MINNESOTA
PUBLIC UTILITIES COMMISSION

Staff Briefing Papers

Meeting Date	March 5, 2019		Agenda Item **6
Company	Otter Tail Power Company		
Docket No.	**E-017/GR-15-1033**		
	In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Service in Minnesota Docket No. E-017/GR-15-1033 Compliance Filing – Decoupling Report		
Issues	1. Does Otter Tail's March 30, 2018 Decoupling Report comply with the Commission's May 1, 2017 Order? 2. Has Otter Tail's Decoupling Report provided enough historical analysis to assess ratepayer impact had decoupling been in place? 3. Should the Commission order implementation of a decoupling pilot for Otter Tail? 4. If the Commission orders implementation, what type of decoupling pilot should be implemented, what customer classes should be included and when should decoupling go into effect? 5. Are there other issues or concerns related to this matter?		
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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

✓ **Relevant Documents**	**Date**
Otter Tail Power – Decoupling Report Compliance Filing	March 30, 2018
Public Utilities Commission – Notice of Comment Period	April 25, 2018
Otter Tail Power – Supplemental Compliance Filing	June 20, 2018
Department of Commerce - Comments	June 25, 2018
Fresh Energy - Comments	June 25, 2018
Otter Tail Power – Reply Comments	July 24, 2018

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I. Statement of the Issues

Does Otter Tail's March 30, 2018 Decoupling Report comply with the Commission's May 1, 2017 Order?

Has Otter Tail's Decoupling Report provided enough historical analysis to assess ratepayer impact had decoupling been in place?

Should the Commission order implementation of a decoupling pilot for Otter Tail?

If the Commission orders implementation, what type of decoupling pilot should be implemented, what customer classes should be included and when should decoupling go into effect?

Are there other issues or concerns related to this matter?

II. Background

In Otter Tail Power Company's (Otter Tail Power, Otter Tail or the Company) 2015 general rate case,[1] Fresh Energy witnesses proposed a revenue decoupling mechanism (RDM) for the Company's residential, farm and general service customers to eliminate Otter Tail's disincentive to "embrace efficient demand side management ("DSM"), distributed generation and storage ("DGS"), and other kinds of distributed energy resources ("DERs")".[2]

On May 1, 2017, the Minnesota Public Utilities Commission, in its Order, accepted Otter Tail's offer to research alternative rate design, and to work with stakeholder groups to develop an alternative rate design.[3] Specifically, the Company "shall prepare a report analyzing the potential customer impacts of Fresh Energy's proposed revenue-decoupling mechanism for the Residential, Farm, and Small General Service rate classes".[4] This report shall include at least the following:

- Comparison of actual 2016 and 2017 revenues to 2016 Test Year baseline revenues (with baseline revenue per customer calculated using the final rates, sales, and customer counts of this rate case); and

- Comparison of actual 2014 and 2015 revenues to 2009 baseline revenues (baseline revenue per customer calculated using the final rates, sales, and customer counts from Otter Tail's 2010 Rate Case (Docket No. E-017/GR-10-239)).

[1] Docket No. E-017/GR-15-1033.

[2] This docket, Attachment 3, Direct Testimony of Mark Lowry and Kaja Rebane, page 3.

[3] This docket, *Findings of Fact, Conclusion and Order*, Ordering Point 26, May 1, 2017, page 70.

[4] Ibid.

Further, Otter Tail shall file this report by April 1, 2018 and "[i]nterested parties will be invited to file comments on the report addressing identified customer impacts, potential strategies for implementing a decoupling mechanism for Otter Tail, and other matters."[5]

On March 30, 2018 Otter Tail Power submitted its "Decoupling Agreement, Analysis and Report".

On April 25, 2018 the Commission issued its "Notice of Comment Period", which posed the question of what action the Commission should take regarding possible implementation of a revenue decoupling mechanism for Otter Tail Power.

On June 20, 2018, in response to questions from the Department of Commerce (Department) about the decoupling analysis report, Otter Tail Power submitted a Supplemental Compliance Filing. To match the Commission's May 1, 2017 Order, this filing revised comparison periods in the original report but they did not result in any changes to the original report's conclusions.

III. Otter Tail Power's Decoupling Agreement, Analysis and Report.

A. Introduction

The Company's report contains the examination of the 2016 and 2009 test years ("base years") against actual results of Company operations for select years outlined in the rate case order. Additionally, Otter Tail chose to analyze all the years between 2009 and 2017. The Company also investigated national decoupling examples from companies that possess certain similarities to Otter Tail Power. Otter Tail then evaluated the proposed decoupling model against criteria defined by the Commission.[6]

B. Examination of National Decoupling Examples

Otter Tail selected the following companies' revenue decoupling experiences to study as they most closely resembled Otter Tail Power in either business operations or the state where business is conducted.

- Idaho Power Company
- Portland General Electric
- Northern States Power Company – Minnesota
- CenterPoint Energy
- Minnesota Energy Resources Corporation

After examining the individual decoupling cases, Otter Tail summarized the lessons it learned, as follows:

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[5] Ibid.

[6] Docket No. E,G-999/CI-08-132, *Order Establishing Criteria and Standards to be Utilized in Pilot Proposals for Revenue Decoupling*, June 19, 2009

First, determine the reason for implementing decoupling. Idaho Power demonstrated with the right reasons and cause for action, decoupling can be successfully implemented. Second, make sure all stake holders want decoupling and understand what the impact will be. The case of the Oregon Public Utilities Commission and Portland General Electric illustrated what happens if all parties are not in agreement on how decoupling can be successful. Third, have the proper starting point as it relates to sales and associated revenues. From Xcel Energy, Otter Tail observed how representative test year determinants can facilitate the proper level of revenue recovery. Fourth, the company needs to have the right mechanism for both the customer and the company. CenterPoint's case illustrates how important the form [and type of revenue decoupling mechanism] can be in facilitating proper function. Finally, Otter Tail noted that if all these components are present and properly implemented, decoupling should present a relatively innocuous and benign change to customers and the company.[7]

C. Evaluating the Fresh Energy Proposal According to the Minnesota Public Utility Commission's Order in Docket No. E,G-999/CI-08-132

Otter Tail Power agreed to look at the revenue per customer model that Dr. Mark Lowry of the Pacific Economics Group Research LLC proposed in the Company's last rate case. Otter Tail evaluated the results from this model based on the criteria developed by the Commission in the docket captioned above, and summarized in Table 1 below:

Table 1: Revenue Decoupling Evaluation

Criteria	***Response***
1. Purpose	The purpose of the mechanism is to remove the Company's disincentive to promote conservation and energy efficiency for select customer classes.
2. Form	The form of the proposed revenue decoupling is the full decoupling revenue-per-customer model that was approved in Xcel Energy's pilot program. No customer charges will be included in the revenue collection and base rate collection of fuel and Conservation Improvement Program (CIP) charges will be removed. Full decoupling removes the impact of weather on sales and use per customer.
3. Cost of Capital	Based on a "mature, multi-decade record of testimony related to the cost of capital for decoupled utilities", Otter Tail Power advocates for a negligible impact to the cost of capital.[8]

[7] This docket, *Supplemental Compliance Filing*, June 20, 2018, page 7

[8] This docket, *Supplemental Compliance Filing*, June 20, 2018, page 13

4. Classes Included	Using the model supplied by Fresh Energy, Otter Tail is applying decoupling to residential, farm, and general services (excluding large general services) classes.
5. Mechanics	At the end of a 12-month period, the total revenue deferral for each customer group would be divided by the forecast of sales to that group for the coming year. The resulting charge would be added to or subtracted from the customer group's volumetric rate for the following 12 months. In contrast to Xcel's plan, Otter Tail's method would use calculated revenue per customer instead of per kWh; also, the Company would include the residential demand control service rate, which has a demand component, as agreed to with Fresh Energy. Decoupling adjustments would be applied in each month of the following April- March period. Otter Tail would effect decoupling by adjusting the volumetric rate on customer's bills. Decoupling would be full decoupling and an annual asymmetrical 3% rate cap would be applied to surcharges. Any residual revenue variances would be eligible for true-up in the following year. Any implementation would follow a mandatory 36-month pilot program.
6. Service Quality	Otter Tail expects no adverse impact on the quality of service provided to its customers.
7. Review	Otter Tail offers the following commentary and response to the model provided by Fresh Energy. First, a comparison of 2016 and 2017 actual results to the 2016 test year was made. Second, an evaluation of the 2014 and 2015 results to the 2009 baseline revenues is provided with commentary.
8. Pilot Implementation	Pilot implementation is not applicable because Otter Tail has not been required to institute a pilot program.

D. Evaluation Results – Caveats

Otter Tail Power believes there are four key points that should be kept in mind when evaluating the model results:

1. In comparing the results of the 2009 test year to 2009 actual, note that the 2009 test year was filed in March of 2010. The actual rates in place in 2009 were approved in the rate case filed in 2007, which has an impact on 2009 actual revenue.

2. To fully explore the historical effects, Otter Tail opted to extend the analysis for the full period from 2009 through 2017.

