

Minnesota Energy Resources Corporation 2685 145th Street West Rosemount, MN 55068 www.minnesotaenergyresources.com

May 1, 2019

Daniel P. Wolf Executive Secretary Minnesota Public Utilities Commission 121 Seventh Place East, Suite 350 St. Paul, MN 55101

**VIA ELECTRONIC FILING** 

### RE: Minnesota Energy Resources Corporation's 2018 Annual Decoupling Evaluation Report

### Docket No. G011/M-19-201

Dear Mr. Wolf:

Minnesota Energy Resources Corporation ("MERC") submits this Annual Decoupling Evaluation Report for calendar year 2018, in accordance with the Minnesota Public Utilities Commission's ("Commission's") prior orders and MERC's approved tariffs on file with the Commission.

On July 13, 2012, the Commission issued its Findings of Fact, Conclusions, and Order in Docket No. G011/GR-10-977, authorizing MERC to implement a revenue decoupling pilot program for a period of three years, unless extended by Commission action. Order Point 11.A of the Commission's July 13, 2012, Order required that MERC file annual reports with the Commission that specify the Revenue Decoupling Mechanism ("RDM") adjustment to be applied to each rate class for the billing period and demonstrate annual progress toward achieving the 1.5 percent energy efficiency goal set forth in Minn. Stat. § 216B.241, along with an evaluation plan similar to the one used in CenterPoint Energy's decoupling pilot.

On October 31, 2016, the Commission issued its Findings of Fact, Conclusions, and Order in Docket No. G011/GR-15-736, authorizing MERC to continue its pilot revenue decoupling mechanism for an additional three years and requiring MERC to include additional information in its future annual decoupling evaluation reports. In particular, Order Point 15.c and d of the Commission's October 31, 2016, Order required:

- c. MERC shall address the merits of extending its revenuedecoupling mechanism to other customer classes as follows:
  - i. In its annual decoupling filings, MERC shall include an analysis of the financial consequences for ratepayers and MERC of extending the decoupling program to all customer classes with more than 50 customers. MERC may also include an analysis of the financial consequences of extending its decoupling program to any other combination of customer classes.

Mr. Daniel P. Wolf May 1, 2019 Page 2

- d. MERC shall address the decline in energy conservation from the Residential class as follows:
  - i. In its annual decoupling filings, MERC shall include an analysis demonstrating the reasonableness of maintaining MERC's decoupling program given evidence that the level of savings generated by the Residential customer class has declined while the program has been in effect. MERC shall include (1) data showing its average Conservation Improvement Program (CIP) savings for the previous five years compared to the savings of its most recent complete year, and (2) an explanation for any differences in the CIP savings, including the likely impact of decoupling;
  - ii. In its decoupling evaluation report or in its initial filing of its next rate case, MERC shall include an analysis demonstrating the reasonableness of maintaining MERC's decoupling program given the evidence that the level of savings generated by the Residential customer class has declined while the program has been in effect.

On December 26, 2018, the Commission issued Findings of Fact, Conclusions, and Order in Docket No. G011/GR-17-563, approving modifications to MERC's decoupling effective January 1, 2019, including removal of MERC's General Service Small Commercial and Industrial customer class from decoupling, and authorizing an additional three-year extension of MERC's decoupling pilot. The approved modifications do not impact this evaluation report, which covers the period January 1, 2018 – December 31, 2018.

MERC's last Decoupling Evaluation Report was submitted on May 1, 2018, covering the period January 1, 2017 – December 31, 2017. On February 6, 2019, the Commission issued an order accepting MERC's 2017 Decoupling Evaluation Report; approving MERC's proposed revenue decoupling adjustment; and ordering MERC to file all future Decoupling Evaluation Reports in separate dockets.

MERC submits this 2018 Decoupling Evaluation Report in compliance with the Commission's July 13, 2012; December 21, 2012; September 26, 2014; August 11, 2015; August 17, 2016; December 1, 2017; and February 6, 2019, Orders in Docket No. G011/GR-10-977; and the Commission's October 31, 2016, Order in Docket No. G011/GR-15-736.

Included with this filing are the following attachments:

- Attachment A: A detailed incremental chronological listing and price per-therm impact of all rate adjustments during 2011 through 2018, consistent with Part G.6 of the Decoupling Evaluation Report.
- Attachment B: A detailed incremental chronological listing and impact of all commodity adjustments during 2011 through 2018, consistent with Part G.7 of the Decoupling Evaluation Report.

Mr. Daniel P. Wolf May 1, 2019 Page 3

- Attachment C: MERC's 2012 Annual Gas Service Quality Report to serve as the "baseline" service quality level prior to implementation of the pilot program in accordance with Part I.2.e of the Decoupling Evaluation Report.
- Attachment D: Summary of the RDM adjustment to be applied to each rate class for the billing period along with supporting data for the calculations. In accordance with the Commission's April 17, 2016, Order and MERC's November 15, 2016, Compliance Filing, in Docket No. G011/GR-10-977, Attachment D includes both actual data for 2015 and 2016 based on MERC's billing data from its billing system, under the tables labeled "actual," and restated December 2015 and January 2016 data to restate customer counts for customer who were not billed in December 2015 but were billed twice in January 2016. The restated data is highlighted in yellow on the tabs labeled "2015 Restated" and "2016 Restated."

Attachment D also provides the data responsive to the Commission's October 31, 2016, Order in Docket No. G011/GR-15-736, that MERC include an analysis of the financial consequences for ratepayers and MERC of extending the decoupling program to all customer classes with more than 50 customers and may also include an analysis of the financial consequences of extending its decoupling program to any other combination of customer classes. Attachment D includes an analysis of the financial consequences for ratepayers and MERC of extending to each customer class.

Please feel free to contact me at (414) 221-2374 if you have any questions regarding this report.

Sincerely,

/s/ Mary L. Wolter

Mary L. Wolter Director – Gas Regulatory Planning & Policy

Enclosures cc: Service List

### Minnesota Energy Resources Corporation's 2018 Annual Revenue Decoupling Evaluation Report

May 1, 2019

### Minnesota Energy Resources Corporation 2018 Annual Revenue Decoupling Mechanism Evaluation Report

### Table of Contents

### <u>Page</u>

A.	Evaluation Overview and History of MERC's Decoupling Mechanism	1
В.	Evaluation of MERC's CIP Programs and Program Savings from 2010- 2018	7
C.	Revenue Deferred and Collected Under the RDM Adjustment	4
D.	Proportion of Margin Lost to Company-Sponsored CIP Relative to the RDM Adjustment	0
E.	Impact of General Rate Cases During Implementation of the Pilot Program 4	-2
F.	New Customer Usage and Adjustment Under the RDM4	4
G.	Related Rate and Customer Usage Information (Actual and Forecasted)4	7
Н.	Impact on MERC Low-Income and LIHEAP Customers5	4
I.	Other Information	62

A. Evaluation Overview and History of MERC's Decoupling Mechanism

### A. Evaluation Overview and History of MERC's Decoupling Mechanism

This Annual Revenue Decoupling Evaluation Report covers the period of January 1, 2018, through December 31, 2018, the sixth year of Minnesota Energy Resources Corporation's ("MERC's" or the "Company's") decoupling pilot. This Evaluation Report is submitted in accordance with the Minnesota Public Utilities Commission's (the "Commission") prior orders related to MERC's evaluation of its decoupling program and the Company's approved revenue decoupling tariffs on file with the Commission.

In 2007, the Minnesota Legislature enacted Minn. Stat. § 216B.2412, which required the Commission to establish criteria and standards for decoupling of energy sales from revenues. Section 216B.2412 also authorized the Commission to approve one or more pilot programs to assess the merits of decoupling as a means of achieving energy savings. In 2009, the Minnesota Legislature amended Minn. Stat. § 216B.2412 to provide the Commission with additional procedural options to establish criteria and standards with respect to decoupling pilot programs.

On June 19, 2009, in Docket No. E,G999/CI-08-132, the Commission issued an Order Establishing Criteria and Standards to be Utilized in Pilot Proposals for Revenue Decoupling, concluding that "the most promising approach is to examine the pilot proposals that will be submitted based on the criteria and standards established by this Order. After implementation and review of these pilot projects, utilities will be in the position to tackle the details of implementing an effective decoupling program."

MERC first proposed a revenue decoupling pilot in its 2010 rate case in Docket No. G007,011/GR-10-977. The Commission approved a three-year revenue decoupling pilot effective January 1, 2013, and required the Company to submit annual evaluations in its July 13, 2012, Findings of Fact, Conclusions, and Order and December 21, 2012, Order in that docket.

MERC submitted its first decoupling evaluation report on March 27, 2014, for calendar year 2013. In its 2013 Decoupling Evaluation, MERC provided both qualitative and quantitative information showing changes in the results of the Company's CIP. As shown in that evaluation, MERC improved its energy savings for the Residential sector under decoupling in 2013.

On September 26, 2014, the Commission issued an Order accepting MERC's 2013 decoupling evaluation report, requiring MERC's next annual report to include an estimate of each class' revenues under (1) no decoupling, (2) partial decoupling, and (3) full decoupling, and approving the Company's proposal to file future annual decoupling reports by May 1, to coincide with the Company's annual Conservation Improvement Program ("CIP") Status Report filing.

MERC submitted its second decoupling evaluation report in May 1, 2015, for calendar year 2014, inclusive of the additional reporting data required by the Commission's September 26, 2014, Order. MERC's 2014 decoupling evaluation report reflected that total energy savings had dropped significantly in 2014 in all sectors, although many of

the programs that were added as a result of decoupling continued to make inroads into their markets and produce savings. In its May 1, 2015, decoupling evaluation report, MERC requested that the Commission approve MERC's decoupling program on a permanent basis following completion of the pilot at the end of 2015. On August 11, 2015, the Commission issued an Order accepting MERC's 2014 decoupling evaluation report, extending MERC's decoupling pilot until such time as the Commission makes a decision as to its permanence, and instructing MERC to include pre-filed testimony in its next rate case discussing extending revenue decoupling to all of its customer classes.

In the Company's 2016 rate case filed on September 30, 2015, in Docket No. G011/GR-15-736, MERC submitted pre-filed testimony addressing the issue of extending revenue decoupling to additional customer classes.

On April 29, 2016, MERC submitted its third decoupling evaluation for calendar year 2015. As reflected in that evaluation report, in 2015, overall CIP savings exceeded previous annual savings recorded in the years 2010 to 2014, which include a predecoupling time period, as well as years when decoupling was in effect. On August 17, 2016, the Commission issued an Order accepting MERC's 2015 decoupling evaluation report, requiring MERC to include future reconciliation adjustment calculations in its decoupling annual report, and requiring MERC to file restated customer billing information.

On October 31, 2016, in Docket No. G011/GR-15-736, the Commission issued Findings of Fact, Conclusions, and Order in MERC's 2016 rate case, extending MERC's pilot revenue-decoupling program for an additional three years (2017-2019), without modification. In that Order, the Commission concluded that there was not a sufficient record to support requiring MERC to extend its decoupling to additional customer classes or requiring MERC to forego decoupling surcharges if the Company failed to achieve specified conservation goals. Additionally, the Commission required MERC to include additional information in its future annual decoupling evaluation reports. In particular, Order Point 15, parts c and d of the Commission's October 31, 2016, Order required the following:

- c. MERC shall address the merits of extending its revenue-decoupling mechanism to other customer classes as follows:
  - i. In its annual decoupling filings, MERC shall analysis include an of the financial consequences for ratepayers and MERC of extending the decoupling program to all customer classes with more than 50 MERC may also include an customers. analysis of the financial consequences of extending its decoupling program to any other combination of customer classes.

- d. MERC shall address the decline in energy conservation from the Residential class as follows:
  - i. In its annual decoupling filings, MERC shall demonstrating include an analysis the of reasonableness maintaining MERC's decoupling program given evidence that the level of savings generated by the Residential customer class has declined while the program has been in effect. MERC shall include (1) data showing its average Conservation Improvement Program (CIP) savings for the previous five years compared to the savings of its most recent complete year, and (2) an explanation for any differences in the CIP savings, including the likely impact of decoupling.
  - ii. In its decoupling evaluation report or in its initial filing of its next rate case, MERC shall include an analysis demonstrating the maintaining reasonableness of MERC's decoupling program given the evidence that the level of savings generated by the Residential customer class has declined while the program has been in effect.

On May 1, 2017, MERC submitted its fourth decoupling evaluation report for calendar year 2016, inclusive of the additional requirements set forth in the Commission's October 31, 2016, order. As reflected in that report, in 2016, savings were slightly down from the previous year and from the average of the pre-decoupling period.

On December 1, 2017, the Commission issued an Order accepting MERC's 2016 revenue decoupling evaluation report and requiring MERC to include in its 2017 report an analysis of how extending the revenue decoupling mechanism to other customer classes would have impacted overall rates for the period 2013-2017.

On May 1, 2018, MERC filed its fifth decoupling evaluation report for calendar year 2017, including an analysis of how extending decoupling to other customer classes would have impacted customer rates during the period 2013-2017. In 2017, MERC only achieved 75.8 percent of its total energy savings goal despite extensive marketing. Residential savings were also down in 2017 due to the loss of almost 50 percent of savings resulting from the new building code.

On December 26, 2018, the Commission issued Findings of Fact, Conclusions, and Order in Docket No. G011/GR-17-563, approving modifications to MERC's decoupling effective January 1, 2019, including removal of MERC's general service Small

Commercial and Industrial ("C&I") customer class from decoupling, and authorizing an additional three-year extension of MERC's decoupling pilot.

On February 6, 2019, the Commission issued an Order approving MERC's 2017 decoupling evaluation report and requiring the Company to file all future annual decoupling evaluation reports in separate dockets.

This decoupling evaluation report for 2018 reflects the sixth evaluation report filed by the Company. In 2018, MERC achieved 94.1 percent of energy savings goals, an improvement of 18.3 percent over 2017. The Low-Income sector achieved 82.3 percent of energy savings goals. The Residential sector realized 90.4 percent of savings goals and the C&I sector realized 96.7 percent of savings goals. MERC achieved 96.7 percent of the 1 percent of CIP-applicable retail sales.

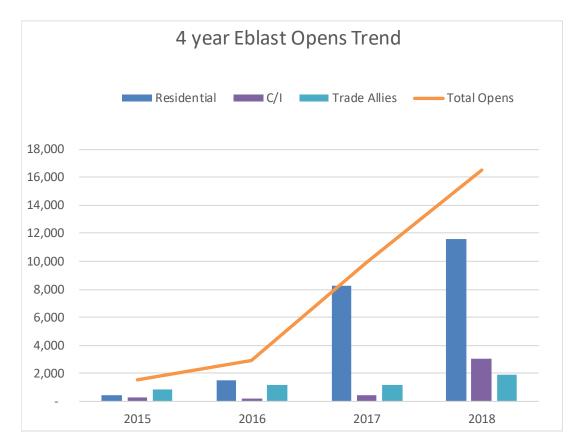
Over the past six years, MERC's decoupling program has proven successful at effectively reducing some of the inherent disincentive to promote energy efficiency. The effectiveness of MERC's decoupling program in removing the disincentive to promote energy efficiency was particularly evident in 2018.

