414 Nicollet Mall
Minneapolis, MN 55401

January 31, 2020

—Via Electronic Filing—

Ryan Barlow
Acting Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: 2019 ANNUAL REPORT
ELECTRIC REVENUE DECOUPLING PILOT PROGRAM
DOCKET NO. E002/M-20-___

Dear Mr. Barlow:

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission the enclosed annual compliance report regarding the Company's Revenue Decoupling Mechanism pilot program. This filing is made pursuant to related Order points in the Commission's May 8, 2015 and August 31, 2015 Orders in Docket No. E002/GR-13-868, its June 12, 2017 Order in Docket No. E002/GR-15-826, its February 6, 2019 Order in both Docket Nos. E002/GR-13-868 and E002/GR-15-826, and its June 25, 2019 Order in Docket No. E002/M-19-127.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact Amber Hedlund at (612) 337-2268 or Amber.R.Hedlund@xcelenergy.com or me at (612) 330-7681 or Lisa.R.Peterson@xcelenergy.com if you have any questions regarding this filing.

Sincerely,

/s/

LISA R. PETERSON
MANAGER, REGULATORY ANALYSIS

Enclosures
c: Service Lists

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Valerie Means	Commissioner
Matthew Schuerger	Commissioner
John A. Tuma	Commissioner

IN THE MATTER OF NORTHERN STATES POWER COMPANY'S 2019 ANNUAL REVENUE DECOUPLING MECHANISM PILOT PROGRAM REPORT	DOCKET NO. E002/M-20-___

ANNUAL REPORT

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission this annual compliance report regarding the Company's Revenue Decoupling Mechanism (RDM) pilot program. This filing is made pursuant to related Order points in the Commission's May 8, 2015 and August 31, 2015 Orders in Docket No. E002/GR-13-868, its June 12, 2017 Order in Docket No. E002/GR-15-826, its February 6, 2019 Order in both Docket No. E002/GR-13-868 and E002/GR-15-826, and its June 25, 2019 Order in Docket No. E002/M-19-127.

Decoupling energy sales from revenues aligns the economic interests for both utilities and customers around the shared goal of increased conservation and energy efficiency. By breaking the link between utility energy sales and the revenue collected from utility customers, the natural disincentive for utilities to promote conservation with their customers is minimized – allowing the utilities to maintain approved revenue levels to operate their infrastructure and continue to deliver safe and reliable power to customers. Similarly, customers are rewarded with bills that are lower than they otherwise would have been due to their energy conservation efforts. Decoupling is additionally complementary to the existing shared savings Conservation Improvement Program (CIP) financial incentive model embedded in Minnesota statutes.

Our RDM was a four-year pilot for our residential and small business customers that began with the 2016 calendar year and ended with the 2019 calendar year. Our RDM took into account differences between the sales levels authorized for the Test Year in the 2016-2019 multi-year rate plan (baseline) and actual sales from all sources,

including weather. The RDM adjustments were calculated to match the actual electric revenue per customer as calculated in the RDM, to the electric revenue per customer level approved by the Commission. This may result in a surcharge or credit for each of the customer classes – with surcharges subject to a three percent cap.[1] We perform the calculations each calendar year, and implement the resulting adjustments on customer bills the following April, which remain in effect for a 12-month period. The majority of customers' bills continue to be based on their actual usage. Therefore, customers can still lower their bills if they reduce their electric consumption.

For the 2019 calendar year, our RDM calculations result in an approximate overall $27.0 million of revenues below the baseline. We believe the main driver for the decrease in 2019 actual sales as compared to the baseline sales was our cumulative CIP results since 2016 and other efficiency gains from customer actions not counted in CIP. The RDM adjustment results in surcharges for all three RDM classes. The average monthly surcharge for a residential non-space heating customer is $1.79; $0.45 for a residential space heating customer; and $2.31 for the average small C&I non-demand customer.

As this is the final year of the pilot program, in addition to providing specific 2019 RDM results and class impacts, we provide a summary of these for the full 2016-2019 pilot period. We also provide the information the Commission's past Orders require – including the annual review criteria from the June 19, 2009 Order setting revenue decoupling criteria and standards in Docket No. E,G999/CI-08-132, and our preliminary CIP results for 2019.[2] We also provide a pilot period summary of CIP results.

The balance of this annual report is organized as follows:

I. Background
II. Revenue Decoupling Mechanism Overview
III. Revenue Accrued and Collected
IV. Customer Complaints
V. Revenue Stabilization

[1] Per the Commission's May 8, 2015 Order in Docket No. E002/GR-13-868, the Company may petition to recover costs that were excluded from recovery due to the cap by demonstrating that DSM programs and other Company initiatives were a substantial contributing factor to the declining sales triggering the cap. The cap is set at 3 percent of a customer class' revenues, excluding fuel and riders. These revenues include the impact of the revenue reductions due to the Tax Cuts and Jobs Act, as approved by the PUC in their May 10, 2019 Order in Docket No. E999/CI-17-895.

[2] The CIP results are preliminary because they are not yet finalized. We are due to file our final 2019 CIP results April 1, 2020 as part of our annual CIP Status Report and 2020/2021 Electric CIP Adjustment Factor Petition.

ANNUAL REPORT

I. BACKGROUND

In Docket No. E,G999/CI-08-132, the Commission established criteria and standards for RDM proposals – and in doing so, also established annual reporting requirements for utilities implementing a Revenue Decoupling Mechanism (RDM).[3]

We proposed a "partial" RDM for our residential customers and our small C&I non-demand customers in our 2013 Minnesota electric rate case in Docket No. E002/GR-13-868.[4] The Commission approved our RDM proposal, with changes, in its May 8, 2015 Order.[5] The Order also set out the February 1 annual report filing date, the

[3] See *In the Matter of a Commission Investigation into the Establishment of Criteria and Standards for the Decoupling of Energy Sales from Revenues*, ORDER ESTABLISHING CRITERIA AND STANDARDS TO BE UTILIZED IN PILOT PROPOSALS FOR REVENUE DECOUPLING, pages 8-9 (June 19, 2009).
[4] A partial RDM excludes the effects of weather.
[5] *See In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota*, FINDINGS OF FACT, CONCLUSIONS, AND ORDER, Docket No. E002/GR-13-868, page 71 (May 8, 2015).

April 1 rate adjustment effective date, and additional information to be included in the annual reports.

The Commission's August 31, 2015 ORDER REOPENING, CLARIFYING AND SUPPLEMENTING MAY 8, 2015 ORDER in the 13-868 case maintained the implementation dates in the May 8th Order, and provided specific direction on the timing of the RDM adjustments through 2020, in light of the Company's plan to file a rate case before the end of 2015.

On November 2, 2015, the Company filed a multi-year rate plan (MYRP) electric rate case in Docket No. E002/GR-15-826. The Commission's June 12, 2017 ORDER in that docket extended the term of the RDM Pilot one additional year through 2019, and set the RDM base year as 2016 weather-normalized actual sales and customer counts.

The 2016 calendar year was the first year of our RDM, and intersected with our electric rate case that was pending at the time of the annual RDM calculations. We applied RDM Adjustments to customer bills in conjunction with final rates on October 1, 2017 for a prorated year. For the 2017 and 2018 calendar years, we applied the RDM adjustments to customer bills effective April 1, 2018 and April 1, 2019, respectively.

The adjustments associated with this 2019 report will be effective April 1, 2020 through March 31, 2021.

On November 1, 2019, we filed a three-year multi-year rate plan (3-year MYRP) for 2020 through 2022.[6] With that plan we proposed to extend our current RDM (with a few minor changes) and expand it to the demand customer class. Concurrent with the 3-year MYRP, we also filed a True-Up Mechanisms Petition for which we received verbal approval from the Commission at a December 12, 2019 agenda meeting.[7] The Petition included a sales true-up mechanism for all customer classes that extends through 2020 and we expect to withdraw our 3-year MYRP.

II. REVENUE DECOUPLING MECHANISM OVERVIEW

Our currently-approved RDM is a four-year (calendar 2016-2017-2018-2019) revenue-per-customer full decoupling mechanism that includes sales impacts from all sources.

[6] Docket No. E002/GR-19-564.
[7] Docket No. E002/M-19-688. At this time, the written Order approving the True-Up Mechanisms is pending.

The RDM is focused on the customer classes for which the largest share of fixed costs are recovered through volumetric rates – residential non-space heating,[8] residential space heating,[9] and small C&I non-demand.[10] These customers represent approximately 96 percent of our customer base and 32 percent of our annual electricity sales.

We calculate an RDM deferral each month, matching the actual electric revenue per customer as calculated in the RDM to the electric revenue per customer level approved by the Commission. At the end of each 12-month period, the total deferral for each customer class is divided by the sales forecast for that class for the coming year. That amount becomes the RDM adjustment factor that is applied to customer bills on April 1st – and either adds-to or subtracts-from each customer's energy charges for the following 12 months.[11]

There is no carrying charge on the RDM deferrals, and if actual class revenues lag approved revenue levels, surcharges are subject to an annual three percent cap.[12] The RDM adjustment is listed as a separate line item on customer bills, displayed as "Decoupling Adj."

III. REVENUE ACCRUED AND COLLECTED

On a monthly basis starting in January of the program year, we calculate the baseline revenues using the baseline fixed revenue per customer (FRC) and actual monthly customer counts. We calculate actual revenues using the baseline fixed energy charges (FEC) and actual monthly sales. The monthly RDM deferral is equal to the over- or under-recovery between authorized and actual revenues each month. The baseline fixed revenue per customer is calculated using 2016 weather-normalized actual sales and customer counts.

[8] This includes customers served on rate codes A01, A02, A03, A04, A05, and A06. Customers on rate codes A07 (Automatic Protective Lighting), A08 (Residential Electric Vehicle Service), and A80/A81 (Residential Electric Vehicle Pilot Service) are not included in the RDM.
[9] This includes customers served on rate codes A00, A01, A02, A03, A04, A05, and A06.
[10] This includes customers served on rate codes A05, A06 1S, A06 3S, A06 P, A09, A10, A11, A12, A16, A18, and A22.
[11] The fourth-year/2019 RDM adjustment will be put into effect on April 1, 2020.
[12] The Company has the ability to petition for approval of revenues impacted by the cap in the following program year. The cap is set at three percent of each customer class revenues, excluding fuel and riders.

A. Total Over- or Under-Collection of Allowed Revenues by Customer Class or Group

Table 1 below illustrates the total over- and under-collections of revenue allowed under the RDM by customer class.

Table 1: Total Over- or Under-Collection of Allowed Revenues by Customer Class

2019 Actual Sales and Actual Customer Counts

	($ Millions)				Avg Monthly Customer Surcharge /(Refund)	RDM Rate ($/kWh) Apr 20 – Mar 21
	Total RDM Surcharge/ (Refund)	Carry-Over Balance[13]	Estimated Surcharge Cap	2019 Class Impact[14]		
Residential	$28.2	($1.2)	$25.6	$24.4	$1.79[15]	$0.003069
Residential with Space Heating	$0.3	($0.1)	$0.9	$0.2	$0.45[16]	$0.000512
Small Commercial Non-Demand	$2.8	($0.1)	$2.5	$2.4	$2.31[17]	$0.002849
Total	$31.2			$27.0		

The 2019 RDM results are calculated using rates currently in effect. These rates reflect the impact of the 2017 Tax Cuts and Jobs Act (TCJA), as authorized by the Commission's December 5, 2018 Order in Docket No. E,G999/CI-17-895.

B. Total Collection of Prior Deferred Revenue

The collection of prior deferred revenue for 2018 began on April 1, 2019, and is shown in Attachment B.

[13] Carry-over (over/under-collection) balance from 2018 decoupling deferrals.
[14] Includes the Total RDM surcharge and carry-over balance.
[15] Based on average usage per customer of 583 kWh per month.
[16] Based on average usage per customer of 887 kWh per month.
[17] Based on average usage per customer of 812 kWh per month.

C. RDM Deferral Amounts

Attachments C1 to C3 show the 2019 RDM deferral calculations by class by month. In each of these Attachments, we calculate the RDM factors by class, based on the implementation of the factors from April 1, 2020 through March 31, 2021.

We additionally provide a summary of RDM Deferral amounts for the 2016-2019 pilot period in Section X.

IV. CUSTOMER COMPLAINTS

We implemented a Decoupling category in our customer complaint tracking process to coincide with our October 1, 2017 implementation of the 2016 RDM Adjustments. In 2019, we logged one complaint and no inquiries. The customer suggested changes to the explanation of the Decoupling program as contained in our April 2019 bill Onsert. In response to this complaint, we provided the customer with additional information on our Decoupling program. We also made revisions to the bill Onsert for 2020, and per standard process, requested the Commission's Consumer Affairs Office (CAO) to review the Onsert prior to finalizing it for 2020 RDM customer bills. The CAO approved our bill Onsert language on January 16, 2020.

V. REVENUE STABILIZATION

The credit rating agencies generally have a favorable view of revenue decoupling mechanisms because they stabilize cash flows and net revenues. Strong credit ratings are important to maintain access to the capital markets at attractive terms, so that we can continue to finance our infrastructure investments at the lowest cost for the benefit of our customers. That said, there is no identifiable impact on our cost of capital due to the RDM.

VI. COMPARISON – TRADITIONAL REGULATION TO PARTIAL- AND FULL-DECOUPLING

Our RDM is a full decoupling mechanism that measures actual sales to a baseline – so it captures all differences in sales levels that occur for any reason, including the effects of weather. This compares to a partial decoupling mechanism, which excludes the effects of weather.

Table 2 below shows a summary of revenue impacts under no RDM, partial RDM, and full RDM scenarios.

Table 2: 2019 Revenue Impacts Under RDM Scenarios
($ Millions)

	No RDM	Partial RDM	Full RDM[18]
Residential	$0	$27.4	$28.2
Residential with Space Heating	$0	$0.9	$0.3
Small Commercial Non-Demand	$0	$2.8	$2.8
Total	$0	$31.1	$31.2

Note: (Refund) or Surcharge

We provide the monthly calculations by class under the partial RDM scenario in Attachments D1 through D3. As noted previously, our full decoupling results are provided in Attachments C1 through C3.

VII. CIP INITIATIVES AND RESULTS

In this section, we outline our CIP initiatives and achievements for calendar year 2019.[19] We also provide descriptions of all new and existing DSM programs and conservation initiatives, their overall effectiveness, and any information about circumstances that might have caused sales to the relevant customer groups to differ from forecasted sales.[20]

A. Current Programs

In 2019, the Company offered a multitude of CIP programs that serve our business, residential, and low-income customers. We outline these programs below, and provide more detailed descriptions as Attachment E.

[18] Does not include carry-over balances from 2018 deferrals nor the surcharge caps in order to illustrate impacts between partial and full decoupling.

[19] While this report is for the 2019 RDM program year, we note that the effects of the Company's CIP initiatives and achievements on the RDM are cumulative from the baseline, which in this case would begin with 2017 CIP results. For reference, the Company's actual 2017 CIP Portfolio energy savings achievement was 658 million kWh (or 2.27 percent of sales), which was 152 percent of our approved energy savings goal of 434 million kWh; the Business segment energy savings were approximately 464 million kWh, and Residential and Low-Income collectively saved 194 million kWh. In 2018, CIP Portfolio energy savings achievement was 680 million kWh (or 2.35 percent of sales), which was 157 percent of our approved energy savings goal of 434 million kWh; the Business segment energy savings were approximately 479 million kWh, and Residential and Low-Income collectively saved 201 million kWh.

[20] The Commission's May 8, 2015 Order in Docket No. E002/GR-13-868 docket determined that the analysis of the effectiveness of the RDM would be aided by program description information, among other things.

1. Business

The Business Segment of our portfolio represents all Xcel Energy customers who are not on a residential rate, including small business, large commercial and large industrial customers. We offer studies and assessments as well as prescriptive, custom and holistic programs to best serve our business customers with a wide range of efficiency projects. Our program portfolio encourages customers to choose high efficiency options ranging from a simple lighting fixture replacement to a main production line upgrade or energy-efficient design of a new facility.

Study-based programs also offer assistance to customers, whether they need to identify simple energy efficiency opportunities or change their corporate culture to an energy efficiency model. Holistic programs (such as Commercial Efficiency, Process Efficiency, Business New Construction, Data Center Efficiency, and Turn Key Services) foster a deeper level of customer commitment to energy efficiency and engage customers in long-term energy planning intended to change the way customers manage their energy use and business operations. This individualized approach to identifying customer needs, measuring energy savings, and removing implementation barriers is popular with customers and has proven successful in delivering consistent energy savings. For customers interested in a less hands-on approach, our Self-Direct program offers a strong alternative.

We also offer two load management programs under the business segment: Saver's Switch® for Business and Electric Rate Savings. Saver's Switch® for Business customers receive a monthly discount on their June through September bills in exchange for allowing the Company to cycle their air conditioner on and off during control periods. Business customers participating in the Electric Rate Savings program receive discounts on their demand charges if they can reduce their electric loads during control periods by at least 50 kW. Our Minnesota business customers provide approximately 398 MW of load relief to the NSP System from these programs.

Most of the programs in our business portfolio are available to all of our business customer sectors such as small and large retail, office, hospital, manufacturer, educational and government facilities. A few programs, such as Commercial Efficiency and Process Efficiency, are designed to serve more specific market sectors by better targeting efficiency opportunities and customizing delivery options to better engage customers and match their operations and needs.

The business programs offered in 2019 are largely the same as offered in 2018 and included:

- Business New Construction
- Commercial Efficiency
- Commercial Refrigeration Efficiency
- Cooling Efficiency
- Custom Efficiency
- Data Center Efficiency
- Efficiency Controls
- Fluid Systems Optimization
- Foodservice Equipment
- Heating Efficiency
- Lighting Efficiency
- Motor and Drive Efficiency
- Multi-Family Building Efficiency
- Process Efficiency
- Recommissioning
- Self-Direct
- Turn Key Services
- Saver's Switch for Business
- Electric Rate Savings
- Business Education
- Small Business Lamp Recycling

2. Residential

The Residential Segment of our portfolio consists of more than one million electric and approximately 425,000 natural gas customers who reflect a diverse population with a variety of lifestyles. The residential portfolio offers a comprehensive set of programs, including prescriptive rebates for heating and cooling equipment, whole house solutions for new and existing homes, and educational offerings such as energy audits. The Residential Segment also contains Saver's Switch®, a long-standing load management offering available to residential customers with central air conditioning and electric water heaters. Our Minnesota residential customers provide approximately 339 MW of load relief to the NSP System through our Saver's Switch program.

The residential programs offered in 2019 were the same as 2018 and included:

- Efficient New Home Construction
- Energy Efficient Showerheads

- Energy Feedback
- Home Energy Squad
- Home Lighting
- Insulation Rebate
- Refrigerator Recycling
- Residential Cooling
- Residential Heating (Heating Systems Rebate)
- School Education Kits
- Water Heater Rebate
- Whole Home Efficiency
- Residential Saver's Switch
- Consumer Education
- Home Energy Audit
- Residential Lamp Recycling

3. Low-Income

The Low-Income Segment of our portfolio provides services and products to help income-qualified customers reduce their energy usage and ultimately lower their utility bills. Low-income customers traditionally reside in single- and multi-family rental homes. Our goal for this segment is to educate customers about energy usage and how to reduce monthly utility bills. Somewhat unique to this segment, we provide materials and hands-on assistance to make permanent changes in low-income residences that improve comfort and lower monthly utility costs.

The low-income programs we offered in 2019 were also the same as 2018 and included the following:

- Home Energy Savings
- Low-Income Home Energy Squad
- Multi-Family Energy Savings

B. Effectiveness of New and Current Programs

Preliminary results from our 2019 CIP portfolio show energy savings of approximately 530 million kWh[21] (or 1.84 percent of sales), which is 117 percent of

[21] The 530 million kWh is the annual savings from measures installed in 2019. However, the actual impact on sales in 2019 is approximately half of this, assuming the measures are installed at a constant pace throughout the year.

our approved energy savings goal of 452 million kWh.[22] In 2019, our Business Segment accounted for approximately 336 million kWh in energy savings while our Residential and Low-Income Segment programs collectively saved about 194 million kWh. We are scheduled to submit our final 2019 savings achievements in our annual CIP Status Report by April 1, 2020.

We provide a summary of CIP results for the 2016-2019 pilot period compared to the pre-RDM period in Section X.

C. Other Factors Impacting Energy Consumption

In this section, we discuss other factors that may have contributed to a decline in energy consumption for the period, however focusing primarily on weather as the key variable in the 2019 RDM year.

Generally, sales are influenced by growth in our customer base and customer operations, actions our customers take that impact their usage, the economy, and most heavily, weather. As we discussed previously, weather is the only variable measured in our illustrative RDM calculations.

In 2019, weather conditions were generally colder than normal[23] during both the winter and summer seasons. Winter weather, as measured by Heating Degree Days (HDD), was 6.8 percent colder than the Test Year normal, which generally resulted in *more* electricity sales than if winter weather conditions were equivalent to the Test Year normal weather conditions. Summer weather was also colder than the Test Year normal, with Cooling Degree Days (CDD) 5.2 percent below the Test Year normal weather conditions, which resulted in *less* electricity sales than if summer weather conditions were equivalent to the Test Year normal. The net 2019 weather normalization adjustment for weather-sensitive customer classes was a decrease of 20,862 MWh.

We calculate the weather impact on sales for the residential without space heating, residential with space heating, and small C&I customer classes. For the RDM period, we have weather-normalized 2019 actual calendar month sales to estimate what sales would have been if weather conditions had been equivalent to the Test Year normal weather, based on weather variance from normal conditions and weather-response

[22] Achievement results based on the CIP standard for energy savings as defined in Minn. Stat. § 216B.241, subd. 1a(b).
[23] Normal weather conditions are defined as the 20-year average of the weather data available at the time the Test Year forecast was developed.

coefficients. To determine the weather-normalization adjustment, we calculated the weather-normalization coefficients from regression models that use actual sales as the input variable.[24]

The weather-normalization sales adjustments vary by customer class, depending on the heating and cooling equipment used by customers within the respective classes. We discuss each of the RDM customer classes below, and note that a net reduction in actual sales results in a customer credit, and a net increase in sales results in a customer surcharge.

Residential without space heating. This customer class generally uses natural gas- or propane-fueled forced air furnaces for heating, and centralized air conditioning for cooling. For this customer class the combined weather adjustments for colder than normal weather in the winter months and colder than normal weather in the summer months has led to an *increase* of 3,378 MWh to actual sales.

Residential with space heating. This customer class generally uses electric-powered heat pump technology for winter heating and summer cooling, or electric-powered radiant technology in baseboards and ceilings for heating and window- or wall-mounted air conditioning units for summer cooling. For this customer class the combined weather adjustments for colder than normal weather in the winter months and warmer than normal weather in the summer months has led to a *decrease* of 13,403 MWh to actual sales.

Small C&I. This customer class generally uses natural gas- or propane-fueled forced air furnaces for heating, and centralized air conditioning units for cooling. For this customer class the combined weather adjustments for colder than normal weather in the winter months and warmer than normal weather in the summer months has led to a *decrease* of 10,836 MWh to actual sales.

The 2019 weather impacts account for approximately $0.8 million in surcharges to the Residential without Space Heating class and $0.7 million in credits to the Residential with Space Heating and Small Commercial and Industrial Non-Demand classes.

[24] Provided in Docket No. E002/GR-15-826, Sales Forecast Prefiling (October 2, 2015), Information Request No. 20.

VIII. CUSTOMER COMMUNICATION

In 2019, we included a Bill Onsert containing general educational information about decoupling and the RDM on the April bills of customers in the decoupled classes.[25] We also included a bill message on their April bills that concisely explained the specific RDM adjustment for each respective class.[26]

In 2020, we intend to employ largely the same Onsert that provides general educational information about decoupling, and an updated class-specific bill message that conveys the 2019 adjustment amounts. That said, as noted earlier, we made minor revisions to the Onsert for improved clarity based on customer feedback. We provide the Onsert as Attachment F to this filing, and our proposed bill messages (by class) below.

> Residential non-space heating
> Effective April 1, 2020, the Decoupling Adj on your bill is updated to reflect the results of the fourth year of Xcel Energy's revenue decoupling program. See the additional information about decoupling provided on your billing statement. The Decoupling Adj is a surcharge of $0.003069 per kWh, which will be reflected on your bill for the next 12 months.
>
> Residential with space heating
> Effective April 1, 2020, the Decoupling Adj on your bill is updated to reflect the results of the fourth year of Xcel Energy's revenue decoupling program. See the additional information about decoupling provided on your billing statement. The Decoupling Adj is a surcharge of $0.000512 per kWh, which will be reflected on your bill for the next 12 months.
>
> Small Commercial and Industrial
> Effective April 1, 2020, the Decoupling Adj on your bill is updated to reflect the results of the fourth year of Xcel Energy's revenue decoupling program. See the additional information about decoupling provided on your billing statement. The Decoupling Adj is surcharge of $0.002849 per kWh, which will be reflected on your bill for the next 12 months.

[25] An "Onsert" is the content of what might have been provided to customers in a traditional bill insert printed directly onto the billing statement.
[26] We note that we provided additional information to customers leading up to the October 1, 2017 implementation of RDM Adjustments on customer bills, which we have detailed in prior annual filings in this docket.

IX. TARIFF

We provide the updated RDM Tariff Sheet in redline and final format, showing the 2019 RDM rates that will take effect April 1, 2020 as Attachment G to this Report.

Minnesota Electric Rate Book – MPUC No. 2

Section No. 5, Sheet No. 117, Rev. 5

X. POTENTIAL CHANGES, EXTENSION AND FUTURE ROLE

The Commission's May 8, 2015 Order in the E002/GR-13-868 docket requires that we discuss in our annual filing, any issues we encountered and any improvements or suggestions we have for the future. Additionally, the Commission's June 25, 2019 Order in Docket No. E002/M-19-127 requires that we discuss whether to renew the Company's decoupling program, and potential modifications, including whether the program should be modified to better reflect the value of electric vehicles and potentially beneficial electrification.

At the time of the Commission's June 25, 2019 Order, the RDM was scheduled to terminate at the end of the 2019 plan year. However, in Docket No. E002/M-19-688, the Commission subsequently decided to approve the Company's Petition for Approval of True-up Mechanisms, which was submitted concurrent with its multi-year rate case Petition in Docket No. E002/GR-19-564. This terminates the RDM as scheduled at the end of 2019, and extends the Company's Sales True-up Mechanism through 2020 for all classes, including the RDM classes – effectively decoupling all classes through 2020.

The Company does not propose a renewal of the RDM at this time given that the Sales True-up Mechanism is currently in place, but we anticipate bringing forth a decoupling mechanism proposal in our next rate case. We do not have specific modifications to the pilot RDM to offer or propose at this time. We discuss the role decoupling plays in the transformation of beneficial electrification below.

In this section, we summarize the RDM Pilot results and address the Commission's request to discuss the treatment of beneficial electrification in a decoupling mechanism to support public policies, such as reductions in carbon dioxide (CO_2) emissions through the expanded use of electric vehicles (EV) or beneficial electrification.

A. RDM Pilot Results

The Company's RDM pilot was approved to operate from 2016 through 2019 to coincide with the MYRP timeframe. The pilot was largely successful, as the Company was able to increase CIP achievements while maintaining revenue levels allowed by the Commission (up to a surcharge cap) over the pilot timeframe. Tables 3 and 4 below illustrate the RDM Pilot results and historical CIP achievements before and after the RDM was implemented, respectively.