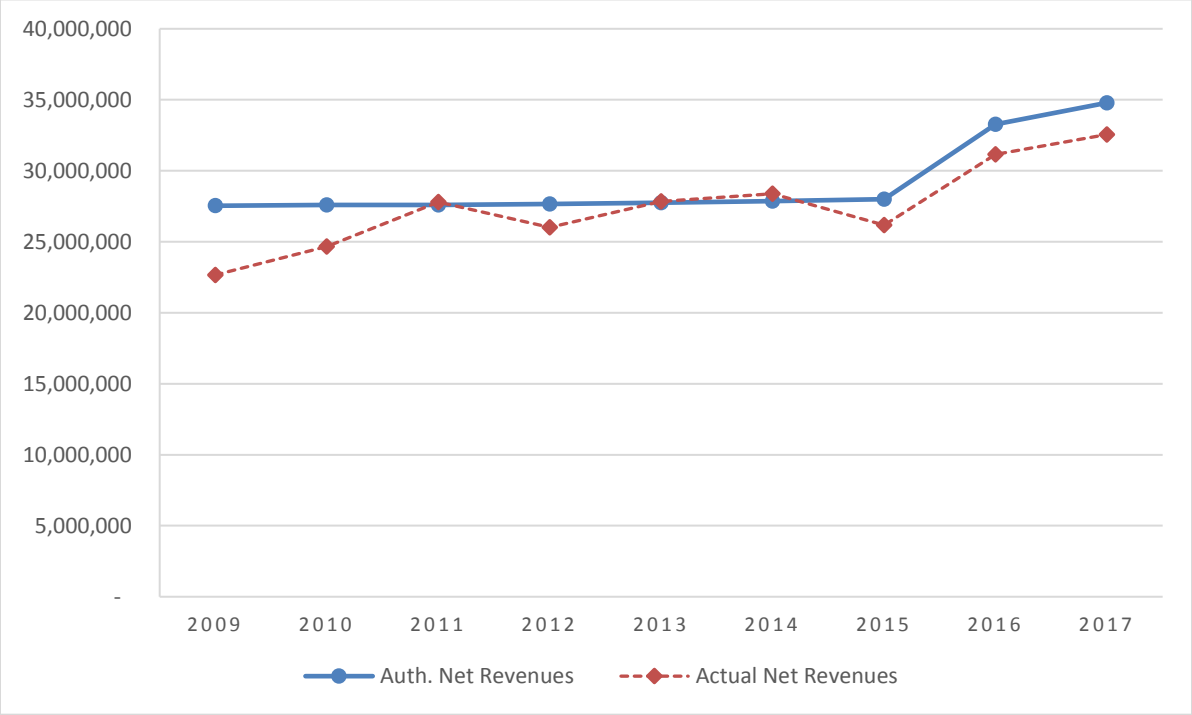
3. There was a mixture of rates in the 2009 through 2017 timeframe: final rates from the 2007 rate case, interim rates from the 2010 rate case beginning in 2010 and going through September of 2011, and interim and final rates from the 2016 rate case. Therefore, Otter Tail decided to standardize the evaluation of the model by inserting final rates into the period in which interim rates were collected.

4. Impacts from the residential demand control service rate were handled by adjusting the rate per kilo-watt hour. This way, the revenues derived from demand sales on a kilo-watt basis did not materially affect decisions reached in the evaluation.

E. Evaluation Results – Residential and Farm Service Customer Classes

Below is a graph that compares authorized net revenues to actual net revenues for the 2009 through 2017 evaluation period.

Graph 1: Residential and Farm revenues 2009 through 2017[9]

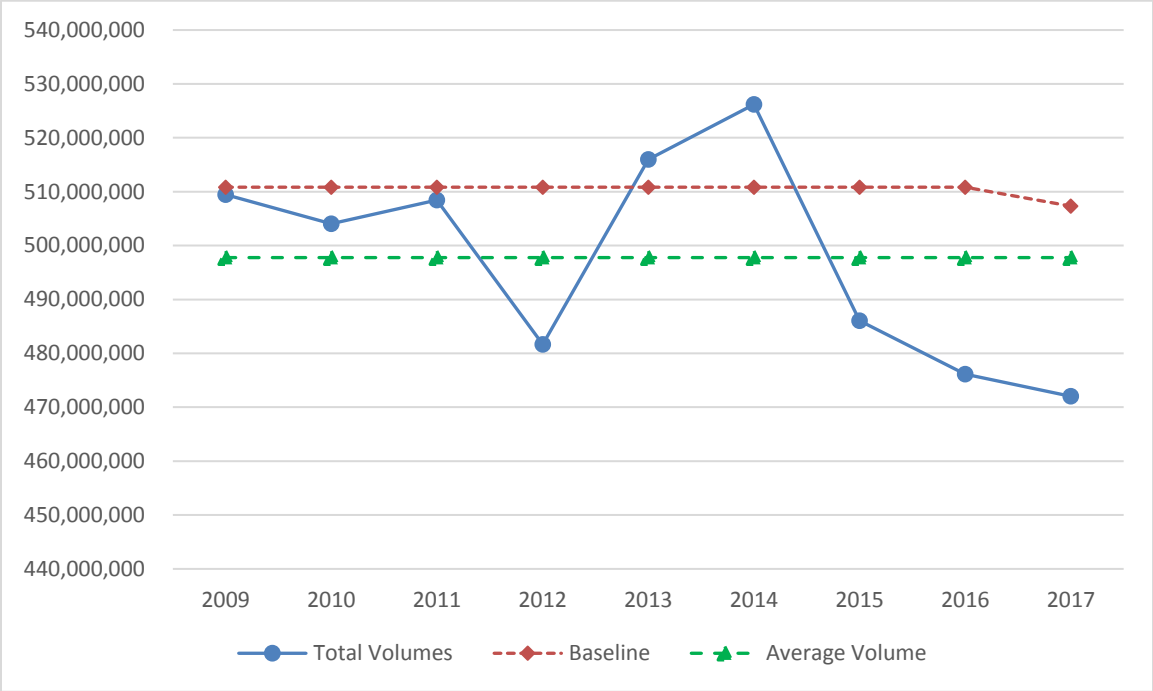


As can be seen above, authorized net revenues were almost always higher than actual net revenues during this time period.

[9] This docket, *Supplemental Compliance Filing*, June 20, 2018, page 17

The graph below shows kWh sales volumes for the entire period.

Graph 2: Residential and Farm Sales Volumes 2009 through 2017[10]

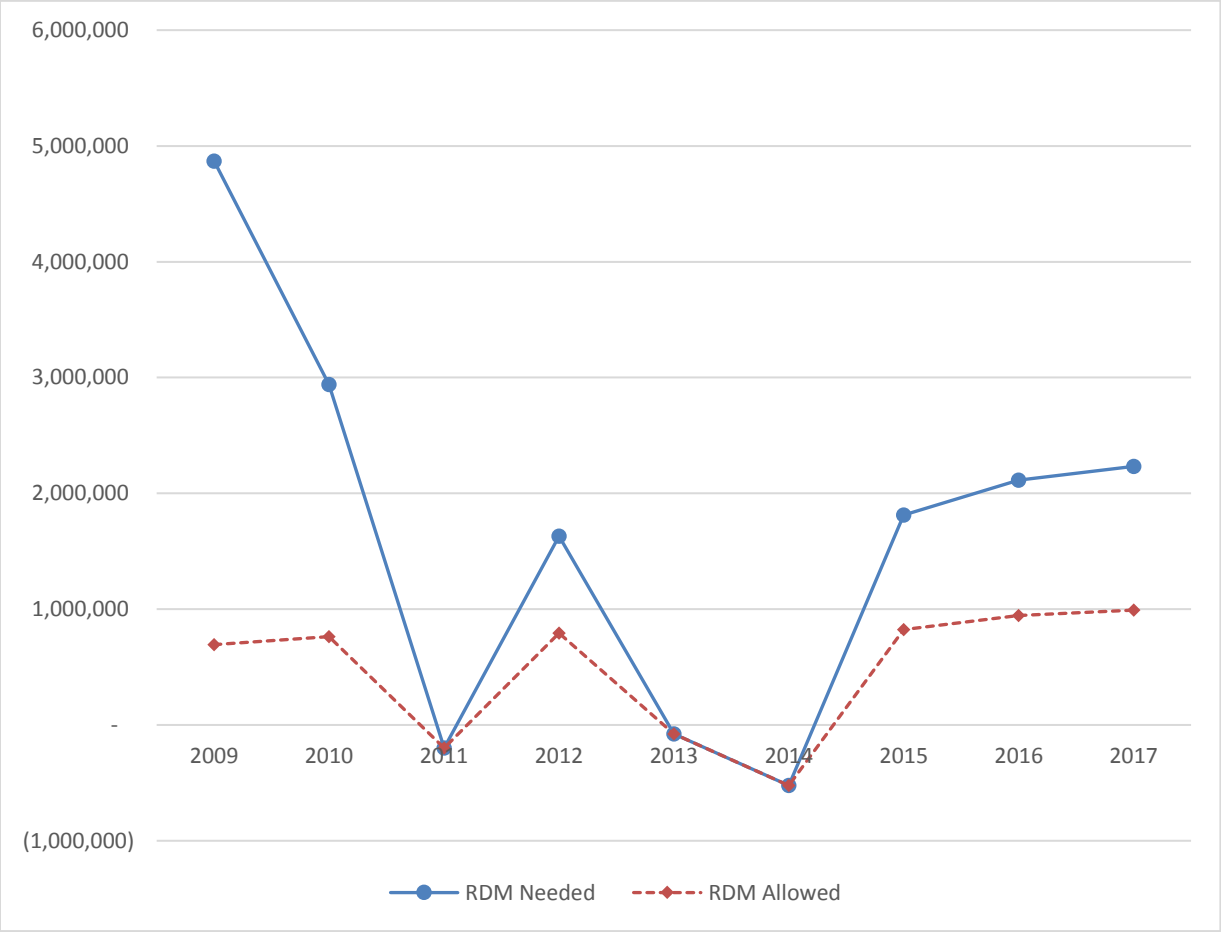


Note that the only time that actual kWh actual volumes exceeded authorized test year (baseline) sales volumes was during the polar vortex winter of 2013 through 2014.

