



**Public  
Version Enclosed**

5000 West Russell Street  
P.O. Box 988  
Sioux Falls, SD 57101-0988

May 1, 2023

—Via Electronic Filing—

Ms. Patricia Van Gerpen, Executive Director  
South Dakota Public Utilities Commission  
State Capitol Building  
500 East Capitol Avenue  
Pierre, South Dakota 57501-5070

RE: PETITION  
2022 DSM STATUS REPORT AND PROPOSED 2024 DSM PLAN

Dear Ms. Van Gerpen:

Enclosed for filing is a Petition by Northern States Power Company requesting approval of our 2022 DSM Status Report which includes our request for: 1) approval of cost recovery for 2021 actual expenditures and incentive, 2) approval of our Proposed 2024 DSM Plan, and 3) proposed DSM Cost Adjustment Factor.

In accordance with South Dakota Admin. R. 20:10:01:39 through 42, Xcel Energy respectfully requests confidential treatment of certain information contained in this filing. In compliance with South Dakota Admin. R. 20:10:01:41, we have clearly marked each page of the confidential version with the term “CONFIDENTIAL”. A public non-confidential version is also being filed simultaneously.

Pursuant to South Dakota Admin. R. 20:10:01:41, the Company submits the following justification for confidential treatment of this petition.

**(1) An identification of the document and the general subject matter of the materials or the portions of the document for which confidentiality is being requested;**

We request confidential treatment on the grounds that the material is proprietary and contains trade secret information, the disclosure of which would result in material damage to the Company’s financial or competitive position. The petition contains financial information that is not available to the general public.

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**(2) The length of time for which confidentiality is being requested and a request for handling at the end of that time. This does not preclude a later request to extend the period of confidential treatment;**

The Company requests that the petition be recognized as confidential in perpetuity.

**(3) The name, address, and phone number of a person to be contacted regarding the confidentiality request;**

Steve Kolbeck  
Principal Manager – South Dakota  
Xcel Energy  
500 W. Russell Street  
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(605) 339-8303

**(4) The statutory or common law grounds and any administrative rules under which confidentiality is requested. Failure to include all possible grounds for confidential treatment does not preclude the party from raising additional grounds in the future;**

The Company requests confidential treatment because the information is both trade secret and proprietary. The claim for confidential treatment is based on South Dakota Admin. R. 20:10:01:39 (4) and S.D. Codified Laws Chapter 1-27-30. The information contained within the referenced documents meets the definition of “trade secret” under S.D. Codified Laws Chapter 37-29-1(4)(1), the South Dakota Uniform Trade Secrets Act, which is defined as information that “[d]erives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and... is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.” The information also meets the definition of “proprietary information” under S.D. Codified Laws Chapter 1-27-28, which is defined as “information on pricing, costs, revenue, taxes, market share, customers, and personnel held by private entities and used for that private entity's business purposes.”

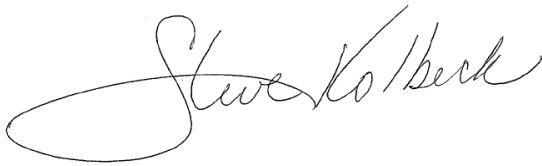
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**(5) The factual basis that qualifies the information for confidentiality under the authority cited.**

Consistent with the terms of the Settlement Stipulation approved by the Commission in the Company's 2012 electric rate case (Docket EL12-046), the rate of return on equity is confidential.

For any questions regarding this filing, please feel free to call me at (605) 339-8350 or email [Steven.T.Kolbeck@xcelenergy.com](mailto:Steven.T.Kolbeck@xcelenergy.com) or contact Kristen Ruud at (612) 216-7979 or email [Kristen.S.Ruud@xcelenergy.com](mailto:Kristen.S.Ruud@xcelenergy.com).

Sincerely,

A handwritten signature in black ink that reads "Steve Kolbeck". The signature is fluid and cursive, with a large loop at the beginning of the first name.

Steve Kolbeck  
Principal Manager –South Dakota

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**STATE OF SOUTH DAKOTA  
BEFORE THE  
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE PETITION OF  
NORTHERN STATES POWER COMPANY  
FOR APPROVAL OF THE 2022 ANNUAL  
DSM STATUS REPORT, INCLUDING 2022  
COST RECOVERY AND INCENTIVE AND  
APPROVAL OF THE PROPOSED 2024 DSM  
COST ADJUSTMENT FACTOR AND  
PROGRAM PLAN

**PETITION FOR 2022 DSM  
PROGRAM APPROVAL AND  
PROPOSED 2024 DSM COST  
ADJUSTMENT FACTOR**

DOCKET NO. EL23- \_\_\_\_

Northern States Power Company, doing business as Xcel Energy, submits to the South Dakota Public Utilities Commission, this Petition seeking approval of our 2022 Annual Demand Side Management (DSM) Report and Proposed 2024 DSM Plan (Plan).

In 2022, our DSM portfolio achievement exceeds 8.7 GWh. These savings will reduce overall energy consumption and, as a result, lower a customer's electric bill. Our enclosed 2024 Plan builds upon 2022 as we continue our energy efficiency and conservation focus to help customers manage their energy usage and save money.

The remainder of this Petition will provide the following: (1) 2022 DSM results and earned incentive; (2) DSM program portfolio; (3) Report on DSM recovery; (4) DSM cost adjustment factor report; and (5) the Company's 2024 DSM plan.

We respectfully request that the Commission approve the following as part of this Petition:

- The Company's 2022 DSM Tracker account;
- Approve the incentive of \$246,599 earned for 2022 program performance;
- Approve the proposed 2024 electric DSM Adjustment Factor of \$0.000503 per kWh; and
- Approve the proposed 2024 DSM Plan.

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## **PETITION**

### **I. 2022 DSM RESULTS AND EARNED INCENTIVE**

#### **A. Executive Summary**

Demand Side Management resources are part of a wide variety of offerings by the Company to empower our customers to control their energy usage and their monthly electric bills. Our DSM portfolio offers a mix of solutions designed to meet individual needs and preferences. In 2022, we achieved over 8.7 GWh of energy savings achievement. This achievement is a result of high penetration of LED lighting for both residential and commercial customers. Our total actual expenditures of \$838,836 falls above the filed budget, but within the Commission approved budget flexibility.<sup>1</sup>

#### **B. Cross Subsidization Review**

In compliance with Commission request, we verify that neither the residential nor the business segment is receiving more benefit than another.<sup>2</sup> Although there have been changes in the percent of spend, as well as percent of kWh over time, the percent of recovery between classes, as shown in Table 1, has been consistent over the past several years.

**Table 1 – Cross Subsidization Review**

| <b>Year</b> | <b>Percent of Spend<br/>(excl. Planning)</b> |                 | <b>Percent of kWh</b> |                 | <b>Percent of Recovery</b> |                 |
|-------------|--|-----------------|-----------------------|-----------------|----------------------------|-----------------|
|             | <b>Residential</b>                           | <b>Business</b> | <b>Residential</b>    | <b>Business</b> | <b>Residential</b>         | <b>Business</b> |
| 2018        | 42%  | 58%             | 42%                   | 58%             | 35%                        | 65%             |
| 2019        | 44%  | 56%             | 29%                   | 71%             | 36%                        | 64%             |
| 2020        | 33%  | 67%             | 33%                   | 67%             | 37%                        | 63%             |
| 2021        | 33%  | 67%             | 42%                   | 58%             | 37%                        | 63%             |
| 2022        | 61%  | 39%             | 40%                   | 60%             | 37%                        | 63%             |

#### **C. Program Achievement**

To evaluate the cost-effectiveness of our portfolio for 2022, we looked at the Total Resource Cost (TRC) ratio, which compares total benefits to total costs of the portfolio. If a program or portfolio has a TRC ratio above one, it is considered cost-effective since

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<sup>1</sup> Docket EL13-015, Commission Order December 3, 2013.

<sup>2</sup> The Commission requested the Company provide a cross-subsidization table in Docket No. EL17-019 during the December 5, 2017 Hearing.

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the benefits outweigh the costs. As shown in the table below, the 2022 portfolio demonstrated a TRC Ratio of 1.43.

Table 2 provides a breakdown of 2022 achievements by program. A full executive summary, which includes both a comparison of 2022 goals versus actuals and cost-effectiveness test results, is provided as Attachment A.