Table 3: 2016-2019 RDM Pilot Summary
Customer Surcharge/(Refund)[27]

Class	2016	2017	2018	2019
Residential	($2.6)	$25.0	($12.5)	$25.6
Residential with Space Heating	$0.9	$0.9	($0.3)	$0.3
Small Commercial Non-Demand	($0.1)	$1.1	($0.2)	$2.5
Total	**($1.8)**	**$27.0**	**($13.0)**	**$28.4**

Table 4: Xcel Energy CIP Electric Savings (2013-2019)

	Year	First-year Energy Savings (GWh)	Retail Sales (GWh)[28]	Energy Savings as Percent of Retail Sales (GWh)
Pre-Decoupling	2013	495	28,987	1.71%
	2014	481	28,987	1.66%
	2015	497	28,987	1.72%
	Average	*491*	*28,987*	*1.69%*
Post-Decoupling	2016	547	28,987	1.89%
	2017	658	28,948	2.27%
	2018	680	28,948	2.35%
	2019	530	28,948	1.83%
	Average	*604*	*28,957*	*2.09%*

[27] Deferrals are capped and do not include carry-over balances.
[28] In CIP, annual retail sales are calculated as a three-year, weather-normalized average and do not include sales to customers who have received CIP exemption from the Minnesota Department of Commerce.

We recognize that the increase in CIP achievements cannot be solely attributed to the RDM. Several other policies in effect during the RDM could have also contributed to this increase in energy savings. These policies include:

- The Shared Savings Demand Side Management (DSM) Financial Incentive Mechanism,
- Energy savings goals of 1.5 percent of retail sales, and
- The Tax Cuts and Jobs Act may have led to more disposable income for customers to make energy-saving investments.

B. Minnesota Greenhouse Gas Reduction Objectives and Beneficial Electrification

Xcel Energy has announced an ambitious carbon reduction vision that goes beyond Minnesota's current Renewable Energy Standard (RES) and implies steeper long-term cuts in power sector greenhouse gas (GHG) emissions than required by Minnesota's statutory goals for economy-wide GHG reduction. We have pledged to reduce our electricity portfolio carbon dioxide emissions to 80 percent below 2005 levels by 2030, and to provide 100 percent carbon-free electricity to our customers by 2050. The goal in Minnesota law is an economy-wide GHG reduction of 30 percent below 2005 levels by 2025 and 80 percent below 2005 levels by 2050.

To date, Xcel Energy has achieved a 34 percent reduction from 2005 levels, and we are on track to achieve over 80 percent below 2005 levels by 2030. Yet, Minnesota did not achieve the 2015 reduction goal of a 15 percent economy-wide reduction in GHG emissions below 2005 levels.[29] To achieve the deep GHG reductions contained in statute across Minnesota's economy by 2050, it will be necessary for transportation and other sectors outside of the electric sector to also achieve CO2 reductions. Realizing this long-term transformation in a cost-effective manner requires early, sustained and coordinated action by many parties. It is generally recognized that the electricity sector can help enable CO2 reductions in other sectors through supporting deployment of electric vehicles (EVs) and other forms of beneficial electrification (such as building and industrial electrification).

We have several programs already approved that are specifically dedicated to encouraging transportation electrification by providing advisory services, helping

[29] See https://www.pca.state.mn.us/air/greenhouse-gas-emissions-data. The Minnesota Pollution Control Agency estimates that Minnesota achieved an economy-wide GHG reduction of about 12 percent from 2005 to 2016.

lower the upfront costs of charging infrastructure, and encouraging charging at times when energy costs are lowest. These include our Residential Electric Vehicle Service tariff, Residential EV Service Pilot, Fleet EV Service, Public Charging Pilots, and Residential EV Subscription Service Pilot.

Steps for future broader electrification are ongoing, including a survey of stakeholder views on electrification,[30] a stakeholder process investigating issues related to targeted fuel-switching in the state's CIP, which is currently not allowed,[31] and a recently launched electrification action plan to examine the possible benefits and concerns of using electrification as a tool for grid optimization in Minnesota.[32] The Commission also initiated an ongoing proceeding to examine the identification and development of performance metrics and potentially incentives for our electric utility operations, where transportation electrification and beneficial electrification is an active area of interest with stakeholders.[33] Specifically, we proposed performance metrics targeting CO_2 avoidance for (1) electric appliances such as water and space heating, and (2) electrification of transportation through EV rate options.

C. Coordination of Decoupling and Other Tools in the Transformation of Beneficial Electrification

Absent specific program and policies, utilities lack direct incentives to support market transformation and GHG savings beyond the electricity sector that are needed to meet the state's long-term climate goals. Coordination among programs within the regulatory framework will be needed to drive the transformation. This may include removal of the utility disincentive through decoupling, actively incentivizing through performance incentive mechanisms, and encouraging customer adoption through appropriate price signals, among other things.

Revenue decoupling mechanisms are generally a deterrent from efforts to promote new load. A decoupling mechanism allows a utility to adjust its rates once each year to make up for any deficit or surplus revenues from the revenue baseline. This

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[30] The Electrified Frontier: Exploring Stakeholder View on the Emerging Intersection of Electrification, Efficiency, and De-carbonization (10/16/2018). Conservation Applied Research and Development (CARD) Final Report. Prepared by Michaels Energy for the Minnesota Department of Commerce, Division of Energy Resources. http://mn.gov/commerce-stat/pdfs/card-electrified-frontier.pdf

[31] Minnesota 2019 Fuel-Switching Stakeholder Process convened by Minnesota Department of Commerce. http://www.burrenergy.com/mnfuelswitching.html

[32] Electrification Action Plan, Minnesota Department of Commerce Division of Energy Resources and Michaels Energy, Beginning January 7, 2020 within final roadmap expected June 2021. https://michaelsenergy.com/electrification-action-plan/home/

[33] *See* Docket No. E002/CI-17-401.

arrangement is designed to eliminate the disincentive for utilities to promote energy conservation and efficiency, which would otherwise reduce both electricity sales and revenues. However, it also creates a new, potentially unintended disincentive for promoting electrification, as the utility cannot realize additional revenues from successful efforts to advance the adoption of beneficial electrification technologies, such as heat pumps. The Commission took steps to address this issue for EV charging by exempting this load from Xcel Energy's decoupling mechanism pilot. However, only the portion of this load served that is separately metered can be factored into the analysis. Thus, while the Commission partially removed the disincentive to promote new EV load, there is still a lack of affirmative incentive to actively encourage it as well as to actively encourage other beneficial electrification. For these reasons, performance incentives may have a role to play in the broader adoption of beneficial electrification.

Customers adopting beneficial electrification technologies could also benefit from rate options and load management strategies. Current rate offerings include standard service with flat seasonal energy charges, as well as two-period time of day service. The Company is also piloting a three-period time of use service for a select residential customer group, and has recently proposed a three-period time of use service for C&I customers. Additional options could come in the form of targeted rates for separately metered load or customer incentives through a rider such as CIP.

The current DSM shared savings incentive mechanism has long been an important tool for incenting utilities to pursue energy savings beyond statutory obligations and drive greater efficiency across Minnesota. However, utilities are currently not allowed to pursue targeted fuel switching projects[34] within CIP (i.e. those projects that incent customers to switch from one end-use fuel to another).[35] This directly precludes

[34] Fuel switching has been defined as "a utility's promotion of a measure that will result in a greater increase in that utility's energy sales than if the measure had not been implemented." *See* Report to the Commissioner of the Department of Commerce, BTU Comparison in Benefit-Cost Analysis for the Conservation Improvement Program at page 2, Docket No. G008/CIP-00-864.07 (October 29, 2003).

[35] *See* Order, In the Matter of Comments Concerning Btu Comparisons in Cost-Benefit Analysis for Conservation Improvement Programs, Docket No. G008/CIP-00-864.07, Ordering Point 1 (March 7, 2005). A very narrow exception to the CIP fuel-switching order was outlined through additional Department guidance issued on August 3, 2012. Consistent with recommendations from the 2011 Minnesota Environmental Initiative 1.5 percent Energy Efficiency Solution Project, the Department determined that "electric utilities may provide direct space heating and domestic hot water energy savings measures to low-income delivered fuel customers and low-income small natural gas municipal utility customers offered in conjunction with the Weatherization Assistance Program." The Department also stated that "utilities may claim the energy savings from those measures towards their CIP energy savings goals." *See* CIP Policy Guidelines: Energy Savings from Delivered Fuels, Department of Commerce Policy Guidance (August 3, 2012) and Minnesota Environmental Initiative 1.5% Energy Efficiency Solutions Project, Final Report (March 2011).

utilities from using CIP funds to encourage any type of beneficial electrification projects, regardless of energy savings or emissions benefits. Beyond CIP funds, utilities are also not allowed to spend advertising funds to promote greater electricity consumption.[36]

D. Summary

The CO_2 goals we have embraced, the electric grid transformation we have initiated, and the other sector beneficial electrification actions we are taking are consistent with the GHG reductions that Minnesota must eventually achieve. Minnesota is well positioned to define innovative performance incentive mechanisms, including decoupling, that consider the current stage of economy-wide GHG reduction across multiple sectors, while properly incentivizing the utility company to accelerate electrification and GHG reductions necessary to meet state-wide goals. There may be a role for a decoupling mechanism to play. To be successful, the design will need to be coordinated with other regulatory mechanisms such as the current CIP incentive and performance-based ratemaking considerations as further development of Minnesota's EV and beneficial electrification framework occurs.

CONCLUSION

Overall, we believe the four-year RDM pilot achieved its objective of removing the financial disincentive to promote energy efficiency and conservation that exists because the Company recovers most of its fixed costs through volumetric rates – creating a financial incentive to maintain or increase sales to recover its costs. Coordination among regulatory mechanisms including decoupling will be important as we move towards broader adoption of beneficial electrification.

Dated: January 31, 2020

Northern States Power Company

[36] Minn. Stat. § 216B.16 subd. 8 (a) part (3).

Xcel Energy Revenue Decoupling Mechanism Timeline

Approval of the Revenue Decoupling Mechanism

Docket No. E002/GR-13-868

- May 8, 2015 – Commission Order approving the RDM.
- August 31, 2015 – Commission Order modifying the RDM implementation if the Company files a 2016 Test Year electric rate case.
- September 2, 2015 – the Company files its compliance tariff sheets.
- October 16, 2015 – the Company files its plan for customer education and outreach.

Docket No. E002/GR-15-826

- November 2, 2015 – the Company files an Application for an increase in electric rates.
- August 16, 2016 – the Company submits a Stipulation of Settlement that includes a one year extension of the RDM.
- June 12, 2017 – Commission Order approving Settlement, extending RDM by one year.

Pilot Year 1 - 2016

- January 1, 2016 – RDM deferral calculations begin.
- December 31, 2016 – Final date of Year 1 deferrals.
- February 1, 2017 – the Company submits its Year 1 Decoupling Report with estimated customer impacts pending final outcomes from its pending rate case and final Conservation Improvement Program (CIP) results.
- July 12, 2017 – the Company submits final RDM results and customer impacts with its final rates compliance filing in Docket No. E002/GR-15-826.
- September 29, 2017 – Commission Order approving final rates compliance, including the proposed October 1, 2017 implementation date for the RDM adjustments.
- Oct 1, 2017 – the Company implements the Decoupling Adjustment on customer bills in conjunction with final rates.
- Oct 26, 2017 – PUC Staff issues Notice of Comment Period on Company's Year 1 Decoupling Report.
- December 27, 2017 – Department of Commerce files Comments on Company's Year 1 Decoupling Report.
- February 15, 2018 - Commission Order approving the Company's Year 1 Decoupling Report and Decoupling Adjustment.

Pilot Year 2 - 2017

- January 1, 2017 – the Company begins calculating Year 2 RDM deferrals.
- December 31, 2017 – Final date of Year 2 deferrals.
- February 1, 2018 – the Company submits its Year 2 Decoupling Report with estimated customer impacts pending final CIP results.
- April 1, 2018 – the Company implements the Year 2 Decoupling Adjustment on customer bills, including reconciliation of prior year deferral revenues.
- April 4, 2018 – Department of Commerce files Comments on Company's Year 2 Decoupling Report.
- January 31, 2019 – the 2017 Decoupling Report was approved at the Commission hearing. The Order is currently pending as of February 1, 2019.

Pilot Year 3 - 2018

- January 1, 2018 – the Company begins calculating Year 3 RDM deferrals.
- December 31, 2018 – Final date of Year 3 deferrals.
- February 1, 2019 – the Company submits its Year 3 Annual Report with estimated customer impacts pending final CIP results.
- April 1, 2019 – the Company implements the Year 3 Decoupling Adjustment on customer bills, including reconciliation of prior year deferral revenues.
- April 2, 2019 – Department of Commerce files Comments on Company's Year 3 Decoupling Report.
- June 25, 2019 – Commission Order approving the Company's Year 3 Decoupling Report and Decoupling Adjustment.

Pilot Year 4 - 2019

- January 1, 2019 – the Company begins calculating Year 4 RDM deferrals.
- December 31, 2019 – Final date of Year 4 deferrals.
- January 31, 2020 – the Company submits its Year 4 Annual Report with estimated customer impacts pending final CIP results.
- April 1, 2020 – the Company implements the Year 4 Decoupling Adjustment on customer bills, including reconciliation of prior year deferral revenues.
- February 1, 2021 – the Company reports over/under collections from the Year 4 (2019) decoupling factors.
- April 1, 2021 – Any over/under collections from the Year 4 (2019) decoupling recoveries will be included as part of the Sales True-up Mechanism factors for 2020, effective April 1, 2021 for 12 months.

Northern States Power Company, a Minnesota corporation
State of Minnesota- Electric Utility
2018 Decoupling Collections Tracker

Month	Actual/Forecast	Residential	Residential w/Space Heating	Small C&I Non-Demand
Apr 19	Actual	100,835	20,342	37,523
May 19	Actual	74,739	(3,510)	7,176
Jun 19	Actual	(2,154,194)	(44,925)	(33,536)
Jul 19	Actual	(1,492,258)	(28,188)	(16,066)
Aug 19	Actual	(1,273,491)	(23,782)	(14,969)
Sep 19	Actual	(1,079,991)	(21,478)	(13,672)
Oct 19	Actual	(948,217)	(29,315)	(12,841)
Nov 19	Actual	(999,378)	(39,620)	(14,351)
Dec 19	Actual	(1,152,832)	(54,606)	(15,776)
Jan 20	Forecast	(1,235,382)	(64,893)	(17,703)
Feb 20	Forecast	(1,030,332)	(54,239)	(15,552)
Mar 20	Forecast	(992,145)	(43,648)	(16,257)
2018 Deferral Collections		(12,182,645)	(387,861)	(126,025)
Prior Period Balance		(849,693)	(162,354)	6,275
2018 Deferral		(12,542,022)	(290,755)	(184,588)
Carry-Over Balance		(1,209,070)	(65,248)	(52,288)

Residential RDM Rate Calculation - Full Decoupling

Residential TY 2016 kWh	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
RES_A01	425,506,563	362,869,503	354,138,223	295,054,929	320,818,644	420,191,116	517,220,204	497,213,618	372,013,297	332,448,127	346,015,064	414,157,371	4,657,646,658
RES_A02	74,174	73,766	65,475	51,003	55,644	61,183	76,400	80,107	58,967	55,327	57,438	79,330	788,813
RES_A02_Off	175,633	161,201	167,221	125,925	126,479	141,457	162,762	136,734	115,681	119,849	127,709	193,681	1,754,331
RES_A03	322,403,930	265,269,191	264,398,931	221,827,175	247,148,846	327,302,201	406,964,329	372,509,339	290,318,063	255,262,902	261,578,388	314,098,212	3,549,081,508
RES_A04	81,005	76,936	67,541	52,013	59,191	71,801	88,785	88,849	66,475	59,972	64,625	84,520	861,713
RES_A04_Off	196,928	173,823	155,170	128,665	135,925	157,537	178,808	155,415	130,591	132,437	145,121	192,218	1,882,638
RES_A05	1,068,888	985,100	780,588	503,151	347,179	298,325	326,327	296,083	218,469	217,465	367,789	803,007	6,212,371
RES_A05 - Optional	17,380	16,018	12,692	8,181	5,645	7,336	8,024	7,281	5,372	3,536	5,980	13,057	110,504
RES_A06	13,861	8,312	11,475	8,587	7,849	7,962	7,620	6,025	4,948	4,813	5,263	8,368	95,083
RES_A06_Off	488,887	468,116	358,077	226,441	142,406	71,130	53,817	41,856	42,396	74,147	134,944	364,871	2,467,088
Residential TY 2016 kWh	750,027,249	630,101,965	620,155,393	517,986,071	568,847,808	748,310,046	925,087,077	870,535,306	662,974,259	588,378,575	608,502,321	729,994,636	8,220,900,707

Res 2019 Energy Chg	Win	Sum
RES_A01, A03	0.088030	0.103010
RES_A02, A04	0.165080	0.204970
RES_A02_Off, A04_Off	0.041700	0.041700
RES_A05	0.044870	0.044870
RES_A05 Optional	0.044870	0.103010
RES_A06	0.360000	0.360000
RES_A06_Off	0.036650	0.036650

Res 2019 Energy Chg Rev	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Annual
RES_A01	37,457,343	31,943,402	31,174,788	25,973,685	28,241,665	43,283,887	53,278,853	51,217,975	38,321,090	29,265,409	30,459,706	36,458,273	437,076,076
RES_A02	12,245	12,177	10,809	8,420	9,186	12,541	15,660	16,419	12,086	9,133	9,482	13,096	141,253
RES_A02_Off	7,324	6,722	6,973	5,251	5,274	5,899	6,787	5,702	4,824	4,998	5,325	8,077	73,156
RES_A03	28,381,218	23,351,647	23,275,038	19,527,446	21,756,513	33,715,400	41,921,396	38,372,187	29,905,664	22,470,793	23,026,746	27,650,066	333,354,112
RES_A04	13,372	12,701	11,150	8,586	9,771	14,717	18,198	18,211	13,625	9,900	10,668	13,953	154,853
RES_A04_Off	8,212	7,248	6,471	5,365	5,668	6,569	7,456	6,481	5,446	5,523	6,052	8,016	78,506
RES_A05	47,961	44,201	35,025	22,576	15,578	13,386	14,642	13,285	9,803	9,758	16,503	36,031	278,749
RES_A05 Optional	780	719	570	367	253	756	827	750	553	159	268	586	6,587
RES_A06	4,990	2,992	4,131	3,091	2,826	2,866	2,743	2,169	1,781	1,733	1,895	3,012	34,230
RES_A06_Off	17,918	17,156	13,124	8,299	5,219	2,607	1,972	1,534	1,554	2,717	4,946	13,373	90,419
Residential 2019 Energy Chg Rev	65,951,362	55,398,967	54,538,077	45,563,088	50,051,953	77,058,627	95,268,535	89,654,713	68,276,426	51,780,122	53,541,590	64,204,481	771,287,941

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Annual
Res Energy Chg Rev - 2019	65,951,362	55,398,967	54,538,077	45,563,088	50,051,953	77,058,627	95,268,535	89,654,713	68,276,426	51,780,122	53,541,590	64,204,481	771,287,941
CCRC Rev @ 0.003133/kWh	2,349,835	1,974,109	1,942,947	1,622,850	1,782,200	2,344,455	2,898,298	2,727,387	2,077,098	1,843,390	1,906,438	2,287,073	25,756,082
Res Energy Chg Rev w/o CCRC - 2019	63,601,527	53,424,857	52,595,130	43,940,237	48,269,753	74,714,171	92,370,237	86,927,326	66,199,328	49,936,732	51,635,152	61,917,408	745,531,859

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2016 Cust Count	1,093,369	1,094,551	1,095,351	1,095,831	1,096,525	1,096,695	1,096,548	1,097,862	1,098,165	1,099,552	1,100,537	1,101,823	1,097,234
2016 kWh	750,027,249	630,101,965	620,155,393	517,986,071	568,847,808	748,310,046	925,087,077	870,535,306	662,974,259	588,378,575	608,502,321	729,994,636	8,220,900,707

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - 2019	58.17	48.81	48.02	40.10	44.02	68.13	84.24	79.18	60.28	45.42	46.92	56.20	
FEC - 2019	0.0847990	0.0847876	0.0848096	0.0848290	0.0848553	0.0998439	0.0998503	0.0998550	0.0998520	0.0848718	0.0848561	0.0848190	

2019 (YEAR 4) Residential

Allowed Rev = FRC * C	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - Fixed Rev per Customer	58.17	48.81	48.02	40.10	44.02	68.13	84.24	79.18	60.28	45.42	46.92	56.20	
C = Actual Customer Count	1,119,836	1,120,611	1,121,725	1,122,496	1,122,899	1,122,778	1,123,150	1,123,930	1,124,572	1,125,385	1,126,215	1,127,457	
Allowed Revenue	65,141,118	54,696,841	53,861,522	45,009,441	49,430,754	76,491,119	94,611,118	88,991,358	67,791,188	51,109,951	52,839,916	63,357,921	763,332,248
Actual Rev = FEC * kWh	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FEC - Fixed Energy Charge	0.0847990	0.0847876	0.0848096	0.0848290	0.0848553	0.0998439	0.0998503	0.0998550	0.0998520	0.0848718	0.0848561	0.0848190	
kWh = Actual Sales	750,821,629	628,126,215	647,811,795	537,070,805	569,805,398	714,889,178	918,981,067	784,133,012	664,810,904	583,537,886	611,231,897	709,517,303	
Actual Revenue	63,668,889	53,257,338	54,940,658	45,559,176	48,351,010	71,377,303	91,760,550	78,299,623	66,382,720	49,525,894	51,866,774	60,180,541	735,170,476
Deferral Calculation: Allowed Revenue - Actual Revenue													
Under / (Over) Collection	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Allowed Revenue	65,141,118	54,696,841	53,861,522	45,009,441	49,430,754	76,491,119	94,611,118	88,991,358	67,791,188	51,109,951	52,839,916	63,357,921	
Actual Revenue	63,668,889	53,257,338	54,940,658	45,559,176	48,351,010	71,377,303	91,760,550	78,299,623	66,382,720	49,525,894	51,866,774	60,180,541	
Under / (Over) Collection	1,472,229	1,439,504	-1,079,136	-549,735	1,079,744	5,113,817	2,850,568	10,691,735	1,408,468	1,584,057	973,143	3,177,380	28,161,772

TY 2019 Base Revenue	852,605,743
Cap at 3% of Base Revenue	25,578,172

Surcharge / (Refund) $	25,578,172	
Carry-Over Balance	-1,209,070	
Apr 2020 - Mar 2021 Sales (kWh)	7,941,316,397	
RDM Rider Rate ($/kWh) - Apr 2020 - Mar 2021	**0.003069**	Surcharge Factor

Average monthly customer surcharge (Apr20-Mar21 avg customers) $1.79

Residential with Space Heating RDM Rate Calculation - Full Decoupling

Res Space Htg TY 2016 kWh	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
RSH_A00	23,954	17,433	15,232	9,986	13,173	16,902	11,564	18,012	12,155	17,323	19,082	20,464	195,280
RSH_A01	36,152,093	28,278,898	26,615,266	12,753,026	12,091,514	12,641,518	14,584,699	14,336,148	11,928,548	15,257,382	21,518,639	31,027,991	237,185,721
RSH_A02	30,599	28,189	24,180	10,840	12,862	10,668	12,214	15,487	11,893	15,814	20,255	26,126	219,127
RSH_A02_Off	68,684	58,503	48,200	24,313	26,503	22,865	23,985	25,698	20,701	30,556	40,239	55,544	445,790
RSH_A03	18,035,787	14,177,211	13,783,767	6,964,807	6,963,747	7,464,341	8,718,851	8,587,046	7,241,618	8,786,668	11,789,254	15,347,108	127,860,205
RSH_A04	33,270	24,898	24,323	11,322	12,127	11,753	13,870	16,220	12,263	15,727	19,830	29,222	224,824
RSH_A04_Off	76,006	53,257	51,383	25,915	24,790	25,223	27,218	26,005	22,978	32,049	40,539	67,267	472,629
RSH_A05	4,721,259	3,644,465	3,235,561	1,463,792	1,161,296	1,089,439	1,299,339	1,292,835	947,932	1,117,689	1,974,641	3,887,843	25,836,090
RSH_A05 Optional	631,642	487,581	432,876	195,836	155,366	133,276	158,954	158,158	115,965	149,532	264,181	520,142	3,403,510
RSH_A06	164	101	47	78	110	117	106	80	101	149	197	204	1,454
RSH_A06_Off	18,939	14,063	10,947	4,307	2,354	672	348	300	421	1,013	3,228	12,962	69,555
Res Space Htg TY 2015 kWh	59,792,398	46,784,597	44,241,783	21,464,221	20,463,842	21,416,774	24,851,148	24,475,989	20,314,576	25,423,901	35,690,085	50,994,872	395,914,186

RSH 2019 Energy Chg	Win	Sum
RSH_A00	0.088030	0.103010
RSH_A01, A03	0.059880	0.103010
RSH_A02, A04	0.092840	0.204970
RSH_A02_Off, A04_Off	0.041700	0.041700
RSH_A05	0.044870	0.044870
RSH_A05 Optional	0.044870	0.103010
RSH_A06	0.360000	0.360000
RSH_A06_Off	0.036650	0.036650

RSH 2019 Energy Chg Rev	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
RSH_A00	2,109	1,535	1,341	879	1,160	1,741	1,191	1,855	1,252	1,525	1,680	1,801	18,069
RSH_A01	2,164,787	1,693,340	1,593,722	763,651	724,040	1,302,203	1,502,370	1,476,767	1,228,760	913,612	1,288,536	1,857,956	16,509,744
RSH_A02	2,841	2,617	2,245	1,006	1,194	2,187	2,504	3,174	2,438	1,468	1,880	2,426	25,980
RSH_A02_Off	2,864	2,440	2,010	1,014	1,105	953	1,000	1,072	863	1,274	1,678	2,316	18,589
RSH_A03	1,079,983	848,931	825,372	417,053	416,989	768,902	898,129	884,552	745,959	526,146	705,941	918,985	9,036,940
RSH_A04	3,089	2,312	2,258	1,051	1,126	2,409	2,843	3,325	2,513	1,460	1,841	2,713	26,940
RSH_A04_Off	3,169	2,221	2,143	1,081	1,034	1,052	1,135	1,084	958	1,336	1,690	2,805	19,709
RSH_A05	211,843	163,527	145,180	65,680	52,107	48,883	58,301	58,010	42,534	50,151	88,602	174,448	1,159,265
RSH_A05 Optional	28,342	21,878	19,423	8,787	6,971	13,729	16,374	16,292	11,946	6,710	11,854	23,339	185,643
RSH_A06	59	36	17	28	40	42	38	29	36	54	71	74	524
RSH_A06_Off	694	515	401	158	86	25	13	11	15	37	118	475	2,549
RSH 2019 Energy Chg Rev	3,499,780	2,739,352	2,594,112	1,260,388	1,205,852	2,142,125	2,483,898	2,446,170	2,037,275	1,503,772	2,103,892	2,987,337	27,003,952

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
RSH Energy Chg Rev - 2019	3,499,780	2,739,352	2,594,112	1,260,388	1,205,852	2,142,125	2,483,898	2,446,170	2,037,275	1,503,772	2,103,892	2,987,337	27,003,952
CCRC Rev @ 0.003133/kWh	187,330	146,576	138,610	67,247	64,113	67,099	77,859	76,683	63,646	79,653	111,817	159,767	1,240,399
RSH Energy Chg Rev w/o CCRC - 2019	3,312,450	2,592,776	2,455,502	1,193,141	1,141,739	2,075,026	2,406,039	2,369,487	1,973,629	1,424,119	1,992,075	2,827,570	25,763,553

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2016 Cust Count	33,415	33,712	33,773	33,852	33,855	33,844	33,822	34,031	34,011	34,015	34,037	34,108	
2016 kWh	59,792,398	46,784,597	44,241,783	21,464,221	20,463,842	21,416,774	24,851,148	24,475,989	20,314,576	25,423,901	35,690,085	50,994,872	

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - 2019	99.13	76.91	72.71	35.25	33.72	61.31	71.14	69.63	58.03	41.87	58.53	82.90	
FEC - 2019	0.0553992	0.0554194	0.0555019	0.0555874	0.0557930	0.0968879	0.0968180	0.0968086	0.0971533	0.0560150	0.0558159	0.0554481	

