


Staff Briefing Papers

Meeting Date	June 6, 2019		Agenda Item 5*
Company	Northern States Power Company d/b/a Xcel Energy (Xcel, Company)		
Docket No.	E-002/M-19-127		
	In the Matter of Northern States Power Company's 2018 Annual Revenue Decoupling Mechanism Pilot Program Report		
Issues	Should the Commission accept Xcel's annual revenue decoupling report for the period ended December 31, 2018, and approve Xcel's revenue decoupling rate adjustments?		
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 Relevant Documents	Date
Xcel Energy – 2018 Decoupling Evaluation Report (Year 3)	February 1, 2019
Minnesota Department of Commerce - Comments	April 2, 2019

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I. Statement of the Issues

Should the Commission accept Xcel's annual revenue decoupling report for the period ended December 31, 2018, and approve Xcel's revenue decoupling rate adjustments?

II. Introduction

This is the Commission's third annual review of Xcel's full revenue decoupling pilot program.

Xcel Energy and the Minnesota Department of Commerce (Department, DOC) are in agreement on recommending that the Commission approve the Company's currently proposed annual revenue decoupling rate adjustments.

Further, the Department implicitly recommended approval of Xcel's Revenue Decoupling Evaluation Report (Report) for the one year time period ending on December 31, 2018.

III. Background

A. Minn. Stat. § 216B.2412, Decoupling of Energy Sales from Revenues

According to Minn. Stat. § 216B.2412, the objective of revenue decoupling is to:

1. Reduce Xcel's disincentive to promote energy efficiency by making the Company's revenue less dependent on energy sales,
2. Achieve energy savings, and
3. Not harm ratepayers.

B. Pilot Revenue Decoupling Program

On May 8, 2015, the Commission issued its Findings of Fact, Conclusions of Law, and Order (2015 Order) in Xcel's 2013 General Rate Case.¹ In this Order, the Commission authorized, effective January 1, 2016, a three year pilot "full" revenue decoupling mechanism (RDM) that applies to the Residential, Residential with Space Heating and Small Commercial and Industrial (Non-Demand) Classes. To coordinate with rates approved in Xcel's 2015 General Rate Case (Docket No. E-002/GR-15-826) the original three year program was extended for a fourth year and will run through December 31, 2019.

Among the 2015 Order's RDM requirements, the Commission instructed Xcel to file an annual revenue decoupling report by February 1st of each year. This is the Company's third annual report encompassing the period of January 1 to December 31, 2018.

¹ Docket No. E-002/GR-13-868.

IV. Parties' Comments

A. Xcel's Annual Decoupling Report

Xcel's revenue decoupling program is a four year pilot for residential and small business customers and began with the 2016 calendar year and will terminate at the end of Xcel's current four-year multi-year rate plan unless extended. The customers subject to Xcel's RDM consist of three classes for which the largest share of fixed costs are recovered through volume-based rates: 1) residential non-space heating, 2) residential space heating, and 3) C&I non-demand.

The revenue decoupling mechanism (RDM) accounts for all differences between approved sales and actual sales, including those caused by weather. The RDM adjustment is calculated by subtracting actual electric revenue for each customer class from the revenue approved by the Commission for that customer class. This may result in a surcharge (actual revenue below approved revenue) or a credit (approved revenue below actual revenue). Any surcharge is capped, by class, at three percent. This calculation is performed once per year and the resulting adjustments are reflected on customer bills beginning the following April and remain in effect for a 12 month period.

Due to a warmer than normal summer, for the 2018 report year, the overall RDM calculation resulted in approximately \$13.0 million of revenues collected above the 2016 baseline.² The calculations resulted in credits for all three customer classes.

**Table 1: Total Over- or Under-Collection of Allowed Revenues by Customer Class³
2018 Actual Sales and Actual Customer Counts**

RDM Class	Total RDM Surcharge/ (Refund)	(\$ Millions)			Avg. Monthly Customer Surcharge/ (Refund)	RDM Rate (\$/kWh) April 2019 – March 2020
		Carry-Over Balance ⁴	Estimated Surcharge Cap	2018 Class Impact ⁵		
Residential	(\$12.5)	(\$0.7)	\$26.2	(\$13.2)	(\$0.98) ⁶	(\$0.001625)
Residential with Space Heating	(\$0.3)	(\$0.1)	\$0.9	(\$0.4)	(\$0.99) ⁷	(\$0.001056)

² Warmer than normal summer weather results in *more* electricity sales.

