

Direct Testimony and Schedules  
Nicholas N. Paluck

Before the South Dakota Public Utilities Commission  
State of South Dakota

In the Matter of the Application of Northern States Power Company  
for Authority to Increase Rates for Electric Service in South Dakota

Docket No. EL22-\_\_\_\_  
Exhibit\_\_\_\_(NNP-1)

**Rate Design**

June 30, 2022



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1 **I. INTRODUCTION**

2

3 Q. PLEASE STATE YOUR NAME AND OCCUPATION.

4 A. My name is Nicholas N. Paluck. I am a Rate Consultant in Regulatory  
5 Administration for Northern States Power Company Minnesota (NSPM or the  
6 Company).

7

8 Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

9 A. I have 15 years of natural gas and electric pricing experience with Northern  
10 States Power Company and Xcel Energy Inc., which includes rate design,  
11 revenue determinations, and cost allocations for the utility operating subsidiaries  
12 of Xcel Energy Inc. My qualifications and experience are further described in  
13 Exhibit\_\_\_(NNP-1), Schedule 1.

14

15 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

16 A. I present the Company’s proposed rate-revenue analysis and class-revenue  
17 responsibility. The Company’s proposed rate design also includes specific  
18 proposals that are addressed by Company witness Mr. Christopher Barthol.  
19 Finally, I am sponsoring the Company’s proposed rate schedules and tariffs.  
20 Redlined and non-redlined versions of the tariff sheets are provided in Schedule  
21 10. I am also sponsoring Statement I and the following schedules included  
22 within my testimony:

23 Schedule 2 – Sales and Revenue by Rate Schedule

24 Schedule 3 – Revenue by Rate Class

25 Schedule 4 – Comparison of Present and Proposed Rates

26 Schedule 5 – Comparison of Monthly Bills at Present and Proposed Rates

27

1 Q. WHAT IS THE BASIS FOR YOUR PROPOSED CLASS REVENUE RESPONSIBILITY AND  
2 RATE DESIGN?

3 A. The Company bases its electric pricing proposals on the following objectives:

- 4 • Produce total revenue equal to test-year revenue requirements, thereby  
5 providing the Company a reasonable opportunity to earn its authorized  
6 return on investment;
- 7 • Accurately reflect the resource costs of providing service and, where  
8 appropriate, the market value of the service;
- 9 • Provide sufficient flexibility in pricing levels and provisions for our  
10 electric service to remain competitive in the broader energy market; and
- 11 • Provide reasonable pricing by considering the importance of rate  
12 continuity, customer understanding, revenue stability, and administrative  
13 practicality.

14

15 Q. HOW IS YOUR TESTIMONY ORGANIZED?

16 A. I present my testimony in the following sections:

- 17 • Rate Revenue Determination;
- 18 • Class Revenue Responsibility;
- 19 • Tariff Modifications;
- 20 • Rate Design Proposals; and
- 21 • Conclusion.

22



1 **II. RATE REVENUE DETERMINATION**

2  
3 Q. WHAT ARE THE 2021 TEST YEAR ELECTRIC REVENUES FROM SALES AT PRESENT  
4 AND PROPOSED RATE LEVELS?

5 A. Table 1 below shows 2021 test year revenues at present and proposed rates for  
6 the Electric Utility-South Dakota retail jurisdiction. Revenues are separated into  
7 two categories: retail rate revenues and other increases. The “other increases”  
8 category is the increase in winter construction and excess footage revenue from  
9 the proposed rate level that is an offset to the proposed retail increase.

10  
11 **Table 1**  
12 **Test-Year Revenue (\$1,000s)**

13

	Present	Proposed	Proposed Increase	Percent Increase
Retail Rate Revenue	\$247,154	\$291,118	\$43,964	17.79%
+ Other Increases	0	\$160	\$160	
Total	\$247,154	\$291,277	\$44,124	17.85%

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18 Company witness Mr. Benjamin C. Halama presents the 2021 test year total  
19 revenue deficiency in his Direct Testimony. Present and proposed 2021 test  
20 year revenues are based on the application of present and proposed rates to the  
21 test-year budgeted sales and customers that are also supported by Mr. Halama.

