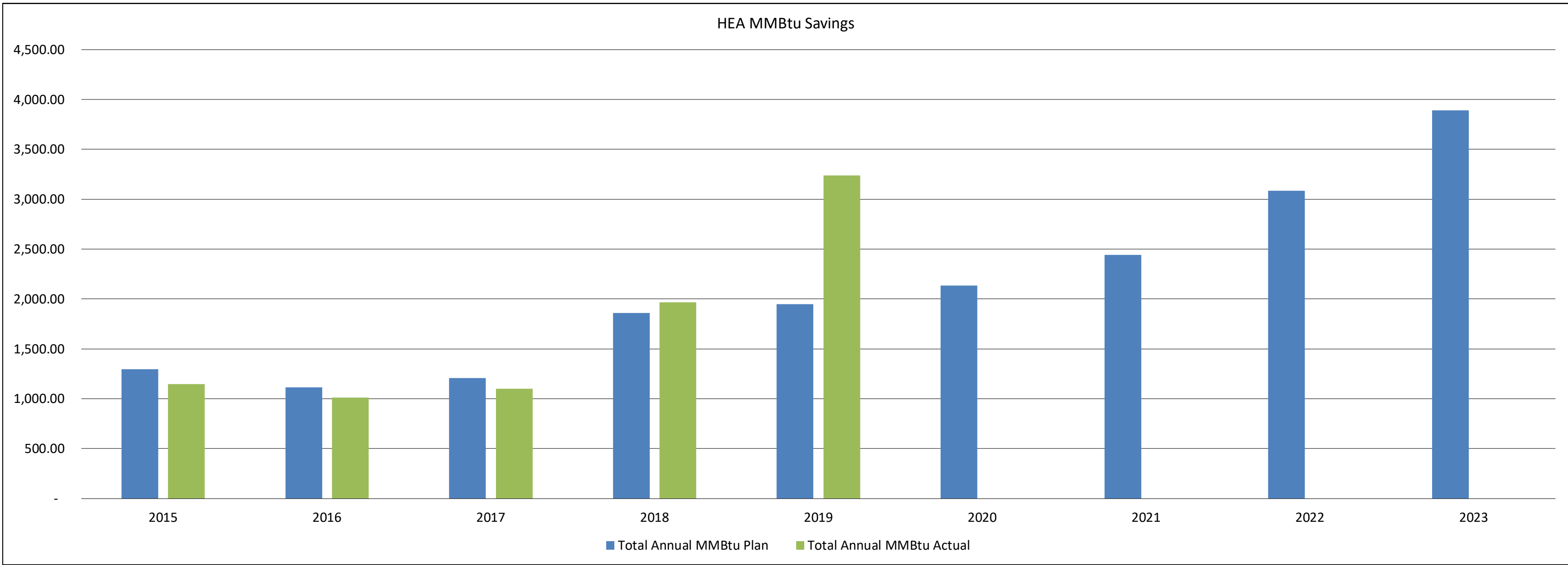
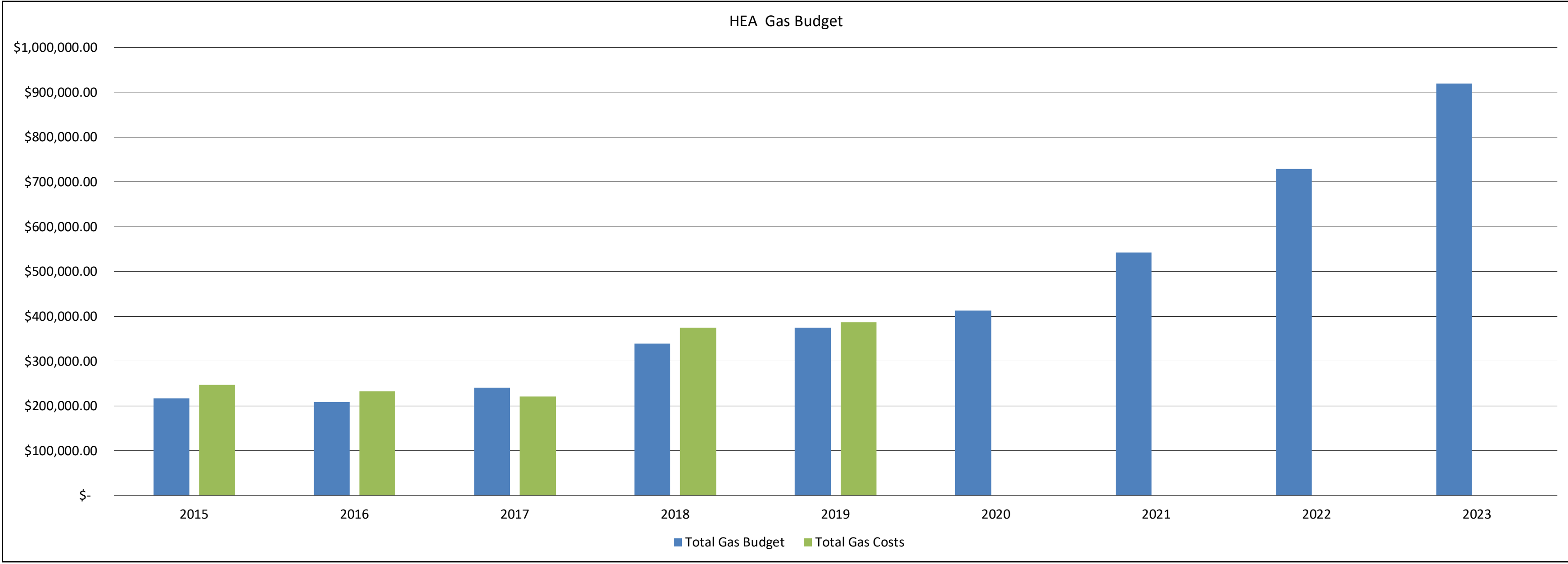
52,446,710

Forecast therm Sales from Company Forecast as seen in Attachment 2 to Schedule 10 B, Page 2 of 3, filed on September 17, 2019 in the Cost of Gas Docket. Does not include Special Contracts.

Actual Performance Incentives includes reconciliations from prior year(s).

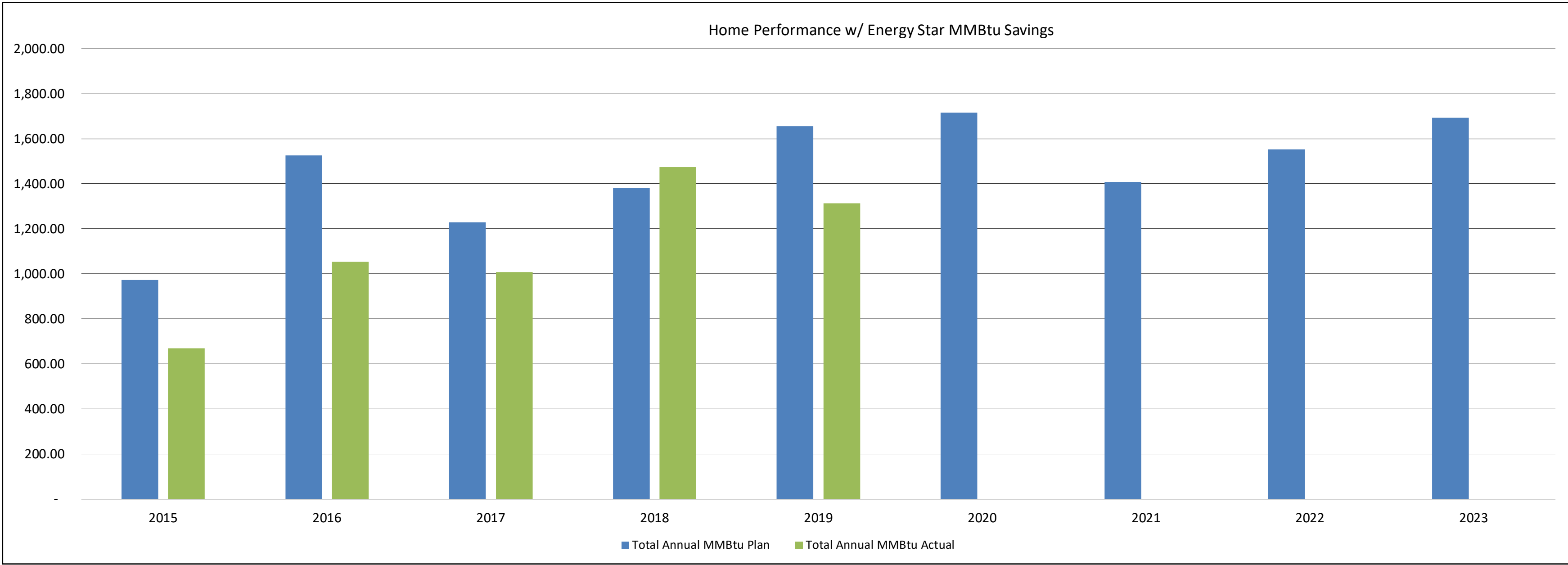
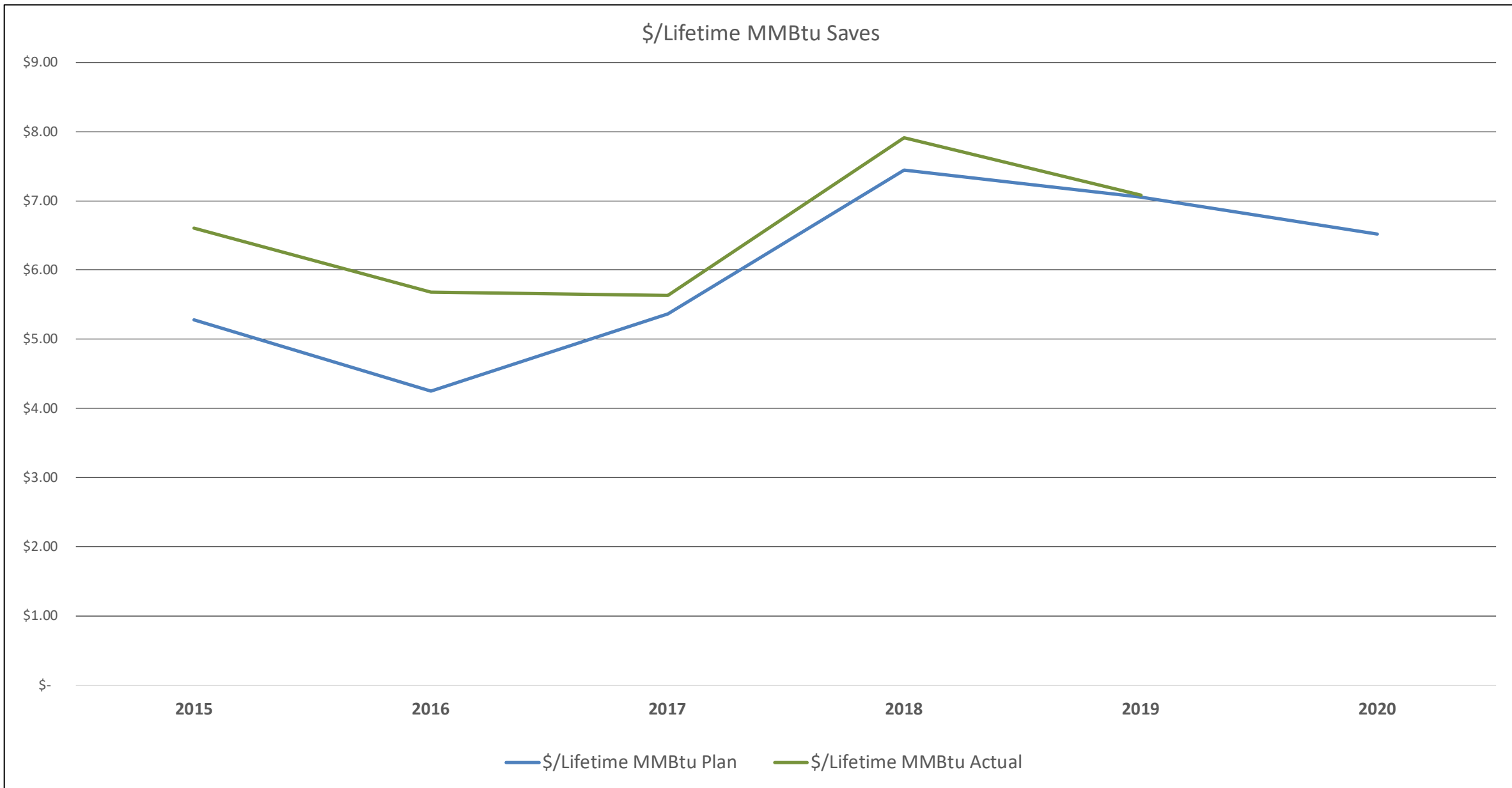
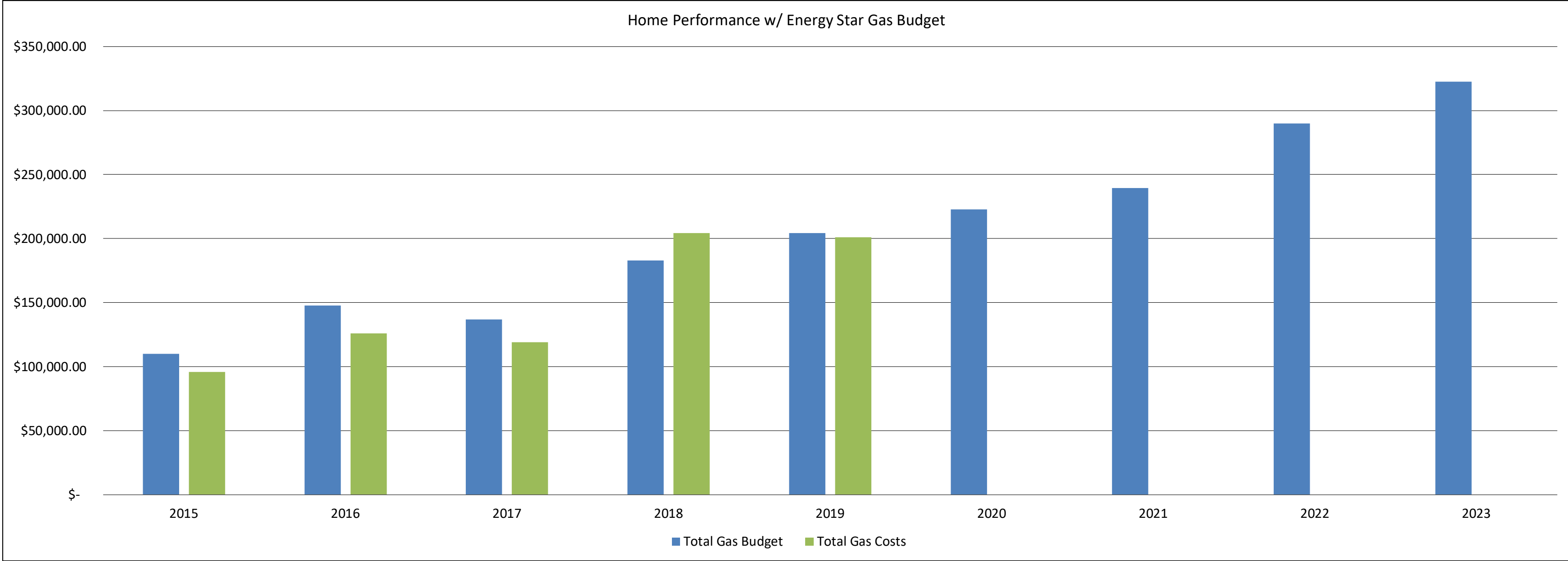
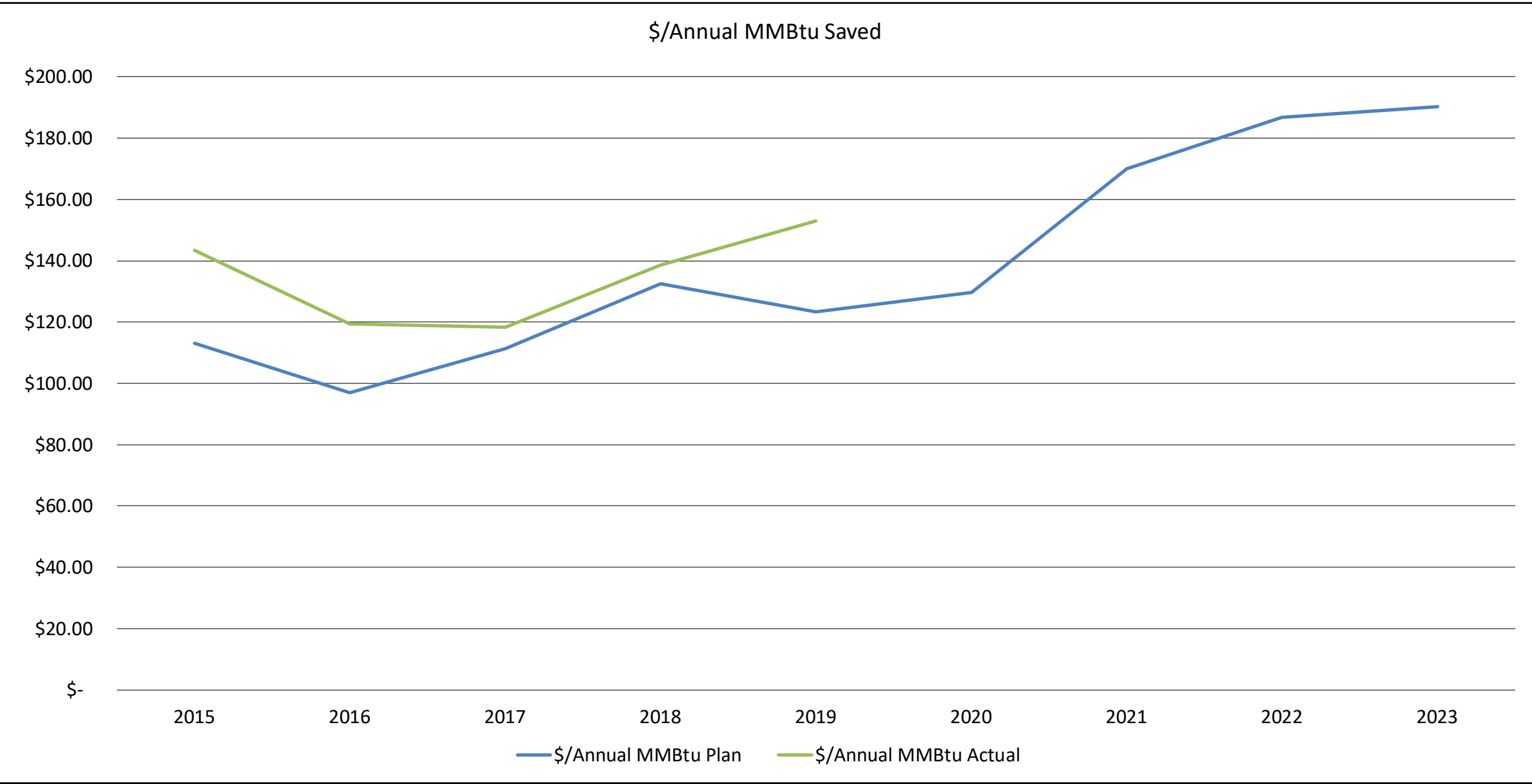
Home Energy Assistance