[10] This docket, *Supplemental Compliance Filing*, June 20, 2018, page 17

It follows then, according to Otter Tail Power, that there are differences in the revenue recovery needed to be collected in future periods versus what is allowed under the model's 3% cap, as shown below in Graph 3.

Graph 3: Residential and Farm RDM deferral balance[11]



[11] Ibid, page 18

Table 2, below, shows a comparison of 2009 actual results and 2009 using actual volumes for the Residential and Farm Classes.

Table 2: Residential and Farm Classes Results

	2009	2009 Using Actual Volumes
Authorized Net Revenues	27,537,036	27,537,036
Actual Net Revenues	22,667,241	26,551,036
RDM Deferral Needed (Refund)/Collection	4,869,795	986,000
RDM Deferral Allowed (Refund)/Collection [1]	**694,933**	**782,319**
RDM Deferral Difference	4,174,862	203,681
Fcst Volumes (April - March) [2]	508,085,032	508,085,032
Needed Surcharge (Rate)	0.009585	0.001941
Allowed Surcharge (Rate)	**0.001368**	**0.001540**
Total Volumes	509,435,858	509,435,858
Total Customers(Month)	592,395	592,396
Volume per Customer	860	860
Per Customer at Needed Rate	$8.24	$1.67
Per Customer at Allowed Rate	**$1.18**	**$1.32**

Cap Calculation:		
Forecast Revenues [3]	23,164,442	26,077,300
Cap (3% of Fcst Rev)	694,933	782,319

1 A positive RDM adjustment is a customer surcharge, a negative adjustment a customer refund.

2 Forecast volumes during the RDM adjustment period is calculated as a weighted average of 9 months of the current year and 3 months of the subsequent year.

3 Forecast net revenues during the RDM adjustment period are calculated as a weighted average of 9 months in the current year and 3 months in the subsequent year.

The 2009 column shows that an under-collection of $4,869,795 would have occurred, mainly due to low sales impacted by sales levels set in the 2007 rate case. The resulting decoupling impact would be significant: the 3% cap on the allowed RDM would have resulted in a deficiency of $4,174,862. The Company would have required an RDM rate adjustment (rate increase) of $8.24 per customer to fully realize the revenue requirement for this customer class, however the per-customer rate would have been capped at $1.18.

In examining the 2009 Using Actual Volumes column, under that scenario, the Company would have been much closer to achieving the full revenue requirement, but would still be deficient by $203,681. (The Company did file a rate case in 2010.)

From the evaluation of 2009 the report goes on to examine the Residential and Farm Class RDM model for 2016 and 2017 as compared to 2016 baseline and 2015 and 2014 as compared to 2009 baseline revenues. The numerical results are shown in Table 3 below.

Table 3: Residential and Farm Classes Results

	2017	2016	2015	2014
Authorized Net Revenues	34,787,586	34,586,721	27,989,514	27,860,613
Actual Net Revenues	32,554,422	31,152,668	26,175,910	28,383,311
RDM Deferral Needed (Refund)/Collection	2,233,164	3,434,053	1,813,604	(522,698)
RDM Deferral Allowed (Refund)/Collection [1]	**991,583**	**945,093**	**822,603**	**(522,698)**
RDM Deferral Difference	1,241,581	2,488,960	991,001	-
Fcst Volumes (April - March) [2]	498,503,774	475,098,024	483,573,678	516,158,605
Needed Surcharge (Rate)	0.004480	0.007228	0.003750	(0.001013)
Allowed Surcharge (Rate)	**0.001989**	**0.001989**	**0.001701**	**(0.001013)**
Total Volumes	472,030,410	476,120,562	486,058,050	526,192,123
Total Customers(Month)	608,741	605,207	602,129	599,356
Volume per Customer	775	787	807	878
Per Customer at Needed Rate	$3.47	$5.69	$3.03	($0.89)
Per Customer at Allowed Rate	**$1.54**	**$1.57**	**$1.37**	**($0.89)**
Cap Calculation:				
Forecast Revenues [3]	33,052,751	31,503,106	27,420,099	27,831,460
Cap (3% of Fcst Rev)	991,583	945,093	822,603	834,944

1 A positive RDM adjustment is a customer surcharge, a negative adjustment a customer refund.

2 Forecast volumes during the RDM adjustment period is calculated as a weighted average of 9 months of the current year and 3 months of the subsequent year.

3 Forecast net revenues during the RDM adjustment period are calculated as a weighted average of 9 months in the current year and 3 months in the subsequent year.

Starting in 2017, the model results show a $2,233,164 deferral necessary for full revenue recovery, but the deferral is capped at $991,583 resulting in a roll forward amount of $1,241,581. Residential sales shortfalls represent much of this customer class and the RDM deferral difference. In terms of the rate impact to the customer, $1.54 per customer would be the allowed rate, while $3.47 would be required for full revenue recovery.

Regarding 2016 results, rates from the 2010 rate case were in effect from January through April 15th, so one must remember that the 3-1/2 month rate differential contributes to the RDM deferral of $3,434,054. Again, like 2017, sales volumes were lower than the test year.

In looking at the 2014-2015 periods, you can see that 2015 required an additional $1,813,604 in revenue, of which $991,001 needed to be carried forward to a future period. Due to colder weather of the 2013-2014 winter, the 2014 model resulted in a $522,698 refund to customers.

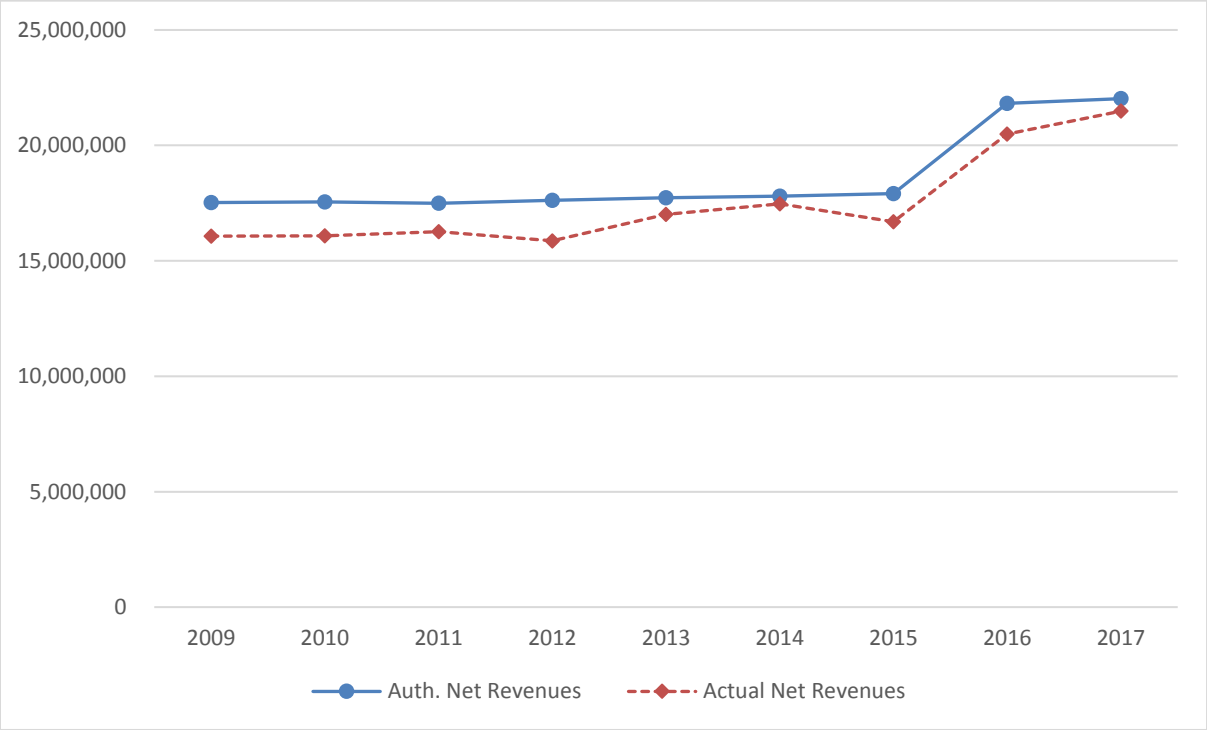
In its report, Otter Tail points out that:

> When considering the impact of sales on decoupling, one point that stands out is the importance of setting the test year sales level correctly. Having sales volumes that are too high corresponds with setting rates too low. The low rates will not allow the utility the opportunity to stay within the bandwidth because there is not enough volume to achieve the revenue requirement target leaving the utility in the position of continually requesting permission to recover the deferred amounts.[12]

F. Evaluation Results – General Service and Small General Service Classes

Below is a graph that compares authorized net revenues to actual net revenues for this customer class for the 2009 through 2017 evaluation period.