22  
23 Q. HAVE YOU PROVIDED MORE DETAILED COMPARISONS OF TEST-YEAR  
24 REVENUES?

25 A. Yes. I prepared the following summary and detailed comparisons of present  
26 and proposed rate revenues:

1           • **Sales and Revenue by Rate Schedule**

2           – Filed as Exhibit\_\_\_\_(NNP-1), Schedule 2;

3           • **Revenue by Rate Class**

4           – Filed as Exhibit\_\_\_\_(NNP-1), Schedule 3; and

5           • **Sales and Revenue by Rate Schedule and Component Detail**

6           – Filed as Statement I in Volume I of the Application.  
7

8 Q. PLEASE DESCRIBE THE COMPARISONS FILED AS EXHIBIT\_\_\_\_(NNP-1),  
9 SCHEDULE 4 AND EXHIBIT\_\_\_\_(NNP-1), SCHEDULE 5.

10 A. Schedule 4 is a comparison by rate schedule of present and proposed base rates,  
11 including energy charges both with and without fuel costs. Schedule 5 is a  
12 monthly bill comparison by rate schedule of the present and proposed rates at  
13 different usage levels.  
14

15 Q. WERE ANY ADJUSTMENTS TO SALES MADE TO ARRIVE AT THE REVENUE IN  
16 SCHEDULE 2, SCHEDULE 3, AND STATEMENT I?

17 A. Yes. Actual sales were weather-normalized. The impact of this adjustment was  
18 a 46,409 MWh reduction in sales, from 2,189,309 MWh on an actual basis to  
19 2,142,900 MWh on a weather-normalized basis. In addition, I made a 31,504  
20 MWh addition to sales to account for sales growth within 2021 as a part of the  
21 Company’s adjustments for the proposed pro forma year ending December 31,  
22 2021, as discussed further by Mr. Benjamin C. Halama. Therefore, the revenue  
23 presented in Schedule 2, Schedule 3, and Statement I are based on 2,174,404  
24 MWh.  
25

1 **III. CLASS REVENUE RESPONSIBILITY**

2  
3 Q. WHAT PROCESS WAS USED TO DEVELOP THE PROPOSED CLASS REVENUE  
4 APPORTIONMENT?

5 A. Consistent with our pricing objectives, the starting point for proposed class  
6 revenue apportionment is the cost responsibility for each customer class. Class  
7 cost responsibility is determined by the Class Cost of Service Studies (CCOSS)  
8 sponsored by Mr. Barthol. The resulting cost increases by class are then  
9 considered individually, and relative to the total retail increase, to consider  
10 whether a full movement to the cost of service should be moderated.

11  
12 Q. WHAT ARE THE CLASS COST RESPONSIBILITIES AND PROPOSED CLASS INCREASES  
13 IN THIS CASE?

14 A. Table 2 shows the CCOSS class cost responsibilities and the proposed class  
15 apportionment for the 2021 test year.

16  
17 **Table 2**  
18 **Rate Revenue and Cost by CCOSS Class (\$1,000s)**

19

Class	Present Revenue	Cost of Service	Cost Increase %	Proposed Revenue	Proposed Increase %
Residential	\$103,403	\$127,369	23.18%	\$123,731	19.66%
Non-Demand	10,690	12,061	12.82%	12,426	16.24%
C&I Demand	130,839	149,594	14.33%	152,740	16.74%
Lighting	2,221	2,095	-5.68%	2,221	0.00%
<b>Total Retail</b>	<b>\$247,154</b>	<b>\$291,118</b>	<b>17.79%</b>	<b>\$291,118</b>	<b>17.79%</b>
<b>Total</b>	<b>\$247,154</b>	<b>\$291,277</b>	<b>17.85%</b>	<b>\$291,277</b>	<b>17.85%</b>

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1 Q. WHAT IS THE BASIS FOR THE PROPOSED CLASS APPORTIONMENTS IN TABLE 2?

2 A. The basis was a one-third movement to cost for all customer classes. This is a  
3 balanced proposal that provides both significant rate impact moderation and a  
4 significant movement to cost.