<u>Planned</u>		2015		2016		2017		2018		2019		2020		2021		2022		2023	
1)	Total Gas Budget	\$	217,299.34	\$	208,884.45	\$	241,100.00	\$	339,500.00	\$	374,026.00	\$	413,000.00	\$	542,705.00	\$	728,650.00	\$	919,565.00
	Annual Electric Savings Plan (kWh)	\$	-	\$	-	\$	19,500.00	\$	19,100.00	\$	11,828.83	\$	12,266.80	\$	-	\$	-	\$	1,223.04
2)	Total Gas Budget	\$	217,299.34	\$	208,884.45	\$	241,100.00	\$	339,500.00	\$	374,026.00	\$	413,000.00	\$	542,705.00	\$	728,650.00	\$	919,565.00
	Total Lifetime MMBtu Plan		28,134.50		24,183.30		23,672.00		38,285.30		39,469.68		44,343.14		52,284.05		66,078.39		83,213.02
	\$/Lifetime MMBtu Plan	\$	7.72	\$	8.64	\$	10.19	\$	8.87	\$	9.48	\$	9.31	\$	10.38	\$	11.03	\$	11.05
3)	Total Gas Budget	\$	217,299.34	\$	208,884.45	\$	241,100.00	\$	339,500.00	\$	374,026.00	\$	413,000.00	\$	542,705.00	\$	728,650.00	\$	919,565.00
	Total Annual MMBtu Plan		1,294.23		1,112.44		1,206.60		1,859.40		1,947.41		2,136.81		2,442.17		3,085.41		3,889.92
	\$/Annual MMBtu Plan	\$	167.90	\$	187.77	\$	199.82	\$	182.59	\$	192.06	\$	193.28	\$	222.22	\$	236.16	\$	236.40
<u>Actuals</u>		2015		2016		2017		2018		2019									
1)	Total Gas Costs	\$	246,875.44	\$	232,458.52	\$	221,117.77	\$	374,000.00	\$	386,835.96								
	Annual Electric Savings Actual (kWh)		-		-		4.01		16.90		4.28								
2)	Total Gas Costs	\$	246,875.44	\$	232,458.52	\$	221,117.77	\$	374,000.00	\$	386,835.96								
	Total Lifetime MMBtu Actual		25,542.87		19,593.06		21,454.20		40,000.90		65,090.20								
	\$/Lifetime MMBtu Plan	\$	9.67	\$	11.86	\$	10.31	\$	9.35	\$	5.94								
3)	Total Gas Costs	\$	246,875.44	\$	232,458.52	\$	221,117.77	\$	374,000.00	\$	386,835.96								
	Total Annual MMBtu Actual		1,145.08		1,010.97		1,101.86		1,964.60		3,239.38								
	\$/Annual MMBtu Actual	\$	215.60	\$	229.94	\$	200.68	\$	190.37	\$	119.42								



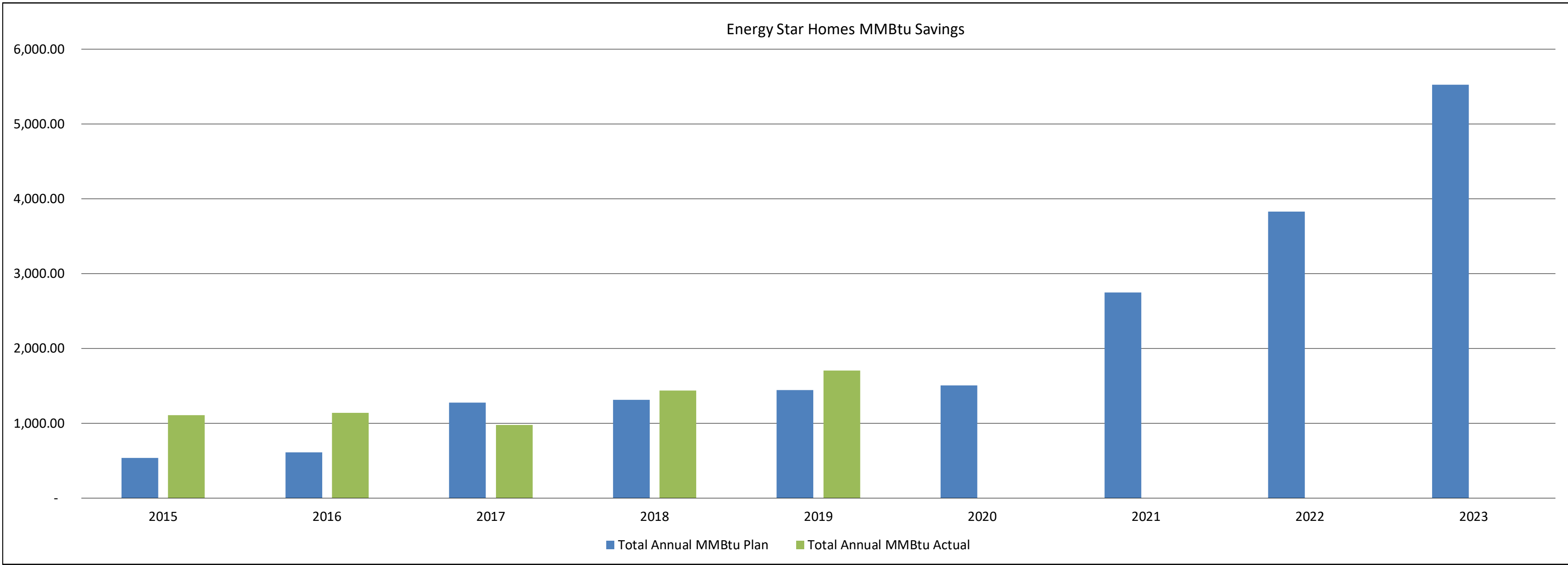
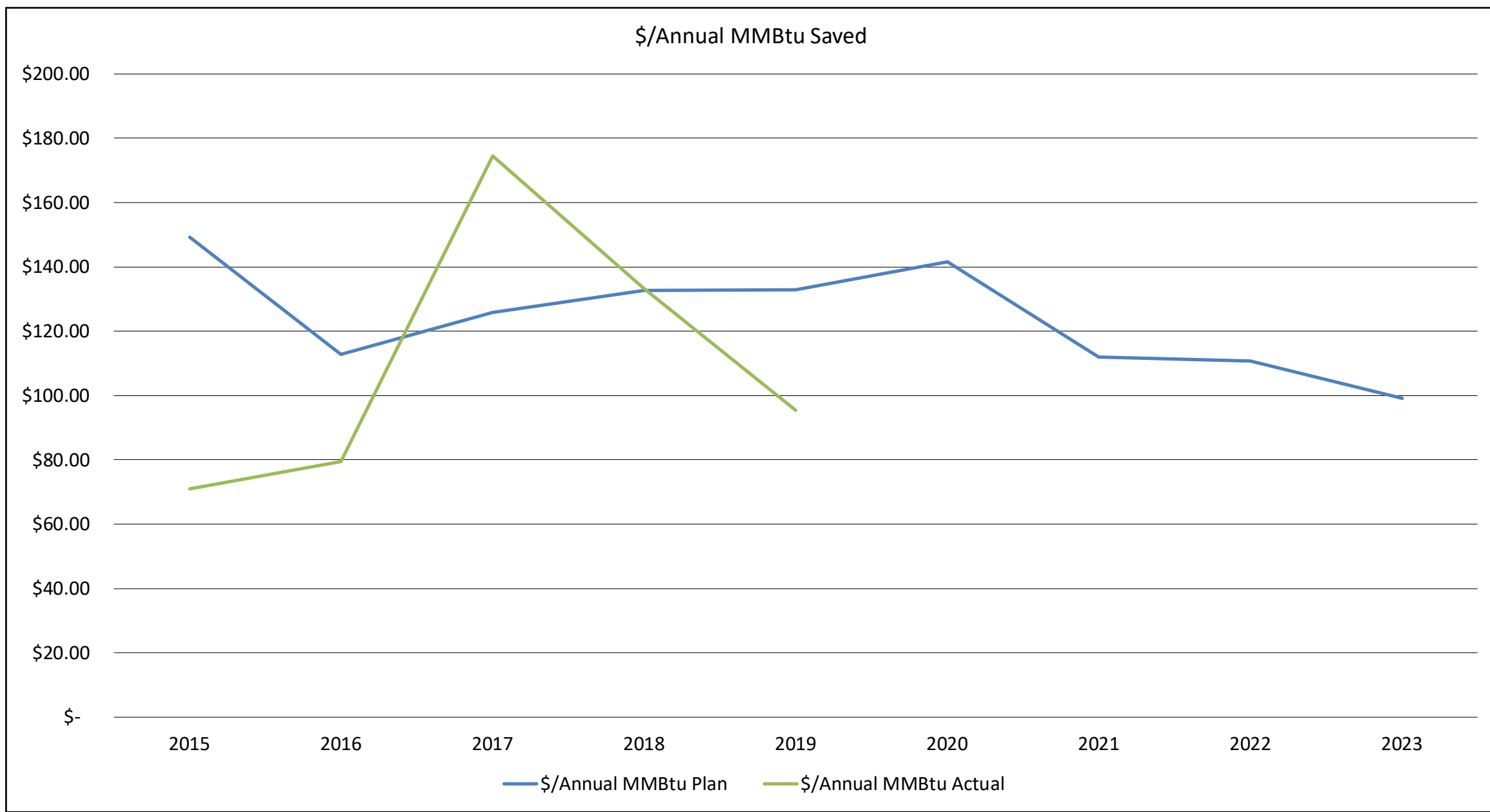
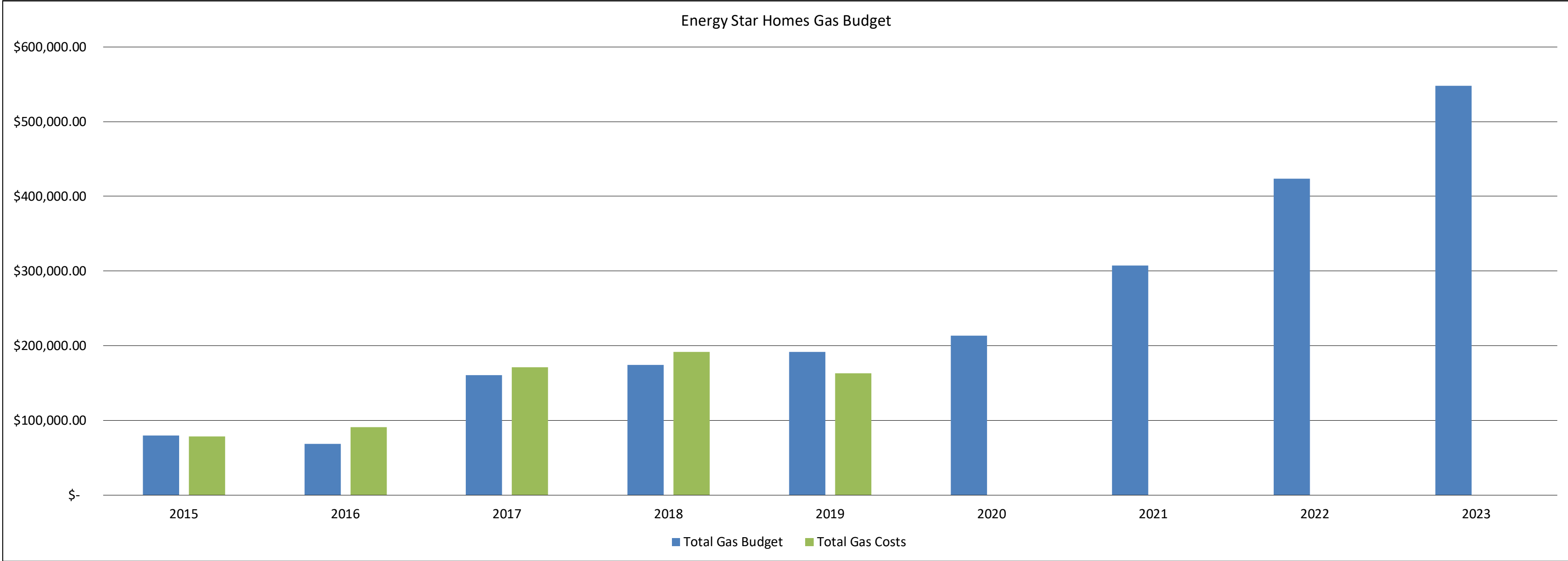
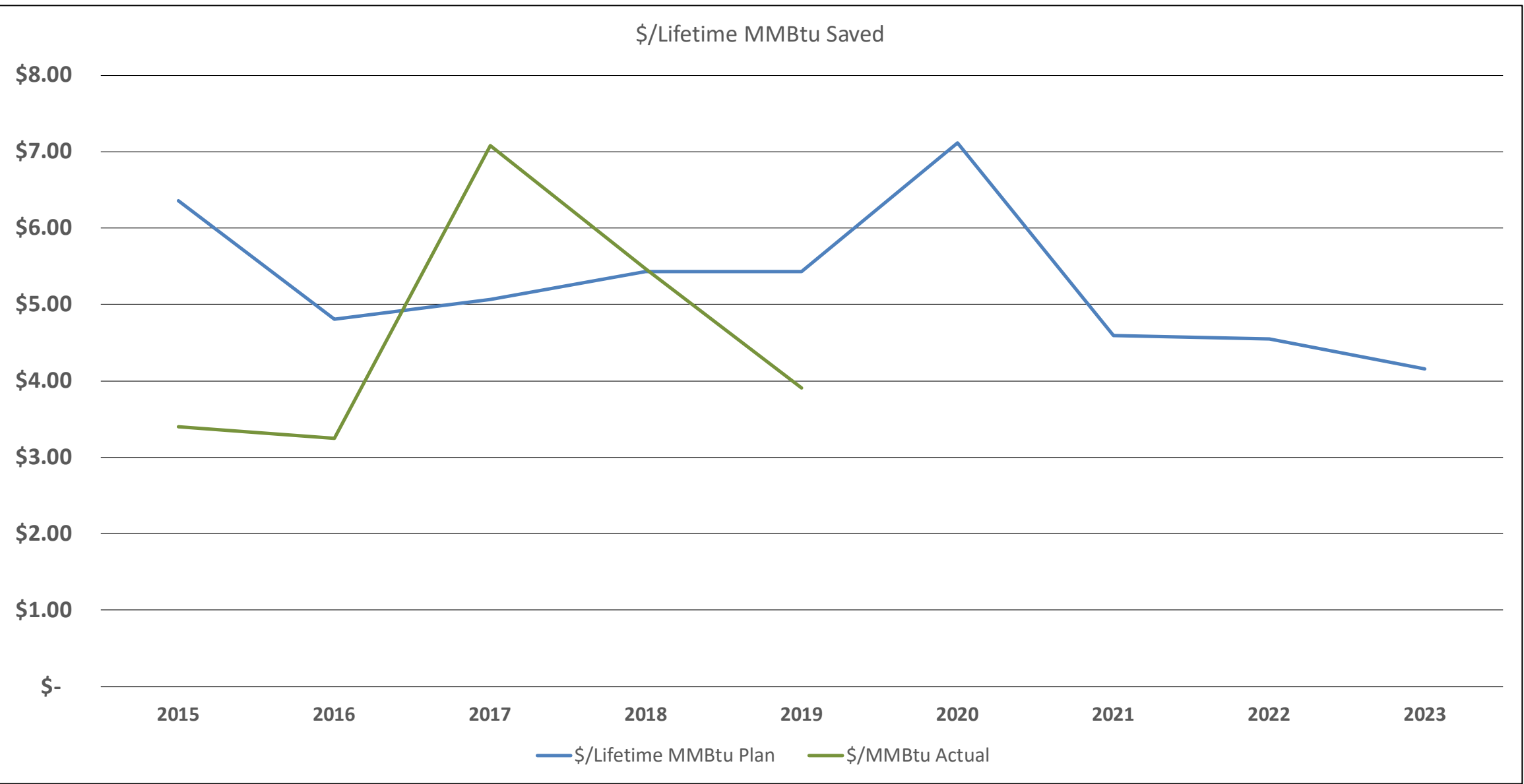
Home Performance w/Energy Star

Planned		2015		2016		2017		2018		2019		2020		2021		2022		2023	
1)	Total Gas Budget	\$	110,000.00	\$	147,740.00	\$	136,800.00	\$	183,000.00	\$	204,236.93	\$	222,642.42	\$	239,330.00	\$	289,874.25	\$	322,364.00
	Annual Electric Savings Plan (kWh)	\$	-	\$	-	\$	10,800.00	\$	23,300.00	\$	24,354.00	\$	20,591.60	\$	2,376.00	\$	7,036.63	\$	2,772.00
2)	Total Gas Budget	\$	110,000.00	\$	147,740.00	\$	136,800.00	\$	183,000.00	\$	204,236.93	\$	222,642.42	\$	239,330.00	\$	289,874.25	\$	322,364.00
	Total Lifetime MMBtu Plan		20,824.99		34,783.42		25,504.00		24,573.30		28,946.40		34,137.18		29,706.11		32,524.40		35,275.48
	\$/Lifetime MMBtu Plan	\$	5.28	\$	4.25	\$	5.36	\$	7.45	\$	7.06	\$	6.52	\$	8.06	\$	8.91	\$	-
3)	Total Gas Budget	\$	110,000.00	\$	147,740.00	\$	136,800.00	\$	183,000.00	\$	204,236.93	\$	222,642.42	\$	239,330.00	\$	289,874.25	\$	322,364.00
	Total Annual MMBtu Plan		972.51		1,525.46		1,228.80		1,381.30		1,655.20		1,716.46		1,407.84		1,552.50		1,693.66
	\$/Annual MMBtu Plan	\$	113.11	\$	96.85	\$	111.33	\$	132.48	\$	123.39	\$	129.71	\$	170.00	\$	186.71	\$	190.34
Actuals		2015		2016		2017		2018		2019									
1)	Total Gas Costs	\$	95,886.98	\$	125,902.87	\$	119,165.42	\$	204,200.00	\$	201,021.15								
	Annual Electric Savings Actual (kWh)		-		-		3.27		19.40		17.21								
2)	Total Gas Costs	\$	95,886.98	\$	125,902.87	\$	119,165.42	\$	204,200.00	\$	201,021.15								
	Total Lifetime MMBtu Actual		14,511.75		22,180.00		21,156.43		25,814.40		28,383.14								
	\$/Lifetime MMBtu Actual	\$	6.61	\$	5.68	\$	5.63	\$	7.91	\$	7.08								
3)	Total Gas Costs	\$	95,886.98	\$	125,902.87	\$	119,165.42	\$	204,200.00	\$	201,021.15								
	Total Annual MMBtu Actual		668.83		1,053.80		1,007.09		1,473.70		1,314.25								
	\$/Annual MMBtu Actual	\$	143.37	\$	119.48	\$	118.33	\$	138.56	\$	152.96								