Graph 4: General Service and Small General Service Revenues 2009 through 2017[13]



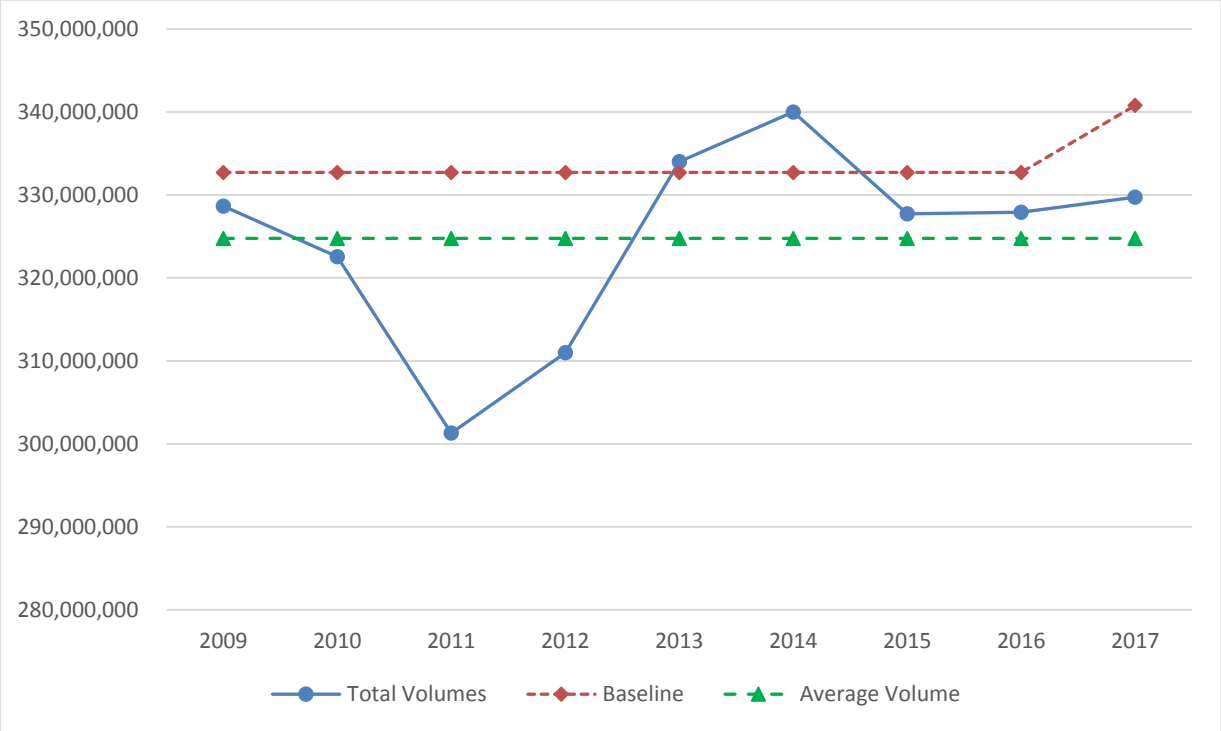
As shown above, authorized revenues were always higher than actual revenue per customer during the 2009-2017 time period.

[12] This docket, *Supplemental Compliance Filing*, June 20, 2018, page 21

[13] This docket, *Supplemental Compliance Filing*, June 20, 2018, page 25

Shown below is a graph of the customer class kilo-watt hour volumes compared to baseline sales volumes.

Graph 5: General Service and Small General Service Volumes 2009 through 2017[14]



As shown above, only during the polar vortex winter of 2013-2014 did actual volumes exceed the baseline level from the rate case test year.

[14] This docket, *Supplemental Compliance Filing*, June 20, 2018, page 25

Next is the graph showing the yearly deferral needed versus the revenue deferrals allowed, shown below.

Graph 6: General Service and Small General Service RDM deferral balance[15]

The graph above shows the differences in the revenue that would be collected in RDM rate adjustments in future periods if Otter Tail were allowed to collect from customers what was authorized in base rates (via rate case test year) versus what would be allowed with a three percent revenue cap in effect.

[15] This docket, *Supplemental Compliance Filing*, June 20, 2018, page 26

Table 4, below shows the results of the RDM model that compares actual 2009 results to the actual 2009 test year.

Table 4: General and Small General Service Classes

	2009	2009 Using Actual Volumes	
Authorized Net Revenues	17,518,777	17,518,777	[4]
Actual Net Revenues	16,068,312	16,689,482	[4]
RDM Deferral Needed (Refund)/Collection	1,450,465	829,295	
RDM Deferral Allowed (Refund)/Collection [1]	**482,176**	**496,152**	
RDM Deferral Difference	968,289	333,143	
Fcst Volumes (April - March) [2]	327,075,814	327,075,814	
Needed Surcharge (Rate)	0.004435	0.002535	
Allowed Surcharge (Rate)	**0.001474**	**0.001517**	
Total Volumes	328,661,035	328,661,035	
Total Customers(Month)	124,646	124,646	
Volume per Customer	2,637	2,637	
Per Customer at Needed Rate	$11.69	$6.68	
Per Customer at Allowed Rate	**$3.89**	**$4.00**	

Cap Calculation:		
Forecast Revenues [3]	16,072,531	16,538,400
Cap (3% of Fcst Rev)	482,176	496,152

1 A positive RDM adjustment is a customer surcharge, a negative adjustment a customer refund.

2 Forecast volumes during the RDM adjustment period is calculated as a weighted average of 9 months of the current year and 3 months of the subsequent year.

3 Forecast net revenues during the RDM adjustment period are calculated as a weighted average of 9 months in the current year and 3 months in the subsequent year.

4 These figures are imputed from Otter Tail's Table 6 on page 28

2009 results show an under-collection of $1,450,465. According to Otter Tail, this deficiency was primarily related to 2009 rates being too low because they were still being impacted by the 2007 rate case. Final rates were not in use until February 2009 and interim rates were still in use in January.

The decoupling impact to the Company for this customer class was material. Customers were protected by the 3% cap resulting in a revenue adjustment of $482,176. However, the sales shortfall and resulting revenue impact to the Company was three times greater than this, at $1,450,465. The Company would have required a per customer rate increase of $11.69 to fully achieve the rate case test year revenue requirement because the customer RDM rate adjustment would have been capped at $3.89 per customer.

Looking at the column '2009 Using Actual Volumes', it appears the Company achieved a marginally better result. However, $333,142 would have been deferred to a future period, while the RDM collection needed of $829,295 was one and two-thirds times larger than the allowed revenue cap of $496,152. Again, OTP believes this confirms that the Company needed to file a rate case in 2010.

Table 5, below, shows the results from comparing 2016 and 2017 to 2016 Test Year baseline and 2015 and 2014 compared to 2009 baseline for the General and Small General Service Classes.

Table 5: General and Small General Service Classes

	2017	2016	2015	2014
Authorized Net Revenues	22,024,890	21,825,504	17,916,528	17,800,014
Actual Net Revenues	21,483,333	20,484,321	16,695,329	17,472,852
RDM Deferral Needed (Refund)/Collection	541,557	1,341,183	1,221,199	327,162
RDM Deferral Allowed (Refund)/Collection [1]	**541,557**	**622,022**	**529,277**	**327,162**
RDM Deferral Difference	-	719,161	691,922	-
Fcst Volumes (April - March) [2]	326,801,503	328,370,986	327,784,760	336,945,765
Needed Surcharge (Rate)	0.001657	0.004084	0.003726	0.000971
Allowed Surcharge (Rate)	**0.001657**	**0.001894**	**0.001615**	**0.000971**
Total Volumes	329,747,999	327,911,981	327,742,353	340,013,569
Total Customers(Month)	129,759	128,580	127,476	126,647
Volume per Customer	2,541	2,550	2,571	2,685
Per Customer at Needed Rate	$4.21	$10.42	$9.58	$2.61
Per Customer at Allowed Rate	**$4.21**	**$4.83**	**$4.15**	**$2.61**
Cap Calculation:				
Forecast Revenues [3]	21,500,049	20,734,074	17,642,577	17,278,472
Cap (3% of Fcst Rev)	645,001	622,022	529,277	518,354

1 A positive RDM adjustment is a customer surcharge, a negative adjustment a customer refund.

2 Forecast volumes during the RDM adjustment period is calculated as a weighted average of 9 months of the current year and 3 months of the subsequent year.