In preparing the 2017-2019 Triennial Plan, the Company reviewed historic trends and the impact of the various changes to the Technical Reference Manual and the new energy code. It became evident at that time that meeting goals would be difficult for MERC. In preparation for this challenge, in 2017, MERC made several changes in its marketing efforts. After 2017 program year results were finalized, MERC recognized that in spite of increased marketing, the portfolio underperformed. In response, the Company filed modifications to the CIP plan in 2018 to improve portfolio performance. These changes were presented in two formal modifications. The first modification, which was filed on May 17, 2018, and approved on July 13, 2018, expanded direct installation measures for commercial customers, provided for a waiver of customer copays for low income weatherization and equipment replacements, added insulated pipe wrap to MERC's water kit, updated water heater rebate measures, and added a home energy assessment. The second modification, which was filed on June 22, 2018, and approved by decision on September 27, 2018, added a residential behavioral change program and terminated MERC's Online Audit Tool.

In 2018, MERC continued to expand the communication of programs and benefits in bill inserts and articles in the newsletter, Customer Connection, and via direct mail campaigns. MERC added a customer relationship management tool to better coordinate C&I customer outreach.

From a digital perspective, in 2017, MERC planned and implemented a more targeted and strategic digital marketing approach to leverage the general awareness promotions mentioned above. In 2018, the Company continued this expanded outreach and increased the number of email campaigns related to CIP offerings from a total of 13 in 2015 and 21 in 2016, to 48 in 2017 and 63 in 2018. The number of emails sent in total increased from 4,161 in 2015 and 7,545 in 2016, to 27,575 in 2017 and 46,507 in 2018. The number of emails opened also increased significantly from 1,583 in 2015 and 2,895

in 2016, and 9,953 in 2017 to 16,502 in 2018.



For Residential and Small C&I customers, trade allies play a key role in influencing customer decisions to implement energy savings measures. When customers who participated in a rebate program were asked how they heard about the program, 75 percent responded the dealer/retailer. In 2018, the Company continued to aggressively conduct outreach to both trade allies and customers, increasing the number of targeted emails sent by 69 percent.

B. Evaluation of MERC's CIP Programs and Program Savings from 2010-2018

### B. <u>Evaluation of MERC's CIP Programs and Program Savings from 2010-2018</u>

The following sections provide an evaluation of MERC's CIP program and program savings from 2010 through 2018. The evaluation uses the 2010 to 2012 CIP program activities for the baseline period <u>prior</u> to decoupling and the 2013 to 2018 CIP program activities for the <u>post</u>-decoupling implementation timeframe. The baseline for comparison is the average energy savings achieved for Residential and C&I customers for the period of 2010 to 2012.

Additionally, MERC is providing a separate breakout of savings for its Small C&I customers, consistent with its June 10, 2016, Reply Comments filed in Docket No. G011/GR-10-977. As stated in MERC's comments,

Currently, the C&I sector is not broken out between small and large customer classes so MERC does not report separately on Small C&I CIP achievements. For purposes of the Decoupling Evaluation Report, MERC has calculated estimated CIP savings based on sales usage for Small C&I and Large C&I. MERC would be able to separately report Small C&I energy savings in its 2016 Decoupling Evaluation Report but would not be able to breakout historical data on CIP energy savings between the Small and Large C&I classes.

MERC has continued to separately calculate and report Small C&I energy savings in this 2018 report.

This section also addresses the Commission's Order Point in Docket No. G011/GR-15-736 requiring that MERC include an analysis demonstrating the reasonableness of maintaining MERC's decoupling program given evidence that the level of savings generated by the Residential customer class has declined while the program has been in effect. Consistent with the Commission's Order, MERC is required to include (1) data showing its average CIP savings for the previous five years compared to the savings of its most recent complete year, and (2) an explanation for any differences in the CIP savings, including the likely impact of decoupling.

Several items should be noted with respect to this evaluation:

- Savings were reported in Mcfs for the 2010-2012 Triennial Plan period ("Base Years"). Starting with the 2013-2015 Plan period ("Post Years"), savings are reported in dekatherms ("Dth"). For simplicity, these units are referenced in this evaluation interchangeably; savings have not been recalculated based on British Thermal Unit ("BTU") content or any other calculation.
- In the Base Years, CIP portfolios, budget, and savings goals for Peoples Natural Gas ("PNG") and Northern Minnesota Utilities ("NMU") were separate. Starting with the Post Years, they were combined. This evaluation report reflects achievements

for PNG and NMU both separately and combined for ease of comparison, as the Post Years no longer track them separately.

- In the Base Years, low-income programs were considered part of Residential programs. However, because the Low-Income sector has been separated out for the Post Years, it has been separated out for the Base Years as well.
- Low-income programs in the Base Years consisted only of the Low Income Weatherization program. Starting with the Post Years, Low-Income sector programs included both Low Income Weatherization and the 4U2 programs. For ease of comparison, 4U2 has been incorporated into the Low-Income sector for the Base Years. It should also be noted that in the 2010 program year, the 4U2 program was a pilot and only offered through four Community Action Program ("CAP") agencies in the PNG service territory.
- To minimize the impact of portfolio-level costs from changes in programs, these costs have been reported separately. These costs include actual spending for CIP support (marketing, fulfillment, data entry into the tracking system, planning, legal, preparing filings and reports, Minnesota Department of Commerce, Division of Energy Resources ("Department") assessments, etc.).
- At the time of writing this report, numbers for 2018 CIP activities have not been filed and consequently, all 2018 numbers reported herein are preliminary.
- While the decoupling mechanism was approved in 2012 and implemented effective January 1, 2013, the initial activity surrounding increasing CIP commitments as a result of decoupling started in 2012 with one-on-one meetings with a variety of stakeholders to obtain input on program ideas. These stakeholders included the Department, the Isaak Walton League of America, the Minnesota Center for Environmental Advocacy, and Clean Energy Resource Teams ("CERTs"). Based on these meetings, MERC made the following modifications in 2013 to implement new measures and programs:
  - A residential heating system tune-up measure was implemented.
  - A retro-commissioning measure was included as part of the C&I Custom Rebate.
  - A Multifamily Direct Install Plus program was launched in July 2013.
  - A Small Business Direct Install Plus program was launched in August 2013.
- CIP activity changes from year to year, especially for small utilities with large customers. For instance, the C&I sector for NMU achieved 132.7 percent of the sector energy savings goal in 2011 and 232.8 percent of the sector energy savings goal in 2012. For PNG, however, the C&I sector achieved approximately 70 percent of the sector energy savings goal in both 2011 and 2012, while the Residential

sector achieved 106.2 percent of the energy savings goal in 2011 and 89.1 percent in 2012. Due to the customer class makeup of NMU, the C&I sector normally carried the energy savings, while for PNG, the opposite was true—the Residential sector normally carried the bulk of the savings. To smooth out the impacts that can be made by large projects, the analysis has included an average over the three Base Years.

- One of the major changes to the Post Years from the Base Years is the discontinuance of behavior-based programs in the Post Years, though, as noted above, MERC did propose a new behavior-based program effective in late 2018. While the Base Years C&I behavioral program was very small and therefore did not have a large impact, the Residential behavior-based program was large and had a significant impact on results. Effective with the 2013 program year, the Department implemented significant modifications to how savings were calculated for behavioral programs, reducing the energy savings by two-thirds. As a result, in order to provide a more accurate comparison of the Base Years to the Post Years, when relevant, we have provided two charts—one including the residential behavior program savings and one modifying the residential behavior program. Home Energy Reports, was reintroduced in December of 2018, because 2018 is a launch or ramp-up year, this program will not have a dramatic impact on 2018 results. MERC would expect more significant savings related to this behavior program in future years.
- CIP savings goals decreased significantly in 2013-2014 due to several factors including an increase in large customers who opted out, a decrease in the operations and maintenance ("O&M") savings allowed for the Building Operator Certification program, an increasing saturation of the potential market for the large customer Turnkey Efficiency program, and reductions in savings in 2014 due to an anticipated increase in the baseline for high-efficiency furnaces, which reduced savings even though participation and measures remained the same.
- In 2015, MERC's CIP savings goals were increased as a result of the acquisition of Interstate Power & Light's ("IPL") Minnesota gas service territory and due to a correction to the CIP-exempt sales.
- The following table summarizes MERC's energy savings goals during the Base Years and Post Years through 2018:

	Energy Sa	ving Goals	Percent of	Retail Sales	
	PNG	NMU	PNG	NMU	
2010	324,510	89,326	0.79%	0.68%	
2011	392,079	105,188	0.93%	0.79%	
2012	450,423	121,682	1.07%	0.90%	
2013	394,	,948	1.1	2%	
2014	357,	,561	1.0	1%	
2015	453,	,193	1.0	5%	
2016	460,	,537	1.0	7%	
2017	531,	,810	1.01%		
2018	541,	,514	1.0	3%	

A number of key challenges and successes are worth noting with respect to MERC's energy savings achievements following implementation of decoupling:

- The residential heating system tune-up measure, introduced in the 2013-2015 • Triennial Plan filing, was projected to achieve 1.8 Dth of savings per unit. In the 2013-2015 Triennial Plan, we estimated 2,000 participants for 2013, 4,000 for 2014, and 6,000 for 2015. This would provide 3,200 Dth of savings in 2013, 6,400 Dth in 2014, and 9,600 Dth in 2015. Unfortunately, participation levels for this measure continued to fall short, and measure projections were dialed back in the 2017-2019 Triennial Plan period. In addition, MERC implemented an Authorized Insulation Contractor ("AIC") program starting in September 2013. This program was implemented to eliminate, to the extent possible, fraudulent activities in air sealing and insulation activities by a variety of organizations that use strong arm tactics in door-to-door marketing. Only work performed by AICs would be eligible for a rebate. While we expected a lower number of rebate applications for this measure due to the change, the actual participation continues to be lower than projected. As a result, savings did not meet the lowered goal. However, the 2013-2015 plan assumed an increase in the furnace baseline, starting in 2014, which did not materialize. Consequently, unexpected savings were recognized due to the lower efficiency baseline, helping to offset lower savings from tune-ups and insulation. These impacts continued through 2018.
- The retro-commissioning measure has not been a high-demand measure. Therefore, MERC estimated two participants in 2013, increasing to six in 2014, and eight in 2015. Savings were estimated at 4,000 Dth per participant. In the first three post-decoupling implementation years, there were no requests for retro-commissioning, even though the Turnkey implementation contractor provided information on the availability of this measure to all C&I customers with whom they were in contact. In each of 2016 and 2018, one rebate application was approved.

- In 2013, MERC issued a Request for Proposals ("RFP") for an implementation contractor for the Multifamily and Small Business programs. The vendor was selected in the summer of 2013 and the programs were implemented in late summer. We were extremely pleased that the Multifamily program exceeded its energy savings goal in 2013, even though the program was in start-up mode. It continues to exceed its energy savings goal. The Multifamily program has evolved to serve as an opportunity to partner with other electric utilities in the delivery of services. In 2018, the program also enjoyed the spotlight with a feature news article published in The Multi Housing Advocate, CIC Midwest News Quarterly, and the Department CIP News.
- The Small Business program achieved approximately 30 percent of its energy savings goal in 2013, but achieved approximately 88 percent in 2014, a significant increase. It achieved 80.1 percent of its energy savings goal in 2015. Despite the increased participation in eligibility usage from 500 Dth per year to 2,000 Dth per year, the implementation contractor continued to struggle with obtaining participation. MERC worked with the implementation contractor to implement special marketing campaigns targeting this "hard-to-reach" customer segment. It was deemed most likely that market potential would be depleted for the next Triennial Plan period. In the 2017–2019 Triennial Plan, MERC received approval to discontinue the program. However, small business customers continue to be eligible for other C&I programs.
- Other minor changes were approved for the 2017–2019 Triennial Plan. These changes include higher rebates for advanced (auto-programming) thermostats, a quality installation pilot for furnaces, and a builder rebate structure based on percentage achieved over energy code for residential new construction.

MERC continues to be committed to the success of the CIP program.

B.1. Based on the results reported in the annual CIP Status Reports, by what amounts did the Company change its CIP program expenditures and its resulting natural gas MCF savings through Company-sponsored programs over the term of the RDM, relative to the 2010-2012 pre-decoupling period? What were the annual CIP savings (completed project basis) for 2018, for Residential and Commercial & Industrial compared to achieved MCF savings in the 2010-2012 (completed project basis) pre-decoupling period?

Changes to CIP expenditures are detailed in Tables B1(A) and B1(B) below. Table B1(A) provides the information based on all programs, including the residential behavior program. Table B1(B) eliminates the residential behavior program. With the reintroduction of the behavioral program, these charts will reflect activity in the Post Years. Both charts also compare 2017 to 2018, 2018 to the average of the Base Years, and the average of the Base Years to the average of the Post Years.

Table B1 (A) - CIP Expenditures											
				Base Years							Post Years
All Programs	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Low Income Programs-PNG	\$595,445	\$467,377	\$564,803	\$542,542							
Low Income Programs-NMU	\$173,617	\$105,824	\$193,307	\$157,583							
Low Income Programs-Total	\$769,062	\$573,201	\$758,110	\$700,124	\$1,044,422	\$950,752	\$1,036,515	\$1,119,228	\$1,596,460	\$1,535,530	\$1,213,818
Residential Programs-PNG	\$2,874,197	\$3,558,117	\$4,021,906	\$3,484,740							
Residential Programs-NMU	\$449,292	\$459,060	\$471,925	\$460,092							
Residential Programs-Total	\$3,323,489	\$4,017,176	\$4,493,831	\$3,944,832	\$4,259,150	\$3,215,396	\$3,623,799	\$4,421,040	\$4,765,649	\$5,102,923	\$4,231,326
C&I Programs-PNG	\$2,082,270	\$1,694,020	\$1,871,669	\$1,882,653							
C&I Programs-NMU	\$514,180	\$925,118	\$1,543,768	\$994,355							
C&I Programs-Total	\$2,596,450	\$2,619,138	\$3,415,437	\$2,877,008	\$2,230,960	\$2,089,208	\$2,812,099	\$2,280,494	\$2,987,644	\$3,587,350	\$2,664,626
Portfolio Level Expenses-PNG	\$652,607	\$651,263	\$975,455	\$759,775							
Portfolio Level Expenses-NMU	\$207,651	\$206,396	\$308,184	\$240,744							
Portfolio Level Expenses-Total	\$860,258	\$857,659	\$1,283,639	\$1,000,519	\$1,095,706	\$1,105,476	\$1,398,226	\$1,377,966	\$1,317,245	\$1,551,632	\$1,307,709
Total Expenditures-PNG	\$6,204,519	\$6,370,776	\$7,433,833	\$6,669,709							
Total Expenditures-NMU	\$1,344,740	\$1,696,397	\$2,517,185	\$1,852,774							
Total Expenditures-Total	\$7,549,259	\$8,067,174	\$9,951,017	\$8,522,483	\$8,630,240	\$7,360,832	\$8,870,639	\$9,198,728	\$10,666,998	\$11,777,436	\$9,417,479
Change 2017 to 2018:	Change 2017 to 2018: \$1,110,438 9.4%										
Change Base Years Average to 2018:				\$3,254,952	38.2%						
Change Base Years Average to Post Ye	ars Average:			\$894,995	10.5%						