**Table 2 – 2022 Actual Achievements  
Executive Summary Table**

| 2022   | Electric Participants | Electric Budget  | Generator kW | Generator kWh    | TRC Ratio   |
|--|-----------------------|------------------|--------------|------------------|-------------|
| <b>Business Segment</b>                      |                       |                  |              |                  |             |
| Lighting Efficiency                          | 201                   | \$486,424        | 840          | 5,215,090        | 0.94        |
| Business Saver's Switch                      | 24                    | \$17,226         | 29           | 39               | 1.21        |
| Peak and Energy Control                      | 8                     | \$3,151          | 1,451        | 2,879            | 141.61      |
| <b>Business Segment Total</b>                | <b>233</b>            | <b>\$506,802</b> | <b>2,320</b> | <b>5,218,008</b> | <b>1.11</b> |
|  |                       |                  |              |                  |             |
| <b>Residential Segment</b>                   |                       |                  |              |                  |             |
| Home Lighting                                | 4,987                 | \$77,304         | 455          | 3,364,441        | 6.65        |
| Heat Pump Water Heaters                      | 2                     | \$1,494          | 1            | 5,341            | 0.98        |
| Residential Demand Response                  | 414                   | \$230,026        | 745          | 110,315          | 1.77        |
| Residential Demand Response - Saver's Switch | 500                   | \$142,499        | 307          | 405              | 1.57        |
| Residential Demand Response - AC Rewards     | 400                   | \$87,527         | 424          | 754              | 2.03        |
| Thermostat Optimization                      | 500                   | \$0              | 15           | 109,157          | 2.36        |
| Consumer Education                           | 45,000                | \$17,844         | 0            | 0                | 0.00        |
| <b>Residential Segment Total</b>             | <b>50,403</b>         | <b>\$326,668</b> | <b>1,202</b> | <b>3,480,097</b> | <b>3.48</b> |
|  |                       |                  |              |                  |             |
| <b>Planning Segment</b>                      |                       |                  |              |                  |             |
| Regulatory Affairs                           | 0                     | \$5,366          | 0            | 0                | 0.00        |
| <b>Planning Segment Total</b>                | <b>0</b>              | <b>\$5,366</b>   | <b>0</b>     | <b>0</b>         | <b>0.00</b> |
|  |                       |                  |              |                  |             |
| <b>PORTFOLIO TOTAL</b>                       | <b>50,636</b>         | <b>\$838,836</b> | <b>3,521</b> | <b>8,698,105</b> | <b>1.43</b> |

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The Status Report shows a successful year for the DSM portfolio. We maintain a well-balanced portfolio of programs and continue to educate customers on the benefits of choosing energy efficiency.

### **D. DSM Incentive Report – Calculation Inputs**

The Company submits the following 2022 incentive calculation in accordance with the Commission’s October 21, 2011 Order, which approved an incentive of 30 percent of expenditures capped at the approved budget.

|                 |           |
|-----------------|-----------|
| Approved Budget | \$821,998 |
| Actual Spend    | \$838,836 |

Since the actual expenditure was greater than the approved budget, the incentive was capped at the approved budget amount. The incentive is calculated as follows: Approved Budget x 30% = Awarded Incentive or **821,998 x 30% =\$246,599.**

This incentive is accounted for in the Company’s 2022 DSM Tracker included in Attachment C.

## **II. DSM PROGRAM PORTFOLIO**

We offer our commercial and residential customers several different opportunities to participate in our energy efficiency programs. In this section, we provide program descriptions, 2022 program activity and results, any changes we anticipate for 2024, and budget and goal considerations. There are no new programs being launched in 2024.

### **A. Business Portfolio**

#### **1. Business Lighting**

The Business Lighting program offers rebates to motivate business customers to purchase LED (light-emitting diode) lamps and fixtures. This will reduce customer up-front costs associated with energy-efficient lighting and provide energy savings over the life of the equipment. The Business Lighting program includes rebates for retrofit and new construction prescriptive projects, as well as a custom rebate for equipment not included in the prescriptive offerings.

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### *a. 2022 Program Activity and Results*

In 2022, Xcel Energy eliminated high bay and troffer fixtures in the prescriptive program because they were no longer cost effective. The Company added a new Lighting Custom Efficiency program, to provide further customer options in the absence of these incentives. The Custom Lighting option requires customers to submit an application before purchasing equipment and each project is evaluated individually to verify cost-effectiveness prior to purchase of equipment.

The 2022 Business Lighting program fell short of its goal and had a TRC value less than 1.0. The resulting TRC of 0.94 was a result of several projects installed in 2021 and submitted for rebates in 2022 (customers have one year from installation of the equipment to submit for a rebate). These projects included several high bay and troffer units – which were removed in 2022 as a rebate option as a result of cost-effectiveness. This situation confirms that moving high bay and troffer fixtures to the Custom Lighting program so they could be evaluated for cost effectiveness before rebating them, was a beneficial decision. We do not anticipate that the program will result in a TRC level less than one in 2023 nor 2024.

The program continues to provide high savings achievement. The program maintains a low cost per kWh; 2022 shows this cost to be nine cents.

### *b. 2024 Proposed Changes*

The baseline for general service lamps, screw-in lamps and downlight retrofit kits, will change to 45 lumens per watt to align with the federal EISA Backstop legislation. There are no changes to rebate types or levels in 2024.

### *c. Budget and Goal Considerations*

We anticipate reduced savings for some measures as discussed above. Additionally, a new measure was added along with increased spending for our Custom Rebates. See Attachment B for further details.

## **2. Business Saver's Switch®**

Business Saver's Switch is a demand management program available to commercial customers. The program uses direct load control to cycle customers rooftop air conditioning units during periods of peak demand, helping to maintain system reliability. Loads are controlled using load control receivers operated remotely via wireless signals. Control periods occur as a result of (1) direction from the Midcontinent Independent



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System Operator (MISO), (2) if, in the Company's opinion the reliability of the system is endangered, or (3) if there is an economic decision to reduce load in particular areas. A minimum of one control event per cooling season is required by MISO.

The program is marketed using direct mail, email and by our customer representatives at our Business Solutions Center.

### *a. 2022 Program Activity and Results*

The Business Saver's Switch program saw moderate growth by continuing to add new premises to the program and performed in alignment with goals while coming in under budget.

The Company held one control event in 2022 for two hours as a result of our MISO obligations.

### *b. 2024 Proposed Changes*

The budget and projected achievements for 2024 will be unchanged.

## **3. Electric Rate Savings (Peak and Energy Controlled Rates)**

The Electric Rate Savings (ERS) program is offered to business customers that can reduce their electric loads by at least 50 kW during control periods when customers are called upon to curtail energy usage. These control periods can be initiated by the Company or tMISO. In return for their load availability, customers receive a monthly discount on their demand charges and can potentially save up to 50 percent on their demand charges over the entire year.

Two conditions would result in customer load curtailment for ERS: (1) If the Company is directed to do so by MISO to help maintain stability in the MISO territory as whole, or (2) if, in the company's opinion, the reliability of system is endangered.<sup>3</sup>

ERS is promoted directly to customers through Xcel Energy's Account Management and Business Solutions Center teams.

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<sup>3</sup> The need can be identified by Commercial Operations, Transmission, or Distribution. Reliability of the system could mean many things and take different circumstances and is not tied to a specific level of demand. In general, if there is a large concern about meeting firm load obligations with expected capacity, we can call on these programs to preserve firm load and we may call on these programs prior to the imminent loss of firm loads.

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### *a. 2022 Program Activity and Results*

In 2022, we exceeded our achievement goal and spent less than budgeted.

The program had two events in 2022 which required participants to curtail their load down to their predetermined demand level for a total of four hours. The first event was a MISO Real Power test lasting an hour in length. The second event was a MISO emergency event lasting for three hours. Additionally, we performed an annual notification test which does not require program participants to control their load. This notification test is necessary to verify customer contact information to ensure that in the event of an actual curtailment event the correct contacts are notified to ensure program compliance.

Program costs were for administrative and application maintenance costs as the company maintains the notification system used for both the notification test and MISO events.

### *b. 2024 Proposed Changes*

We expect additional growth in participants and achievements over the next two years. Based on this probability the budget should be expected to remain relatively the same for 2024.

## **4. Home Lighting**

The Home Lighting program offers discounted prices on light emitting diode (LED) bulbs. Energy efficient lights are an easy and low-cost way for residential and small business customers to save energy and lower their monthly electric bills. The Home Lighting program is a gateway product into our energy-efficiency programs due to the low up-front cost to customers and ease of participation. We promote the Home Lighting program through a variety of channels including bill inserts, emails and point of purchase displays.

We motivate customers to purchase LEDs by offering in-store retail discounts. The discounts are provided through collaboration with bulb manufacturers and retailers. The discount varies depending on the type of bulb and the manufacturer/retail partner. Discounted prices are received at the cash register, making it easy to participate without the hassle of mail-in rebates. Incentives are paid upstream, and the discounts are passed directly to customers.

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### *a. 2022 Program Activity and Results*

The program fell short the participation and energy savings goals for 2022. The number of residential versus business bulbs sold is defined in the table below.

