



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

April 29, 2016

—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  
2015 DSM STATUS REPORT AND PROPOSED 2017 DSM PLAN

Dear Ms. Van Gerpen:

Enclosed for filing is a Petition by Northern States Power Company requesting approval of our 2015 DSM Status Report, including a request for approval of cost recovery for the 2015 actual expenditures and incentive, as well as approval of our Proposed 2017 DSM Plan and 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 S.D. Codified Laws Chapter 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.

**(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;**

Eric Pauli  
Community Relations Manager  
Xcel Energy  
500 W. Russell Street  
P.O. Box 988  
Sioux Falls, South Dakota 57101  
(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.”

Ms. Van Gerpen

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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 call me at (605)339-8303 or email at [eric.pauli@xcelenergy.com](mailto:eric.pauli@xcelenergy.com).

Sincerely,

A handwritten signature in cursive script that reads "Eric Pauli".

Eric Pauli  
Community Relations Manager

**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 2015 ANNUAL  
DSM STATUS REPORT, INCLUDING 2015  
COST RECOVERY AND INCENTIVE AND  
APPROVAL OF THE PROPOSED 2017 DSM  
COST ADJUSTMENT FACTOR AND  
PROGRAM PLAN

**PETITION FOR 2015 DSM  
PROGRAM APPROVAL AND  
PROPOSED 2017 DSM COST  
ADJUSTMENT FACTOR**

DOCKET NO. EL16- \_\_\_\_

**OVERVIEW**

Northern States Power Company, doing business as Xcel Energy, submits to the South Dakota Public Utilities Commission, this Petition seeking approval of the 2015 annual Demand Side Management Status (DSM) Report, including 2015 cost recovery and incentive, as well as approval of our Proposed 2017 DSM Plan (Plan) and Cost Adjustment Factor.

We respectfully request that the Commission approve the following:

- The Company's 2015 DSM Tracker account;
- The incentive earned for program performance in 2015;
- Our proposed 2017 DSM Cost Adjustment Factor of \$0.000507 per kWh; and,
- Our Proposed 2017 DSM Plan.

The remainder of our filing will include the following sections:

- I. ***2015 DSM Status Report*** – Presents 2015 program performance including budgets, goals, expenditures, actual energy savings and participation. This section also specifies any programmatic changes for our 2017 Plan.
- II. ***2015 DSM Cost Recovery Report*** – Provides the 2015 DSM Tracker. The Company seeks approval to record \$844,973 in DSM spending in its DSM Tracker account.
- III. ***2015 DSM Cost Adjustment Factor Report*** – Presents the calculation of the DSM Cost Adjustment Factor to be applied to customer electric usage for recovery of

2015 DSM expenditures, effective January 1, 2017. We are proposing a new electric DSM Cost Adjustment Factor of \$0.000507 per customer kWh.

- IV. *DSM Incentive Report*** – Presents the calculations of the Company’s DSM Financial Incentive. We request approval to record and recover \$232,512 in incentive from customers in the DSM Tracker for calendar year 2015.
- V. *Summary of Proposed 2017 DSM Plan*** – Provides the portfolio level executive summary along with updated cost-effectiveness results.

## **REPORT**

### **I. 2015 DSM Status Report**

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

Our DSM portfolio continues to offer a mix of both load management and energy efficiency programs to our South Dakota customers. In 2015, we continued to help customers manage their energy bills by achieving more than 4.5 GWh of energy savings.

Per our 2015 Plan<sup>1</sup>, we achieved 74 percent of our planned goal. We anticipated lower than expected achievement this year as a result of re-launching our Business Lighting Efficiency program. The lighting program removed CFL technology measures and began offering light-emitting diode (LED) technologies exclusively within the program. We knew that this adjustment would require additional education for customers on the benefits of LED technology. However, the transition has taken longer than anticipated and as a result, we petitioned the Commission<sup>2</sup>, to adjust the 2016 Lighting Efficiency program. New construction LED lighting measures were approved by the Commission in December 2015. We are aware of an active new construction market for business lighting measures in South Dakota and look forward to using these opportunities to continue to educate customers on the benefits of LED technologies.

As we continued to encourage customers to adopt high efficiency equipment we identified opportunities to increase residential participation resulting in increased spending above our anticipated budget. The total actual expenditures of \$844,973 fall above the filed budget, however, within the Commission approved budget flexibility<sup>3</sup>.

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<sup>1</sup> Docket EL 14-040.

<sup>2</sup> Docket EL 15-015, October 5, 2015.