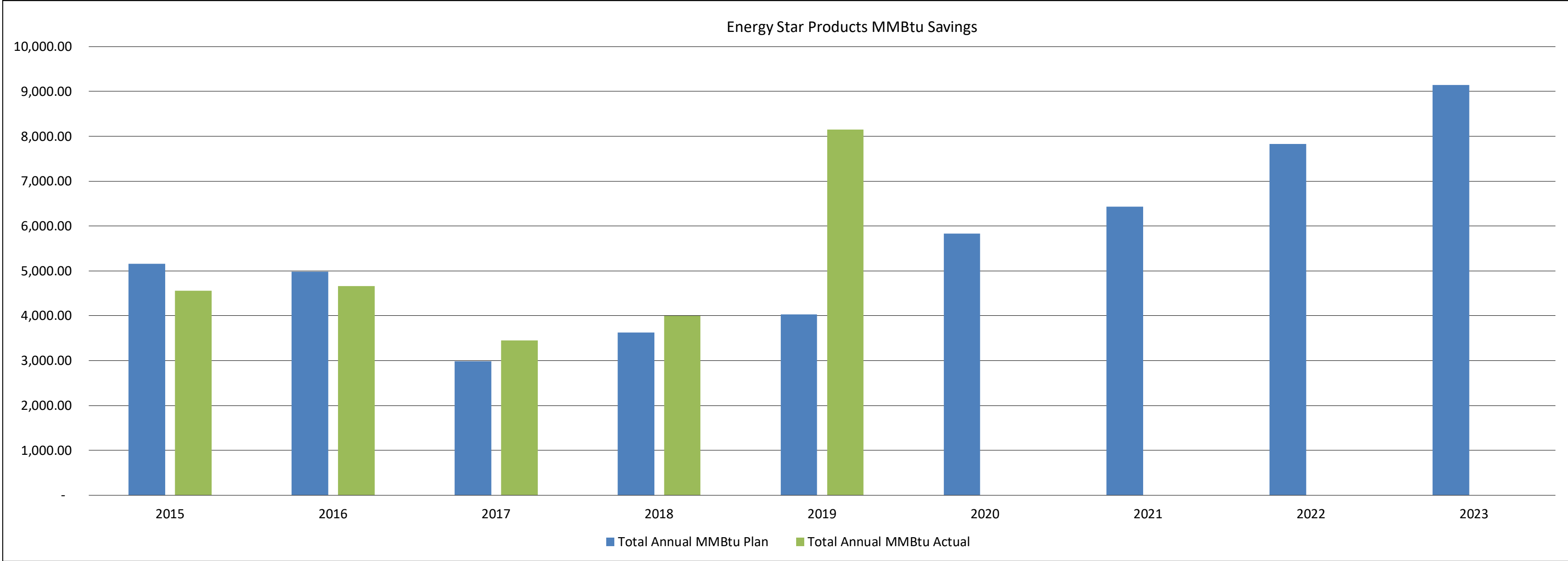
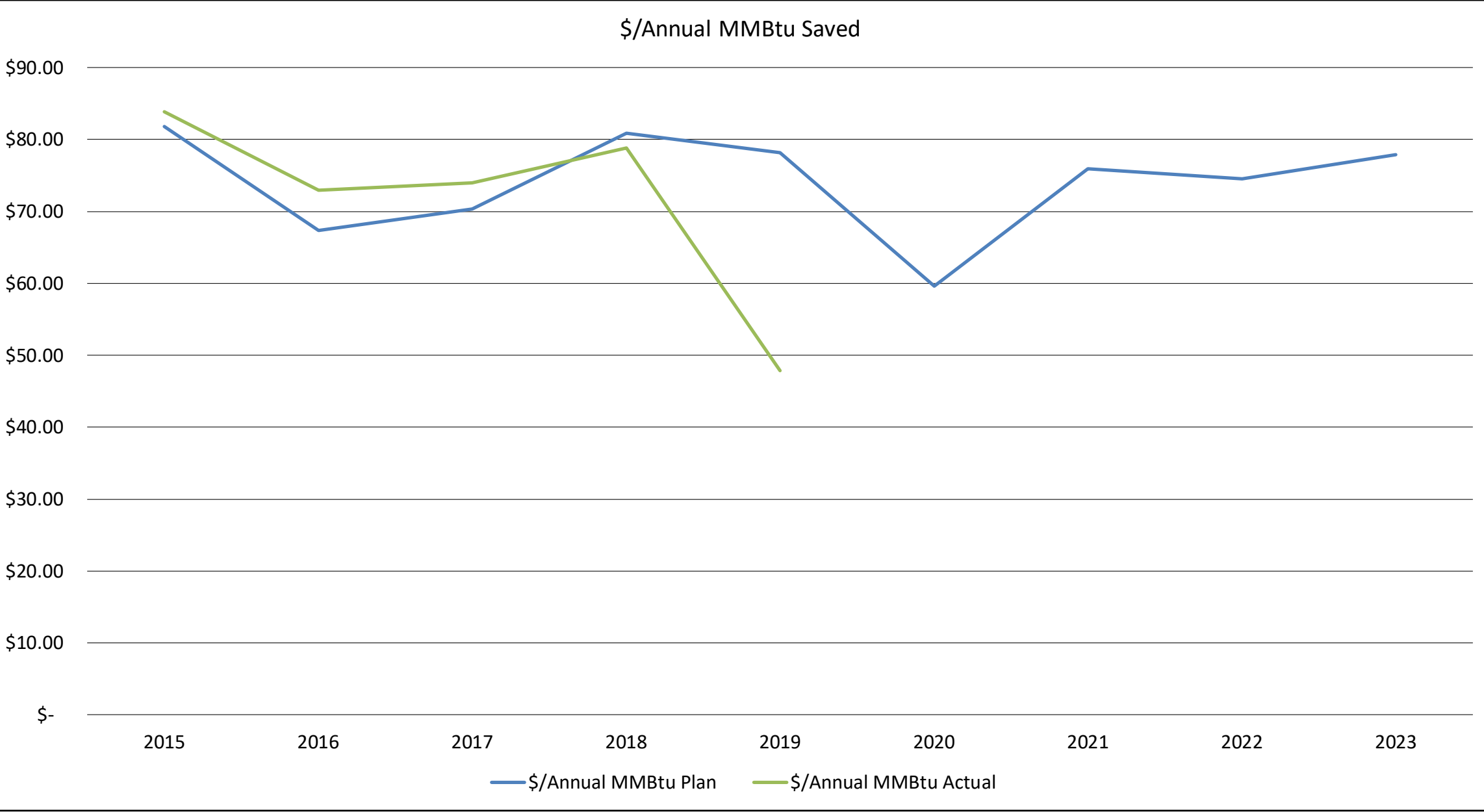
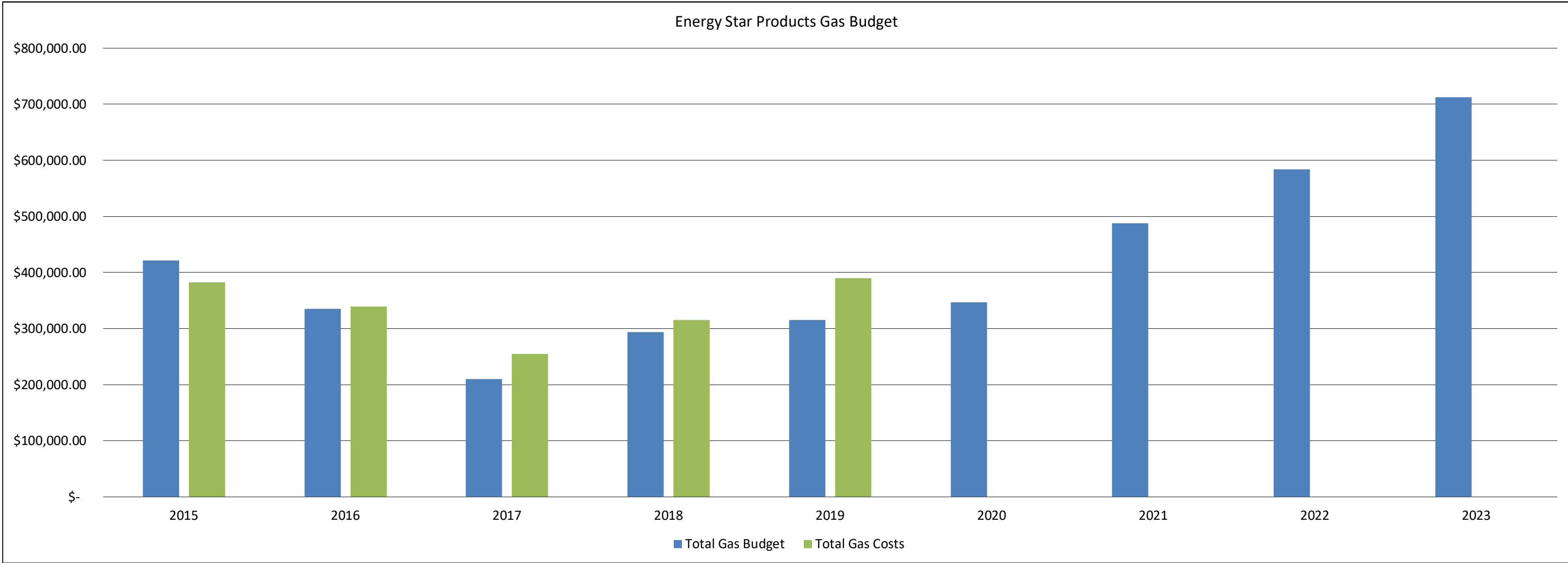
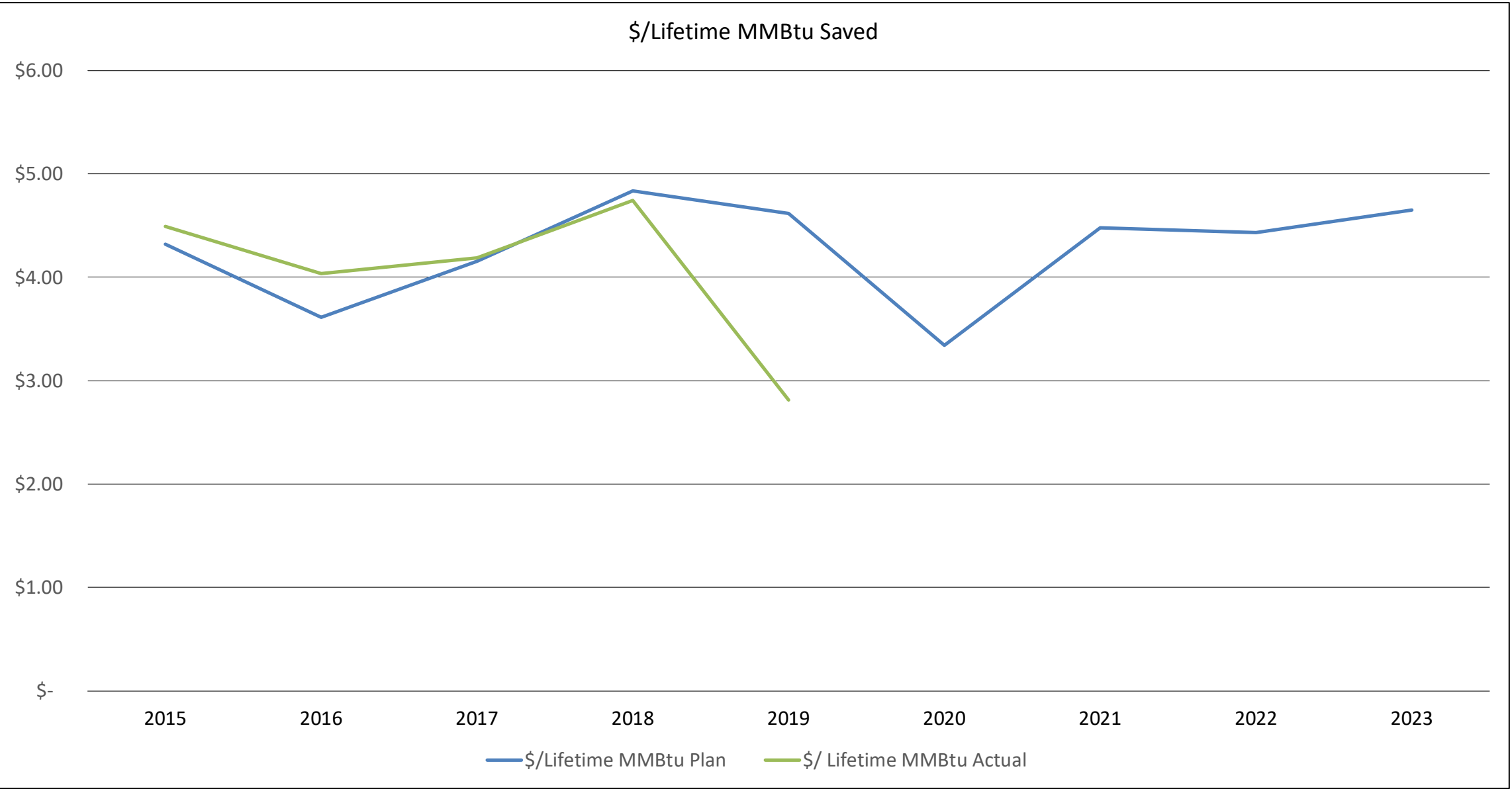
Energy Star Homes

Planned		2015		2016		2017		2018		2019		2020		2021		2022		2023	
1)	Total Gas Budget	\$	80,000.00	\$	68,750.00	\$	160,500.00	\$	174,000.00	\$	191,400.00	\$	213,187.00	\$	307,438.00	\$	423,477.00	\$	548,051.55
	Annual Electric Savings Plan (kWh)	\$	-	\$	-	\$	42,500.00	\$	7,200.00	\$	5,443.00	\$	10,119.24	\$	-	\$	-	\$	-
2)	Total Gas Budget	\$	80,000.00	\$	68,750.00	\$	160,500.00	\$	174,000.00	\$	191,400.00	\$	213,187.00	\$	307,438.00	\$	423,477.00	\$	548,051.55
	Total Lifetime MMBtu Plan		12,588.69		14,308.80		31,681.50		32,046.00		35,260.00		29,950.00		66,927.50		93,175.00		131,913.33
	\$/Lifetime MMBtu Plan	\$	6.35	\$	4.80	\$	5.07	\$	5.43	\$	5.43	\$	7.12	\$	4.59	\$	4.54	\$	4.15
3)	Total Gas Budget	\$	80,000.00	\$	68,750.00	\$	160,500.00	\$	174,000.00	\$	191,400.00	\$	213,187.00	\$	307,438.00	\$	423,477.00	\$	548,051.55
	Total Annual MMBtu Plan		536.48		610.00		1,276.50		1,312.50		1,440.50		1,506.50		2,748.50		3,825.00		5,524.42
	\$/Annual MMBtu Plan	\$	149.12	\$	112.70	\$	125.73	\$	132.57	\$	132.87	\$	141.51	\$	111.86	\$	110.71	\$	99.21
Actuals		2015		2016		2017		2018		2019									
1)	Total Gas Costs	\$	78,324.02	\$	90,656.30	\$	170,911.27	\$	191,400.00	\$	162,869.30								
	Annual Electric Savings Actual (kWh)		-		-		65.33		9.20		27.45								
2)	Total Gas Costs	\$	78,324.02	\$	90,656.30	\$	170,911.27	\$	191,400.00	\$	162,869.30								
	Total Lifetime MMBtu Actual		23,054.30		27,939.00		24,140.00		35,031.00		41,663.42								
	\$/MMBtu Actual	\$	3.40	\$	3.24	\$	7.08	\$	5.46	\$	3.91								
3)	Total Gas Costs	\$	78,324.02	\$	90,656.30	\$	170,911.27	\$	191,400.00	\$	162,869.30								
	Total Annual MMBtu Actual		1,104.98		1,141.00		979.00		1,436.10		1,706.18								
	\$/Annual MMBtu Actual	\$	70.88	\$	79.45	\$	174.58	\$	133.28	\$	95.46								



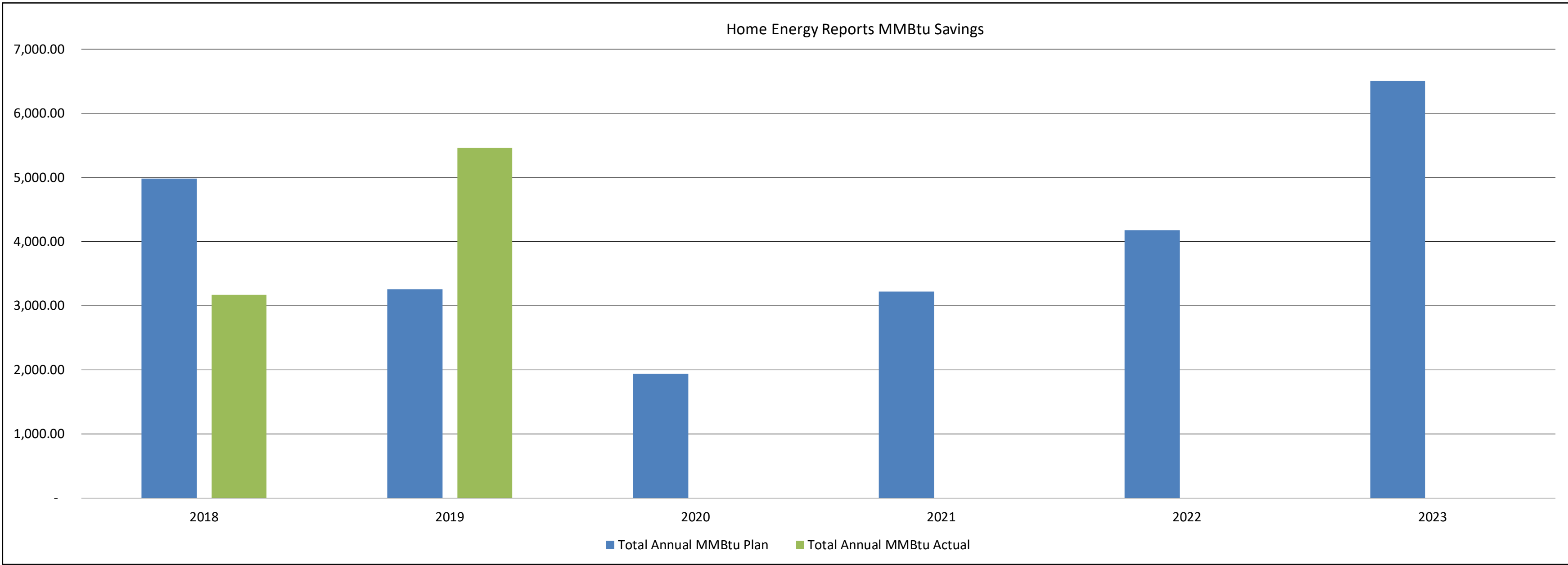
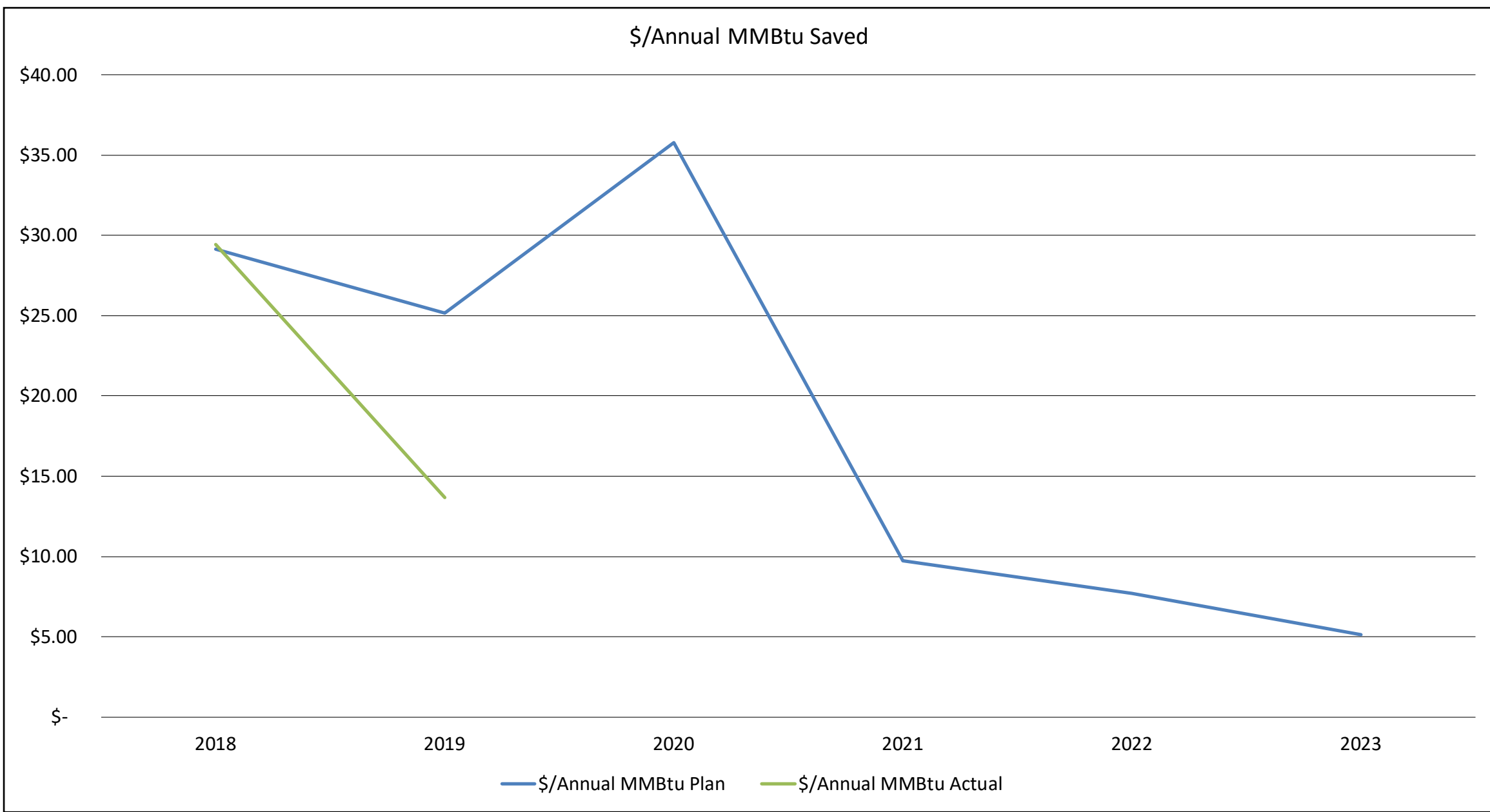
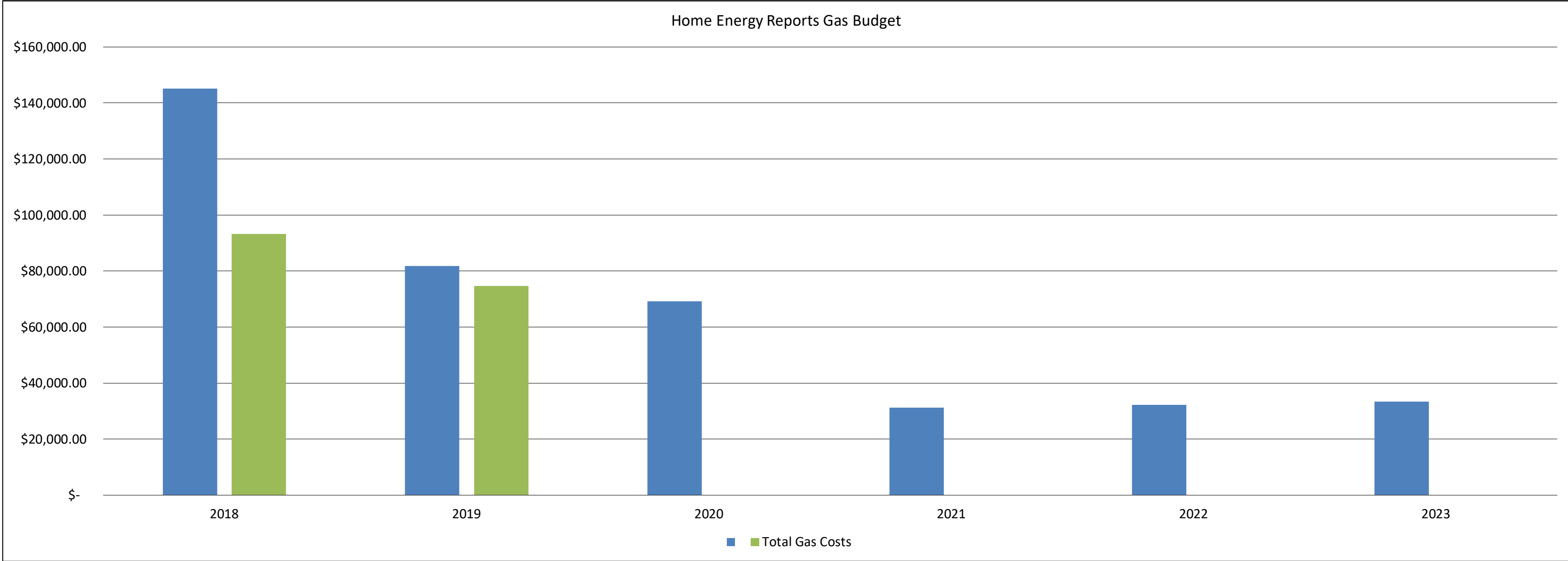
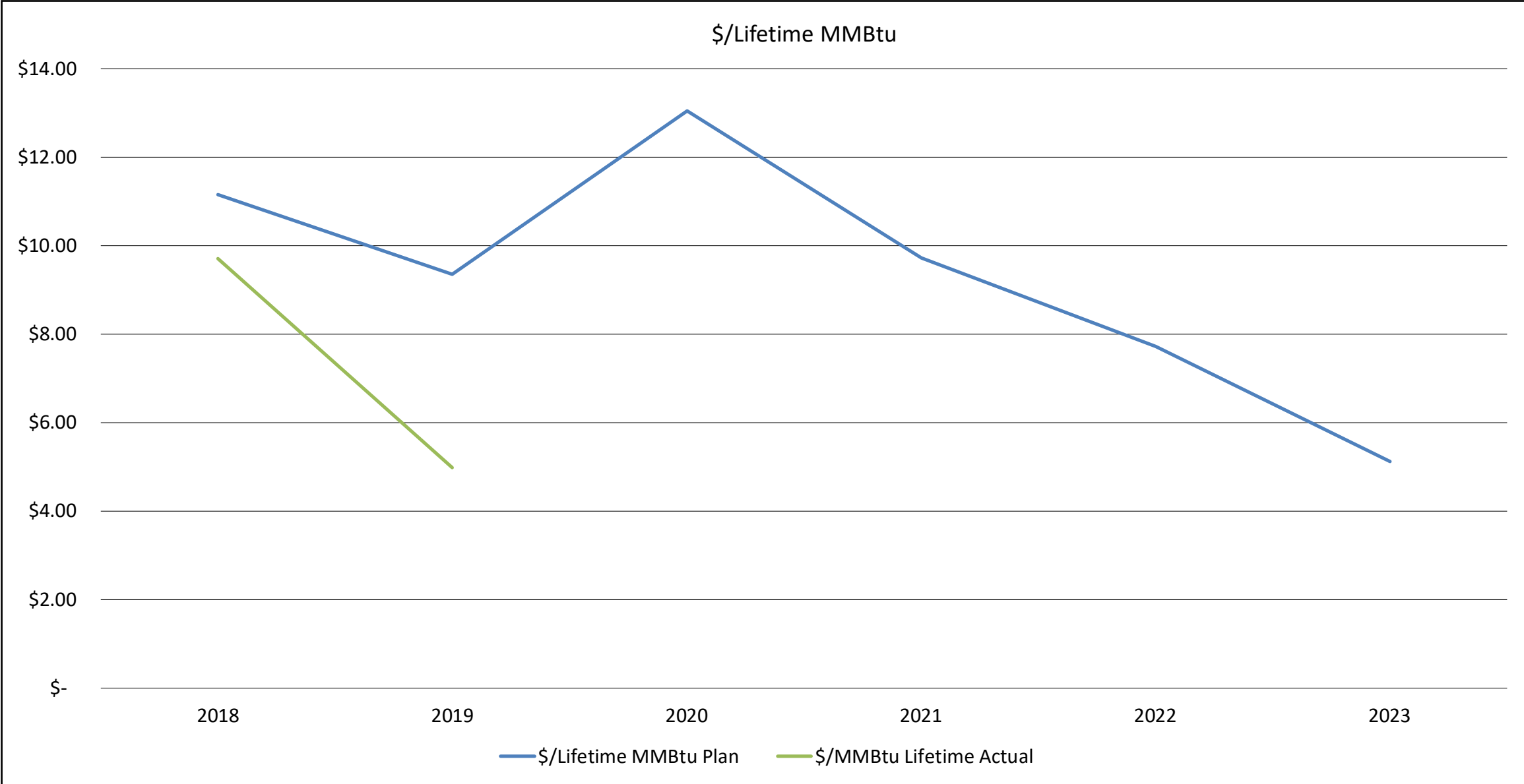
Energy Star Products