³ Northern States Power Company's 2018 Annual Revenue Decoupling Mechanism Pilot Program Report (Year 3), Page 6, February 1, 2019

⁴ Carry-over (over/under-collection) balance from 2017 decoupling deferrals.

⁵ Includes the Total RDM credit and carry-over balance.

⁶ Based on average usage per customer of 604 kWh per month.

⁷ Based on average usage per customer of 935 kWh per month.

RDM Class	(\$ Millions)			Avg. Monthly Customer Surcharge/ (Refund)	RDM Rate (\$/kWh) April 2019 – March 2020	
	Total RDM Surcharge/ (Refund)	Carry-Over Balance ⁴	Estimated Surcharge Cap			2018 Class Impact ⁵
Small Commercial Non-Demand	(\$0.2)	(0.0)	\$2.5	(\$0.2)	(0.18) ⁸	(\$0.000213)
Total	(\$13.0)	(\$0.8)		(\$13.8)		

These refund amounts include the impacts from the 2017 Tax Cuts and Jobs Act (TCJA), which went into effect on December 22, 2017 – and reduced the corporate tax rate beginning in 2018 from a maximum of 35 percent to 21 percent. In 2018, the Commission initiated Docket No. E,G-999/CI-17-895 to investigate the effects of the TCJA, and issued its Order on December 5, 2018 – requiring utilities to return to ratepayers the savings resulting from the TCJA. The Order further required that all utilities:

- Reflect the TCJA’s changes back to January 1, 2018, in all relevant compliance filings, including compliance filings for –
- Net operating losses,
 - For utilities with revenue decoupling, the periodic revenue decoupling adjustments, and
 - For Xcel, sales true-up calculations.

Table 2 below shows the effects of the TCJA on the 2018 decoupling results.

Table 2: 2018 TCJA Impacts on Decoupling (\$ Thousands)

RDM Class	RDM w/o TCJA	RDM w/ TCJA ⁹	Difference
Residential	(\$13,341.2)	(\$12,542.0)	(\$799.2)
Residential with Space Heating	(\$309.8)	(\$290.8)	(\$19.0)
Small Commercial Non-Demand	(\$196.6)	(\$184.6)	(\$12.0)
Total	(\$13,847.6)	(\$13,017.4)	(\$830.2)

To recognize the TCJA’s impact, Xcel reduced the 2018 base rate energy charge revenues, which are used to calculate the FRC (fixed revenue per customer) and FEC (fixed energy charge).

⁸ Based on average usage per customer of 838 kWh per month.

⁹ Does not include carry-over balances from 2017 deferrals.

Table 3 below shows a summary of revenue impacts under no RDM, partial RDM, and full RDM scenarios.

**Table 3: 2018 Revenue Impacts under RDM Scenarios
(\$ Thousands)**

Customer Class	No RDM	Partial RDM	Full RDM ¹⁰
Residential	\$0.0	\$26,210.4	(\$12,542.0)
Residential with Space Heating	\$0.0	\$925.6	(\$290.8)
Small Commercial Non-Demand	\$0.0	\$1,179.8	(\$184.6)
Total	\$0.0	\$28,315.8	(\$13,017.4)

Note: (Refund) or Surcharge

In terms of energy savings, Xcel stated that preliminary results from its 2018 portfolio of CIP programs showed positive results by saving approximately 666 million kWh¹¹ or 2.32 percent of sales. This represents 153 percent of Xcel’s approved energy savings goal of 434 million kWh.¹²

Below is a table listing Xcel’s 2017 CIP programs.