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

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To evaluate the cost-effectiveness of our portfolio in 2015, we looked at the Total Resource Cost (TRC) ratio, which compares total benefits to total costs of the portfolio.<sup>4</sup> If a program or portfolio has a TRC ratio above one, it is considered cost-effective. As shown in the table below, the 2015 portfolio demonstrated a TRC Ratio value of 1.73.

The 2015 DSM Plan was created based on market assumptions and forecasts of customer interest. Table 1 provides a breakdown of 2015 achievements by program. A full executive summary, which includes both a comparison of 2015 goals versus actuals and all cost-effectiveness test results, is provided as Attachment A.

**Table 1 – Executive Summary Table of 2015 Actual Achievements**

2015	Electric Participants	Electric Budget	Generator kW	Generator kWh	TRC Ratio
<b>Business Segment</b>					
Lighting Efficiency	99	\$238,751	312	1,687,744	1.02
Business Saver's Switch	7	\$28,556	55	407	1.93
Peak and Energy Control	9	\$4,708	797	43,889	72.86
<b>Business Segment Total</b>	<b>115</b>	<b>\$272,015</b>	<b>1,165</b>	<b>1,732,039</b>	<b>1.34</b>
<b>Residential Segment</b>					
Ground Source Heat Pump	9	\$14,361	26	44,799	0.62
Home Lighting	38,919	\$204,700	338	2,727,345	2.48
Residential Saver's Switch	1,024	\$270,775	726	5,877	2.67
Consumer Education	93,056	\$63,005	0	0	-
<b>Residential Segment Total</b>	<b>133,008</b>	<b>\$552,841</b>	<b>1,089</b>	<b>2,778,021</b>	<b>2.21</b>
<b>Planning Segment</b>					
Regulatory Affairs	0	\$20,117	0	0	-
<b>Planning Segment Total</b>	<b>0</b>	<b>\$20,117</b>	<b>0</b>	<b>0</b>	<b>-</b>
<b>PORTFOLIO TOTAL</b>	<b>133,123</b>	<b>\$844,973</b>	<b>2,254</b>	<b>4,510,060</b>	<b>1.73</b>

The Status Report continues to show a successful year for the DSM portfolio. While under goal, we were able to exceed 2014 performance<sup>5</sup>. We maintain a well-balanced portfolio of programs and continued to educate customers. More details of each program's performance are offered in the 2015 Program Achievements section below.

<sup>4</sup> A TRC ratio above 1.0 indicates the benefit outweighs the costs.

<sup>5</sup> In 2014, the Company achieved 4,452,883 GWh of achievement.

## **B. 2015 Program Achievements**

### 1. Business Segment

#### a. Lighting Efficiency

The Lighting Efficiency program offers retrofit and new construction rebate incentives to commercial and industrial customers who purchase and install qualifying energy efficient lighting products. Rebates are offered to encourage customers to purchase energy efficient lighting by reducing the up-front costs associated with new lighting equipment.

##### *i. 2015 Program Activity and Results*

The Lighting Efficiency program was re-launched in 2015 after being idled since April of 2013 as a result of budget constraints. The re-launched program focused exclusively on providing commercial and industrial customer incentives for installing LED lighting technology. Non-LED rebates were completely removed from the 2015 program to aid in market transformation to the more efficient technology.

The primary focus for 2015 was to build program awareness. We found that there was a need to reestablish the program in the market and note the change to LED lamps and fixtures. We utilized multiple channels of communication to build the awareness, including in-person trade partner training, customer and trade partner emails, newsletters, online information sheets and one-on-one conversations with lighting stakeholders.

Participation in the first half of the year was slow due to sales lead times after the re-launch, but the program began to gain traction in the third and fourth quarters.

Despite missing its filed savings targets, the program established a project pipeline that will carry well into 2016. The program's overall spending per savings ratio was higher than the filed ratio due to incurring costs associated with the program's re-launch, building pipeline and communication efforts while corresponding projects will not be completed until 2016.

##### *ii. 2017 Program Changes*

The 2017 program will continue to rebate the seven LED new construction measures launched at the beginning of 2016. These measures were added in response to increased new construction. No other changes are being filed for 2017.

b. Business Saver's Switch®

Business Saver's Switch is a prescriptive load 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. The program is marketed via direct mail, telemarketing and advertising.

*i. 2015 Program Activity and Results*

Due to a relatively few large customer installations, we exceeded achievement targets while staying within budget for the year. This was a result of efficiencies in deploying multiple switches at few locations. All installs for the year were new installations; there were no maintenance replacements of existing switches.