Planned		2015		2016		2017		2018		2019		2020		2021		2022		2023	
1)	Total Gas Budget	\$	421,694.96	\$	335,242.65	\$	210,000.00	\$	293,600.00	\$	315,235.70	\$	347,114.00	\$	488,013.00	\$	583,827.00	\$	712,320.00
	Annual Electric Savings Plan (kWh)	\$	-	\$	-	\$	18,500.00	\$	17,000.00	\$	22,628.00	\$	12,455.00	\$	(3,440.00)	\$	(3,870.00)	\$	(4,300.00)
2)	Total Gas Budget	\$	421,694.96	\$	335,242.65	\$	210,000.00	\$	293,600.00	\$	315,235.70	\$	347,114.00	\$	488,013.00	\$	583,827.00	\$	712,320.00
	Total Lifetime MMBtu Plan		97,573.24		92,742.44		50,524.90		60,691.60		68,316.20		103,963.60		109,021.00		131,753.18		153,257.66
	\$/Lifetime MMBtu Plan	\$	4.32	\$	3.61	\$	4.16	\$	4.84	\$	4.61	\$	3.34	\$	4.48	\$	4.43	\$	4.65
3)	Total Gas Budget	\$	421,694.96	\$	335,242.65	\$	210,000.00	\$	293,600.00	\$	315,235.70	\$	347,114.00	\$	488,013.00	\$	583,827.00	\$	712,320.00
	Total Annual MMBtu Plan		5,157.75		4,977.47		2,987.70		3,629.40		4,032.40		5,826.80		6,427.00		7,829.43		9,146.23
	\$/Annual MMBtu Plan	\$	81.76	\$	67.35	\$	70.29	\$	80.89	\$	78.18	\$	59.57	\$	75.93	\$	74.57	\$	77.88
Actuals		2015		2016		2017		2018		2019									
1)	Total Gas Costs	\$	382,505.12	\$	339,472.62	\$	254,638.91	\$	315,200.00	\$	390,115.90								
	Annual Electric Savings Actual (kWh)		-		-		-		-		-								
2)	Total Gas Costs	\$	382,505.12	\$	339,472.62	\$	254,638.91	\$	315,200.00	\$	390,115.90								
	Total Lifetime MMBtu Actual		85,116.50		84,115.20		60,838.90		66,448.60		138,776.10								
	\$/ Lifetime MMBtu Actual	\$	4.49	\$	4.04	\$	4.19	\$	4.74	\$	2.81								
3)	Total Gas Costs	\$	382,505.12	\$	339,472.62	\$	254,638.91	\$	315,200.00	\$	390,115.90								
	Total Annual MMBtu Actual		4,559.70		4,655.70		3,444.20		4,000.80		8,154.30								
	\$/Annual MMBtu Actual	\$	83.89	\$	72.92	\$	73.93	\$	78.78	\$	47.84								



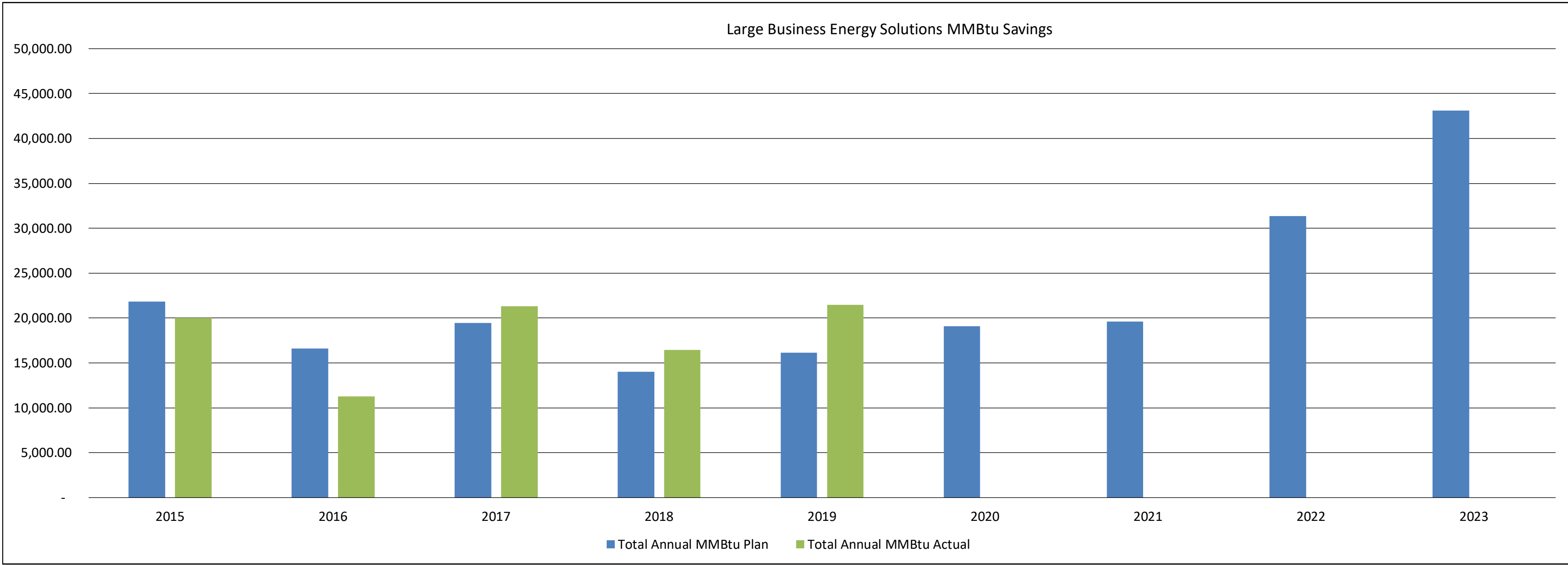
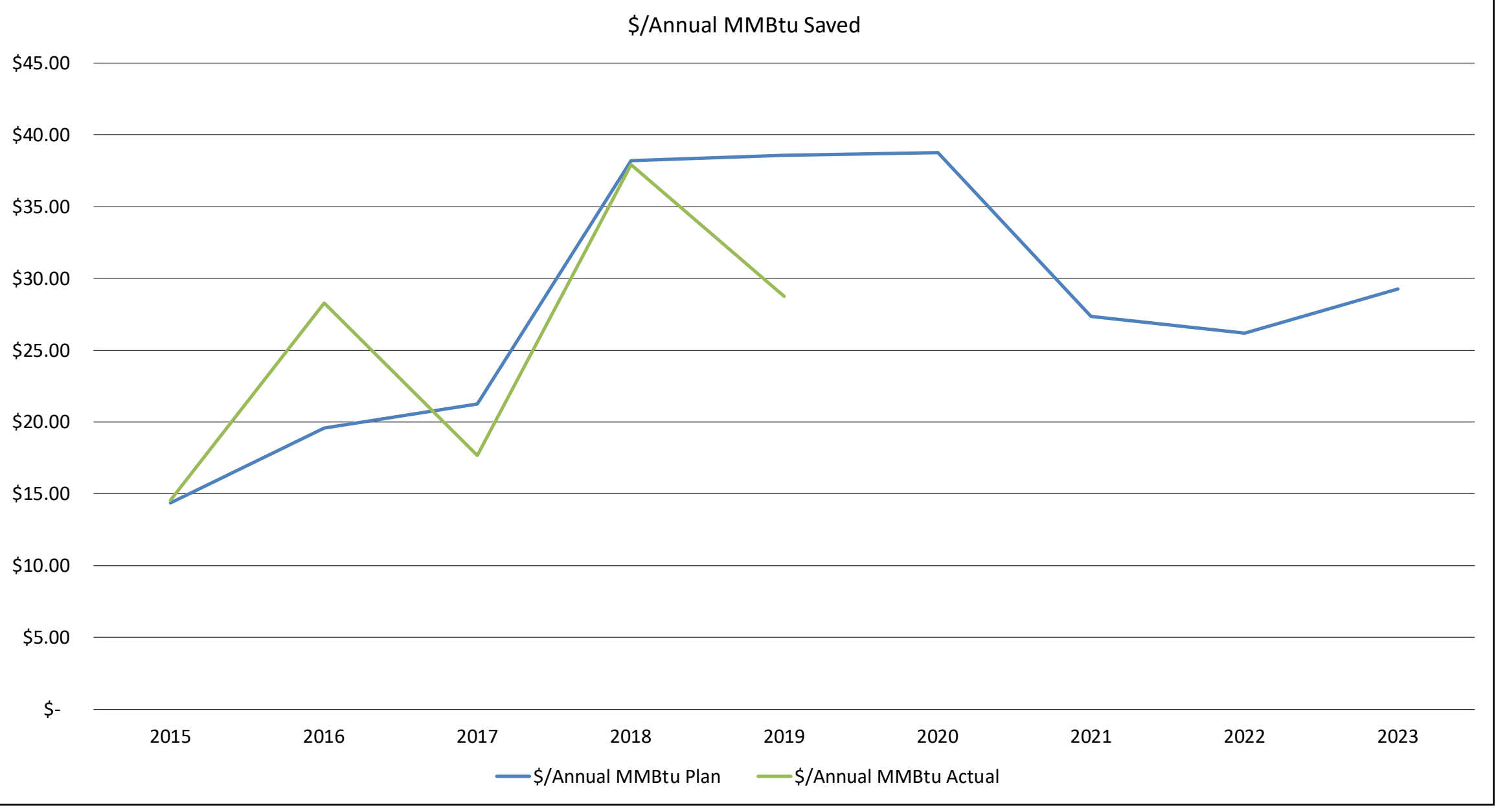
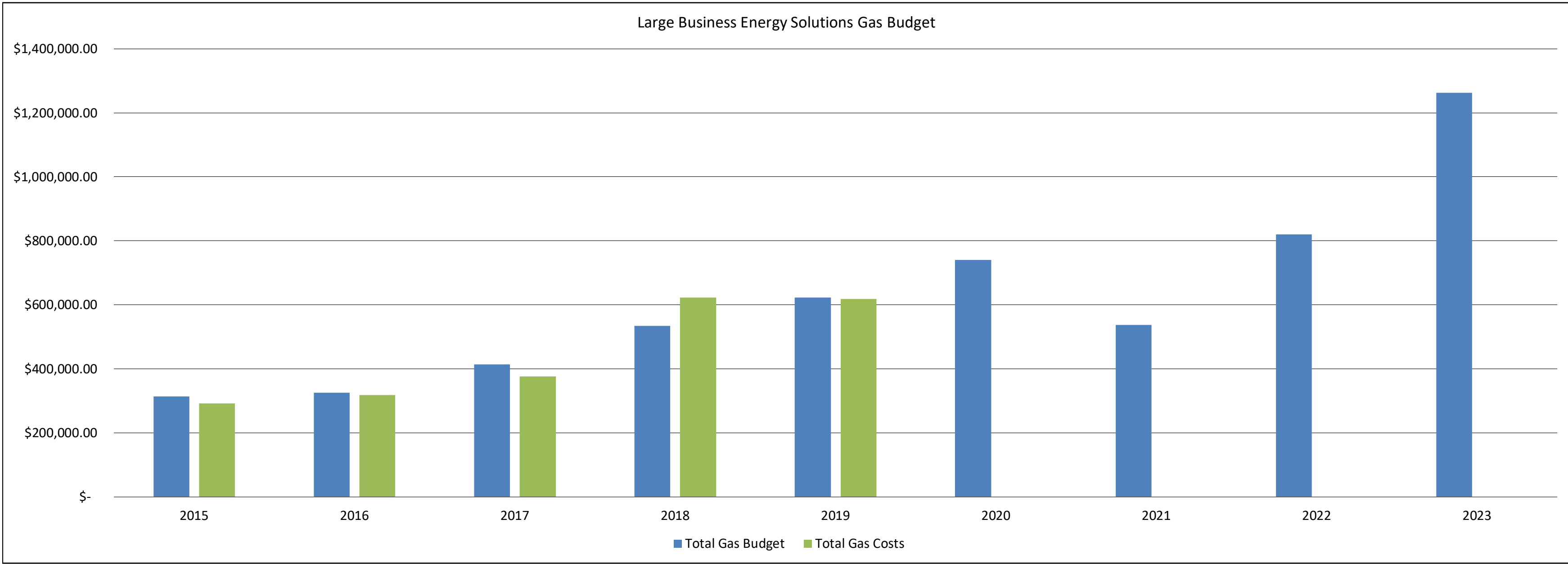
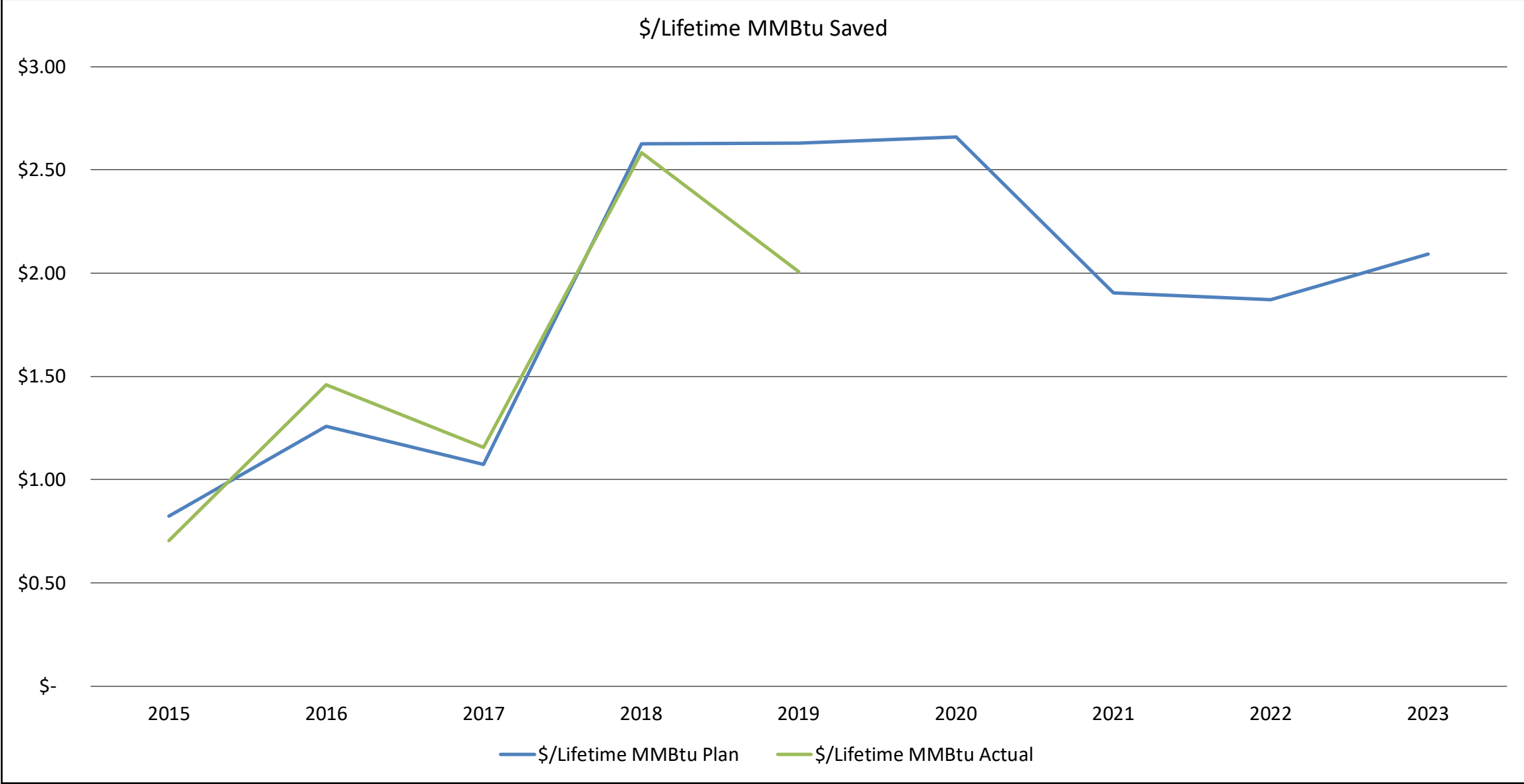
Home Energy Reports