### Table B1 (B) - CIP Expenditures

Table B1 (B) - CIP Expenditures											
Programs Without Residential				Base Years							Post Years
Behavior Program	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Low Income Programs-PNG	\$595,445	\$467,377	\$564,803	\$542,542							
Low Income Programs-NMU	\$173,617	\$105,824	\$193,307	\$157,583							
Low Income Programs-Total	\$769,062	\$573,201	\$758,110	\$700,124	\$1,044,422	\$950,752	\$1,036,515	\$1,119,228	\$1,596,460	\$1,535,530	\$1,213,818
Residential Programs-PNG	\$2,445,335	\$3,120,519	\$3,466,413	\$3,010,756							
Residential Programs-NMU	\$326,918	\$348,137	\$314,502	\$329,852							
Residential Programs-Total	\$2,772,253	\$3,468,656	\$3,780,916	\$3,340,608	\$4,259,150	\$3,215,396	\$3,623,799	\$4,421,040	\$4,765,649	\$4,903,647	\$4,198,114
C&I Programs-PNG	\$2,082,270	\$1,694,020	\$1,871,669	\$1,882,653							
C&I Programs-NMU	\$514,180	\$925,118	\$1,543,768	\$994,355							
C&I Programs-Total	\$2,596,450	\$2,619,138	\$3,415,437	\$2,877,008	\$2,230,960	\$2,089,208	\$2,812,099	\$2,280,494	\$2,987,644	\$3,587,350	\$2,664,626
Portfolio Level Expenses-PNG	\$652,607	\$651,263	\$975,455	\$759,775							
Portfolio Level Expenses-NMU	\$207,651	\$206,396	\$308,184	\$240,744							
Portfolio Level Expenses-Total	\$860,258	\$857,659	\$1,283,639	\$1,000,519	\$1,095,706	\$1,105,476	\$1,398,226	\$1,377,966	\$1,317,245	\$1,551,632	\$1,307,709
Total Expenditures-PNG	\$5,775,657	\$5,933,179	\$6,878,340	\$6,195,725							
Total Expenditures-NMU	\$1,222,366	\$1,585,475	\$2,359,762	\$1,722,534							
Total Expenditures-Total	\$6,998,023	\$7,518,654	\$9,238,102	\$7,918,260	\$8,630,240	\$7,360,832	\$8,870,639	\$9,198,728	\$10,666,998	\$11,578,159	\$9,384,266
Change 2017 to 2018:		\$911,161	7.9%								
Change Base Years Average to 2018:				\$3,659,900	46.2%						
Change Base Years Average to Post Years	ars Average:			\$1,466,006	18.5%						

Activity for Low Income Weatherization had been declining in the early Post Years. Had 4U2 not been included in the Low-Income sector, this trend would be more obvious. The 4U2 program has overcome marketing obstacles and continues to have a pipeline of customers waiting to be served. However, because 4U2 is unable to leverage Federal Weatherization Assistance Program funding, the total cost of improvements is borne by MERC, thereby increasing the cost per Dth saved. In addition, Federal Weatherization Assistance Program protocols have increased the health and safety issues that must be addressed in each home, increasing program costs without any additional savings. Furthermore, due to MERC's dispersed service territory, it has been difficult to find qualified insulation contractors who are readily available to work on our projects in outstate Minnesota. This challenge persisted in 2018 as these contractors are generally smaller businesses and, without a steady stream of business from MERC, they commit to other projects. It is difficult for these qualified insulation contractors to drop existing projects to work on MERC's programs. This has resulted in longer lead times for 4U2 work being completed. Finally, in recent years, for homes with vermiculite in the attic, we experience delays in potential work being completed. Low-Income sector spending decreased only slightly from 2017 to 2018. However, Low-Income sector spending in 2018 was significantly higher when compared to the Base Years.

Residential sector spending increased from 2017 to 2018, from Base Years to 2018, and from Base Years to the Post Years. The continued health of the new construction market and the reconfiguration and focused outreach related to water kits contributed to this achievement in 2018.

C&I sector expenditures increased from 2017 to 2018, from Base Years to 2018, and from Base Years to Post Years.

Overall, expenditures increased across the entire portfolio in all aspects, comparing 2017 to 2018, 2018 to Base Years, and Post Years to Base Years. Spending increased 9.4 percent from 2017 to 2018, 38.2 percent from Base Years to 2018, and 10.5 percent from Base Years to Post Years.

Changes to CIP savings are detailed in Tables B1(C) and B1(D) below. Table B1(C) provides the information based on all programs, including the residential behavior program with full behavioral savings claimed in Base Years. Table B1(D) modifies savings for the residential behavior program for the Base Years by acknowledging only 33 percent of the savings, consistent with the approved average savings method. Both charts also compare 2017 to 2018, the average of the Base Years to 2018, and the average of the Base Years to the average of the Post Years.

				Base Years							Post Years
All Programs	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Low Income Programs-PNG	8,337	6,009	5,710	6,685							
Low Income Programs-NMU	2,231	1,235	1,954	1,806							
Low Income Programs-Total	10,567	7,244	7,664	8,492	11,207	8,139	8,114	8,387	12,256	9,592	9,616
Residential Programs-PNG	194,455	205,978	200,156	200,196							
Residential Programs-NMU	37,754	34,504	31,933	34,731							
Residential Programs-Total	232,209	240,482	232,090	234,927	208,071	180,137	209,604	211,918	158,514	181,707	191,658
C&I Programs-Small C&I	n/a *	n/a *	n/a *	n/a *	n/a *	n/a *	n/a *	13,523	5,874	4,725	8,041
C&I Programs-PNG	146,083	144,398	153,171	147,884							
C&I Programs-NMU	56,977	65,624	141,671	88,091							
C&I Programs-Total	203,060	210,022	294,842	235,975	205,542	180,792	275,664	238,173	226,344	317,388	240,651
Total Savings-PNG	348,874	356,384	359,038	354,765							
Total Savings-NMU	96,962	101,363	175,558	124,628							
Total Savings	445,836	457,748	534,596	479,393	424,821	369,068	493,382	472,000	402,989	513,412	445,336
Change 2017 to 2018:				110,423	21.5%						
Change Base Years Average to 2018:				34,018	7.1%						
Change Base Years Average to Post Yea	rs Average:			(34,057)	-7.1%						

Table B1 (C) - CIP Savings All Programs

\* Savings for qualifying C/I Small Business Programs available from 2016 forward.

Base Years Post Years All Programs 2010 2011 2012 Average 2013 2014 2015 2016 2017 2018 Average Low Income Programs-PNG 8,337 6.009 5,710 6.685 Low Income Programs-NMU 2,231 1,235 1,954 1,806 10,567 11,207 8,139 8,114 8,387 12,256 9,616 Low Income Programs-Total 7,244 7,664 8,492 9,592 Residential Programs-PNG 153,452 176,987 163,200 164,546 Residential Programs-NMU 26,137 26,584 22,748 25,157 Residential Programs-Total 179,590 203.571 185.948 189,703 208.071 180.137 209,604 211.918 158.514 178.053 191.658 C&I Programs-Small C&I n/a \* n/a ' n/a' n/a <sup>i</sup> n/a n/a ' n/a <sup>:</sup> 13,523 5.874 4,725 8,041 C&I Programs-PNG 146,083 144.398 153,171 147.884 141,671 C&I Programs-NMU 56,977 65,624 88,091 203,060 210,022 294.842 235,975 205,542 180,792 275,664 238,173 226,344 317,388 240,651 C&I Programs-Total Total Savings-PNG 307.872 327.393 322.081 319.115 Total Savings-NMU 85,345 93,443 166,373 115,054 393,217 420,837 434,169 493,382 472,000 402,989 Total Savings 488,454 424,821 369,068 509,758 445,336 Change 2017 to 2018: 106,769 20.9% Change Base Years Average to 2018: 75,589 17.4% Change Base Years Average to Post Years Average: 11.167 2.6%

Table B1 (D) - CIP Savings with Average Savings Method applied to Behavioral Program

\* Savings for qualifying C/I Small Business Programs available from 2016 forward.

Total savings in the Low-Income sector decreased in 2018 compared to 2017.

The Residential sector increased energy savings in 2018 compared to 2017 under both scenarios. Savings were higher in 2018 compared to Base Years when reviewing the impact of the average savings method, Table B1(D). Whereas, Post Years were lower overall relative to the average of Base Years based on actual savings, Table B1(C). The decrease in savings in the current planning cycle relates to the fact that the new energy code reduced the savings from an average of 48.2 Dth per participant in 2016 down to 30.4 Dth per participant in 2018. This translates to a 38 percent reduction in savings.

Savings in the C&I sector increased in 2018 as compared to 2017. This was primarily the result of a very large custom rebate project. Customer projects of this size are rarely seen in MERC's territory.

Overall, the result over the entire portfolio is an increase of 20.9 percent from 2017 to 2018; an increase of 6.3 percent from the average of the Base Years to 2018; and a decrease of 7.1 percent from the average of Base Years to the average of the Post Years based on actual savings. After adjusting behavior program savings in accordance with the average savings method, as reflected in Table B1(D), there is an increase of 20.7 percent from 2017 to 2018, an increase of 17 percent in savings from the average of the Base Years to 2018, and an increase of 2.6 percent from the average of the Base Years to the average of the Post Years.

Based on this comparison, results through and including 2018 indicate that when Base Year behavioral program savings are adjusted to account for the Average Savings Method, MERC has achieved increased average energy savings in the Post Years after implementation of decoupling.

As previously agreed, MERC compared the list of Small C&I customers covered by the revenue decoupling mechanism ("RDM") to all C&I activity in the CIP program and identified savings from the Small C&I customer class.<sup>1</sup> This savings has been listed

<sup>&</sup>lt;sup>1</sup> MERC, however, was unable to breakout historical data on CIP energy savings between the Small and Large C&I classes for comparison to the 2016 and 2017 results. This is consistent with MERC's Reply Comments for its 2015 Annual Decoupling Evaluation Report:

Currently, the C&I sector is not broken out between small and large customers classes so MERC does not report separately on Small C&I CIP achievements. For purposes of the Decoupling Evaluation Report, MERC has calculated estimated CIP savings based on sales usage for Small C&I and Large C&I. MERC would be able to separately report Small C&I energy savings in its 2016 Decoupling Evaluation Report but would not be able to breakout historical data on CIP energy savings between the Small and Large C&I classes.

In the Matter of the Application by Minn. Energy Res. Corp. for Auth. to Increase Rates for Nat. Gas Serv. *in Minn.*, Docket No. G011/GR-10-977, MERC REPLY COMMENTS, 2015 ANNUAL DECOUPLING EVALUATION (June 10, 2016).

separately in the charts. MERC and its implementation contractor found through direct experience that Small C&I customers covered by the RDM are truly "hard to reach." They are busy, seldom have sufficient staff to be concerned about energy efficiency, and energy costs do not comprise a significant part of their overall operating expenses. In addition, many rent their facility from a landlord and so are unable or unwilling to make building investments to increase energy efficiency. Despite these obstacles, in 2018, 4,725 Dth of savings resulted from their participation in MERC's CIP programs, down from 5,874 in 2017.

## B.2. What is the proportion of MCF savings from Company-sponsored CIP programs compared to overall weather normalized sales volumes, in total, and for Residential and Commercial & Industrial customers for each year 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, and 2018?

The savings numbers for the Base Years are from the combination of PNG and NMU CIP Status Reports. The sales numbers have been taken from the combination of PNG and NMU Jurisdictional Reports with numbers adjusted to remove the sales of customers who were approved to opt-out of the CIP program and program charges.

Changes to CIP savings as a percentage of sales (from the respective planning cycles) are detailed in Table B2 below. A second table modifying the impact of the residential behavior program was not included as the difference did not significantly change the final result. Table B2 shows CIP savings results in energy saved as a percentage of sales in Post Years.

The sales included in Table B2 are the three-year average of weather normalized sales from each respective planning period.

	First Year Energy	Yr Average, 20-Yr Weather Normalized	Energy Savings as Percent of
All Programs	Savings	Sales (Dth)	<b>Retail Sales</b>
Base Year - 2010 (2010-2012 Triennial)	445,836	54,862,275	0.81%
Base Year - 2011 (2010-2012 Triennial)	457,748	54,862,275	0.83%
Base Year - 2012 (2010-2012 Triennial)	534,596	54,862,275	0.97%
Post Year - 2013 (2013-2015 Triennial)	424,821	35,297,938	1.20%
Post Year - 2014 (2013-2015 Triennial)	369,068	35,297,938	1.05%
Post Year - 2015 (Ext of 2013-2015 Triennial)	493,382	43,175,948	1.14%
Post Year - 2016 (Ext of 2013-2015 Triennial)	472,000	43,175,948	1.09%
Post Year - 2017 (2017-2019 Triennial)	402,989	52,732,921	0.76%
Post Year - 2018 (2017-2019 Triennial)	509,758	52,732,921	0.97%

Table B2 - CIP Savings as Percent of Weather-Normalized Sales (Dth)

### B.3. What were the associated lost margins from Company-sponsored CIP, Residential and Commercial & Industrial customers for each year 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, and 2018?

Lost margins for all programs are provided in Table B3(A). These lost margins correspond to the savings detailed in Table B1(C).

Table B3 (A) - CIP Savings: Wargin Re	able B3 (A) - CIP Savings: Margin Revenues											
All Programs	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Low Income-PNG	\$14,795	\$11,668	\$11,087									
Low Income-NMU	\$4,854	\$2,987	\$4,727									
Low Income Programs-Total	\$19,649	\$14,655	\$15,814	\$22,138	\$18,142	\$17,693	\$20,112	\$29,557	\$24,932			
Residential-PNG	\$345,080	\$399,947	\$388,643									
Residential-NMU	\$82,149	\$83,462	\$77,243									
Residential Programs-Total	\$427,229	\$483,409	\$465,886	\$411,023	\$401,525	\$457,062	\$508,179	\$382,272	\$462,821			
SC&I Programs-PNG	\$21,725	\$21,907	\$21,073									
LC&I Programs-PNG	\$197,221	\$214,889	\$230,105									
SC&I Programs-NMU	\$10,471	\$12,500	\$24,471									
LC&I Programs-NMU	\$100,927	\$130,189	\$283,720									
SCI Programs-Total	\$32,196	\$34,407	\$45,544	\$42,798	\$46,230	\$61,085	\$26,949	\$12,961	\$11,250			
LCI Programs-Total	\$298,148	\$345,078	\$513,825	\$307,738	\$302,025	\$401,120	\$434,229	\$382,183	\$577,469			
Total Lost Margins-PNG	\$578,821	\$648,411	\$650,908									
Total Lost Margins-NMU	\$198,401	\$229,138	\$390,161									
Total Lost Margins	\$777,222	\$877,549	\$1,041,069	\$783,698	\$767,922	\$936,962	\$989,470	\$806,974	\$1,076,473			

Table B3 (A) - CIP Savings: Margin Revenues

### B.4. During the 2010-2012 pre-decoupling time period as compared to the postdecoupling implementation time period of 2013-2018, did the Company change the scope or magnitude of any of its natural gas CIP programs?

MERC has made a number of modifications to its natural gas CIP programs in the Post Years, as discussed earlier in this report. In 2018, the Company filed modifications to the CIP plan to improve portfolio performance with respect to goal achievement. These changes were presented in two formal modifications. The first modification, which was filed on May 17, 2018, and approved on July 13, 2018, expanded direct installation measures for commercial customers, provided for a waiver of 4U2 customer co-pays, added insulated pipe wrap to MERC's water kit, updated water heater rebate measures, and added a home energy assessment. The second modification, which was filed on June 22, 2018, and approved by decision on September 27, 2018, added a residential behavioral change program and terminated MERC's Online Audit Tool.

B.5. What incremental program changes or expansions were implemented, and when, for the pre-decoupling time period of 2010-2012 as compared to the post-decoupling implementation time period of 2013-2018? Identify and describe each new, revised, or expanded programmatic change for Residential and Commercial & Industrial customers.