*iii. 2017 Program Changes*

There are no changes to the program anticipated for the 2017 program year.

c. Peak Controlled and Energy Controlled Rates

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

*i. 2015 Program Activity and Results*

The program fell short of the approved goal for 2015. We attribute this to future changes in the program as noted by our opt-out waiver<sup>6</sup> provided to customers who wanted to leave the rate due to the possible increase in control events.

Although the budget was underspent, the Company continued to pursue customer participation through various marketing activities. Every year a program information packet is sent to participating customer, explaining any program changes, reminders of their responsibility as an interruptible customer on a control day and providing historical information. A customer meeting is also held to better explain the program, MISO

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<sup>6</sup> Docket No.15-014.



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impacts and operational details. The budget going forward will remain the same in an effort to maintain the current participation level.

### *ii. 2017 Program Changes*

There are no changes to the program anticipated for the 2017 program year.

## 2. Residential Segment

### a. Ground Source Heat Pump

The Ground Source Heat Pump (GSHP) program provides rebates to residential customers who purchase and install a qualifying closed-loop GSHP where electricity is used as the primary heating and cooling source. Customers must install the GSHP for both space heating and space cooling; systems installed for the purpose of only heating or cooling are not rebated through the program.

This program is primarily marketed through installers. Customers are also made aware of the program via our website and consumer events.

### *i. 2015 Program Activity and Results*

There was a decrease in participation in 2015 attributed in part to the maturity of the program. In addition, participation is significantly driven by installers. Several of the installers actively promoting the program in 2014 did not participate in 2015.

To increase program awareness, the program was featured at the Sioux Falls Canaries Game and was promoted using a bill insert in September. Additional promotional activities have been planned to increase program participation in 2016.

The program was under budget but the dollars are in-line with the program's actual achievement.

### *ii. 2017 Program Changes*

There are no changes to the program anticipated for the 2017 program year.

### b. Home Lighting

The Home Lighting program offers discounted prices on compact fluorescent light (CFL) and light-emitting diode (LED) bulbs. Energy efficient lights are an easy and low cost way

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for customers to save energy and reduce the cost of their monthly electric bills. We promote the Home Lighting program through a variety of venues including a bill insert, radio and interactive advertising, community events and point of purchase displays.

Additionally, we continue to partner with MidAmerican Energy Company on its gas home energy audit program *HomeCheck Assessment*. MidAmerican delivers the program and installs energy efficient bulbs in customers' homes. This partnership delivers and installs lighting energy savings directly to our service area.

### *i. 2015 Program Activity and Results*

The program exceeded its participation and energy savings goals. Additional dollars were allocated to the Home Lighting program in 2015 to achieve higher participation and energy savings.

### *ii. 2017 Program Changes*

In 2017, the Home Lighting program is further expanding incentives for LED bulbs. There continues to be a reduction in price for LEDs, increasing the probability of customers purchasing an LED bulb over a traditional CFL. In addition, LEDs bulbs tend to provide higher customer satisfaction because they perform better in different lighting applications.

In 2016, some large retailers will stop stocking CFLs bulbs and will focus on LEDs. This trend is expected to continue to grow in 2017, making it more difficult to find locations to purchase CFLs moving forward. As a result, a majority of funding available for Home Lighting will shift to LED bulbs.

### *c. Residential Saver's Switch®*

The Residential Saver's Switch program offers a bill discount to customers who agree to allow the Company to remotely control their central air conditioners during the summer months and their electric water heaters during regardless of season. Saver's Switch is a significant component of our load management portfolio. The program is marketed primarily through direct mail.

### *i. 2015 Program Activity and Results*

In 2015, we had strong interest in the program. As a result, the achievements and program expenses are both substantially above what was planned. All installs for the year were new installations; there were no maintenance replacements of existing switches.

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### *ii. 2017 Program Changes*

There are no changes to the program anticipated for the 2017 program year.

#### d. Consumer Education

Consumer Education is an indirect-impact program focusing on creating awareness of energy conservation by providing residential customers with information on how to reduce energy usage within their homes.

The primary objective of the Consumer Education program is to heighten residential customers' awareness about energy efficiency and energy conservation. Through the program we want to develop engaged customers who proactively take steps to reduce energy consumption by increasing their homes' efficiency measures and thereby reducing their energy consumption.

### *i. 2015 Program Activity and Results*

This year we employed an electronic email campaign as well as onsite community outreach to provide information and resources to residential customers. By utilizing the seasonal email campaign, we were able to expand communications to customers and reduce program costs. To supplement onsite outreach, a kiosk with energy conservation tips and videos was installed in the Sioux Falls public library. We exceeded both our participation and budget goals.