Planned		2015		2016		2017		2018		2019		2020		2021		2022		2023	
1)	Total Gas Budget	\$	-	\$	-	\$	-	\$	145,100.00	\$	81,756.00	\$	69,206.00	\$	31,300.00	\$	32,250.00	\$	33,300.00
	Annual Electric Savings Plan (kWh)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
2)	Total Gas Budget	\$	-	\$	-	\$	-	\$	145,100.00	\$	81,756.00	\$	69,206.00	\$	31,300.00	\$	32,250.00	\$	33,300.00
	Total Lifetime MMBtu Plan		-		-		-		13,010.00		8,745.59		5,304.47		3,221.60		4,177.50		6,500.00
	\$/Lifetime MMBtu Plan								11.15		9.35		13.05		9.72		7.72		5.12
3)	Total Gas Budget	\$	-	\$	-	\$	-	\$	145,100.00	\$	81,756.00	\$	69,206.00	\$	31,300.00	\$	32,250.00	\$	33,300.00
	Total Annual MMBtu Plan		-		-		-		4,980.00		3,252.00		1,934.00		3,221.60		4,177.50		6,500.00
	\$/Annual MMBtu Plan								29.14		25.14		35.78		9.72		7.72		5.12
Actuals		2015		2016		2017		2018		2019									
1)	Total Gas Costs	\$	-	\$	-	\$	-	\$	93,300.00	\$	74,676.41								
	Annual Electric Savings Actual (kWh)		-		-		-		-		-								
2)	Total Gas Costs	\$	-	\$	-	\$	-	\$	93,300.00	\$	74,676.41								
	Total Lifetime MMBtu Actual		-		-		-		9,620.00		14,978.10								
	\$/MMBtu Lifetime Actual								9.70		4.99								
3)	Total Gas Costs	\$	-	\$	-	\$	-	\$	93,300.00	\$	74,676.41								
	Total Annual MMBtu Actual		-		-		-		3,170.00		5,461.00								
	\$/Annual MMBtu Actual								29.43		13.67								



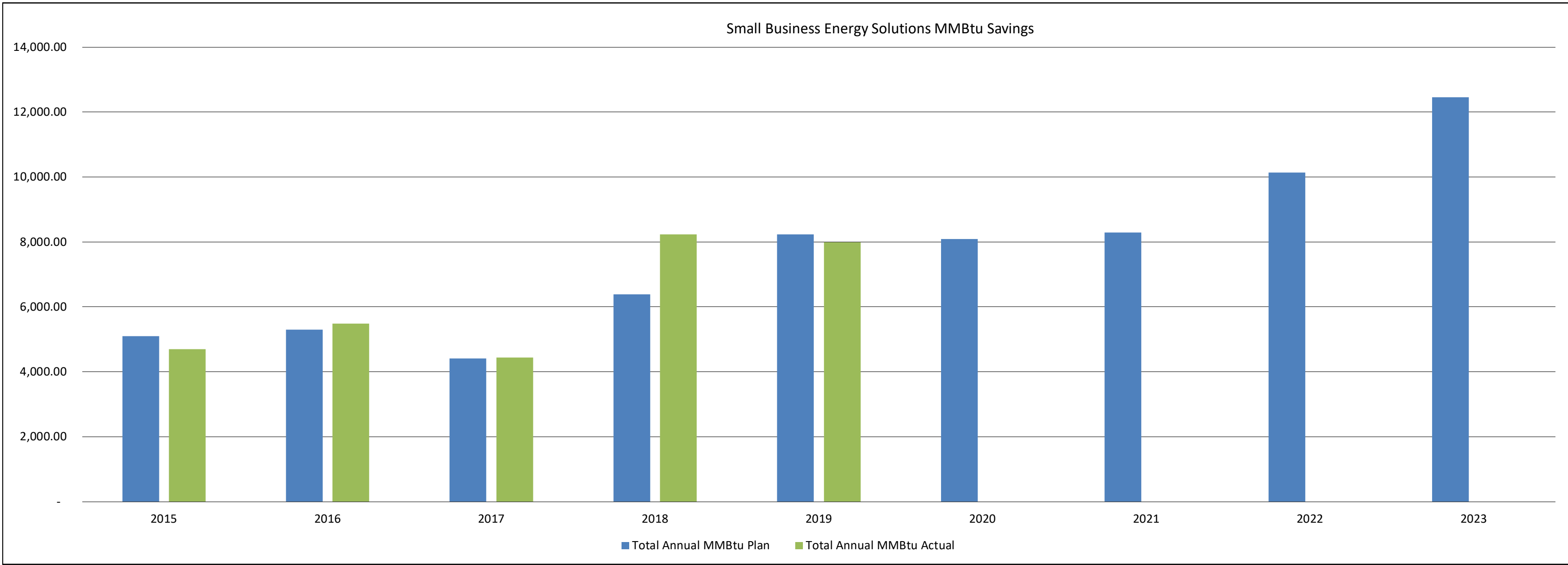
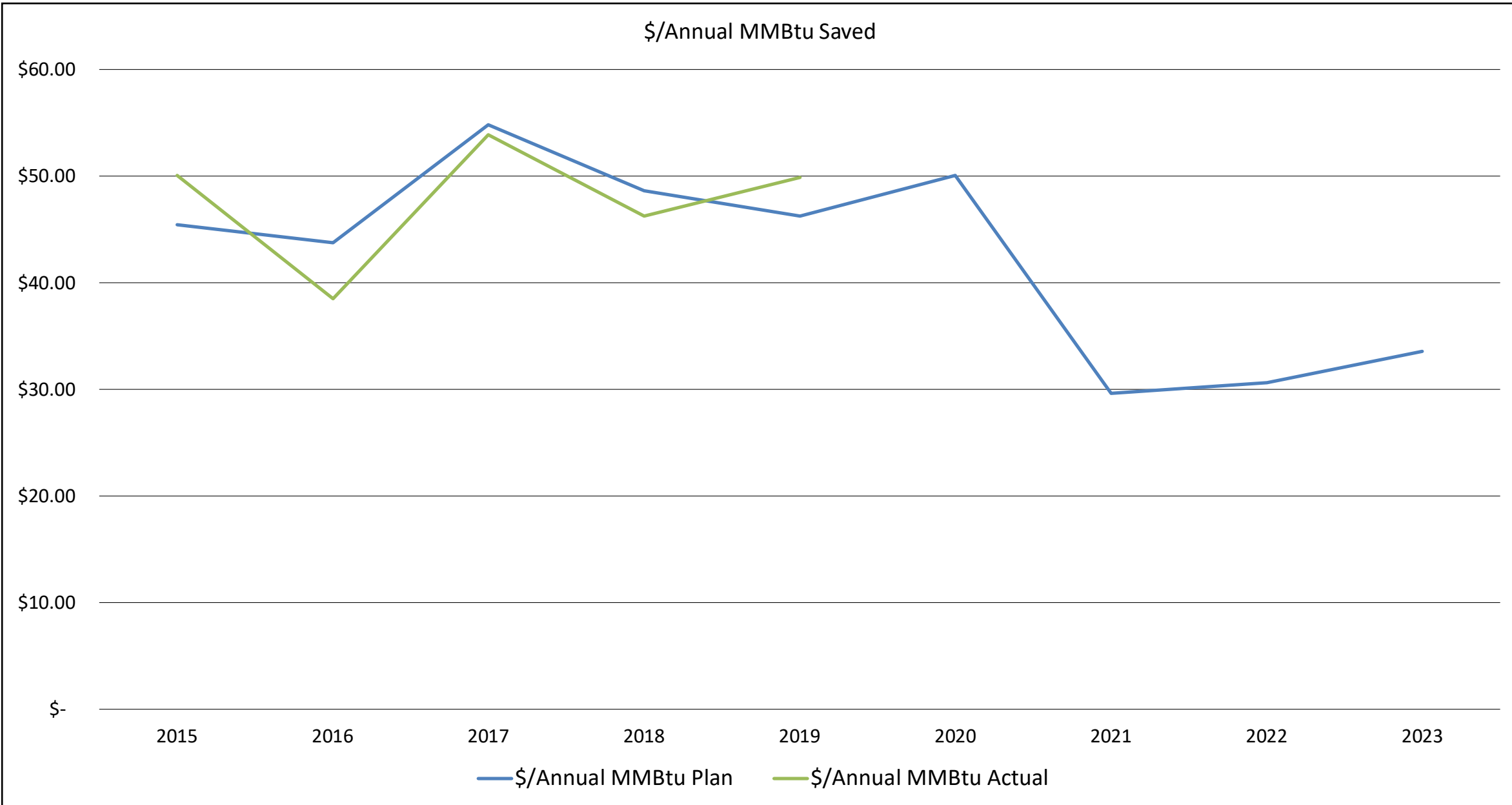
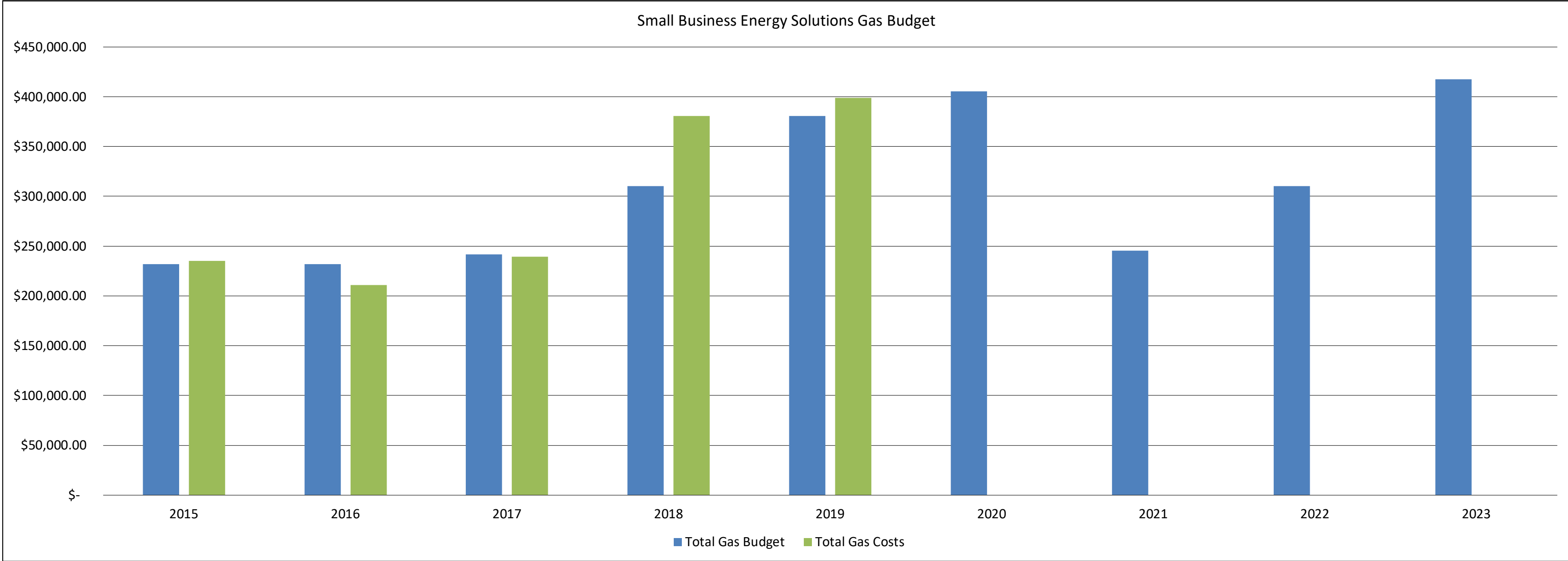
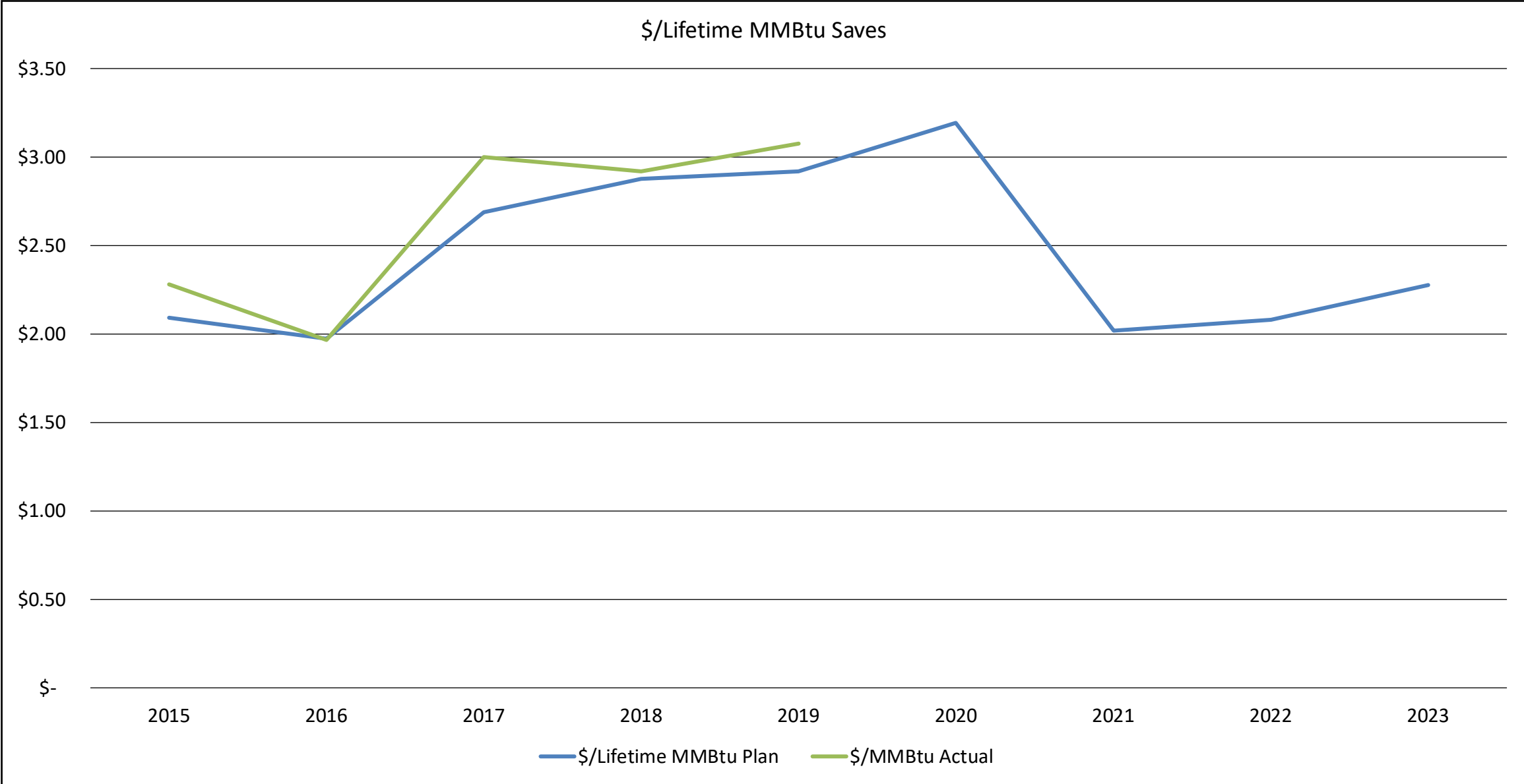
Large Business Energy Solutions

Planned		2015		2016		2017		2018		2019		2020		2021		2022		2023	
1)	Total Gas Budget	\$	313,214.41	\$	325,307.89	\$	413,800.00	\$	535,000.00	\$	623,034.90	\$	740,393.00	\$	536,980.60	\$	820,534.80	\$	1,262,746.00
	Annual Electric Savings Plan (kWh)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
2)	Total Gas Budget	\$	313,214.41	\$	325,307.89	\$	413,800.00	\$	535,000.00	\$	623,034.90	\$	740,393.00	\$	536,980.60	\$	820,534.80	\$	1,262,746.00
	Total Lifetime MMBtu Plan		381,065.08		258,334.09		385,820.20		203,586.70		236,973.53		278,343.20		281,808.27		438,083.74		603,542.64
	\$/Lifetime MMBtu Plan	\$	0.82	\$	1.26	\$	1.07	\$	2.63	\$	2.63	\$	2.66	\$	1.91	\$	1.87	\$	2.09
3)	Total Gas Budget	\$	313,214.41	\$	325,307.89	\$	413,800.00	\$	535,000.00	\$	623,034.90	\$	740,393.00	\$	536,980.60	\$	820,534.80	\$	1,262,746.00
	Total Annual MMBtu Plan		21,825.29		16,625.84		19,472.30		14,000.20		16,150.29		19,094.24		19,613.19		31,335.63		43,109.61
	\$/Annual MMBtu Plan	\$	14.35	\$	19.57	\$	21.25	\$	38.21	\$	38.58	\$	38.78	\$	27.38	\$	26.19	\$	29.29
Actuals		2015		2016		2017		2018		2019									
1)	Total Gas Costs	\$	291,699.33	\$	318,457.75	\$	376,625.30	\$	623,000.00	\$	618,081.86								
	Annual Electric Savings Actual (kWh)		-		-		-		-		-								
2)	Total Gas Costs	\$	291,699.33	\$	318,457.75	\$	376,625.30	\$	623,000.00	\$	618,081.86								
	Total Lifetime MMBtu Actual		414,162.70		218,055.92		325,854.48		241,209.70		307,893.58								
	\$/Lifetime MMBtu Actual	\$	0.70	\$	1.46	\$	1.16	\$	2.58	\$	2.01								
3)	Total Gas Costs	\$	291,699.33	\$	318,457.75	\$	376,625.30	\$	623,000.00	\$	618,081.86								
	Total Annual MMBtu Actual		20,038.00		11,251.91		21,305.39		16,432.70		21,486.38								
	\$/Annual MMBtu Actual	\$	14.56	\$	28.30	\$	17.68	\$	37.91	\$	28.77								



