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 2024 ANNUAL DSM STATUS REPORT, INCLUDING 2024 COST RECOVERY AND INCENTIVE AND APPROVAL OF THE PROPOSED 2025 DSM COST ADJUSTMENT FACTOR

PETITION FOR 2024 DSM PROGRAM APPROVAL AND PROPOSED 2026 DSM COST ADJUSTMENT FACTOR

DOCKET NO. EL25-

Northern States Power Company, doing business as Xcel Energy, submits to the South Dakota Public Utilities Commission, this Petition seeking approval of our 2024 Annual Demand Side Management (DSM) Report. As discussed with Commission Staff preceding this filing, we will file our 2026 DSM Plan on August 1, 2025, as well as file a request to change the date for subsequent report and plan filings from May 1 to August 1.

The Company intends to file a DSM Plan in South Dakota for 2026; however, we continue to review the portfolio considering the Commission's comments in December of 2024. We believe the DSM Plan is an important part of our overall energy portfolio, providing a least cost resource of energy efficiency to our customers. In addition, we recognize changes to technology and opportunities for energy efficiency. As a result, we will supplement our Petition by August 1, 2025, with a new plan addressing such new opportunities and being responsive to the Commission.

In 2024, our DSM portfolio achievement exceeded 5.5 GWh. These savings will reduce overall energy consumption and, as a result, lower a customer's electric bill. The remainder of this Petition will provide the following: (1) 2024 DSM results and earned incentive; (2) DSM program portfolio; (3) Report on DSM cost recovery; and (4) DSM cost adjustment factor report.

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

- The Company's 2024 DSM Tracker account;
- Approve the incentive of \$255,148 earned for 2024 program performance; and
- Approve the proposed 2025 electric DSM Adjustment Factor of \$0.000476 per kWh.

PETITION

I. 2024 DSM RESULTS AND EARNED INCENTIVE

A. Executive Summary

Demand Side Management (DSM) 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 2024, we achieved over 5.5 GWh of energy savings. Our total actual expenditures of \$925,557 falls above the filed budget, but within the Commission approved budget flexibility.¹

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. ² 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.

Percent of Spend Percent of kWh Percent of Recovery (excl. Planning) Year Residential **Business** Residential **Business** Residential **Business** 2018 42% 58% 42% 58% 35% 65% 2019 44 %29% 71% 56% 36% 64%33% 67% 33% 67% 37% 63% 2020 2021 33% 67% 42% 58% 37% 63% 61% 39% 40% 60% 37% 63% 2022 2023 81% 19% 76% 24% 37%63% 2024 65% 35% 29% 71% 37% 63%

Table 1 - Cross Subsidization Review

C. Program Achievement

To evaluate the cost-effectiveness of our portfolio for 2024, we looked at the Total Resource Cost (TRC) ratio, which compares total benefits to total costs of the portfolio.

¹ Docket EL13-015, Commission Order December 3, 2013.

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

If a program or portfolio has a TRC ratio above one, it is considered cost-effective since the benefits outweigh the costs. As shown in the table below, the 2024 portfolio demonstrated a TRC Ratio of 1.81.

Table 2 provides a breakdown of 2024 achievements by program. A full executive summary, which includes both a comparison of 2024 targets versus actuals and cost-effectiveness test results, is provided as Attachment A.

Table 2 – 2024 Actual Achievements Executive Summary Table

	Electric Participants	Electric Budget	Generator kW	Generator kWh	TRC Ratio
Business Segment					
Lighting Efficiency	190	\$244,791	611	3,962,348	1.58
Business Saver's Switch	19	\$58,841	73	103	1.00
Peak and Energy Control	1	\$22,242	73	145	1.11
Business Segment Total	210	\$325,874	756	3,962,595	1.54
Residential Segment					
Home Lighting	8,927	\$184,485	218	1,533,933	2.53
Heat Pump Water Heaters	7	\$2,985	3	23,122	1.22
Residential Demand Response	1,092	\$379,338	1,200	29,773	2.22
Consumer Education	39,772	\$22,798	0	0	0.00
Residential Segment Total	49,798	\$589,606	1,421	1,586,828	2.28
Planning Segment					
Regulatory Affairs	0	\$10,077	0	0	0.00
Planning Segment Total	0	\$10,077	0	0	0.00
PORTFOLIO TOTAL	50,008	\$925,557	2,178	5,549,423	1.81

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 2024 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 \$850,492 Actual Spend \$925,557

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 \$850,492 x 30% = \$255,148.