Participation achievement is measured through a formula of various educational opportunities as noted below:

- 50 percent sponsored event attendance;
- 100 percent program signups generated at sponsored events;
- 100 percent program leads generated at sponsored events; and
- 100 percent seasonal email campaign/bill inserts.

### *ii. 2017 Program Changes*

There are no changes to the program anticipated for the 2017 program year.

### 3. Planning Segment

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### a. Regulatory Affairs Administration

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. The group also provides procedures for effectively addressing requirements and complying with the DSM regulatory process.

The following notes the Regulatory Affairs Administration budget breakout:

- 85 percent labor; and
- 15 percent promotion (bill insert<sup>7</sup> and membership dues).

#### *i. 2015 Program Activity and Results*

The Regulatory Affairs Administration budget was exceeded by approximately \$5,000 in 2015. This increase is due to additional resources as part of an update to the 2016 DSM Plan<sup>8</sup> as well as membership dues to the Consortium for Energy Efficiency (CEE). CEE membership allows us to continue to refine our programs through benchmarking our efforts with programs across the nation to offer the most effective programs to South Dakota.

## II. DSM Cost Recovery Report

Cost-effective conservation benefits all of our customers by reducing the need to build new power plants 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 2015 spending and cost recovery as well as the Company's carrying charge rates.

In 2015, the total portfolio spend came in at \$844,973. This amount is nine percent over our approved budget of \$775,041, but falls within the ten percent spend flexibility granted by the Commission<sup>9</sup>. In addition to the DSM expenses, the Company is requesting recovery of \$232,512 in financial incentive earned for our 2015 DSM performance for total recovery of \$1,077,485.

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:

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<sup>7</sup> Xcel Energy is required to notify customers of the change in the DSM Cost Adjustment Factor.

<sup>8</sup> Xcel Energy, Update to Petition 2014 DSM Status Report and Proposed 2016 DSM Plan, Docket 15-015, October 5, 2015.

<sup>9</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. EL-13-017)

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- Calculations of the Carrying Charge Rates used from January 2015 through June 1, 2015;
- Calculations of the Carrying Charge Rates used from June 1, 2015 through December 31, 2015 and found in the 2015 Tracker; and,
- Xcel Energy's 2015 DSM Tracker, which documents monthly DSM expenditures and recovered costs.

### III. DSM Cost Adjustment Factor Report

The current DSM Cost Adjustment Factor of \$0.000448 per kWh was implemented on January 1, 2016<sup>10</sup>. Xcel Energy requests a new DSM Cost Adjustment Factor of \$0.000507 per kWh to be effective with the first billing cycle of January 2017.

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

- Information specified in South Dakota Administrative Rule 20:10:13:26 regarding the updated DSM Cost Adjustment Factor;
- Forecasted 2016 and 2017 DSM Trackers reflecting the forecasted cost recovery with the current and proposed rates;
- Proposed customer bill notice; and
- Proposed updated tariff sheet in both redlined and clean versions.

Historically, the Company includes the bill notice informing customers of the change in the DSM Cost Adjustment Factor through a customer bill insert. We propose that moving forward we include a bill onsert for future customer communication. An onsert is a space on the bill itself for communications that are part of the bill rather than a stand-alone bill insert and can be presented as a portion of a page as an additional full page or added to the back of the bill (front & back). Onserts have several advantages over a bill insert while essentially communicating in the same way. Benefits include better visibility, additional printing flexibility, less lead time and lower cost.

The proposed onsert language is provided on page 5 in Attachment C. In the event that Commission approval of the proposed adjustment is delayed beyond the timeframe needed to implement the rate change by January 1, 2017, the Company will continue to apply the current DSM Cost Adjustment of \$0.000448 per kWh up to the first cycle of the first full billing period following Commission approval of a revised factor.

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<sup>10</sup> Docket EL15-015, Commission Order December 16, 2015.

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Xcel Energy requests a new DSM Cost Adjustment Factor of \$0.000507 per customer kWh to be effective with the first billing cycle of January 2017 and to remain in effect through December 2017 or until the Commission approves a new DSM Cost Adjustment Factor. This is an increase of \$0.000059 per kWh or 13 percent. The increase in DSM Cost Adjustment Factor is due in part due to a change in the Weighted Average Cost of Capital adjusted in our 2014 Electric Rate Case<sup>11</sup>, as well as exceeding our approved budget in 2015.

This proposed factor is calculated to reduce the DSM Tracker balance to \$0 by the end of December 2017. It is based on the forecasted December 2017 unrecovered balance in the Company’s DSM Tracker account. This forecasted balance is based on the forecasted January 2017 beginning balance, projected expenditures for 2017, and the forecasted 2017 incentive. The inputs and calculation are shown below.