3 Forecast net revenues during the RDM adjustment period are calculated as a weighted average of 9 months in the current year and 3 months in the subsequent year.

In comparing 2017 to the 2016 test year, we see that the sales volumes and resulting rates were sufficient to fall within the recovery bandwidth: the calculated deferral needed was $541,557 and, since the 3% cap was $645,001, the deferral allowed equaled the $541,557 needed. So, the per-customer needed and allowed rates were the same $4.21.

In looking at the 2015 and 2014 comparison to 2009 Test Year, we see that 2015 had a required RDM deferral of $1,221,199, while the deferral cap resulted in a carry forward of $691,922. For

2014, we see that the RDM deferral needed was $327,162, but since this was in the recovery bandwidth, the 3% cap did not apply and deferral allowed was the same amount.

G. Evaluation Results – Lessons Learned

1. Identify reason for adopting decoupling.

Otter Tail is still evaluating potential reasons to implement decoupling. The Company notes that Fresh Energy is the first group to propose decoupling to Otter Tail with the goal being to promote distributed energy resources. Otter Tail suggests that there may be other ways outside of revamping the pricing mechanism to achieve this particular goal.

2. Do all the stakeholders want decoupling and understand the impact?

Otter Tail points out that several consumer groups have opposed decoupling on various grounds and that unanimous support may not be possible. Also, the Company's customers have not indicated support or opposition to the idea of decoupling. Otter Tail supposes that seeing the size of deferral surcharges applied to their bills might be startling for the affected customers. The Company does not see consensus on supporting decoupling.

3. Successful decoupling requires the proper starting point in the test year billing determinants.

This point was most illuminating for Otter Tail. In looking at the Xcel Energy pilot decoupling program, Otter Tail realized the differences in magnitude between the size of the two companies and the growth of the surcharge accounts in both cases using the revenue per customer decoupling model.

Referencing the 2016 form EIA 861 report,[16] one can make the comparison below:

Data Year	State	Customer Characteristics	Utility	Revenues (Thousands)	Sales (Mw hours)	Customer Count
2016	MN	**Residential**	Northern States Power Co - Minnesota	1,136,510.7	8,621,046	1,131,107
			Otter Tail Power Co	53,510.7	528,189	48,186
			Percent	**4.71%**	**6.13%**	**4.26%**
		Commercial	Northern States Power Co - Minnesota	1,338,791.8	13,491,895	137,797
			Otter Tail Power Co	90,554.2	1,071,890	13,286
			Percent	**6.76%**	**7.94%**	**9.64%**

As can be seen above, for both residential and commercial classes, the Northern States Power – Minnesota part of Xcel is roughly 20 times larger than Otter Tail Power. With that in mind, you can look at the 2017 decoupling report that Xcel filed with the Minnesota Public Utilities Commission in 2018,[17] shown below.

[16] U.S. Energy Information Administration Form EIA-861, *Annual Electric Power Industry Report*

[17] Docket Nos. E-002/GR-13-868 & E-002/GR-15-826, Xcel Energy Electric Rate Case 2017 Decoupling

Table 6 - Total Over- or Under-Collection of Allowed Revenues by Customer Class[18]
2017 Actual Sales and Actual Customer Counts

	($ Millions)			Avg Monthly Customer Surcharge/ (Refund)	RDM Rate ($/kWh) Apr 18 – Mar 19
	Total RDM Surcharge/ (Refund)	Estimated Surcharge Cap	2017 Class Impact		
Residential	$25.0	$26.2	$25.0	$1.8712	$0.003064
Residential with Space Heating	$1.3	$0.9	$0.9	$2.1913	$0.002361
Small Commercial Non-Demand	$1.1	$2.5	$1.1	$1.0614	$0.001245
Total	$27.5		$27.1		

You can directly compare Xcel's 2017 Surcharge/Deferral numbers to Otter Tail's study results below:

Customer Classes	RDM Deferral Needed (Refund)/Collection	RDM Deferral Allowed	Deferral Difference
Residential and Farm Service	$2,233,163	$991,583	$1,241,580
General Service and Small General Service	$541,557	$541,557	$0

Otter Tail Power - at approximately 1/20th the size of Xcel Minnesota - exceeded the residential surcharge cap by $1,241,581 while Xcel Minnesota remained within the residential surcharge cap and only exceeded the Residential with Space Heating category cap by $400,000.

Regarding Otter Tail's General Service activity, in the full 2009-2017 period (9 years), only 2017 and 2014 fell within the recovery bandwidth. 2017, of course, had the rates set from the 2016 rate case while 2014 had effects of the polar vortex winter.

These comparisons illustrated to Otter Tail the importance of accurately setting the initial test year billing determinants for the base line of revenue per customer decoupling.

4. The importance of choosing the correct decoupling mechanism.

Otter Tail does not object to the revenue per customer model that Xcel is using, as long as the starting test year billing determinants are sufficient to stay within the recovery bandwidth.

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[18] Docket Nos. E-002/GR-13-868 & E-002/GR-15-826, *Xcel Energy Electric Rate Case 2017 Decoupling Annual Report*, February 1, 2018, Table 1, page 6

However, Otter Tail believes more thought could be given to the other alternative regulation options shared by Dr. Lowry. After presenting the options, Dr. Lowry prescribed the revenue per customer decoupling model, which was - in his opinion - the best choice for Otter Tail Power.

5. After selecting the right model with the proper components, execute implementation.

Otter Tail appreciates the chance to evaluate decoupling examples from both a regional and national perspective. This examination has illuminated the importance of aligning stakeholder interests with the proper measures to achieve those goals.

H. Conclusion

Upon examining the results of the study, Otter Tail notes several items. First, in the case of the Residential and Farm classes, from 2009 through 2017, Otter Tail would have been applying the maximum surcharge in all years except for 2011, 2013 and 2014. In the case of the General Service and Small General Service classes, the maximum surcharge would have been used in all years except for 2014 and 2017. From the Company's perspective, questions remain about what would have happened to any unrecovered balance in excess of applying the three percent cap, for example, would OTP be allowed to carry that balance forward to another time period?

The first observations above, led to the second item: the importance of setting the appropriate approved test year billing determinants. The approved volumes from the 2009 test year appear to have been reachable only through the extra-ordinary circumstances of the polar vortex winter.[19]

Finally, Otter Tail Power appreciates having the opportunity to examine decoupling and observe how it applies to company operations. This evaluation has proved valuable in examining decoupling from both national and local perspectives as well as taking lessons learned from other companies that have implemented revenue decoupling mechanisms.

IV. Department of Commerce Comments

A. Department Analysis

Minnesota Statutes § 216B.2412 defines decoupling as a regulatory tool designed to separate a utility's revenue from changes in energy sales. The Statute states that the purpose of decoupling is to reduce a utility's disincentive to promote energy efficiency. It also requires a revenue decoupling mechanism balance the goals of eliminating a utility's "throughput incentive" with protecting ratepayers. Throughput incentive refers to a utility's incentive to

[19] "A polar vortex is a low-pressure system of cold polar air—a normal weather phenomenon. But during the 2013-2014 winter, a high-pressure system in the Pacific pushed the northern polar vortex southward, contributing to North America's cold, snowy and icy winter." Kazmierczak, Jeanette. "The 2013-2014 polar vortex adds data points to the books." https://climate.nasa.gov/news/2262/the-2013-2014-polar-vortex-adds-data-points-to-the-books/NASA, April 1, 2015; March 26, 2018

increase marginal revenue beyond its short-run marginal costs, resulting in an incentive to increase sales (and, conversely, no incentive to promote energy conservation).

In terms of protecting ratepayers, the Department concludes that a customer can be negatively impacted by high RDM surcharges and/or increased volatility in rates.

The Commission has only authorized RDM's with a cap, in order to ensure that ratepayers are limited in any adverse impacts. However, with a cap in place, the utility absorbs the risk of not fully recovering its authorized revenue. The Department states that:

> Although a symmetrical cap is thought to treat surcharges and refunds more fairly if they are both capped at the same percentage, the Minnesota Department of Commerce, Division of Energy Resources' (Department or DOC) analysis of MERC's implementation of its symmetrical cap during the period 2013-2017 indicates that MERC's decoupled customers were surcharged $1.9 million more than if there had not been a cap.[20] Clearly, this outcome harms ratepayers.

B. Compliance with the Commission's May 1, 2017 Order[21]

1. Otter Tail will work with stakeholder groups in its research of alternative rate designs.

The Department did not participate in stakeholder discussions on Otter Tail's Decoupling Report and is unaware if the Company worked with other stakeholders in preparing its decoupling analysis and report study.