2019 (YEAR 4) RSH

Allowed Rev = FRC * C	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - Fixed Rev per Customer	99.13	76.91	72.71	35.25	33.72	61.31	71.14	69.63	58.03	41.87	58.53	82.90	
C = Actual Customer Count	35,639	35,767	36,017	36,040	36,204	36,181	36,165	36,190	36,294	36,349	36,454	36,595	
Allowed Revenue	3,532,917	2,750,825	2,618,655	1,270,259	1,220,957	2,218,311	2,572,716	2,519,812	2,106,109	1,521,838	2,133,534	3,033,743	27,499,676
Actual Rev = FEC * kWh	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FEC - Fixed Energy Charge	0.0553992	0.0554194	0.0555019	0.0555874	0.0557930	0.0968879	0.0968180	0.0968086	0.0971533	0.0560150	0.0558159	0.0554481	
kWh = Actual Sales	61,762,882	51,629,186	42,279,676	27,393,044	24,918,739	21,479,509	26,649,138	22,529,405	20,341,226	28,021,512	43,592,565	51,728,510	
Actual Revenue	3,421,614	2,861,260	2,346,601	1,522,709	1,390,291	2,081,105	2,580,117	2,181,040	1,976,218	1,569,625	2,433,159	2,868,249	27,231,987
Deferral Calculation: Allowed Revenue - Actual Revenue													
Under / (Over) Collection	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Allowed Revenue	3,532,917	2,750,825	2,618,655	1,270,259	1,220,957	2,218,311	2,572,716	2,519,812	2,106,109	1,521,838	2,133,534	3,033,743	
Actual Revenue	3,421,614	2,861,260	2,346,601	1,522,709	1,390,291	2,081,105	2,580,117	2,181,040	1,976,218	1,569,625	2,433,159	2,868,249	
Under / (Over) Collection	111,303	-110,435	272,053	-252,450	-169,333	137,207	-7,401	338,771	129,891	-47,787	-299,625	165,495	267,689

TY 2019 Base Revenue	30,505,469
Cap at 3% of Base Revenue	915,164

Surcharge / (Refund) $	267,689	
Carry-Over Balance	-65,248	
Apr 2020 - Mar 2021 Sales (kWh)	395,009,621	
RDM Rider Rate ($/kWh) - Apr 2020 - Mar 2021	**0.000512**	Surcharge Factor

Average monthly customer surcharge (Apr20-Mar21 avg customers) $0.45

Small Commercial non-demand RDM Rate Calculation - Full Decoupling

SCI non-demand TY 2016 kWh	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
SCI_A05	280,148	278,047	189,407	130,963	84,939	59,155	77,318	80,160	65,043	70,907	84,096	201,909	1,602,093
SCI_A05 Optional	18,517	18,378	12,519	8,656	5,614	178	233	241	196	4,687	5,559	13,346	88,125
SCI_A06	20,056	13,142	11,606	11,104	10,140	10,069	12,585	12,642	9,678	8,650	9,169	8,190	137,031
SCI_A06 1S	178,302	112,504	136,752	74,118	56,735	15,082	18,073	11,297	9,158	26,863	39,549	107,268	785,701
SCI_A06 3S	189,306	119,447	145,192	78,693	60,237	75,152	90,058	56,293	45,634	28,521	41,990	113,889	1,044,412
SCI_A06 P	0	0	0	0	0	0	0	0	0	0	0	0	0
SCI_A09	2,016	2,049	1,850	2,162	2,052	2,158	2,136	1,898	1,977	1,958	2,171	2,048	24,473
SCI_A10	72,732,571	69,077,420	68,058,230	61,006,005	59,701,876	64,615,613	74,346,556	73,221,025	62,667,393	58,809,523	56,856,299	67,241,503	788,334,014
SCI_A11	22,712	19,795	21,760	20,904	20,661	20,172	20,034	18,165	16,947	17,785	16,308	19,712	234,956
SCI_A12	1,339,251	1,378,147	1,381,421	1,188,759	1,208,878	992,039	1,177,734	1,078,621	986,863	1,062,228	1,142,574	1,361,957	14,298,471
SCI_A12_Off	2,973,997	2,707,914	2,711,015	2,530,915	2,422,062	2,198,270	2,156,675	1,990,452	1,885,572	2,023,636	2,219,280	2,704,514	28,524,302
SCI_A16	1,159,133	1,213,909	1,143,651	1,105,733	1,260,541	1,098,433	962,778	1,178,308	874,390	1,199,043	1,126,222	1,168,699	13,490,842
SCI_A18	2,810,929	1,917,468	2,456,663	2,332,188	2,341,707	2,350,157	2,465,049	2,063,696	2,092,372	2,278,554	2,301,705	2,144,146	27,554,633
SCI_A22	181,554	188,805	185,966	201,580	206,369	199,305	213,912	183,986	182,567	196,225	202,482	202,948	2,345,699
SCI non-demand TY 2016 kWh	81,908,491	77,047,026	76,456,033	68,691,779	67,381,811	71,635,784	81,543,141	79,896,785	68,837,790	65,728,580	64,047,403	75,290,128	878,464,750

SCI n-d 2019 Energy Chg	win	sum
SCI_A05	0.044870	0.044870
SCI_A05 Optional	0.044870	0.092560
SCI_A06	0.360000	0.360000
SCI_A06 1S, A06_3S	0.036650	0.036650
SCI_A06 P	0.035600	0.035600
SCI_A09, A10, A11	0.077570	0.092560
SCI_A12	0.117230	0.148800
SCI_A12_Off	0.041700	0.041700
SCI_A16, A18, A22	0.068140	0.079190

SCI n-d 2019 Energy Chg Rev	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
SCI_A05	12,570	12,476	8,499	5,876	3,811	2,654	3,469	3,597	2,918	3,182	3,773	9,060	71,886
SCI_A05 Optional	831	825	562	388	252	16	22	22	18	210	249	599	3,995
SCI_A06	7,220	4,731	4,178	3,997	3,650	3,625	4,531	4,551	3,484	3,114	3,301	2,948	49,331
SCI_A06 1S	6,535	4,123	5,012	2,716	2,079	553	662	414	336	985	1,449	3,931	28,796
SCI_A06 3S	6,938	4,378	5,321	2,884	2,208	2,754	3,301	2,063	1,672	1,045	1,539	4,174	38,278
SCI_A06 P	0	0	0	0	0	0	0	0	0	0	0	0	0
SCI_A09	156	159	144	168	159	200	198	176	183	152	168	159	2,021
SCI_A10	5,641,866	5,358,335	5,279,277	4,732,236	4,631,075	5,980,821	6,881,517	6,777,338	5,800,494	4,561,855	4,410,343	5,215,923	65,271,080
SCI_A11	1,762	1,536	1,688	1,622	1,603	1,867	1,854	1,681	1,569	1,380	1,265	1,529	19,355
SCI_A12	157,000	161,560	161,944	139,358	141,717	147,615	175,247	160,499	146,845	124,525	133,944	159,662	1,809,917
SCI_A12_Off	124,016	112,920	113,049	105,539	101,000	91,668	89,933	83,002	78,628	84,386	92,544	112,778	1,189,463
SCI_A16	78,983	82,716	77,928	75,345	85,893	86,985	76,242	93,310	69,243	81,703	76,741	79,635	964,725
SCI_A18	191,537	130,656	167,397	158,915	159,564	186,109	195,207	163,424	165,695	155,261	156,838	146,102	1,976,705
SCI_A22	12,371	12,865	12,672	13,736	14,062	15,783	16,940	14,570	14,457	13,371	13,797	13,829	168,452
SCI n-d 2019 Energy Chg Rev	6,241,785	5,887,280	5,837,671	5,242,781	5,147,073	6,520,651	7,449,123	7,304,647	6,285,543	5,031,167	4,895,953	5,750,330	71,594,003

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
RSH Energy Chg Rev - 2019	6,241,785	5,887,280	5,837,671	5,242,781	5,147,073	6,520,651	7,449,123	7,304,647	6,285,543	5,031,167	4,895,953	5,750,330	71,594,003
CCRC Rev @ 0.003133/kWh	256,619	241,388	239,537	215,211	211,107	224,435	255,475	250,317	215,669	205,928	200,661	235,884	2,752,230
RSH Energy Chg Rev w/o CCRC - 2019	5,985,166	5,645,892	5,598,134	5,027,569	4,935,966	6,296,216	7,193,649	7,054,331	6,069,874	4,825,239	4,695,292	5,514,446	68,841,773

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016 Cust Count	85,416	85,362	85,404	85,316	85,279	85,220	85,110	85,174	85,177	85,290	85,289	85,336
2016 kWh	81,908,491	77,047,026	76,456,033	68,691,779	67,381,811	71,635,784	81,543,141	79,896,785	68,837,790	65,728,580	64,047,403	75,290,128

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
FRC - 2019	70.07	66.14	65.55	58.93	57.88	73.88	84.52	82.82	71.26	56.57	55.05	64.62
FEC - 2019	0.0730714	0.0732785	0.0732203	0.0731903	0.0732537	0.0878921	0.0882189	0.0882930	0.0881765	0.0734116	0.0733096	0.0732426

2019 (YEAR 4) SCI non-demand

Allowed Rev = FRC * C	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - Fixed Rev per Customer	70.07	66.14	65.55	58.93	57.88	73.88	84.52	82.82	71.26	56.57	55.05	64.62	
C = Actual Customer Count	85,682	85,652	85,691	85,596	85,617	85,582	85,522	85,541	85,582	85,711	85,819	85,990	
Allowed Revenue	6,003,804	5,665,072	5,616,946	5,044,069	4,955,529	6,322,961	7,228,471	7,084,727	6,098,736	4,849,057	4,724,469	5,556,708	69,150,551
Actual Rev = FEC * kWh	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FEC - Fixed Energy Charge	0.0730714	0.0732785	0.0732203	0.0731903	0.0732537	0.0878921	0.0882189	0.0882930	0.0881765	0.0734116	0.0733096	0.0732426	
kWh = Actual Sales	80,658,635	73,292,986	81,002,138	67,110,384	66,316,667	67,924,479	75,649,674	70,796,358	64,379,002	60,559,861	67,612,426	74,291,387	
Actual Revenue	5,893,837	5,370,801	5,931,001	4,911,827	4,857,940	5,970,022	6,673,733	6,250,826	5,676,714	4,445,795	4,956,643	5,441,296	66,380,434
Deferral Calculation: Allowed Revenue - Actual Revenue													
Under / (Over) Collection	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Allowed Revenue	6,003,804	5,665,072	5,616,946	5,044,069	4,955,529	6,322,961	7,228,471	7,084,727	6,098,736	4,849,057	4,724,469	5,556,708	
Actual Revenue	5,893,837	5,370,801	5,931,001	4,911,827	4,857,940	5,970,022	6,673,733	6,250,826	5,676,714	4,445,795	4,956,643	5,441,296	
Under / (Over) Collection	109,968	294,271	-314,055	132,243	97,589	352,939	554,738	833,900	422,021	403,262	-232,173	115,412	2,770,116

TY 2019 Base Revenue	81,707,591
Cap at 3% of Base Revenue	2,451,228

Surcharge / (Refund) $	2,451,228	
Carry-Over Balance	-52,288	
Apr 2020 - Mar 2021 Sales (kWh)	841,882,676	
RDM Rider Rate ($/kWh) - Apr 2020 - Mar 2021	**0.002849**	Surcharge Factor

Average monthly customer surcharge (Apr20-Mar21 avg customers) $2.31

Residential RDM Rate Calculation - Partial Decoupling

Residential TY 2016 kWh	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
RES_A01	425,506,563	362,869,503	354,138,223	295,054,929	320,818,644	420,191,116	517,220,204	497,213,618	372,013,297	332,448,127	346,015,064	414,157,371	4,657,646,658
RES_A02	74,174	73,766	65,475	51,003	55,644	61,183	76,400	80,107	58,967	55,327	57,438	79,330	788,813
RES_A02_Off	175,633	161,201	167,221	125,925	126,479	141,457	162,762	136,734	115,681	119,849	127,709	193,681	1,754,331
RES_A03	322,403,930	265,269,191	264,398,931	221,827,175	247,148,846	327,302,201	406,964,329	372,509,339	290,318,063	255,262,902	261,578,388	314,098,212	3,549,081,508
RES_A04	81,005	76,936	67,541	52,013	59,191	71,801	88,785	88,849	66,475	59,972	64,625	84,520	861,713
RES_A04_Off	196,928	173,823	155,170	128,665	135,925	157,537	178,808	155,415	130,591	132,437	145,121	192,218	1,882,638
RES_A05	1,068,888	985,100	780,588	503,151	347,179	298,325	326,327	296,083	218,469	217,465	367,789	803,007	6,212,371
RES_A05 - Optional	17,380	16,018	12,692	8,181	5,645	7,336	8,024	7,281	5,372	3,536	5,980	13,057	110,504
RES_A06	13,861	8,312	11,475	8,587	7,849	7,962	7,620	6,025	4,948	4,813	5,263	8,368	95,083
RES_A06_Off	488,887	468,116	358,077	226,441	142,406	71,130	53,817	41,856	42,396	74,147	134,944	364,871	2,467,088
Residential TY 2016 kWh	750,027,249	630,101,965	620,155,393	517,986,071	568,847,808	748,310,046	925,087,077	870,535,306	662,974,259	588,378,575	608,502,321	729,994,636	8,220,900,707

Res 2019 Energy Chg	Win	Sum
RES_A01, A03	0.088030	0.103010
RES_A02, A04	0.165080	0.204970
RES_A02_Off, A04_Off	0.041700	0.041700
RES_A05	0.044870	0.044870
RES_A05 Optional	0.044870	0.103010
RES_A06	0.360000	0.360000
RES_A06_Off	0.036650	0.036650

Res 2019 Energy Chg Rev	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Annual
RES_A01	37,457,343	31,943,402	31,174,788	25,973,685	28,241,665	43,283,887	53,278,853	51,217,975	38,321,090	29,265,409	30,459,706	36,458,273	437,076,076
RES_A02	12,245	12,177	10,809	8,420	9,186	12,541	15,660	16,419	12,086	9,133	9,482	13,096	141,253
RES_A02_Off	7,324	6,722	6,973	5,251	5,274	5,899	6,787	5,702	4,824	4,998	5,325	8,077	73,156
RES_A03	28,381,218	23,351,647	23,275,038	19,527,446	21,756,513	33,715,400	41,921,396	38,372,187	29,905,664	22,470,793	23,026,746	27,650,066	333,354,112
RES_A04	13,372	12,701	11,150	8,586	9,771	14,717	18,198	18,211	13,625	9,900	10,668	13,953	154,853
RES_A04_Off	8,212	7,248	6,471	5,365	5,668	6,569	7,456	6,481	5,446	5,523	6,052	8,016	78,506
RES_A05	47,961	44,201	35,025	22,576	15,578	13,386	14,642	13,285	9,803	9,758	16,503	36,031	278,749
RES_A05 Optional	780	719	570	367	253	756	827	750	553	159	268	586	6,587
RES_A06	4,990	2,992	4,131	3,091	2,826	2,866	2,743	2,169	1,781	1,733	1,895	3,012	34,230
RES_A06_Off	17,918	17,156	13,124	8,299	5,219	2,607	1,972	1,534	1,554	2,717	4,946	13,373	90,419
Residential 2019 Energy Chg Rev	65,951,362	55,398,967	54,538,077	45,563,088	50,051,953	77,058,627	95,268,535	89,654,713	68,276,426	51,780,122	53,541,590	64,204,481	771,287,941

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Annual
Res Energy Chg Rev - 2019	65,951,362	55,398,967	54,538,077	45,563,088	50,051,953	77,058,627	95,268,535	89,654,713	68,276,426	51,780,122	53,541,590	64,204,481	771,287,941
CCRC Rev @ 0.003133/kWh	2,349,835	1,974,109	1,942,947	1,622,850	1,782,200	2,344,455	2,898,298	2,727,387	2,077,098	1,843,390	1,906,438	2,287,073	25,756,082
Res Energy Chg Rev w/o CCRC - 2019	63,601,527	53,424,857	52,595,130	43,940,237	48,269,753	74,714,171	92,370,237	86,927,326	66,199,328	49,936,732	51,635,152	61,917,408	745,531,859

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2016 Cust Count	1,093,369	1,094,551	1,095,351	1,095,831	1,096,525	1,096,695	1,096,548	1,097,862	1,098,165	1,099,552	1,100,537	1,101,823	1,097,234
2016 kWh	750,027,249	630,101,965	620,155,393	517,986,071	568,847,808	748,310,046	925,087,077	870,535,306	662,974,259	588,378,575	608,502,321	729,994,636	8,220,900,707

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - 2019	58.17	48.81	48.02	40.10	44.02	68.13	84.24	79.18	60.28	45.42	46.92	56.20	
FEC - 2019	0.0847990	0.0847876	0.0848096	0.0848290	0.0848553	0.0998439	0.0998503	0.0998550	0.0998520	0.0848718	0.0848561	0.0848190	

2019 (YEAR 4) Residential

Allowed Rev = FRC * C	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - Fixed Rev per Customer	58.17	48.81	48.02	40.10	44.02	68.13	84.24	79.18	60.28	45.42	46.92	56.20	
C = Actual Customer Count	1,119,836	1,120,611	1,121,725	1,122,496	1,122,899	1,122,778	1,123,150	1,123,930	1,124,572	1,125,385	1,126,215	1,127,457	
Allowed Revenue	65,141,118	54,696,841	53,861,522	45,009,441	49,430,754	76,491,119	94,611,118	88,991,358	67,791,188	51,109,951	52,839,916	63,357,921	763,332,248
Actual Rev = FEC * kWh	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FEC - Fixed Energy Charge	0.0847990	0.0847876	0.0848096	0.0848290	0.0848553	0.0998439	0.0998503	0.0998550	0.0998520	0.0848718	0.0848561	0.0848190	
kWh = WN Actual Sales	743,588,777	609,725,998	637,547,959	537,146,835	582,449,803	748,750,229	892,140,187	867,219,266	607,120,373	580,353,999	598,857,255	719,214,401	
Actual Revenue	63,055,551	51,697,227	54,070,186	45,565,626	49,423,955	74,758,121	89,080,480	86,596,203	60,622,204	49,255,672	50,816,709	61,003,039	735,944,973
Deferral Calculation: Allowed Revenue - Actual Revenue													
Under / (Over) Collection	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Allowed Revenue	65,141,118	54,696,841	53,861,522	45,009,441	49,430,754	76,491,119	94,611,118	88,991,358	67,791,188	51,109,951	52,839,916	63,357,921	
Actual Revenue	63,055,551	51,697,227	54,070,186	45,565,626	49,423,955	74,758,121	89,080,480	86,596,203	60,622,204	49,255,672	50,816,709	61,003,039	
Under / (Over) Collection	2,085,567	2,999,615	-208,664	-556,185	6,800	1,732,998	5,530,638	2,395,155	7,168,985	1,854,279	2,023,207	2,354,882	27,387,276

TY 2019 Base Revenue	852,605,743
Cap at 3% of Base Revenue	25,578,172

Surcharge / (Refund) $	25,578,172	
Carry-Over Balance	0	
Apr 2020 - Mar 2021 Sales (kWh)	7,941,316,397	
RDM Rider Rate ($/kWh) - Apr 2020 - Mar 2021	**0.003221**	Surcharge Factor

Average monthly customer surcharge (Apr20-Mar21 avg customers) $1.88

Residential with Space Heating RDM Rate Calculation - Partial Decoupling

Res Space Htg TY 2016 kWh	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
RSH_A00	23,954	17,433	15,232	9,986	13,173	16,902	11,564	18,012	12,155	17,323	19,082	20,464	195,280
RSH_A01	36,152,093	28,278,898	26,615,266	12,753,026	12,091,514	12,641,518	14,584,699	14,336,148	11,928,548	15,257,382	21,518,639	31,027,991	237,185,721
RSH_A02	30,599	28,189	24,180	10,840	12,862	10,668	12,214	15,487	11,893	15,814	20,255	26,126	219,127
RSH_A02_Off	68,684	58,503	48,200	24,313	26,503	22,865	23,985	25,698	20,701	30,556	40,239	55,544	445,790
RSH_A03	18,035,787	14,177,211	13,783,767	6,964,807	6,963,747	7,464,341	8,718,851	8,587,046	7,241,618	8,786,668	11,789,254	15,347,108	127,860,205
RSH_A04	33,270	24,898	24,323	11,322	12,127	11,753	13,870	16,220	12,263	15,727	19,830	29,222	224,824
RSH_A04_Off	76,006	53,257	51,383	25,915	24,790	25,223	27,218	26,005	22,978	32,049	40,539	67,267	472,629
RSH_A05	4,721,259	3,644,465	3,235,561	1,463,792	1,161,296	1,089,439	1,299,339	1,292,835	947,932	1,117,689	1,974,641	3,887,843	25,836,090
RSH_A05 Optional	631,642	487,581	432,876	195,836	155,366	133,276	158,954	158,158	115,965	149,532	264,181	520,142	3,403,510
RSH_A06	164	101	47	78	110	117	106	80	101	149	197	204	1,454
RSH_A06_Off	18,939	14,063	10,947	4,307	2,354	672	348	300	421	1,013	3,228	12,962	69,555
Res Space Htg TY 2015 kWh	59,792,398	46,784,597	44,241,783	21,464,221	20,463,842	21,416,774	24,851,148	24,475,989	20,314,576	25,423,901	35,690,085	50,994,872	395,914,186

RSH 2019 Energy Chg	Win	Sum
RSH_A00	0.088030	0.103010
RSH_A01, A03	0.059880	0.103010
RSH_A02, A04	0.092840	0.204970
RSH_A02_Off, A04_Off	0.041700	0.041700
RSH_A05	0.044870	0.044870
RSH_A05 Optional	0.044870	0.103010
RSH_A06	0.360000	0.360000
RSH_A06_Off	0.036650	0.036650

RSH 2019 Energy Chg Rev	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
RSH_A00	2,109	1,535	1,341	879	1,160	1,741	1,191	1,855	1,252	1,525	1,680	1,801	18,069
RSH_A01	2,164,787	1,693,340	1,593,722	763,651	724,040	1,302,203	1,502,370	1,476,767	1,228,760	913,612	1,288,536	1,857,956	16,509,744
RSH_A02	2,841	2,617	2,245	1,006	1,194	2,187	2,504	3,174	2,438	1,468	1,880	2,426	25,980
RSH_A02_Off	2,864	2,440	2,010	1,014	1,105	953	1,000	1,072	863	1,274	1,678	2,316	18,589
RSH_A03	1,079,983	848,931	825,372	417,053	416,989	768,902	898,129	884,552	745,959	526,146	705,941	918,985	9,036,940
RSH_A04	3,089	2,312	2,258	1,051	1,126	2,409	2,843	3,325	2,513	1,460	1,841	2,713	26,940
RSH_A04_Off	3,169	2,221	2,143	1,081	1,034	1,052	1,135	1,084	958	1,336	1,690	2,805	19,709
RSH_A05	211,843	163,527	145,180	65,680	52,107	48,883	58,301	58,010	42,534	50,151	88,602	174,448	1,159,265
RSH_A05 Optional	28,342	21,878	19,423	8,787	6,971	13,729	16,374	16,292	11,946	6,710	11,854	23,339	185,643
RSH_A06	59	36	17	28	40	42	38	29	36	54	71	74	524
RSH_A06_Off	694	515	401	158	86	25	13	11	15	37	118	475	2,549
RSH 2019 Energy Chg Rev	3,499,780	2,739,352	2,594,112	1,260,388	1,205,852	2,142,125	2,483,898	2,446,170	2,037,275	1,503,772	2,103,892	2,987,337	27,003,952

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
RSH Energy Chg Rev - 2019	3,499,780	2,739,352	2,594,112	1,260,388	1,205,852	2,142,125	2,483,898	2,446,170	2,037,275	1,503,772	2,103,892	2,987,337	27,003,952
CCRC Rev @ 0.003133/kWh	187,330	146,576	138,610	67,247	64,113	67,099	77,859	76,683	63,646	79,653	111,817	159,767	1,240,399
RSH Energy Chg Rev w/o CCRC - 2019	3,312,450	2,592,776	2,455,502	1,193,141	1,141,739	2,075,026	2,406,039	2,369,487	1,973,629	1,424,119	1,992,075	2,827,570	25,763,553

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2016 Cust Count	33,415	33,712	33,773	33,852	33,855	33,844	33,822	34,031	34,011	34,015	34,037	34,108	
2016 kWh	59,792,398	46,784,597	44,241,783	21,464,221	20,463,842	21,416,774	24,851,148	24,475,989	20,314,576	25,423,901	35,690,085	50,994,872	

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - 2019	99.13	76.91	72.71	35.25	33.72	61.31	71.14	69.63	58.03	41.87	58.53	82.90	
FEC - 2019	0.0553992	0.0554194	0.0555019	0.0555874	0.0557930	0.0968879	0.0968180	0.0968086	0.0971533	0.0560150	0.0558159	0.0554481	

2019 (YEAR 4) RSH

Allowed Rev = FRC * C	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - Fixed Rev per Customer	99.13	76.91	72.71	35.25	33.72	61.31	71.14	69.63	58.03	41.87	58.53	82.90	
C = Actual Customer Count	35,639	35,767	36,017	36,040	36,204	36,181	36,165	36,190	36,294	36,349	36,454	36,595	
Allowed Revenue	3,532,917	2,750,825	2,618,655	1,270,259	1,220,957	2,218,311	2,572,716	2,519,812	2,106,109	1,521,838	2,133,534	3,033,743	27,499,676

Actual Rev = FEC * kWh	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FEC - Fixed Energy Charge	0.0553992	0.0554194	0.0555019	0.0555874	0.0557930	0.0968879	0.0968180	0.0968086	0.0971533	0.0560150	0.0558159	0.0554481	
kWh = WN Actual Sales	60,029,663	46,145,784	38,493,671	26,793,913	24,391,444	22,464,332	26,083,406	24,207,494	20,160,666	25,926,784	40,362,312	53,862,441	
Actual Revenue	3,325,595	2,557,373	2,136,471	1,489,405	1,360,872	2,176,522	2,525,344	2,343,494	1,958,676	1,452,288	2,252,859	2,986,571	26,565,470

Deferral Calculation: Allowed Revenue - Actual Revenue

Under / (Over) Collection	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Allowed Revenue	3,532,917	2,750,825	2,618,655	1,270,259	1,220,957	2,218,311	2,572,716	2,519,812	2,106,109	1,521,838	2,133,534	3,033,743	
Actual Revenue	3,325,595	2,557,373	2,136,471	1,489,405	1,360,872	2,176,522	2,525,344	2,343,494	1,958,676	1,452,288	2,252,859	2,986,571	
Under / (Over) Collection	207,322	193,452	482,183	-219,146	-139,914	41,789	47,372	176,318	147,433	69,549	-119,325	47,172	934,206

TY 2019 Base Revenue	30,505,469
Cap at 3% of Base Revenue	915,164

Surcharge / (Refund) $	915,164	
Carry-Over Balance	0	
Apr 2020 - Mar 2021 Sales (kWh)	395,009,621	
RDM Rider Rate ($/kWh) - Apr 2020 - Mar 2021	**0.002317**	Surcharge Factor