Business	Residential
Business New Construction	Efficient New Home Construction
Commercial Efficiency	Energy Efficient Showerheads
Commercial Refrigeration Efficiency	Energy Feedback
Computer Efficiency	Home Energy Squad
Cooling Efficiency	Home Lighting
Custom Efficiency	Insulation Rebate
Data Center Efficiency	Refrigerator Recycling
Efficiency Controls	Residential Cooling
Fluid Systems Optimization	Residential Heating (Heating Rebate)
Foodservice Equipment	School Education Kits
Heating Efficiency	Water Heater Rebate
Lighting Efficiency	Whole Home Efficiency

¹⁰ Does not include carry-over balances from 2017 deferrals.

¹¹ The 666 million kWh is the annual savings from measures installed in 2018. However, the actual impact on sales in 2018 is approximately half of this, assuming the measures are installed at a constant pace throughout the year.

¹² Achievement results based on the CIP standard for energy savings as defined in Minn. Stat. § 216B.241, subd. 1a(b).

Business	Residential
Motor and Drive Efficiency	Residential Saver’s Switch
Multi-Family Building Efficiency	Consumer Education
Process Efficiency	Home Energy Audit
Recommissioning	Residential Lamp Recycling
Self-Direct	Low Income
Turn Key Services	Home Energy Savings
Saver’s Switch for Business	Low-Income Home Energy Squad
Electric Rate Savings	Multi-Family Energy Savings
Business Education	
Small Business Lamp Recycling	

According to the Company, sales are influenced by growth in their customer base and customer operations, actions their customers take that impact their usage, the economy, and most greatly, the weather.

Weather conditions in calendar-year 2018 were generally cooler than normal in winter and warmer than usual in the summer. Winter weather was 6.9 percent cooler than the baseline year normal, according to Heating Degree Days (HDD), and this would tend to result in *more* electricity sales than normal. Summer weather was 39.8 percent warmer than usual, as measured by a Temperature Humidity Index (THI) and also would tend to result in *more* electricity sales than normal.

The 2018 weather impacts accounted for about \$42.9 million in credits to all RDM customer classes, while the reductions in sales accounted for about \$29.9 million, netting in a credit of approximately \$13.0 million.

B. Department of Commerce - Comments

The Department’s analysis of Xcel’s 2018 Annual Report includes a review of:

- Xcel’s ability to surcharge customers for 2018 deferrals
- Xcel’s compliance with Commission reporting requirements
- Xcel’s 2018 Conservation Improvement Program (CIP) achievements
- Xcel’s 2018 deferral calculation

1. Xcel’s Ability to Surcharge Customers

The Commission’s 2015 Order stated that Xcel is prohibited from making an upward rate adjustment through revenue decoupling following a year where it fails to achieve energy savings equal to 1.2 percent of its retail sales. The Department noted that, although Xcel’s 2018

CIP Status Report had not been evaluated, the Company claimed first year energy savings of over 680 million kWh or approximately 2.32 percent of retail sales. Therefore, the Department concludes that Xcel is able to surcharge its applicable customers through its RDM Rider beginning in 2019.

2. Xcel's Reporting Requirements

Order Point 40e of the Commission's May 8, 2015 Order requires annual reporting by February 1 of each year before any application of an RDM adjustment factor on April 1. This report shall include the following information:

- i. Total over- or under-collection of allowed revenues by customer class or group;
- ii. Total collection of prior deferred revenue;
- iii. Calculations of the RDM deferral amounts;
- iv. The number of customer complaints;
- v. The amount of revenues stabilized and how the stabilization impacted Xcel's overall risk profile;
- vi. A comparison of how revenues under traditional regulation would have differed from those collected under partial and full decoupling;
- vii. A description of all new and existing demand-side-management programs and other conservation initiatives Xcel had in effect for the year covered by the report;
- viii. A description of the effectiveness of all new and existing demand-side management programs and other conservation initiatives Xcel had in effect for the year covered by the report; and
- ix. Other factors that may have contributed to a decline in energy consumption, including weather and the economy.

The Department concluded that Xcel complied with these reporting requirements.