5

6 Q. HOW DO YOU MEASURE CLASS MOVEMENT TO COST?

7 A. This measurement defines the relative position between a class increase set at  
8 the average retail increase (no movement to cost) and a class increase set directly  
9 at a class cost from the CCOSS (full movement to cost). Using a hypothetical  
10 example of a 10 percent average retail increase and a 16 percent class cost  
11 increase, the potential cost movement range is 6 percent (16 percent less 10  
12 percent). In this example, a proposed 13 percent class increase represents a 50  
13 percent cost movement, calculated as 3 percent (13 percent less 10 percent)  
14 divided by the full 6 percent range.

15

16 Q. CAN A PROPOSED REVENUE APPORTIONMENT BE ADJUSTED IF A DIFFERENT  
17 FINAL REVENUE REQUIREMENT IS APPROVED BY THE COMMISSION?

18 A. Yes. The proportional class revenue responsibilities that are represented by a  
19 proposed class revenue apportionment, at a certain total retail increase amount,  
20 can be applied to another total retail revenue requirement. This proportional  
21 factoring approach is reasonable and has been previously used for the  
22 Company's compliance filings in prior rate cases to accurately maintain a  
23 Commission-approved class revenue apportionment at a different rate level.  
24 This approach can also accommodate revisions to class cost allocations or  
25 changes to the percent movements to cost, as well as updated sales and revenue  
26 levels.

27

1 Q. IS THE RECOMMENDED REVENUE APPORTIONMENT CONSISTENT WITH THE  
2 COMPANY'S PRICING OBJECTIVES?

3 A. Yes, the revenue apportionment balances the pricing objective of moving  
4 customer classes to cost with the pricing objective of rate continuity.  
5

#### 6 IV. RATE DESIGN PROPOSALS 7

8 Q. IS THE COMPANY PROPOSING ANY STRUCTURAL CHANGES TO ITS BASIC RATE  
9 STRUCTURE?

10 A. No.  
11

#### 12 A. Residential and C&I Non-Demand Customer Charges

13 Q. WHAT IS THE PRIMARY FUNCTION OF A CUSTOMER CHARGE?

14 A. The primary function of a customer charge is to recover the fixed cost of serving  
15 customers. Customer-related costs include metering, service lines, meter  
16 reading, and billing. These costs are not variable with usage. Other industries  
17 include similar customer charges, including cable television, streaming services,  
18 and internet service. When fixed costs are recovered through a fixed customer  
19 charge, costs are more equitably recovered from customers at all usage levels.  
20

21 Q. WHAT IS THE FIXED COST OF SERVING CUSTOMERS THAT IS NOT RELATED TO  
22 ENERGY USAGE IN THIS CASE?

23 A. According to the CCOSS, the fixed monthly cost of serving residential  
24 customers is \$23.07.  
25

1 Q. WHAT LEVEL OF CUSTOMER CHARGES IS THE COMPANY PROPOSING IN THIS  
2 CASE FOR RESIDENTIAL SERVICE AND SMALL GENERAL SERVICE CUSTOMERS?

3 A. We are proposing an increase of \$1.50 that is in line with the magnitude of  
4 increase we are seeking in this rate case and will move Residential customer  
5 charges closer to cost. Our present and proposed customer charges for  
6 Residential Service customers are shown in Table 3 below.

7

8

**Table 3**

9

**Residential Service Customer Charges**

10

<b>Service Category</b>	<b>Present</b>	<b>Proposed</b>
Residential Overhead	\$8.25	\$9.75
Residential Time-of-Day or Underground	\$10.25	\$11.75
Residential Electric Heating - Overhead	\$8.25	\$9.75
Residential Electric Heating - Underground	\$10.25	\$11.75
Residential Time-of-Day and Underground	\$12.25	\$13.75

11

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17 Q. WHY IS IT IMPORTANT TO MOVE FIXED CUSTOMER CHARGES CLOSER TO COST?

18 A. When fixed customer charges are set below cost, the difference is recovered in  
19 variable energy charges. This results in customers with above-average usage  
20 subsidizing the cost of serving those customers with below-average usage.

21

22 Q. ARE THERE OTHER CUSTOMER BENEFITS FROM MOVING CLOSER TO COST-  
23 BASED CUSTOMER CHARGES?

24 A. Yes. Customers will benefit from our proposed customer charges because their  
25 monthly bills will be less sensitive to weather variations. Also, customers with  
26 electric water heating or clothes dryers, for example, will pay lower subsidies as  
27 a result of the above average usage related to those appliances.

