

TO: COMMISSIONERS AND ADVISORS
FROM: ERIC PAULSON AND AMANDA REISS (STAFF)
SUBJECT: EL20-015 STAFF MEMORANDUM
DATE: DECEMBER 3, 2020

STAFF MEMORANDUM

1.0 OVERVIEW

On May 1, 2020, Northern States Power Company, dba Xcel Energy (Xcel), filed a Petition with the Commission requesting approval of the company’s 2019 Demand Side Management (DSM) Report, proposed DSM plan for 2021, revised DSM Cost Adjustment Factor for 2021 of \$0.000527/kWh, and associated tariff sheets. In revised response to Staff data request 1-1 on November 2, 2020, Xcel revised the proposed DSM Cost Adjustment Factor for 2021 to \$0.000528/kWh and provided updated tariff sheets.

Provided in this memo is a discussion on Xcel’s 2019 DSM plan performance and changes to the company’s proposed DSM Plan for 2021. Further, Staff provides a recommendation that the Commission approve Xcel’s requests based on the supporting information provided by the company.

2.0 DISCUSSION

2.1 Report on 2019 DSM Plan Activities

In 2019, Xcel came in over budget, spending \$815,393 while a budget of \$752,023 was approved by the Commission. Table 1 shows the 2019 approved budgets and the 2019 actual spending for each program. The residential programs came in at 118% of the approved budget, the business programs came in at 104% of the approved budget, and the planning segment came in at 43% of the approved budget.

Table 1. 2019 Budgeted Expenses vs. Actuals			
	B	A	V
Residential Home Lighting	\$ 93,412	\$ 78,282	84%
Residential Saver's Switch	\$ 187,913	\$ 241,098	128%
Consumer Education	\$ 21,165	\$ 37,613	178%
Total Residential	\$ 302,490	\$ 356,993	118%
Lighting Efficiency	\$ 389,320	\$ 409,434	105%
Business Saver's Switch	\$ 37,213	\$ 36,823	99%
Peak and Energy Control	\$ 10,000	\$ 6,529	65%
Total Business	\$ 436,533	\$ 452,787	104%
Planning Segment	\$ 13,000	\$ 5,614	43%
All Programs	\$ 752,023	\$ 815,393	108%

Table 2 provides the energy savings, demand savings, and participation results from the 2019 DSM plan as compared to the approved budget. Overall Xcel’s DSM plan experienced more energy savings than forecasted, mainly due to the significantly higher energy savings that occurred in the Residential Home Lighting, Business Lighting Efficiency, and Business Peak and Energy Control programs.

	Energy Savings (Annual kWh)			Demand Savings (kW)			Participation		
	B	A	V	B	A	V	B	A	V
Residential Home Lighting	1,508,018	2,492,147	165%	154	257	167%	2,635	4,293	163%
Residential Saver's Switch	1,651	1,515	92%	546	518	95%	770	705	92%
Consumer Education	0	0	-	0	0	-	68,000	70,706	104%
Total Residential	1,509,669	2,493,662	165%	700	774	111%	71,405	75,704	106%
Lighting Efficiency	3,985,513	6,071,035	152%	484	886	183%	334	144	43%
Business Saver's Switch	107	87	82%	42	35	83%	12	18	150%
Peak and Energy Control	3,695	39,315	1064%	99	1,065	1074%	1	1	100%
Total Business	3,989,315	6,110,436	153%	626	1,986	317%	347	163	47%
Planning Segment	-	-	-	-	-	-	-	-	-
All Programs	5,498,983	8,604,099	156%	1,326	2,760	208%	71,752	75,867	106%

The residential lighting program once again experienced strong participation during the year, resulting in Xcel exceeding the energy savings goal while remaining under budget. Looking at the Business programs, the peak energy control program experienced significantly higher energy and demand savings than planned and was under budget. The Business Lighting Efficiency program was close to the approved budget but achieved high energy and demand savings with low participation. The Business Lighting Efficiency had low participation but those that participated completed larger than anticipated energy savings projects. The peak energy control energy and demand savings were high due to the new customers who signed up for the program having a larger load commitment than Xcel anticipated.

Overall, Xcel’s DSM Plan was cost-effective for the 2019 program year. All programs had Total Resource Cost (TRC) test results greater than 1.0. Table 3 provides a breakdown of the benefit/cost test results that occurred in 2019.