**Table 1. Home Lighting Achievement**

| Type of Customer                    | Number of LED Bulbs Sold | Percent of Bulbs | Rebate Total |
|-------------------------------------|--------------------------|------------------|--------------|
| Residential                         | 59,297                   | 93%              | \$56,598     |
| Business (Generally Small Business) | 4,157                    | 7%               | \$4,260      |

### *b. 2024 Proposed Changes*

The baseline for screw-in bulbs has been updated to 45 lumens per watt to match the minimum efficiency levels set by the Department of Energy. Because of this, the savings per bulb sold has decreased. Additionally, we have added nightlights to the measure mix.

The energy savings and budget target for the product was derived by analyzing the market potential, historical sales data, available retail channels and participating customer segments.

## **5. Heat Pump Water Heaters**

The Heat Pump Water Heaters program offers retrofit and new construction rebates to residential customers who purchase and install qualifying energy efficient heat pump water heaters. Rebates are offered to encourage customers to purchase energy efficient equipment by reducing up-front costs associated with new heat pump water heaters. The following water heating measures are rebated at this time:

- Medium Draw Heat Pump Water Heater – Refrigerant Based Cooling & Electric Resistance Heat (30-80 Gallon);
- Medium Draw Heat Pump Water Heater – Refrigerant Based Cooling & ASHP Heat (30-80 Gallon);
- Medium Draw Heat Pump Water Heater – Refrigerant Based Cooling & Natural Gas Heat (30-80 Gallon);
- Medium Draw Heat Pump Water Heater – Non-Refrigerant Based Cooling & Electric Resistance Heat (30-80 Gallon);
- Medium Draw Heat Pump Water Heater – Non-Refrigerant Based Cooling & ASHP Heat (30-80 Gallon); and

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- Medium Draw Heat Pump Water Heater – Non-Refrigerant Based Cooling & Natural Gas Heat (30-80 Gallon).

Heat pump water heaters have a much larger incremental cost but save a significant amount of energy over an electric resistance water heater. Rebates were provided at \$400 per equipment which funds approximately 50 percent of the incremental cost to purchase and install this energy efficient option. The up-front cost of the technology is a barrier for most customers and the offered rebate helps overcome this barrier by reducing the incremental cost to provide a payback between eight and sixteen months. We want to encourage the use of energy-efficient opportunities with our customers and providing rebates on electric heat pump water heaters will continue to reduce customer barriers that prohibit energy efficient options from being utilized.

### *a. 2022 Program Activity and Results*

In 2022, the Heat Pump Water Heaters program continued to see low participation. The low participation in 2022 has impacted the overall TRC level. We want to encourage the use of energy-efficient opportunities and believe our change in 2022 to increase the rebate level will help us encourage our customers to purchase electric heat pump water heaters by reducing barriers to participation; however, we are aware that this is newer technology and may take time to find a foothold in the market.

### *b. 2024 Proposed Changes*

We do not intend to adjust the program materially in 2024 as new rebates were already placed in market beginning in 2022.

The higher rebate, put in place in 2022, should continue to assist with market transformation by increasing demand for the product which will then increase product availability within the market. The program budget includes rebates, promotion, and administrative costs. The rebates make up the majority of the budget while a smaller amount is allotted to administration and promotion. The Company will utilize low-cost marketing tactics, partnerships with manufacturers, distributors, retailers, and trade partner outreach to increase awareness of the program.

## **6. Residential Demand Response**

We offer two demand response products to our residential customers under the Residential Demand Response program: Saver's Switch® and AC Rewards. Both products target central air conditioners for reducing system load during demand peaks.

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Both offerings will be promoted primarily via email, direct mail and our customer care organization.

Saver's Switch offers a seasonal bill discount to customers who agree to allow the Company to remotely control their central air conditioners during the summer months. Customers with qualifying electric water heaters can enroll this equipment as well. Electric water heaters can be controlled year-round, and customers receive incentives for their participation year-round. Saver's Switch has been a part of the Company's demand response portfolio since approximately 1990. As such, a significant portion of switches are nearing the end of their useful life.

The AC Rewards program (smart thermostat offering) was launched in 2020 and offers residential electric customers the opportunity to implement a new load management option. The purpose of this product is to allow the company to control residential cooling load when needed.

AC Rewards requires customers to "Bring Your Own Thermostat (BYOT)", which means that any customer who has a central AC and a qualifying thermostat is eligible to participate. Customers will be incentivized with a one-time incentive for enrolling their qualifying device in AC Rewards and an annual incentive for every year they remain on the offering. For customers who do not have a qualifying thermostat, but have a central AC, they can receive a discount for purchasing and installing an ENERGY STAR® rated thermostat that is AC Rewards qualified. The following measures are incentivized at this time:

| Measure Offerings              | Incentives   |
|--------------------------------|--|
| Saver Switch for AC            | 15% discount off electric charges from June through September  |
| Saver Switch for Water Heaters | 2% discount off electric charges year-round  |
| AC Rewards                     | \$75 bill credit for enrolling in the demand management program and \$25 annual bill credit in October |
| Thermostat Optimization        | \$50 incentive for installing a qualifying smart thermostat  |

Control periods occur as a result of (1) direction from the Midcontinent Independent System Operator (MISO), (2) if, in the Company's opinion the reliability of the system is endangered, or (3) if there is an economic decision to reduce load in particular areas. A minimum of one control event per cooling season is required by MISO.

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### *a. 2022 Program Activity and Results*

In 2022, the Residential Demand Response program slightly under spent its budget while participants and achievements were below target. The Saver's Switch product encountered higher than expected costs for hardware and installations. In all, the Company installed about 380 new Saver's Switches, enrolled over 350 thermostats into AC Rewards, and paid out over 50 thermostat energy efficiency rebates.

The Saver's Switch and AC Rewards products had one control event in 2022. The Company continues to plan for the execution of a minimum of one control event per year.

### *b. 2024 Proposed Changes*

For 2024, the Residential Demand Response budget is increased to accommodate the ongoing replacement need of switches that have outlived their useful lives and are due for replacement. The Company anticipates approximately a 50/50 mix of new installations versus maintenance replacements of older switches, but the mix may vary from year to year depending upon customer signup interest.

## **7. Trade Partner Engagement**

Trade Partners are a key marketing channel for our DSM efforts. Trade Partners educate and promote our programs to customers, verify that the equipment they are installing meets our program specifications and help customers complete the rebate paperwork. We consider our Trade Partners to be contractors, distributors and manufacturers of energy-efficient equipment.

Trade Partner support is conducted through training workshops and Account Manager outreach. Account Management in Sioux Falls plays an important role in supporting the efforts of our South Dakota Trade Partners. Account Management is available to meet with Trade Partners for program training, site visits and help with rebate paperwork.

Other support is provided through phone and email communications from Trade Relations Managers. Xcel Energy's Trade Relations Managers are based in Minneapolis and assist our South Dakota Trade Partners by providing answers to trade questions on our rebate specifications and paperwork. They produce email updates for Trade Partners when there is important information to share. Trade Relations Managers are also available to conduct additional in-depth training on an as-needed basis.

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In 2021, the pandemic prohibited Trade Relations Managers from conducting in person trainings per Company guidelines designed to protect employees and customers alike.

### 8. Consumer Education

The Consumer Education program creates awareness of energy conservation by providing residential customers with information and resources to reduce their homes' energy use. The Company provides customers with opportunities to actively engage in energy efficiency by meeting customers at events and via digital channels. These opportunities provide direct messaging outreach to customers. On-site engagement at events allows the Company's brand ambassadors to have direct conversations with customers allowing them to ask questions and learn more. Customized digital outreach allows customers to explore resources on their own time.

#### *a. 2022 Program Activity and Results*

In 2022, the company achieved just under the year-end participation target. The program came just under budget as well. The program's primary focus at community events is to engage with customers to discuss ways they can save energy and money utilizing Xcel Energy's tools and resources. The two milestone events allow for the Company to engage with a large number of customers. The program also explored digital marketing and contributes to Apogee, a monthly email to customers educating them on their bill along with energy and money-saving tips.

To continuously improve education efforts, the team is continually finding ways to improve educational and awareness outreach opportunities to engage with customers in Xcel Energy's service territory to increase awareness and participation. The aim is to educate customers in an inviting space and target high impact events with big crowds. The combination of these initiatives continues to drive participation in DSM products.

In 2022, the company sponsored and participated in two milestone events in our service territory:

- February 25-27, 2022 – Sioux Falls Empire Home Show, Sioux Falls Convention Center, Sioux Falls, SD
  - The Company engaged with nearly 4,000 customers at this show and distributed 1,246 LED bulbs while driving messaging around home-energy saving tips and program messaging. This show is an ideal event to deliver our home energy-saving messaging.
- September 10, 2022 – Sioux Falls Sidewalk Arts Festival, Sioux Falls, SD

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- The Company engaged with approximately 4,000 customers and distributed 336 LED bulbs to customers. With approximately 20,000 visitors attending this event, this is a great opportunity to engage with a large number of customers.