Behavior programs were discontinued after the Base Years, although MERC has recently reinitiated a behavioral program offering in 2018. The Base Years included the

Residential Home Energy Reports by Opower and the Schools for Energy Efficiency program by Hallberg Engineering.

The Company made the following changes to the CIP programs for the Post Years. The changes were made to improve the overall efficiency of the programs.

- The Residential Online Energy Audit was added as part of the Residential Sector Support programs in 2013. The Online Energy Audit provided a tool to generate leads for other programs. The Online Energy Audit tool was available through the end of 2018.
- Direct installation of low-cost measures was added to In-Home Energy Audits. MERC's residential auditors now install up to two low-flow showerheads, up to two bathroom faucet aerators, a low-flow kitchen faucet aerator, and up to six feet of pipe insulation as appropriate for the home. The 2015-2016 CIP Plan Extension added an additional direct installation measure. A 2017 modification added two additional direct installation options.
- In 2013, Residential dishwasher rebates were added for gas water heating customers. Dishwashers must be ENERGY STAR® certified to qualify for a rebate.
- The Residential AIC program was introduced in September 2013. This program provides for quality insulation and air sealing work by a cadre of insulation contractors who have: 1) agreed to program rules for customer service and marketing tactics; 2) passed Residential Building Envelope Whole House Air Leakage Control Installer BPI Certification; 3) taken combustion air training through the Center for Energy and Environment; and 4) passed a stringent quality control process on their initial insulation jobs. Random quality control inspections continue. Only insulation jobs performed by an AIC contractor were eligible for a rebate. This requirement has drastically reduced the number of insulation rebates issued in the last quarter of 2013 and in 2014, 2015, 2016, 2017, and 2018. This reduction is expected to continue.

The following measures and programs were added as a direct result of input from stakeholder discussions as required by the decoupling mechanism approval:

- A Residential Heating System Tune-Up Rebate was added. This rebate provided \$35 for a 7-point heating system tune-up.
- Retro-Commissioning was added as a measure under C&I Custom Rebates.
- A Small Business program was added. This program targeted the hard-toreach small commercial customer who used approximately 500 Dth per year or less. In 2015, this usage was increased to 2,000 Dth per year or less. This program provided for direct installation of low-cost measures such as

faucet aerators and pre-rinse spray valves as appropriate. It installed and programmed, or reprogrammed, setback thermostats to fit the businesses' needs. The program also provided a basic analysis of their energy use and investigated up to three additional high-value energy savings opportunities. Finally, the program offered assistance for completing these high-value savings opportunities. It should be noted that this program was discontinued at the end of 2016.

 A Multifamily program was added. This program targeted multifamily buildings with five or more units with a central gas meter, central heating, and central or individual water heating systems. It included low-income housing, 55-and-over senior housing, assisted living, on-campus college housing, and apartments. The program provided for direct installation of low-flow showerheads and faucet aerators, heating system and other high-value energy savings opportunity analysis, programming or re-programming of existing boiler controls, and customer ventilation analysis and improvement as appropriate. In addition, low-income multifamily buildings were eligible for an additional 25 percent on many of the standard C&I rebate.

In 2016, a Quality Installation pilot for 95 percent and 97 percent Annual Fuel Utilization Efficiency ("AFUE") gas furnaces was initiated. The results of this small pilot were analyzed in 2018. Pre- and post-usage for participants was compare to pre- and post-usage for a control group. The statistical analysis was not able to validate Iowa program studies.

In 2017, the Company filed a modification to add direct install measures for residential audit programs, add two C&I prescriptive measures, and incorporate various existing measure adjustments.

 In 2018, the Company filed modifications to the CIP plan to improve portfolio performance. The first modification allowed for expanding partnerships in the residential sector support program and delivering additional direct install measures in the commercial sector support programs. In addition, this modification requested the addition pipe wrap to the Water Kit program to extract more savings. The second modification proposed the discontinuance of the Online Audit Tool in order to reintroduce a residential behavioral program, Home Energy Reports. The Online Audit Tool was an indirect program with no savings goals, whereas the Home Energy Reports program will generate savings. B.6. What new or revised customer educational, informational, and marketing programs related to CIP were implemented by the Company during 2018? What were the primary messages and estimated costs of each of these programs? Were any MCF savings attributed to such programs in the annual CIP Status Report, and if so, how much, and using what assumptions or studies?

As mentioned above, Residential Online Energy Audits were added during 2013 and continued in 2014, 2015, 2016, 2017, and 2018 to help identify residential opportunities. This tool was discontinued at the end of 2018 and replaced with a behavioral program. The primary driver for deploying the Online Energy Audit tool was to encourage greater energy efficiency program participation.

MERC invested in updating C&I customer North American Industry Classification System ("NAICS") codes in 2013 to enable C&I customer market segmentation and meaningful direct mail campaigns. The effort cost-effectively identified NAICS codes for 85 percent of the C&I customers. This effort was handled internally and was absorbed into the marketing budget. MERC continues to use NAICS codes for the direct marketing of specific measures and messages to targeted customer segments.

Trade ally email blasts ("e-blasts") were also implemented during 2013 and continued through 2018. Using information from past rebate application forms, MERC targeted specific trade ally groups with information pertinent to their customer base. The costs incurred were primarily labor costs to gather email addresses, develop content, and send the emails.

Residential customer email outreach was also implemented in 2013 and continued through 2018. MERC continues to consolidate information from online energy audits, rebate applications, and in-home energy audit results and send emails to customers informing them about the availability of rebates. To facilitate the ability of customers to unsubscribe from the email outreach and to track the effectiveness of the email outreach, MERC subscribes to Constant Contact, a software tool that tracks the number of opened emails, click-throughs, and unsubscribe requests. The cost of this service is minimal (less than \$500 per year). Other costs associated with this outreach effort included labor to develop the template, write the emails, and send them to customers.

More detailed information on the increased promotional activity and outreach is provided in Section B.13 below.

B.7. What were the annual revenues collected in base rates from ratepayers to fund CIP programs by Residential and Commercial & Industrial customers for the pre-decoupling period of 2010-2012 as compared to the post-decoupling implementation period of 2013 through 2018?

Table B7 below reflects annual revenues collected in base rates from MERC's Residential and Small C&I customers.

Table B7 - Annual Revenues Collected in Base Rates											
All Programs	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Residential - PNG	\$831,723	\$876,866	\$709,447								
Residential - NMU	\$278,770	\$304,250	\$262,806	\$2,692,461	\$4,865,135	\$3,943,080	\$4,345,378	\$4,770,331	\$6,101,875		
C&I - PNG	\$41,544	\$43,879	\$32,540								
C&I - NMU	\$20,941	\$19,376	\$16,891	\$181,945	\$362,793	\$258,141	\$186,572	\$223,462	\$290,368		
Total	\$1,172,978	\$1,244,371	\$1,021,684	\$2,874,406	\$5,227,928	\$4,201,221	\$4,531,950	\$4,993,793	\$6,392,243		

# B.8. What were actual annual CIP expenditures for 2010-2012? How were such amounts spent each year for Residential and Commercial & Industrial customers? Identify the total expenditures directly distributed to customers (by customer group), and the total expenditures for the administration and program delivery of the programs.

The actual annual CIP expenditures by sector are listed below, categorized by incentive and non-incentive expenditures. Incentive expenditures are rebates only and do not consider costs for materials that are directly installed. Non-incentive expenditures are for administration, fulfillment and other delivery costs, marketing, and evaluation.

Actual CIP expenditures, exclusive of non-program portfolio costs related to CIP support and marketing, are detailed by type in Tables B8(A) and B8(B) below. Table B8(A) provides totals for all programs, including the residential behavior program. Table B8(B) excludes the costs of the residential behavior program.

Table B8 (A) - Actual Expenditures by		2010			2011			2012	
All Programs	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total
Low Income Sector-PNG	\$0	\$595,445	\$595,445	\$0	\$467,378	\$467,378	\$0	\$564,803	\$564,803
Low Income Sector-NMU	\$0	\$173,617	\$173,617	\$0	\$105,824	\$105,824	\$0	\$193,307	\$193,307
Low Income Sector-Total	\$0	\$769,062	\$769,062	\$0	\$573,202	\$573,202	\$0	\$758,110	\$758,110
Residential Sector-PNG	\$1,649,675	\$1,224,522	\$2,874,197	\$2,141,314	\$1,416,802	\$3,558,116	\$2,488,687	\$1,533,219	\$4,021,906
Residential Sector-NMU	\$207,119	\$242,173	\$449,292	\$233,131	\$225,929	\$459,060	\$213,440	\$258,485	\$471,925
Residential Sector-Total	\$1,856,794	\$1,466,695	\$3,323,489	\$2,374,444	\$1,642,731	\$4,017,176	\$2,702,127	\$1,791,704	\$4,493,831
C&I Sector-PNG	\$1,240,023	\$842,247	\$2,082,270	\$561,367	\$1,132,653	\$1,694,020	\$988,327	\$883,342	\$1,871,669
C&I Sector-NMU	\$269,442	\$244,738	\$514,180	\$516,849	\$408,269	\$925,118	\$1,016,674	\$527,094	\$1,543,768
C&I Sector-Total	\$1,509,465	\$1,086,985	\$2,596,450	\$1,078,216	\$1,540,921	\$2,619,138	\$2,005,001	\$1,410,436	\$3,415,437
Total-PNG	\$2,889,698	\$2,662,214	\$5,551,912	\$2,702,681	\$3,016,833	\$5,719,514	\$3,477,014	\$2,981,364	\$6,458,378
Total-NMU	\$476,561	\$660,528	\$1,137,089	\$749,980	\$740,021	\$1,490,001	\$1,230,114	\$978,886	\$2,209,000
Total	\$3,366,259	\$3,322,742	\$6,689,001	\$3,452,661	\$3,756,854	\$7,209,515	\$4,707,128	\$3,960,250	\$8,667,378
Incentive vs non-incentive as a									
percent of total spending	50.3%	49.7%		47.9%	52.1%		54.3%	45.7%	
		2013			2014			2015	
	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total
Low Income Sector	\$0	\$1,044,422	\$1,044,422	\$0	\$950,752	\$950,752	\$0	\$1,067,508	\$1,067,508
Residential Sector	\$2,993,564	\$1,265,586	\$4,259,150	\$1,946,935	\$1,268,462	\$3,215,397	\$2,296,764	\$1,644,408	\$3,941,172
C&I Sector	\$1,196,127	\$1,034,833	\$2,230,960	\$982,346	\$1,106,862	\$2,089,208	\$1,566,309	\$2,040,842	\$3,607,150
Total	\$4,189,691	\$3,344,842	\$7,534,533	\$2,929,281	\$3,326,076	\$6,255,357	\$3,863,073	\$4,752,758	\$8,615,830
Incentive vs non-incentive as a									
percent of total spending	55.6%	44.4%		46.8%	53.2%		44.8%	55.2%	
		2016	•		2017			2018	
	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total
Low Income Sector	\$0	\$1,119,228	\$1,119,228	\$0	\$1,596,460	\$1,596,460	\$0	\$1,535,530	\$1,535,530
Residential Sector	\$2,486,416	\$1,934,625	\$4,421,040	\$2,607,574	\$2,158,075	\$4,765,649	\$2,709,384	\$2,393,539	\$5,102,923
C&I Sector	\$1,139,652	\$1,140,842	\$2,280,494	\$1,799,115	\$1,188,529	\$2,987,644	\$2,610,504	\$976,846	\$3,587,350
Total	\$3,626,067	\$4,194,694	\$7,820,762	\$4,406,689	\$4,943,065	\$9,349,754	\$5,319,888	\$4,905,915	\$10,225,803
Incentive vs non-incentive as a									
percent of total spending	46.4%	53.6%		47.1%	52.9%		52.0%	48.0%	

Table B8 (A) - Actual Expenditures by Type

Table B8 (B) - Actual Expenditures by Programs Without Residential		2010			2011			2012	
Behavior Program	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total
Low Income Sector-PNG	\$0	\$595,445	\$595,445	\$0	\$467,378	\$467,378	\$0	\$564,803	\$564,803
Low Income Sector-NMU	\$0	\$173,617	\$173,617	\$0	\$105,824	\$105,824	\$0	\$193,307	\$193,307
Low Income Sector-Total	\$0	\$769,062	\$769,062	\$0	\$573,202	\$573,202	\$0	\$758,110	\$758,110
Residential Sector-PNG	\$1,649,675	\$795,660	\$2,445,335	\$2,141,314	\$979,205	\$3,558,116	\$2,488,687	\$977,726	\$4,021,906
Residential Sector-NMU	\$207,119	\$119,799	\$326,918	\$233,131	\$115,006	\$459,060	\$213,440	\$101,062	\$471,925
Residential Sector-Total	\$1,856,794	\$915,459	\$2,772,253	\$2,374,444	\$1,094,212	\$4,017,176	\$2,702,127	\$1,078,788	\$4,493,831
C&I Sector-PNG	\$1,240,023	\$842,247	\$2,082,270	\$561,367	\$1,132,653	\$1,694,020	\$988,327	\$883,342	\$1,871,669
C&I Sector-NMU	\$269,442	\$244,738	\$514,180	\$516,849	\$408,269	\$925,118	\$1,016,674	\$527,094	\$1,543,768
C&I Sector-Total	\$1,509,465	\$1,086,985	\$2,596,450	\$1,078,216	\$1,540,921	\$2,619,138	\$2,005,001	\$1,410,436	\$3,415,437
Total-PNG	\$2,889,698	\$2,233,352	\$5,123,050	\$2,702,681	\$2,579,236	\$5,719,514	\$3,477,014	\$2,425,871	\$6,458,378
Total-NMU	\$476,561	\$538,154	\$1,014,715	\$749,980	\$629,099	\$1,490,001	\$1,230,114	\$821,463	\$2,209,000
Total	\$3,366,259	\$2,771,506	\$6,137,765	\$3,452,661	\$3,208,335	\$7,209,515	\$4,707,128	\$3,247,334	\$8,667,378
Incentive vs non-incentive as a									
percent of total spending	54.8%	45.2%		47.9%	44.5%		54.3%	37.5%	
		2013			2014			2015	
	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total
Low Income Sector	\$0	\$1,044,422	\$1,044,422	\$0	\$950,752	\$950,752	\$0	\$1,067,508	\$1,067,508
Residential Sector	\$2,993,564	\$1,265,586	\$4,259,150	\$1,946,935	\$1,268,462	\$3,215,397	\$2,296,764	\$1,644,408	\$3,941,172
C&I Sector	\$1,196,127	\$1,034,833	\$2,230,960	\$982,346	\$1,106,862	\$2,089,208	\$1,566,309	\$2,040,842	\$3,607,150
Total	\$4,189,691	\$3,344,842	\$7,534,533	\$2,929,281	\$3,326,076	\$6,255,357	\$3,863,073	\$4,752,758	\$8,615,830
Incentive vs non-incentive as a									
percent of total spending	55.6%	44.4%		46.8%	53.2%		44.8%	55.2%	
		2016			2017			2018	
	Incentive	Non-Incentive	Total		Non-Incentive	Total	Incentive	Non-Incentive	Total
Low Income Sector	\$0	\$1,119,228	\$1,119,228	\$0	\$1,596,460	\$1,596,460	\$0	\$1,535,530	\$1,535,530
Residential Sector	\$2,486,416	\$1,934,625	\$4,421,040	\$2,607,574	\$2,158,075	\$4,765,649	\$2,709,384	\$2,393,539	\$5,102,923
C&I Sector	\$1,139,652	\$1,140,842	\$2,280,494	\$1,799,115	\$1,188,529	\$2,987,644	\$2,411,228	\$976,846	\$3,587,350
Total	\$3,626,067	\$4,194,694	\$7,820,762	\$4,406,689	\$4,943,065	\$9,349,754	\$5,120,612	\$4,905,915	\$10,026,527
Incentive vs non-incentive as a									
percent of total spending	46.4%	53.6%		47.1%	52.9%		51.1%	48.9%	

## B.9. How did MERC's natural gas Commissioner-approved conservation energy savings goal(s) compare to the reported CIP energy savings for 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, and 2018 reported in the annual CIP Status Report? How did decoupling influence these results?