This incentive is accounted for in the Company's 2024 DSM Tracker included in Attachment B. The Q4 incentive also includes a true up from the company's 2023 Tracker.

II. 2024 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 and 2024 program activity.

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.

The Business Lighting program fell short of its filed spend and goals in 2024. To encourage future participation, the Company added several new measures in 2025 including: LED to LED (Type B tube), Luminaire level lighting controls for High End Trim, 3-foot LED linear tubes, new exterior LED lamps HID base (mogul & E26), and new exterior downlights in 2025.

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 through the use of load control receivers operated remotely via wireless signals. 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. Customers opt-in to the program. The program is marketed using direct mail, email and by our customer representatives at our Business Solutions Center.

The Business Saver's Switch program slightly exceeded its budget while achievement also exceeded the forecasted targets. Participation was close to as forecasted. Participation included a mix of new customer installations as well as maintenance replacements for switches that had exceeded their lifetime. The Company held one control event in 2024 for two hours to satisfy MISO obligations.

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

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

Two conditions would result in customer load curtailment for ERS: (1) If the Company is directed to curtail electrical load by MISO to help maintain stability in the MISO territory as whole, or (2) if the reliability of system is endangered.³

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

³ 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.

In 2024, the ERS program had one participant. This was anticipated as growth of the program begins to mature for this offering.

The program had one event in 2024 where participants were required to curtail their load down to their predetermined demand level for a total of one hour. The event, a Real Power test, occurred in August. Additionally, we performed an annual communications notification test which does not require program participants to control their load. This notification test is necessary to verify customer contact information to make sure that the correct numbers, emails, and contacts are notified to ensure program compliance in case of an actual curtailment event.

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. Additional costs applied in 2024 as the Company started building an internal Power BI dashboard to efficiently display program customers, interruptible groups, controllable loads, firm demands, and more. This dashboard has enhanced program organization and tracking.

B. Residential Portfolio

1. 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. The Company promotes the Home Lighting program through a variety of channels including bill onserts, emails, and point of purchase displays.

The program motivates customers to purchase LEDs by offering in-store retail discounts. The discounts are provided by the Company 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.

The program exceeded the participation and energy savings targets. The number of residential versus business bulbs sold is defined in the table below.

Table 3 Home Lighting Achievement

Type of Customer	Number of LED Bulbs Sold	Percent of Bulbs	Rebate Total
Residential	112,456	94%	\$161,615
Business (Generally Small Business)	7,178	6%	\$10,316

2. Heat Pump Water Heaters

The Heat Pump Water Heaters program offered retrofit and new construction rebates to residential customers who purchase and install qualifying energy efficient heat pump water heaters. Heat pump water heaters have a much larger incremental cost but save a significant amount of energy over an electric resistance water heater and rebates were offered to encourage customers to purchase energy efficient equipment by reducing upfront costs associated with new heat pump water heaters. In 2024, rebates were provided at \$400 per equipment which funds approximately 50 percent of the incremental cost to purchase and install this energy efficient option.

Participation in the Heat Pump Water Heaters program was lower than forecasted and spending was in line with these results. However, participation registered the highest single-year level in programs history driving the program to a positive TRC test. This offering ended in the beginning of 2025.

3. Residential Demand Response

The Company offers 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. Both offerings are promoted primarily via email, direct mail and our customer care organization. For both programs, customers opt-in to the program to participate.

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 deployed 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 air conditioner (AC) and a qualifying thermostat is eligible to participate. Customers will receive 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 eligible. The following measures are incentivized:

Measure Offerings	Incentives
Saver Switch for AC	\$10 discount off electric charges from June through
	September
Saver Switch for Water Heaters	\$2 monthly 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 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.

In 2024, the Residential Demand Response program substantially exceeded its budget and participants. Generator kWh was slightly below target while generator kW was above its target. In all, the Company installed more than 700 new Saver's Switches, via a combination of new participants and replacements of existing installations that have outlived their useful life. The Company also enrolled over 300 thermostats into AC Rewards.

The Saver's Switch and AC Rewards products had one control event in 2024. The Company continues to plan for the execution of a minimum of one control event per year.