### *b. 2024 Program Changes*

The budget and projected achievements for 2024 will be unchanged.

## **9. Regulatory Affairs**

The Planning & Administration group manages all DSM regulatory filings, directs and prepares cost-benefit analysis, provides results of energy conservation achievements and prepares cost recovery reports. This group also provides procedures and policies for effectively addressing requirements and complying with the DSM regulatory process. The entirety of the budget is to cover non-direct program labor including labor for such things as onsets and regulatory requests. We are proposing no changes in 2024.

## **III. DSM COST RECOVERY REPORT**

Cost-effective conservation benefits customers by reducing the need to build a new power plant or other generation facilities to meet our customers' electricity needs. Conservation also has environmental benefits, including a reduction in air pollution and greenhouse gas emissions associated with using fossil fuels. This section reports the actual 2022 spending and cost recovery as well as the Company's carrying charge rates.

In 2022, the total portfolio spend came in at \$838,836. This amount is above our approved budget of \$821,998 but falls within the ten percent spend flexibility granted by the Commission.<sup>4</sup> In addition to DSM expenses, the Company is requesting recovery of \$246,599 in financial incentive earned for our 2022 DSM performance for total recovery of \$1,085,435.<sup>5</sup>

Supportive documentation for this cost recovery request, some of which falls under the category of confidential data, is provided as Attachment C of this filing and includes:

- Calculations of the Carrying Charge Rates in 2022 and found in the 2022 Tracker; and

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<sup>4</sup> The Commission approved a 10 percent spend flexibility beginning in 2013 as part of the approval of the Company's 2012 DSM Status Report and 2014 DSM Proposed Plan. (Docket No. EL13-017)

<sup>5</sup> The Company acknowledges an error in the 2022 Tracker of \$480. These funds will be removed in the 2023 Tracker.



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- Xcel Energy's 2022 DSM Tracker, which documents monthly DSM expenditures and recovered costs.

### IV. DSM COST ADJUSTMENT FACTOR

The current DSM Cost Adjustment Factor of \$0.000479 per kWh was implemented on January 1, 2022.<sup>6</sup> The Company requests a new DSM Cost Adjustment Factor of \$0.000503 per kWh to be effective with the first billing cycle of January 2024.

Supportive documentation for this rate change request, some of which falls under the category of confidential data, is provided as Attachments D1-D4 of this filing and includes:

- Information specified in South Dakota Administrative Rule 20:10:13:26 regarding the updated DSM Cost Adjustment Factor;
- Forecasted 2023 and 2024 DSM Trackers reflecting the forecasted cost recovery with the current and proposed rates;
- Proposed bill insert notice; and
- Proposed updated tariff sheet in both redlined and clean versions.

The Company requests a new DSM Cost Adjustment Factor of \$0.000503 per customer kWh to be effective with the first billing cycle of January 2024 and to remain in effect through December 2024 or until the Commission approves a new DSM Cost Adjustment Factor. This is a increase of 0.000026 per kWh compared to the previous DSM Cost Adjustment Factor. This increase is due to the 2022 adjustment leading to under-recovery.

If Commission approval of the proposed adjustment is delayed beyond the timeframe needed to implement the rate change by January 1, 2024 the Company will continue to apply the current DSM Cost Adjustment of \$0.000479 per kWh up to the first cycle of the first full billing period following Commission approval of a revised factor.

This proposed factor is calculated to reduce the DSM Tracker balance to \$0 by the end of December 2024. It is based on the forecasted December 2024 unrecovered balance in the Company's DSM Tracker account. This 2024 forecasted balance is based on the forecasted January beginning balance, projected expenditures and the forecasted incentive. The inputs and calculation are shown below.

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<sup>6</sup> Docket EL22-010, Commission Order December 12, 2022.

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This calculation results in a rate that would recover the sum of the beginning balance, approved expenditures and estimated incentives over the January 1, 2024 – December 31, 2024 period.

We note that the bill onsert for the DSM Cost Adjustment Factor has, in the past, been combined with the South Dakota Infrastructure Rider Rate. Attempts are made to limit the amount of onserts per bill when necessary; this further reduces cost. We will combine in 2024 if timing of each filing allows the ability to do so.

## **V. 2024 DSM PLAN**

This section includes a summary of our proposed 2024 Plan. Our plan for 2024 is to continue to provide customers energy efficient options and rebates to help them manage future energy bills. Table 7 summarizes our proposed goals and provides updated cost-effectiveness results by program. The total portfolio has a passing TRC Ratio of 1.55. A full executive summary, which includes all cost-effectiveness test results, is provided as Attachment E.

## PUBLIC

**Table 7 – Proposed 2024 DSM Plan  
Executive Summary**

| <b>2024</b>                      | <b>Electric Participants</b> | <b>Electric Budget</b> | <b>Generator kW</b> | <b>Generator kWh</b> | <b>TRC Ratio</b> |
|----------------------------------|------------------------------|------------------------|---------------------|----------------------|------------------|
| <b>Business Segment</b>          |                              |                        |                     |                      |                  |
| Lighting Efficiency              | 180                          | \$389,418              | 672                 | 6,091,709            | 1.41             |
| Business Saver's Switch          | 20                           | \$26,150               | 57                  | 78                   | 1.65             |
| Peak and Energy Control          | 1                            | \$10,350               | 174                 | 448                  | 5.67             |
| <b>Business Segment Total</b>    | <b>201</b>                   | <b>\$425,918</b>       | <b>903</b>          | <b>6,092,234</b>     | <b>1.44</b>      |
|                                  |                              |                        |                     |                      |                  |
| <b>Residential Segment</b>       |                              |                        |                     |                      |                  |
| Home Lighting                    | 5,183                        | \$99,539               | 146                 | 1,089,357            | 2.90             |
| Heat Pump Water Heaters          | 21                           | \$11,000               | 8                   | 61,901               | 1.07             |
| Residential Demand Response      | 1,460                        | \$281,685              | 734                 | 58,865               | 1.60             |
| Consumer Education               | 52,579                       | \$22,000               | 0                   | 0                    | 0.00             |
| <b>Residential Segment Total</b> | <b>59,243</b>                | <b>\$414,224</b>       | <b>887</b>          | <b>1,210,123</b>     | <b>1.90</b>      |
|                                  |                              |                        |                     |                      |                  |
| <b>Planning Segment</b>          |                              |                        |                     |                      |                  |
| Regulatory Affairs               | 0                            | \$10,350               | 0                   | 0                    | 0.00             |
| <b>Planning Segment Total</b>    | <b>0</b>                     | <b>\$10,350</b>        | <b>0</b>            | <b>0</b>             | <b>0.00</b>      |
| <b>PORTFOLIO TOTAL</b>           | <b>59,444</b>                | <b>\$850,492</b>       | <b>1,790</b>        | <b>7,302,357</b>     | <b>1.55</b>      |

## CONCLUSION

In summary, the Company respectfully requests that the Commission:

- Approve the Company's 2022 DSM Tracker account;
- Approve the incentive of \$246,599 earned for 2022 program performance;
- Approve the proposed 2024 electric DSM Adjustment Factor of \$0.000503 per kWh; and
- Approve the proposed 2024 DSM Plan.

We look forward to continuing these programs in South Dakota. The Company appreciates the interest and efforts of South Dakota policy makers in supporting this DSM portfolio.

**PUBLIC**

Dated: May 1, 2023

Xcel Energy

A handwritten signature in black ink that reads "Steve Kolbeck". The signature is fluid and cursive, with a large loop at the beginning of the first name.