Actual versus approved energy savings are detailed in Tables B9(A) and B9(B) below. Table B9(A) provides the information based on all programs, including the residential behavior program. Table B9(B) shows the effect of modifying the residential behavior program savings by the Average Savings Method. The percent of approved energy savings achieved increased in 2018 compared to 2017.

Residential savings increased in 2018 compared to 2017 results. With the impacts of the new energy code causing a decrease in calculated energy savings, MERC reintroduced the behavioral program, added pipe wrap to water kits, and aggressively marketed residential rebates to boost savings. MERC also engaged in partnerships to increase Water Kit program results. This increased outreach in both water kit and Residential rebate measures improved the sector savings results by 18.5 percent when compared to 2017.

In the C&I segment, MERC proposed, and the Department approved, a modification to reduce the C&I Rebate program goals in 2018 in order to realign savings goals with expected market conditions. Although the C&I sector fell short of goal in 2018, MERC

recognized significant improvement, largely due to a large custom rebate project that was completed in 2018, contributing nearly 90,000 Dth of savings to the sector. In addition, significant outbound customer calls and trade ally outreach helped boost the number of applications for prescriptive rebates by nearly 35 percent in 2018.

abie b5 (A) - Actual versus Approved Energy Savings										
All Programs	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Actual - PNG	348,874	356,384	359,038							
Actual - NMU	96,962	101,363	175,558							
Actual - Total	445,836	457,748	534,596	424,821	369,068	493,382	472,000	402,989	513,412	
Approved - PNG	324,510	392,079	450,423							
Approved - NMU	89,326	105,188	121,682							
Approved - Total	413,836	497,268	572,106	394,949	357,561	453,194	460,536	531,810	541,514	
Savings Over(Under) Achieved - PNG	24,364	(35,695)	(91,386)							
Savings Over(Under) Achieved - NMU	7,636	(3,825)	53,876							
Savings Over(Under) Achieved - Total	32,000	(39,520)	(37,510)	29,872	11,507	40,188	11,464	(128,821)	(28,102)	
Percent Achieved	107.7%	92.1%	93.4%	107.6%	103.2%	108.9%	102.5%	75.8%	94.8%	

Table B9 (A) - Actual versus Approved Energy Savings

Table B9 (B) - Actual versus Approved Energy Savings with Average Savings Method applied

Programs With Modified Residential									
Behavior Program	2010	2011	2012	2013	2014	2015	2016	2017	2018
Actual - PNG	307,872	327,393	322,081						
Actual - NMU	85,345	93,443	166,373						
Actual - Total	393,217	420,837	488,454	424,821	369,068	493,382	472,000	402,989	509,758
Approved - PNG	324,510	392,079	450,423						
Approved - NMU	89,326	105,188	121,682						
Approved - Total	413,836	497,268	572,106	394,949	357,561	453,194	460,536	531,810	541,514
Savings Over(Under) Achieved - PNG	(16,639)	(64,686)	(128,343)						
Savings Over(Under) Achieved - NMU	(3,981)	(11,745)	44,691						
			,						
Savings Over(Under) Achieved - Total	(20,620)	(76,431)	(83,652)	29,872	11,507	40,188	11,464	(128,821)	(28,102)
Percent Achieved	95.0%	84.6%	85.4%	107.6%	103.2%	108.9%	102.5%	75.8%	94.1%

The impact that decoupling has had on MERC's CIP marketing is discussed in Section B.13 below. While factors unrelated to the Company's promotion of energy conservation have the potential to, and frequently do, affect actual energy savings achievements, MERC's decoupling pilot has been effective in achieving the goal of reducing the disincentive for the Company to encourage energy conservation.

## B.10. MERC shall include a comparison of lifetime energy savings that can be attributed to the Company's CIP before and after the implementation of revenue decoupling.

Lifetime energy savings are detailed in Tables B10(A) and B10(B) below. Table B10(A) provides the information based on all programs, including the residential behavior program. Table B10(B) modifies the savings for the residential behavior program to reflect the changes in how the Department currently measures energy savings under the Average Savings Method. Lifetime energy savings are detailed by utility, by

Residential and C&I sectors, and by year. Under both scenarios, Post Year lifetime savings exceeds Base Year lifetime savings.

In prior reporting, MERC inadvertently did not include lifetime savings from Building Operator Training O&M savings, Multifamily Direct Install Plus, and Small Business Direct Install Plus programs in 2013 and 2014. The tables below have been corrected to include these programs. Overall lifetime savings have increased from Base Years to Post Years. In past decoupling evaluation reports, Table B10(A) included only one year of residential behavior program savings rather than lifetime savings. This has been corrected. In 2017, Residential lifetime energy savings was incorrectly reported due to a data entry error. This error has been corrected in the tables below.

				Base Years							Post Years
All Programs	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Residential Programs-PNG	2,620,919	3,270,852	2,950,696	2,947,489							
Residential Programs-NMU	425,622	453,505	412,951	430,693							
Residential Programs-Total	3,046,541	3,724,357	3,363,647	3,378,182	3,274,790	3,341,899	3,789,697	3,994,962	2,962,037	3,100,130	3,410,586
C&I Programs-PNG	2,361,120	1,726,282	2,095,077	2,060,826							
C&I Programs-NMU	557,135	1,045,860	2,222,509	1,275,168							
C&I Programs-Total	2,918,255	2,772,141	4,317,585	3,335,994	3,059,724	3,125,297	3,631,203	2,835,370	3,593,757	5,075,013	3,553,394
Total Lifetime Savings-PNG	4,982,039	4,997,134	5,045,773	5,008,315							
Total Lifetime Savings-NMU	982,757	1,499,365	2,635,459	1,705,860							
Total Lifetime Savings	5,964,796	6,496,498	7,681,232	6,714,175	6,334,514	6,467,196	7,420,900	6,830,332	6,555,794	8,175,143	6,963,980

Lifetime savings for 2017 Residential programs have been corrected.

Table B10 (B)- Lifetime Energy Savings	with Average	e Savings Me	thod Applie	d							
Programs With Modified Residential				Base Years							Post Years
Behavior Program	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Residential Programs-PNG	2,497,911	3,183,864	2,839,826	2,840,534							
Residential Programs-NMU	390,771	429,749	385,395	401,972							
Residential Programs-Total	2,888,682	3,613,613	3,225,221	3,242,505	3,274,790	3,341,899	3,789,697	3,994,962	2,962,037	3,089,170	3,408,759
C&I Programs-PNG	2,361,120	1,726,282	2,095,077	2,060,826							
C&I Programs-NMU	557,135	1,045,860	2,222,509	1,275,168							
C&I Programs-Total	2,918,255	2,772,141	4,317,585	3,335,994	3,059,724	3,125,297	3,631,203	2,835,370	3,593,757	5,075,013	3,553,394
Total Lifetime Savings-PNG	4,859,031	4,910,146	4,934,902	4,901,360							
Total Lifetime Savings-NMU	947,906	1,475,609	2,607,904	1,677,139							
Total Lifetime Savings	5,806,937	6,385,754	7,542,806	6,578,499	6,334,514	6,467,196	7,420,900	6,830,332	6,555,794	8,164,183	6,962,153

### B.11. MERC shall include documentation in its evaluation and annual reports that shows for each existing CIP project any changes that have occurred in the number of participants, any reductions in gas use per participant, and any changes in the cost-effectiveness or any other measure that gauges the performance of these projects.

Due to the redesign of the CIP portfolio for the 2013-2015 Triennial Plan, it was not possible to provide information for CIP program changes by program. For example, in 2012, the Community Energy Services program was a stand-alone program. In 2013, the workshop and In-Home Audit portions of the program were included in the Residential Sector Support program while the actual rebates for improvements were included in the Residential Rebates program. Therefore, information here has been provided by sector.

The first two tables below detail by sector, by utility, and by year, participation in the three customer sectors, including and excluding the residential behavior program

(Tables B11(A) and B11(B), respectively). The residential behavior program had a significant impact on participation, as many customers received Home Energy Reports. With this program being reintroduced in 2018, we see the impact on participation in the Residential sector. Participation is one way of gauging the success of a program. Excluding the impact of the Home Energy Reports, participation has continued to increase significantly from Base Years to Post Years, by individual year as well as by average of Base and Post years. In 2018, in Table B11(B), with the impact of the behavioral participants removed, we see the increase in participation in other Residential programs. This is significant for a small utility like MERC.

Table B11 (A) - Participation

				Base Years							Post Years
All Programs	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Low Income Sector-PNG	288	262	217	256							
Low Income Sector-NMU	86	34	69	63							
Low Income Sector-Total	374	296	286	319	401	343	404	448	624	888	518
Residential Sector-PNG	52,858	64,506	63,915	60,426							
Residential Sector-NMU	13,205	13,336	12,075	12,872							
Residential Sector-Total	66,063	77,842	75,990	73,298	18,805	17,456	21,721	20,942	19,459	86,552	30,823
C&I Sector-PNG	257	268	869	465							
C&I Sector-NMU	82	131	338	184							
C&I Sector-Total	339	399	1,207	648	2,442	5,941	7,513	6,224	6,961	6,337	5,903
All Sectors-PNG	53,403	65,036	65,001	61,147							
All Sectors-NMU	13,373	13,501	12,482	13,119							
All Sectors-Total	66,776	78,537	77,483	74,265	21,648	23,740	29,638	27,614	27,044	93,777	37,244

#### Table B11 (B) - Participation

Programs Without Residential				Base Years							Post Years
Behavior Program	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Low Income Sector-PNG	288	262	217	256							
Low Income Sector-NMU	86	34	69	63							
Low Income Sector-Total	374	296	286	319	401	343	404	448	624	888	518
Residential Sector-PNG	14,418	15,815	12,660	14,298							
Residential Sector-NMU	2,314	2,207	1,408	1,976							
Residential Sector-Total	16,732	18,022	14,068	16,274	18,805	17,456	21,721	20,942	19,459	23,424	20,301
C&I Sector-PNG	257	268	869	465							
C&I Sector-NMU	82	131	338	184							
C&I Sector-Total	339	399	1,207	648	2,442	5,941	7,513	6,224	6,961	6,337	5,903
All Sectors-PNG	14,963	16,345	13,746	15,018							
All Sectors-NMU	2,482	2,372	1,815	2,223							
All Sectors-Total	17,445	18,717	15,561	17,241	21,648	23,740	29,638	27,614	27,044	30,649	26,722

Another way of gauging success is by evaluating the cost to deliver the energy savings. The tables below detail cost per Dth saved by sector each year. Table B11(C) and B11(D) provide this information. Of special note is the increase from the average of the Base Years (\$18.24 per Dth saved) to the average of the Post Years (\$21.10 per Dth saved) without the impact of Home Energy Reports, which was a low-cost program. This is due to the combination of rising costs to implement programs and the declining cost of natural gas, both of which result in longer payback periods, which then require more marketing to obtain participation. The cost of energy savings is also impacted by the annual increase to cost per Dth saved for low-income programs. In 2018, the cost per Dth saved at the portfolio level is down when compared to 2017.

### Table B11 (C) - Cost per Dth Saved

				Base Years							Post Years
All Programs	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Low Income Sector-PNG	\$71.42	\$77.78	\$98.91	\$82.71							
Low Income Sector-NMU	\$77.83	\$85.70	\$98.93	\$87.49							
Low Income Sector-Total	\$72.78	\$79.13	\$98.92	\$83.61	\$93.19	\$120.33	\$131.57	\$137.61	\$130.26	\$160.09	\$128.84
Residential Sector-PNG	\$14.78	\$17.27	\$20.09	\$17.38							
Residential Sector-NMU	\$11.90	\$13.30	\$14.78	\$13.33							
Residential Sector-Total	\$14.31	\$16.70	\$19.36	\$16.79	\$20.47	\$19.38	\$18.81	\$22.45	\$30.06	\$28.66	\$23.30
C&I Sector-PNG	\$14.25	\$11.73	\$12.22	\$12.74							
C&I Sector-NMU	\$9.02	\$14.10	\$10.90	\$11.34							
C&I Sector-Total	\$12.79	\$12.47	\$11.58	\$12.28	\$10.85	\$15.09	\$13.08	\$12.31	\$12.87	\$11.14	\$12.56
Total Portfolio-PNG	\$17.78	\$17.88	\$20.70	\$18.79							
Total Portfolio-NMU	\$13.87	\$16.74	\$14.34	\$14.98							
Total Portfolio-Total	\$16.93	\$17.62	\$18.61	\$17.72	\$20.32	\$19.94	\$17.98	\$19.49	\$26.08	\$22.79	\$21.10

### Table B11 (D) - Cost per Dth Saved

Programs Without Residential				Base Years							Post Years
Behavior Program	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Low Income Sector-PNG	\$71.42	\$77.78	\$98.91	\$82.71							
Low Income Sector-NMU	\$77.83	\$85.70	\$98.93	\$87.49							
Low Income Sector-Total	\$72.78	\$79.13	\$98.92	\$83.61	\$93.19	\$120.33	\$131.57	\$137.61	\$130.26	\$160.09	\$128.84
Residential Sector-PNG	\$15.94	\$17.63	\$21.24	\$18.27							
Residential Sector-NMU	\$12.51	\$13.10	\$13.83	\$13.14							
Residential Sector-Total	\$15.44	\$17.04	\$20.33	\$17.60	\$20.47	\$19.38	\$18.81	\$22.45	\$30.06	\$27.83	\$23.17
C&I Sector-PNG	\$14.25	\$11.73	\$12.22	\$12.74							
C&I Sector-NMU	\$9.02	\$14.10	\$10.90	\$11.34							
C&I Sector-Total	\$12.79	\$12.47	\$11.58	\$12.28	\$10.85	\$15.09	\$13.08	\$12.31	\$12.87	\$11.14	\$12.56
Total Portfolio-PNG	\$18.76	\$18.12	\$21.36	\$19.42							
Total Portfolio-NMU	\$14.32	\$16.97	\$14.18	\$14.97							
Total Portfolio-Total	\$17.80	\$17.87	\$18.91	\$18.24	\$20.32	\$19.94	\$17.98	\$19.49	\$26.08	\$22.79	\$21.10

The third way MERC gauges success is by the Societal Test. The Societal Test results for each year of the Base Years and the Post Years are based on post year analysis and are, therefore, actual results based on actual performance as approved in our past status reports. The 2018 Societal Test results shown below are preliminary, as the 2018 Status Report has not yet been approved.

Two things should be noted with respect to these tables. The first is that the Low-Income sector was included in the Residential sector for the Base Years. The second is that the methodology and inputs for the benefit-cost analysis were changed for the Post Years, primarily as a result of the lower cost of gas.