Average monthly customer surcharge (Apr20-Mar21 avg customers) $2.06

Small Commercial non-demand RDM Rate Calculation - Partial Decoupling

SCI non-demand TY 2016 kWh	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
SCI_A05	280,148	278,047	189,407	130,963	84,939	59,155	77,318	80,160	65,043	70,907	84,096	201,909	1,602,093
SCI_A05 Optional	18,517	18,378	12,519	8,656	5,614	178	233	241	196	4,687	5,559	13,346	88,125
SCI_A06	20,056	13,142	11,606	11,104	10,140	10,069	12,585	12,642	9,678	8,650	9,169	8,190	137,031
SCI_A06 1S	178,302	112,504	136,752	74,118	56,735	15,082	18,073	11,297	9,158	26,863	39,549	107,268	785,701
SCI_A06 3S	189,306	119,447	145,192	78,693	60,237	75,152	90,058	56,293	45,634	28,521	41,990	113,889	1,044,412
SCI_A06 P	0	0	0	0	0	0	0	0	0	0	0	0	0
SCI_A09	2,016	2,049	1,850	2,162	2,052	2,158	2,136	1,898	1,977	1,958	2,171	2,048	24,473
SCI_A10	72,732,571	69,077,420	68,058,230	61,006,005	59,701,876	64,615,613	74,346,556	73,221,025	62,667,393	58,809,523	56,856,299	67,241,503	788,334,014
SCI_A11	22,712	19,795	21,760	20,904	20,661	20,172	20,034	18,165	16,947	17,785	16,308	19,712	234,956
SCI_A12	1,339,251	1,378,147	1,381,421	1,188,759	1,208,878	992,039	1,177,734	1,078,621	986,863	1,062,228	1,142,574	1,361,957	14,298,471
SCI_A12_Off	2,973,997	2,707,914	2,711,015	2,530,915	2,422,062	2,198,270	2,156,675	1,990,452	1,885,572	2,023,636	2,219,280	2,704,514	28,524,302
SCI_A16	1,159,133	1,213,909	1,143,651	1,105,733	1,260,541	1,098,433	962,778	1,178,308	874,390	1,199,043	1,126,222	1,168,699	13,490,842
SCI_A18	2,810,929	1,917,468	2,456,663	2,332,188	2,341,707	2,350,157	2,465,049	2,063,696	2,092,372	2,278,554	2,301,705	2,144,146	27,554,633
SCI_A22	181,554	188,805	185,966	201,580	206,369	199,305	213,912	183,986	182,567	196,225	202,482	202,948	2,345,699
SCI non-demand TY 2016 kWh	81,908,491	77,047,026	76,456,033	68,691,779	67,381,811	71,635,784	81,543,141	79,896,785	68,837,790	65,728,580	64,047,403	75,290,128	878,464,750

SCI n-d 2019 Energy Chg	win	sum
SCI_A05	0.044870	0.044870
SCI_A05 Optional	0.044870	0.092560
SCI_A06	0.360000	0.360000
SCI_A06 1S, A06_3S	0.036650	0.036650
SCI_A06 P	0.035600	0.035600
SCI_A09, A10, A11	0.077570	0.092560
SCI_A12	0.117230	0.148800
SCI_A12_Off	0.041700	0.041700
SCI_A16, A18, A22	0.068140	0.079190

SCI n-d 2019 Energy Chg Rev	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Annual
SCI_A05	12,570	12,476	8,499	5,876	3,811	2,654	3,469	3,597	2,918	3,182	3,773	9,060	71,886
SCI_A05 Optional	831	825	562	388	252	16	22	22	18	210	249	599	3,995
SCI_A06	7,220	4,731	4,178	3,997	3,650	3,625	4,531	4,551	3,484	3,114	3,301	2,948	49,331
SCI_A06 1S	6,535	4,123	5,012	2,716	2,079	553	662	414	336	985	1,449	3,931	28,796
SCI_A06 3S	6,938	4,378	5,321	2,884	2,208	2,754	3,301	2,063	1,672	1,045	1,539	4,174	38,278
SCI_A06 P	0	0	0	0	0	0	0	0	0	0	0	0	0
SCI_A09	156	159	144	168	159	200	198	176	183	152	168	159	2,021
SCI_A10	5,641,866	5,358,335	5,279,277	4,732,236	4,631,075	5,980,821	6,881,517	6,777,338	5,800,494	4,561,855	4,410,343	5,215,923	65,271,080
SCI_A11	1,762	1,536	1,688	1,622	1,603	1,867	1,854	1,681	1,569	1,380	1,265	1,529	19,355
SCI_A12	157,000	161,560	161,944	139,358	141,717	147,615	175,247	160,499	146,845	124,525	133,944	159,662	1,809,917
SCI_A12_Off	124,016	112,920	113,049	105,539	101,000	91,668	89,933	83,002	78,628	84,386	92,544	112,778	1,189,463
SCI_A16	78,983	82,716	77,928	75,345	85,893	86,985	76,242	93,310	69,243	81,703	76,741	79,635	964,725
SCI_A18	191,537	130,656	167,397	158,915	159,564	186,109	195,207	163,424	165,695	155,261	156,838	146,102	1,976,705
SCI_A22	12,371	12,865	12,672	13,736	14,062	15,783	16,940	14,570	14,457	13,371	13,797	13,829	168,452
SCI n-d 2019 Energy Chg Rev	6,241,785	5,887,280	5,837,671	5,242,781	5,147,073	6,520,651	7,449,123	7,304,647	6,285,543	5,031,167	4,895,953	5,750,330	71,594,003

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
RSH Energy Chg Rev - 2019	6,241,785	5,887,280	5,837,671	5,242,781	5,147,073	6,520,651	7,449,123	7,304,647	6,285,543	5,031,167	4,895,953	5,750,330	71,594,003
CCRC Rev @ 0.003133/kWh	256,619	241,388	239,537	215,211	211,107	224,435	255,475	250,317	215,669	205,928	200,661	235,884	2,752,230
RSH Energy Chg Rev w/o CCRC - 2019	5,985,166	5,645,892	5,598,134	5,027,569	4,935,966	6,296,216	7,193,649	7,054,331	6,069,874	4,825,239	4,695,292	5,514,446	68,841,773

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2016 Cust Count	85,416	85,362	85,404	85,316	85,279	85,220	85,110	85,174	85,177	85,290	85,289	85,336	
2016 kWh	81,908,491	77,047,026	76,456,033	68,691,779	67,381,811	71,635,784	81,543,141	79,896,785	68,837,790	65,728,580	64,047,403	75,290,128	

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - 2019	70.07	66.14	65.55	58.93	57.88	73.88	84.52	82.82	71.26	56.57	55.05	64.62	
FEC - 2019	0.0730714	0.0732785	0.0732203	0.0731903	0.0732537	0.0878921	0.0882189	0.0882930	0.0881765	0.0734116	0.0733096	0.0732426	

2019 (YEAR 4) SCI non-demand

Allowed Rev = FRC * C	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FRC - Fixed Rev per Customer	70.07	66.14	65.55	58.93	57.88	73.88	84.52	82.82	71.26	56.57	55.05	64.62	
C = Actual Customer Count	85,682	85,652	85,691	85,596	85,617	85,582	85,522	85,541	85,582	85,711	85,819	85,990	
Allowed Revenue	6,003,804	5,665,072	5,616,946	5,044,069	4,955,529	6,322,961	7,228,471	7,084,727	6,098,736	4,849,057	4,724,469	5,556,708	69,150,551
Actual Rev = FEC * kWh	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
FEC - Fixed Energy Charge	0.0730714	0.0732785	0.0732203	0.0731903	0.0732537	0.0878921	0.0882189	0.0882930	0.0881765	0.0734116	0.0733096	0.0732426	
kWh = WN Actual Sales	80,493,869	72,681,462	80,747,201	67,110,384	66,677,965	69,169,390	74,823,655	73,793,960	60,689,261	60,841,119	67,365,151	74,490,337	
Actual Revenue	5,881,797	5,325,990	5,912,334	4,911,827	4,884,406	6,079,440	6,600,863	6,515,494	5,351,366	4,466,443	4,938,515	5,455,867	66,324,341
Deferral Calculation: Allowed Revenue - Actual Revenue													
Under / (Over) Collection	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Allowed Revenue	6,003,804	5,665,072	5,616,946	5,044,069	4,955,529	6,322,961	7,228,471	7,084,727	6,098,736	4,849,057	4,724,469	5,556,708	
Actual Revenue	5,881,797	5,325,990	5,912,334	4,911,827	4,884,406	6,079,440	6,600,863	6,515,494	5,351,366	4,466,443	4,938,515	5,455,867	
Under / (Over) Collection	122,007	339,083	-295,388	132,243	71,123	243,522	627,609	569,233	747,370	382,614	-214,046	100,840	2,826,210

TY 2019 Base Revenue	81,707,591
Cap at 3% of Base Revenue	2,451,228

Surcharge / (Refund) $	2,451,228	
Carry-Over Balance	0	
Apr 2020 - Mar 2021 Sales (kWh)	841,882,676	
RDM Rider Rate ($/kWh) - Apr 2020 - Mar 2021	**0.002912**	Surcharge Factor

Average monthly customer surcharge (Apr20-Mar21 avg customers) $2.36

➢ Business New Construction

Description
The Business New Construction program influences owners, architects, and engineers to include energy efficient systems and equipment in their designs for new construction, additions to existing buildings and/or major renovation projects. We provide consulting services and energy modeling, as well as electricity and natural gas efficiency implementation rebates. The program is primarily marketed by our sales team and consultants to design teams and customers who want to build energy efficiency into their building design.

The program's main offerings include the following:

- Prescriptive rebates, including motors, cooling and heating equipment identified in the Energy Efficient Buildings program component; and
- Custom rebates for energy efficiency strategies incorporated into the building design through either the Energy Efficient Buildings or the Energy Design Assistance program component.

The main offerings are described below.

Energy Design Assistance (EDA)
The EDA offering provides energy expertise to encourage energy efficient building design and construction practices. EDA offers design assistance in support of an integrated design process by providing free computer energy modeling of the planned design, funding to offset the cost of design time associated with the increased energy analysis, financial incentives to improve the cost-effectiveness of a package of energy efficiency measures, and field verification to ensure that the strategies are installed per the design intent. EDA is a free service for our business customers and energy modeling is done in real-time, so the project team can visualize the impacts of their efficiency choices.

With the advancements in real-time modeling, the EDA program has combined the Quick and Basic tracks into a single offering, the Standard track. Therefore two tracks are now available for customer involvement: Standard and Enhanced. The Standard track is for customers interested in a collaborative design process to identify energy savings using new technologies. Projects must represent buildings with 20,000 square feet or greater that are in the schematic design or early design development phase. Rebates are based on demand and energy savings (kW, kWh, and Dth). The design team must strive to achieve a minimum of 5% demand and energy savings over the baseline. If 5% is not achieved, the customer is no longer eligible for that component of the rebate.

The Enhanced track is for customers interested in obtaining sustainable building certifications such as the United States Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED). The Enhanced track allows for further analysis in the early stages of design for HVAC, daylighting, and massing analysis. Projects in the Enhanced Track must represent buildings with a minimum of 50,000 square feet that are in the pre-design or early schematic phase. Design teams must strive to achieve a minimum of 30% demand savings over the baseline. Finally, the project must be registered with the USGBC LEED certification or equivalent certification (i.e. Minnesota B3 or Green Globes).

We administer the Business New Construction program with help from outside energy design consultants who facilitate meetings with the design teams and building owners, and complete energy modeling activities. The current EDA baseline is based on the updated Minnesota State Energy Code referencing the ASHRAE 90.1-2010 Energy Standard.

Energy Efficient Buildings (EEB)

The EEB offering is intended to provide a simplified approach to optimizing energy efficiency options in new construction, additions, and major renovations. This component addresses the portion of the new construction market not suited for the full-blown energy modeling of the EDA offering. It offers final design review, equipment recommendations, and onsite verification.

Focusing on the needs of smaller building owners, the EEB offering provides a comprehensive list of typical energy efficiency measures that can be incorporated into the new building design, as well as the rebate amounts for each measure. Incentives are provided for heating, cooling, lighting, building envelope, motors, and custom opportunities. We administer the product using both internal and external resources to review the calculations, recommend equipment, and verify installation. EEB is a free service to our business customers. Any size building may participate, but this component is best suited for buildings that are greater than 5,000 square feet. Projects must enter the program prior to completion of construction documents.

Unlike many other programs, the Business New Construction program verifies incremental project costs at a program level, rather than project level. Because of the large scale of most projects, the final costs for all energy savings measured within the building are difficult to identify individually. Instead, we use the best estimate of costs from the design team and use it to project the energy savings costs using the DOE2 energy model. The payback criterion is estimated using the same cost definitions as for incremental cost.

Program Changes

The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this plan.

Change	Rationale	DER Notification Method	Date Notified
Eliminated one of the EDA Tracks/Combined the Quick and Basic tracks to become the Standard track	Technological advances in energy modeling software streamlines the process and projects that previously would have qualified for the Quick track receive as much rigor as the Basic track has had in the past.	New to this plan	New

Budget and Goal Considerations
The program's participation, energy savings goals, and budgets were determined by reviewing historical achievement and the state of the construction market industry. In recent years, the construction market has been very active and we expect that to continue throughout this 2017-2019 CIP Plan. However, code changes will reduce energy savings attributed to this program. The main budget drivers include the following:

- Incentives – Incentives make up more than half the budget. In addition to customer incentives, the EDA product provides incentives to design teams. Up to $12,000 per project is available to reimburse customers and design teams for the extra expense associated with participation.
- Customer Service – These activities are associated with the cost of developing energy models, as well as time spent conducting customer meetings.
- Measurement and Verification – All Business New Construction projects are verified using on-site visits.

Involvement of Community Energy Organizations
The New Construction program engages customers, trade allies, and other stakeholders at the individual project level and supports organizations including the United States Green Building Council (USGBC-MN) and the Center for Sustainable Building Research (CSBR).

➢ Commercial Efficiency

Description
The Commercial Efficiency program offers large commercial customers customized resources to develop a holistic, sustainable energy management plan. This program provides funding for studies to identify and scope energy efficiency opportunities. Rebates are available to customers who implement qualifying energy efficiency recommendations. The Commercial Efficiency program was modeled after our successful Process Efficiency program with adjustments made to reflect the unique nature of the commercial market. This program is marketed to large commercial customers through Xcel Energy's account managers. The program targets commercial customers that have at least 1 GWh or 4,000 Dth of conservation potential.

The program offerings are delivered in three phases. Each phase is defined in a Memorandum of Understanding that is customized to reflect the needs of the specific customer.

Phase 1: Identification
Xcel Energy performs a high level analysis to identify opportunities for energy savings in the customer's business practices, facilities, and operations. This is completed at no cost to the customer. Phase 1 is delivered using internal resources or a third-party provider.

Phase 2: Scoping
This phase provides support and resources to further define, measure, and provide recommendations and assistance for energy savings opportunities while working with the customer to optimize the business practices identified in Phase 1. The customer pays up to 25% of approved funding for Phase 2 work up to $7,500 for Phase 2 efforts. Total funding for Phase 2 is based on estimated savings. The purpose of the customer contribution is to ensure management-level engagement and the customer's commitment to a holistic approach. Phase 2 is delivered using internal resources or third-party technical experts selected through an RFP process, or through technology-specific experts of the customer's choosing.

Phase 3: Implementation
We work with the customer to put together a schedule of efficiency and conservation goals that translates their energy management plans into actual conservation impacts. This phase includes a customized rebate and bonus schedule that rewards deep energy savings and/or a system-wide approach.

Upon project completion, customers earn rebates for improvements that qualify for any of our prescriptive or custom programs. The savings are included in the Commercial Efficiency program achievements, but mirror the rules and rebate levels of our other programs. If the improvements do not qualify for rebates due to program rules, we claim the project savings as study driven program savings due to the extensive level of investment and influence we have with these customers.

Due to the similar holistic nature of the Commercial Efficiency and Process Efficiency programs, we use similar program-specific policies for both programs. Unless otherwise noted, these policies previously have been filed and approved by the DER for the Process Efficiency program:

- Bundling: When customers identify multiple measures for installation, a bundle can be evaluated to see if it qualifies for a rebate versus each individual component. This allows

measures with too short of a payback for a rebate to be leveraged to drive projects with too long a payback for the customer to install so that both are implemented.

- Preapproval dates: Custom-type measures in Commercial Efficiency require a custom analysis, but the actual date the project is submitted and the analysis is completed does not disqualify a project if it was initiated after the customer entered into the program. This is due to the extensive resources used by the program to identify and scope ways to drive energy efficiency into how a customer does business. The goals and awareness created during Phases 1 and 2 can result in projects that drive energy savings in business areas that act without immediately notifying the personnel in contact with Xcel Energy.
- Rebate bonuses: We use the rebate structure of other end-use programs and then incorporate rebate bonuses for system optimization and/or exceeding annual achievement targets.
- Facility-level metering: This concept is being developed and may be tested through this program. We work in advance with the DER to define the methodology of how we propose to take credit under this metering scenario. Facility-level metering provides us the ability to accurately account for all savings generated by installation of a measure and incorporate the savings that may be driven plant-wide that we have been unable to accurately capture historically.
- Behavioral Savings: We use the DER's Average Savings Method to count behavioral savings created through single entity-based behavioral change efforts. This may apply to technical projects that require specific behaviors to maintain persistent energy savings throughout their lifetime.

Program Changes
None.

Budget and Goal Considerations
We determined the program's participation, energy savings goals, and budgets by examining historic participation levels, project and participation cycles, and costs.

The main budget drivers include the following:

- Administration – These costs are driven by marketing, sales, engineering, and external labor resources to support the Company's heavy engagement with the customer, as well as cover the costs of those projects requiring metered verification.
- Customer Service – The Company utilizes third-party resources to deliver the program's identification and scoping phases.
- Participant Incentives – The program has a robust rebate budget due to the size of projects initiated through the Commercial Efficiency program.

Involvement of Community Energy Organizations

The Commercial Efficiency program works with Community Energy Organizations to promote the program and deliver its offerings. In particular, the Trillion BTU financing delivered by the St. Paul Port Authority and Xcel Energy could collaborate to help customers fund large capital projects when financing is a barrier to implementation. We consider leveraging other resources as they become available through community and other organizations, and consider integrating their offerings into our program and customer's energy management plans.

➢ Commercial Refrigeration Efficiency

Description
The Commercial Refrigeration Efficiency program is designed to achieve energy and demand savings via refrigeration maintenance and upgrades for small to medium retail commercial customers with significant refrigeration loads, notably grocery, convenience, and liquor stores. Refrigeration systems in these targeted facility types make up over 50 percent of the facility's energy use. This program targets commercial customers that have a peak demand of 400 kW or less.

The program provides a walk-through energy assessment to identify efficiency improvement opportunities and uses a combination of direct installation, prescriptive, and custom improvement measures to convert those opportunities into real energy savings for the customers. Rebates are offered to lower the incremental capital cost associated with energy improvement opportunities.

This program consists of five components:

1. Free on-site energy assessment – Customers are offered a free, no-obligation on-site facility energy assessment and walk-through to identify and explain key energy efficiency opportunities. A copy of the assessment report will be provided after the visit, and will include a prioritization of identified opportunities.

2. Direct install for immediate savings – While on-site for the energy assessment, free direct installations of the following energy savings measures :
    a. Screw-in LEDs for walk-in coolers/freezers;
    b. Pre-rinse sprayers for restaurants and commercial kitchens and aerators in restrooms and kitchen sinks; and
    c. Coil brush give-away and demonstration tutorial for use on refrigeration coils.

3. Coil-cleaning – As part of the on-site visit, are free coil-cleaning service, including materials and training for self-contained equipment. Since coil cleaning should be performed annually, we will provide customers with a coil cleaning brush, an instructional "How-To" sheet, and an on-site tutorial, to equip them with the tools and knowledge to complete this task on a regular basis using in-house staff. We will claim energy savings for the efforts from the first cleaning.

4. Follow-up refrigeration measures – As part of the assessment report, a number of opportunities will be identified for implementation. Several of these measures have been identified by the Company as standard across many customer types and therefore warrant prescriptive rebate treatment. Examples of these measures include:
    a. Anti-sweat heater controls
    b. Demand control ventilation
    c. Electronically commutated motors
    d. Evaporator fan motor controllers
    e. LED reach-in case lighting
    f. New reach-in case with doors
    g. Night curtains for coolers
    h. No heat case doors

i. Retrofit of open multi-deck case with doors

Other refrigeration measures may qualify for custom rebates. Examples include demand defrost controls, floating head pressure control, and Q-sync motors. These measures will be evaluated through the custom process.

5. Turn-Key Services – The customer will be provided with proactive project management to assist with the implementation of prescriptive projects, including coordination between the customer, Company, and the installation contractors/trade allies to complete the improvements and submit rebate applications.

Program Changes
None.

Budget and Goal Considerations
We determined the program's participation, energy savings goals, and budgets by examining other program historic participation levels, project and participation cycles, and costs.

The main budget drivers include the following:

- Administration – These costs are driven by marketing, sales, engineering, and external labor resources to support the program.
- Customer Service – The Company will utilize third-party resources to deliver the program's on-site energy assessments.
- Participant Incentives – The program offers prescriptive and custom rebates along with some free direct install measures.

Involvement of Community Energy Organizations
The Commercial Refrigeration Efficiency program works with community energy organizations to promote the program and deliver its offerings. In particular, we have collaborated with the City of Minneapolis to promote the program. The City of Minneapolis offers additional incentives through its Green Business Cost Share program to customers in Minneapolis and enhanced incentives in designated Green Zones. In addition we have tried to leverage vendor industry organizations, area community business organizations and customer focused organizations.

➢ Computer Efficiency

Description
The Computer Efficiency program offers prescriptive rebates to computer and server manufacturers who sell and ship personal computers (PCs) and servers with efficient power supplies to customers in our service area. Prescriptive rebates are also offered to customers who install virtual desktop infrastructure or remote power management.

The main offerings are described below:

1) High Efficient Power Supply
- Desktop personal computer (PC)s; and
- Servers

Manufacturers that sign a participation agreement and turn in a claim form to the Company's third-party implementer can receive incentives to cover part of the incremental cost for installing high efficient power supplies. Manufacturers use this incentive to promote PC's with high effiency power supplies and to increase the number of products offered with high-efficiency power supplies. The third-party administrator delivers the incentives to manufacturers and provides monthly sales reports and invoices to Xcel Energy for reimbursement.

2) Desktop PC Virtualization
This downstream measure provides rebates to business customers who implement a Virtual Desktop Infrastructure (VDI) strategy. This strategy involves installing a VDI device (also known as "thin clients", "zero clients" or "ultra-thin clients") instead of the traditional desktop PC. The VDI device has a lower operating wattage and uses less energy than traditional desktop computers.

3) PC Power Management
This downstream measure provides rebates to business customers who install power management software that remotely controls a computer's power management strategy, such as PC inactivity and overnight sleep settings, from data centers or other central locations. The software, that manages the computer's power management settings, is locked and the computer user cannot override the power management settings.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Raise the baseline of desktop PC power supplies and virtual desktop incentives to meeting ENERGY STAR version 6.0 spec or	Encourage the sales of higher efficiency ENERGY STAR products and adjust power supply incentive levels to meet the current conditions of the personal computer market.	New to this Plan	New

higher. Also modify the desktop PC power supply incentive levels as a result of the increased baseline.			

Budget and Goal Considerations
The program's participation and energy savings goals and budget were determined by looking at the Company's overall electric goal and past participation levels.

The main budget drivers include the following:

- Customer Incentives – This budget reflects only the downstream rebates. This is based on historical participation across the offerings and includes predicted growth in products.
- Labor – A majority of the budget is allocated to the external administration of the upstream product. The product is currently being administered by Ecova. The internal labor budget is based on past program performance.
- Promotion and Advertising – Budgets for direct promotion and sales support materials are included in the total budget. Promotions are targeted to customers and trade partners and typically focus around activities such as new or revised product offerings, case studies featuring successful projects, educational opportunities, and campaigns to increase specific product awareness.
- Consulting – A large portion of the budget is allocated for upstream incentives to computer manufacturers. This budget reflects the new incentive levels, incentive tiers implemented in previous years and the projected totals in each tier.

Involvement of Community Energy Organizations
None.

➢ Cooling Efficiency

Description
The Cooling Efficiency program offers prescriptive and custom rebates to business customers who install efficient cooling systems used for space and process cooling. The program also offers rebates for cooling-focused studies. The Cooling Efficiency program encourages Xcel Energy business customers to choose the most efficient cooling equipment that best meets their needs.

The program's main offerings include the following:

- Prescriptive rebates for:
  - Cooling equipment that exceeds the minimum efficiency required by energy codes; or
  - VFD retrofits on chillers.
- Custom rebates for:
  - Cooling recovery and other non-prescriptive cooling projects.
- Study funding to identify and quantify energy saving cooling projects.

The main offerings are described below.

Prescriptive Cooling Efficiency Rebates
The program offers rebates for cooling equipment that exceeds the minimum efficiency of ASHRAE 90.1 -2010 standards. Eligible prescriptive equipment includes packaged terminal air conditioners, rooftop unit economizers, water source heat pumps, direct expansion units, variable frequency drive retrofits on chillers, and new chillers. Refrigeration measures are also included in the Cooling Efficiency program. These measures include zero loss energy doors, electronically commutated motor evaporator fans, close the case doors and anti-sweat heater controls. The prescriptive program does not require preapproval.

Custom Cooling Efficiency Rebates
Custom rebates are available for non-prescriptive energy efficiency cooling equipment. To be eligible for a custom rebate, preapproval is required before moving forward with the project. The energy savings are then analyzed and after completion, we issue a rebate.

Cooling Efficiency Study Funding
The program offers funding to identify energy efficiency opportunities. Customers must receive preapproval before moving forward with the study. The projected energy savings are then analyzed and after study completion, review rebates are paid. The study rebates are awarded based on projected savings.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Updated baseline efficiencies for DX units, chillers, PTACs and water source heat pumps	Updated program to meet 2015 MN Energy Code	New to this plan	New
Addition of mini-split systems	Product added for customers seeking a solution for spot heating and cooling	New to this Plan	New

Budget and Goal Considerations
The program's participation, energy savings goals, and budget were determined by looking at the Company's overall electric and gas goals, past program participation levels, and the typical ramp-up period for program changes and new offerings. We reviewed the equipment and project characteristics of historical projects to develop a projected average savings per participant for various program offerings. Reported energy savings for the program are determined by using project-specific inputs of actual use and efficiency.

The main budget drivers include the following:

- Participant Incentives – The budget reflects the rebate levels and projected customer participation in each offering, which was based on 2013-2015 participation across the offerings.
- Trade Incentives – The administration budget includes incentives for the trades.
- Administration – These budgets are based on past program performance with a slight increase built in for expanded program offerings, engineering, promotion, and participation. The Company occasionally utilizes analytical and consulting services for custom Cooling Efficiency projects.
- Advertising and Promotion – The promotional budget includes spending for several customer and trade communications per year, which are necessary to drive participation and awareness.

Involvement of Community Energy Organizations
Because cooling systems can be very complex, trade support is crucial to achieving our goals. We actively engage trade partners in program design, project implementation, and program promotion through regular meetings and correspondence with our Trade Relations Manager. We also partner with local energy groups such as the Minnesota ASHRAE Chapter and host trade partner training events to further local industries understanding of energy efficiency programs.

➢ Custom Efficiency

Description
The Custom Efficiency program offers rebates to electric and natural gas business customers who implement energy saving projects that are not available through our prescriptive programs. The program is marketed to all business customers regardless of size using direct contact with customers via our sales representatives, the internet, and trade channels.

Energy saving non-prescriptive projects encompasses installing new equipment, replacing existing equipment, retrofitting equipment or improving processes that lower a customer's electric or natural gas use. The project list includes, but is not limited to, boilers, compressed air, cooling, lighting, motors, and other technologies, all of which must pass cost-effectiveness on an individual project basis.

This program also offers study funding to help customers determine project viability and energy savings potential.

Equipment Rebates
Rebate amounts are defined by the engineering examination of the demand and energy savings attributed to the project. The analysis incorporates standard engineering principals, relative to industry standards and the interactive energy effects of the equipment and/or system components. Successful applicants receive a rebate if their completed project passes the benefit/cost-effectiveness parameter.

Study Funding
Successful applicants receive partial funding based on an engineering assessment of the estimated demand and energy savings of the project.