3. Xcel's 2018 Energy Savings

The Department noted that Minnesota Statutes § 216B.241, Subdivision 3 states, in part:

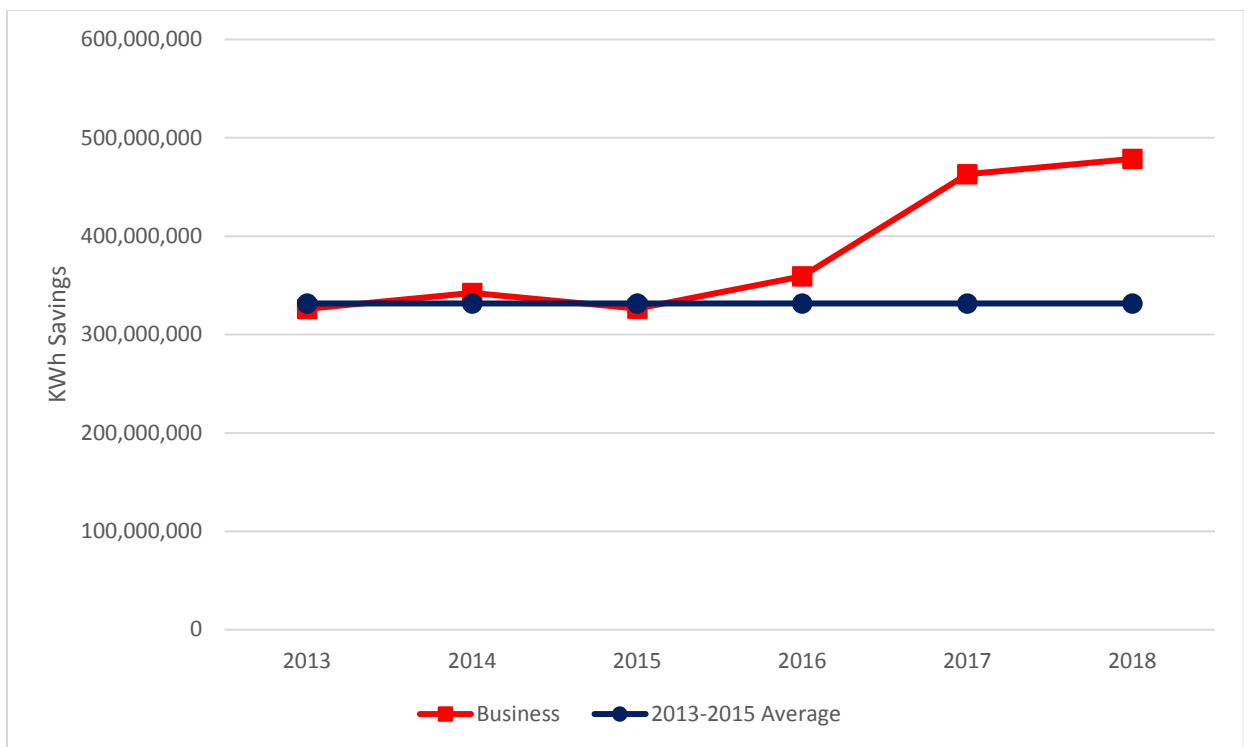
Each pilot program must utilize the criteria and standards established in subdivision 2 and be designed to determine whether a rate-decoupling strategy achieves energy savings.

Table 4, on the next page, shows the Department's comparison between Xcel's 2017 CIP (total rather than on-peak) energy saving achievements with the three years of its pre-decoupling achievements.

Table 4: Xcel’s 2018 CIP Achievements Compared to Pre-Decoupling (2013-2015) CIP Achievements (in kWh)¹³

	Business	Residential	Total
2013	326,172,990	167,072,321	493,245,311
2014	342,313,567	136,265,278	478,578,845
2015	326,406,491	173,987,045	500,393,536
2013-2015 Average	331,631,016	159,108,215	490,739,231
2016	359,412,589	191,286,634	550,699,223
2017	463,172,254	192,898,330	656,070,584
2018	478,637,852	201,810,597	680,448,449
2018 % Difference from 2013-2015 Average	44%	27%	39%
2018 % Difference from 2017	3%	5%	4%