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**B. Residential Service**

Q. PLEASE DESCRIBE THE PROPOSED RATE DESIGN FOR RESIDENTIAL SERVICE OTHER THAN CUSTOMER CHARGES.

A. The proposed Residential Service tariff retains the present design structure, including the distinction for electric space heating. After crediting the proposed customer charge revenue against the class revenue allocation, Residential energy charges are calculated by considering a seasonal differential and the Residential cost of service distinction for electric space heating. Based on cost of service distinctions and customer charges that are closer to cost, customers with electric space heating have lower energy charges during the non-summer months of October through May.

**C. C&I Demand Class Rate Design**

Q. HOW DID YOU DEVELOP THE PROPOSED RATE DESIGN FOR THE C&I DEMAND CLASS?

A. I started by calculating the proposed base energy charge, which is not time-differentiated and is the same for all non-time-of-day tariffs in the C&I Demand class. The base energy charge is calculated using C&I Demand class energy costs and energy-related capacity costs at the secondary voltage level, which is consistent with the Company’s stratification approach supported by Mr. Barthol for allocating production plant to customer classes. Next, the cost of fuel was subtracted from the base energy charge, because fuel and purchased energy costs are recovered separately, and the resulting net cost was increased by an additional amount to recover the average cost of the Energy Charge Credit (ECC). The ECC cost is equal to the proposed ECC per kWh times the 18.0 percent of sales that qualify for the ECC. Finally, the resulting base energy

1 charge was increased by 0.986 cents per kWh to moderate the increases  
2 otherwise required in the demand charge.

3  
4 Q. ARE GENERAL TIME OF DAY (TOD) SERVICE ENERGY CHARGES DERIVED  
5 FROM THE GENERAL SERVICE ENERGY CHARGE?

6 A. Yes. The General TOD Service base energy charges are the result of separating  
7 the General Service base energy charge into on-peak and off-peak components  
8 by using a TOD ratio. The level of the General TOD Service base energy  
9 charges is set equivalent to the non-TOD charge then weighted by the on-peak  
10 and off-peak kWh sales percentages for the C&I Demand class.

11  
12 Q. WHAT TOD RATIO DID YOU USE TO SEPARATE THE GENERAL SERVICE BASE  
13 ENERGY CHARGE INTO THE GENERAL TOD SERVICE BASE ENERGY CHARGES?

14 A. In this case, I used a TOD ratio of on-peak to off-peak base energy charges  
15 (Energy Ratio) of 1.80 to 1.

16  
17 One of the goals in designing rates for General TOD Service is to maintain  
18 reasonable continuity in the relationship between on-peak and off-peak charges,  
19 as measured by the TOD Combined Ratio. The TOD Combined Ratio results  
20 from combining the Energy Ratio and TOD fuel cost charges (Fuel Ratio), as  
21 shown in Table 4 below. The Fuel Ratio is prescribed as the marginal energy  
22 cost ratio for the full test year, which for the 2021 test year is a historically low  
23 ratio of 1.41 on-peak to 1 off-peak. Despite the lower Fuel Ratio, the Energy  
24 Ratio of 1.80 to 1 was required to balance the impact of a higher base rate share  
25 of total price to produce a Combined Ratio of 1.69 to 1.

26



1 **Table 4**

2 **Comparison of On-Peak Ratios**

3

Test Year	Energy Ratio	Fuel Ratio	Total Ratio
2011	1.63	1.58	1.60
2013	1.90	1.46	1.71
2021	1.80	1.41	1.69

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5  
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7

8 Q. WHAT IS THE ECC?

9 A. The ECC, or Energy Charge Credit, which has also been referred to as a high  
10 load factor credit, is a component of demand-metered rates that applies a credit  
11 to kWh energy usage above the 400 hours-use (55 percent load factor) level.  
12 The ECC was originally developed in 1993 to mitigate the effect of our  
13 stratification-based CCOSS driven demand and energy charges on customers  
14 with very high load factors. The ECC is a mathematical device that has the  
15 effect of determining the monthly bills of customers at both standard rates and  
16 an equivalent rate design with higher demand and lower energy charges, and  
17 automatically applies the lower cost option.