By:

\_\_\_\_\_  
Steve Kolbeck

Principal Manager –South Dakota

## **PUBLIC**

### **Service of Filings**

We request that communications regarding this Application be directed to:

Christine Schwartz  
Regulatory Administrator  
Xcel Energy  
414 Nicollet Mall, 401-7  
Minneapolis, MN 55401  
(612) 330-6793  
Regulatory.Records@xcelenergy.com

| Executive Summary Table-2022     |                       |                  |              |                   |                                  |                       |             |                  |             |              |             |                  |                |                        |             |                        |                    |                                     |             |
|----------------------------------|-----------------------|------------------|--------------|-------------------|----------------------------------|-----------------------|-------------|------------------|-------------|--------------|-------------|------------------|----------------|------------------------|-------------|------------------------|--------------------|-------------------------------------|-------------|
| Goal                             |                       |                  |              |                   | Actual                           |                       |             |                  |             |              |             |                  |                |                        |             | Test Results           |                    |                                     |             |
| 2022                             | Electric Participants | Electric Budget  | Generator kW | Generator kWh     | 2022                             | Electric Participants | % of Goal   | Electric Budget  | % of Goal   | Generator kW | % of Goal   | Generator kWh    | Lifetime Years | Lifetime Generator kWh | % of Goal   | Participant Test Ratio | Utility Test Ratio | Ratepayer Impact Measure Test Ratio | TRC Ratio   |
| <b>Business Segment</b>          |                       |                  |              |                   | <b>Business Segment</b>          |                       |             |                  |             |              |             |                  |                |                        |             |                        |                    |                                     |             |
| Lighting Efficiency              | 477                   | \$399,900        | 742          | 5,981,518         | Lighting Efficiency              | 201                   | 42%         | \$486,424        | 122%        | 840          | 113%        | 5,215,090        | 17             | 90,001,665             | 87%         | 2.52                   | 4.17               | 0.37                                | 0.94        |
| Business Saver's Switch          | 10                    | \$25,250         | 35           | 48                | Business Saver's Switch          | 24                    | 240%        | \$17,226         | 68%         | 29           | 83%         | 39               | 15             | 583                    | 82%         | INF                    | 1.21               | 1.21                                | 1.21        |
| Peak and Energy Control          | 1                     | \$10,000         | 174          | 345               | Peak and Energy Control          | 8                     | 800%        | \$3,151          | 32%         | 1,451        | 835%        | 2,879            | 5              | 14,394                 | 835%        | INF                    | 141.61             | 92.86                               | 141.61      |
| <b>Business Segment Total</b>    | <b>488</b>            | <b>\$435,150</b> | <b>951</b>   | <b>5,981,911</b>  | <b>Total</b>                     | <b>233</b>            | <b>48%</b>  | <b>\$506,802</b> | <b>116%</b> | <b>2,320</b> | <b>244%</b> | <b>5,218,008</b> | <b>17</b>      | <b>90,016,642</b>      | <b>87%</b>  | <b>2.52</b>            | <b>4.92</b>        | <b>0.45</b>                         | <b>1.11</b> |
| <b>Residential Segment</b>       |                       |                  |              |                   | <b>Residential Segment</b>       |                       |             |                  |             |              |             |                  |                |                        |             |                        |                    |                                     |             |
| Home Lighting                    | 6,154                 | \$101,933        | 587          | 4,334,997         | Home Lighting                    | 4,987                 | 81%         | \$77,304         | 76%         | 455          | 78%         | 3,364,441        | 12             | 41,663,449             | 78%         | 47.40                  | 12.33              | 0.27                                | 6.65        |
| Heat Pump Water Heaters          | 21                    | \$10,250         | 8            | 62,033            | Heat Pump Water Heaters          | 2                     | 10%         | \$1,494          | 15%         | 1            | 15%         | 5,341            | 30             | 105,345                | 9%          | 5.42                   | 1.82               | 0.25                                | 0.98        |
| Residential Demand Response      | 1,400                 | \$243,500        | 781          | 87,288            | Residential Demand Response      | 414                   | 30%         | \$230,026        | 94%         | 745          | 95%         | 110,315          | 30             | 1,111,246              | 126%        | 13.01                  | 1.66               | 1.14                                | 1.77        |
| Consumer Education               | 45,000                | \$21,165         | 0            | 0                 | Consumer Education               | 50,403                | 112%        | \$326,668        | 1543%       | N/A          | N/A         | N/A              | N/A            | N/A                    | N/A         |                        |                    |                                     |             |
| <b>Residential Segment Total</b> | <b>52,575</b>         | <b>376,848</b>   | <b>1,376</b> | <b>4,484,318</b>  | <b>Residential Segment Total</b> | <b>55,806</b>         | <b>106%</b> | <b>\$635,492</b> | <b>169%</b> | <b>1,202</b> | <b>87%</b>  | <b>3,480,097</b> | <b>13</b>      | <b>42,880,040</b>      | <b>78%</b>  | <b>41.94</b>           | <b>1.49</b>        | <b>1.48</b>                         | <b>0.00</b> |
| <b>Planning Segment</b>          |                       |                  |              |                   | <b>Planning Segment</b>          |                       |             |                  |             |              |             |                  |                |                        |             |                        |                    |                                     |             |
| Regulatory Affairs               | 0                     | \$10,000         | 0            | 0                 | Regulatory Affairs               | N/A                   | N/A         | \$5,366          | 54%         | 0            | N/A         | 0                | N/A            | N/A                    | N/A         | N/A                    | N/A                | N/A                                 | N/A         |
| <b>Planning Segment Total</b>    | <b>0</b>              | <b>\$10,000</b>  | <b>0</b>     | <b>0</b>          | <b>Total</b>                     | <b>N/A</b>            | <b>N/A</b>  | <b>\$5,366</b>   | <b>54%</b>  | <b>0</b>     | <b>N/A</b>  | <b>0</b>         | <b>N/A</b>     | <b>N/A</b>             | <b>N/A</b>  | <b>N/A</b>             | <b>N/A</b>         | <b>N/A</b>                          | <b>N/A</b>  |
| <b>PORTFOLIO TOTAL</b>           | <b>53,063</b>         | <b>\$821,998</b> | <b>2,327</b> | <b>10,466,229</b> | <b>PORTFOLIO TOTAL</b>           | <b>50,636</b>         | <b>154%</b> | <b>\$838,836</b> | <b>285%</b> | <b>3,521</b> | <b>331%</b> | <b>8,698,105</b> | <b>15</b>      | <b>132,896,682</b>     | <b>165%</b> | <b>4.07</b>            | <b>4.57</b>        | <b>0.41</b>                         | <b>1.43</b> |