Program Changes
None

Budget and Goal Considerations
The program's participation, energy savings goals, and budgets were determined by looking at the overall electric and gas goals, analyzing historical data, reviewing projects in the pipeline, and evaluating the forecasted economic conditions. We also included other variables such as promotions needed to reach goals, rebate levels, and staffing. Projected customer participation and savings are based on expected average project size and mix of technologies anticipated. The opportunity for program achievement continues to decline as the traditional market base has opted into holistic programs and as technologies migrate from a custom to prescriptive rebate structure.

Involvement of Community Energy Organizations
None

➢ Data Center Efficiency

Description
The Data Center Efficiency program offers prescriptive and custom rebates to business customers who install energy saving measures in their existing or new data center. The program also offers rebates for data center energy studies. The program is primarily marketed to our enterprise and colocation data center customers through our account managers and the Business Solutions Center, but any size data center can participate. We also work closely with our trade partners, specifically engineering firms, technology services firms, mechanical contractors and manufacturers' representatives to market the program.

The program's main offerings include the following:

- Prescriptive rebates for efficiency improvements falling under any of the end-use prescriptive programs we offer.
- Custom rebates are awarded for efficiency measures such as:
  - Air-flow management;
  - Server and IT systems;
  - Cooling systems;
  - Humidification systems;
  - Transformers; and
  - Uninterruptable Power Supplies (UPS).
- Study funding to identify and/or quantify energy savings projects. Exceptions to the cap may apply for very large or complex studies.
- For customers who are building a new data center, we offer knowledge and resources, free of charge, to help data center owners optimize the efficiency of their facilities during the siting, design, and early operation stages of the new data center. Our consultant guides data center owners and design teams through a series of analyses to identify a set of high energy performance design elements to incorporate into the facility.

Program Changes
None.

Budget and Goal Considerations
The program's participation, energy savings goals, and budgets were determined by looking at the Company's overall electric goal, past participation levels, current pipeline, and expected project lead time. We also reviewed the equipment and project characteristics of recent project analyses to develop a projected average savings per participant for various program offerings.

The main budget drivers include the following:

- Rebates – The rebate budget reflects the current rebate levels and projected customer participation in each offering, which was based on 2014 and 2015 participation combined with future pipeline data.
- Labor – These budgets are based on past program performance.
- Promotion and Advertising – Promotion budgets are based on historical spend. Additional money was allocated towards advertising to perform data center specific advertising.

- Consulting – Fees to hire a consultant to provide the services for new construction projects were based on historical trends within the Energy Design Assistance component of the Business New Construction program as well as the quantity of projects we are forecasting for this track.

Involvement of Community Energy Organizations

The Data Center Efficiency program works with multiple community energy organizations, ranging from trade partners and installers to local industry organizations. Xcel Energy hosts program and technical training and information sessions for trade partners and sponsors and presents at local industry chapter organization meetings and events.

➢ Efficiency Controls

Description
The Efficiency Controls program offers custom electric and gas rebates to customers who install automated control systems resulting in energy savings. These systems are centralized networks programmed to monitor and control mechanical and sometimes lighting systems within a building, allowing customers to reduce energy costs by adjusting usage of equipment. The program is marketed to all business customers.

The program offers custom rebates for:

- Installation of automated control systems;
- Addition of control points to an existing system; and
- Microprocessor-based control panels.

The main offerings are described below.

Offerings
To be eligible for a rebate, customers are required to submit their rebate application and project proposal for preapproval prior to purchase or ordering equipment. Xcel Energy evaluates each application, estimates energy savings of the proposed system, and notifies the customer of rebate qualification and estimated rebate amount.

Current market information suggests that customers continue to have a strong interest in energy control systems; however the face of the controls market is shifting. We may expect reduced customer demand for digital control system rebates due to the following short term factors:

- Reduced customer interest in rebates as more customers have already converted to newer digital control systems;
- Early rebate program participants (c.2005) are just over halfway through equipment life;
- Customers already using a digital control system have an increased interest in other services, such as data-driven, cloud-based energy reporting systems (Xcel Energy is running a pilot program for EMIS type systems); and
- New LED fixtures with integrated controls are far more cost-effective with greater overall energy savings than simply retrofitting controls for existing lighting.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Reduced forecast	Better alignment with actual market conditions	New to this Plan	New
Increased rebates	Better alignment with actual market conditions	New to this Plan	New

Budget and Goal Considerations
The program's participation and energy savings goals and budget were determined by analyzing the overall electric and gas goals, historical program performance, current technology and market conditions as described above.

The main budget drivers include the following:

- Rebates – As the market becomes more saturated with digital control systems, the customers left to convert require greater assistance and higher rebate incentives to influence project implementation. The budgets were estimated based on fewer participants and higher rebates.
- Labor – Internal labor to market and administer program offerings are estimated based on historic spend.
- Consulting – Supporting engineering and staff augmentation to ensure accurate consistent analyses and support any M&V efforts as needed.

Involvement of Community Energy Organizations
The Efficiency Controls program employs the services of an energy engineering firm to conduct and analysis of each project for cost-effectiveness.

➢ Fluid Systems Optimization

Description
The Fluid Systems Optimization program, historically known as the Compressed Air program, offers study funding to perform system diagnostics, as well as prescriptive and custom rebates for the purchase of energy saving equipment. The major systems supported by the program are compressed air, pumping, fans, blowers, vacuums, and hydraulics. System diagnostic studies based on the laws of fluid system dynamics are funded as a means to identify and correct inefficiencies within customers' air and fluid systems. Studies often identify additional measures to improve system efficiency. The program is primarily marketed to mid- to large-sized industrial customers.

The program's main offerings include the following:

- Prescriptive Rebates for:
  - Variable speed drive compressors;
  - No loss air drains;
  - Cycling refrigerated dryers;
  - Dew point demand controls; and
  - Mist eliminators.
- Custom and Recommissioning rebates including, but not limited to:
  - Calibration/tune-up of system set points;
  - Adjustment of valves and dampers;
  - Reducing system demand;
  - Air to electric conversions;
  - Capital equipment replacements and upgrades; and
  - System redesigns.
- Compressed air supply-side and demand-side studies.
- Additional System Studies for:
  - Pumping;
  - Fan systems;
  - Blower systems;
  - Vacuum systems; and
  - Hydraulic systems.

The main offerings are described below.

<u>Prescriptive Rebates</u>
The Fluid Systems Optimization program offers rebates for qualifying prescriptive equipment.

<u>Custom Rebates</u>
The program pays custom rebates for qualifying energy saving measures that are not included under the prescriptive rebate category. Such projects are evaluated under the Custom Efficiency analysis and must follow the rules of the Custom Efficiency program. The Company also rebates qualifying system tune-ups, waste reduction efforts, and non-capital equipment changes that are identified in a study and do not fit into the prescriptive rebate category.

Compressed Air Supply-Side Study
A customer's pre-approved Compressed Air Supply-Side Study cost is eligible for reimbursement after 75% of the leaks identified have been repaired and the study has been reviewed by an Xcel Energy engineer or an authorized consultant. The studies are based on the customer's existing system horsepower and identify a customer's supply baseline and system improvements.

System Studies
The Company will pay study funding of up to 75% of the study cost not to exceed $25,000. An extra rebate incentive is offered to customers to cover their out-of-pocket study costs. This incentive applies to all implemented measures from the study, regardless of the payback, and the cap of the extra incentive is the customer's out of pocket cost for their study (i.e. study cost minus study rebate).

Program Changes
None.

Budget and Goal Considerations
The program's participation and energy savings goals and budget were determined by looking at the Company's overall electric goal and past participation levels.

The main budget drivers include the following:

- Participant Incentives – This budget represents the rebates we will pay for products and studies. This is based on 2015 participation across the offering and includes predicted growth in the legacy products and new opportunities from the new study offerings.
- Administration – These budgets are based on past program performance with an increase built in for increased participation and technical engineer support.

Involvement of Community Energy Organizations
The Fluid Systems Optimization program partners with the Department of Energy (DOE) to provide training on the Compressed Air Challenge program and Fan Systems. We also work with the Hydraulic Institute promoting pump system optimization and creating pumping standards and best practices. We have partnered with the Consortium for Energy Efficiency to establish best practices for industrial systems including blower systems and pumping.

➢ Foodservice Equipment

Description
The Foodservice Equipment program offers prescriptive gas and electric rebates to business customers who purchase and install qualifying energy efficient foodservice equipment. The objective of the program is to encourage customers to purchase higher efficiency foodservice equipment.

The program's main offerings include prescriptive rebates for the following:

- Gas Equipment
  - Broilers (charbroilers, salamander, upright);
  - Demand controlled ventilation;
  - Dishwashers (gas water heating);
  - Fryers;
  - Ovens (combination, convection, conveyor, rotisserie, rotating rack); and
  - Pasta cookers.
- Electric Equipment
  - Demand controlled ventilation;
  - Dishwashers (electric water heating); and
  - Hot food holding cabinets.

Program Changes
None.

Budget and Goal Considerations
The saving levels were established using the latest Arkansas TRM and Energy Star assumptions. We used historical participation levels to estimate participants.

The main budget drivers include the following:

- Administration – The budgets were based on historical performance.
- Advertising and Promotion – This budget provides funds to promote the program through customer and trade education and awareness through events and direct communication.
- Participant Incentives – The rebate budget reflects the current rebate levels and projected customer participation in each offering.

Involvement of Community Energy Organizations
We work with community organizations, distributors and manufacturers of foodservice equipment to help educate customers of this program offering.

➢ Heating Efficiency

Description
The Heating Efficiency program offers prescriptive and custom natural gas rebates to business customers who install energy efficiency boilers, furnaces, water heaters, unit heaters and other system improvements. The program also offers funding to conduct heating engineering assistance studies. The program is primarily marketed through our account managers for our large customers and energy efficiency specialists for our small business customers. We also work closely with our trade partners, specifically manufacturers' representatives, to market the program.

The program's main offerings include the following:

- Prescriptive rebates for:
  - New boilers, furnaces, water heaters and unit heaters that exceed the minimum efficiency required by energy codes;
  - Optional auxiliary boiler equipment that further improves a new or existing boiler's efficiency; and
  - Distribution-system improvements, including steam trap repair and replacement and pipe insulation.
- Custom rebates for:
  - Heat recovery projects and other energy saving projects that lower a customer's natural gas use and pass the required Societal and Participant Tests on a per project basis; and
  - Heating systems with more than 30% process load or larger than 10 million BTUH.
- Study funding to identify and quantify heating-related energy savings projects.

The main offerings are described below.

Prescriptive Rebates
The program offers prescriptive rebates for boilers, furnaces, water heaters and unit heaters that substantially exceed the minimum efficiency required by energy codes. Prescriptive rebates are also available for auxiliary boiler equipment to improve a boiler's efficiency or distribution-system improvements to reduce heat loss. New packaged boiler systems do not qualify for auxiliary equipment rebates unless the customer can show that the same boiler is available and qualifies for the base boiler rebate without the auxiliary equipment.

Custom Rebates
The program offers custom rebates for efficiency equipment that is non-prescriptive. These projects require pre-approval and are funded based on anticipated energy savings. The Custom rebate process is more complex than the prescriptive rebate process, as each project is analyzed on an individual basis rather than based on deemed savings.

Study Funding
The program offers two types of study funding for customers interested in identifying and analyzing potential heating-related energy efficiency projects: prescriptive steam trap audits and custom studies. Prescriptive steam trap audits are rebated and may receive funding up to 100% of the audit cost. These audits do not require preapproval; however, all faulty traps identified in the study must

be replaced. Custom studies are funded based on anticipated savings. These studies require preapproval and each project is analyzed individually.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Increased baseline efficiency for hot water boilers greater than 2.5 Million BTUH	In compliance with MN Commercial Energy Code	New to this Plan	New
Increased minimum pipe insulation requirements	In compliance with MN Commercial Energy Code	New to this Plan	New
Reduced the assumed average operating efficiency for condensing boilers	As suggested in Commercial Condensing Boiler Optimization CARD	New to this Plan	New
Decreased the efficiency improvement for tune-ups performed on condensing boilers	As suggested in Commercial Condensing Boiler Optimization CARD	New to this Plan	New
Add Electrically Commuted Motors (ECMs) for furnaces to the program (moved from the Motor and Drive Efficiency Program)	Capitalize on market efficiencies with similar segment (promote with furnace rebates)	New to this Plan	New

Budget and Goal Considerations
The program's participation, energy savings goal, and budget were determined by looking at the Company's overall gas goal, past participation levels, the typical ramp-up period for program changes, and new offerings. We reviewed the equipment chosen and general characteristics of historical projects to develop a projected average savings per participant for various program offerings.

The main budget drivers include the following:

- Rebates – The rebate budget reflects the new measure levels and projected customer participation in each offering, which was based on 2014 and 2015 participation across the offerings.

- Trade Incentives – These budgets are based on a percentage of anticipated customer rebates. These incentives are paid to motivate trade partners to participate by helping to educate and install energy efficiency improvements.
- Labor – These budgets are based on past program performance with a slight increase build in for expanded program offerings, engineering, and participation.
- Promotion and Advertising – Promotions may include direct mail to customers and trade, training events, email marketing, and trade publications

Involvement of Community Energy Organizations

The Commercial Heating program works with multiple community energy organizations from trade vendors and installers, to the Minnesota Blue Flame Association. We meet with the trade annually to assess engagement, program strengths and weaknesses, as well as to get feedback on the market. The Minnesota Blue Flame Association is used to drive awareness of natural gas conservation topics and increase educational resources for energy savings options.

➢ Lighting Efficiency

Description
The Lighting Efficiency program offers prescriptive and custom rebates to Xcel Energy electric business customers who install qualifying energy efficient lighting equipment in existing or new buildings. The program also offers rebates for Lighting Redesign studies to customers needing assistance to optimize the lighting systems within their facilities. The program is primarily marketed through our account managers for our large customers. We also work closely with our trade partners, manufacturers' representatives, distributors, and contractors to market the program.

The program's main offerings include the following:

- Prescriptive rebates for products from a pre-defined list of lighting measures that save energy. Typical options include:
    - Light emitting diode (LED) lamps and fixtures that replace inefficient systems, including incandescent, high intensity discharge (HID), and fluorescent technologies; and
    - Low-wattage fluorescent lamps and fixtures that replace higher-wattage fluorescent and HID lighting.
- Custom rebates for energy saving lighting projects that do not fall within the requirements of the prescriptive rebates.
- Study funding is available for customers who have facilities that are under or mis-lit. Studies identify and quantify lighting solutions that include energy saving opportunities.
- Midstream LED lamp incentives for local distributors, called Business LED Instant Rebate.

The main offerings are described below.

<u>Prescriptive Lighting Rebates</u>
The program offers rebates for qualifying lighting equipment that is more efficient than existing equipment in retrofit situations or more efficient than standard equipment in new construction applications. Lighting measures most applicable to a prescriptive rebate format are ones that are commonly installed in the marketplace and have an easily identifiable means to determine energy savings.

<u>Custom Lighting Rebates and Advanced Lighting Controls</u>
Applications for energy saving lighting projects that do not fit into the prescriptive paths may be reviewed using the Custom Efficiency or Advanced Lighting Control product preapproval application and the accompanying Lighting Evaluation Worksheet. Project analysis and preapproval of Custom Efficiency and Advanced Lighting Control lighting projects is required prior to equipment purchase and installation.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Addition of additional rebate tiers for LED area lights	Customer demand	New to this Plan	New
Addition of LED screw-in lamps (HID replacement) rebates	Customer demand	New to this Plan	New
Addition of LED PL lamps (CFL replacement) rebates	Customer demand	New to this Plan	New
Addition of LED down lights (with fluorescent baseline) rebates	Customer demand	New to this Plan	New
Addition of integral fixture sensor rebates	Customer demand	New to this Plan	New

Budget and Goal Considerations
The program's participation, energy savings goals, and budgets were determined by looking at the Company's overall electric goal, past participation levels, as well as the large number of LED products that are expected to becomes commercially available during the time period of this Plan. We reviewed the equipment and project characteristics of historical projects to develop projected average cents per kWh rebates for each measure. Anticipated energy savings for the program was determined using Xcel Energy's deemed savings database.

The main budget drivers include the following:

- Participant Incentives – The vast majority of the budget is allocated for rebates. This budget reflects the new rebate levels and projected customer participation in each measure, which was based on 2014 and 2015 participation across the offerings.
- Administration – These budgets are based on past program performance with a slight increase built in for expanded program offerings, engineering, and account management involvement. The budget also includes third-party implementer costs for the implementation of Business LED Instant Rebate efforts and technical assistance with complex lighting projects.
- Advertising and Promotion – A small promotional budget was derived using historical data from past activities. Promotions are targeted to customers and trade partners and typically focus around activities such as new or revised product offerings, case studies featuring successful projects, educational opportunities, and bonus rebates.
- Customer Service – This budget is applied to consulting and analytical services for lighting projects that are analyzed through the Custom Efficiency program.

Involvement of Community Energy Organizations

The Lighting Efficiency program is promoted through a number of community organizations. The Minnesota Chamber of Commerce's Energy Smart program actively promotes lighting efficiency and refers their membership to the program as part of their overall initiative to promote energy efficiency. We coordinate regularly with the Center for Energy and Environment and the One-Stop Shop program to ensure the rebate levels, policies, and practices are relatively consistent. Additionally, we work with trade organizations, such as the Building Owners and Managers Association, as a means to promote energy efficiency to their membership.

➢ Motor and Drive Efficiency

Description
The Motor and Drive Efficiency program offers prescriptive and custom rebates to electric business customers that install National Electrical Manufacturers Association (NEMA) Premium motors, Enhanced NEMA Premium motors, constant speed motor controllers (CSMCs), HVAC and non-HVAC variable frequency drives (VFDs) and water well pump (WWP) VFDs. Rebates for motor and drive system studies are also available. The Motor and Drive Efficiency program offers products to customers that are looking to improve their motor and drive system efficiency and system reliability, while reducing electricity consumption and costs.

The program is primarily marketed through our account managers and Energy Efficiency Specialists to our large and mid-range customers. We also work closely with our trade partners, specifically manufacturers' representatives, to market the program.

The program's main offerings include the following:

- Prescriptive rebates for:
  - New or replacement equipment that meets or exceeds the NEMA Premium efficiency energy standards for Motors;
  - New or replacement equipment CSMCs used to control any constant speed motor that is lightly loaded when the speed cannot vary;
  - HVAC and non-HVAC VFDs used to control the motor speed of fans and pumps; and
  - WWP VFDs used to control motor speed for water well pumping in specific applications.
- Custom rebates for:
  - Projects and equipment that do not meet the prescriptive criteria.
- Study funding.

The main offerings are described below.

Prescriptive Rebates
The prescriptive rebates are available to electric business customers with projects that meet the prescriptive requirements of the Motor and Drive Efficiency program.

The program offers prescriptive rebates for HVAC and non-HVAC VFDs or drives, CSMCs and NEMA Premium efficiency motors. As well as alternating current permanent magnet (PMAC) motors that fall under the Enhanced Motor portion of the program and WWP VFDs. The PMAC motors and WWP VFD products were added to the prescriptive portion of the program to reduce the barriers that prevent customers from purchasing the more efficient but higher priced innovative technologies.

Custom Rebates
The custom rebates are available to customers with projects that fall outside the prescriptive program criteria and/or for new technologies in the market place.

Study Rebates

The Motor and Drive Efficiency program offers study funding for customers that want a deeper understanding of how their motors and drives work within their facility.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Move Electronically Commutated Motors (ECMs) to the Heating Efficiency Program	Capitalize on market efficiencies with similar segment (promote with furnace rebates)	New to this Plan	New

Budget and Goal Considerations
The program's participation, energy savings goals, and budgets were determined by looking at the programs historical electric goals and historical participation levels. Our analysis included the review of equipment and characteristics of historical projects to develop a projected average savings per participant for various program offerings.

The main budget drivers include the following:

- Participant Incentives – The budget reflects rebates to help offset initial costs associated with the capital investment in energy efficient equipment.
- Administration – These budgets are based on past program performance with a slight increase built in for expanded program offerings, engineering and participation.
- Advertising and Promotion – A small promotional budget was derived using historical data from past activities. Promotions are targeted to customers and typically focus around activities such as new or revised product offerings, or bonus rebates.
- Customer Service – The Company employs consulting and analytical services for motor projects that are analyzed through the Custom Efficiency program, as well as for motor engineering studies.

Involvement of Community Energy Organizations
The Motor Efficiency program works with multiple community energy organizations including trade vendors, distributors and installers. This is done by hosting training sessions for both customers and trade partners. We also participate regularly with Motors Decisions Matter to ensure practices, product offerings and rebates are relatively consistent. Additionally, we work with trade organizations, such as the Building Owners and Managers Association and Electrical Apparatus Service Association, Inc. as a means to promote energy efficiency to their membership.

➢ Multi-Family Building Efficiency

Description
The Multi-Family Building Efficiency (MFBE) program is a joint offering with CenterPoint Energy that provides a streamlined approach to whole-building energy savings in multifamily properties. Offered through one program implementer, it is designed to engage building owners by helping them understand their energy use, achieve immediate energy savings through low-cost improvements, and move beyond the initial measures for deep energy savings. The structure is a combined approach of a building audit/direct-install phase to engage the building owners and achieve early savings, and a performance-based component to encourage further improvements in the building.

The incentives offered through this program are based on a percent of the cost of the energy saving improvements, making it easy for owners to understand the incentive available relative to their share in the cost. Additionally, instead of encouraging specific measures, the program seeks to drive property owners to achieve the maximum savings possible by offering increasing incentives for higher levels of savings, regardless of how the savings are achieved, the form of energy saved (electricity or natural gas), or location of energy savings (resident or common space). The allocation of energy savings between spaces, fuels, and rate classes occurs "behind the scenes" as much as possible, in order to avoid confusing participants and maximize accessibility. The program is marketed to building owners/managers and is available to both market rate and affordable housing properties.

The program's main offerings include the following:

- Whole-building energy audit & direct install of low-cost energy savings measures;
- Project consultation; and
- Incentives for whole-building energy savings.

The main offerings are described below.

<u>Whole-building energy audit and direct install of low-cost energy savings measures</u>
The MFBE program target is building owners/managers, those who can make decisions and take action to implement energy efficient improvements in the building as a whole. Eligible properties must have Xcel Energy as their electric service provider and either CenterPoint Energy or Xcel Energy as their natural gas provider. The multifamily building must also have a common entrance, common space(s) and in-unit kitchens to qualify for participation in the program. The determination of whether a property is eligible to participate is reviewed on a case-by-case basis.

To encourage engagement, the program starts with a free audit and direct install of energy saving measures, with all services being provided by one third party program implementer. After completion of the whole-building energy audit and direct installations, a written report identifying the audit findings and recommended energy savings actions necessary to achieve the various incentive levels is provided to the building owner/manager.

Direct install measures include:

- In unit LEDs;
- Common area screw-in LEDs;
- LED exit signs;
- Kitchen and bath faucet aerators;
- Energy efficient showerheads; and
- Water heater blankets.

Project consultation

The building owner/manager works with the program implementer to select a specific set of improvements. The program implementer develops job specifications, establishes a timeline for installation of improvements, assesses bids received from contractors, and works with the owner to select a winning bid. The selected contractor performs the specified work and the implementer oversees QA/QC to ensure improvements are performed as specified.

Incentives for whole-building energy savings

Participants moving beyond the assessment and direct-install phase of the program and choosing to undertake energy efficiency upgrades are eligible for financial incentive payments based on the level of whole-building energy savings achieved, according to the following schedule:

Achievement Level	Whole-building Energy Savings Achieved	Incentive Level
Tier 1	15%	25% of cost
Tier 2	20%	35% of cost
Tier 3	25%	40% of cost

The incentive level is applied to the total cost of installing approved energy-related measures. Thus, if a building owner elects to undertake building improvements unrelated to saving energy, the costs of those improvements would not be included in the calculation of the final incentive. The program implementer confirms the owner understands which measures and costs are or are not included in the calculation of the incentive before the work begins. If the improvements selected by the owner are not cost-effective, the Companies may refuse to pay an incentive; this is also communicated to the owner before work begins.

The incentives are paid when the participant reaches either the completion of their project as a whole (whether that gets them to tier 1, 2 or 3) or when they reach any one tier on the way to their end goal. To qualify for the incentive payment, projects must be completed and operational within two years of the audit.

Buildings qualifying as low-income (based on the August 2012 guidance document from the Department of Commerce, Division of Energy Resources) are eligible for incentives double those available to market-rate buildings (e.g. 50%, 70%, 80% of cost). Although the MFBE program is not a dedicated low-income program, the use of this program adds additional value for these customers and the associated program costs for low-income buildings (both incentive spending and

project delivery expenses) may be used for purposes of demonstrating compliance with the statutory low-income spending requirement.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Changed to LEDs for in-unit direct install lighting measure	Market availability of CFLs is decreasing as LEDs become more prevalent and affordable	New to this Plan	New

Budget and Goal Considerations
The program's participation and energy savings goals and budget increased each year due to the high level of interest experienced with the launch.

The main budget drivers include the following:

- Administration – This budget covers internal labor and expenses for program planning and implementation and vendor administration.
- Customer Services – Services provided by Third-party program implementers is funded through this budget.
- Rebates – This budget covers the incentives paid when whole-building energy savings are achieved.

Involvement of Community Energy Organizations
We are participating in the MN Multifamily Affordable Housing Energy Network, which consists of various community stakeholders and initiated by Fresh Energy and the National Housing Trust. We are also members of a national ACEEE working group focused on energy efficiency in multifamily properties.

➢ Process Efficiency

Description
The Process Efficiency program offers large to mid-sized industrial customer's customized resources to develop a holistic, sustainable energy management plan. This program provides funding for studies to identify and scope energy efficiency opportunities. Rebates are available to customers who implement qualifying energy efficiency recommendations. This program is primarily marketed to industrial customers through account managers. The program targets industrial customers that have at least 0.5 GWh or 2,000 Dth of conservation potential.

The program offerings are delivered in three phases. Each phase is defined in a Memorandum of Understanding that is customized to reflect the needs of the specific customer.

Phase 1: Identification
Xcel Energy performs a high level analysis to identify opportunities for energy savings in the customer's business practices, facilities, and operations. This is completed at no cost to the customer. Phase 1 is delivered using a third-party provider selected through an RFP process.

Phase 2: Scoping
This phase provides support and resources to further define, measure, and provide recommendations and assistance for energy savings opportunities while working with the customer to optimize the business practices identified in Phase 1. Total funding for Phase 2 is based on estimated savings and a typical customer is asked to contribute up to 25% with a maximum amount of $7,500. The purpose of the customer contribution is to ensure management-level engagement and the customer's commitment to a holistic approach. Phase 2 is delivered using internal resources or third-party technical experts selected through an RFP process, or through technology-specific experts of the customer's choosing.

Phase 3: Implementation
We work with the customer to put together an energy management plan which includes conservation goals and energy conservation projects. This phase includes a customized rebate and bonus schedule that rewards deep energy savings and/or a system-wide approach.

Upon project completion, customers earn rebates for improvements that qualify for any of our prescriptive or custom programs. The savings are included in the Process Efficiency program achievements, but mirror the rules and rebate levels of our other programs. If the improvements do not qualify for rebates due to program rules, we claim the project savings in a manner consistent with our study driven credit policy.

Due to the holistic nature of this program, several policies have been previously filed and approved by the DER and continue to remain in effect:

- Bundling: When customers identify multiple measures for installation, a bundle can be evaluated to see if it qualifies for a rebate versus each individual component. This allows measures with too short of a payback for a rebate to be leveraged to drive projects with too long a payback for the customer to install so that both are implemented.
- Preapproval dates: Custom-type measures in Process Efficiency require a custom analysis, but the actual date the project is submitted and the analysis is completed does not disqualify

a project if it was initiated after the customer entered into the program. This is due to the extensive resources used by the program to identify and scope ways to drive energy efficiency into how a customer does business. The goals and awareness created during Phases 1 and 2 can result in projects that drive energy savings in business areas that act without immediately notifying the personnel in contact with Xcel Energy.