18  
19 Q. DOES THE ECC PROVIDE OTHER BENEFITS?

20 A. Yes. The ECC adds precision to two-part TOD energy charges by recognizing  
21 that as a customer's load factor increases, a larger portion of energy use occurs  
22 when system loads and energy costs are at the lowest levels. The ECC  
23 essentially provides much of the benefit of a three-part TOD rate without its  
24 substantially greater complexity.

25  
26 Q. ARE YOU PROPOSING TO CHANGE THE AMOUNT OF THE ECC?

27 A. Yes. The proposed ECC of 1.255¢ per kWh is a 0.302¢ per kWh increase from

1 the current ECC of 0.953¢ per kWh. This increase is designed to help maintain  
2 the relationship of the ECC to the combination of base energy and fuel rates.

3  
4 Q. HOW DID YOU DEVELOP THE PROPOSED DEMAND CHARGES FOR THE C&I  
5 DEMAND CLASS?

6 A. Proposed demand charges were designed to recover the proposed C&I Demand  
7 class revenue requirement that is not recovered through the energy and  
8 customer charges. This approach also recovers the cost of all interruptible  
9 demand charge discounts through demand charges.

10  
11 Q. DO THE COMPANY'S PROPOSED DEMAND CHARGES INCLUDE ADDITIONAL  
12 INTERRUPTIBLE DISCOUNTS?

13 A. Yes. Proposed interruptible demand charge discounts were increased to  
14 maintain greater consistency with the Company's rates in its other jurisdictions.  
15 The individual proposed increases for the two currently available interruptible  
16 service categories are 6.2 percent to 7.1 percent.

17  
18 **Table 5**  
19 **Present and Proposed Interruptible Discounts**  
20 **NSPM-South Dakota Electric Jurisdiction**  
21 (Average Monthly Discount per kW)

22

Rate Code	E20-21	E22
Present	\$3.57	\$4.07
Proposed	\$3.79	\$4.36
Increase	\$0.22	\$0.29
Increase %	6.2%	7.1%

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26

1 Q. DOES THE PROPOSED C&I DEMAND RATE DESIGN PRODUCE CUSTOMER BILL  
2 INCREASES THAT VARY BY LOAD FACTOR?

3 A. Yes. There is a lower percentage increase in customer bills for customers with  
4 higher load factors than for customers with lower load factors. These  
5 differentials for General Service and General Time of Day Service are shown in  
6 Exhibit\_\_\_(NNP-1), Schedule 5, with the different percent increases for  
7 customer load factors at 200, 400 and 600 hours of use per month. For a  
8 customer with a demand of 100 kW, the percent increase at the 600 hours use  
9 level is approximately three percentage points less than at the 200 hours use  
10 level.

11

12 Q. HOW WERE THE VOLTAGE DISCOUNTS DERIVED?

13 A. The energy charge voltage discounts were monetized by multiplying the net  
14 decrease in losses at primary, transmission transformed and transmission levels  
15 by the General Service energy charge and fuel costs. The demand voltage  
16 discounts were calculated by deriving the distribution cost per kW of avoided  
17 distribution costs. For example, a customer at a primary voltage level causes no  
18 secondary distribution cost, therefore the primary voltage discount removes the  
19 impact of secondary distribution cost from the base demand charges calculated  
20 at the secondary voltage level. Exhibit\_\_\_(NNP-1), Schedule 7 contains the  
21 voltage discount analysis.