2010	2011	2012	2013	2014	2015	2016	2017	2018
n/a	n/a	n/a						
n/a	n/a	n/a	1.07	0.88	0.84	0.68	0.84	0.66
6.39	5.44	4.78						
6.17	7.44	6.50	1.67	2.22	2.19	2.86	1.45	1.49
5.91	6.47	6.14						
9.21	3.84	6.36	3.64	2.57	3.05	7.45	3.24	1.52
5.75	5.45	4.85						
6.88	4.37	5.97	2.13	2.18	2.61	3.10	1.92	1.42
	n/a n/a 6.39 6.17 5.91 9.21 5.75	n/a         n/a           n/a         n/a           6.39         5.44           6.17         7.44           5.91         6.47           9.21         3.84           5.75         5.45	n/a         n/a         n/a           n/a         n/a         n/a           6.39         5.44         4.78           6.17         7.44         6.50           5.91         6.47         6.14           9.21         3.84         6.36           5.75         5.45         4.85	n/a         n/a         n/a           n/a         n/a         n/a         1.07           6.39         5.44         4.78         1.07           6.17         7.44         6.50         1.67           5.91         6.47         6.14         1.07           9.21         3.84         6.36         3.64           5.75         5.45         4.85         1.67	n/a         n/a         n/a           n/a         n/a         n/a         1.07         0.88           6.39         5.44         4.78	n/a         n/a         n/a           n/a         n/a         n/a         1.07         0.88         0.84           6.39         5.44         4.78             0.84         0.84           6.17         7.44         6.50         1.67         2.22         2.19           5.91         6.47         6.14             3.05           5.75         5.45         4.85             3.05	n/a         n/a         n/a           n/a         n/a         n/a         1.07         0.88         0.84         0.68           6.39         5.44         4.78              0.68         0.84         0.68           6.17         7.44         6.50         1.67         2.22         2.19         2.86           5.91         6.47         6.14             7.45           9.21         3.84         6.36         3.64         2.57         3.05         7.45           5.75         5.45         4.85             7.45	n/a         n/a         n/a           n/a         n/a         n/a         1.07         0.88         0.84         0.68         0.84           6.39         5.44         4.78

### Table B11 (E) - Societal Test Trend

Residential Sector in Base Years included Low Income Sector

### Table B11 (F) - Societal Test Trend

Programs Without Residential									
Behavior Program	2010	2011	2012	2013	2014	2015	2016	2017	2018
Low Income Sector-PNG	n/a	n/a	n/a						
Low Income Sector-NMU	n/a	n/a	n/a	1.07	0.88	0.84	0.68	0.84	0.66
Residential Sector-PNG	4.88	4.66	3.80						
Residential Sector-NMU	3.97	5.83	6.22	1.67	2.22	2.19	2.86	1.45	1.50
C/I Sector-PNG	5.91	6.47	6.14						
C/I Sector-NMU	9.21	3.84	6.36	3.64	2.57	3.05	7.45	3.24	1.52
Total Portfolio-PNG	4.97	5.00	4.30						
Total Portfolio-NMU	5.99	3.98	5.69	2.13	2.18	2.61	3.10	1.92	1.43

Residential Sector in Base Years included Low Income Sector

As mentioned earlier, low-income programs continue to struggle with cost effectiveness due to the increase in required health and safety measures that do not produce savings and the number of walkaways. MERC continues to improve cost effectiveness in sectors where these barriers do not exist.

### B.12. MERC shall document any specific actions the Company has undertaken that demonstrate a shift or realignment in the Company's support for energy conservation initiatives (e.g., efforts that would strengthen energy efficiency requirements in building codes and appliance standards at the national, state or local level).

MERC continues to support CIP programs in Minnesota. In several meetings with the Department, MERC has been praised for being the first to step up and actively build quality control into programs, such as the AIC program that ensures a high level of comprehensiveness and quality in insulation programs.

The 2017-2019 Triennial Plan filing added an incentive to C/I customers pursuing ENERGY STAR® Building Certification.

In 2017, MERC adopted the new uniform energy factor standard for minimum requirements associated with water heating measures. In addition, in late 2018, MERC proposed the adoption of ENERGY STAR® standards for water heating rebate eligibility requirements for both Residential and C/I rebate programs.

At the local level, MERC has engaged and supported customers who are building and or recommissioning in Rochester's sustainability framework, an initiative in the Destination Medical Center district.

B.13. MERC shall include an analysis demonstrating the reasonableness of maintaining MERC's decoupling program given evidence that the level of savings generated by the Residential customer class has declined while the program has been in effect. MERC shall include (1) data showing its average Conservation Improvement Program (CIP) savings for the previous five years compared to the savings of its most recent complete year, and (2) an explanation for any differences in the CIP savings, including the likely impact of decoupling.

In its Findings of Fact, Conclusions, and Order in Docket No. G011/GR-15-736, the Commission ordered that MERC address energy conservation from the Residential class in its future annual decoupling filings.

Tables 13(A) and 13(B) below shows Dth savings for the previous seven years of Residential savings (2011 through 2017) and the average of those seven years,

followed by the eighth year (2018). The charts are based on data in Table B1(C) CIP Savings All Programs, including all savings associated with Behavior programs, and Table B1(D) CIP Savings with Behavior Programs adjusted to reflect the Department's Average Savings Method. In both Tables 13(A) and 13(B), the average of the seven years is higher than 2018 savings for Residential programs. This result is due to the decrease in water kit measure savings in the Residential sector and the impact of building code changes starting in 2017, with the new planning cycle. For Low-Income programs, 2018 savings are greater than the seven-year average.

Table -13	(A) - Average Savings 2011-2	017 versus 203	L8	

								2011-2017	
All Programs	2011	2012	2013	2014	2015	2016	2017	Average	2018
Low Income	7,244	7,664	11,207	8,139	8,114	8,387	12,256	9,002	9,592
Residential	240,482	232,090	208,071	180,137	209,604	211,918	158,514	205,831	181,707
Total	247,726	239,754	219,278	188,276	217,718	220,305	170,770	214,832	191,299

Table -13(B) - Average Savings 2011-2017 versus 2018 with Average Savings Method applied

With Average Savings Method								2011-2017	
applied to Behavioral Program	2011	2012	2013	2014	2015	2016	2017	Average	2018
Low Income	7,244	7,664	11,207	8,139	8,114	8,387	12,256	9,002	9,592
Residential	203,571	185,948	208,071	180,137	209,604	211,918	158,514	193,966	178,053
Total	210,815	193,612	219,278	188,276	217,718	220,305	170,770	202,968	187,645

As reflected in Table B1(D), which is duplicated below, the percentage change from the pre-decoupling period (2010-2012) to 2018, after modifying the energy savings associated with the Home Energy Reports project to reflect the changes in how the Department measures these energy savings, is an increase of 2.6 percent. The percentage increase for only Residential savings for Post Years compared to Base Years was one percent.

				Base Years							Post Years
All Programs	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
Low Income Programs-PNG	8,337	6,009	5,710	6,685							
Low Income Programs-NMU	2,231	1,235	1,954	1,806							
Low Income Programs-Total	10,567	7,244	7,664	8,492	11,207	8,139	8,114	8,387	12,256	9,592	9,616
Residential Programs-PNG	153,452	176,987	163,200	164,546							
Residential Programs-NMU	26,137	26,584	22,748	25,157							
Residential Programs-Total	179,590	203,571	185,948	189,703	208,071	180,137	209,604	211,918	158,514	178,053	191,658
C&I Programs-Small C&I	n/a *	n/a *	n/a *	n/a *	n/a *	n/a *	n/a *	13,523	5,874	4,725	8,041
C&I Programs-PNG	146,083	144,398	153,171	147,884							
C&I Programs-NMU	56,977	65,624	141,671	88,091							
C&I Programs-Total	203,060	210,022	294,842	235,975	205,542	180,792	275,664	238,173	226,344	317,388	240,651
Total Savings-PNG	307,872	327,393	322,081	319,115							
Total Savings-NMU	85,345	93,443	166,373	115,054							
Total Savings	393,217	420,837	488,454	434,169	424,821	369,068	493,382	472,000	402,989	509,758	445,336
Change 2017 to 2018:				106,769	20.9%						
Change Base Years Average to 2018:				75,589	17.4%						
Change Base Years Average to Post Yea	rs Average:			11,167	2.6%						

Table B1 (D) - CIP Savings with Average Savings Method applied to Behavioral Program

\* Savings for qualifying C/I Small Business Programs available from 2016 forward.

MERC did not separately report on the Small C&I class energy savings prior to 2016 so is unable to provide an accurate comparison of 2018 Small C&I savings results to prior years. For 2010 through 2015, MERC allocated savings based on sales as reported in the Jurisdictional Reports. Table 13(C) below compares the estimated savings from Base Years to Post Years. The average savings for Base Years was 21,389 Dth and for Post Years, not including 2016 through 2018, was 26,308 Dth. Savings from program participation in 2016 through 2018 demonstrates that using a percentage of

sales to allocate savings to the Small C&I customer class likely overstated savings from that class. Continuing to analyze savings by comparing customers in the Small C&I class to participation in C&I CIP programs provides a more accurate and relevant analysis. With the decreased savings in 2016, 2017, and 2018, the Post Years average continues to be lower than the Base Years average.

10010 20(0)											
Comparison of Small Business Savings Over the Years											
				<b>Base Years</b>							Post Years
Small C&I Only	2010	2011	2012	Average	2013	2014	2015	2016	2017	2018	Average
C&I Programs - Small C&I	20,103	19,385	24,678	21,389	23,101	22,111	33,714	13,523	5,874	4,725	17,175

Table 13(C)

While numerous factors unrelated to MERC's promotion of energy conservation have the potential to, and frequently do, affect actual energy savings achievements, MERC believes its decoupling program has been successful in removing the disincentive to encourage energy conservation.

MERC notes that there have been several issues that have impacted Residential savings. These notes are followed by detailed information on the increased activity to create awareness and promote CIP programs to customers and trade allies.

- In 2010, at the height of the American Recovery and Reinvestment Act ("ARRA") funding, the Low Income Weatherization program produced almost 8,000 Dth of savings. In 2011, the year with the highest level of savings for the 2011 to 2016 period above, the program produced 5,851 Dth of savings. Savings have not reached 3,700 Dth since then. The CAP agencies lost a number of crews due to reduced funding after the ARRA funding was depleted. This limited the number of jobs they could complete. Based on anecdotal information received from our agencies, it was also considered important for the agencies to use their federal funding first, rather than leverage MERC dollars, as use of federal funding affected future funding.
- The nature of MERC's service territory creates additional challenges for the delivery of energy efficiency programs. In many communities, there are less than 1,000 Residential customers, making it difficult for CAP agencies to find qualified low-income participants who are MERC customers. In addition, required health and safety investments have increased not only in quantity but in price, and produce no quantifiable energy savings.
- In 2011 and 2012, MERC learned that some insulation contractors were not performing in a professional manner. To protect our customers and maximize quality installations, an AIC program was implemented. For customers to receive a rebate for insulation and air sealing, they must use an AIC. This has significantly reduced the number of insulation rebates requested from over 2,000 in 2013 to just over 300 in 2014 and 2015 and fewer than 300 in years 2016 through 2018. In terms of savings, 2012 and 2013 produced insulation savings of 40,859 and 40,366 Dth, respectively. However, after the implementation of the AIC program in September 2013, savings for insulation have dropped to 6,117 Dth in 2014; 6,314 Dth in 2015; 4,521 Dth in 2016;

3,559 Dth in 2017; and 3,809 Dth in 2018. While MERC continues to be committed to quality over quantity, the changes have affected our savings achieved.

- In 2017 and 2018, Residential savings were significantly impacted by the new energy code. The new energy code reduced the savings from an average of 48.2 Dth per participant in 2016 down to 29.2 Dth per participant in 2017, and 30.4 Dth in 2018. Consequently, a small reduction in participation resulted in a 37 to 41 percent reduction in savings.
- Another Residential program affected by claimable savings changes between triennial periods was the Water Kit program. In 2016, the average savings per water kit was 7.1 Dth per kit. In 2017, the average claimable savings per water kit dropped to 4.1 Dth per kit.
- With the reintroduction of a Behavior program, we will see lower first-year claimable energy savings in the Post Years program than when the project was in place during the Base Years due to the impact associated with the Average Savings Method.

While the above issues may have detrimentally impacted Residential savings, the following are notable positive impacts:

- In 2018, the Water Kit program exceeded program goals both with respect to participation and savings. In order to improve participation to small communities, MERC partnered with CERTs' Drops and Watts campaign to promote and distribute water conservation kits at various community events and public facilities. These events included county fairs, community events, city halls, and libraries. In addition to promoting these events via e-blasts and social media, we engaged city and community resources to jointly promote the kits in social media, community newsletters, and even a local television station. In total, MERC distributed 1,831 water conservation kits in 14 cities, 6 county fairs/community events, and 3 libraries through the Drops and Watts campaign. In addition, CERTs conducted outreach and distributed approximately 6,500 water kit business reply cards to 56 different cities in MERC's service territory. In combination with the increased saving per kit resulting from the modification and the increased promotions with CERTs, the Water Kit program exceeded its savings goals by 29 percent. This represents an improvement in savings of 81 percent over 2017.
- In 2017 and 2018, MERC added several new partnership agreements for the In-Home energy audit program, which helped improve participation in the Residential Sector Support programs.
- The Company continued to drive rebate participation through customer and trade ally engagement. In 2018, MERC processed 14,792 rebate measures, which represents 12 percent more than 2017.

 Our Residential new construction program continues to deliver solid results, which reflects a healthy new construction market. With the adoption of the new Minnesota Energy Code, savings dropped in 2017 and 2018 to 33,059 Dth in 2017 and 32,100 Dth in 2018 due to the higher baseline for relatively steady participation.

As mentioned in previous reports, with the multiple programmatic changes, it is extremely difficult, if not impossible, to isolate the impact of decoupling on Residential energy savings. Nevertheless, MERC believes its decoupling program has proven successful at effectively removing the disincentive to promote energy efficiency. Many tactics have been put into place or expanded since decoupling was implemented.

- Since 2011, MERC has hosted an annual meeting for all of the Company's implementation contractors. Initially, these meetings consisted of MERC informing the contractors about changes to existing programs. In the past several years, however, MERC has expanded the agenda to include brainstorming and problem-solving sessions about marketing and increasing awareness, referring customers to other programs, increasing coordination between contractors, and refining ideas for improving customer participation. One major achievement that has evolved is expanding the Company's Neighborhood Energy workshops to include representation from the local CAP agency and 4U2 contractor when possible to enable attendees (who are customers) to learn about more programs, obtain more detailed information about the programs from the implementation contractor, sign up for the programs immediately if appropriate, and meet the energy auditor in person.
- MERC has significantly increased the number of e-blasts sent to targeted audiences with very specific and relevant messages. As demonstrated below, the open and click-through rates for these e-blasts are exemplary.
  - In 2013, two e-blasts were sent to heating, ventilation, and air conditioning ("HVAC") trade allies—one related to heating system tune-up rebates and the second offering a special, limited-time bonus for commercial customer rebates. Of 307 and 411 recipients, open rates were 46.1 percent and 37.4 percent, respectively. Click-through rates (to rebate pages on the MERC website) were 53.7 percent and 26.1 percent, respectively.
  - In 2014, twelve e-blasts were sent. E-blasts to trade allies targeted either all trade allies, insulation trade allies, or HVAC trade allies. Of over 1,853 recipients, the open rates ranged from 32.9 percent to 54.5 percent, and click-through rates ranged from 7.3 percent to 37.5 percent.