2023/2024 Lighting Measures

| Type             | Lighting Efficiency                              | 2021 Rebate Amount (\$) | 2022 Rebate Amount (\$) | 2023 Rebate Amount (\$) | 2024 Rebate Amounts (\$) | Rebate Adjustment | Justification |
|------------------|--|-------------------------|-------------------------|-------------------------|--------------------------|-------------------|---------------|
| Retrofit         | Stairwell Fixture                                | \$ 40.00                | \$ 40.00                | \$ 40.00                | \$ 40.00                 | N/A               |               |
| Retrofit         | Networked Lighting Controls                      | \$ 40/watt              | \$ 40/watt              | \$ 40/watt              | \$ 40/watt               | N/A               |               |
| Retrofit         | Standalone Occupancy sensor                      | \$05/watt               | \$05/watt               | \$05/watt               | \$05/watt                | N/A               |               |
| Retrofit         | Standalone Daylighting sensor                    | \$ 10/watt              | \$ 10/watt              | \$ 10/watt              | \$ 10/watt               | N/A               |               |
| Retrofit         | Standalone Daylighting & Occupancy sensors       | \$15/watt               | \$15/watt               | \$15/watt               | \$15/watt                | N/A               |               |
| Retrofit         | High End Trim                                    |                         |                         |                         | \$15/watt                | New for 2024      |               |
| Retrofit         | LED Mogul Screw-base Lamp 30-39W                 | \$ 30.00                | \$ 30.00                | \$ 30.00                | \$ 30.00                 | N/A               |               |
| Retrofit         | LED Mogul Screw-base lamp 40-49W                 | \$ 40.00                | \$ 40.00                | \$ 40.00                | \$ 40.00                 | N/A               |               |
| Retrofit         | LED Mogul Screw-base Lamp 50-59W                 | \$ 50.00                | \$ 50.00                | \$ 50.00                | \$ 50.00                 | N/A               |               |
| Retrofit         | LED Mogul Screw-base lamp 60-119W                | \$ 60.00                | \$ 60.00                | \$ 60.00                | \$ 60.00                 | N/A               |               |
| Retrofit         | LED Mogul Screw-base lamp 120-230W               | \$ 75.00                | \$ 75.00                | \$ 75.00                | \$ 75.00                 | N/A               |               |
| Retrofit         | LED L&L Exit Sign                                | \$ 25.00                | \$ 25.00                | \$ 25.00                | \$ 25.00                 | N/A               |               |
| Retrofit         | LED Interior Sensor - In Fixture Retrofit        | \$ 10.00                | \$ 10.00                | \$ 10.00                | \$ 10.00                 | N/A               |               |
| Retrofit         | LED Interior Fixture <= 25W                      | \$ 20.00                | \$ 20.00                | \$ 20.00                | \$ 20.00                 | N/A               |               |
| Retrofit         | LED Interior Fixture 20W - 50W                   | \$ 40.00                | \$ 40.00                | \$ 40.00                | \$ 40.00                 | N/A               |               |
| Retrofit         | LED Ref and Fix Cases 5' or 6' doors             | \$ 45.00                | \$ 45.00                | \$ 45.00                | \$ 45.00                 | N/A               |               |
| Retrofit         | LED Parking Garage Lighting 25W-60W              | \$ 75.00                | \$ 75.00                | \$ 75.00                | \$ 75.00                 | N/A               |               |
| Retrofit         | LED Area Lighting - 45-65W                       | \$ 25.00                | \$ 25.00                | \$ 25.00                | \$ 25.00                 | N/A               |               |
| Retrofit         | LED Area Lighting - 66-89W                       | \$ 25.00                | \$ 25.00                | \$ 25.00                | \$ 25.00                 | N/A               |               |
| Retrofit         | LED Area Lighting - 90-119W                      | \$ 30.00                | \$ 30.00                | \$ 30.00                | \$ 30.00                 | N/A               |               |
| Retrofit         | LED Area Lighting - 120-140W                     | \$ 30.00                | \$ 30.00                | \$ 30.00                | \$ 30.00                 | N/A               |               |
| Retrofit         | LED Exterior Wall Pack <= 25W                    | \$ 25.00                | \$ 25.00                | \$ 25.00                | \$ 25.00                 | N/A               |               |
| Retrofit         | LED Exterior Wall Pack 20W - 60W                 | \$ 50.00                | \$ 50.00                | \$ 50.00                | \$ 50.00                 | N/A               |               |
| Retrofit         | LED Exterior Wall Pack 61W - 150W                | \$ 80.00                | \$ 80.00                | \$ 80.00                | \$ 80.00                 | N/A               |               |
| Retrofit         | LED Parking Garage Wall Pack <= 25W              | \$ 35.00                | \$ 35.00                | \$ 35.00                | \$ 35.00                 | N/A               |               |
| Retrofit         | LED Parking Garage Wall Pack 20W - 60W           | \$ 75.00                | \$ 75.00                | \$ 75.00                | \$ 75.00                 | N/A               |               |
| Retrofit         | LED Parking Garage Wall Pack 61W - 150W          | \$ 100.00               | \$ 100.00               | \$ 100.00               | \$ 100.00                | N/A               |               |
| Retrofit         | LED Outdoor Canopy or Soffit lighting 25W - 60W  | \$ 75.00                | \$ 75.00                | \$ 75.00                | \$ 75.00                 | N/A               |               |
| Retrofit         | LED Outdoor Canopy or Soffit lighting 61W - 150W | \$ 100.00               | \$ 100.00               | \$ 100.00               | \$ 100.00                | N/A               |               |
| Retrofit         | LED Interior Lamp <= 3W                          | \$ 4.00                 | \$ 2.00                 | \$ 2.00                 | \$ 2.00                  | N/A               |               |
| Retrofit         | LED Interior Lamp 6W - 10W                       | \$ 6.00                 | \$ 3.00                 | \$ 3.00                 | \$ 3.00                  | N/A               |               |
| Retrofit         | LED Interior Lamp 11W - 20W                      | \$ 8.00                 | \$ 4.00                 | \$ 4.00                 | \$ 4.00                  | N/A               |               |
| Retrofit         | LED Tube Type A 2 foot                           | \$ 2.00                 | \$ 2.00                 | \$ 2.00                 | \$ 2.00                  | N/A               |               |
| Retrofit         | LED Tube Type C 2 foot                           | \$ 3.00                 | \$ 3.00                 | \$ 3.00                 | \$ 3.00                  | N/A               |               |
| Retrofit         | LED Tube Type A 4 foot                           | \$ 2.00                 | \$ 2.00                 | \$ 2.00                 | \$ 2.00                  | N/A               |               |
| Retrofit         | LED Tube Type C 4 foot                           | \$ 3.00                 | \$ 3.00                 | \$ 3.00                 | \$ 3.00                  | N/A               |               |
| Retrofit         | LED Tube Type B 4 foot                           | \$ 3.00                 | \$ 3.00                 | \$ 3.00                 | \$ 3.00                  | N/A               |               |
| New Construction | LED Interior Lamp <= 3W                          | \$ 4.00                 | \$ 2.00                 | \$ 2.00                 | \$ 2.00                  | N/A               |               |
| New Construction | LED Interior Lamp 6W - 10W                       | \$ 6.00                 | \$ 3.00                 | \$ 3.00                 | \$ 3.00                  | N/A               |               |
| New Construction | LED Interior Lamp 11W - 20W                      | \$ 8.00                 | \$ 4.00                 | \$ 4.00                 | \$ 4.00                  | N/A               |               |
| New Construction | LED Interior Fixture <= 25W                      | \$ 15.00                | \$ 15.00                | \$ 15.00                | \$ 15.00                 | N/A               |               |
| New Construction | LED Interior Fixture 20W - 50W                   | \$ 20.00                | \$ 20.00                | \$ 20.00                | \$ 20.00                 | N/A               |               |
| New Construction | LED Ref and Fix Cases 5' or 6' doors             | \$ 35.00                | \$ 35.00                | \$ 35.00                | \$ 35.00                 | N/A               |               |
| New Construction | LED Parking Garage Lighting 25W-60W              | \$ 35.00                | \$ 25.00                | \$ 25.00                | \$ 25.00                 | N/A               |               |
| New Construction | LED Area Lighting - 45-65W                       | \$ 15.00                | \$ 15.00                | \$ 15.00                | \$ 15.00                 | N/A               |               |
| New Construction | LED Area Lighting - 66-89W                       | \$ 15.00                | \$ 15.00                | \$ 15.00                | \$ 15.00                 | N/A               |               |
| New Construction | LED Area Lighting - 90-119W                      | \$ 30.00                | \$ 30.00                | \$ 30.00                | \$ 30.00                 | N/A               |               |
| New Construction | LED Area Lighting - 120-140W                     | \$ 30.00                | \$ 30.00                | \$ 30.00                | \$ 30.00                 | N/A               |               |
| New Construction | LED Exterior Wall Pack <= 25W                    | \$ 15.00                | \$ 15.00                | \$ 15.00                | \$ 15.00                 | N/A               |               |
| New Construction | LED Exterior Wall Pack 20W - 60W                 | \$ 30.00                | \$ 30.00                | \$ 30.00                | \$ 30.00                 | N/A               |               |
| New Construction | LED Exterior Wall Pack 61W - 150W                | \$ 50.00                | \$ 50.00                | \$ 50.00                | \$ 50.00                 | N/A               |               |
| New Construction | LED Parking Garage Wall Pack <= 25W              | \$ 15.00                | \$ 15.00                | \$ 15.00                | \$ 15.00                 | N/A               |               |
| New Construction | LED Parking Garage Wall Pack 20W - 60W           | \$ 30.00                | \$ 30.00                | \$ 30.00                | \$ 30.00                 | N/A               |               |
| New Construction | LED Parking Garage Wall Pack 61W - 150W          | \$ 50.00                | \$ 50.00                | \$ 50.00                | \$ 50.00                 | N/A               |               |
| New Construction | LED Outdoor Canopy or Soffit lighting 25W - 60W  | \$ 30.00                | \$ 20.00                | \$ 20.00                | \$ 20.00                 | N/A               |               |
| New Construction | LED Outdoor Canopy or Soffit lighting 61W - 150W | \$ 50.00                | \$ 25.00                | \$ 25.00                | \$ 25.00                 | N/A               |               |
| Custom Lighting  | Average rebate amount estimated                  |                         | \$ 7,125.00             | \$ 7,125.00             | \$ 7,125.00              | N/A               |               |

| Home Lighting                                 | 2021 Rebate Amount (\$) | 2022 Rebate Amount (\$) | 2023 Rebate Amount (\$) | 2024 Rebate Amount (\$)            | Rebate Adjustment | Justification  |
|---|-------------------------|-------------------------|-------------------------|------------------------------------|-------------------|--|
| LED Bulb - A-Line                             | \$1.07                  | \$0.90                  | \$0.90                  | Included in new GSL category below | n/a               | n/a  |
| LED Bulb - Specialty                          | \$1.54                  | \$1.30                  | \$1.30                  | Included in new GSL category below | n/a               | n/a  |
| LED Bulb - Linear Tube - Residential portion  | \$2.00                  | \$2.00                  | \$2.00                  | \$2.00                             | n/a               | n/a  |
| LED Bulb - Linear Tube - Business portion     | \$3.92                  | \$3.92                  | \$3.92                  | \$2.00                             | Yes               | Discounts offered in invoices are the same for both res and bus so this matches the res rebate |
| LED Bulb - General Service Lamp (GSL)         | n/a                     | n/a                     | n/a                     | \$0.96                             | n/a               | New category to align with DOL definitions   |
| LED Bulb - Non General Service Lamp Specialty | n/a                     | n/a                     | n/a                     | \$2.00                             | n/a               | New category to align with DOL definitions   |
| LED Connected Lighting                        | n/a                     | n/a                     | n/a                     | \$2.00                             | n/a               | New measure  |
| LED Nightlight                                | n/a                     | n/a                     | n/a                     | \$1.00                             | n/a               | New measure  |