- Rebate bonuses: We will use the rebate structure of the other end-use programs and then incorporate additional rebate bonuses for system optimization and/or exceeding annual achievement targets.
- Facility-level metering: This concept is being developed and may be tested through this program. We work in advance with the DER to define the methodology of how we propose to take credit under this metering scenario. Facility-level metering provides us the ability to accurately account for all savings generated by installation of a measure and incorporate the savings that may be driven plant-wide that we have been unable to accurately capture historically.
- Behavioral Savings: We use the DER's Average Savings Method to count behavioral savings created through single entity-based behavioral change efforts. This also could apply to technical projects that require specific behaviors to maintain persistent energy savings throughout their lifetime.

Program Changes
None.

Budget and Goal Considerations
We determined the program's participation, energy savings goals, and budgets by examining historic participation levels, project and participation cycles, and costs.

The main budget drivers include the following:

- Administration – These costs are driven by marketing, sales, engineering, and external labor resources to support the Company's heavy engagement with the customer, as well as cover the costs of those projects requiring metered verification.
- Customer Service – The Company utilizes third-party resources to deliver the program's identification and scoping phases.
- Participant Incentives – The program has a robust rebate budget due to the size of projects likely to be initiated through the Process Efficiency program. In addition to standard rebates, Process Efficiency offers lucrative bonus rebates for exceeding energy savings and/or implementing projects on a system-wide approach.

Involvement of Community Energy Organizations
The Process Efficiency program works with Community Energy Organizations to promote the program and deliver its offerings. In particular, The Trillion BTU financing delivered by the St. Paul Port Authority, and Xcel Energy could collaborate to help customers fund large capital projects when financing is a barrier to implementation. We consider leveraging resources as they become available through these and other external organizations and consider integrating their offerings into our program and our customers' energy management plans.

➢ Recommissioning

Description
The Recommissioning program offers study funding and electric and natural gas implementation rebates to commercial customers who optimize their existing equipment to make it more energy efficient. The program is primarily marketed through our account managers, Business Solutions Center, and recommissioning study providers.

The program's main offerings include the following:

- Study funding to identify and quantify Recommissioning-related energy saving measures;
- Rebates for implementing recommissioning or building system tune up measures identified through a study;
- Building benchmarking tools to provide customers with a streamlined, consistent process for obtaining whole building energy usage data and measure the energy efficiency of buildings; and
- Rebates to off-set the cost of Building Operator Certification training.

Recommissioning Study
Customers may receive rebates for both the study and implementation of their recommissioning measures. Our study funding helps customers pay a study provider to identify the recommissioning opportunities that exist within their building. Typical measures that are identified include, but are not limited to:

- Adjustment of outside air and return air dampers;
- Calibration/tune-up of Energy Management System points;
- Eliminating simultaneous heating and cooling;
- Optimum start/stop of air handlers and makeup air units (early shutdown in the evening, late start in the morning);
- Resetting of a chiller's condenser water temperature; and
- Resetting the chilled water and hot water supply temperatures.

Fast Track Implementation Path
This path is for customers who have either performed a study outside of our program or have identified recommissioning measures within their building without an Xcel Energy funded study. To qualify, we review their recommissioning savings opportunities to determine implementation rebates. We perform the same detailed review as we do for studies that we fund. Because our review helps customers make decisions, we claim Study-Driven credit for the resulting savings, no matter what the payback is, when customers implement the recommendations.

Refrigeration Recommissioning Path
This path is focused on analyzing grocery and convenience store refrigeration systems to determine how their refrigeration systems (i.e. compressors, condensers, display cases, suction and discharge temperatures) can be adjusted and optimized to save energy. Due to the nature of the recommended measures, implementation of the energy savings recommendations occur as the provider is conducting the analysis.

Building Benchmarking Offering

Benchmarking provides a streamlined and consistent approach for building owners to access whole-building usage data and measure the energy efficiency of their building(s). The service relies upon ENERGY STAR Portfolio Manager to assist Xcel Energy customers in benchmarking their buildings. Key features of the offering include:

- Building owner authorization;
- Tenant identification;
- Data privacy rule implementation;
- Consumption data aggregation and normalization; and
- Automated data transfer to the ENERGY STAR Portfolio Manager.

Building Operator Certification Offering

Rebates offered to encourage the training and certification of building operators in our Minnesota service territory through the Building Operator Certification (BOC) offering. Rebates are paid to participants who complete Level I or Level II of the BOC training. Energy savings is captured on a per-participant basis and is derived through the training's influence on building operators to identify energy efficient opportunities and make energy conscious decisions.

The DER has previously approved the following policies:

- If it is too burdensome for the customer to provide invoices for a project, we will accept their signature as documentation of implementation as long as the customer is willing to forego any potential rebate.
- Study-driven credit: If a customer implements measures that have less than a nine month payback or greater than a 15 year payback, the customer will not receive a standard implementation rebate (customer may be eligible for a bonus rebate if measure is implemented within 9 months) but we will claim those study-driven savings. We believe that our help identifying and analyzing energy efficiency measures provides sufficient influence on the customer's decision to implement those measures.
- Nine month bonus incentive: Because most recommissioning measures have a less than nine month payback, the Recommissioning program offers a bonus incentive of $0.03/kWh and $3/Dth for customers who implement recommended recommissioning measures within nine months of the study approval date (date on the customer's study approval letter).
- Maintenance: The program claims energy savings for maintenance items identified and implemented through the Recommissioning process.
- Secondary credit: We will offer rebates and take credit for measures that have secondary benefits in addition to on-site energy benefits. These secondary benefits could include purchase chilled water, city water, etc. The electricity savings embedded in these secondary benefits will be added to the on-site reduction.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Addition of Building Operator Certification Measure	Added to encourage building operators to become leaders in their field and identify energy efficient opportunities in their building(s).	New to this Plan	New
Addition of Building Benchmarking Measure	Building Benchmarking was approved through Product Development in 2016 and will be converted to a measure under the Recommissioning Program for the 2017-2019 Triennial Plan.	Formal Modification	Filed on October 15, 2015 and approved on January 21st, 2016

Budget and Goal Considerations
The program's participation and energy savings goals and budget were determined by past participation levels for the program.

The main budget drivers include the following:

- Rebates – The budget includes costs for study rebates, implementation rebates, and the nine month implementation bonus. Historically, we have paid out more in study rebates than implementation rebates.
- Labor – These budgets are based on historical actuals for the program.
- Promotion and Advertising – This budget is for customer mailings, literature and trainings.
- Consulting – We offer a vendor incentive to encourage study providers to aid customers in implementing their recommended recommissioning measures.

Involvement of Community Energy Organizations
We value feedback from customers and study providers and make an effort to gather their input to ensure the program is effective. As ideas are generated, the team reviews and implements if feasible. The program team, as well as the trade relations manager, meets both formally and informally with active trade allies to discuss the program and obtain feedback, as necessary.

➢ Self-Direct

Description
The Self-Direct program is targeted toward "self-sufficient" business customers who have the resources to manage their own energy efficiency improvement projects and the capability to perform measurement and verification (M&V). Some customers may prefer to use their in-house experience and resources, while others may choose an energy service company (ESCO) or other energy partner to assist them with their efforts. Regardless, customers who implement and commission qualifying projects can receive rebates based upon the amount of energy savings achieved.

Program Changes
None

Budget and Goal Considerations
The program has not had any participation since its inception. However, customers have expressed interest in the program, but for their own reasons have not pursued participation beyond initial discussions or gravitate to our holistic, full-service programs. Though there are no demand and energy goals within the plan, we will continue to offer it as a customer choice; therefore, the program budget reflects what spending may occur should a customer avail themselves to this opportunity.

➢ Turn Key Services

Description
The Turn Key Services program is designed to remove hurdles for our business customers of all sizes when identifying and implementing energy efficiency projects. The program is primarily promoted through our energy efficiency specialists and account managers. We work closely with our third-party consultant to implement the program.

The program's main offerings include the following:
- Prescriptive rebates for the end-uses rebated in our other prescriptive programs;
- Custom rebates for any measure eligible for rebates under our other custom programs;
- A subsidized audit that identifies energy saving opportunities. Customers pay a portion of the audit cost based on their size; and
- Free implementation services to help customers implement energy efficiency projects.

The main offerings are described below.

Identification of Measures
Customers signing up for an assessment receive an ASHRAE Level I audit. This assessment is a walkthrough of the entire facility and involves an analysis of the customer's utility bills and includes graphs that show how much energy is being used by each end use. The audit identifies simple low/no cost opportunities in addition to higher cost conservation opportunities. An ENERGY STAR Benchmarking score is calculated for all applicable building segments. All opportunities also include energy savings estimates, cost savings and applicable rebates.

Implementation Services
The program offers a variety of services that customers may choose from depending on their specific needs to help them implement their projects. Services include, but are not limited to:
- Attending internal stakeholder customer meetings to obtain approval;
- Assistance with prioritizing projects;
- Financial analysis of implementing measures;
- Bidding process review;
- Coordination of implementation;
- Verification of installation; and
- Paperwork compilation and rebate submission.

Funding
Participants are eligible for prescriptive and custom rebates for installed and implemented energy efficiency measures. Customers can qualify for a bonus rebate if they implement their recommendations within a certain timeframe. In addition, we subsidize audits and implementation services to encourage customers to move beyond the barriers to participation.

Consistent with other custom type projects, we anticipate there will be projects identified through this program that are custom in nature and payback to the customer is less than nine months. The Company claims study-driven credit for these projects.

Program Changes
None.

Budget and Goal Considerations
The program's participation, energy savings goals, and budgets were determined by looking at historical program performance and study participation.

The main budget drivers include the following:

- Administration – This budget includes labor estimates which are based on historical spending.
- Third Party Customer Services – This cost includes scoping, and project management services provided directly to the customer.
- Promotion – This cost includes promotional outreach tactics to increase awareness and encourage participation. It is always important to build a pipeline of audits for Turn Key to help with future goals.
- Participant Incentives – The rebate budget reflects the assumed participation across multiple end-use programs based on projects implemented in 2015.

Involvement of Community Energy Organizations
The Turn Key Services program employs the services of a third-party company to deliver the assessments and the project scoping and implementation assistance for the program.

➢ Saver's Switch® for Business

Description
Saver's Switch is a load management program available to business electric customers with central air conditioning. Participating customers receive a monthly discount on their June through September bills. In exchange for the discounts, participants allow Xcel Energy to cycle their air conditioner on and off during control events, which typically occur on hot, humid summer days. Air conditioners are controlled via a radio operated switch installed by a licensed electrician on or near the customer's air conditioner. The switches utilize an adaptive algorithm designed to ensure a 50% reduction in air conditioner load during a control event. In the past decade, we have had relatively few control events. The tariff allows for up to 300 control hours each year.

Program Changes
None.

Budget and Goal Considerations
The program budget and savings were developed based on equipment and installation costs for the number of switches to be installed and replaced. During the course of this Plan, in addition to recruiting new participants, we intend to replace switches older than 20 years. We also conduct inspections of additional older switches to verify functionality and, if needed, replace with new hardware. The overall participant target is met with a combination of new installations and maintenance replacements.

The main budget drivers included the following:

- Administration – This budget category covers the costs of internal labor for program planning and implementation, as well as the costs of external contract labor and software maintenance.
- Customer Service – The program uses a third-party to install the switches.
- Advertising and Promotion – The program has a limited promotional budget in this Plan, as a signficiant portion of the installations are from the replacement of old switches.
- Measurement and Verification – The program hires a third-party to conduct data collection for measurement and verification to determine the savings per switch.

Involvement of Community Energy Organizations
The program utilizes specialized hardware and contracted installers. Therefore, other than for promotions, there is no involvement from community energy organizations.

➢ Electric Rate Savings

Description
The Electric Rate Savings program is offered to any business customer who can reduce their electric loads during control periods by at least 50 kW. In return for reducing their loads, they receive a monthly discount on their demand charges. Participants save as much as 50 percent on demand charges over the year. Currently, the Electric Rate Savings program is promoted directly through Xcel Energy's account management and Business Solutions Center team.

Program Changes
None.

Budget and Goal Considerations
The program's participation, energy savings goals, and budgets were estimated using historical program performance and emerging market influences expected in the near future. The budget for this program includes labor costs for associated services, with the remaining costs attributed to customer communications. Customer communications include, program information packets sent to each participating customer, explaining any program changes, reminders of their responsibility as an interruptible customer on a control day, and their historical control information.

We anticipate changes in demand response rules at an independent system operation level, and environmental rules for the operation of back-up generators will likely have an adverse effect on participation. Therefore, participation has been limited over the three year period as these rules are finalized. Consequently, the budget for the program will remain steady in an effort to maintain current participation levels for the 2017 – 2019 periods.

The main components of the program budget include:

- Administration – This category includes labor costs for internal sales, sales support and fulfillment, marketing administration and planning, equipment installation and maintenance, project planning and implementation.
- Advertising and Promotion – We have budgeted to conduct an annual customer mailing, test event mailings, customer town meetings, and program collateral materials.

Involvement of Community Energy Organizations
None.

➢ Business Education

Description
The Business Education program focuses on creating awareness of energy efficiency and providing business customers with information about what they can do to reduce energy use in their buildings. The program encourages customers to make Xcel Energy their first contact when considering equipment or process upgrades and engages customers to make changes that lower their energy use. The program focuses on removing the barriers to adoption of energy efficiency measures by educating customers and their employees on the impacts of their energy use and offering information on how to take action to achieve long-term energy savings.

The program is primarily marketed to small and mid-sized business customers through sponsorships and customer outreach, advertising campaigns, direct mail and email newsletters, and the Energy Efficiency Specialists at the Business Solutions Center.

The program's main offerings include the following:

- Sponsorship and Customer Outreach;
- Digital Communications; and
- Online Energy Assessments.

The main offerings are described below.

Sponsorships and Customer Outreach
A variety of grassroots community events, sponsorships and workshops are targeted with the program to promote energy efficiency rebates and energy conservation strategies to a wide range of customers. This in-person, one-on-one customer outreach is critical to driving onsite customer leads and program signups.

Digital Communications
The program takes part in targeted digital communications to reach a variety of small business customers, taking into account the wide range of industries and customer segments. Examples of digital communications include:

- Targeted email campaigns;
- Energy efficiency newsletters;
- Social media; and
- Energy conservation video series.

Online Energy Assessment
This free, half-hour, do-it-yourself analysis helps businesses discover potential ways to save on their annual energy bills. Customers enter 12 months of billing data, their specific industry, equipment, and age of their facility. The assessment provides specific energy saving recommendations and applicable rebate and program offerings.

Program Changes
None.

Budget and Goal Considerations
The program's participation goals and budgets were determined by estimating direct mail and email campaign read and open rates, educational material requests, community outreach sponsorships and online energy assessment participation.

The main budget drivers include the following:

- Administration – This budget provides funds for internal staff and external fulfillment.
- Advertising and Promotion – This budget includes funds for direct mail promotion of no cost/low cost energy saving tips, Online Energy Assessments, energy efficiency events, sponsorships, and print and interactive advertising.

Involvement of Community Energy Organizations
The Business Education program participates in a variety of community-hosted customer outreach events. The program provides displays, staffing, and materials to promote energy conservation and efficiency to attendees.

➢ Small Business Lamp Recycling

Description
The Small Business Lamp Recycling program encourages electric customers in Minnesota to recycle their spent fluorescent bulbs instead of discarding them.

The program's main offerings include the following:

- Free compact fluorescent light bulb recycling at participating local hardware stores and partnering county hazardous waste facilities; and
- Coupons for 50¢ off the recycling fee for each fluorescent tube and HID bulb at participating hardware stores. The coupons are available at participating hardware stores and on the xcelenergy.com website.

The Small Business Lamp Recycling Program is marketed primarily through Xcel Energy's Home Lighting program promotions, participating hardware stores, and on the Xcel Energy website. A search feature allows customers to search by zip code to find the nearest recycling locations.

The Company follows the requirements of Minn. Stat. 216B.241, subd 5, which necessitates public utilities to notify customers that fluorescent recycling is the law in Minnesota. Every Small Business Lamp Recycling and Home Lighting promotional piece includes a disclaimer regarding the statute, such as, "Fluorescent lamps contain small amounts of mercury that are harmful to the environment. In Minnesota, it is illegal to dispose of spent mercury bulbs in household trash receptacles."

Program Changes
None.

Budget and Goal Considerations
The budget was developed based on historical spending and the expected number of bulbs to be recycled in the coming years. The budget is set to increase about five percent annually to account for additional bulbs that we anticipate will be recycled each year. The promotional budgets remain consistent throughout the Triennial Plan.

The main budget drivers include the following:

- Administration – This provides funds for internal labor for planning and program implementation.
- Promotion and Advertising– We market this program with the Home Lighting program promotions.

Involvement of Community Energy Organizations
Xcel Energy stays active in the Minnesota and national Lamp Recycling community through its partnerships with Mercury Technologies of Minnesota, Inc., and the Center for Energy and Environment.

➢ Efficient New Home Construction

Description
The Efficient New Home Construction program encourages home builders to construct energy efficient residential homes by providing incentives for achieving total energy savings of at least 10% better than code.

This program applies to builders of residential single-family, duplex, triplex, fourplex, town homes, and condo units that have individual heating systems and residential meters for Xcel Energy gas and/or electric service. We use a third-party implementer to recruit raters and to provide product training for raters and builders. The third-party implementer is responsible for collecting and reviewing building information from the raters and providing information to Xcel Energy for use in determining savings. The implementer also maintains all of the collected data in its own database. Builders hire their own RESNET-certified house raters who coordinate with their own RESNET providers.

The program's main offerings include the following:

- Builder rebates for gas homes achieving a total energy savings level of at least 10% above the level established by code;
- Builder rebates for electric-only homes achieving a total energy savings level of at least 10% above the level established by code;
- Appliance rebates for qualifying homes with Xcel Energy electric service; and
- Rater incentives.

The main offerings are described below.

Gas and Gas/Electric Homes
New in 2017 builders will be able to hire the RESNET-certified house rater of their choice. This also allows them to choose the services beyond the house rating itself that they would like to purchase. Homes must test out at a minimum of 10% total energy savings above code and must have positive therm savings. Homes not reaching that minimum are not eligible to participate and no incentives or payments to the builder or the rater will be available. For each qualified new home completed in our gas service territory, the builder is eligible for rebates.

Electric-only Homes
For homes built in our electric-only service territory, the builder receives a rebate when the home achieves the minimum 10% total energy savings above code and has positive kWh savings.

Appliance rebates
Prescriptive appliance rebates for ENERGY STAR rated clothes washers and ENERGY STAR rated refrigerators are available for homes successfully participating in either of the offers above and where Xcel Energy is the electric provider.

Rater Incentive
An incentive is paid to raters for each eligible home they submit to the program. This incentive recognizes the additional work required for data collection and entry.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Methodology	Date Notified
Program name change to Efficient New Home Construction from ENERGY STAR Homes	Reduces confusion in the market as to which homes are tested and which actually meet ENERGY STAR certification requirements. In addition, the name change provides consistency between Xcel Energy and its partnering utility, CenterPoint Energy.	New to this Plan	New
Removal of the program model of a single house rater contracted by the utility	Changes to the program structure allow the builders to choose their own house raters. This opens the market to new raters and is consistent with the new CenterPoint Energy model.	New to this Plan	New
Addition of rebates for gas homes achieving 10% or more energy savings over the code baseline	Changes to the Minnesota energy code raised the baseline for energy savings in new construction.	New to this Plan	New
Removal of electronically commutated motor (ECM) appliance rebate	ECMs must be modeled in the home analysis in order to achieve the correct HERS score.	New to this Plan	New
Removal of ENERGY STAR rated dishwasher appliance rebate	Changes to DOE appliance efficiency baselines have made savings with dishwashers negligible.	New to this Plan	New

Budget and Goal Considerations
The program's budgets and electric and gas energy savings goals were determined by cost estimates based on historical program expenses and forecasted participation rates.

The main budget drivers include the following:

- Administration – This category funds project planning and implementation along with program management. This includes the payment for the data aggregator serving the program.
- Advertising and Promotion – The program's direct promotion through sponsorship of the Parade of Homes and sales support materials are supported with these funds.
- Participant Incentives – These funds cover builder rebates.

Involvement of Community Energy Organizations

We are involved with the Builders' Association of the Twin Cities in promoting the construction and sale of new, energy efficient homes. We are the sponsor for the Green Path Energy Efficient Homes Tour which accompanies both spring and fall Parade of Homes events.

➢ Energy Efficient Showerheads

Description
The Energy Efficient Showerheads program is designed to offer year-round natural gas and electric savings to Xcel Energy customers. Residential natural gas and combination gas and electric customers in the Minnesota service territory are eligible to receive free 1.5-gallon-per-minute (GPM) high efficiency showerheads, 1.0 GPM bathroom faucet aerators, and a 1.5 GPM kitchen faucet aerator to help reduce energy costs and water use.

Eligible customers are contacted and offered a free kit, valued at approximately $10-$14 depending on the specific combination of measures. The kit is shipped to customers who respond to the offer within the promotional period. Kit contents include a combination of showerheads, kitchen and bath aerators, Teflon tape, and illustrated installation instructions.

The Company contracts with a third-party to manage all customer responses and distribute the energy efficient showerheads and aerators. The third-party is a recognized distributor of energy efficiency-related products in the United States. Customer responses are tracked by the provider, given to us following the distribution, and kept in a tracking system to calculate savings.

The program's main offerings include the following:

- 1.5 GPM high efficiency showerhead;
- 1.5 GPM kitchen aerator; and
- 1.0 GPM bathroom aerator.

The main offerings are described below.

- Customers who have two bathrooms and have not yet participated in the program or participated more than six years ago are eligible to receive a kit containing:
    - Two 1.5 GPM high efficiency showerheads;
    - One 1.5 GPM kitchen aerator; and
    - Two 1.0 GPM bathroom aerators.
- Customers who have one bathroom and have not yet participated in the program or participated more than six years ago are eligible to receive a kit containing:
    - One 1.5 GPM high efficiency showerhead;
    - One 1.5 GPM kitchen aerator; and
    - One 1.0 GPM bathroom aerator.

Customers responding to the promotional offer must indicate if they have one or two bathrooms in their home and what fuel serves their water heater (gas, electric or unknown). Other kit combinations may be developed based on customer demand and eligibility determined by past participation.

Each new participant is allowed one kit and customers may participate in the program once every 10 years. However, previous measure life was deemed at 6 years and therefore past participants are eligible for the free measures after 6 years.

Program Changes

The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Measure lifetimes increased to 10 years	Updated via DEER Database for Energy Efficient Resources	New to this Plan	New
Demand savings for showerhead measure	10-20 percent of savings determined during peak	New to this Plan	New
Secondary showerhead and bathroom faucet aerator measures added	Assumed most households have a second bathroom	New to this Plan	New
Changed assumption of customers with electric water heaters	Based on previous years' data of self-reported water heater types	New to this Plan	New

Budget and Goal Considerations
The product budget was developed based upon the expected participation level. Using the past program performance as a guide, the cost of the measures, fulfillment, postage, and all necessary marketing efforts were included to develop the budgets.

The main budget drivers include the following:

- Administration – This covers the costs of external fulfillment, web development, rebate costs, project planning, and implementation.
- Advertising and Promotion – The program uses direct mail and email to attract customers.
- Measurement and Verification – This category provides funds to survey participating customers.

Involvement of Community Energy Organizations
None.

➢ Energy Feedback

Description
The Energy Feedback program is a behavioral conservation program based on the Residential Home Energy Reporting System, a patented program developed by Opower. The program provides a targeted direct mailing called the Home Energy Report to a designated group of residential customers, giving them specific information and recommendations on ways to reduce their energy consumption. Customers receive new information with each Home Energy Report. Savings are quantified by comparing the energy consumption of the recipient group to that of a non-participating control group. The program also features an online web portal known as "My Energy" that features even more ways for customers to learn about energy use in their homes and possibilities for reduction. My Energy is available to all customers, with the only qualification being enrollment in My Account.

The program's main offerings include the following:

Personalized Home Energy Reports
These individualized reports are mailed and/or emailed to customers on a cadence prescribed by their tenure in the program. Reports provide:

- Customer's energy use compared to the average 100 "neighbors" in similarly sized homes with similar characteristics;
- Targeted efficiency recommendations based on home profile data available; and
- Other information such as consumption graphs or year to year bill comparisons.

Recipients are selected from among Xcel Energy Minnesota residential customers and may "opt out" of the program at any time upon request.

The Company anticipates doing an expansion in 2017, adding approximately 49,000 combo customers and 25,000 electric-only customers. In 2018 and 2019, smaller refills will be done as necessary to maintain participation levels.

My Energy Online Portal
This feature is available to all Minnesota residential customers. It provides the same information as the Home Energy Report on demand, along with more detail and other options. When going to the web portal, customers can:

- See their neighbor comparison;
- See graphs showing energy consumption by fuel type by bill period or day; and
- Take a Home Energy Analysis which provides insight into how energy is used in the home.

Customers are encouraged to visit My Energy through the use of emails, targeted messaging, and social channels.

Program Changes
None.

Budget and Goal Considerations
The budget and goals were developed with the costs supplied by Opower for delivery of the Home Energy Reports and for hosting the My Energy portal.

The main budget driver for the program is:

- Administration – This budget provides for program management and implementation along with data management and program development.

Involvement of Community Energy Organizations
The Center for Energy and the Environment has been instrumental in the development, implementation, and evaluation of this program as a pilot project. Subsequently we have worked with Cadmus to validate savings identified through the My Energy portal.

➢ Home Energy Squad®

Description
The Home Energy Squad program offers installation services to electric and gas customers who seek to improve their homes' energy efficiency and comfort, and lower their utility bills. The program directly installs a number of moderate-impact, low-cost measures for combination gas and electric customers and for electric-only customers who are natural gas customers of CenterPoint Energy. In addition and where cost effective, the program installs fuel-appropriate measures in Xcel Energy electric-only and gas-only territories where the operations vendor has identified potential customers. The program seeks to assist customers' efforts to overcome barriers related to making energy improvements, including confusion about product choices, varying costs, and finding qualified installers. The program charges a flat fee and offers customers to choose from a suite of energy saving measures. The program is marketed primarily within the metro area and larger out-of-state cities.

The program's main offerings include the following:

- Electric measures, including:
  - LED light bulbs of various types and wattages.
- Heating and cooling measures, including:
  - Weather-stripping of two external doors;
  - Programmable thermostat installation; and
  - Setback of pre-existing programmable thermostats.
- Hot water measures, including:
  - Insulation blanket for water heater;
  - High efficiency showerheads and faucet aerators; and
  - Temperature assessment and setback of water heater.
- Optional measures for customer purchase, including:
  - Electronics timer;
  - Second programmable thermostat installation; and
  - Weather-stripping of additional doors.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Switching from CFLs to LEDs	Increased customer demand and market availability in addition to discontinued CFL manufacturing	New to this Plan	New
Installation of measures in homes that are served by Xcel Energy gas-only or electricity-	Pre-identified opportunities where customers will benefit from single-fuel measure installation	New to this Plan	New

only			
Upon customer request conduct, a Home Energy Audit at the same time as a Home Energy Squad visit ("enhanced visit")	Provides customer convenience	New to this Plan	New
During an enhanced visit, perform an insulation evaluation and if warranted provide a list of qualified insulation installers from the Company's approved BPI list along with a bid	Provides customer convenience and encourages additional home energy efficiency	New to this Plan	New

Budget and Goal Considerations

The program's participation and energy savings goals and budget were determined by cost estimates based on vendor proposals, potential number of participants, and historical program expenses. The main budget drivers include the following:

- Administration – This category funds program administration costs through third-party vendors, as well as third-party labor for the installation of energy efficient measures in customers' homes.
- Promotion and Advertising – This category covers print, broadcast and interactive advertising, phone and street canvassing, and event promotion. As this program progresses it requires increased costs to build awareness and to directly reach participants.