2. Otter Tail will submit a report by April 1, 2018.

Otter Tail submitted the report in a timely manner, on March 30, 2018.

3. Otter Tail must include a comparison of actual 2016 and 2017 revenues to the 2016 Test Year baseline revenues – with baseline revenue per customer calculated using the final rate, sales, and customer counts of this rate case.

Otter Tail included the appropriate comparisons in its June 20, 2018 Supplemental Compliance Filing.

4. Otter Tail's report must include a comparison of actual 2014 and 2015 revenues to 2009 baseline revenues - with baseline revenue per customer calculated using the final rates, sales and customer counts from Otter Tail's 2010 rate case.

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[20] See May 8, 2018 Direct Testimony of Christopher T. Davis, *In the Matter of the Application of Minnesota Energy Resources Corporation for Authority to Increase Rates for Natural Gas Service in Minnesota*, p. 25-26.

[21] This docket, *Findings of Fact, Conclusion and Order*, Ordering Point 26, May 1, 2017.

Table 3, page 22 of Otter Tail's Supplemental Compliance Filing Decoupling Report included a comparison of 2014 and 2015 Residential and Farm Classes' actual results to the 2009 Test Year. Table 7, page 30 of the Supplemental Compliance Decoupling Report, included a comparison of 2014 and 2015 General and Small General Service Classes' to the 2009 Test Year.[22]

5. Department Conclusion.

The Department concluded that Otter Tail provided a reasonable amount of the data requested/required in the Commission's May 1, 2017 Order.

C. Adequacy of Otter Tail's Analysis

One of the main purposes of the decoupling study was to evaluate how an RDM would have affected ratepayers if it had been if effect since 2009. The Department concluded that the decoupling report provided a reasonable analysis of the impact of one RDM model over the period from 2010 to 2017.

[22] Staff notes that the Department's comments regarding point 4 referred to the original decoupling report filing. Otter Tail's June 20, 2018 Supplemental Compliance Filing contained the comparison periods per the Commissions orders and staff has modified this paragraph to reflect those changes.

Table 7, below, shows what annual surcharges/(refunds) would have occurred during this period under three different caps.

Table 7: Otter Tail Surcharges/(Refunds) Assuming Fresh Energy's Proposed RDM had been in Place 2010-2017[23]

	No Cap[1]		Symmetrical 3%		Asymmetrical 3%	
	Surcharges/ (Refunds)	Annual Cost Per Customer	Surcharges/ (Refunds)	Annual Cost Per Customer	Surcharges/ (Refunds)	Annual Cost Per Customer
	Residential & Farm	Residential & Farm	Residential & Farm	Residential & Farm	Residential & Farm	Residential & Farm
2010	$2,940,028	$59.28	$763,237	$15.36	$763,237	$15.36
2011	($199,068)	($4.08)	($199,068)	($4.08)	($199,068)	($4.08)
2012	$1,631,038	$32.28	$794,303	$15.72	$794,303	$15.72
2013	($76,502)	($1.56)	($76,502)	($1.56) [2]	($76,502)	($1.56) [2]
2014	($522,698)	($10.68)	($522,698)	($10.68)	($522,698)	($10.68)
2015	$1,813,604	$36.36	$822,603	$16.44	$822,603	$16.44
2016	$3,434,054	$68.28	$945,093	$18.72	$945,093	$18.72
2017	$2,233,163	$41.64	$991,583	$18.48	$991,583	$18.48
2010-2017	$11,253,619		$3,518,551		$3,518,551	
	General Service	General Service	General Service	General Service	General Service	General Service
2010	$1,473,642	$143.88	$483,852	$47.28	$483,852	$47.28
2011	$1,234,486	$118.08	$484,811	$46.32	$484,811	$46.32
2012	$1,757,593	$165.12	$484,566	$45.48	$484,566	$45.48
2013	$719,043	$68.16	$513,692	$48.60	$513,692	$48.60
2014	$327,161	$31.32	$327,161	$31.32	$327,161	$31.32
2015	$1,221,199	$114.96	$529,277	$49.82 [2]	$529,277	$49.82 [2]
2016	$1,341,182	$125.04	$622,022	$57.99 [2]	$622,022	$57.99 [2]
2017	$541,557	$50.52	$541,557	$50.52	$541,557	$50.52
2010-2017	$10,066,329		$4,469,114		$4,469,114	
Total	$21,319,948		$7,987,665		$7,987,665	

[1] Calculating an RDM without a cap indiates the actual changes in revenues, no more and no less, needed to eliminate the utility's throughput incentive.

[2] Note: Staff altered amounts to reflect changed customer counts.

1. Residential and Farm Customer Classes Results

Looking at Residential and Farm customer classes, you can see that refunds resulted in only three out of the eight years. Also, because the refunds never exceeded three percent of forecast net revenue, they would have been the same with no cap, or a symmetrical or asymmetrical three percent cap.

If we assume that Otter Tail would have implemented Fresh Energy's proposed RDM with a 3% asymmetrical cap, Residential and Farm customers would have been refunded a total of

[23] This docket, Comments of the Minnesota Department of Commerce, Division of Energy Resources, June 25, 2018, Table 1, page 6.

$798,268 and surcharged a total of $4,316,819 for a total net surcharge of $3,518,551 over the entire period. During that time, the annual per customer amount would have ranged from a refund of 10.68 in 2014 to a surcharge as high as $18.72 in 2016.

Table 8: Residential and Farm RDM Surcharges/(Refunds) Assuming No Cap As a Percent of Net Revenues (2010-2017)[24]

	Surcharges/ (Refunds) Assuming No Cap	Forecasted Net Revenues	Surcharge/(Refund) Without Cap as percent of Net Revenues
2010	$2,940,028	$25,441,236	12%
2011	($199,068)	$27,353,905	(1%)
2012	$1,631,038	$26,476,764	6%
2013	($76,502)	$27,969,455	0%
2014	($522,698)	$27,831,460	(2%)
2015	$1,813,604	$27,420,099	7%
2016	$3,434,054	$31,503,106	11%
2017	$2,233,163	$33,052,767	7%

As shown above in Table 8, RDM surcharges as a percent of Forecast Net Revenues range from 6% to 12%. The Department does not believe this level of cost (rate) increase would be reasonable, so a cap should be required.

By dividing 3% capped amounts by uncapped amounts, Table 9 below, shows the relative efficiency of eliminating Otter Tail's throughput incentive.

Table 9: Percentage of Throughput Incentive Eliminated Under RDM with Symmetrical or Asymmetrical 3% Cap for Residential and Farm Customers[25]

	Surcharges/Refunds 3% Cap	Surcharges/ (Refunds) Without Cap	Throughput Incentive Eliminated
2010	$763,237	$2,940,028	26%
2011	($199,068)	($199,068)	100%
2012	$794,303	$1,631,038	49%
2013	($76,502)	($76,502)	100%
2014	($522,698)	($522,698)	100%
2015	$822,603	$1,813,604	45%
2016	$945,093	$3,434,054	28%
2017	$991,583	$2,233,163	44%
2010-2017	$3,518,551	$11,253,619	31%

[24] This docket, Comments of the Minnesota Department of Commerce, Division of Energy Resources, June 25, 2018, Table 2, page 7.

[25] This docket, Comments of the Minnesota Department of Commerce, Division of Energy Resources, June 25, 2018, Table 3, page 8.

The Department notes that although a 31% overall reduction in throughput incentive is significant, the Department would be more comfortable with an RDM that eliminated more than 50 percent of the throughput incentive.

2. General Service and Small General Service Customer Classes Results

As Table 6 above shows, the RDM for General Service customer classes would have resulted in only surcharges throughout the study period. If you assume implementation of a three percent symmetrical cap, then Otter Tail would have surcharged a total of $4,469,114 for 2010-2017. The average General Service customer surcharge would have ranged from a high of $57.99[26] in 2016 to a low of $31.32 in 2014.

If a cap were not used, then total surcharges would have been $10,066,329 with a high average General Service customer cost of $165.12 in 2012[27] and a low of $31.32 in 2014.

Table 10: General Service RDM Surcharges/(Refunds) Assuming No Cap As A Percent of Net Revenues (2010-2017)[28]

	Surcharges/ (Refunds)	Forecasted Net Revenues	Surcharge/(Refund) Without Cap as percent of Net Revenues
2010	$1,473,642	$16,128,395	9%
2011	$1,234,486	$16,160,365	8%
2012	$1,757,593	$16,152,198	11%
2013	$719,043	$17,123,073	4%
2014	$327,161	$17,278,472	2%
2015	$1,221,199	$17,642,577	7%
2016	$1,341,182	$20,734,074	6%
2017	$541,557	$21,500,049	3%

As can be seen in Table 10 above, the Company would have charged three percent or less of net revenues only in 2014 and 2017. The other six years would have ranged from 4% to 11%. The Department does not believe that surcharge percentages of 6% to 11% are reasonable cost (rate) increases, so an RDM for Otter Tail should be capped.