**[CONFIDENTIAL DATA BEGINS HERE**

**Inputs Used to Determine the Forecasted December 2017 Balance**

Forecasted beginning balance (Jan 2017)	
Approved expenditures (Jan 2017 - Dec 2017)	\$775,675
Forecasted 2017 incentive	\$232,703
Forecasted Dec 31 2017 balance	

**Calculation of Revised Electric DSM Cost Adjustment Factor**

(1) Forecasted Dec 2017 DSM Tracker Balance	\$
(2) Forecasted 2017 Electric Sales (MWh)	
<hr/>	
(3) Recalculated Electric DSM Cost Adjustment Rate = (1)/(2)	\$ /MWh
	\$ /kWh

**CONFIDENTIAL DATA ENDS HERE]**

The resulting rate is **\$0.000507 per customer kWh.**

**IV. DSM Incentive Report**

In accordance with the Commission’s October 21, 2011 Order, which approved an incentive of 30 percent of expenditures capped at the approved budget of \$775,041, Xcel Energy submits the 2015 incentive calculation.

<sup>11</sup> Docket No. EL14-058, Commission Order June 16, 2015. The Weighted Average Cost of Capital (WACC) approved in Docket No. EL14-058 was incorporated into the DSM carrying charge beginning in July 2015.

**A. Calculation Inputs**

Approved 2015 Budget	\$775,041
Actual 2015 Spend	\$844,973

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

**\$775,041 x 30% = \$232,512**

Based on the 2015 expenditures below the approved budget, we respectfully request approval of a DSM incentive of \$232,512. This incentive is accounted for in our 2015 DSM Tracker included in Attachment B.

**V. Summary of 2017 DSM Plan**

This section includes a summary of our proposed 2017 Plan. The Company is not requesting any program-specific changes for 2017. Table 2 summarizes our proposed goals and provides updated cost-effectiveness results by program.

As shown in Table 2, the total portfolio has a passing TRC Ratio of 1.40. A full executive summary, which includes all cost-effectiveness test results, is provided as Attachment D. We respectfully request the Commission approve our Proposed 2017 DSM Plan.

Table 2 – Executive Summary Table of 2017 Forecast

2017	Electric Participants	Electric Budget	Generator kW	Generator kWh	TRC Ratio
<b>Business Segment</b>					
Lighting Efficiency	2,140	\$389,520	552	4,192,955	1.27
Business Saver's Switch	12	\$30,950	34	85	1.05
Peak and Energy Control	1	\$10,000	102	3,707	4.17
<b>Business Segment Total</b>	<b>2,153</b>	<b>\$430,470</b>	<b>689</b>	<b>4,196,747</b>	<b>1.28</b>
<b>Residential Segment</b>					
Ground Source Heat Pump	12	\$25,050	20	98,404	0.64
Home Lighting	3,772	\$97,340	112	1,065,912	1.87
Residential Saver's Switch	770	\$181,650	565	1,486	2.97
Consumer Education	68,000	\$27,165	0	0	-
<b>Residential Segment Total</b>	<b>72,554</b>	<b>\$331,205</b>	<b>696</b>	<b>1,165,801</b>	<b>1.83</b>
<b>Planning Segment</b>					
Regulatory Affairs	0	\$14,000	0	0	-
<b>Planning Segment Total</b>	<b>0</b>	<b>\$14,000</b>	<b>0</b>	<b>0</b>	<b>-</b>
<b>PORTFOLIO TOTAL</b>	<b>74,708</b>	<b>\$775,675</b>	<b>1,385</b>	<b>5,362,548</b>	<b>1.40</b>



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**Service of Filings**

We request that communications regarding this Application be directed to:

Mara Ascheman  
Senior Attorney  
Xcel Energy Services Inc.  
414 Nicollet Mall, 401-8  
Minneapolis, MN 55401  
(612) 215-4605

SaGonna Thompson  
Records Analyst  
Xcel Energy Services Inc.  
414 Nicollet Mall, 401-8  
Minneapolis, MN 55401  
(612) 330-5500

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## CONCLUSION

In summary, the Company respectfully requests that the Commission:

- Approve the Company's 2015 DSM Tracker account;
- Approve the incentive of \$232,512 earned for 2015 program performance;
- Approve the proposed 2017 electric DSM Adjustment Factor of \$0.000507 per kWh; and,
- Approve the Proposed 2017 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.