22

### 23 **D. Lighting Services**

24 Q. DO THE PROPOSED LIGHTING RATES RECOGNIZE COST DIFFERENTIALS BY SUB-  
25 CATEGORY WITHIN THE LIGHTING CLASS?

26 A. Yes. The proposed revenue levels were determined by moderately applying the  
27 CCOSS-indicating adjustments for the lighting sub-categories. Street lighting

1 for municipal customers includes the System and Energy service cost categories.  
2 System service is full service lighting that includes the lighting system, energy,  
3 maintenance, and repairs. The Energy category includes flat-rate Purchased  
4 Equipment services and metered energy-only service. Protective service is full  
5 service security lighting that is available for residential and commercial  
6 customers. The cost decrease indicated by the CCOSS across all lighting  
7 categories was moderated to a keep lighting revenue flat to present revenues.  
8

9 **E. Fuel Clause Rider**

10 Q. HAS THE PROPOSED FUEL CLAUSE RIDER BEEN UPDATED FOR THE 2021 TEST  
11 YEAR?

12 A. Yes. The Service Category Ratio section of the Fuel Cost Rider was updated to  
13 be consistent with test year 2021 information. This update was determined  
14 using the method approved by the Commission in previous rate cases. The  
15 development of these updates is shown in Exhibit\_\_\_(NNP-1), Schedule 6.  
16 Consistent with Mr. Halama’s testimony, present revenues incorporate the fuel  
17 amount detailed in Statement P. However, property taxes that have historically  
18 been recovered via the Fuel Clause Rider have been removed from proposed  
19 fuel revenues and are proposed to be recovered via proposed base rates. The  
20 impact of the \$1.8M adjustment is shown in the Fuel section of Schedule 3.  
21

22 **F. Other Rate Design Proposals**

23 *1. Residential Controlled Air Conditioning and Water Heating Rider*

24 Q. PLEASE DESCRIBE THE COMPANY’S PROPOSED REVISIONS TO THE RESIDENTIAL  
25 CONTROLLED AIR CONDITIONING AND WATER HEATING RIDER, A DIRECT  
26 LOAD CONTROL PROGRAM KNOWN AS SAVER’S SWITCH.

1 A. Residential Service customers with central air conditioning have the option of  
2 participating in our Saver's Switch program, which provides a discount for  
3 control of their air conditioner, through the Residential Controlled Air  
4 Conditioning and Water Heating Rider. An additional discount is available to  
5 customers with an electric water heater that can also be controlled.

6  
7 The current rate design provides a 15 percent discount on energy and fuel cost  
8 charges during the four summer-season months for controlled air-conditioning.  
9 If participating air-conditioning customers also have an electric water heater, an  
10 additional 2 percent discount during every month is available for controlled  
11 water heating. This design was established when the base cost of fuel was  
12 included in energy rates. When all fuel costs were moved from base energy rates  
13 into a separate fuel cost charge in 2007, it became necessary to apply the percent  
14 discounts to both energy and fuel charges to retain the same discount amounts,  
15 increasing administrative complexity.

16  
17 The discount levels were created when energy rates were lower than today and  
18 the cost of new peaking generation was much higher than it is today. As result,  
19 the discount amount for program participation is no longer consistent with the  
20 benefits provided by this long-standing demand response option.

21  
22 The Company proposes to adjust the Residential Controlled Air Conditioning  
23 and Water Heating Rider to more closely align program incentives with  
24 customer and utility benefits. We propose to revise the air-conditioning  
25 incentive structure to a flat monthly bill credit of \$10 for the months of June-  
26 September (\$40 per year). For controlled electric water heating, the additional  
27 incentive is proposed as \$2 every billing month (\$24 per year).

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Q. HOW DO CURRENT INCENTIVES FOR THE SAVER’S SWITCH PROGRAM COMPARE TO PROPOSED CREDITS?

A. In 2019, Active Saver’s Switch program participants received an average annual credit of approximately \$53. Although the proposed \$40 annual credit is lower than the current credit, it is commonly used for comparable direct load control programs across the country and has been successfully used for years in our Colorado jurisdiction. Our higher energy use customers will see a steeper drop in their incentive, but these customers may be better served under a different demand response program.

Q. WHAT IS THE VALUE OF THE SAVER’S SWITCH PROGRAM?

A. Our recent analysis of the Saver’s Switch program, including avoided generation capacity and energy costs on the system, and the costs of the program, including the cost of switches, advertising costs to recruit new participants and administration costs to operate the system, show an annual net benefit of approximately \$30 per customer switch.