Xcel Energy  
 South Dakota Capital Structure  
 Carrying Charge Calculation

State of South Dakota Jurisdiction

2014 Rate Case-Docket EL-14-058 (Order issued 7/22/15)

Base Assumptions

Capital Structure:

Long-term Debt  
 Short-term Debt  
 Preferred Stock  
 Common Equity

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| <u>Percent</u> | <u>Cost</u> | <u>Weighted Cost</u> |
|----------------|-------------|----------------------|
|                |             |                      |
|                |             |                      |
|                |             |                      |
|                |             |                      |
|                |             | 7.22%                |

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Weighted Cost of Capital

Equity  
 Debt  
 Total

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 DATA BEGINS  
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|       |
|-------|
|       |
|       |
|       |
| 7.22% |

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|                               |          |       |
|-------------------------------|----------|-------|
| Book Depreciation Rate        | 30 years | 3.33% |
| Tax Depreciation Life - MACRS | 20 years |       |
| Composite SD Tax Rate =       | 21.0000% |       |
| Composite Company Tax Rate =  | 28.0300% |       |
| Property Tax Exempt =         | 0        |       |

Use these values beginning January 1, 2018:

(b) Composite SD Tax Rate 21%

(c) Carrying Charge Rate =

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## **Supporting Documentation for Updated DSM Cost Adjustment Factor**

The following is information specified in South Dakota Administrative Rule 20:10:13:26 regarding the updated DSM Cost Adjustment Factor:

### **(1) Name and address of the public utility;**

Xcel Energy  
500 West Russell Street  
Sioux Falls, South Dakota 57104  
(605) 339-8350

### **(2) Section and sheet number of tariff schedule;**

Xcel Energy proposes to update DSM Rate tariff sheet number 73 in Section 5 of the Xcel Energy South Dakota Electric Rate Book. Attachment D4 includes the proposed tariff sheets with the updated DSM Rate.

### **(3) Description of the change;**

The proposed updated DSM Rate is designed to true up the cost recovery, which is over our forecasted budget in the time period of 2023-2024 timeframe, as well as recover all forecasted 2024 DSM expenditures and incentives.

### **(4) Reason for the change;**

As proposed in the South Dakota DSM Plan and described in the DSM Cost Adjustment Factor tariff sheet, the Company plans to update the DSM Cost Adjustment Factor on an annual basis in the Status Report filing. The updated DSM Rate is designed to true up any over-recovery or under-recovery that exists in the tracker as well as recover the forecasted DSM expenditures and incentives for the upcoming year.

**(5) Present rate;**

Pursuant to the Commission's December 12, 2022 Order,<sup>1</sup> Xcel Energy implemented the approved rate of \$0.000479 per kWh effective January 1, 2022.

**(6) Proposed rate;**

Xcel Energy requests a new DSM Cost Adjustment Factor of \$0.000503 per customer kWh.

**(7) Proposed effective date of modified rate;**

Xcel Energy requests this new DSM Cost Adjustment Factor of \$0.000503 per customer kWh become effective with the first billing cycle of January 2024. We request this rate remain in effect through December 2024 or until the Commission approves a new DSM Cost Adjustment Factor.

**(8) Approximation of annual amount of increase or decrease in revenue;**

This new DSM Cost Adjustment Factor of \$0.000503 per customer kWh is a increase of \$0.000026 per kWh or 4.92 percent.

**(9) Points affected;**

The proposed updated DSM Rate would be applicable to all areas served by Xcel Energy in South Dakota.

**(10) Estimation of the number of customers whose cost of service will be affected and annual amounts of either increases or decreases, or both, in cost of service to those customers;**

The proposed electric tariff will apply to all customers throughout all customer classes as described within the filing. Xcel Energy presently serves just over 108,000 electric customers in 36 communities in eastern South Dakota.

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<sup>1</sup> Docket No. EL22-010

**(11) Statement of facts, expert opinions, documents, and exhibits to support the proposed changes.**

A narrative for the calculation of the updated rate is included in the DSM Cost Adjustment Factor Report section of this filing. Attachments D2-D4 include the forecasted 2023 and 2024 DSM Trackers, which are referenced in the narrative, along with the proposed customer bill onsert message and the proposed updated tariff sheets in both redline and clean versions.

| Northern States Power Company<br>State of South Dakota- Electric Utility<br>DSM Cost Recovery & Incentive Mechanism - Total<br>2023 Forecast |  |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
|--|--|-------------------|--------------------|-----------------|-------------------|-----------------|------------------|------------------|--------------------|-----------------------|---------------------|----------------------|----------------------|-------|
|  | 2023<br>EXPENSES   | January<br>Actual | February<br>Actual | March<br>Actual | April<br>Forecast | May<br>Forecast | June<br>Forecast | July<br>Forecast | August<br>Forecast | September<br>Forecast | October<br>Forecast | November<br>Forecast | December<br>Forecast | Total |
| 1.   | Balance  |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 2.   | DSM Program Expenditures   |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 3.   | Total Incentive<br>(Line 2 * 30%)                                |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 4.   | Total Expenditures + Incentive<br>(Line 2 + 3)                   |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
|  | RECOVERY   |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 5.   | DSM Adjustment Factor (\$/MWh)                                   |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 6.   | Calendar Month Sales Volume Forecast (MWh)                       |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 7.   | Total Cost Recovery (Line 5*6)                                   |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 8.   | Sub-Balance (Over/Under Recovery)<br>(Line 1 + 4 - 7)            |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 9.   | Accum Deferred Tax<br>(Line 8 *21%)                              |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 10.  | Net Investment<br>(Line 8 - 9)                                   |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 11.  | Carrying Charge Rate   |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 12.  | Carrying Charge<br>(Line 10 * carrying charge)                   |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 13.  | 13. End of Month Balance (over)/under recovered<br>(Line 8 + 12) |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
|  |  |                   |                    |                 |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |

Table 1: 2023 DSM Tracker Forecast, With Cost Recovery in 2023

[CONFIDENTIAL DATA BEGINS

CONFIDENTIAL DATA ENDS]

|  |   |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
|--|---|---------------------|----------------------|-------------------|-------------------|-----------------|------------------|------------------|--------------------|-----------------------|---------------------|----------------------|----------------------|-------|
| Northern States Power Company<br>State of South Dakota- Electric Utility<br>DSM Cost Recovery & Incentive Mechanism - Total<br>2024 Forecast |   |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
|  | 2024<br>EXPENSES                                      | January<br>Forecast | February<br>Forecast | March<br>Forecast | April<br>Forecast | May<br>Forecast | June<br>Forecast | July<br>Forecast | August<br>Forecast | September<br>Forecast | October<br>Forecast | November<br>Forecast | December<br>Forecast | Total |
| 1.   | [CONFIDENTIAL DATA BEGINS<br>Balance                  |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 2.   | DSM Program Expenditures                              |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 3.   | Total Incentive<br>(Line 2 * 30%)                     |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 4.   | Total Expenditures + Incentive<br>(Line 2 + 3)        |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
|  | RECOVERY  |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 5.   | DSM Adjustment Factor (\$/MWh)                        |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 6.   | Calendar Month Sales Volume Forecast (MWh)            |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 7.   | Total Cost Recovery                                   |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 8.   | Sub-Balance (Over)/Under Recovery<br>(Line 1 + 4 - 7) |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 9.   | Accum Deferred Tax<br>(Line 8 * 21%)                  |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 10.  | Net Investment<br>(Line 8 - 9)                        |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 11.  | Carrying Charge Rate                                  |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 12.  | Carrying Charge<br>(Line 10 * carrying charge)        |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| 13.  | End of Month Balance<br>(Line 8 + 12)                 |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| CONFIDENTIAL DATA ENDS   |   |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |
| [CONFIDENTIAL DATA BEGINS  |   |                     |                      |                   |                   |                 |                  |                  |                    |                       |                     |                      |                      |       |

Table 2: 2024 DSM Tracker Forecast, With Cost Recovery in 2024

CONFIDENTIAL DATA ENDS]

## Proposed Customer Bill Onsert Language

### DSM Cost Adjustment Factor Increase Effective January 1, 2024

Xcel Energy offers a variety of load management and demand side management (DSM) programs to our South Dakota customers to help them reduce their home's usage. The South Dakota Public Utilities Commission has approved a new Demand Side Management Cost Adjustment Factor as a separate line item on your monthly electric bill to recover the cost of our load management and DSM programs. Beginning January 1, 2024 the rate factor will decrease from \$0.000479 per kWh per kWh to \$0.000503 per kWh.