	TRC	Utility	Participant	RIM
Residential Home Lighting	3.82	6.53	17.75	0.37
Residential Saver's Switch	2.40	2.40	INF	1.95
Consumer Education	-	-	-	-
Total Residential	2.70	3.05	18.45	0.63
Lighting Efficiency	1.56	7.88	3.34	0.54
Business Saver's Switch	1.06	1.06	INF	0.98
Peak and Energy Control	76.61	76.61	INF	4.92
Total Business	1.76	8.32	3.39	0.62
Planning Segment	-	-	-	-
All Programs	1.99	5.95	4.03	0.62

In its Petition, Xcel requests the Commission approve a performance incentive of \$225,607 for 2019. The incentive is a fixed percentage (30%) of actual program expenses and capped at 30% of the approved budget. The purpose of the incentive is to cover lost margins Xcel incurs as a result of DSM Plan implementation. Staff reviewed Xcel's 2019 DSM tracker account and 2019 DSM tracker account adjustment and determined the incentive was properly accounted for.

2.2 DSM Plan for 2021

2.2.1 Proposed Program Changes for 2021

The proposed changes to Xcel's 2021 DSM program are to the residential and business lighting programs, which are as follows:

Residential Lighting:

1. Increased LED bulb A-Line and Specialty rebate;
2. Revised to a slightly higher energy savings and budget target.

Business Lighting:

1. Increased Business LED bulb – linear tube rebate;

Xcel states in their petition that they have updated their assumptions and savings calculations for Home Lighting due to various DOE studies and the implementation of the Energy Independence and Security Act. Staff has no concerns with the proposed program changes.

2.2.2 Proposed Budget for 2021

The proposed budget for 2021 is provided in Table 4. Xcel proposes an increase of \$23,805 for its 2021 DSM Plan. This increase is spread between the Residential Home Lighting program and Business Lighting Efficiency program. Also included is a decrease to the Planning Segment budget. Based on forecasted participation and associated energy savings, Xcel estimates that all programs will be cost-effective in 2021. Staff has no concerns with Xcel's proposed budget for 2021.

	2020	2021	YOY Change	TRC Ratio
Residential Home Lighting	\$ 96,756	\$ 99,655	3%	4.13
Residential Demand Response	\$ 235,500	\$ 235,500	0%	3.12
Consumer Education	\$ 21,165	\$ 21,165	0%	-
Heat Pump Water Heaters	\$ 12,900	\$ 12,900	0%	1.00
Total Residential	\$ 366,321	\$ 369,220	1%	3.34
Lighting Efficiency	\$ 389,320	\$ 414,226	6%	1.02
Business Saver's Switch	\$ 25,250	\$ 25,250	0%	1.30
Peak and Energy Control	\$ 10,000	\$ 10,000	0%	8.37
Total Business	\$ 424,570	\$ 449,476	6%	1.04
Planning Segment	\$ 14,000	\$ 10,000	-29%	-
All Programs	\$ 804,891	\$ 828,696	3%	1.53

In addition, the fixed percentage incentive of 30 percent of actual spending with a cap set at 30 percent of the approved budget (\$248,609) is proposed to continue in 2021.

2.2.3 DSM Cost Adjustment Factor for 2021

In its original filing, Xcel proposed to increase the DSM Cost Adjustment Factor to \$0.000527/kWh for 2021. In revised response to Staff Data Request 1-1, where Xcel updated its tracker account to factor in actual expenses and revenues recorded between the initial filing and Staff's data request, Xcel identified that the rate should be revised to \$0.000528/kWh. Table 5 provides the estimated bill impacts of the proposed DSM cost adjustment factor for 2021.

Table 5: Bill Impacts of 2021 DSM Cost Adjustment Factor

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	\$52.96	\$0.000477	\$0.19	\$53.15	\$52.96	\$0.000528	\$0.21	\$53.17	\$ 0.02	0.04%
500	\$64.13	\$0.000477	\$0.24	\$64.37	\$64.13	\$0.000528	\$0.26	\$64.39	\$0.02	0.03%
600	\$75.31	\$0.000477	\$0.29	\$75.60	\$75.31	\$0.000528	\$0.32	\$75.63	\$0.03	0.04%
750	\$92.08	\$0.000477	\$0.36	\$92.44	\$92.08	\$0.000528	\$0.40	\$92.48	\$0.04	0.04%
1000	\$120.02	\$0.000477	\$0.48	\$120.50	\$120.02	\$0.000528	\$0.53	\$120.55	\$0.05	0.04%
2000	\$231.79	\$0.000477	\$0.95	\$232.74	\$231.79	\$0.000528	\$1.06	\$232.85	\$0.11	0.05%

3.0 STAFF RECOMMENDATION

For docket EL20-015, Staff makes the following recommendations:

- 1) The Commission approve Xcel's 2019 DSM tracker account;
- 2) The Commission approve the performance incentive earned in 2019;
- 3) The Commission approve Xcel's proposed DSM Plan for 2021; and
- 4) The Commission approve the 2021 DSM Cost Adjustment Factor of \$0.000528/kWh, with an effective date of January 1, 2021, and the associated tariff sheet.