Although this analysis indicates that the appropriate credit could be less than the proposed \$40 annual credit, we are continuing efforts to make the program more cost-effective by performing annual tests on the equipment to maximize effectiveness and to pursue cost savings in the switch equipment. The ability of the residential Saver’s Switch program to control 400 MW of load may also prove more valuable over time as a hedge against possible future spikes in capacity prices. The Company is also looking at other control strategies across all of its demand response programs to integrate renewables, provide load relief at the distribution level, and to minimize energy costs. Work to appropriately

1 assess these emerging value streams is still in the early stages, but these value  
2 streams may be significant in the future. For these reasons, the Company  
3 believes a \$40 annual credit per customer switch is appropriate.  
4

5 Q. WHAT IS THE EXPECTED IMPACT OF THE PROPOSED CHANGE TO THE  
6 INCENTIVE AMOUNT AND STRUCTURE FOR THE SAVER'S SWITCH PROGRAM?

7 A. Although we do not anticipate a loss of Saver's Switch customers as a result of  
8 this incentive change, the final result is difficult to predict.<sup>1</sup> Some customers  
9 may find it helpful to have a defined fixed credit amount rather than a  
10 percentage discount, which may encourage customers who have resisted  
11 participation in the past. Customers with lower energy usage will also benefit  
12 from the proposed incentive design.  
13

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<sup>1</sup> Florida Power and Light completed a transition to a lower incentive for direct load control (similar to Saver's Switch) in 2015. They found approximately 20 percent of customers did move off the rate; however, the program today is the only program in the nation larger than Xcel Energy's program. See Florida Power and Light's filings at: <http://www.floridapsc.com/library/filings/2015/05165-2015/05165-2015.pdf#search=Docket%20No.%20150085-EG>).

1 **V. TARIFF MODIFICATIONS**

2  
3 Q. ARE YOU SPONSORING SCHEDULES OF THE PROPOSED TARIFFS AND PROPOSED  
4 TARIFF CHANGES?

5 A. Yes. I sponsor several schedules that provide the proposed tariffs and that  
6 identify proposed tariff changes. Those schedules are located in Volume 2 of  
7 the Application and are attached to my testimony as follows:

- 8 • Schedule 8: List of Proposed Tariff Sheets
- 9 • Schedule 9: Summary List of Tariff Changes
- 10 • Schedule 10: Rate Schedules and Tariffs (Redlined and non-Redlined)

11  
12 Q. IS THE COMPANY PROPOSING ANY NON-RATE REVISIONS TO THE SOUTH  
13 DAKOTA ELECTRIC TARIFF?

14 A. Yes. The Company is proposing several wording changes to the South Dakota  
15 Electric Rate Book. In general, these proposed revisions are intended to bring  
16 the rate book up to date and increase consistency with the Company's approved  
17 tariffs in other jurisdictions. Consistency across the Company's different rate  
18 books benefits customers, particularly those customers who operate in multiple  
19 jurisdictions, by simplifying their compliance burden and providing consistent  
20 treatment across jurisdictions. Cross-jurisdictional consistency among our  
21 tariffs also enhances the Company's administrative efficiency, which ultimately  
22 benefits all customers by allowing the Company to better focus on providing  
23 reliable, cost-effective electric service. The remainder of this section supports  
24 the Company's proposed wording revisions to the rate book, which are  
25 provided in redline and non-redline format in Volume 2 of the Application.

26  
27 1. *Peak Controlled Service Rules*



1 Q. ARE ANY CLARIFYING RULE ADDITIONS PROPOSED FOR THE RULES FOR  
2 APPLICATION OF PEAK CONTROLLED SERVICES TARIFF?

3 A. Yes. Two additions are proposed in Section 5 of the Rate Book related to the  
4 Peak Controlled Services Tariff. The first addition is proposed rule no. 4,  
5 requiring that customers provide reliable contact information for the purpose  
6 of receiving control period notifications. This is an essential requirement that  
7 has largely been followed by customers without a formal rule because it is also  
8 in their best interest to avoid control failure charges. However, some recent  
9 difficulty with reliably contacting all customers indicates a formal rule may be a  
10 helpful addition.