[26] Staff adjusted amount to reflect changed customer count.

[27] Staff corrected year.

[28] This docket, Comments of the Minnesota Department of Commerce, Division of Energy Resources, June 25, 2018, Table 4, page 9.

Table 11: Percentage Elimination of Throughput Incentive for General Service Customer Classes Under RDM With Symmetrical or Asymmetrical 3% Cap (2010-2017)[29]

	Surcharges/(Refunds) 3% Cap	Surcharges/ (Refunds) Without Cap	Throughput Incentive Eliminated
2010	$483,852	$1,473,642	33%
2011	$484,811	$1,234,486	39%
2012	$484,566	$1,757,593	28%
2013	$513,692	$719,043	71%
2014	$327,161	$327,161	100%
2015	$529,277	$1,221,199	43%
2016	$622,022	$1,341,182	46%
2017	$541,557	$541,557	100%
2010-2017	$4,469,114	$10,066,329	44%

Table 11 above shows that applying a three percent cap (either symmetrical or asymmetrical) to the proposed Otter Tail RDM for this customer class would have reduced the Company's throughput incentive by 44 percent overall. Although this is significant, the Department would prefer reductions greater than 50 percent.

D. Whether the Commission Should Order Implementation of a Decoupling Pilot for Otter Tail

In response to DOC IR DOC-331, Otter Tail stated:

> 1. Otter Tail is not currently planning to propose an RDM. However, Otter Tail will continue to evaluate the merits and potential drawbacks of an RDM for Otter Tail and its customers. Otter Tail is reflecting on the fact that it appears that the sales forecasts set in its last two rate cases for these rate classes may have been set higher than reasonable, given what has actually occurred thereafter. Otter Tail is also concerned about the effect of caps that may be considered for such a mechanism, and the effect that such caps may have on the intended purposes of an RDM.
>
> 2. We do not have an alternative rate design to propose at this time. Otter Tail will continue to consider rate design alternatives and dialogue with stakeholders. Otter Tail notes that it continues to demonstrate effective promotion of conservation through consistent achievement of strong CIP results. Otter Tail's filed conservation results for 2017 show Otter Tail achieving 3.02

[29] This docket, Comments of the Minnesota Department of Commerce, Division of Energy Resources, June 25, 2018, Table 5, page 10.

percent energy savings, over double the 1.5 percent statutory goal. The last five years of conservation efforts have also produced net financial benefits for the customers of $169,871,838 over the lifetime of the energy efficiency investments.

Given the fact that Otter Tail doesn't currently support implementation of an RDM pilot and the Company has achieved high levels of energy savings for its CIP customers, the Department does not support requiring Otter Tail to implement a decoupling pilot project at this time. The Department went on to note that the Company did acknowledge that, in its last two rate cases, the sales forecasts for the studied customer classes may have been set higher than reasonable, given subsequent actual results that rarely achieved the authorized revenue per customer. The Department went on to clarify that Otter Tail's sales forecasts have been based on a full record, and so, have been considered reasonable for ratemaking purposes.

E. If the Commission Orders Implementation of an RDM, What Type of Decoupling Pilot Should be Implemented?

Although the Department does not support an RDM for Otter Tail at this time, should the Commission still be interested in requiring an RDM pilot, then the Department recommended waiting until Otter Tail's next rate case, when the type of RDM could be proposed in conjunction with the Company's sales forecast. The Department also recommended that the RDM be extended to all non-market rate customers for which the Company has a throughput incentive.

F. Other Issues or Concerns

The Department had no other issues or concerns.

G. Summary and Recommendations

The Department concluded that:

- Otter Tail's decoupling report included a reasonable analysis of the impact of an RDM on the Company's Residential and Farm and General Service customer classes.
- The RDM proposed by Fresh Energy with a three percent symmetrical cap would have eliminated less than 50 percent of under-collections when comparing authorized revenue per customer versus that which would have been actually realized.
- Although Otter Tail would have benefitted from the proposed RDM, the Company does not plan to propose implementing an RDM at this time.
- Otter Tail, in its response to DOC IR No. 332, determined that its forecasts for its last two rate cases may have been too high. As a result, the Department concluded that any Company RDM proposal should be done in conjunction with a rate case when the sales forecast can be studied at the same time.
- Otter Tail has commendably high energy savings for its CIP customers.

Based on these factors, the Department recommends that the Commission decline to order implementation of an RDM for Otter Tail at this time.

V. Fresh Energy Comments

A. Overview

Fresh Energy developed and submitted a revenue decoupling proposal for consideration as described in Dr. Mark Lowry's testimony in Otter Tail's rate case.[30] Ultimately, the Commission rejected the proposal but required the Company to file updated information reflected in the Company's report and subsequent June 20, 2018 supplemental filing.

Fresh Energy had corrections regarding certain agreements that the Company said were found between Otter Tail Power and Fresh Energy, specifically on page 1 of the decoupling report. As confirmed with Otter Tail staff in later discussions,

> Fresh Energy and the Company did not reach any of the agreements listed in the report and are using the Commission's May 1, 2017 rate case order and the information provided in the Company's report in this docket as the basis for ongoing discussions.

B. Minnesota's Progress on Revenue Decoupling

As seen in Table 12 below, since 2007 the Commission has considered and approved eight revenue decoupling proposals at various times for four companies with a ninth pending approval.

Table 12: Minnesota Revenue Decoupling Mechanisms[31]

Utility	Rate case docket	Commission approved
CenterPoint Energy (gas)	G-008/GR-08-1075	January 11, 2010
Minnesota Energy Resources Corporation (gas)	G-007,011/GR-10-977	July 13, 2012
CenterPoint Energy (gas)	G-008/GR-13-316	June 9, 2014
Xcel Energy (electric)	E-002/GR-13-868	May 8, 2015
Great Plains Natural Gas (gas)	G-004/GR-15-879	September 6, 2016
Minnesota Energy Resources Corporation (gas)	G-011/GR-15-736	October 31, 2016
Xcel Energy (electric)	E-002/GR-15-826	June 12, 2017
CenterPoint Energy (gas)	G-008/GR-17-285	May 10, 2018 hearing (order pending)
Minnesota Energy Resources Corporation (gas)	G-011/GR-17-563	(ALJ report pending)

Fresh Energy stated that clearly the Commission, Minnesota's investor-owned utilities, the Department of Commerce and other stakeholders have experience in understanding and

[30] This docket, *Dr. Mark Lowry Direct Testimony on behalf of Fresh Energy*, August 16, 2016.

[31] This docket, *Comments of Fresh Energy*, June 25, 2018, Table 1, page 2.

debating different aspects of revenue decoupling and their importance in Minnesota's energy policy. Fresh Energy went on to point out that in its Order in this rate case, the Commission specifically stated:

> The issue before the Commission is not the merits of revenue decoupling generally, but as applied to Otter Tail in the current docket.[32]

Given this record of experience and support from the Commission, Fresh Energy believes that in moving forward with considering revenue decoupling for Otter Tail Power, the focus should be on implementation, best practices, and improving an ability to anticipate future growth rates in order to lessen the magnitude of decoupling adjustments.

C. Otter Tail Power's Report

Otter Tail provided information in two categories: lessons learned from a selected group of five utilities; and examination of Otter Tail's rates, revenues and billing determinants in studying Fresh Energy's proposed revenue decoupling mechanism.

1. Lessons Learned

The lessons learned that are listed on page 10 of the Company's report are:

1) Determine the reason for implementing decoupling;
2) Make sure all stakeholders want decoupling and understand what the impact will be;
3) Have the proper starting point as it relates to sales and associated revenues;
4) Have the right mechanism for both the customer and the company; and
5) Present a relatively innocuous and benign change to customers and the company.

Fresh Energy stated that they agree with all of these as goals for establishing a successful revenue decoupling mechanism, except for the second item. Fresh Energy went on to argue that while "consensus is certainly laudable, good public policy should not rely on consensus to move forward".[33] Further, they stated that a purpose of the Commission is to hear viewpoints and arguments from different stakeholders and interests, and then to make decisions that are most in the public interest and consistent with Minnesota statute. Fresh Energy does not believe that moving forward with Otter Tail's revenue decoupling should require the full support of all stakeholders.

Fresh Energy did agree with Otter Tail that, given the Company's current rate structure as it relates to sales and revenues, this may not be an appropriate time to implement revenue decoupling. However, with improvements to its underlying rate structure and appropriate caps on surcharges, many revenue decoupling mechanisms result in minimal negative impacts to customers while yielding the full benefits of the policy.

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[32] This docket, *Commission Findings of Fact, Conclusions and Order*, May 1, 2017, page 69.

[33] This docket, *Comments of Fresh Energy*, June 25, 2018, page 4.