Figure 1: Comparing Xcel’s 2018 Business First-Year Energy Savings to Average Pre-Decoupling (2013-2015) Business First-Year Energy Savings¹⁴



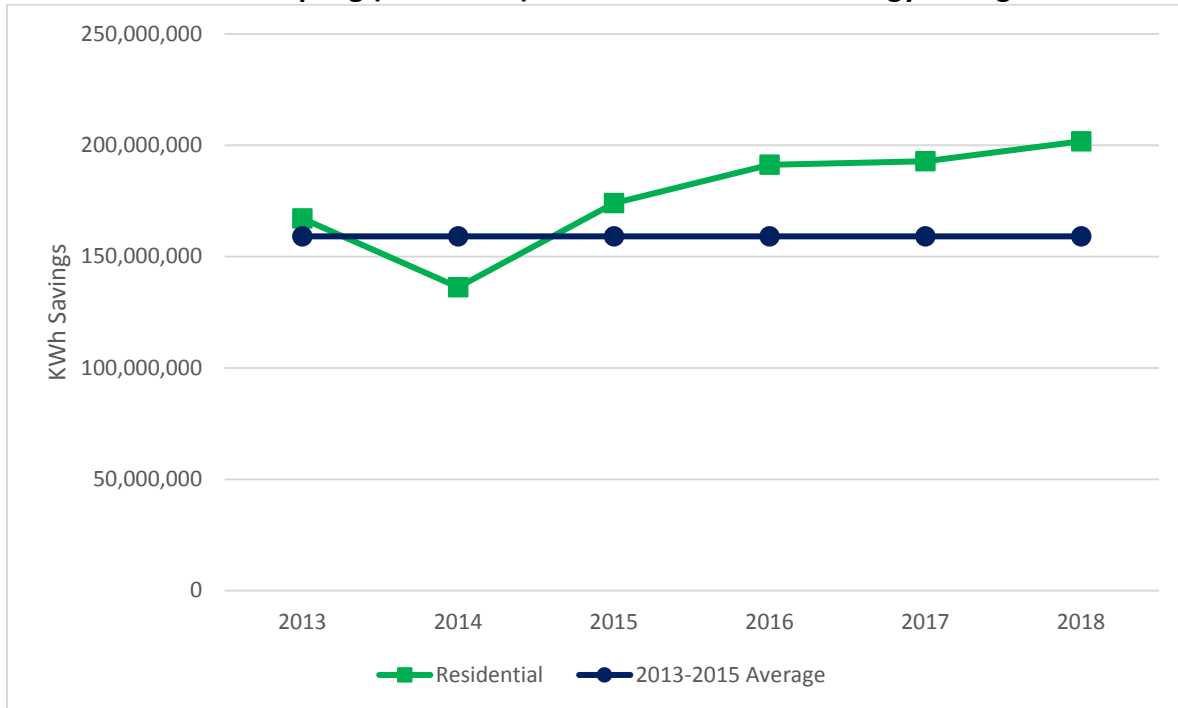
As can be seen in Table 4 and Figure 1, above, the Company’s business segment energy savings were 3 percent higher than its 2017 savings and 44 percent higher than the average of its 2013-2015 business segment energy savings. Because Xcel did not provide separate CIP

¹³ Source: Docket E-002/M-19-127 Minnesota Department of Commerce – Comments, Page 7, Table 5, April 2, 2019.

¹⁴ Source: Docket E-002/M-19-127 Minnesota Department of Commerce – Comments, Page 8, April 2, 2019.

achievements for its non-demand-metered Small General Service customers, this comparison is only for the larger Business segment group.

Figure 2: Comparing Xcel’s 2018 Residential First-Year Energy Savings to Average Pre-Decoupling (2013-2015) Residential First-Year Energy Savings¹⁵



In comparing Xcel’s Residential customer group energy savings, Table 4 and Figure 2 show that 2018 savings were 5 percent higher than 2017 and 27 percent higher than the average 2013-2015 pre-decoupling energy savings.

The Department concluded that, due to other state policies such as the Shared Savings DSM financial incentive program, these increases in energy savings, while commendable, cannot be directly attributed to the decoupling pilot program.