Eight of the e-blasts were sent directly to customers. For the Residential customer segment, the online audit completions allowed for targeted messages. Those whose responses demonstrated high opportunity for efficiency were referred to the in-home Residential Energy Audit program. Others were provided specific information about heating or water heater systems if those customers noted that their systems were older or provided insulation rebates if they selected low levels of insulation in the audit. For C&I customers, e-blasts informed customers about upcoming Building Operator Certification classes, the Company's (then) Benchmarking program, and the Small Business program. Of over 3,000 recipients, the open rates ranged from 31.4 percent to 63.3 percent, and click-through rates ranged from 8.1 percent to 31.2 percent.

 In 2015, 13 e-blasts were sent, reaching almost 4,200 recipients. Seven were sent to trade allies. Of those, one e-blast was targeted to agricultural grant writers and auditors and addressed agricultural rebates; one was sent to insulation contractors, and the others were sent to HVAC or general trade allies. Open rates ranged from 26.7 percent to 41.2 percent and click-through rates ranged from 5.9 percent to 30.3 percent.

The six e-blasts sent to customers reached over 1,700 customers. Four e-blasts were sent to Residential customers, one to prior C&I Rebate program participants, and one to Small C&I customers. Open rates ranged from 29.9 percent to 60.5 percent and click-through rates ranged from 3.4 percent to 19.6 percent.

The number of e-blasts sent in 2016 increased to 21 with over 7,500 recipients. Eight e-blasts went to trade allies, including buildings, CAP agencies, and community-based organizations such as Habitat for Humanity and housing and redevelopment authorities. HVAC and insulation contractors were reminded that tax credits for energy efficiency measures had been extended by Congress and builders were informed about improvements in rebates for new construction. Open rates ranged from 20.9 percent to 51 percent and click-through rates ranged from 0.6 percent to 56 percent.

Topics for the eight Residential e-blasts included informing online audit participants about energy workshops in their community, next steps to increase energy efficiency based on in-home audit results, and reminders to past tune-up rebate recipients to tune-up their heating systems. The C&I customer e-blasts covered upcoming Building Operator Training classes, reminders for past participants of boiler and furnace tune-ups and steam trap rebate recipients to keep their systems in good conditions, and a final email to Small C&I customers to inform them of the upcoming discontinuation of the Small Business Direct Install Plus program. Open rates for these e-blasts ranged from 23.2 percent to 58.2 percent.

- In 2017, the number of e-blasts jumped to 48. Twenty-nine e-blasts went to the Residential sector, reaching almost 22,000 customers with an open rate of 38 percent. Six e-blasts went to the C&I segment, reaching over 2,000 customers. The open rate was 23 percent.
   MERC also targeted trade allies with strategic messaging as detailed earlier. Thirteen e-blasts were sent, reaching over 3,500 trade allies. The open rate was 34 percent. The total open rate for all markets was 36 percent and the click through rate was 6.4 percent.
- In 2018, MERC implemented a total of 63 email campaigns, an increase of 31 percent over 2017. Thirty-one of those campaigns were directed to the Residential segment, with over 30,000 recipients and a 38 percent open rate. Eleven email campaigns went to the C&I segment, to 9,500 customers with a 32 percent open rate. Lastly, 21 campaigns went to trade allies or community organizations, which included 6,155 recipients, with a 31 percent open rate. For all campaigns, the company maintained an open rate of 35 percent.

The average open rates vary by industry. However, in general, average open rates range from 12 to 28 percent, demonstrating that the Company's results are generally very high.

C. Revenue Deferred and Collected Under the RDM Adjustment

#### C. <u>Revenue Deferred and Collected Under the RDM Adjustment</u>

#### C.1. What was the monthly, annual, and cumulative amount of revenue deferred and recovered by customer rate class through the decoupling mechanism during the period being evaluated? A discussion describing actions leading to these adjustments will be provided.

Each month, the average distribution revenue per customer on an actual basis was compared to the baseline forecast approved in Docket No. G011/GR-17-563. The resulting monthly deferrals, as well as the annual result and cumulative balances, are provided in the table below. 2018 resulted in surcharges for Small C&I customers and credits for Residential customers associated with the 2018 decoupling mechanism. The 2018 deferral commenced with the surcharges and credits beginning March 1, 2019.

MERC			
Table C1			
2018			
	Resi	dential	GS Small C/I
	Monthly	Cumulative	Monthly Cumulative
Jan	\$ 2,986,574	\$ 2,986,574	\$ 175,412 \$ 175,412
Feb	860,210	3,846,784	- 175,412
Mar	147,390	3,994,174	(16,577) 158,836
Apr	-	3,994,174	(8,593) 150,243
May	-	3,994,174	(14,040) 136,203
Jun	-	3,994,174	(37,133) 99,070
Jul	-	3,994,174	(2,287) 96,782
Aug	-	3,994,174	1,187 97,969
Sep	-	3,994,174	(24,604) 73,364
Oct	-	3,994,174	(35,533) 37,831
Nov	(109,195)	3,884,980	25,624 63,455
Dec	(732,118)	3,152,862	(105,756) (42,301)
Total		<u>\$ 3,152,862</u>	<u>\$ (42,301</u> )
	•		istomers and negative
numbers r	epresent cust	omer surcharges.	

# C.2. Has MERC made any changes to its methods or calculations of the decoupling deferral over the course of the pilot? Describe any such changes, their purpose, and impact on the deferral.

Beginning in July 2013, MERC consolidated its four purchased gas adjustments ("PGAs") into two. The decoupling mechanism was initially formatted to enter each PGA's customer class data separately under the four PGA setup. Starting in July 2013,

instead of distinguishing between the various PGAs, the sales and customer count data were entered at the total MERC level by customer class. This had no effect on the decoupling mechanism calculation as the decoupling calculation is done at the total level.

For MERC's 2014 decoupling mechanism, the Company updated the forecasted sales and customer counts to match what was approved in MERC's 2014 rate case, Docket No. G011/GR-13-617. This did have an effect on the margin calculation used in the decoupling mechanism model, but synced up the margin with what was actually approved for rates in 2014.

In MERC's 2015 decoupling mechanism, the Company continued to use the forecasted sales and customer counts approved in MERC's 2014 rate case, Docket No. G011/GR-13-617. In addition, in May 2015, MERC finalized the acquisition of IPL's natural gas distribution assets and customers and began including the actual sales and customer counts in the revenue decoupling calculation. Since MERC's decoupling mechanism is done on a use-per-customer basis, the acquisition of the IPL customers only effected the calculation to the extent the former IPL customers' average usage varies from the average use-per-customer approved in MERC's 2014 rate case, Docket No. G011/GR-13-617.

In MERC's 2016 decoupling mechanism, the Company updated the forecasted sales and customer counts to match what was filed and ultimately approved in MERC's 2016 rate case, Docket No. G011/GR-15-736. This did have an effect on the margin calculation used in the decoupling mechanism model, but synced up the margin with what was actually approved for rates in 2016. In addition, MERC initially used the interim revenue margin rates approved by the Commission in Docket No. G011/GR-15-736 in the decoupling calculation, but ultimately updated the margin rates that resulted from the October 31, 2016, Commission Order in Docket No. G011/GR-15-736.

In MERC's 2017 decoupling mechanism, MERC continued to use the forecasted sales and customer counts approved in MERC's 2016 rate case, Docket No. G011/GR-15-736.

In MERC's 2018 decoupling mechanism, which was filed on March 1, 2019, in Docket No. G011/M-19-201, MERC updated the forecasted sales and customer counts to match what was filed and ultimately approved in MERC's 2018 rate case, Docket No. G011/GR-17-563. This does have an effect on the margin calculation used in the decoupling mechanism model, but syncs up the margin with what was actually approved for rates in 2018. In addition, MERC initially used the interim revenue margin rates approved by the Commission in Docket No. G011/GR-17-563 in the decoupling calculation, but ultimately updated the margin rates that were filed in MERC's March 13, 2019, Compliance Filing in Docket No. G011/GR-17-563.

C.3. Were there any issues that arose regarding the methodology or input values for calculation of the accounting journal entries which implemented the decoupling deferral? Explain and quantify the impact of any changes in methodology or input values.

The consolidation during 2013 of MERC's four PGAs into two, as previously discussed, only affected the inputs into the decoupling model, but had no impact on the calculation of the decoupling deferral.

The update of sales and customer counts for the 2014 decoupling mechanism, as previously discussed, did not have any effect on the inputs, but did make the margin comparison of actuals to what was approved in rates consistent.

The inclusion of former IPL customers in the 2015 decoupling mechanism, as previously discussed, did not affect the type of data input into the calculation, but would have had an impact on the calculation to the extent the former IPL customers' average usage varied from the average use-per-customer approved in MERC's 2014 rate case, Docket No. G011/GR-13-617. The impact of the former IPL customers is no different than if any other customer was added to the system, e.g., a new subdivision, but, due to the number of customer additions, would have a more material effect on the calculation to the extent the former IPL customers in the average use-per-customer than that approved in Docket No. G011/GR-13-617.

The update of sales and customer counts for the 2016 and 2017 decoupling mechanism and then again in the 2018 decoupling mechanism, as previously discussed, did not have any effect on the inputs, but did make the margin comparison of actuals to what was approved in rates consistent.

C.4. What was the pretax margin and net income impact resulting from the recoverable revenue deferrals for the period being evaluated as a result of the pilot? What percentage of total pretax margins and net income for the Company's operations is represented by these deferrals in each year?

Table C4			
2018			
Line	Description	Reference	Amount
1	Decoupling Pre-Tax Margin		\$ (3,110,561)
2	Effective Tax Rate-Operating		26.35%
3	Net Income Effect of Decoupling	Line 1 x (1-Line 2)	\$ (2,290,903)
4	2018 Total Margin		\$ 118,802,363
5	Decouple Margin as a % of Total Margin	Line 1 / Line 4	-2.62%
6	2018 Operating Net Income		\$ 22,734,631
7	Decoupling Net Income as a % of Total Net Income	Line 3 / Line 6	-10.08%

C.5. What was MERC's Residential and Commercial & Industrial recorded gas margin revenue and recorded gas margin revenue per customer for 2010 through the period being evaluated, before and after decoupling deferrals?

Table C5								
Distribution Margin (excluding CCRC in	n base rates)							
				2013 Pre-	2013 Post	2014 Pre-	2014 Post	
				Decoupling	Decoupling	Decoupling	Decoupling	
	2010	2011	2012	Deferral	Deferral	Deferral	Deferral	
Residential Gas Margin	\$26,552,150	\$32,647,483	\$27,945,891	\$33,070,295	\$30,972,176	\$ 38,984,778	\$35,701,543	
Residential Customers	187,603	187,125	189,630	192,428	192,428	193,436	193,436	
Residential Gas Margin per Customer	\$ 142	\$ 174	\$ 147	\$ 172	\$ 161	\$ 202	\$ 185	
Small C/I Gas Margin	\$ 1,255,943	\$ 1,437,591	\$ 1,243,583	\$ 2,108,400	\$ 1,845,305	\$ 2,342,522	\$ 2,176,096	
Small C/I Customers	9,597	9,555	10,466	10,983	10,959	10,985	10,985	
Small C/I Gas Margin per Customer	\$ 131	\$ 150	\$ 119	\$ 192	\$ 168	\$ 213	\$ 198	
	2015 Pre-	2015 Post	2016 Pre-	2016 Post	2017 Pre-	2017 Post	2018 Pre-	2018 Post
	Decoupling	Decoupling	Decoupling	Decoupling	Decoupling	Decoupling	Decoupling	Decoupling
	Deferral	Deferral	Deferral	Deferral	Deferral	Deferral	Deferral	Deferral
Residential Gas Margin	\$29,944,555	\$33,227,790	\$34,695,576	\$38,539,647	\$36,687,775	\$38,851,874	\$43,517,637	\$ 40,364,775
Residential Customers	200,979	200,979	210,638	210,638	210,041	210,041	212,391	212,391
Residential Gas Margin per Customer	\$ 149	\$ 165	\$ 165	\$ 183	\$ 175	\$ 185	\$ 205	\$ 190
Small C/I Gas Margin	\$ 1,461,865	\$ 1,521,261	\$ 1,339,728	\$ 1,568,542	\$ 1,579,523	\$ 1,730,870	\$ 1,891,449	\$ 1,933,750
Small C/I Customers	9,983	9,983	8,777	8,777	8,632	8,632	10,052	10,052
Small C/I Gas Margin per Customer	\$ 146	\$ 152	\$ 153	\$ 179	\$ 183	\$ 201	\$ 188	\$ 192

### C.6. What was the total amount of decoupling surcharge revenue collected from ratepayers each month of the period being evaluated?

Decoupling Surcharge Rates in effect for January and February 2018 were \$0.01761 and \$0.01384 for Residential and Small C&I respectively. From March through December 2018, the surcharge rates in effect were \$0.01643 and \$0.01774 for Residential and Small C&I respectively. The total surcharge revenue collected from ratepayers each month as a result of the rates is as follows:

		Residential		Small C&I		Summary
	Ref	und/(Surcharge)	Refu	nd/(Surcharge)	Refu	und/(Surcharge)
		Activity		Activity		Activity
Jan-18	\$	(645,909.37)	\$	(40,305.30)	\$	(686,214.67)
Feb-18	\$	(606,340.01)	\$	(15,668.02)	\$	(622,008.03)
Mar-18	\$	(500,256.68)	\$	(18,210.97)	\$	(518,467.65)
Apr-18	\$	(390,095.96)	\$	(19,315.90)	\$	(409,411.86)
May-18	\$	(225,523.79)	\$	(12,305.38)	\$	(237,829.17)
Jun-18	\$	(75,569.27)	\$	(2,796.82)	\$	(78,366.09)
Jul-18	\$	(56,849.39)	\$	(1,467.01)	\$	(58,316.40)
Aug-18	\$	(41,437.30)	\$	(1,287.48)	\$	(42,724.78)
Sep-18	\$	(60,859.18)	\$	(1,286.08)	\$	(62,145.26)
Oct-18	\$	(112,091.32)	\$	(4,523.11)	\$	(116,614.43)
Nov-18	\$	(272,388.34)	\$	(17,915.93)	\$	(290,304.27)
Dec-18	\$	(515,106.23)	\$	(20,433.41)	\$	(535,539.64)
	\$	(3,502,426.84)	\$	(155,515.41)	\$	(3,657,942.25)

# C.7. What is the monthly customer bill impact of the decoupling rate adjustment for customers during the recovery period? This should be expressed as an average monthly dollar amount collected and percentage based on the total decoupling amount to be collected divided by total estimated revenue for Residential customers.

In Docket No. G011/GR-17-563, the average Residential customer was forecasted to use 73 therms per month. In the 2018 decoupling calculation, the credit rate was calculated to be \$0.01765 per therm. Therefore, the average monthly credit per Residential customer is expected to be \$1.28.

In Docket No. G011/GR-17-563, the estimated average monthly Residential customer revenue was \$59.99. Therefore, as a percentage, the average Residential customer will see a credit of 2.13 percent.

D. Proportion of Margin Lost to Company-Sponsored CIP Relative to the RDM Adjustment

- D. <u>Proportion of Margin Lost to Company-Sponsored CIP Relative to the RDM</u> Adjustment
- D.1. What was the annual amount of estimated lost margin due directly to Company CIP programs for Residential and Commercial & Industrial customers during 2018 relative to the RDM for the same customer groups? This analysis should display the estimated annual reduction in therms and margin (\$).