### Residential Electric Service — Winter Month Bill Example

This chart provides a comparison of customer bills by applying the prior DSM rate versus the new DSM rate. The table below shows the DSM Rider rate increase only and does not factor in any other rate change that may occur at the same time.

| Usage<br>(kWh) | Prior Rates    |                     |               |               | New Rates      |                      |               |             | Amount<br>of Bill<br>Increase | Percent<br>Increase |
|----------------|----------------|---------------------|---------------|---------------|----------------|----------------------|---------------|-------------|-------------------------------|---------------------|
|                | Other<br>Rates | Prior DSM<br>Factor | Prior<br>DSM  | Prior<br>Bill | Other<br>Rates | New<br>DSM<br>Factor | New<br>DSM    | New<br>Bill |                               |                     |
| 400            | \$46.99        | \$0.000479          | <b>\$0.19</b> | \$47.18       | \$46.99        | \$0.000503           | <b>\$0.20</b> | \$47.19     | 0.01                          | 0.02%               |
| 500            | \$56.68        | \$0.000479          | <b>\$0.24</b> | \$56.92       | \$56.68        | \$0.000503           | <b>\$0.25</b> | \$56.93     | 0.01                          | 0.02%               |
| 600            | \$66.36        | \$0.000479          | <b>\$0.29</b> | \$66.65       | \$66.36        | \$0.000503           | <b>\$0.30</b> | \$66.66     | 0.01                          | 0.02%               |
| 750            | \$80.89        | \$0.000479          | <b>\$0.36</b> | \$81.25       | \$80.89        | \$0.000503           | <b>\$0.38</b> | \$81.27     | 0.02                          | 0.02%               |
| 1000           | \$105.11       | \$0.000479          | <b>\$0.48</b> | \$105.59      | \$105.11       | \$0.000503           | <b>\$0.50</b> | \$105.61    | 0.02                          | 0.02%               |
| 2000           | \$201.96       | \$0.000479          | <b>\$0.96</b> | \$202.92      | \$201.96       | \$0.000503           | <b>\$1.01</b> | \$202.97    | 0.05                          | 0.02%               |

### For more information:

You may call **800.895.4999** with questions or examine the new rates by visiting our website at **xcelenergy.com**

# Legislative



PUBLIC

Northern States Power Company, a Minnesota corporation  
Minneapolis, MN 55401

**SOUTH DAKOTA ELECTRIC RATE BOOK - SDPUC NO. 2**

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**DEMAND SIDE MANAGEMENT COST  
ADJUSTMENT FACTOR**

Section No. 5  
~~10th~~<sup>11th</sup> Revised Sheet No. 73  
Cancelling ~~9th~~<sup>10th</sup> Revised Sheet No. 73

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**APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

**RIDER**

There shall be included on each customer's monthly bill a Demand Side Management Cost Adjustment, which shall be calculated by multiplying the monthly applicable billing kilowatt hours (kWh) by the Demand Side Management Factor (DSM Factor). This Demand Side Management Cost Adjustment shall be calculated before city surcharge and sales tax.

**DETERMINATION OF DSM FACTOR**

A DSM Factor shall be calculated by dividing the forecasted balance of the DSM Tracker Account (Tracker), including any True Up, by the Forecasted Retail Sales for the Next Recovery Period. The DSM Factor shall be rounded to the nearest \$0.000001 per kWh.

The DSM Factor may be adjusted annually with approval of the South Dakota Public Utilities Commission (Commission). The DSM Factor is:

All Customers \$0.~~000479~~000503 per kWh

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DSM Tracker shall include all annual expenses, costs and incentives associated with demand side management programs and that are approved by the Commission. All revenues recovered pursuant to the Demand Side Management Cost Adjustment shall be credited to the Tracker.

Forecasted Retail Sales shall be the estimated total retail electric sales for the Next Recovery Period.

Next Recovery Period shall be that period that begins January 1 and ends December 31 following the Company's most recent May 1 filing.

**TRUE-UP**

True Up shall include the difference between the revenues received from customers and actual expenditures for the most recent recovery period ending December 31.

A True Up will be included in each annual May 1 filing beginning with the May 1, 2013 filing. The 2012 DSM Factor calculation will not include a True Up due to no previous cost or revenue activity prior to implementation of the Demand Side Management Cost Adjustment in 2012. Beginning with the Company's request submitted on May 1, 2013, the DSM Factor may include a True Up.

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Date Filed: ~~04-29-22~~05-01-23

By: Christopher B. Clark

Effective Date: ~~01-01-23~~

President, Northern States Power Company, a Minnesota corporation

Docket No. EL~~22-01923-~~

Order Date: ~~12-07-22~~

# Non-Legislative

PUBLIC

Northern States Power Company, a Minnesota corporation  
Minneapolis, MN 55401

**SOUTH DAKOTA ELECTRIC RATE BOOK - SDPUC NO. 2**

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**DEMAND SIDE MANAGEMENT COST  
ADJUSTMENT FACTOR**

Section No. 5  
11th Revised Sheet No. 73  
Cancelling 10th Revised Sheet No. 73

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All Customers                      \$0.000503 per kWh

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DSM Tracker shall include all annual expenses, costs and incentives associated with demand side management programs and that are approved by the Commission. All revenues recovered pursuant to the Demand Side Management Cost Adjustment shall be credited to the Tracker.

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Date Filed: 05-01-23

By: Christopher B. Clark  
President, Northern States Power Company, a Minnesota corporation

Effective Date:

Docket No. EL23-

Order Date:

| <b>Executive Summary Table-2024</b> |                              |                        |                     |                      |                               |                           |  |                  |
|-------------------------------------|------------------------------|------------------------|---------------------|----------------------|-------------------------------|---------------------------|--|------------------|
| <b>2024</b>                         | <b>Electric Participants</b> | <b>Electric Budget</b> | <b>Generator kW</b> | <b>Generator kWh</b> | <b>Participant Test Ratio</b> | <b>Utility Test Ratio</b> | <b>Ratepayer Impact Measure Test Ratio</b> | <b>TRC Ratio</b> |
| <b>Business Segment</b>             |                              |                        |                     |                      |                               |                           |  |                  |
| Lighting Efficiency                 | 180                          | \$389,418              | 672                 | 6,091,709            | 4.33                          | 5.69                      | 0.35                                       | 1.41             |
| Business Saver's Switch             | 20                           | \$26,150               | 57                  | 78                   | INF                           | 1.65                      | 1.64                                       | 1.65             |
| Peak and Energy Control             | 1                            | \$10,350               | 174                 | 448                  | INF                           | 5.67                      | 5.51                                       | 5.67             |
| <b>Business Segment Total</b>       | <b>201</b>                   | <b>\$425,918</b>       | <b>903</b>          | <b>6,092,234</b>     | <b>4.33</b>                   | <b>5.44</b>               | <b>0.36</b>                                | <b>1.44</b>      |
|                                     |                              |                        |                     |                      |                               |                           |  |                  |
| <b>Residential Segment</b>          |                              |                        |                     |                      |                               |                           |  |                  |
| Home Lighting                       | 5,183                        | \$99,539               | 146                 | 1,089,357            | 21.04                         | 4.72                      | 0.24                                       | 2.90             |
| Heat Pump Water Heaters             | 21                           | \$11,000               | 8                   | 61,901               | 5.77                          | 2.06                      | 0.21                                       | 1.07             |
| Reidential Demand Response          | 1,460                        | \$281,685              | 734                 | 58,865               | 2.25                          | 1.57                      | 1.20                                       | 1.60             |
| Consumer Education                  | 59,243                       | \$414,224              | N/A                 | N/A                  |                               |                           |  |                  |
|                                     |                              |                        |                     |                      |                               |                           |  |                  |
| <b>Residential Segment Total</b>    | <b>59,243</b>                | <b>\$414,224</b>       | <b>887</b>          | <b>1,210,123</b>     | <b>9.25</b>                   | <b>2.26</b>               | <b>0.39</b>                                | <b>1.90</b>      |
|                                     |                              |                        |                     |                      |                               |                           |  |                  |
| <b>Planning Segment</b>             |                              |                        |                     |                      |                               |                           |  |                  |
| Regulatory Affairs                  | 0                            | \$10,350               | 0                   | 0                    |                               |                           |  |                  |
| <b>Planning Segment Total</b>       | <b>0</b>                     | <b>\$10,350</b>        | <b>0</b>            | <b>0</b>             |                               |                           |  |                  |
|                                     |                              |                        |                     |                      |                               |                           |  |                  |
|                                     |                              |                        |                     |                      |                               |                           |  |                  |
| <b>PORTFOLIO TOTAL</b>              | <b>59,444</b>                | <b>\$850,492</b>       | <b>1,790</b>        | <b>7,302,357</b>     | <b>5.06</b>                   | <b>3.82</b>               | <b>0.37</b>                                | <b>1.55</b>      |