Involvement of Community Energy Organizations

Xcel Energy partners with CenterPoint Energy to serve their common customers. Xcel Energy contracts with the Neighborhood Energy Connection in the utility's gas and electric combination territory, and with the Center for Energy and Environment and CenterPoint Energy in the utilities' shared territory.

➢ Home Lighting

Description
The Home Lighting program provides resources for customers to purchase energy efficient light bulbs. Using energy efficient bulbs is an easy and inexpensive way for customers to save electricity. The Company provides an avenue for customers to purchase discounted energy efficient bulbs through local retailers.

The Company motivates customers to purchase CFLs and LEDs by offering in-store retail discounts. The discounts are provided through collaboration with the bulb manufacturers and retailers. The three entities combine resources to offer instant rebates enabling customers to purchase a variety of energy efficient bulb models at a discounted price. The discount varies depending on the type of bulb and the manufacturer/retailer partner. There is no mail-in rebate form. The customer receives the discounted price at the cash register. Incentives are paid upstream and the discounts are passed on to the customer. The Company partners with retailers such as Home Depot, Walmart, Costco, Ace Hardware, and Menards.

In 2017, the Company will offer CFL discounts, but will focus on increasing the awareness and sales of LED bulbs. Continuing to offer CFL discounts to customers during 2017 will help ease the transition to LEDs while the marketplace is changing and allow energy efficient bulbs to be available to all customer types at a low cost. In 2017 - 2018, retailers will begin to discontinue stocking CFLs, replacing the product with value LEDs. Value LEDs are characterized by lower lifetime hours, commonly 10,000-15,000 hours. Also, the price is much lower than the traditional LEDs, making them more cost effective and attractive to customers who want to use LED technology but have been resistant to price. The program will offer a minimal amount of CFL discounts in 2017 to cover retailers that have not transitioned to LEDs. Beginning in 2018, the Company will discontinue the support of CFLs.

A new ENERGY STAR specification goes into effect January 2017, reducing the stringent requirements on LED bulbs. It will require lower lifetime hours: 15,000 versus 25,000. The Environmental Protection Agency (EPA) has eliminated the dimming requirement and changed the omni-directional requirement. This change in the ENERGY STAR specification will require lower cost LEDs to perform better and be more consistent in order to meet the certification.

The objective of the Home Lighting program is to motivate customers to purchase energy efficient bulbs. The Company will focus marketing dollars toward building awareness and sales of LED bulbs, in addition to helping educate customers about the product benefits and the changing marketplace. The Company will use various media channels to reach customers such as: radio, in-store signage, publications, bill inserts, social media, internet and sponsorship of community events. The peak sales period for energy efficient bulbs is in the fall and winter, as such, most of the promotions are scheduled during these peak buying periods.

The Company uses an RFP process each year to select participating retailers and to enable partnerships with a variety of retailers (including big box, mass merchandiser, and hardware and grocery outlets) which helps to ensure optimal pricing and reduces free-ridership. The Company uses a third-party implementer to implement the RFP and to help manage the program. The implementer is primarily responsible for tracking the product sales details, including the location,

types and quantities of bulbs sold each year and calculating the energy savings to be used in the annual Status Report.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
CFLs discounts eliminated in 2018	Product is being replaced with LEDs	New to this Plan	New

Budget and Goal Considerations
The energy savings target for the product was derived by analyzing the market potential and historical sales data, while considering new technologies, market potential, available retail channels and participating customer segments. All Xcel Energy Minnesota electric customers are eligible to participate in the program.

The Home Lighting budget has decreased slightly from 2015 spending because of a decline in the cost of LED bulbs and incentives. The upstream markdown incentives are typically between 30% and 70% of the incremental cost of the bulb and vary by the bulb manufacturer. The cost savings are passed on to the customer as an instant rebate.

Involvement of Community Energy Organizations
The Company collaborates with several organizations to monitor and incorporate best practices into lighting product design. These activities include: Consortium for Energy Efficiency membership, national ENERGY STAR Lighting Partner meeting attendance, and monitoring information published by lighting manufacturers, E-Source, the American Council for an Energy-Efficient Economy, the EPA, and the U.S. Department of Energy.

➢ Insulation Rebate

Description
The Insulation Rebate program offers prescriptive electric and natural gas rebates to customers who upgrade the insulation and air-sealing in their homes. The program captures natural gas and electric savings on existing single-family and multi-unit homes, up to four units, that professionally install insulation with a Residential Building Envelope Whole House Air Leakage Control Installer (RBE-WHALCI) certified through Building Performance Institute (BPI). Xcel Energy electric-only customers must use electricity as their main heating source in order to qualify.

The Insulation Rebate program is marketed primarily through a mix of social media, bill onserts, the Xcel Energy website, and cross-marketing opportunities with other Xcel Energy programs.

The program's main offerings include the following prescriptive rebates:

- Attic insulation and bypass sealing:
  - Must have a pre R-value of 20 or less; and
  - Must have a post R-value of 44 or greater.
    - Homes with existing insulation of R-21 or greater must add at least R-25 of additional insulation.
- Wall insulation:
  - Must have empty wall cavity; and
  - Must have a post R-value of 12 or more.
- Air-sealing and weather stripping.

The main offering is described below:

Participating customers must contract for insulation services with a BPI RBE-WHALCI certified insulation contractor in order to qualify for a rebate. Additionally, air sealing and weather stripping must follow industry-accepted practices for mitigating air leakage. Homes can participate in the program more than once every calendar year but rebates are not issued for the same measure completed either under the Insulation Rebate program or under a different rebate program, such as Whole Home Efficiency. With the changes to the Home Energy Audit program, participation in the Insulation Rebate program is expected to increase in this filing.

We rely upon a dealer network to aid in the success of the program. The Trade Relations Manager offers program-specific trainings and information sessions to the insulation trade.

An online registry of RBE-WHALCI BPI certified insulation contractors is available for customers to choose a certified insulation contractor. In order to qualify for rebates customers must choose an insulation contractor from this online registry.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Rebate values	Incentivize customers to implement more than one insulation project at a time	New to this Plan	New
Decouple rebate measures	Allowing customers to implement more than one insulation project at a time and be competitive with other utilities that offer insulation rebates	New to this Plan	New

Budget and Goal Considerations
The program's budgets and electric and gas energy savings goals were determined based on historical program performance, along with the costs associated with decoupling the rebate measures and increasing the rebate structure of all the program's measures. Marketing dollars focus on cross-marketing opportunities with other Xcel Energy programs and social media, proven cost-effective strategies for this program. In addition, dollars are being shifted from project delivery to measurement and verification to properly allocate costs associated with the site visits.

The main budget drivers include the following:

- Administration – This category funds program planning and implementation, channel management and rebate processing.
- Advertising and Promotion – The program utilizes social media, contractor training and cross-utility marketing to promote the program, and uses direct and indirect promotions such as community outreach events in partnership with other electric and natural gas rebate programs.
- Participant Incentives – These funds cover the costs of customer rebates.
- Measurement and Verification – The program uses these funds to perform verification of submitted paperwork.

Involvement of Community Energy Organizations
The Xcel Energy residential trade relations manager is involved with the Minnesota Building Performance Association, MN Blue Flame Natural Gas Association and the Xcel Energy trade partner network to help advance and promote the program.

➢ Refrigerator Recycling

Description
The Refrigerator Recycling program offers residential electric customers prescriptive rebates and pick-up services to dispose of their operable, inefficient refrigerator and freezer units in an environmentally safe and compliant manner. The program is designed to educate customers about inefficient refrigerators and freezers, and the potential long-term cost savings and energy usage reduction from removing them.

The main offerings are described below.

The program offers a prescriptive rebate for removing:

- Any functional refrigerator; or
- A freezer operating as a standalone unit.

The program is limited to two units removed per household per year. The program takes energy credit for each freezer or refrigerator based on its age and unit type. The Company utilizes the services of a qualified third-party vendor to perform the following services:

- Unit collection, recycling, transportation and storage;
- Qualification of unit at the time of scheduled pick up;
- Appliance processing and materials recycling;
- Issuance of incentive payments;
- Implementation of all customer service related to above activities;
- Product tracking and reporting; and
- Supporting Measurement and Verification requirements.

The vendor is required to comply with all local, state and federal requirements. This includes maintaining all permits and licenses required for any facilities, equipment and personnel used for this product. The vendor is bound by contract to de-manufacture and recycle all units received; none may be re-sold or placed back in service. The adherence to this process ensures that recycled units will not re-enter the market.

Xcel Energy and the third-party vendor both market the program. The target market consists of customers who are disposing of their functioning refrigerator and/or freezer. Generally these customers have a single-family home with two or more individuals in the household. The product is available to customers for a limited program period to limit free-ridership. The marketing strategy utilizes seasonal campaigns to promote the product. Product demand often peaks in the summer months, which is associated with customer home improvement and cleaning projects. Deployment of promotional tactics coincides with these seasonal time periods, with contingency plans if goals are not made by third quarter of each year. Additionally, the third-party vendor will survey participants annually to determine customer satisfaction and to verify energy savings.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Recycling any functional refrigerator	Encourage the retirement of all inefficient units and keep a primary unit from becoming a secondary unit in the home	New to this Plan	New

Budget and Goal Considerations
The program's participation and energy savings goals and budget were determined from historical program results and costs per participant. The main budget drivers include the following:

- Administration – The program uses a third-party vendor to implement the program, including: marketing planning, online scheduling, call center operations, refrigerator/freezer collection, transportation and storage, qualification of appliances, appliance processing and materials recycling, issuing of customer incentive payments, all customer service aspects related to recycling, product tracking, all reporting to Xcel Energy and environmental and compliance entities, supporting measurement and verification, and compliance with all local, state and federal requirements.
- Participant Incentives – The program pays customer rebates with these funds.
- Labor – This budget category is used for internal marketing and rebate operations labor.
- Promotion and Advertising – This effort includes: bill inserts, direct mail, print, outdoor, broadcast and online advertisements, community outreach, and social media.

Involvement of Community Energy Organizations
We market the program in cooperation with environmental organizations and events as opportunities arise.

➢ Residential Cooling

Description
The Residential Cooling program encourages customers to purchase new energy efficient cooling equipment and install this equipment using Quality Installation (QI) standards. QI specifications are based on the Air Conditioning Contractors of America (ACCA) Standard 5 which dictates proper sizing, airflow, duct sealing, and refrigeration charge. The program provides an incentive to Xcel Energy electric customers to purchase qualifying central air conditioning (AC) or air source heat pump (ASHP) equipment and have it installed using these industry guidelines. Ground source heat pumps (GSHP) are eligible for rebates when customers purchase and install ENERGY STAR equipment; however, these are not subject to QI requirements. Additionally, ductless mini-split heat pumps may receive a rebate based on certain criteria.

The program's main offerings include the following:

- Prescriptive rebates for:
    - Central Air Conditioners & Air Source Heat Pumps with Quality Installation;
    - Ground Source Heat Pumps; and
    - Ductless Mini-Split Heat Pumps.

The main offerings are described below.

Equipment	Criteria
Central AC Only	13 – 14.9 SEER with QI
ASHP Only	14 – 14.9 SEER with QI
Central AC & ASHP	15+ SEER/min 12.5 EER with QI
Central AC & ASHP	16+ SEER/min 13 EER with QI
GSHP	14.1 EER Closed Loop
Ductless Mini-Split Heat Pump	15.0 – 26.0 SEER, 9 – 12 HSPF

To be eligible for the AC and ASHP program incentives, customers must use a participating contractor for the installation. Participating installation companies have at least one installer who has taken and passed an online QI assessment. Xcel Energy also accepts, but does not require, North American Technician's Excellence (NATE) certification to become a participating contractor. A list of participating contractors is available to customers from Xcel Energy. GSHP and Ductless Mini-Split Heat Pump incentives are eligible to customers using any contractor.

Program Changes
The following table summarizes the program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Addition of Ductless Mini-Split Heat Pump rebates	Contractors and distributors have indicated that this market share is growing and in demand. Reasonable energy savings can be claimed.	New to this Plan	New

Budget and Goal Considerations and Participation Development
The budget for the Residential Cooling program was developed based on historical costs per participant and was estimated according to expected participation. Taking into consideration the economic state of the market, the program goals reflect steady participation and a decrease in the promotional budget to provide a cost-effective program for our stakeholders.

The main budget drivers include the following:

- Administration – This category funds administration labor, materials, postage and rebate processing labor and measure and verification.
- Promotion – The program utilizes low cost promotions including bill onserts, email marketing, direct mail marketing, social media, blogs, and Trade Partner outreach.
- Participant Incentives – These fund customer rebates for qualifying products.

Involvement of Community Energy Organizations
The Residential Cooling program works closely with the Minnesota Heating and Cooling Association and the Minnesota Building Performance Organization to align best practices and to help communicate and educate the trade about our programs. Additionally, Xcel Energy is a member of ACCA and the Heating, Air-conditioning and Refrigeration Distributors International (HARDI), both national organizations.

➢ Residential Heating (Heating System Rebate)

Description
The Residential Heating program offers prescriptive electric and natural gas rebates to Xcel Energy natural gas customers who install new high-efficiency furnaces and hot water boilers as well as Electronically Commutated Motors (ECM). The natural gas portion of the program is designed to encourage customers to choose high-efficiency heating equipment through a tiered rebate schedule, and the electric portion is designed to encourage customers to upgrade the fan motor of the forced-air furnace. The rebate schedule supports the "good, better, best" selling techniques among the trade partners and enables customers to better understand the benefits of choosing energy efficient equipment.

The program is marketed primarily to homeowners via various forms of mass media messaging and an extensive trade ally network that serves as in-home spokespeople for the program while selling new equipment. This program is also cross-marketed with the Insulation Rebate and Water Heating Rebate programs.

The program's main offerings include the following:

- Prescriptive rebates for:
    - Natural gas forced-air furnaces:
        - Add-on replacement and new construction.
    - Natural gas hot-water boilers:
        - Add-on replacement and new construction.
    - Electronically Commutated Motors:
        - Factory-installed and retrofit units.

Xcel Energy residential natural gas customers who install natural gas forced-air furnaces or hot water boilers are eligible to participate in this offering.

The company also offers ECM rebates to its residential electric customers. In late 2015 the Company filed, with approval early in 2016, to extend the ECM rebate to include retrofit units. Customers are not required to have natural gas to qualify for the ECM rebate. Alternate fuel furnaces that have an ECM also may qualify.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Discontinue 92% AFUE furnaces	A program evaluation recommended dropping the lower tier rebate to ensure a stronger net to gross ratio	New to this Plan	New
Add a 95% AFUE furnace tier	Encourage participation by matching the good, better,	New to this Plan	New

Add a 97% AFUE furnace tier	best selling model	New to this Plan	New
Increase the 90% AFUE boiler rebate amount	Differentiate higher efficiency units via a tiered rebate structure	New to this Plan	New
Increase the 95% AFUE boiler rebate amount		New to this Plan	New

Budget and Goal Considerations
The program's participation and energy savings goals and budgets were determined by analyzing historical program trends as well as industry market forecasts.

The main budget drivers include the following:

- Participant Incentives – Rebates represent the largest portion of the budget. The rebate schedule was developed to encourage participation and differentiate between efficiency levels. There is a marked increase in budget from previous years due to the tiered rebate schedule that should increase participation at the higher efficiency levels, which results in greater savings per unit.
- Administration – Labor charges are predominantly represented by product management and rebate processing.
- Advertising and Promotion – Advertising is generally covered via cross promotion among other programs. Promotional spending includes event promotion, community outreach and HVAC dealer trade shows as well as other ad-hoc opportunities.

Involvement of Community Energy Organizations
We collaborate with the Minnesota Heating & Cooling Association, the Minnesota Plumbing, Heating, Cooling Contractors of America, and the Heating, Air-Conditioning Distributors International to help advance the program.

➢ School Education Kits

Description
The School Education Kits program offers a multi-component kit that combines classroom activities and in-home projects to fifth or sixth grade students and their parents to teach them about energy and water conservation. The program targets schools within our Minnesota service territory that receive both electric and natural gas service and to those teachers and students who enroll in the program through the third-party implementers.

The program's main offering is the Take Action Kit typically containing the following:

- Natural Resources Fact Chart;
- Digital water/air thermometer;
- FilterTone alarm;
- Energy efficiency showerhead (1.5 GPM);
- Kitchen aerator (1.5 GPM);
- Bathroom aerator (1.0 GPM);
- Teflon tape;
- Two 9-Watt LED light bulb;
- Two 11-Watt LED light;
- Flow rate test bag;
- LED night light;
- Parent comment card; and
- Think, Talk, Take Action! Wristband.

This prescriptive program provides direct impact savings, helps to build awareness of energy conservation at a young age, and provides energy and water savings to customers of various income levels. Traditional marketing tactics are not needed since schools are selected to ensure maximum outreach. Once schools are selected and enrolled, a third-party implementer recruits and trains the teachers, provides all materials, distributes the kits, and continues ongoing support if the teachers have questions while implementing the program. Classroom support is available via fax, phone, email and by a toll-free 800 number.

Teachers can enroll through a variety of channels. If teacher response is insufficient, the third-party provider implements contingencies for additional outreach. Upon enrollment, teachers dictate to the third-party when in the school year they would like to use the program materials and provide accurate enrollment numbers. The third-party staff remains in contact with teachers throughout the school year to assist teachers as needed, as well as to ensure return of the surveys that provide Measurement and Verification results. It can take up to three months to receive the results from each elementary school depending on when the teachers begin the activity.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Replace CFLs with LEDs	Increased customer demand and market availability in addition to a decrease in CFL manufacturing	New to this Plan	New
Demand savings for showerhead measure	10-20 percent of savings determined during peak	New to this Plan	New

Budget and Goal Considerations
The program's participation, electric and natural gas energy savings goals, and budgets were estimated using historical program results and proposed third-party costs. The main budget drivers include the following:

- Administration – This funds the program's internal labor and external fulfillment by our third-party implementer, which includes: project planning, turn key coordination, implementation, marketing, tracking of installations/surveys, call center and online help centers, measurement and verification of the program, and enrollment/reporting.
- Participant Incentives – This category covers the costs of the kit contents.

Involvement of Community Energy Organizations
We work with our Community Affairs department, Account Management group, and local community non-profits to identify schools. We also look for additional opportunities when available for cross promotion, outreach, or cost sharing.

➢ Water Heater Rebate

Description
The Water Heater Rebate program offers prescriptive rebates to customers who purchase and install qualifying high efficiency natural gas water heating equipment for residential use. Storage tank and tankless models are eligible. Customers may choose to self-install units rather than working with a plumber.

We intend to market the program using a variety of communication tools, including: HVAC trade partner communication, email newsletters, tradeshows, and point-of-purchase materials at retailers. The program is cross-promoted with other Xcel Energy residential heating-related programs.

The program's main offerings include the following:

Equipment	Criteria
Natural Gas Storage Tank Water Heater	0.67 – 0.69 EF, ≤ 55 gallons
Natural Gas Storage Tank Water Heater	0.70+ EF, ≤ 55 gallons
Natural Gas Tankless Water Heater	0.90+ EF

In order to participate, customers must receive natural gas service from Xcel Energy. The program is applicable only for the purchase of qualifying new standard tank water heaters or tankless water heaters installed in new or replacement applications. Due to new manufacturing standards, units with tanks larger than 55 gallons are not eligible. While most standard tank water heaters do not pass the cost-benefit tests, they are included as a part of the Water Heater Rebate program to spur customer demand for high efficiency equipment in the marketplace and to satisfy customer choice.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Baseline for storage tank water heater increase to 0.62 EF	New manufacturing standards effectively make 0.62 EF the lowest efficiency possible to manufacture	New to this Plan	New

Budget and Goal Considerations
The program's participation and gas savings goals were developed based on historical program performance and expected participation throughout the Triennial period. The budget was determined based on the costs needed to rebate the expected number of eligible units and the appropriate rebate amounts per efficiency level.

The main budget drivers include the following:

- Administration – This category represents internal labor for project planning and implementation, as well as external contract labor, materials and postage.
- Advertising and Promotion – This program is promoted via trade partner communication, email newsletters, tradeshows, and point-of-purchase materials.
- Participant Incentives – The majority of the budget goes to pay customer rebates.

Involvement of Community Energy Organizations

Xcel Energy is an active member in the Consortium for Energy Efficiency's Coalition of ENERGY STAR Water Heaters. The Company is committed to assisting this group's mission of inspiring changes in the market through the promotion of energy efficient technologies.

➢ Whole Home Efficiency

Description
The Whole Home Efficiency program offers prescriptive electric and gas rebates to residential customers who take a whole-house approach to improving the energy efficiency of their existing, single-family homes. The program offers customers personal assistance from beginning to end of their projects, direct contractor resources, rebates to reduce the project cost, direct install options, and independent verification of the improvements after completion.

Customers must be both electric and natural gas customers of Xcel Energy to participate. An energy audit through Xcel Energy or by a company-approved contractor must precede the project and must include a blower door test. The program is marketed primarily through Xcel Energy's Home Energy Audit program and secondarily through the trades, with the objective of helping customers find and prioritize energy efficiency improvements in their homes.

The program's main offerings include prescriptive rebates for:

- Air leakage reduction;
- Attic and wall insulation;
- Boilers and furnaces;
- Central air conditioners and ductless mini-split heat pumps;
- Clothes washers;
- Electronically commutated motor fans;
- Programmable thermostats;
- Refrigerators; and
- Water heaters.

The program also offers direct install for:

- Value LEDs;
- Energy efficient showerheads;
- Faucet aerators; and
- Water heater blankets.

To receive rebates, customers are required to install either attic insulation or comprehensive wall insulation, defined as at least 75% of the exterior walls of the home. Customers then need to select two other improvements, not including the direct install options. The customer can receive rebates for a whole-house project within one year of signing up for the program. All improvements are verified by the auditor doing the final inspection. Customers must use company-approved contractors, and those contractors receive training about the program and its required processes. Customers also have the opportunity to have some measures directly installed as part of the final project inspection. We see this as a way to add value for the customer and take advantage of the inspector's presence in the home. Integrating these measures that also exist in other programs provides a more comprehensive whole-house approach, and also decreases customer confusion and frustration with program overlap and eligibility.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Remove Water Heater Setback	Minimal customer participation	New to this Plan	New
Remove Dishwasher	New DOE baseline makes it difficult to be cost-effective	New to this Plan	New
Remove Refrigerator Recycling	Easier for customers to manage through stand-alone program	New to this Plan	New
Remove Freezer Recycling	Easier for customers to manage through stand-alone program	New to this Plan	New
Remove TV peripherals	Minimal customer participation	New to this Plan	New
Remove LED bulbs	Now offered through direct install	New to this Plan	New
Remove CFLs	Market availability of CFLs is decreasing as LEDs become more prevalent and affordable	New to this Plan	New
Remove Programmable Thermostat setback	Minimal customer participation	New to this Plan	New
Remove .62 and .64 EF Water Heaters	Market availability	New to this Plan	New
Add Air Leakage Reduction – Tier 1 and Tier 2	More accurately capture the impacts of insulation by using pre- and post- blower door test results	New to this Plan	New
Add EC Fan Motor Retrofit on existing furnace	Offered in the Residential Heating program	New to this Plan	New
Add Ductless Mini-Split Heat Pump 15.0 – 26.0 SEER, 9 - 12 HSPF	Offered in the Residential Cooling program	New to this Plan	New
Add .67 .69 EF Storage Tank Water Heater ≤ 55 gallons	Offered in the Water Heating Rebate program	New to this Plan	New
Add .70+ EF Storage Tank Water Heater ≤ 55 gallons	Offered in the Water Heating Rebate program	New to this Plan	New
Add .90+ EF Tankless Water Heater	Offered in the Water Heating Rebate program	New to this Plan	New
Add 90% and 95% EF Boilers	Offered in the Residential Heating Program	New to this Plan	New

Add Value LED (Direct Install)	Customers benefit as a free measure; greater assurance of lamp quality, wattage and installation	New to this Plan	New
Add Water Heater Blanket (Direct Install)	Customers benefit as a free measure	New to this Plan	New
Add Energy Efficient Showerhead (Direct Install)	Customers benefit as a free measure	New to this Plan	New
Add Faucet Aerator (Direct Install)	Customers benefit as a free measure	New to this Plan	New
Change program name from Home Performance with ENERGY STAR	Places focus on whole home approach and on efficiency. Reduces customer confusion with other utility programs and with the fact that many of the ENERGY STAR appliance rebates have been removed.	New to this Plan	New
Allow approved contractors to conduct Home Energy Audit	Streamlines the process for both contractors and customers encouraging more participation	New to this Plan	New

Budget and Goal Considerations
The program's budgets and electric and gas energy savings goals were determined using cost and savings estimates based on discussions with vendor and by historical program performance.

The main budget drivers include the following:

- Administration – This category covers program planning and implementation as well as program management.
- Advertising and Promotion – The program is marketed through advertising and support materials, including brochures and welcome kits.
- Participant Incentives – This category covers rebates and costs for direct install measures.
- Measurement and Verification – The program funds a third-party to inspect 100% of projects completed and to do the exit blower door test.

Involvement of Community Energy Organizations
Xcel Energy contracts with the Neighborhood Energy Connection (NEC) to implement the program. NEC is responsible for program promotion support, sign-ups, customer follow-up, verification visits, paperwork administration, and program tracking. We are also looking to increase targeted marketing by collaborating with communities in Xcel Energy's Partners in Energy program.

➢ Saver's Switch®

Description
Saver's Switch is Xcel Energy's residential load management program. The program gives participating customers bill discounts in exchange for allowing the Company to reduce their air conditioning and, if applicable, water heater usage on days of peak demand. During a control event (typically a hot, humid day or evening), air conditioners are cycled on and off in a manner designed to reduce the load by 50%. Enrolled electric water heater load is shed entirely for the duration of the control event, which can occur at any time of year. Air conditioners and water heaters are controlled via a radio operated switch installed by a licensed electrician on or near the customer's central air conditioning unit. Participants in the air conditioning program have the option of enrolling a qualifying electric water heater; however, customers cannot enroll a water heater on its own. The program's main offerings include the following:

- Participating air conditioning customers receive a 15% discount off the electric energy charges on their bills between June and September; and
- Water heater participants receive 2% off the same charges year-round.

The Saver's Switch program has operated in Minnesota since 1990. Many of the switches installed early in the program are now beyond their estimated 15-year useful life. In this Plan, we intend to continue to use the Virtual Visit tool to identify switches that should be replaced. We also plan to proactively replace switches more than 20 years old.

Program Changes
None.

Budget and Goal Considerations
The program budget and savings were developed based on equipment and installation costs for the number of switches to be installed and replaced.

The main budget drivers include the following:

- Administration – This budget category will cover the costs of internal labor for program planning and implementation, as well as the costs of external contract labor and software maintenance.
- Customer Services – The program uses a third-party to install the switches.
- Advertising and Promotion – The program will have a limited promotional budget in this Plan, as most of the installations will be from the replacement of old switches.
- Measurement and Verification – The program hires a third-party consultant to conduct measurement and verification to determine the savings per switch achieved each year.

➢ Consumer Education

Description
The Consumer Education program is an indirect-impact program that provides residential customers with the information and resources to reduce their energy usage. Because the Residential Segment is demographically varied, Xcel Energy employs a variety of resources to communicate the conservation message.

The program's communication strategies include the following:

- Annual community and conservation events and local community event outreach with energy efficiency messages;
- Social media;
- Online messaging through local newspaper media websites;
- Direct mail marketing to address seasonal usage challenges;
- Sponsorship of local Earth Day events;
- Sponsorship of local conservation publications;
- Conservation messaging through Your Energy Newsletter;
- Publication of reference materials; and
- Sponsorship of seminars and conferences supporting residential conservation and energy efficiency.