Small Business Energy Solutions

Planned		2015		2016		2017		2018		2019		2020		2021		2022		2023	
1)	Total Gas Budget	\$	231,722.47	\$	231,722.47	\$	241,500.00	\$	310,300.00	\$	380,546.00	\$	405,248.00	\$	245,413.80	\$	310,213.00	\$	417,690.25
	Annual Electric Savings Plan (kWh)	\$	-	\$	-	\$	-	\$	1,500.00	\$	1,512.00	\$	1,905.96	\$	497.20	\$	621.50	\$	-
2)	Total Gas Budget	\$	231,722.47	\$	231,722.47	\$	241,500.00	\$	310,300.00	\$	380,546.00	\$	405,248.00	\$	245,413.80	\$	310,213.00	\$	417,690.25
	Total Lifetime MMBtu Plan		110,728.17		117,452.34		89,832.30		107,870.90		130,383.66		126,923.40		121,478.01		149,164.22		183,538.77
	\$/Lifetime MMBtu Plan	\$	2.09	\$	1.97	\$	2.69	\$	2.88	\$	2.92	\$	3.19	\$	2.02	\$	2.08	\$	2.28
3)	Total Gas Budget	\$	231,722.47	\$	231,722.47	\$	241,500.00	\$	310,300.00	\$	380,546.00	\$	405,248.00	\$	245,413.80	\$	310,213.00	\$	417,690.25
	Total Annual MMBtu Plan		5,102.50		5,296.72		4,403.60		6,380.90		8,229.14		8,096.40		8,289.85		10,132.28		12,450.27
	\$/Annual MMBtu Plan	\$	45.41	\$	43.75	\$	54.84	\$	48.63	\$	46.24	\$	50.05	\$	29.60	\$	30.62	\$	33.55
Actuals		2015		2016		2017		2018		2019									
1)	Total Gas Costs	\$	234,948.98	\$	210,948.60	\$	239,187.58	\$	380,500.00	\$	398,639.86								
	Annual Electric Savings Actual (kWh)		-		-		-		-		-								
2)	Total Gas Costs	\$	234,948.98	\$	210,948.60	\$	239,187.58	\$	380,500.00	\$	398,639.86								
	Total Lifetime MMBtu Actual		103,109.60		107,297.74		79,748.31		130,383.70		129,608.20								
	\$/MMBtu Actual	\$	2.28	\$	1.97	\$	3.00	\$	2.92	\$	3.08								
3)	Total Gas Costs	\$	234,948.98	\$	210,948.60	\$	239,187.58	\$	380,500.00	\$	398,639.86								
	Total Annual MMBtu Actual		4,694.80		5,482.74		4,439.84		8,229.10		7,988.66								
	\$/Annual MMBtu Actual	\$	50.04	\$	38.48	\$	53.87	\$	46.24	\$	49.90								



Northern Utilities, Inc. Calculation of Lost Revenue Rate (LRR)					
Line	Sector	Effective			Reference
		November 1, 2020	November 1, 2021	November 1, 2022	
Residential Classes- R5, R6, R10, R11					
1	Sector Ending Balance-October 31	\$ 98,805	\$ (452)	\$ (55)	Page 2, Ln 2
2	Lost Distribution Revenue-November through October	344,524	458,582	604,191	Page 2, Ln 4, Total
3	Interest- November through October	(850)	(2,527)	(3,314)	Page 2, Ln 17, Total
4	Total to be recovered	\$ 442,479	\$ 455,603	\$ 600,821	Line 1 + Line 2 + Line 3
5	Sector Sales - Therms- November through October	20,133,234	20,341,869	20,727,239	Page 2, Line 7
6	Lost Revenue Rate (\$ per therm)	\$0.0220	\$0.0224	\$0.0290	Line 4 / Line 5
Commercial & Industrial Classes-G40/T40, G50/T50, G41/T41, G51/T51, G42/T42, G-52/T52					
7	Sector Ending Balance-October 31	(5,831)	(1,123)	(2,171)	Page 2, Ln 21
8	Lost Distribution Revenue-November through October	\$ 162,437	\$ 211,707	\$ 282,490	Page 2, Ln 24, Total
9	Interest- November through October	\$ (388)	\$ (438)	\$ (542)	Page 2, Ln 37, Total
10	Total to be recovered	\$ 156,217	\$ 210,146	\$ 279,777	Line 7 + Line 8 + Line 9
11	Sector Sales - Therms- November through October	52,446,710	54,440,281	55,734,520	Page 2, Line 27
12	Lost Revenue Rate (\$ per therm)	\$0.0030	\$0.0039	\$0.0050	Line 10 / Line 11

Northern Utilities, Inc.
Lost Revenue Reconciliation
2020

Line	Sector / Description	Unit	Actual Nov-19	Actual Dec-19	Estimate Jan-20	Estimate Feb-20	Estimate Mar-20	Estimate Apr-20	Estimate May-20	Estimate Jun-20	Estimate Jul-20	Estimate Aug-20	Estimate Sep-20	Estimate Oct-20	Total
1	RESIDENTIAL														
2	Beginning Balance - (Over)/Under	\$'s	\$ 51,276	\$ 58,859	\$ 47,805	\$ 33,086	\$ 18,072	\$ 8,767	\$ 9,173	\$ 13,589	\$ 27,557	\$ 44,192	\$ 62,340	\$ 80,938	
3	COSTS														
4	Lost Distribution Revenue	\$'s	\$ 20,120	\$ 20,120	\$ 20,348	\$ 20,726	\$ 21,180	\$ 21,709	\$ 19,640	\$ 20,442	\$ 21,310	\$ 21,777	\$ 22,712	\$ 23,380	\$ 253,465
5															
6	REVENUE														
7	Sector Sales	Therms	1,373,589	2,755,471	3,086,303	3,143,380	2,678,854	1,871,517	1,339,252	574,945	418,712	331,195	377,676	505,288	18,456,181
8	Lost Revenue Rate	\$/Therm	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	<u>\$0.0114</u>	
9	Revenue	\$'s	\$ 12,774	\$ 31,411	\$ 35,229	\$ 35,836	\$ 30,539	\$ 21,338	\$ 15,270	\$ 6,554	\$ 4,773	\$ 3,776	\$ 4,306	\$ 5,760	\$ 207,566
10															
11	(Over)/Under-Recovery (Exc interest)		\$ 58,622	\$ 47,568	\$ 32,924	\$ 17,976	\$ 8,713	\$ 9,138	\$ 13,543	\$ 27,477	\$ 44,093	\$ 62,194	\$ 80,747	\$ 98,558	
12															
13	INTEREST														
14	Average Monthly Balance		\$ 54,949	\$ 53,213	\$ 40,364	\$ 25,531	\$ 13,393	\$ 8,952	\$ 11,358	\$ 20,533	\$ 35,825	\$ 53,193	\$ 71,544	\$ 89,748	
15	Interest Rate-WSJ Prime Rate	Annual %	5.25%	5.25%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	3.25%	3.25%	3.25%	3.25%	
16	Days per Month		30	31	31	29	31	30	31	30	31	31	30	31	366
17	Computed Interest	\$'s	\$ 237	\$ 237	\$ 162	\$ 96	\$ 54	\$ 35	\$ 46	\$ 80	\$ 99	\$ 146	\$ 191	\$ 247	\$ 1,630
18															
19	Ending Balance	\$'s	\$ 58,859	\$ 47,805	\$ 33,086	\$ 18,072	\$ 8,767	\$ 9,173	\$ 13,589	\$ 27,557	\$ 44,192	\$ 62,340	\$ 80,938	\$ 98,805	
20	COMMERCIAL & INDUSTRIAL														
21	Beginning Balance - (Over)/Under	\$'s	\$ (27,418)	\$ (24,343)	\$ (25,195)	\$ (27,303)	\$ (29,281)	\$ (29,268)	\$ (25,626)	\$ (24,861)	\$ (21,939)	\$ (18,150)	\$ (13,999)	\$ (9,598)	
22															
23	COSTS														
24	Lost Distribution Revenue	\$'s	\$ 11,295	\$ 11,413	\$ 11,624	\$ 11,804	\$ 12,075	\$ 12,391	\$ 7,558	\$ 7,694	\$ 7,884	\$ 8,183	\$ 8,509	\$ 8,862	\$ 119,293
25															
26	REVENUE														
27	Sector Sales	Therms	4,571,040	6,397,368	7,174,996	7,197,471	6,286,658	4,548,589	3,522,410	2,463,920	2,125,963	2,099,142	2,145,572	2,670,168	51,203,298
28	Lost Revenue Rate	\$/Therm	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	<u>\$0.0019</u>	
29	Revenue	\$'s	\$ 8,108	\$ 12,155	\$ 13,627	\$ 13,675	\$ 11,945	\$ 8,643	\$ 6,692	\$ 4,682	\$ 4,039	\$ 3,988	\$ 4,077	\$ 5,073	\$ 96,704
30															
31	(Over)/Under-Recovery (Exc interest)	\$'s	\$ (24,231)	\$ (25,084)	\$ (27,198)	\$ (29,175)	\$ (29,151)	\$ (25,519)	\$ (24,760)	\$ (21,849)	\$ (18,095)	\$ (13,955)	\$ (9,567)	\$ (5,810)	
32															
33	INTEREST														
34	Average Monthly Balance		\$ (25,825)	\$ (24,714)	\$ (26,196)	\$ (28,239)	\$ (29,216)	\$ (27,394)	\$ (25,193)	\$ (23,355)	\$ (20,017)	\$ (16,052)	\$ (11,783)	\$ (7,704)	
35	Interest Rate-WSJ Prime Rate	Annual %	5.25%	5.25%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	3.25%	3.25%	3.25%	3.25%	
36	Days per Month		30	31	31	29	31	30	31	30	31	31	30	31	366
37	Computed Interest	\$'s	\$ (111)	\$ (110)	\$ (105)	\$ (106)	\$ (118)	\$ (107)	\$ (101)	\$ (91)	\$ (55)	\$ (44)	\$ (31)	\$ (21)	\$ (1,002)
38															
39	Ending Balance	\$'s	\$ (24,343)	\$ (25,195)	\$ (27,303)	\$ (29,281)	\$ (29,268)	\$ (25,626)	\$ (24,861)	\$ (21,939)	\$ (18,150)	\$ (13,999)	\$ (9,598)	\$ (5,831)	

NOTES:

Line 1: DE 17-136 2019 Annual Report
Line 4: Page 3, Line 7
Line 21: DE 17-136 2019 Annual Report
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Northern Utilities, Inc.
Lost Revenue Reconciliation
2021

Line	Sector / Description	Unit	Estimate Nov-20	Estimate Dec-20	Estimate Jan-21	Estimate Feb-21	Estimate Mar-21	Estimate Apr-21	Estimate May-21	Estimate Jun-21	Estimate Jul-21	Estimate Aug-21	Estimate Sep-21	Estimate Oct-21	Total
1	RESIDENTIAL														
2	Beginning Balance - (Over)/Under	\$'s	\$ 98,805	\$ 93,400	\$ 60,767	\$ 14,588	\$ (39,942)	\$ (80,803)	\$ (98,360)	\$ (98,527)	\$ (84,693)	\$ (64,811)	\$ (42,951)	\$ (20,662)	
3	COSTS														
4	Lost Distribution Revenue	\$'s	\$ 27,078	\$ 27,683	\$ 27,963	\$ 28,432	\$ 28,993	\$ 29,649	\$ 26,764	\$ 27,757	\$ 28,832	\$ 29,410	\$ 30,568	\$ 31,395	\$344,524
5															
6	REVENUE														
7	Sector Sales	Therms	1,488,092	2,751,261	3,374,845	3,769,530	3,167,624	2,134,862	1,211,836	621,702	397,455	336,440	372,462	507,126	20,133,234
8	Lost Revenue Rate	\$/Therm	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	<u>\$0.0220</u>	
9	Revenue	\$'s	\$ 32,738	\$ 60,528	\$ 74,247	\$ 82,930	\$ 69,688	\$ 46,967	\$ 26,660	\$ 13,677	\$ 8,744	\$ 7,402	\$ 8,194	\$ 11,157	442,931
10															
11	(Over)/Under-Recovery (Exc interest)	\$	\$ 93,144	\$ 60,555	\$ 14,484	\$ (39,910)	\$ (80,636)	\$ (98,121)	\$ (98,256)	\$ (84,448)	\$ (64,605)	\$ (42,802)	\$ (20,577)	\$ (423)	
12															
13	INTEREST														
14	Average Monthly Balance		\$ 95,975	\$ 76,978	\$ 37,625	\$ (12,661)	\$ (60,289)	\$ (89,462)	\$ (98,308)	\$ (91,488)	\$ (74,649)	\$ (53,807)	\$ (31,764)	\$ (10,543)	
15	Interest Rate-WSJ Prime Rate	Annual %	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	
16	Days per Month		<u>30</u>	<u>31</u>	<u>31</u>	<u>28</u>	<u>31</u>	<u>30</u>	<u>31</u>	<u>30</u>	<u>31</u>	<u>31</u>	<u>30</u>	<u>31</u>	365
17	Computed Interest	\$'s	\$ 256	\$ 212	\$ 104	\$ (32)	\$ (166)	\$ (239)	\$ (271)	\$ (244)	\$ (206)	\$ (149)	\$ (85)	\$ (29)	\$ (850)
18															
19	Ending Balance	\$'s	\$ 93,400	\$ 60,767	\$ 14,588	\$ (39,942)	\$ (80,803)	\$ (98,360)	\$ (98,527)	\$ (84,693)	\$ (64,811)	\$ (42,951)	\$ (20,662)	\$ (452)	
20	COMMERCIAL & INDUSTRIAL														
21	Beginning Balance - (Over)/Under	\$'s	\$ (5,831)	\$ (3,380)	\$ (5,094)	\$ (10,471)	\$ (17,100)	\$ (21,336)	\$ (19,648)	\$ (20,061)	\$ (17,081)	\$ (13,036)	\$ (8,793)	\$ (4,332)	
22															
23	COSTS														
24	Lost Distribution Revenue	\$'s	\$ 15,282	\$ 15,960	\$ 16,145	\$ 16,331	\$ 16,609	\$ 16,933	\$ 10,292	\$ 10,431	\$ 10,626	\$ 10,933	\$ 11,267	\$ 11,629	162,437
25															
26	REVENUE														
27	Sector Sales	Therms	4,273,046	5,887,088	7,167,043	7,641,797	6,930,321	5,063,577	3,549,981	2,467,336	2,179,685	2,219,780	2,262,857	2,804,200	52,446,710
28	Lost Revenue Rate	\$/Therm	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	<u>\$0.0030</u>	
29	Revenue	\$'s	\$ 12,819	\$ 17,661	\$ 21,501	\$ 22,925	\$ 20,791	\$ 15,191	\$ 10,650	\$ 7,402	\$ 6,539	\$ 6,659	\$ 6,789	\$ 8,413	157,340
30															
31	(Over)/Under-Recovery (Exc interest)	\$'s	\$ (3,368)	\$ (5,082)	\$ (10,450)	\$ (17,066)	\$ (21,283)	\$ (19,593)	\$ (20,006)	\$ (17,032)	\$ (12,994)	\$ (8,763)	\$ (4,314)	\$ (1,115)	
32															
33	INTEREST														
34	Average Monthly Balance		\$ (4,600)	\$ (4,231)	\$ (7,772)	\$ (13,768)	\$ (19,191)	\$ (20,464)	\$ (19,827)	\$ (18,546)	\$ (15,038)	\$ (10,899)	\$ (6,554)	\$ (2,724)	
35	Interest Rate-WSJ Prime Rate	Annual %	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	
36	Days per Month		<u>30</u>	<u>31</u>	<u>31</u>	<u>28</u>	<u>31</u>	<u>30</u>	<u>31</u>	<u>30</u>	<u>31</u>	<u>31</u>	<u>30</u>	<u>31</u>	365
37	Computed Interest	\$'s	\$ (12)	\$ (12)	\$ (21)	\$ (34)	\$ (53)	\$ (55)	\$ (55)	\$ (50)	\$ (42)	\$ (30)	\$ (18)	\$ (8)	\$ (388)
38															
39	Ending Balance	\$'s	\$ (3,380)	\$ (5,094)	\$ (10,471)	\$ (17,100)	\$ (21,336)	\$ (19,648)	\$ (20,061)	\$ (17,081)	\$ (13,036)	\$ (8,793)	\$ (4,332)	\$ (1,123)	

NOTES:

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Northern Utilities, Inc.
Lost Revenue Reconciliation
2022

Line	Sector / Description	Unit	Estimate Nov-21	Estimate Dec-21	Estimate Jan-22	Estimate Feb-22	Estimate Mar-22	Estimate Apr-22	Estimate May-22	Estimate Jun-22	Estimate Jul-22	Estimate Aug-22	Estimate Sep-22	Estimate Oct-22	Total
1	RESIDENTIAL														
2	Beginning Balance - (Over)/Under	\$'s	\$ (452)	\$ 1,361	\$ (23,579)	\$ (61,594)	\$ (108,923)	\$ (142,508)	\$ (150,961)	\$ (143,405)	\$ (121,509)	\$ (92,583)	\$ (61,583)	\$ (29,880)	
3	COSTS														
4	Lost Distribution Revenue	\$'s	\$ 36,297	\$ 37,046	\$ 37,400	\$ 37,990	\$ 38,697	\$ 39,523	\$ 35,636	\$ 36,886	\$ 38,240	\$ 38,970	\$ 40,428	\$ 41,470	\$458,582
5															
6	REVENUE														
7	Sector Sales	Therms	1,539,490	2,765,843	3,361,516	3,799,359	3,211,440	2,124,312	1,235,437	653,425	402,658	346,257	384,100	518,031	20,341,869
8	Lost Revenue Rate	\$/Therm	\$0.0224	\$0.0224	\$0.0224	\$0.0224	\$0.0224	\$0.0224	\$0.0224	\$0.0224	\$0.0224	\$0.0224	\$0.0224	\$0.0224	
9	Revenue	\$'s	\$ 34,485	\$ 61,955	\$ 75,298	\$ 85,106	\$ 71,936	\$ 47,585	\$ 27,674	\$ 14,637	\$ 9,020	\$ 7,756	\$ 8,604	\$ 11,604	455,658
10															
11	(Over)/Under-Recovery (Exc interest)	\$	\$ 1,360	\$ (23,548)	\$ (61,477)	\$ (108,710)	\$ (142,161)	\$ (150,569)	\$ (142,999)	\$ (121,156)	\$ (92,288)	\$ (61,370)	\$ (29,758)	\$ (14)	
12															
13	INTEREST														
14	Average Monthly Balance		\$ 454	\$ (11,094)	\$ (42,528)	\$ (85,152)	\$ (125,542)	\$ (146,539)	\$ (146,980)	\$ (132,280)	\$ (106,899)	\$ (76,977)	\$ (45,670)	\$ (14,947)	
15	Interest Rate-WSJ Prime Rate	Annual %	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
16	Days per Month		30	31	31	28	31	30	31	30	31	31	30	31	365
17	Computed Interest	\$'s	\$ 1	\$ (31)	\$ (117)	\$ (212)	\$ (347)	\$ (391)	\$ (406)	\$ (353)	\$ (295)	\$ (212)	\$ (122)	\$ (41)	\$ (2,527)
18															
19	Ending Balance	\$'s	\$ 1,361	\$ (23,579)	\$ (61,594)	\$ (108,923)	\$ (142,508)	\$ (150,961)	\$ (143,405)	\$ (121,509)	\$ (92,583)	\$ (61,583)	\$ (29,880)	\$ (55)	
20	COMMERCIAL & INDUSTRIAL														
21	Beginning Balance - (Over)/Under	\$'s	\$ (1,123)	\$ 1,377	\$ (1,560)	\$ (9,297)	\$ (18,875)	\$ (25,492)	\$ (24,052)	\$ (25,381)	\$ (22,000)	\$ (17,138)	\$ (11,846)	\$ (6,203)	
22															
23	COSTS														
24	Lost Distribution Revenue	\$'s	\$ 19,900	\$ 20,595	\$ 20,870	\$ 21,146	\$ 21,559	\$ 22,041	\$ 13,417	\$ 13,624	\$ 13,914	\$ 14,369	\$ 14,866	\$ 15,405	211,707
25															
26	REVENUE														
27	Sector Sales	Therms	4,461,453	6,033,757	7,331,503	7,868,875	7,209,005	5,265,433	3,763,681	2,610,132	2,307,251	2,317,233	2,358,947	2,913,010	54,440,281
28	Lost Revenue Rate	\$/Therm	\$0.0039	\$0.0039	\$0.0039	\$0.0039	\$0.0039	\$0.0039	\$0.0039	\$0.0039	\$0.0039	\$0.0039	\$0.0039	\$0.0039	
29	Revenue	\$'s	\$ 17,400	\$ 23,532	\$ 28,593	\$ 30,689	\$ 28,115	\$ 20,535	\$ 14,678	\$ 10,180	\$ 8,998	\$ 9,037	\$ 9,200	\$ 11,361	212,317
30															
31	(Over)/Under-Recovery (Exc interest)	\$'s	\$ 1,377	\$ (1,559)	\$ (9,282)	\$ (18,840)	\$ (25,431)	\$ (23,986)	\$ (25,313)	\$ (21,937)	\$ (17,084)	\$ (11,806)	\$ (6,179)	\$ (2,159)	
32															
33	INTEREST														
34	Average Monthly Balance		\$ 127	\$ (91)	\$ (5,421)	\$ (14,068)	\$ (22,153)	\$ (24,739)	\$ (24,682)	\$ (23,659)	\$ (19,542)	\$ (14,472)	\$ (9,013)	\$ (4,181)	
35	Interest Rate-WSJ Prime Rate	Annual %	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	Total
36	Days per Month		30	31	31	28	31	30	31	30	31	31	30	31	365
37	Computed Interest	\$'s	\$ 0	\$ (0)	\$ (15)	\$ (35)	\$ (61)	\$ (66)	\$ (68)	\$ (63)	\$ (54)	\$ (40)	\$ (24)	\$ (12)	\$ (438)
38															
39	Ending Balance	\$'s	\$ 1,377	\$ (1,560)	\$ (9,297)	\$ (18,875)	\$ (25,492)	\$ (24,052)	\$ (25,381)	\$ (22,000)	\$ (17,138)	\$ (11,846)	\$ (6,203)	\$ (2,171)	