Dated: April 29, 2016

Xcel Energy



By: \_\_\_\_\_

ERIC PAULI

Community Relations Manager

Full Executive Summary Table - 2015 Actual Achievements																	
	GOAL				ACTUAL				TEST RESULTS								
	Participants	Electric Budget	Generator kW	Generator kWh	Participants	% of Goal	Electric Spend	% of Goal	Generator kW	% of Goal	Generator kWh	% of Goal	Part Ratio	Utility Ratio	RIM Ratio	TRC Ratio	
<b>2014</b>																	
<b>Business Segment</b>																	
Lighting Efficiency	304	\$433,191	964	5,177,006	99	33%	\$ 238,751	55%	312	32%	1,687,744	33%	1.36	4.01	0.77	1.02	
Business Saver's Switch	20	\$30,950	30	224	7	35%	\$ 28,556	92%	55	185%	407	182%	INF	1.93	1.59	1.93	
Peak and Energy Control	1	\$6,000	101	2,612	9	900%	\$ 4,708	78%	797	789%	43,889	1680%	INF	72.86	2.36	72.86	
<b>Business Segment Total</b>	<b>325</b>	<b>\$ 470,141</b>	<b>1,095</b>	<b>5,179,842</b>	<b>115</b>	<b>35%</b>	<b>\$ 272,015</b>	<b>58%</b>	<b>1,165</b>	<b>106%</b>	<b>1,732,039</b>	<b>33%</b>	<b>1.53</b>	<b>4.98</b>	<b>0.95</b>	<b>1.34</b>	
<b>Residential Segment</b>																	
Ground Source Heat Pump	12	\$25,050	19	102,398	9	75%	\$14,361	57%	26	134%	44,799	44%	0.85	3.11	0.66	0.62	
Residential Home Lighting	7,129	\$56,035	104	799,473	38,919	546%	\$204,700	365%	338	325%	2,727,345	341%	7.89	6.50	0.43	2.48	
Residential Saver's Switch	758	\$181,650	502	3,954	1,024	135%	\$270,775	149%	726	145%	5,877	149%	INF	2.67	1.01	2.67	
Consumer Education	68,000	\$27,165	0	0	93,056	137%	\$63,005	232%	-	-	-	-	-	-	-	-	-
<b>Residential Segment Total</b>	<b>75,899</b>	<b>\$ 289,900</b>	<b>625</b>	<b>905,825</b>	<b>133,008</b>	<b>175%</b>	<b>\$ 552,841</b>	<b>191%</b>	<b>1,089</b>	<b>174%</b>	<b>2,778,021</b>	<b>307%</b>	<b>7.67</b>	<b>3.79</b>	<b>0.53</b>	<b>2.21</b>	
<b>Planning Segment</b>																	
Regulatory Affairs	0	\$ 15,000	0	0	-	0%	\$ 20,117	134%					-	-	-	-	-
<b>Planning Segment Total</b>	<b>0</b>	<b>\$ 15,000</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>0%</b>	<b>\$ 20,117</b>	<b>134%</b>					<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>PORTFOLIO TOTAL</b>	<b>76,224</b>	<b>\$ 775,041</b>	<b>1,720</b>	<b>6,085,667</b>	<b>133,123</b>	<b>175%</b>	<b>\$ 844,973</b>	<b>109%</b>	<b>2,254</b>	<b>131%</b>	<b>4,510,060</b>	<b>74%</b>	<b>3.63</b>	<b>4.09</b>	<b>0.64</b>	<b>1.73</b>	

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**Xcel Energy  
 South Dakota Capital Structure  
 Carrying Charge Calculation**

**State of South Dakota Jurisdiction  
 2012 Rate Case-Docket EL-12-046  
 Base Assumptions**

<u>Capital Structure:</u>	<u>Percent</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long-term Debt	[CONFIDENTIAL DATA BEGINS HERE]		
Short-term Debt			
Perferred Stock			
Common Equity			7.78%

[CONFIDENTIAL DATA ENDS HERE]

<u>Weighted Cost of Capital</u>		
Equity	[CONFIDENTIAL DATA BEGINS HERE]	
Debt		
Total		
Weighted Cost of Capital		7.78%

[CONFIDENTIAL DATA ENDS HERE]

Book Depreciation Rate	30 years	3.33%
Tax Depreciation Life - MACRS	20 years	
Composite SD Tax Rate =	35.0000%	
Composite Company Tax Rate =	40.8481%	
Property Tax Exempt =	0.000%	

<u>Use these values beginning May 1, 2013:</u>	
(b) Composite SD Tax Rate	35.0000%
(c) Carrying Charge Rate =	[CONFIDENTIAL DATA BEGINS HERE]