4. Xcel’s 2017 Deferral Calculation

As shown in Table 5, on the next page, due to over-collection of revenues in 2018, Xcel’s decoupling deferral calculations resulted in refunds for each of its decoupling customer classes for the period April 1, 2019 through March 31, 2020. The Department concluded that Xcel correctly calculated its RDM factors.

¹⁵ Source: Docket E-002/M-19-127 Minnesota Department of Commerce – Comments, Page 8, April 2, 2019.

Table 5: Xcel's Calculation of its April 2018-March 2019 RDM Factors¹⁶

	Residential Without Space Heating (\$/kWh)	Residential With Space Heating (\$/kWh)	Small General Service (non-demand) (\$/kWh)	Total
Under(Over) Collection in 2017	(\$12,542,022)	(\$290,755)	(\$184,588)	(\$13,017,365)
Carry Over Balance	(\$684,676)	(\$139,710)	\$166	(\$824,220)
Total	(\$13,226,698)	(\$430,465)	(\$184,422)	(\$13,841,585)
April 2018-March 2019 Sales	\$8,137,868,546	\$407,767,340	\$864,133,606	
RDM Factor – Surcharge/(Refund)	(\$0.001625)	(\$0.001056)	(\$0.000213)	

5. Department Recommendations

In conclusion, the Department recommended that the Commission approve Xcel's RDM factors as shown in Table 5 above, for implementation April 1, 2019 through March 31, 2020. The Department also tacitly recommended approval of Xcel's Revenue Decoupling Evaluation Report for the year ending on December 31, 2018.

V. Staff Analysis

In general, Staff agrees with the Department's analysis and supports their recommendations. However, Staff does have comments on three additional issues.

A. Filing in Separate Dockets

Staff notes that the Company complied with Ordering Point No. 3 of the Commission's February 6, 2019 Order¹⁷ by filing this Decoupling Annual Report in a separate docket.

B. Full-Decoupling Compared to Partial Decoupling

Staff notes that, in addition to the full-decoupling calculations, Xcel has been ordered to provide, as part of the Report and for informational purposes only, partial-decoupling calculations. Partial decoupling is based on actual sales that are weather-normalized.

As shown in Tables 6 and 7, had Xcel's program been a partial decoupling pilot, the decoupling adjustments would have resulted in surcharges to all classes instead of refunds. The total impact would have been \$41.0 million higher, including \$38.8 million higher for the residential class.

¹⁶ Source: Docket E-002/M-19-127 Minnesota Department of Commerce – Comments, Page 9, April 2, 2019.

¹⁷ Docket E-002/GR-13-868; E-002/GR-15-826 Order, February 6, 2019

Table 6: Comparison, Xcel's 2018 Full-Decoupling and Partial-Decoupling Amounts¹⁸

Class	Full Decoupling, in \$000	Partial Decoupling, in \$000	Difference
Residential	(\$12,542)	\$26,210	\$38,752
Residential with Space Heating	(\$291)	\$926	\$1,216
Small C&I (Non-Demand)	(\$185)	\$1,180	\$1,364
Total	(\$13,017)	\$28,316	\$41,333

Table 7: Comparison, Xcel's 2018 Full-Decoupling and Partial-Decoupling RDM Factors¹⁹

Class	Full Decoupling	Partial Decoupling	Difference
Residential	(\$0.001541)	\$0.003221	\$0.004762
Residential with Space Heating	(\$0.000713)	\$0.002270	\$0.002983
Small C&I (Non-Demand)	(\$0.000214)	\$0.001365	\$0.001579

Table 8, below, shows the average customer impact per month on customer billings of full decoupling versus partial decoupling. As shown, partial decoupling would have resulted in significant surcharges compared to the full decoupling refunds.

Table 8: Comparison, Xcel's 2018 Full-Decoupling and Partial-Decoupling RDM Effect on Average Customer Monthly Billing¹⁹

Class	Full Decoupling	Partial Decoupling	Difference
Residential ¹⁹	(\$0.93)	\$1.89	\$2.83
Residential with Space Heating ²⁰	(\$0.67)	\$1.80	\$2.47
Small C&I (Non-Demand) ²¹	(\$0.18)	\$1.14	\$1.32

Table 9, below, shows the 2018 impact of the Tax Cuts and Jobs Act on Xcel's revenue decoupling. While the percentage difference, by customer class varies, overall it amounts to an approximate 6% decrease.