11

12 The second clarification is the addition of proposed rule no. 9 regarding new  
13 Company testing requirements that are required by the Midcontinent  
14 Independent System Operator (MISO). In their FERC filing in Docket ER19-  
15 651, MISO stated the following about testing requirements:

16 This proposal, along with the concomitant LMR (Load Modifying  
17 Resources) availability filing (Docket ER19-650), is expected to  
18 provide MISO's operators with greater certainty regarding the ability  
19 of DR (Demand Response) to curtail load during an emergency, by  
20 requiring an annual demonstration that may be satisfied by meeting a  
21 curtailment instruction or submitting the results of a real power test  
22 for such resources prior to qualification in the Planning Resource  
23 Auction. MISO believes these enhancements are critical given the  
24 increasing operational dependence on LMRs to maintain system  
25 reliability and resilience.

26 Real power tests will provide more certainty regarding the level of load relief  
27 that will be available during MISO emergency events, and the proposed rule will  
28 document this requirement.

29

2. *Proposed Revisions to the General Rules and Regulations*

Q. PLEASE DESCRIBE THE COMPANY’S PROPOSED WORDING CHANGES TO THE GENERAL RULES AND REGULATIONS IN SECTION 6 OF THE SOUTH DAKOTA ELECTRIC RATE BOOK.

A. The Company’s specific proposed wording changes to Section 6 of the Rate Book are presented in Volume 2 of the Application. A summary of the proposed changes are as follows:

- On Sheet 4, the Company proposes to amend the General Rule in the Optional Metering Service rule to improve readability, understandability, and consistency across our service territories.
- On Sheets 27, 27.1, and 27.2, the Company proposes to replace the Special Facilities rule with new language and definitions which are designed to clarify: the circumstances under which the Company will install special facilities (including a limitation that such facilities will only be installed when doing so will not adversely affect the reliability, structural integrity, ability to efficiently expand capacity or operational integrity of the Company’s distribution or transmission facilities); the ownership of such facilities; the costs customers will incur as a result of such installation; and how payments may and shall be made. These changes are intended to improve grid reliability, improve the rule’s understandability for customers, and reduce administrative burden for cross-jurisdictional entities by improving consistency across our service territories.
- On Sheets 29 and 29.1, the Company proposes to amend its rule pertaining to the replacement of overhead facilities with underground facilities. Specifically, the Company proposes to add a subsection on special facilities in public right-of-ways that clarifies: the circumstances under which the Company will pay for replacement, modification, or relocation of facilities on public right-of-

1 ways; the circumstances under which a municipality would incur excess  
2 expenditure charges; when the Company would begin the replacement,  
3 modification, or relocation process; and the circumstances under which the  
4 Company reserves the right to require an order from a municipality and  
5 challenge the lawfulness of such an order. These changes are proposed to  
6 improve consistency across our service territories and to improve certainty for  
7 customers and the Company about the processes, timing, and costs associated  
8 with modifying, relocating, or replacing facilities on public right-of-ways.

- 9 • On Sheet 30, the Company proposes additional amendments to its rule  
10 pertaining to the replacement of overhead facilities with underground  
11 facilities, specifically here pertaining to easements. The Company proposes to  
12 require that the customer must engage and pay for an electrician to adapt the  
13 customer's electrical facilities to accept services from the Company's  
14 underground facilities. This change is proposed to improve consistency across  
15 our service territories and for safety and quality control purposes.

16  
17 *3. Proposed Revisions to Customer Bill Forms*

18 Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED REVISIONS TO THE STANDARD  
19 CUSTOMER BILL FORMS INCLUDED IN SECTION 8 OF THE ELECTRIC RATE BOOK

20 A. As described in the Direct Testimony of Company witness Mr. Marty Mensen,  
21 the transition to smart meters as part of the Company's Meter Replacement  
22 program will result in a shift to interval billing, which will change the appearance  
23 of customer bills. As a result, the Company is submitting proposed revisions to  
24 the standard customer forms on Sheets 2.1, 2.2, 3.1, and 4.1 of the South Dakota  
25 Electric Rate Book.

26

1 **VI. CONCLUSION**

2

3 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

4 A. The Company's proposed class revenue allocation and rate design is consistent  
5 with our pricing objectives and our cost of providing service. The cost-based  
6 focus of our overall recommendations will result in fair and reasonable electric  
7 pricing that provides an economically sound distribution of cost responsibility.

8

9 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

10 A. Yes, it does.