The program focuses on renewing existing partnerships and establishing new partnerships with an enhanced focus on digital communication. In addition, the program employs social media strategies to drive active engagement in energy efficiency through Facebook, twitter and blogs. By continuing to diversify the communication channels, the program increases residential customer knowledge base and provides a greater variety of resource options and services.

Program Changes
None.

Budget and Goal Considerations and Participation Development
The program budgets were developed through identification of customer growth patterns, costs to produce materials, the reach of advertising, and sponsorship costs. The participation goals were established through targeted outreach to customer segments and use of multiple channels for delivery of energy efficiency messaging.

The main budget drivers include the following:

- Administration – This category represents the internal labor needed for program planning and implementation.
- Advertising and Promotion – Promotional events are the primary budget driver for this program.

Involvement of Community Energy Organizations
None.

➢ Home Energy Audits

Description
The Home Energy Audit program offers substantially discounted energy auditing services to residential customers. The purpose of this program is to improve energy savings by influencing homeowners' and renters' behaviors through conservation education. This program is marketed through seasonal advertising and bill inserts as increases in monthly energy bills tend to drive program activity. We take advantage of local "green event" opportunities and direct mail campaigns as needed.

The program's main offerings include the following two tiers of audits:

- Home Walkthrough ($30); and
- Standard Audit with Infrared ($60).

The main offerings are described below.

Walkthrough Audits
The Home Walkthrough begins with the auditor's review and analysis of the customer's billing history and a discussion surrounding any concerns or questions that the customer may have regarding home energy usage and related comfort. The auditor performs an assessment of the interior and exterior of the home and provide a review of the top recommendations to the homeowner. This option is free to income-qualifying customers. An electronic personalized audit report is emailed to the customer highlighting the top recommendations and providing rebate program information.

Standard Audit with Infrared
The Standard Audit with infrared includes all Home Walkthrough audit components, as well as a blower door test and a combustion appliance zone (CAZ) test. The blower door test is conducted in every home and the CAZ test is performed only if atmospherically vented appliances are present. Also included is an infrared scan to evaluate internal structures such as drywall and insulation and to determine temperature differences where insulation is present, missing, or not working effectively. In order for the infrared scan to be effective there needs to be a certain differential between the indoor and outdoor air temperatures. The infrared scan is offered when applicable.

Customers may get a Home Walkthrough audit every three years, or upgrade to a more extensive audit more frequently. The charges to the customer are assessed on bills after the audit is completed.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Eliminate Standard Audit and reduce cost to customer of Standard Audit with Infrared from $100 to $60	The cost to the customer of the higher tier has been reduced from $100 to $60 to stimulate demand	New to this Plan	New
Upon customer request, conduct a Home Energy Audit at the same time as a Home Energy Squad visit ("enhanced visit")	Provides customer convenience	New to this Plan	New
During an enhanced visit, perform an insulation evaluation and if warranted provide a list of qualified insulation installers from the Company's approved BPI list along with a bid	Provides customer convenience and encourages additional home energy efficiency	New to this Plan	New

Budget and Goal Considerations
The program's participation and budgets were determined by historical program participation targets and expenses.

The main budget drivers include the following:

- Administration – The budget includes the costs of internal labor and external contract labor to support the program.
- Customer Services – This category represents the costs of the third-party auditors, as well as the payments made by customers for their audits
- Advertising and Promotion – The program includes a modest promotional budget to steer customers to the audits.

Involvement of Community Energy Organizations
Xcel Energy contracts with the Neighborhood Energy Connection (NEC) to implement the Home Energy Audit program. NEC is responsible for program promotion, audit scheduling, auditor recruiting and subcontracting, paperwork administration and program tracking.

➢ Residential Lamp Recycling

Description
The Residential Lamp Recycling program encourages electric customers in Minnesota to recycle their spent fluorescent bulbs instead of discarding them, to ensure that mercury does not get into the environment.

The program's main offerings include the following:

- Free compact fluorescent light bulb recycling at participating local hardware stores and partnering county hazardous waste facilities; and
- Coupons for 50¢ off the recycling fee for each fluorescent tube and HID bulb at participating hardware stores. The coupons are available at participating hardware stores and on the xcelenergy.com website.

The Residential Lamp Recycling Program is marketed primarily through Xcel Energy's Home Lighting program promotions, participating hardware stores, and on the main Xcel Energy website. A search feature allows customers to search by zip code to find the nearest recycling locations.

The Company follows the requirements of Minn. Stat. 216B.241, subd 5, which necessitates public utilities to notify customers that fluorescent recycling is the law in Minnesota. Every Residential Lamp Recycling and Home Lighting promotional piece includes a disclaimer regarding the statute, such as, "Fluorescent lamps contain small amounts of mercury that are harmful to the environment. In Minnesota, it is illegal to dispose of spent mercury bulbs in household trash receptacles."

Program Changes
None.

Budget and Goal Considerations
The budget was developed based on historical spending and the expected number of bulbs to be recycled in the coming years. The budget is set to increase about five percent annually to account for additional bulbs that we anticipate will be recycled each year. The promotional budgets will remain consistent throughout the Triennial Plan.

The main budget drivers include the following:

- Administration – This provides funds for internal labor for planning and program implementation.
- Promotion and Advertising– We market this program with the Home Lighting promotions.

Involvement of Community Energy Organizations
Xcel Energy stays active in the Minnesota and national Lamp Recycling community through its partnerships with Mercury Technologies of Minnesota, Inc., and the Center for Energy and Environment.

➢ Home Energy Savings

Description
The Home Energy Savings program (HESP) offers free home energy education and improvement services to income-qualifying customers. Participating customers receive a home visit and energy bill analysis to learn about energy conservation. Based on the findings in the home visit, we determine the customer's eligibility for other offerings including home weatherization and appliance replacements.

To qualify for participation in HESP, Xcel Energy customers must:

- Have a household income that is at 50% of the State Median Income guidelines or at 200% of the federal poverty level, whichever is greater; and
- Properties with two to four housing units, at least 50% of the households must have incomes below 50% of the State Median Income guidelines or 200% of the federal poverty level, whichever is greater.
- Rental properties must agree to maintain affordable rent in order to receive benefits from this program.

The program is implemented through third-party providers who are responsible for customer recruitment, enrollment, income eligibility confirmation, subcontractor management, program forecasting, tracking, and reporting. The program is promoted by Xcel Energy through advertising and promotion efforts including out-of-home, direct mail, radio, and online. It is also supported with efforts by our Customer Care and Low Income Assistance departments.

The program's main offerings include the following:

- Free electric home services including:
  - Home energy educational visits;
  - Refrigerator replacements and recycling;
  - Freezer replacements and recycling;
  - Window/wall AC replacements and recycling;
  - Electronically commutated motors installed in new furnaces; and
  - Attic insulation for electrically heated homes.
- Free natural gas home services including:
  - Attic insulation and air-sealing;
  - Wall insulation;
  - Furnace or boiler replacement; and
  - Water heater replacement.

The main offerings are described below.

Electric Home Services

The home energy educational visits are available to all income-qualified customers in Xcel Energy's electric service territory and are provided during a Low Income Home Energy Squad visit. These visits include:

- Analysis of the electric bill;
- Home energy assessment and education;
- Inspection and evaluation of major appliances;
- Written energy savings recommendations; and
- Distribution of energy conservation educational materials.

Appliance replacements are available to those customers whose appliances meet the following criteria:

- Customer must own the appliance or provide a signed waver to allow replacement and recycling of the old inefficient appliance;
- Appliance must be used on a regular basis;
- Appliance must be in working condition;
- Refrigerators must be the primary unit in the home unless the customer agrees to recycle a second working appliance as well; and
- Window/wall AC units may have a maximum EER rating of 8.5.

Evaluation and installation of electric weatherization services is also available in electrically heated homes.

Natural Gas Home Services

These services are available to all income qualified customers in Xcel Energy's natural gas service territory:

- DOE standard energy audit including blower door testing;
- Detailed specifications for all weatherization measures;
- Insulation of attic and bypass sealing to an R-value of 44;
- Insulation of walls to an R-value of 14 or greater; and
- Carbon monoxide detector installed with any weatherization job.

We provide funding for the replacement of old inefficient furnaces, boilers and water heaters with the following:

- Furnaces with a minimum AFUE of 92%;
- Boilers with a minimum AFUE of 84%; and
- Natural gas water heaters with an EF of 0.67 or higher.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Expanding program offering to include 1-4 unit properties	This expands the program to provide energy saving services to a portion of the market that is not served by any other CIP program	New to this Plan	New
The home assessment for potential HESP measures will be performed during a Low Income Home Energy Squad visit	This creates cost efficiencies within the Low Income segment since the Low Income Home Energy Squad crew are already in the home. This eliminates the need for one of the HESP visits to the home. HESP program will continue to cover the assessment cost.	New to this Plan	New

Budget and Goal Considerations
The program's participation and energy savings goals and budgets were based on historical program data.

The main budget drivers include the following:

- Administration – Covers internal labor and expenses for program planning and implementation and vendor administration.
- Customer Services – Services provided by Third-party program implementers are funded through these funds.
- Rebates - Covers the cost of the equipment/measures installed.
- Promotion and Advertising - The program's direct advertising, bill onserts, communications outreach events and more are supported with these funds.

Involvement of Community Energy Organizations
We continuously try to build relationships with existing agencies and non-profit organizations in the state, such as the Salvation Army and Metro Meals on Wheels. These partnerships allow us to increase program awareness and increase program participation.

➢ Low Income Home Energy Squad®

Description
The Low Income Home Energy Squad program offers installation services to electric and gas customers who seek to improve their homes' comfort, and lower their utility bills. The program is marketed to income-qualifying customers. The program directly installs a number of moderate-impact, low-cost measures for combination gas and electric customers and for electric-only customers who are natural gas customers of CenterPoint Energy. The program pays for the equipment and labor costs to install a number of appropriate, moderate, impact measures. The program helps to remove barriers for customers to make energy improvements.

The program's main offerings include the following:

- Electric measures, including:
  - Value LED light bulbs or various types and wattages.
- Heating and cooling measures, including:
  - Weather-stripping of two external doors;
  - Programmable thermostat installation; and
  - Setback of pre-existing programmable thermostats.
- Hot water measures, including:
  - Insulation blanket for water heater;
  - High efficiency showerheads and faucet aerators; and
  - Temperature assessment and setback of water heater.

Program Changes
The following table summarizes changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Switching from CFLs to Value LEDs	Market availability of CFLs is decreasing as LEDs become more prevalent and affordable	New to this Plan	New
Installation of measures in homes that are served by Xcel Energy gas-only or electricity-only	Pre-identified opportunities where customers will benefit from single fuel measure installation	New to this Plan	New
Addition of electric-only program component so as to offer a program to customers whose gas is provided by CenterPoint Energy	Expand the program offering to all customers, beyond Xcel Energy combo customer territory	New to this Plan	New
Perform home	Creates cost efficiencies with	New to this Plan	New

assessment for potential Low Income Home Energy Savings Program	Low Income Home Energy Squad crew already in the home. This eliminates one of the HESP visits to the home. HESP program to cover the assessment cost.		

Budget and Goal Considerations
The program's participation and energy savings goals and budget were determined by cost estimates based on vendor proposals, potential number of participants, and historical program expenses. The main budget drivers include the following:

- Administration – This budget funds program administration costs through third-party vendors, as well as third-party labor for the installation of energy efficient measures in customers' homes.
- Promotion and Advertising – This category covers print, broadcast and interactive advertising, phone and street canvassing, and event promotion. As this program progresses it requires increased costs to build awareness and to directly reach participants.

Involvement of Community Energy Organizations
Xcel Energy contracts with third-party non-profit implementers to provide this service.

➢ Multi-Family Energy Savings

Description
The Multi-Family Energy Savings program offers free education and services to qualifying multi-family buildings. The Multi-Family program provides electric services to income-qualifying renters and is designed to reach these tenants and support low-income housing through building-wide projects. The program offers information on additional energy saving actions the building residents can take beyond the program, and free in-unit energy upgrades, including LEDs and electric appliance replacements.

To qualify, multi-family buildings with five or more units in our electric territory must meet the following criteria:

- For properties with five or more units, 66% of the households must have incomes below 50% of the State Median Income guidelines or 200% of the federal poverty level, whichever is greater.
- Properties with five or more units must follow the Low Income Verification guidelines posted on the MN Division of Energy Resources website.

The program is administered by a third-party implementer that can provide services throughout Xcel Energy's Minnesota electric service territory. The program is implemented through third-party providers that are responsible for customer recruitment, enrollment, income eligibility confirmation, subcontractor management, program forecasting, tracking, and reporting. The program is promoted through outreach with multifamily stakeholders and associations. Minimal promotional activities have been necessary to date, but tactics that would be deployed if needed are direct mail campaigns and sales calls to qualifying buildings, which are identified through local resources such as HUD and LIHEAP.

The program's main offering is free electric equipment and installations, including:

- LEDs;
- Refrigerator replacements and recycling;
- Freezer replacements and recycling;
- Window air conditioner (AC) replacements and recycling; and
- Wall/sleeve AC replacements and recycling.

This offering provides tenant educational materials, building energy assessments, and in-unit LED installation to qualified buildings. In addition, appliance replacement and recycling is provided to those buildings/units where the appliances meet the following criteria:

- Appliance must be used on a regular basis;
- Appliance must be in working condition;
- Refrigerator must be the primary one used in the unit, unless customer agrees to recycle a second working appliance as well; and
- Window/wall AC units must have an EER rating of 8.5 or less to be replaced.

Appliances that are replaced through this program continue to be the property of the original owner. For example, refrigerators owned by the building owner continue to be property of the building owner and AC units owned by the tenant continue to be property of the tenant.

Program Changes
The following table summarizes program changes made after the 2015 Status Report was filed, as well as changes new to this Plan.

Change	Rationale	DER Notification Method	Date Notified
Change from installation of CFLs to LEDs	Market availability of CFLs is decreasing as LEDs become more prevalent and affordable	New to this Plan	New
Educational seminars are no longer available	Challenges organizing seminars and getting tenants to attend has limited our ability to provide energy saving education. Energy conservation education is provided at the time of the assessment and LED install and with materials left behind for the tenants.	New to this Plan	New
2-4 unit weatherization for electrically heated homes removed	To streamline our Low Income portfolio offering, we are expanding the Home Energy Savings program (HESP) to provide services, including weatherization for electrically heated properties, for 1-4 unit properties	New to this Plan	New

Budget and Goal Considerations
The program's participation and energy savings goals and budget were based on historical program data.

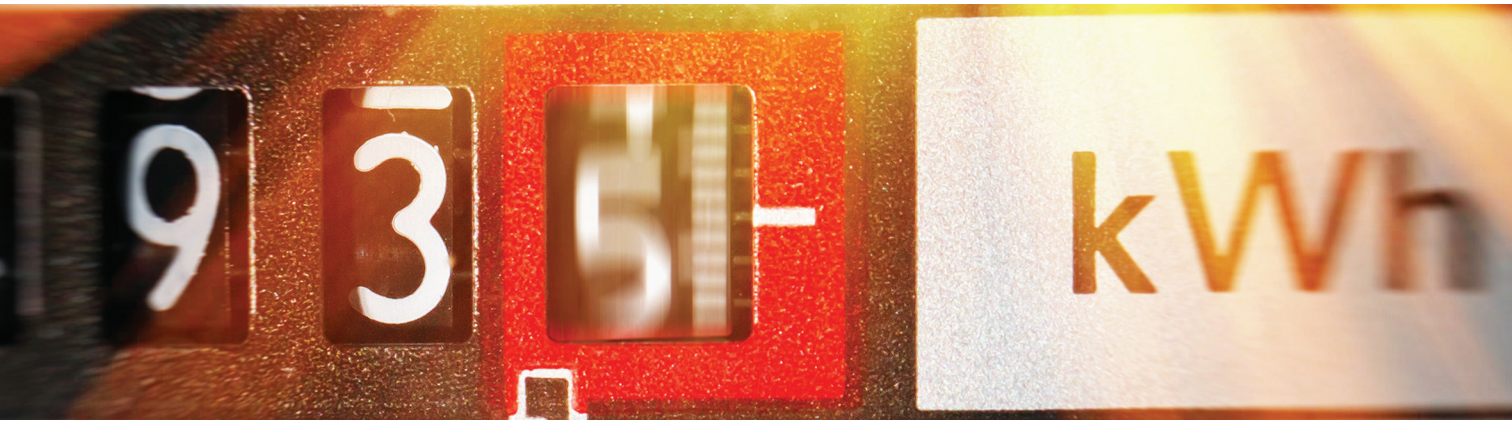
The main budget drivers include the following:

- Administration – Covers internal labor and expenses for program planning and implementation and vendor administration.
- Customer Services – Services provided by third-party program implementers are paid through these funds.
- Rebates – Covers the cost of the equipment/measures installed.
- Promotion and Advertising – The program's direct advertising, bill onserts, communications outreach events and more are supported with these funds.

Involvement of Community Energy Organizations

Program training and information is provided to the MN Housing Finance Authority for consideration with the properties receiving funding.

Xcel Energy®

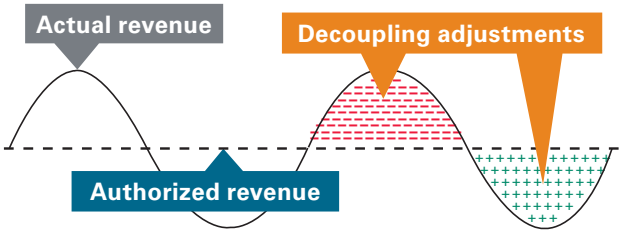


MINNESOTA ELECTRIC DECOUPLING PROGRAM

WHAT IS DECOUPLING?

Decoupling breaks the connection between an energy company's earnings and electric sales by matching actual revenues to revenue levels approved by a regulatory authority. (In Minnesota, this is the Public Utilities Commission or PUC.) This way, there is no incentive for the company to sell more energy in order to generate more revenue. The "How Decoupling Works" chart below shows how decoupling adjusts rates to smooth out revenue fluctuations over time.

HOW DECOUPLING WORKS



WHAT IS XCEL ENERGY'S ELECTRIC DECOUPLING PILOT PROGRAM?

Xcel Energy began a four-year electric decoupling pilot program for residential and small business customers. Each year starting in 2017, Xcel Energy applies a decoupling adjustment to customer bills that corrects non-fuel revenue to PUC approved levels — presented as either a surcharge or a credit. For the fourth year of the pilot, the decoupling adjustment appears on bills as a line item called "Decoupling Adj" from April 2020 through March 2021.

WHAT DOES DECOUPLING MEAN FOR YOU?

Over time, decoupling will not have a large impact on customer bills, because the majority of a customer's bill comes from the amount of electricity used. If you use less electricity, you reduce the consumption-based portion of your bill — saving money, even with a decoupling adjustment.

TYPICAL RESIDENTIAL BILL

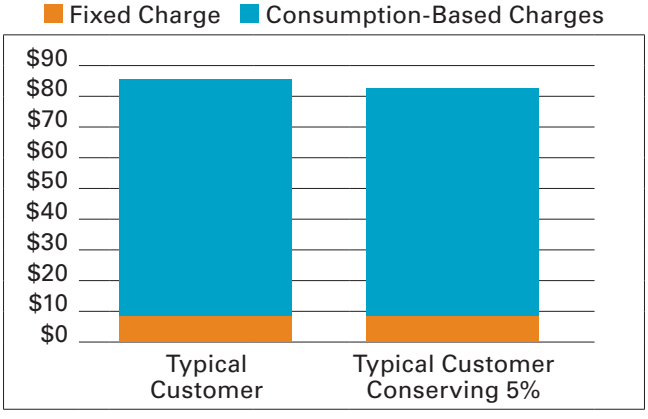


Chart is illustrative of typical residential customer. Actual results will vary by class and customer usage.

WHAT DOES DECOUPLING MEAN FOR ENERGY EFFICIENCY AND ENERGY CONSERVATION?

The decoupling program helps ensure Xcel Energy remains focused on helping customers conserve electricity. Customers who measurably reduce their energy consumption are rewarded with lower electricity bills.

To find out more about decoupling, visit **xcelenergy.com/Rates**.

Redline

APPLICABILITY
Applicable to bills for electric service provided under the Company's Residential and non-demand-metered Small General Service schedules, excluding lighting services.

RIDER
For customers subject to this rider, there shall be included on each customer's monthly bill a Revenue Decoupling Mechanism Rider (RDM Rider) which shall be the applicable Revenue Decoupling Mechanism Rider factor multiplied by the customer's monthly kWh electric consumption.

DETERMINATION OF RDM RIDER FACTORS
Annual RDM Rider Factor
Each year during the term of this rider the Company will calculate an RDM Rider factor for each applicable class. These factors will be based on revenues billed through December 31 and applied to bills from April 1 through the March 31 of the following year. The RDM Rider factors are:

Residential without Space Heating ~~credit~~surcharge (A01, A02, A03, A04, A05, A06)	~~$0.001625~~$0.003069 per kWh	R
Residential with Space Heating ~~credit~~surcharge (A00, A01, A02, A03, A04, A05, A06)	~~$0.001056~~$0.000512 per kWh	R
Small General Service (non-demand) ~~credit~~surcharge (A05, A06, A09, A10, A11, A12, A16, A18, A22)	~~$0.000213~~$0.002849 per kWh	R

The calculation for the RDM Rider factor is:

Annual RDM Rider factor = RDM Rider Deferral / Forecasted Sales

For purposes of this section the following definitions apply:

RDM Rider Deferral	Annual RDM Rider Deferral = the sum of the 12 monthly RDM Rider Deferrals plus any under- or over-recovery of the previous Annual RDM Rider Deferral as described in item 3 of the RDM Rider Deferral Account on tariff sheet 5-118.
Forecasted Sales	Forecasted Usage = forecasted use in kWh for the timeframe the RDM Rider factor to be in place.

The Annual RDM Rider factor to collect under-recovered revenues shall be capped at +3% of the total customer group base revenue for each of the rate classes, unless the Company is granted approval from the Minnesota

(Continued on Sheet No. 5-118)

Public Utilities Commission (Commission) to recover revenues in excess of the 3% cap. The RDM Rider factor to return over-recovered revenues shall not be capped.

(Continued on Sheet No. 5-118)

Clean

APPLICABILITY
Applicable to bills for electric service provided under the Company's Residential and non-demand-metered Small General Service schedules, excluding lighting services.

RIDER
For customers subject to this rider, there shall be included on each customer's monthly bill a Revenue Decoupling Mechanism Rider (RDM Rider) which shall be the applicable Revenue Decoupling Mechanism Rider factor multiplied by the customer's monthly kWh electric consumption.

DETERMINATION OF RDM RIDER FACTORS
Annual RDM Rider Factor
Each year during the term of this rider the Company will calculate an RDM Rider factor for each applicable class. These factors will be based on revenues billed through December 31 and applied to bills from April 1 through the March 31 of the following year. The RDM Rider factors are:

Residential without Space Heating (A01, A02, A03, A04, A05, A06)	$0.003069 per kWh surcharge	R
Residential with Space Heating (A00, A01, A02, A03, A04, A05, A06)	$0.000512 per kWh surcharge	R
Small General Service (non-demand) (A05, A06, A09, A10, A11, A12, A16, A18, A22)	$0.002849 per kWh surcharge	R

The calculation for the RDM Rider factor is:

Annual RDM Rider factor = RDM Rider Deferral / Forecasted Sales

For purposes of this section the following definitions apply:

RDM Rider Deferral — Annual RDM Rider Deferral = the sum of the 12 monthly RDM Rider Deferrals plus any under- or over-recovery of the previous Annual RDM Rider Deferral as described in item 3 of the RDM Rider Deferral Account on tariff sheet 5-118.

Forecasted Sales — Forecasted Usage = forecasted use in kWh for the timeframe the RDM Rider factor to be in place.

L

(Continued on Sheet No. 5-118)

CERTIFICATE OF SERVICE

I, Jim Erickson, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

Docket Nos. **E002/M-19-127**
E002/GR-15-826
E002/GR-13-868
Xcel Energy's Miscellaneous Electric Service List

Dated this 31st day of January 2020

/s/
_____
Jim Erickson
Regulatory Administrator

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-127_M-19-127
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Ryan	Barlow	ryan.barlow@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 55101214	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
James	Canaday	james.canaday@ag.state.mn.us	Office of the Attorney General-RUD	Suite 1400 445 Minnesota St. St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
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Richard	Johnson	Rick.Johnson@lawmoss.com	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-868_Official CC Service List
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Ganesh	Krishnan	ganesh.krishnan@state.mn.us	Public Utilities Commission	Suite 350121 7th Place East St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
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Susan	Mackenzie	susan.mackenzie@state.mn.us	Public Utilities Commission	121 7th Place E Ste 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-868_Official CC Service List
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Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	OFF_SL_13-868_Official CC Service List
Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates	7400 Lyndale Ave S Ste 190 Richfield, MN 55423	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
Sean	Stalpes	sean.stalpes@state.mn.us	Public Utilities Commission	121 E. 7th Place, Suite 350 Saint Paul, MN 55101-2147	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List

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Lynnette	Sweet	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	Yes	OFF_SL_13-868_Official CC Service List
Samantha	Williams	swilliams@nrdc.org	Natural Resources Defense Council	20 N. Wacker Drive Ste 1600 Chicago, IL 60606	Electronic Service	No	OFF_SL_13-868_Official CC Service List
Patrick	Zomer	Patrick.Zomer@lawmoss.com	Moss & Barnett a Professional Association	150 S. 5th Street, #1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-868_Official CC Service List

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Gail	Baranko	gail.baranko@xcelenergy.com	Xcel Energy	414 Nicollet Mall7th Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_15-826_Official
Ryan	Barlow	ryan.barlow@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 55101214	Electronic Service	Yes	OFF_SL_15-826_Official
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James	Canaday	james.canaday@ag.state.mn.us	Office of the Attorney General-RUD	Suite 1400 445 Minnesota St. St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_15-826_Official

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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_15-826_Official
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Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-826_Official
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Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_15-826_Official
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Electronic Service	No	OFF_SL_15-826_Official
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David	Aafedt	daafedt@winthrop.com	Winthrop & Weinstine, P.A.	Suite 3500, 225 South Sixth Street Minneapolis, MN 554024629	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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Alison C	Archer	aarcher@misoenergy.org	MISO	2985 Ames Crossing Rd Eagan, MN 55121	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Ryan	Barlow	ryan.barlow@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 55101214	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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James	Canaday	james.canaday@ag.state.mn.us	Office of the Attorney General-RUD	Suite 1400 445 Minnesota St. St. Paul, MN 55101	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
John	Coffman	john@johncoffman.net	AARP	871 Tuxedo Blvd. St, Louis, MO 63119-2044	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance	2720 E. 22nd St Institute for Local Self-Reliance Minneapolis, MN 55406	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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Janet	Gonzalez	Janet.gonzalez@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 55101	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Michael	Hoppe	il23@mtn.org	Local Union 23, I.B.E.W.	932 Payne Avenue St. Paul, MN 55130	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law	2950 Yellowtail Ave. Marathon, FL 33050	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Linda	Jensen	linda.s.jensen@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street St. Paul, MN 551012134	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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Peder	Larson	plarson@larkinhoffman.com	Larkin Hoffman Daly & Lindgren, Ltd.	8300 Norman Center Drive Suite 1000 Bloomington, MN 55437	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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Joseph	Meyer	joseph.meyer@ag.state.mn.us	Office of the Attorney General-RUD	Bremer Tower, Suite 1400 445 Minnesota Street St Paul, MN 55101-2131	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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Carol A.	Overland	overland@legalectric.org	Legalectric - Overland Law Office	1110 West Avenue Red Wing, MN 55066	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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Joseph	Windler	jwindler@winthrop.com	Winthrop & Weinstine	225 South Sixth Street, Suite 3500 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
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