C. Other Programs & Activities

1. Consumer Education

The Consumer Education program creates awareness of energy efficiency 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.

The program's primary focus at community events is to engage with customers one to one to discuss ways they can save energy and money utilizing Xcel Energy's tools and resources. The two milestone events allow the Company to engage with a large number of customers. The program continues to invest in paid custom marketing campaigns via Apogee, a monthly email to customers educating them on their bill along with energy and money-saving tips.

In 2024, the Company sponsored and participated in two milestone events in our service territory:

February 25-27, 2024 – Sioux Falls Empire Home Show, Sioux Falls Convention Center, Sioux Falls, SD

The Company engaged with nearly 1,500 customers at this show and distributed 1,440 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. The event attracted 8,000 people.

September 10, 2024 – Sioux Falls Sidewalk Arts Festival, Sioux Falls, SD

The Company engaged with approximately 1,500 customers and distributed 1,056 LED bulbs to customers. With approximately 27,500 visitors attending this event, this is a great opportunity to engage with customers.

Participation was lower than projected in 2024 and while spending was just over the filed targets.

2. 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 onserts and regulatory requests. The segment spending in 2024 was under the spending target.

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 2024 spending and cost recovery as well as the Company's carrying charge rates.

In 2024, the actual portfolio spend was \$925,557. This amount is above our approved budget of \$850,492 but falls within the ten percent spend flexibility granted by the Commission.⁴ In addition to DSM expenses, the Company is requesting recovery of \$255,148 in financial incentive earned for our 2024 DSM performance for total recovery of \$1,180,705.

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

- Calculations of the Carrying Charge Rates in 2024 and found in the 2024 Tracker;
 and
- Xcel Energy's 2024 DSM Tracker, which documents monthly DSM expenditures and recovered costs.

IV. DSM Cost Adjustment Factor

The current DSM Cost Adjustment Factor of \$0.000452 per kWh was implemented on January 1, 2025.⁵ The Company requests a new DSM Cost Adjustment Factor of \$0.000476 per kWh to be effective with the first billing cycle of January 2026.

⁴ 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)

⁵ Docket EL24-016, Commission Order November 20, 2024.

Supportive documentation for this rate change request, some of which falls under the category of confidential data, is provided as Attachments C1-C4 of this filing and includes:

- Information specified in South Dakota Administrative Rule 20:10:13:26 regarding the updated DSM Cost Adjustment Factor;
- Forecasted 2025 and 2026 DSM Trackers reflecting the forecasted cost recovery with the current and proposed rates;
- Proposed bill onsert notice; and
- Proposed updated tariff sheet in both redlined and clean versions.

The Company requests a new DSM Cost Adjustment Factor of \$0.000476 per customer kWh to be effective with the first billing cycle of January 2026 and to remain in effect through December 2026 or until the Commission approves a new DSM Cost Adjustment Factor. This is an increase of \$0.000024 per kWh compared to the previous DSM Cost Adjustment Factor. This increase was due to higher-than-expected spending in 2024.

If Commission approval of the proposed adjustment is delayed beyond the timeframe needed to implement the rate change by January 1, 2026, the Company will continue to apply the current DSM Cost Adjustment of \$0.000476 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 2026. It is based on the forecasted December 2026 unrecovered balance in the Company's DSM Tracker account. This 2026 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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This calculation results in a rate that would recover the sum of the beginning balance, approved expenditures, and estimated incentives over the January 1, 2025 – December 31, 2025 period. This rate of [CONFIDENTIAL DATA BEGINS HERE] CONFIDENTIAL DATA ENDS HERE] would result in a negative balance. To get as close to a possible \$0 balance by December 31, 2026, the rate was incrementally decreased to reflect future inclusion of carrying charges, until the balance approached \$0 without going negative. The resulting rate is \$0.000476 per customer kWh.

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 2025 if timing of each filing allows the ability to do so.

CONCLUSION

In summary, the Company respectfully requests that the Commission:

- Approve the Company's 2024 DSM Tracker account;
- Approve the incentive of \$255,148 earned for 2024 program performance; and
- Approve the proposed 2025 electric DSM Adjustment Factor of \$0.000476 per kWh.

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.

Dated: May 1, 2025

Xcel Energy

By:

Steve Kolbeck

Principal Manager -South Dakota

Service of Filings

We request that communications regarding this Application be directed to:

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