NOTES:

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Northern Utilities, Inc.
Lost Revenue Reconciliation
2023

Line	Sector / Description	Unit	Estimate Nov-22	Estimate Dec-22	Estimate Jan-23	Estimate Feb-23	Estimate Mar-23	Estimate Apr-23	Estimate May-23	Estimate Jun-23	Estimate Jul-23	Estimate Aug-23	Estimate Sep-23	Estimate Oct-23	Total
1	RESIDENTIAL														
2	Beginning Balance - (Over)/Under	\$'s	\$ (55)	\$ 2,206	\$ (31,015)	\$ (80,930)	\$ (141,611)	\$ (186,291)	\$ (198,289)	\$ (188,551)	\$ (159,817)	\$ (121,832)	\$ (81,065)	\$ (39,385)	
3	COSTS														
4	Lost Distribution Revenue	\$'s	\$ 47,899	\$ 48,843	\$ 49,305	\$ 50,076	\$ 51,001	\$ 52,081	\$ 46,950	\$ 48,584	\$ 50,354	\$ 51,308	\$ 53,214	\$ 54,576	\$604,191
5															
6	REVENUE														
7	Sector Sales	Therms	1,573,826	2,828,417	3,416,061	3,809,640	3,283,798	2,191,915	1,264,781	668,473	413,139	353,796	392,198	531,196	20,727,239
8	Lost Revenue Rate	\$/Therm	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	<u>\$0.0290</u>	
9	Revenue	\$'s	\$ 45,641	\$ 82,024	\$ 99,066	\$ 110,480	\$ 95,230	\$ 63,566	\$ 36,679	\$ 19,386	\$ 11,981	\$ 10,260	\$ 11,374	\$ 15,405	601,090
10															
11	(Over)/Under-Recovery (Exc interest)	\$	\$ 2,203	\$ (30,976)	\$ (80,776)	\$ (141,334)	\$ (185,839)	\$ (197,776)	\$ (188,018)	\$ (159,353)	\$ (121,444)	\$ (80,785)	\$ (39,224)	\$ (214)	
12															
13	INTEREST														
14	Average Monthly Balance		\$ 1,074	\$ (14,385)	\$ (55,896)	\$ (111,132)	\$ (163,725)	\$ (192,034)	\$ (193,154)	\$ (173,952)	\$ (140,631)	\$ (101,309)	\$ (60,144)	\$ (19,799)	
15	Interest Rate-WSJ Prime Rate	Annual %	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	
16	Days per Month		<u>30</u>	<u>31</u>	<u>31</u>	<u>28</u>	<u>31</u>	<u>30</u>	<u>31</u>	<u>30</u>	<u>31</u>	<u>31</u>	<u>30</u>	<u>31</u>	365
17	Computed Interest	\$'s	\$ 3	\$ (40)	\$ (154)	\$ (277)	\$ (452)	\$ (513)	\$ (533)	\$ (465)	\$ (388)	\$ (280)	\$ (161)	\$ (55)	\$ (3,314)
18															
19	Ending Balance	\$'s	\$ 2,206	\$ (31,015)	\$ (80,930)	\$ (141,611)	\$ (186,291)	\$ (198,289)	\$ (188,551)	\$ (159,817)	\$ (121,832)	\$ (81,065)	\$ (39,385)	\$ (269)	
20	COMMERCIAL & INDUSTRIAL														
21	Beginning Balance - (Over)/Under	\$'s	\$ (2,171)	\$ 1,168	\$ (2,814)	\$ (12,710)	\$ (24,710)	\$ (33,178)	\$ (30,910)	\$ (32,131)	\$ (27,193)	\$ (20,255)	\$ (12,779)	\$ (4,797)	
22															
23	COSTS														
24	Lost Distribution Revenue	\$'s	\$ 26,450	\$ 27,483	\$ 27,852	\$ 28,222	\$ 28,775	\$ 29,421	\$ 17,910	\$ 18,188	\$ 18,576	\$ 19,186	\$ 19,852	\$ 20,574	282,490
25															
26	REVENUE														
27	Sector Sales	Therms	4,621,894	6,292,648	7,545,388	8,035,087	7,432,800	5,413,466	3,808,871	2,634,146	2,314,395	2,332,967	2,369,358	2,933,500	55,734,520
28	Lost Revenue Rate	\$/Therm	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	<u>\$0.0050</u>	
29	Revenue	\$'s	\$ 23,109	\$ 31,463	\$ 37,727	\$ 40,175	\$ 37,164	\$ 27,067	\$ 19,044	\$ 13,171	\$ 11,572	\$ 11,665	\$ 11,847	\$ 14,667	278,673
30															
31	(Over)/Under-Recovery (Exc interest)	\$'s	\$ 1,170	\$ (2,812)	\$ (12,688)	\$ (24,664)	\$ (33,099)	\$ (30,824)	\$ (32,044)	\$ (27,114)	\$ (20,189)	\$ (12,733)	\$ (4,773)	\$ 1,109	
32															
33	INTEREST														
34	Average Monthly Balance		\$ (501)	\$ (822)	\$ (7,751)	\$ (18,687)	\$ (28,904)	\$ (32,001)	\$ (31,477)	\$ (29,622)	\$ (23,691)	\$ (16,494)	\$ (8,776)	\$ (1,844)	
35	Interest Rate-WSJ Prime Rate	Annual %	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	<u>3.25%</u>	Total
36	Days per Month		<u>30</u>	<u>31</u>	<u>31</u>	<u>28</u>	<u>31</u>	<u>30</u>	<u>31</u>	<u>30</u>	<u>31</u>	<u>31</u>	<u>30</u>	<u>31</u>	365
37	Computed Interest	\$'s	\$ (1)	\$ (2)	\$ (21)	\$ (47)	\$ (80)	\$ (85)	\$ (87)	\$ (79)	\$ (65)	\$ (46)	\$ (23)	\$ (5)	\$ (542)
38															
39	Ending Balance	\$'s	\$ 1,168	\$ (2,814)	\$ (12,710)	\$ (24,710)	\$ (33,178)	\$ (30,910)	\$ (32,131)	\$ (27,193)	\$ (20,255)	\$ (12,779)	\$ (4,797)	\$ 1,104	

NOTES:

Line 1: Page 2b, Line 19
Line 4: Page 3c, Line 7
Line 21: Page 2b, Line 39
Line 24: Page 3c, Line 11

Northern Utilities
Monthly and Cumulative Savings (Therms) and Lost Base Revenue
November 1, 2019 to October 31, 2020

Northern Utilities Inc.
NHPUC Docket No. 20-092
Attachment J5 - (2021 - 2023 Plan)
Page 3 of 6

Line	Description	10/31/2019	Actual Nov-19	Actual Dec-19	Estimate Jan-20	Estimate Feb-20	Estimate Mar-20	Estimate Apr-20	Estimate May-20	Estimate Jun-20	Estimate Jul-20	Estimate Aug-20	Estimate Sep-20	Estimate Oct-20	Period Annual Savings
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	Residential Annualized Savings	349,140	-	-	3,936	6,560	7,872	9,184	9,184	15,745	17,057	9,184	18,369	13,121	110,213
2	C&I Annualized Savings	616,273	65,423	7,159	10,876	10,876	16,314	19,033	10,876	13,595	19,033	29,910	32,629	35,348	271,073
3	Total		65,423	7,159	14,812	17,437	24,187	28,218	20,061	29,340	36,090	39,094	50,998	48,468	381,286
			Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Period LBR
4	Monthly Residential Savings		-	-	328	547	656	765	765	1,312	1,421	765	1,531	1,093	9,184
5	Cumulative Residential Savings	29,095	29,095	29,095	29,423	29,970	30,626	31,391	32,156	33,468	34,890	35,655	37,186	38,279	391,235
6	Average Residential Distribution Rate		0.6915	0.6915	0.6916	0.6916	0.6916	0.6916	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	
7	Lost Residential Revenue		\$ 20,120	\$ 20,120	\$ 20,348	\$ 20,726	\$ 21,180	\$ 21,709	\$ 19,640	\$ 20,442	\$ 21,310	\$ 21,777	\$ 22,712	\$ 23,380	\$ 253,465
8	Monthly C&I Savings		5,452	597	906	906	1,360	1,586	906	1,133	1,586	2,492	2,719	2,946	22,589
9	Cumulative C&I Savings	51,356	56,808	57,405	58,311	59,217	60,577	62,163	63,069	64,202	65,788	68,281	71,000	73,946	760,767
10	Average C&I Distribution Rate		0.1988	0.1988	0.1993	0.1993	0.1993	0.1993	0.1198	0.1198	0.1198	0.1198	0.1198	0.1198	
11	Lost C&I Revenue		\$ 11,295	\$ 11,413	\$ 11,624	\$ 11,804	\$ 12,075	\$ 12,391	\$ 7,558	\$ 7,694	\$ 7,884	\$ 8,183	\$ 8,509	\$ 8,862	\$ 119,293
12	Total Lost Revenue		\$ 31,414	\$ 31,533	\$ 31,972	\$ 32,530	\$ 33,255	\$ 34,100	\$ 27,199	\$ 28,136	\$ 29,194	\$ 29,960	\$ 31,221	\$ 32,242	\$ 372,758

Line 1: Page 4, Line 15

Line 1: Page 4, Line 21

Line 3: Line 1 + Line 2

Line 4: Line 1 / 12

Line 5: Prior Month Line 5 + Current Month Line 4

Line 6: Page 5, Line 30, Col. 3; Page 5, Line 30, Col. 3

Line 7: Line 5 x Line 6

Line 8: Line 2 / 12

Line 9: Prior Month Line 9 + Current Month Line 8

Line 10: Page 5, Line 37, Col. 3; Page 5, Line 52, Col. 3

Line 11: Line 9 x Line 10

Line 12: Line 7 + Line 11

Northern Utilities
Monthly and Cumulative Savings (Therms) and Lost Base Revenue
November 1, 2020 to October 31, 2021

Northern Utilities Inc.
NHPUC Docket No. 20-092
Attachment J5 - (2021 - 2023 Plan)
Page 3a of 6

Line	Description	10/31/2020	Estimate Nov-20	Estimate Dec-20	Estimate Jan-21	Estimate Feb-21	Estimate Mar-21	Estimate Apr-21	Estimate May-21	Estimate Jun-21	Estimate Jul-21	Estimate Aug-21	Estimate Sep-21	Estimate Oct-21	Period Annual Savings
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	Residential Annualized Savings	459,352	10,496	10,496	4,874	8,124	9,748	11,373	11,373	19,497	21,121	11,373	22,746	16,247	157,469
2	C&I Annualized Savings	887,347	32,629	40,786	11,161	11,161	16,742	19,532	11,161	13,952	19,532	30,693	33,484	36,274	277,107
3	Total		43,125	51,282	16,035	19,285	26,490	30,905	22,534	33,448	40,653	42,066	56,230	52,521	434,576
			Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Period LBR
4	Monthly Residential Savings		875	875	406	677	812	948	948	1,625	1,760	948	1,895	1,354	13,122
5	Cumulative Residential Savings	38,279	39,154	40,029	40,435	41,112	41,924	42,872	43,820	45,444	47,205	48,152	50,048	51,402	531,597
6	Average Residential Distribution Rate		0.6916	0.6916	0.6916	0.6916	0.6916	0.6916	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	
7	Lost Residential Revenue		\$ 27,078	\$ 27,683	\$ 27,963	\$ 28,432	\$ 28,993	\$ 29,649	\$ 26,764	\$ 27,757	\$ 28,832	\$ 29,410	\$ 30,568	\$ 31,395	\$ 344,524
8	Monthly C&I Savings		2,719	3,399	930	930	1,395	1,628	930	1,163	1,628	2,558	2,790	3,023	23,092
9	Cumulative C&I Savings	73,946	76,665	80,063	80,994	81,924	83,319	84,946	85,877	87,039	88,667	91,225	94,015	97,038	1,031,771
10	Average C&I Distribution Rate		0.1993	0.1993	0.1993	0.1993	0.1993	0.1993	0.1198	0.1198	0.1198	0.1198	0.1198	0.1198	
11	Lost C&I Revenue		\$ 15,282	\$ 15,960	\$ 16,145	\$ 16,331	\$ 16,609	\$ 16,933	\$ 10,292	\$ 10,431	\$ 10,626	\$ 10,933	\$ 11,267	\$ 11,629	\$ 162,437
12	Total Lost Revenue		\$ 42,360	\$ 43,642	\$ 44,109	\$ 44,762	\$ 45,602	\$ 46,582	\$ 37,056	\$ 38,188	\$ 39,458	\$ 40,343	\$ 41,835	\$ 43,024	\$ 506,960

Line 1: Page 4, Line 15

Line 1: Page 4, Line 21

Line 3: Line 1 + Line 2

Line 4: Line 1 / 12

Line 5: Prior Month Line 5 + Current Month Line 4

Line 6: Page 5, Line 30, Col. 3; Page 5, Line 30, Col. 3

Line 7: Line 5 x Line 6

Line 8: Line 2 / 12

Line 9: Prior Month Line 9 + Current Month Line 8

Line 10: Page 5, Line 37, Col. 3; Page 5, Line 52, Col. 3

Line 11: Line 9 x Line 10

Line 12: Line 7 + Line 11

Northern Utilities
Monthly and Cumulative Savings (Therms) and Lost Base Revenue
November 1, 2021 to October 31, 2022

Northern Utilities Inc.
NHPUC Docket No. 20-092
Attachment J5 - (2021 - 2023 Plan)
Page 3b of 6

Line	Description	10/31/2021	Estimate Nov-21	Estimate Dec-21	Estimate Jan-22	Estimate Feb-22	Estimate Mar-22	Estimate Apr-22	Estimate May-22	Estimate Jun-22	Estimate Jul-22	Estimate Aug-22	Estimate Sep-22	Estimate Oct-22	Period Annual Savings
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	Residential Annualized Savings	616,821	12,998	12,998	6,141	10,235	12,282	14,329	14,329	24,564	26,611	14,329	28,658	20,470	197,942
2	C&I Annualized Savings	1,164,454	33,484	41,855	16,587	16,587	24,881	29,028	16,587	20,734	29,028	45,615	49,761	53,908	378,054
3	Total		46,481	54,852	22,728	26,822	37,163	43,356	30,916	45,298	55,638	59,944	78,419	74,378	575,996
			Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Period LBR
4	Monthly Residential Savings		1,083	1,083	512	853	1,023	1,194	1,194	2,047	2,218	1,194	2,388	1,706	16,495
5	Cumulative Residential Savings	51,402	52,485	53,568	54,080	54,933	55,956	57,150	58,344	60,391	62,609	63,803	66,191	67,897	707,407
6	Average Residential Distribution Rate		0.6916	0.6916	0.6916	0.6916	0.6916	0.6916	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	
7	Lost Residential Revenue		\$ 36,297	\$ 37,046	\$ 37,400	\$ 37,990	\$ 38,697	\$ 39,523	\$ 35,636	\$ 36,886	\$ 38,240	\$ 38,970	\$ 40,428	\$ 41,470	\$ 458,582
8	Monthly C&I Savings		2,790	3,488	1,382	1,382	2,073	2,419	1,382	1,728	2,419	3,801	4,147	4,492	31,504
9	Cumulative C&I Savings	97,038	99,828	103,316	104,698	106,081	108,154	110,573	111,955	113,683	116,102	119,903	124,050	128,542	1,346,885
10	Average C&I Distribution Rate		0.1993	0.1993	0.1993	0.1993	0.1993	0.1993	0.1198	0.1198	0.1198	0.1198	0.1198	0.1198	
11	Lost C&I Revenue		\$ 19,900	\$ 20,595	\$ 20,870	\$ 21,146	\$ 21,559	\$ 22,041	\$ 13,417	\$ 13,624	\$ 13,914	\$ 14,369	\$ 14,866	\$ 15,405	\$ 211,707
12	Total Lost Revenue		\$ 56,196	\$ 57,641	\$ 58,270	\$ 59,136	\$ 60,257	\$ 61,565	\$ 49,052	\$ 50,510	\$ 52,154	\$ 53,339	\$ 55,295	\$ 56,875	\$ 670,289

Line 1: Page 4, Line 15

Line 1: Page 4, Line 21

Line 3: Line 1 + Line 2

Line 4: Line 1 / 12

Line 5: Prior Month Line 5 + Current Month Line 4

Line 6: Page 5, Line 30, Col. 3; Page 5, Line 30, Col. 3

Line 7: Line 5 x Line 6

Line 8: Line 2 / 12

Line 9: Prior Month Line 9 + Current Month Line 8

Line 10: Page 5, Line 37, Col. 3; Page 5, Line 52, Col. 3

Line 11: Line 9 x Line 10

Line 12: Line 7 + Line 11

Northern Utilities
Monthly and Cumulative Savings (Therms) and Lost Base Revenue
November 1, 2022 to October 31, 2023

Northern Utilities Inc.
NHPUC Docket No. 20-092
Attachment J5 - (2021 - 2023 Plan)
Page 3c of 6

Line	Description	10/31/2022	Estimate Nov-22	Estimate Dec-22	Estimate Jan-23	Estimate Feb-23	Estimate Mar-23	Estimate Apr-23	Estimate May-23	Estimate Jun-23	Estimate Jul-23	Estimate Aug-23	Estimate Sep-23	Estimate Oct-23	Period Annual Savings
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	Residential Annualized Savings	814,763	16,376	16,376	8,026	13,377	16,053	18,728	18,728	32,105	34,781	18,728	37,456	26,754	257,487
2	C&I Annualized Savings	1,542,508	49,761	62,202	22,224	22,224	33,336	38,892	22,224	27,780	38,892	61,116	66,672	72,228	517,550
3	Total		66,137	78,578	30,250	35,601	49,388	57,620	40,952	59,885	73,672	79,844	104,128	98,982	775,038
			Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Period LBR
4	Monthly Residential Savings		1,365	1,365	669	1,115	1,338	1,561	1,561	2,675	2,898	1,561	3,121	2,230	21,457
5	Cumulative Residential Savings	67,897	69,262	70,626	71,295	72,410	73,748	75,308	76,869	79,544	82,443	84,003	87,125	89,354	931,987
6	Average Residential Distribution Rate		0.6916	0.6916	0.6916	0.6916	0.6916	0.6916	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	
7	Lost Residential Revenue		\$ 47,899	\$ 48,843	\$ 49,305	\$ 50,076	\$ 51,001	\$ 52,081	\$ 46,950	\$ 48,584	\$ 50,354	\$ 51,308	\$ 53,214	\$ 54,576	\$ 604,191
8	Monthly C&I Savings		4,147	5,183	1,852	1,852	2,778	3,241	1,852	2,315	3,241	5,093	5,556	6,019	43,129
9	Cumulative C&I Savings	128,542	132,689	137,873	139,725	141,577	144,355	147,596	149,448	151,763	155,004	160,097	165,653	171,672	1,797,447
10	Average C&I Distribution Rate		0.1993	0.1993	0.1993	0.1993	0.1993	0.1993	0.1198	0.1198	0.1198	0.1198	0.1198	0.1198	
11	Lost C&I Revenue		\$ 26,450	\$ 27,483	\$ 27,852	\$ 28,222	\$ 28,775	\$ 29,421	\$ 17,910	\$ 18,188	\$ 18,576	\$ 19,186	\$ 19,852	\$ 20,574	\$ 282,490
12	Total Lost Revenue		\$ 74,349	\$ 76,326	\$ 77,158	\$ 78,298	\$ 79,777	\$ 81,502	\$ 64,860	\$ 66,772	\$ 68,930	\$ 70,494	\$ 73,066	\$ 75,149	\$ 886,681