2. Otter Tail Power's Rate Structure

Fresh Energy stated that it is clear from the Company's report that its underlying rate structure is not adequately matched with revenues, with many years experiencing significant under-recovery. The purpose of revenue decoupling in Minnesota is to "reduce a utility's disincentive to promote energy efficiency".[34] This reduction comes from separating a utility's revenue from changes in energy sales and also from minimizing the customer's monthly fixed charges. Often, a utility's revenues will not decrease beyond a few percentage points while achieving substantial energy savings. However, wide swings in revenues can result due to inaccurate sales forecasts. In other words, the revenue decoupling mechanism can't make up for an underlying flawed sales forecast and rate structure. Therefore, Fresh Energy recommends that Otter Tail address its revenue and rate structure before proposing a revenue decoupling mechanism in its next rate case.

3. Otter Tail Power's Conservation Improvement Programs

Fresh Energy noted that Otter Tail reported achieving 3.02 percent energy savings in its 2017 CIP Annual Report[35], which is significantly higher than the statutory goal of 1.5 percent of gross annual retail energy sales.[36] The Commission has questioned the need for Otter Tail's revenue decoupling based on this CIP performance.

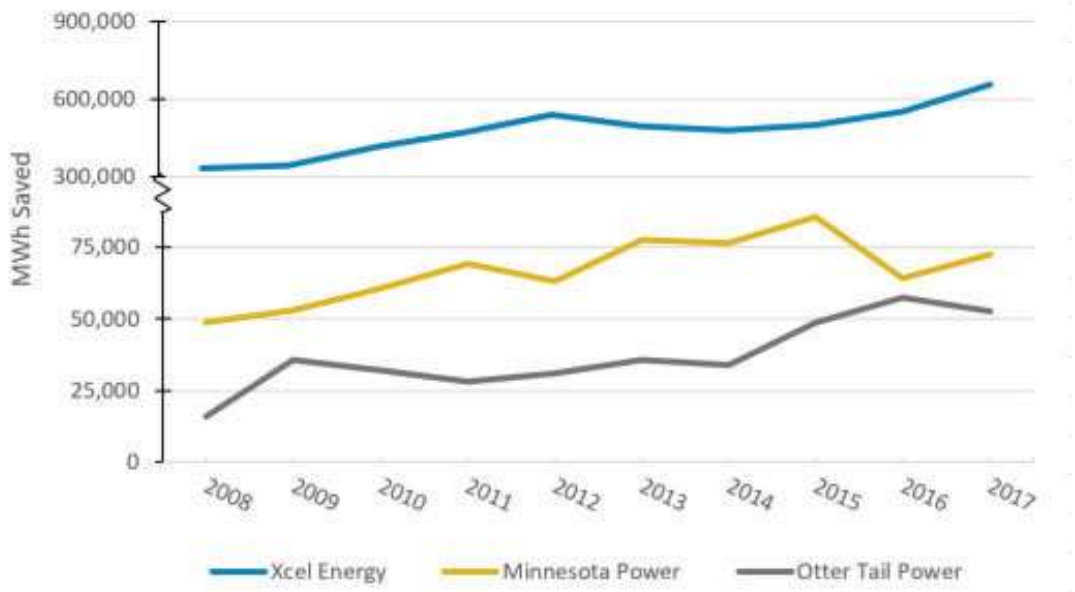
[34] Minn. Stat. § 216B.2412, Subdivision 1.

[35] Docket No. E017/CIP-16-116.01, *Otter Tail Power 2017 Conservation Improvement Project Status Report*, March 30, 2018.

[36] Minn. Stat. § 21B.241, Subdivision 1c, paragraph (b).

While Fresh Energy finds this performance laudable, it noted that in terms of actual MWh of savings achieved, the amount of savings declined from 2016 to 2017 as illustrated in Graph 7 below.

Graph 7: Investor-owned Utility CIP Performance 2008-2017[37]



Fresh Energy noted that Otter Tail's difference between the increase in percent-of-savings and the actual amount of savings was largely due to a large customer leaving the program and, thus, reducing the energy sales denominator in the percent savings goal.

Minnesota Statute states that "energy savings are an energy resource, and that cost-effective energy savings are preferred over all other energy resources".[38] In other words the 1.5 percent statutory energy savings goal should be viewed as a benchmarked floor that utilities should continually try to exceed, as long as their efforts are cost-effective. Fresh Energy believes that revenue decoupling can help Otter Tail maintain and exceed its recent energy savings performance.

4. Alternative Rate Designs

The Commission's Order in the rate case said that it accepted Otter Tail's offer to "research alternative rate design – and to work with stakeholder groups in this effort – culminating in an alternative rate design proposal".[39] Yet, the Company did not file any rate design proposal and, in its response to the Department's Information Request 331, the Company said that it did not have any alternative rate design to propose at this time. Notably, Otter Tail, the Office of Attorney General, and Fresh Energy all supported advancing time-of-use rates in the Company's rate case as a means of meeting effective rate design objectives. Therefore, Fresh Energy

[37] This docket, *Comments of Fresh Energy*, June 25, 2018, Figure 1, page 6.

[38] Minn. Stat. § 216B.2401.

[39] This docket, *Findings of Fact, Conclusion and Order*, May 1, 2017, page 70.

respectfully requests more information on Otter Tail's views and plans for residential time-of-use rates in its reply comments.

D. Recommendations

Fresh Energy recommends that Otter Tail Power address the issues with its underlying rate structure and develop and propose a revenue decoupling mechanism of its choosing based on an updated rate structure for consideration by the Commission and other stakeholders in its next rate case.

VI. Otter Tail Power Reply Comments

Both the Department and Fresh Energy agreed on the conclusion that Otter Tail's report was a reasonable analysis of the impact of a revenue decoupling mechanism for the selected customer classes.

The report showed that the sales volumes for the customer classes were forecast to be higher than the actual sales that occurred during the evaluation period. Thus, the forecasts resulted in rates that were significantly lower than the ongoing actual per-customer revenue requirements. Otter Tail stated that this outcome is at least in part due to success in fostering conservation. On the other hand, it seems also to be an indication that the Company's sales volumes for these classes were forecast too high in the recent rate case, which resulted in immediate under-recovery. In either case, Otter Tail will need to improve its sales forecast accuracy in the next rate case, whether or not a decoupling mechanism is used.

Regarding Fresh Energy's request that the Company provide further information on its views and plans for time-of-use rates, Otter Tail points out that it has proposed Residential time-of-use rates in current rate cases in both North Dakota and South Dakota. The company needs to evaluate the final results in those cases and then intends to submit proposed time-of-use rates in its next Minnesota rate case.

Otter Tail also stated that the effect of surcharge caps deserves further consideration. Since the goal of a decoupling mechanism is to remove disincentives for conservation, there should be recognition that surcharge caps interfere with this goal. This should be given additional discussion where a decoupling proposal may be considered for implementation.

VII. Staff Analysis

All parties agree that the report fulfills the Commission's order and includes an adequate historical study of the effects of applying Fresh Energy's proposed revenue per customer decoupling mechanism. In addition to the periods required by the Commission, Otter Tail extended the study by including the years from 2010 to 2013, resulting in a larger historical period from 2010 to 2017.

All parties pointed out the significant under-collections of revenue for many years for both customer classes and the high frequency of years where surcharges would be limited by a three percent cap. As acknowledged by Otter Tail in response to a Department IR, the results appear

to show that the sales forecasts used in the Company's last two rate cases were too high for the tested classes, resulting in rates set too low, so that full recovery was not within the "bandwidth" of allowed revenues.

Based on the information above, staff concurs with the Department recommendation that revenue decoupling not be implemented at this time. Staff also agrees with the Department comments that if a revenue decoupling plan is ordered, it should be in conjunction with improved sales forecasting in the Company's next rate case.

Staff notes that Fresh Energy's recommendation may be interpreted to mean that Otter Tail will be *required* to implement the decoupling proposal studied. Since, historically, the Commission has never mandated that a utility implement decoupling, the Commission may want to order Otter Tail, as part of the initial filing of its next rate case, to discuss the merits of why it should or should not implement a decoupling program.

VIII. Decision Alternatives

Otter Tail Power's Decoupling Agreement, Analysis and Report

1. Accept Otter Tail Power's analysis and report as being in compliance with the Commissions May 1, 2017 Order, (Otter Tail Power, Department, Fresh Energy) OR

2. Reject Otter Tail Power's analysis and report.

Decoupling Pilot Implementation

3. Order Otter Tail to propose implementation of a decoupling pilot program in its next rate case (Fresh Energy), OR

4. Order Otter Tail, as part of the initial filing of its next rate case, to include a plan for a decoupling program, potentially for implementation, and to discuss the merits of why it should or should not implement decoupling, OR

5. Take no action (Otter Tail, Department).

If the Commission orders a decoupling pilot program

6. Determine the type of decoupling mechanism and the customer classes that would be decoupled, OR

7. Take no action (Otter Tail, Department).

Residential Time-of-Use Rates

8. Require Otter Tail Power to submit a compliance filing within 30 days of the Commission's Order in this docket that responds in detail to Fresh Energy's request for information (in reply comments) on the Company's plans for residential time-of-use rates, OR

9. Require Otter Tail Power to address and include a plan for residential time-of-use rates in its next Minnesota rate case, OR

10. Take no action.