[CONFIDENTIAL DATA ENDS HERE]

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**Xcel Energy  
 South Dakota Capital Structure  
 Carrying Charge Calculation**

**State of South Dakota Jurisdiction  
 2014 Rate Case-Docket EL-14-058  
 Base Assumptions**

<u>Capital Structure:</u>	<u>Percent</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long-term Debt	[CONFIDENTIAL DATA BEGINS HERE]		
Short-term Debt			
Preferred Stock			
Common Equity			7.22%

[CONFIDENTIAL DATA ENDS HERE]

<u>Weighted Cost of Capital</u>		
Equity	[CONFIDENTIAL DATA BEGINS HERE]	
Debt		
Total		
Weighted Cost of Capital		7.22%

[CONFIDENTIAL DATA ENDS HERE]

Book Depreciation Rate	30 years	3.33%
Tax Depreciation Life - MACRS	20 years	
Composite SD Tax Rate =	35.0000%	
Composite Company Tax Rate =	40.8481%	
Property Tax Exempt =	0.000%	

<u>Use these values beginning July1, 2015:</u>	
(b) Composite SD Tax Rate	35.0000%
(c) Carrying Charge Rate =	[CONFIDENTIAL DATA BEGINS HERE]

[CONFIDENTIAL DATA ENDS HERE]



## **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. Pages 6-9 of this attachment include 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 slightly under budget that was forecasted to occur during 2015-2016 timeframe, as well as recover all forecasted 2017 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 May 1 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 16, 2015 Order,<sup>1</sup> Xcel Energy implemented the approved rate of \$0.000448 per kWh effective January 1, 2016.

<sup>1</sup> Docket No. EL 15-015

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**(6) Proposed rate;**

Xcel Energy requests a new DSM Cost Adjustment Factor of \$0.000507 per customer kWh.

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

Xcel Energy requests this new DSM Cost Adjustment Factor of \$0.000507 per customer kWh become effective with the first billing cycle of January 2017. We request this rate remain in effect through December 2017 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 \$0.000507 per customer kWh is an increase of \$0.000059 per kWh or 13 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 90,600 electric customers in 36 communities in eastern South Dakota.

**(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. The following pages of this attachment include the forecasted 2016 and 2017 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.



Table 1: 2016 DSM Tracker Forecast, With Cost Recovery in 2016

Northern States Power Company State of South Dakota- Electric Utility DSM Cost Recovery & Incentive Mechanism - Total 2016 Forecast													
	January	February	March	April	May	June	July	August	September	October	November	December	Total
<b>2016 EXPENSES</b>	<b>[CONFIDENTIAL DATA BEGINS]</b>												
1. Balance													
2. DSM Program Expenditures													
3. Total Incentive (Line 2 * 30%)													
4. Total Expenditures + Incentive (Line 2 + 3)													
<b>RECOVERY</b>													
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) (Line 1 + 4 - 6)													
9. Accum Deferred Tax (Line 7 * 35%)													
10. Net Investment (Line 7 - 8)													
11. Carrying Charge Rate													
12. Carrying Charge (Line 9 * carrying charge)													
13. End of Month Balance (Line 7 + 10)													
													<b>[CONFIDENTIAL DATA ENDS]</b>

Table 2: 2017 DSM Tracker Forecast, With Cost Recovery in 2017

Northern States Power Company State of South Dakota-Electric Utility DSM Cost Recovery & Incentive Mechanism - Total 2017 Forecast													
2017 EXPENSES	January	February	March	April	May	June	July	August	September	October	November	December	Total
1. Balance													
2. DSM Program Expenditures													
3. Total Incentive (Line 2 * 30%)													
4. Total Expenditures + Incentive (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) (Line 1 + 4 - 6)													
9. Accum Deferred Tax (Line 7 * 35%)													
10. Net Investment (Line 7 - 8)													
11. Carrying Charge Rate													
12. Carrying Charge (Line 9 * carrying charge)													
13. End of Month Balance (Line 7 + 10)													
	<b>CONFIDENTIAL DATA ENDS</b>												

## Proposed Customer Bill Onsert Language

### DSM Cost Adjustment Factor Decrease Effective January 1, 2017

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 (DSM) 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, 2017, the rate factor will increase from \$0.000448 per kWh to \$0.000507 per kWh.

### Residential Electric Service – Winter Month Bill Example

This chart provides a comparison of customer bills by applying the prior DSM rate vs. the new DSM rate.