¹⁸ Note: Decoupling amounts only, without Carry-Over Balance from previous period.

¹⁹ Based on average usage per customer of 604 kWh per month.

²⁰ Based on average usage per customer of 935 kWh per month.

²¹ Based on average usage per customer of 838 kWh per month.

**Table 9: 2018 TCJA Impacts on Decoupling
(\$ Thousands)**

RDM Class	RDM w/o TCJA	RDM w/TCJA ²²	Difference	% Difference
Residential	(\$13,341.2)	(\$12,542.0)	(\$799.2)	5.990%
Residential with Space Heating	(\$309.8)	(\$290.8)	(\$19.0)	6.143%
Small Commercial Non-Demand	(\$196.6)	(\$184.6)	(\$12.0)	6.095%
Total	(\$13,847.6)	(\$13,017.4)	(\$830.2)	5.995%

Table 10 below, shows the TCJA impact on the allowed revenue for decoupling. Absent the TCJA, Xcel’s allowed revenue would have been \$52.8 million higher and the decoupling adjustment refund would have been \$0.8 million higher. In other words, ratepayers would have paid an additional \$52.0 million.²³

**Table 10: 2018 TCJA Impacts on Decoupling Allowed Revenue
(\$ Thousands)**

RDM Class	Without TCJA	With TCJA	Difference	% Difference
Residential	778,261.2	731,483.8	46,777.4	6.395%
Residential with Space Heating	27,303.3	25,640.7	1,662.6	6.484%
Small Commercial Non-Demand	70,872.3	66,590.9	4,281.4	6.429%
Total	876,436.8	823,715.4	52,721.4	6.400%

C. Should Xcel’s pilot revenue decoupling program continue past the December 31, 2019 termination date?

Xcel’s program is designed to coincide with the four-year term of its multiyear rate plan. Xcel has indicated that it intends to submit a petition for another multi-year rate plan in November 2019. At some point this revenue decoupling will need to be evaluated and allowed to continue as is or with modifications or allowed to lapse. Xcel’s upcoming multiyear rate plan may be the most appropriate docket to evaluate Xcel’s program, however, a decision and final rates in that docket may not occur until 2021. If the program is to continue seamlessly, a request from Xcel to continue the program will be needed from Xcel before the program lapses.

Regardless, staff believes that part of the evaluation of Xcel’s revenue decoupling program should include an assessment of whether revenue decoupling has worked for Xcel. It appears that Xcel is still interested in new load, for example, Google, Electric Vehicles, and beneficial electrification in general. The Commission may want to consider whether revenue decoupling

²² Does not include carry-over balances from 2017 deferrals.

²³ \$52.8 million - \$0.8 million = \$52.0 million.

is working to help change the Company's "mind-set" by removing the disincentive to promote energy efficiency and achieve energy savings.

VI. Decision Alternatives

2019 Annual Revenue Decoupling Evaluation Report (Pilot Program Year 3)

1. Accept Xcel's 2018 (Year 3) revenue decoupling evaluation report. (Xcel, DOC) OR
2. Reject Xcel's 2018 (Year 3) revenue decoupling evaluation report.

2019 Annual Revenue Decoupling RDM Factors (Pilot Program Year 3)

3. Approve Xcel's revenue decoupling rate adjustment factors. (Xcel, DOC) OR
4. Reject Xcel's revenue decoupling rate adjustment factors and determine alternative adjustment factors.

Evaluation and Extension of Xcel's Revenue Decoupling Pilot Program

5. Request Xcel and interested parties evaluate Xcel's revenue decoupling program and make a recommendation on whether the program should be extended in Xcel's next rate case. OR
6. Request Xcel and interested parties evaluate Xcel's revenue decoupling program and make a recommendation on whether the program should be extended in Xcel's next annual revenue decoupling evaluation report.