Line 1: Page 4, Line 15

Line 1: Page 4, Line 21

Line 3: Line 1 + Line 2

Line 4: Line 1 / 12

Line 5: Prior Month Line 5 + Current Month Line 4

Line 6: Page 5, Line 30, Col. 3; Page 5, Line 30, Col. 3

Line 7: Line 5 x Line 6

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Line 9: Prior Month Line 9 + Current Month Line 8

Line 10: Page 5, Line 37, Col. 3; Page 5, Line 52, Col. 3

Line 11: Line 9 x Line 10

Line 12: Line 7 + Line 11

Northern Utilities, Inc.
Gas Savings for LRR Calculation

Northern Utilities, Inc.
 NHPUC Docket No. 20-092
 Attachment J5 - (2021 - 2023 Plan)
 Page 4 of 6

Planned Gas Savings - 2020		Annual
		Therms
1. Residential Programs		
2. Home Energy Assistance		21,368
3. EnergyStar Homes		15,065
4. Home Performance w/EnergyStar		17,165
5. EnergyStar Products		58,268
6. Residential Behavior		19,340
7. Residential		131,206
8.		
9. Commercial & Industrial Programs		
10. Large Business Energy Solutions		190,942
11. Small Business Energy Solutions		80,964
12. Education (Gas)		-
13. Commercial & Industrial		271,906

LBR Savings Allocation		Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Nov-19 to Oct-	Jan-20 to Dec-
		Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20		20 Total	20 Total
14. Residential Programs				3.0%	5.0%	6.0%	7.0%	7.0%	12.0%	13.0%	7.0%	14.0%	10.0%	8.0%	8.0%			
15. Annualized Therms	Therms	0	0	3,936	6,560	7,872	9,184	9,184	15,745	17,057	9,184	18,369	13,121	10,496	10,496		110,213	131,206
16.																		
17. Monthly Incremental	Therms	0	0	328	547	656	765	765	1,312	1,421	765	1,531	1,093	875	875		9,184	10,934
18. Monthly Cumulative	Therms	29,095	29,095	29,423	29,970	30,626	31,391	32,156	33,468	34,890	35,655	37,186	38,279	39,154	40,029		391,235	412,228
19.																		
20. Commercial & Industrial Programs				4.0%	4.0%	6.0%	7.0%	4.0%	5.0%	7.0%	11.0%	12.0%	13.0%	12.0%	15.0%			
21. Annualized Therms	Therms	65,423	7,159	10,876	10,876	16,314	19,033	10,876	13,595	19,033	29,910	32,629	35,348	32,629	40,786		271,073	271,906
22.																		
23. Monthly Incremental	Therms	5,452	597	906	906	1,360	1,586	906	1,133	1,586	2,492	2,719	2,946	2,719	3,399		22,589	22,659
24. Monthly Cumulative	Therms	56,808	57,405	58,311	59,217	60,577	62,163	63,069	64,202	65,788	68,281	71,000	73,946	76,665	80,063		760,767	803,281

Northern Utilities, Inc.
Gas Savings for LRR Calculation

Planned Gas Savings - 2021		Annual Therms
1. Residential Programs		
2. Home Energy Assistance		24,422
3. EnergyStar Homes		27,485
4. Home Performance w/EnergyStar		14,078
5. EnergyStar Products		64,270
6. Residential Behavior		32,216
7. Residential		162,471
8.		
9. Commercial & Industrial Programs		
10. Large Business Energy Solutions		196,132
11. Small Business Energy Solutions		82,898
12. Education (Gas)		-
13. Commercial & Industrial		279,030

LBR Savings Allocation		Unit	Estimate Nov-20	Estimate Dec-20	Estimate Jan-21	Estimate Feb-21	Estimate Mar-21	Estimate Apr-21	Estimate May-21	Estimate Jun-21	Estimate Jul-21	Estimate Aug-21	Estimate Sep-21	Estimate Oct-21	Estimate Nov-21	Estimate Dec-21	Nov-20 to Oct- 21 Total	Jan-21 to Dec- 21 Total
14. Residential Programs			8.0%	8.0%	3.0%	5.0%	6.0%	7.0%	7.0%	12.0%	13.0%	7.0%	14.0%	10.0%	8.0%	8.0%		100.0%
15. Annualized Therms	Therms		10,496	10,496	4,874	8,124	9,748	11,373	11,373	19,497	21,121	11,373	22,746	16,247	12,998	12,998	157,469	162,471
16.																		
17. Monthly Incremental	Therms		875	875	406	677	812	948	948	1,625	1,760	948	1,895	1,354	1,083	1,083	13,122	13,539
18. Monthly Cumulative	Therms		39,154	40,029	40,435	41,112	41,924	42,872	43,820	45,444	47,205	48,152	50,048	51,402	52,485	53,568	531,597	558,467
19.																		
20. Commercial & Industrial Programs			12.0%	15.0%	4.0%	4.0%	6.0%	7.0%	4.0%	5.0%	7.0%	11.0%	12.0%	13.0%	12.0%	15.0%		100.0%
21. Annualized Therms	Therms		32,629	40,786	11,161	11,161	16,742	19,532	11,161	13,952	19,532	30,693	33,484	36,274	33,484	41,855	277,107	279,030
22.																		
23. Monthly Incremental	Therms		2,719	3,399	930	930	1,395	1,628	930	1,163	1,628	2,558	2,790	3,023	2,790	3,488	23,092	23,253
24. Monthly Cumulative	Therms		76,665	80,063	80,994	81,924	83,319	84,946	85,877	87,039	88,667	91,225	94,015	97,038	99,828	103,316	1,031,771	1,078,186

Northern Utilities, Inc.
Gas Savings for LRR Calculation

Northern Utilities, Inc.
 NHPUC Docket No. 20-092
 Attachment J5 - (2021 - 2023 Plan)
 Page 4b of 6

Planned Gas Savings - 2022

	Annual Therms
1. Residential Programs	
2. Home Energy Assistance	30,854
3. EnergyStar Homes	38,250
4. Home Performance w/EnergyStar	15,525
5. EnergyStar Products	78,294
6. Residential Behavior	41,775
7. Residential	204,698
8.	
9. Commercial & Industrial Programs	
10. Large Business Energy Solutions	313,356
11. Small Business Energy Solutions	101,323
12. Education (Gas)	-
13. Commercial & Industrial	414,679

LBR Savings Allocation		Estimate Nov-21	Estimate Dec-21	Estimate Jan-22	Estimate Feb-22	Estimate Mar-22	Estimate Apr-22	Estimate May-22	Estimate Jun-22	Estimate Jul-22	Estimate Aug-22	Estimate Sep-22	Estimate Oct-22	Estimate Nov-22	Estimate Dec-22	Nov-21 to Oct- 22 Total	Jan-22 to Dec- 22 Total
14. Residential Programs		8.0%	8.0%	3.0%	5.0%	6.0%	7.0%	7.0%	12.0%	13.0%	7.0%	14.0%	10.0%	8.0%	8.0%		100.0%
15. Annualized Therms	Therms	12,998	12,998	6,141	10,235	12,282	14,329	14,329	24,564	26,611	14,329	28,658	20,470	16,376	16,376	197,942	204,698
16.																	
17. Monthly Incremental	Therms	1,083	1,083	512	853	1,023	1,194	1,194	2,047	2,218	1,194	2,388	1,706	1,365	1,365	16,495	17,058
18. Monthly Cumulative	Therms	52,485	53,568	54,080	54,933	55,956	57,150	58,344	60,391	62,609	63,803	66,191	67,897	69,262	70,626	707,407	741,242
19.																	
20. Commercial & Industrial Programs		12.0%	15.0%	4.0%	4.0%	6.0%	7.0%	4.0%	5.0%	7.0%	11.0%	12.0%	13.0%	12.0%	15.0%		100.0%
21. Annualized Therms	Therms	33,484	41,855	16,587	16,587	24,881	29,028	16,587	20,734	29,028	45,615	49,761	53,908	49,761	62,202	378,054	414,679
22.																	
23. Monthly Incremental	Therms	2,790	3,488	1,382	1,382	2,073	2,419	1,382	1,728	2,419	3,801	4,147	4,492	4,147	5,183	31,504	34,557
24. Monthly Cumulative	Therms	99,828	103,316	104,698	106,081	108,154	110,573	111,955	113,683	116,102	119,903	124,050	128,542	132,689	137,873	1,346,885	1,414,302

Northern Utilities, Inc.
Gas Savings for LRR Calculation

Northern Utilities, Inc.
 NHPUC Docket No. 20-092
 Attachment J5 - (2021 - 2023 Plan)
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Planned Gas Savings - 2023		Annual
		Therms
1. Residential Programs		
2. Home Energy Assistance		38,899
3. EnergyStar Homes		55,244
4. Home Performance w/EnergyStar		16,937
5. EnergyStar Products		91,462
6. Residential Behavior		65,000
7. Residential		267,542
8.		
9. Commercial & Industrial Programs		
10. Large Business Energy Solutions		431,096
11. Small Business Energy Solutions		124,503
12. Education (Gas)		-
13. Commercial & Industrial		555,599

LBR Savings Allocation		Unit	Estimate Nov-22	Estimate Dec-22	Estimate Jan-23	Estimate Feb-23	Estimate Mar-23	Estimate Apr-23	Estimate May-23	Estimate Jun-23	Estimate Jul-23	Estimate Aug-23	Estimate Sep-23	Estimate Oct-23	Estimate Nov-23	Estimate Dec-23	Nov-22 to Oct- 23 Total	Jan-23 to Dec- 23 Total
14. Residential Programs			8.0%	8.0%	3.0%	5.0%	6.0%	7.0%	7.0%	12.0%	13.0%	7.0%	14.0%	10.0%	8.0%	8.0%		100.0%
15. Annualized Therms	Therms		16,376	16,376	8,026	13,377	16,053	18,728	18,728	32,105	34,781	18,728	37,456	26,754	21,403	21,403	257,487	267,542
16.																		
17. Monthly Incremental	Therms		1,365	1,365	669	1,115	1,338	1,561	1,561	2,675	2,898	1,561	3,121	2,230	1,784	1,784	21,457	22,295
18. Monthly Cumulative	Therms		69,262	70,626	71,295	72,410	73,748	75,308	76,869	79,544	82,443	84,003	87,125	89,354	91,138	92,921	931,987	976,158
19.																		
20. Commercial & Industrial Programs			12.0%	15.0%	4.0%	4.0%	6.0%	7.0%	4.0%	5.0%	7.0%	11.0%	12.0%	13.0%	12.0%	15.0%		100.0%
21. Annualized Therms	Therms		49,761	62,202	22,224	22,224	33,336	38,892	22,224	27,780	38,892	61,116	66,672	72,228	66,672	83,340	517,550	555,599
22.																		
23. Monthly Incremental	Therms		4,147	5,183	1,852	1,852	2,778	3,241	1,852	2,315	3,241	5,093	5,556	6,019	5,556	6,945	43,129	46,300
24. Monthly Cumulative	Therms		132,689	137,873	139,725	141,577	144,355	147,596	149,448	151,763	155,004	160,097	165,653	171,672	177,228	184,172	1,797,447	1,888,285

Northern Utilities, Inc.

Summary of Average Distribution Rate for Lost Revenue

Calculation of Average Distribution Rate for Lost Revenue (Detail)

Line	Summary of Average Distribution Rate for Lost Revenue													
	Calculation of Average Distribution Rate for Lost Revenue (Detail)													
	(1) Number of Customers	(2) Customer Charge	(3)=(1)X(2) Calculated Customer Charge	(4) Billing Determinants - Winter First	Excess	(5) Winter Distribution Rates First	Excess	(6) = (4) X (5) Winter Distribution	(7) Billing Determinants - Summer First	Excess	(8) Summer Distribution Rates First	Excess	(9) = (7) X (8) Summer Distribution	
				Therms	Therms	Therms \$/thm	Therms \$/thm	Revenue	Therms	Therms	Therms \$/thm	Therms \$/thm	Revenue	
8	R-5 Residential, Heating	298,631	\$22.20	\$6,629,608	6,478,926	9,001,237	\$ 0.6920	\$ 0.6920	\$10,712,273	2,834,361	443,163	\$ 0.6099	\$ 0.6099	\$1,998,962
9	R-10 Residential Heating, Low Income	8,632	\$8.88	\$76,652	220,721	233,658	\$ 0.6920	\$ 0.6920	\$314,430	76,929	10,603	\$ 0.6099	\$ 0.6099	\$53,386
10	R-6 Residential, Non-Heating	15,334	\$22.20	\$340,415	52,030	102,959	\$ 0.6470	\$ 0.6470	\$100,278	50,338	31,354	\$ 0.6470	\$ 0.6470	\$52,855
11	Total Residential Service	322,597		\$7,046,675	6,751,677	9,337,854			\$11,126,981	2,961,628	485,120			\$2,105,202
13	G-40 Low Annual, High Winter Use	60,426	\$75.09	\$4,537,388	1,992,261	7,546,425	\$ 0.1865	\$ 0.1865	\$1,778,965	764,224	873,989	\$ 0.1865	\$ 0.1865	\$305,527
14	G-50 Low Annual, Low Winter Use	9,931	\$75.09	\$745,719	222,671	971,369	\$ 0.1865	\$ 0.1865	\$222,688	215,924	504,561	\$ 0.1865	\$ 0.1865	\$134,370
15	G-41 Medium Annual, High Winter Use	8,238	\$222.64	\$1,834,108	11,812,715		\$ 0.2425	\$2,864,583	2,550,957			\$ 0.1895		\$483,406
16	G-51 Medium Annual, Low Winter Use	3,357	\$222.64	\$747,402	1,848,039	1,299,553	\$ 0.1712	\$ 0.1399	\$498,192	1,394,554	800,973	\$ 0.1337	\$ 0.1087	\$273,518
17	G-42 High Annual, High Winter Use	377	\$1,335.81	\$503,600	4,461,198		\$ 0.1984	\$885,102	1,555,205			\$ 0.1206		\$187,558
18	G-52 High Annual, Low Winter Use	395	\$1,335.81	\$527,645	8,729,046		\$ 0.1720	\$1,501,396	8,525,494			\$ 0.0792		\$675,219
19	Total General Service	82,724		\$8,895,863	29,065,930	9,817,347		\$7,750,926	15,006,358	2,179,523				\$2,059,598
21	Total Company	405,321		\$15,942,538	35,817,607	19,155,201		\$18,877,907	17,967,986	2,664,643				\$4,164,800

Notes:
Column (1), Column (4) and Column (7): 2018 actual billing determinants.
Column (2), Column (5) and Column (8): Winter and Summer distribution rates effective May 1, 2019.
R-11 Rate Class is closed May 1, 2017. R-11 Rate Class Customers migrated to R-6 Rate Class.

Calculation of Average Distribution Rate for Lost Revenue Winter and Summer (Summary)

	(10)=(3)	(11) = (6) + (9)	12=(10)+(11)	(13)=(4)+(7)
	Total Calculated Customer Revenue	Total Volumetric Revenue	Total Distribution Revenue	Total Annual Therms
R-5	\$6,629,608	\$12,711,235	\$19,340,843	18,757,687
R-10	\$76,652	\$367,816	\$444,468	541,911
R-6	\$340,415	\$153,133	\$493,547	236,681
Total Residential Service	\$7,046,675	\$13,232,183	\$20,278,858	19,536,279
G-40	\$4,537,388	\$2,084,492	\$6,621,880	11,176,899
G-50	\$745,719	\$357,059	\$1,102,778	1,914,525
G-41	\$1,834,108	\$3,347,990	\$5,182,098	14,363,672
G-51	\$747,402	\$771,709	\$1,519,112	5,343,119
G-42	\$503,600	\$1,072,659	\$1,576,260	6,016,403
G-52	\$527,645	\$2,176,615	\$2,704,260	17,254,540
Total General Service	\$8,895,863	\$9,810,524	\$18,706,387	56,069,158
Total Company	\$15,942,538	\$23,042,707	\$38,985,246	75,605,437

Based on Actual Billing Determinants for 2019 at Current Distribution Rates- Winter

	(1) Total Volumetric Revenue	(2) Total Winter therms	(3)=(1)X(2) Average Distribution Rate \$/therm
R-5	\$10,712,273	15,480,163	\$0.6920
R-10	\$314,430	454,379	\$0.6920
R-6	\$100,278	154,989	\$0.6470
Total Residential Service	\$11,126,981	16,089,531	\$0.6916
G-40	\$1,778,965	9,538,686	\$0.1865
G-50	\$222,688	1,194,040	\$0.1865
G-41	\$2,864,583	11,812,715	\$0.2425
G-51	\$498,192	3,147,592	\$0.1583
G-42	\$885,102	4,461,198	\$0.1984
G-52	\$1,501,396	8,729,046	\$0.1720
Total General Service	\$7,750,926	38,883,277	\$0.1993

Based on Actual Billing Determinants for 2019 at Current Distribution Rates- Summer

	(1) Total Volumetric Revenue	(2) Total Summer therms	(3)=(1)X(2) Average Distribution Rate \$/therm
R-5	\$1,998,962	3,277,524	\$0.6099
R-10	\$53,386	87,532	\$0.6099
R-6	\$52,855	81,692	\$0.6470
Total Residential Service	\$2,105,202	3,446,748	\$0.6108
G-40	\$305,527	1,638,213	\$0.1865
G-50	\$134,370	720,485	\$0.1865
G-41	\$483,406	2,550,957	\$0.1895
G-51	\$273,518	2,195,527	\$0.1246
G-42	\$187,558	1,555,205	\$0.1206
G-52	\$675,219	8,525,494	\$0.0792
Total General Service	\$2,059,598	17,185,881	\$0.1198
Total	\$ 23,042,707	75,605,437	

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
Summary of EEC/LRR Typical Bill Analysis

Energy Efficiency Charge/Lost Revenue Rate (\$/therm)	<u>2019-2020</u>	<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>
Residential	\$0.0613	\$0.0994	\$0.0985	\$0.1203
Commercial & Industrial	\$0.0266	\$0.0367	\$0.0509	\$0.0704

<u>Bill per period</u>	<u>Winter</u>	<u>Summer</u>	<u>Winter</u>	<u>Summer</u>	Winter	Summer	Winter	Summer
Residential Heat - R-5	\$965.88	\$253.49	\$989.78	\$258.50		\$989.22 \$258.38	\$1,002.89	\$261.24
Residential Non-Heat - R-6	\$293.77	\$190.71	\$298.54	\$193.02		\$298.43 \$192.97	\$301.16	\$194.29
G-40 Commercial & Industrial	\$1,883.32	\$595.65	\$1,901.21	\$598.63		\$1,926.36 \$602.81	\$1,960.89	\$608.57
G-41 Commercial & Industrial	\$15,873.32	\$3,247.96	\$16,042.98	\$3,287.04		\$16,281.51 \$3,341.98	\$16,609.07	\$3,417.42
G-51 Commercial & Industrial	\$8,115.57	\$4,059.16	\$8,217.05	\$4,135.37		\$8,359.72 \$4,242.53	\$8,555.63	\$4,389.67

Change from prior period - \$ per period

Residential Heat - R-5		\$23.90	\$5.01		(\$0.56)	(\$0.12)	\$13.68	\$2.86
Residential Non-Heat - R-6		\$4.77	\$2.31		(\$0.11)	(\$0.05)	\$2.73	\$1.32
G-40 Commercial & Industrial		\$17.89	\$2.98		\$25.15	\$4.19	\$34.53	\$5.75
G-41 Commercial & Industrial		\$169.66	\$39.08		\$238.53	\$54.94	\$327.56	\$75.45
G-51 Commercial & Industrial		\$101.47	\$76.21		\$142.67	\$107.15	\$195.92	\$147.15

Change from prior period - %

Residential Heat - R-5		2.47%	1.97%		-0.06%	-0.05%	1.38%	1.11%
Residential Non-Heat - R-6		1.62%	1.21%		-0.04%	-0.03%	0.91%	0.69%
G-40 Commercial & Industrial		0.95%	0.50%		1.32%	0.70%	1.79%	0.95%
G-41 Commercial & Industrial		1.07%	1.20%		1.49%	1.67%	2.01%	2.26%
G-51 Commercial & Industrial		1.25%	1.88%		1.74%	2.59%	2.34%	3.47%