Usage (kWh)	Prior Rates				New Rates				Amount of Bill Increase	Percent Increase
	Other Rates	Prior DSM Factor	Prior DSM	Prior Bill	Other Rates	New DSM Factor	New DSM	New Bill		
400	\$49.81	0.000448	<b>\$0.18</b>	\$49.99	\$49.81	0.000507	<b>\$0.20</b>	\$50.01	\$0.02	0.05%
500	\$60.20	0.000448	<b>\$0.22</b>	\$60.42	\$60.20	0.000507	<b>\$0.25</b>	\$60.45	\$0.03	0.05%
600	\$70.58	0.000448	<b>\$0.27</b>	\$70.85	\$70.58	0.000507	<b>\$0.30</b>	\$70.88	\$0.04	0.05%
750	\$86.17	0.000448	<b>\$0.34</b>	\$86.51	\$86.17	0.000507	<b>\$0.38</b>	\$86.55	\$0.04	0.05%
1000	\$112.14	0.000448	<b>\$0.45</b>	\$112.59	\$112.14	0.000507	<b>\$0.51</b>	\$112.65	\$0.06	0.05%
2000	\$214.35	0.000448	<b>\$0.90</b>	\$215.25	\$214.35	0.000507	<b>\$1.01</b>	\$215.36	\$0.12	0.05%

### For more information

You may examine the new rate rider by visiting our website at [xcelenergy.com/Company/Rates\\_&\\_Regulations](http://xcelenergy.com/Company/Rates_&_Regulations). If you have further questions, please contact Xcel Energy at **1-800-895-4999**.

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# Legislative

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

PROPOSED

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

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**DEMAND SIDE MANAGEMENT COST  
ADJUSTMENT FACTOR**

Section No. 5  
~~3rd~~4th Revised Sheet No. 73  
Cancelling ~~2nd~~3rd Revised Sheet No. 73

---

**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 ~~\$0.000448~~\$0.000507 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: ~~05-01-15~~04-29-16 By: Christopher B. Clark Effective Date: ~~01-01-16~~  
President, Northern States Power Company, a Minnesota corporation  
Docket No. ~~EL15-01516-~~ Order Date: ~~12-16-15~~

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## **Non-Legislative**

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

PROPOSED

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

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**DEMAND SIDE MANAGEMENT COST  
ADJUSTMENT FACTOR**

Section No. 5  
4th Revised Sheet No. 73  
Cancelling 3rd Revised Sheet No. 73

---

**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**

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

All Customers                      \$0.000507 per kWh

I

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Date Filed: 04-29-16

By: Christopher B. Clark

Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. EL16-

Order Date:

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Executive Summary Table - 2017									
	Electric Participants	Electric Budget	Generator kW	Generator kWh	Participant Test Ratio	Utility Test Ratio	Ratepayer Impact Measure Test Ratio	TRC Ratio	
<b>2016</b>									
<b>Business Segment</b>									
Lighting Efficiency	2,140	\$ 389,520.00	552	4,192,955	2.18	5.46	0.62	1.27	
Business Saver's Switch	12	\$ 30,950.00	34	85	INF	1.05	0.51	1.05	
Peak and Energy Control	1	\$ 10,000.00	102	3,707	INF	4.17	1.67	4.17	
<b>Business Segment Total</b>	<b>2,153</b>	<b>\$ 430,470.00</b>	<b>689</b>	<b>4,196,747</b>	<b>2.21</b>	<b>5.12</b>	<b>0.63</b>	<b>1.28</b>	
<b>Residential Segment</b>									
Ground Source Heat Pump	12	\$ 25,050.00	20	98,404	1.17	2.76	0.50	0.64	
Home Lighting	3,772	\$ 97,340.00	112	1,065,912	6.36	4.19	0.39	1.87	
Residential Saver's Switch	770	\$ 181,650.00	565	1,486	INF	2.97	0.76	2.97	
Consumer Education	68,000	\$ 27,165.00	0	0				-	
<b>Residential Segment Total</b>	<b>72,554</b>	<b>\$ 331,205.00</b>	<b>696</b>	<b>1,165,801</b>	<b>6.16</b>	<b>3.07</b>	<b>0.53</b>	<b>1.83</b>	
<b>Planning Segment</b>									
Regulatory Affairs	0	\$ 14,000.00	0	0				-	
<b>Planning Segment Total</b>	<b>0</b>	<b>\$ 14,000.00</b>	<b>0</b>	<b>0</b>				<b>-</b>	
<b>PORTFOLIO TOTAL</b>	<b>74,708</b>	<b>\$ 775,675.00</b>	<b>1,385</b>	<b>5,362,548</b>	<b>3.07</b>	<b>4.67</b>	<b>0.61</b>	<b>1.40</b>	