Measures/Programs Added Due to Decoupling	Energy Savings (Therms)	Distribution Margin Rates	Lost Margin
Low Income Sector	95,919	\$0.25993	\$24,932
Residential Sector	1,780,534	\$0.25993	\$462,821
Small C/I Sector	47,250	\$0.23810	\$11,250
Large C/I Sector	3,173,880	\$0.18194	\$577,469
Total	5,097,583		\$1,076,473

Table D - 2018 Estimated Energy Savings and Lost Margin Due to CIP

In 2018, the CIP savings were calculated based on comparing the customers in the Small C&I class eligible for RDM to the projects implemented by all C&I customers. In the past, a percentage of C&I energy savings were allocated to the Small C&I segment based on sales.

In 2018, MERC recorded a Regulatory Asset (Surcharge to Customers) of \$6,101,875 for the Residential sector. This includes the Low-Income sector as there is no distinction of low-income customers in the RDM. Also in 2018, MERC recorded a Regulatory Asset (Surcharge to Customers) of \$290,368 for the Small C&I sector.

The Large C&I sector is not included in MERC's RDM calculation; therefore, no Regulatory Liability or Asset has been calculated.

E. Impact of General Rate Cases During Implementation of the Pilot Program

#### E. Impact of General Rate Cases During Implementation of the Pilot Program

#### E.1. Did MERC file any rate cases during the pilot period? If so, when?

MERC filed three rate cases during the pilot period. A rate case based on a 2014 test year was filed in Docket No. G011/GR-13-617 on September 30, 2013; a rate case based on a 2016 test year was filed in Docket No. G011/GR-15-736 on September 30, 2015; and a rate case based on a 2018 test year was filed in Docket No. G011/GR-17-563 on October 13, 2017.

#### E.2. To the extent new base rates took effect during the pilot period, when did those new rates take effect and what impact did that have on the methods and mechanics of the deferral calculations? Please include changes to base therm sales, weather adjustments, and rate of return.

The 2014 decoupling mechanism was updated with the sales, customer counts, and distribution rates (less the Conservation Cost Recovery Charge ("CCRC")) that were ultimately approved in Docket No. G011/GR-13-617.

The 2015 decoupling mechanism continued to use the same forecasted sales, customer counts, and distribution rates (less the CCRC) used in the 2014 decoupling mechanism since base rates set in 2014 and 2015 were both set in MERC's 2014 rate case.

The 2016 decoupling mechanism was updated with the sales and customer counts that were filed and ultimately approved in Docket No. G011/GR-15-736. The interim distribution rates (less the CCRC) were initially used in the decoupling mechanism, but ultimately updated based on the rate design approved in the Commission's October 31, 2016, Order in Docket No. G011/GR-15-736.

The 2017 decoupling mechanism continued to use the same forecasted sales, customer counts, and distribution rates (less the CCRC) used in the 2016 decoupling mechanism since base rates set in 2016 and 2017 were both set in MERC's 2016 rate case.

The 2018 decoupling mechanism was updated with the sales and customer counts that were filed and ultimately approved in Docket No. G011/GR-17-563. The interim distribution rates (less the CCRC) were initially used in the decoupling mechanism, but ultimately updated based on the rate design approved by the Commission in its December 26, 2018, Order, as filed in MERC's March 13, 2019, Compliance Filing in Docket No. G011/GR-17-563.

F. New Customer Usage and Adjustment Under the RDM

#### F. <u>New Customer Usage and Adjustment Under the RDM</u>

- F.1. What was the impact of new customers on the decoupling calculations for the period being evaluated? Specifically what was:
  - a. The number of customers used (by class) in the decoupling calculations;
  - b. The number of customers approved (by class) in the most recent general rate case;
  - c. The difference between a and b;
  - d. The margin associated with c; and
  - e. The per customer impact of d.

Table F1 - Customer Usage and Adjustment		
	Residential	GS Small C&I
Actual Customers in Decoupling Calculation	212,391	10,052
Approved Customers in Decoupling Calculation	210,331	9,097
Actual less Approved Customers	2,060	955
Difference in Customers x Average Actual Annual Use x Per Therm Rate	\$ 366,218	\$ 174,713
Per Customer Impact of d	\$ 1.72	\$ 17.38

## F.2. Did MERC implement any changes to the methodology to account for new customers during the course of the pilot?

No changes to the methodology to account for new customers during the course of the evaluation period were necessary. As described in the Direct Testimony of Ms. Valerie Grace in Docket No. G007,011/GR-10-977, MERC's decoupling mechanism is calculated on a per-customer basis. The reason behind the per-customer basis is to:

filter out any changes (increase or decrease) in the number of customers that would differ from those levels supporting the revenue approved by the Commission in a general rate case proceeded. Doing so will not only isolate the changes in usage and related distribution revenues for the number of customers that were used to determine the revenues approved in a general rate case proceeding; it will recognize the additional costs incurred by MERC to provide service to new customers. These costs include the addition of new services and meters as well as other expenses to serve new customers joining the system. This approach will allow MERC to continue to recover the cost of connecting new customers. Moreover, it will also prevent MERC from recovering revenues for load losses associated with customers leaving the system.

F.3. What were the monthly numbers of customers served, by rate schedule, in the evaluation period being reported on?

Table F3 - Number	of Custome	rs
	Residential	Small C&I
Jan-18	212,165	8,806
Feb-18	212,164	9,474
Mar-18	212,080	10,249
Apr-18	212,183	10,208
May-18	212,345	10,301
Jun-18	212,708	10,258
Jul-18	212,368	10,266
Aug-18	212,498	10,247
Sep-18	212,600	10,252
Oct-18	212,890	10,211
Nov-18	213,764	10,213
Dec-18	210,925	10,138
Monthly Average	212,391	10,052

### F.4. What was the actual average usage for customers subject to the decoupling rider for the evaluation period being reported on?

The average annual usage per Residential customer in 2018 was 943 therms.

The average annual usage per Small C&I customer in 2018 was 975 therms.

# F.5. In this section, please also refer to and discuss the data regarding total sales volumes and total gas margin revenues provided in response to questions G1 and G2 below.

In the responses to questions G1 and G2 below, MERC has identified, by rate schedule, sales, and margin revenues for 2010 to 2018 actual, as well as the 2019 forecast. These sales and margins are not weather normalized and represent the actual data from year to year.

G. Related Rate and Customer Usage Information (Actual and Forecasted)

#### G. Related Rate and Customer Usage Information (Actual and Forecasted)

### G.1. What were total therm sales volumes by rate schedule in the period being evaluated?

		ACTUALS											
	TOTAL	FORECAST											
RATE SCHEDULE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019			
SC_INTERR	28,990,686	31,917,575	28,020,652	39,571,664	37,199,675	30,959,100	34,216,089	38,515,333	33,448,817	36,399,374			
SC_JOINT	527,860	521,944	388,885	425,811	449,827	220,382	289,265	351,019	299,817	395,835			
SC_LCI	79,999,173	85,965,329	74,202,360	96,596,507	106,101,306	83,496,419	91,741,417	99,881,147	114,240,242	100,241,429			
SC_RES	159,126,553	163,964,334	137,124,435	181,296,462	201,388,459	154,688,267	162,516,165	171,847,747	200,903,182	184,923,670			
SC_SCI	8,820,834	8,596,847	7,034,960	12,392,175	14,950,997	9,415,183	6,942,314	8,184,906	9,522,562	8,020,426			
SC_TRNSP	442,458,897	455,923,761	522,937,889	497,478,521	554,826,052	473,628,027	543,082,339	534,853,299	570,373,316	559,247,448			
Grand Total	719,924,003	746,889,790	769,709,181	827,761,140	914,916,316	752,407,378	838,787,589	853,633,451	928,787,937	889,228,182			

### G.2. What were total gas margin revenues by rate schedule in 2011 and each evaluation period?

									TOTAL
		ACTUALS							FORECAST
RATE SCHEDULE	2011	2012	2013	2014	2015	2016	2017	2018	2019
SC_LCI	\$14,954,066	\$13,192,305	\$17,421,453	\$20,195,323	\$15,004,750	\$16,726,295	\$17,051,752	\$17,707,438	\$16,925,765
SC_RES	\$32,647,483	\$27,945,891	\$37,479,743	\$44,889,488	\$34,190,323	\$38,971,376	\$40,157,001	\$46,724,225	\$44,596,192
SC_SCI	\$1,437,591	\$1,234,583	\$2,463,734	\$3,125,356	\$1,900,858	\$1,383,048	\$1,906,585	\$2,117,214	\$1,769,707
Grand Total	\$49,039,140	\$42,372,779	\$57,364,930	\$68,210,167	\$51,095,931	\$57,080,719	\$59,115,338	\$66,548,877	\$63,291,665

G.3. What was the rate of average annual gas customer growth by rate schedule starting in 2011? How does this compare to MERC's historical levels of gas customer growth in the 2009-2010 period? What is the Company's forecast for future customer growth? What were the average annual customer count totals by rate schedule for the period being reported?

Part 1: Rate of Average Annual Ga		wth by Rate Sch	edule.							
Part 2: Companies forecast growt										
Part 3: What were the average an	nual customer o	ount totals by r	ate schedule for	the period bei	ng reported.					
				TUALS						
	Part 3:	Part 3:	Part 3:	Part 3:	Part 3:	Part 3:	Part 3:	Part 3:	Part 3:	Part 3:
	AVERAGE	AVERAGE	AVERAGE	AVERAGE						
FIX CHARGE COUNTS/ MONTH:					AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVE. FORECAST
SERVICECLASS	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
SC_INTERR	571	488	450	452	446	472	510	470	442	489
SC_JOINT	14	11	8	7	8	5	10	8	6	20
SC_LCI	11,516	11,436	10,731	10,412	10,429	1-	14,506	14,239	1	13,900
SC_RES	187,603	187,125	189,630	192,428	193,436		210,638	210,041	212,391	213,615
SC_SCI	9,597	9,555	10,466	10,983	10,985	9,866	8,777	8,632	10,052	9,063
SC_TRNSP	165	165	165	166	171	. 173	235	210	228	200
Grand Total	209,465	208,780	211,451	214,449	215,475	223,816	234,676	233,600	236,042	237,287
		Part 1:	Part 1:	Part 1:	Part 1:	Part 1:	Part 1:	Part 1:	Part 1:	Part 2:
		Growth Rate	Growth Rate	Growth Rate	Growth Rate	Growth Rate	Growth Rate	Growth Rate	Growth Rate	Growth Rate
										2019F vs 2018
SERVICECLASS		2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014	2016 vs 2015	2017 vs 2016	2018 vs 2017	Actual
SC_INTERR		-14%	-8%	0%	-1%	6%	8%	-8%	-6%	11%
SC JOINT		-22%	-24%	-19%	18%	-31%	88%	-16%	-28%	229%
SC_LCI		-1%	-6%	-3%	0%	18%	18%	-2%	-9%	8%
SC_RES		0%	1%	1%	1%	4%	5%	0%	1%	1%
sc_sci		0%	10%	5%	0%	-10%	-11%	-2%	16%	-10%
SC_TRNSP		0%	0%	1%	3%	1%	36%	-11%	9%	-12%
Grand Total		0%	1%	1%	0%	4%	5%	0%	1%	1%

G.4. What proportion of customers subject to decoupling was residential versus commercial during the pilot? What proportion of usage from customers subject to decoupling was residential versus commercial during the pilot?

Table G4 - Proportions of C	ustomers and Usage	
	2018 Average	% of Customers
	<b>Annual Customers</b>	Applicable to Decoupling
Residential	212,391	95%
General Service Small C&I	10,052	5%
		% of Sales
	2018 Sales	Applicable to Decoupling
Residential	200,237,595	95%
General Service Small C&I	9,801,270	5%

G.5. On a rate schedule basis, how has actual annual gas use per customer changed during 2011 through the period being evaluated?

USE PER AVERAGE FIX CHARGE CUSTOMER COUNT:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Forecast
	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL
SERVICECLASS	USE PER CUST	USE PER CUST	USE PER CUST	USE PER CUST	USE PER CUST	USE PER CUST	USE PER CUST	USE PER CUST	USE PER CUST	USE PER CUST
SC_INTERR	50,816	65,360	62,273	87,522	83,416	65,591	67,090	81,948	75,716	74,487
SC_JOINT	38, 390	48,932	47,799	64,680	58,042	44,076	28,927	43,877	49,488	19,875
SC_LCI	6,947	7,517	6,915	9,277	10,173	6,777	6,324	7,015	8,840	7,211
SC_RES	848	876	723	942	1,041	770	772	818	946	866
SC_SCI	919	900	672	1,128	1,361	954	790	948	947	885
SC_TRNSP	2,680,215	2,771,573	3,167,289	2,988,921	3,244,913	2,737,734	2,310,989	2,546,920	2,497,420	2,796,237
Grand Total	2,778,136	2,895,159	3,285,671	3,152,471	3,398,947	2,855,903	2,414,891	2,681,526	2,633,358	2,899,561
		CHANGE IN USE PER CUST								
		USE PER CUSI	USE PER CUST	036 PER C031	USE PER CUSI	USE PER CUSI	USE PER CUST	USE PER CUSI	032 PER C031	USE PER CUSI
SERVICECLASS		2011 VS 2010	2012 VS 2011	2013 VS 2012	2014 VS 2013	2015 VS 2014	2016 VS 2015	2017 VS 2016	2018 VS 2017	FCST VS 2018 ACT
SC_INTERR		14,544	-3,087	25,249	-4,106	-17,825	1,499	14,857	-6,231	-7,460
SC_JOINT		10,542	-1,133	16,881	-6,638	-13,966	-15,150	14,951	5,611	-24,003
SC_LCI		570	-602	2,362	896	- 3, 397	-452	690	1,825	197
SC_RES		28	-153	219	99	-271	2	46	128	48
SC_SCI		-19	-228	456	233	-407	-164	158	-1	-63
SC_TRNSP		91,358	395,716	-178,368	255,992	-507,179	-426,746	235,932	-49,500	249,317
Grand Total		117,023	390,512	-133,200	246,476	-543,044	-441,011	266,635	-48,169	218,035

G.6. What has been the change in the Company's natural gas delivered average monthly price per therm by rate schedule during 2011 through the period being evaluated? Provide a detailed incremental chronological listing (including Docket No.) and price per therm impact of all rate adjustments (commodity, general rate case, decoupling, etc.) during 2011 through the period being evaluated. What was the cumulative impact factoring in all rate adjustments from the beginning of 2011 through the period being evaluated?

Please see Attachment A. The data has been split into two time frames—January 2011-June 2013 (the period before MERC's four PGAs were consolidated into two PGAs) and July 2013-2018.

G.7. What has been the natural gas commodity cost embedded in the average monthly price per therm values by rate schedule in the previous question and how did margin revenues (excluding recovery of gas commodity cost) change during 2011 through the period being evaluated? Provide a detailed incremental chronological listing (including Docket No.) and impact of all commodity adjustments during the 2011 through the period being evaluated. What was the total impact factoring in all adjustments from the beginning of 2011 through the period being evaluated?

Please see Attachment B. The data has been split into two time frames—January 2011-June 2013 (the period before MERC's four PGAs were consolidated into two PGAs) and July 2013-2018.

G.8. What is the Company's most recently available three-year forecast for (a) natural gas rates/prices; (b) numbers of customers by rate schedule; (c) usage per customer by rate schedule; and (d) overall therm volumes and margin revenues by rate schedule in each available projected future period?

IG Residential	Year	Month	pe	nodity Cost er Therm	Di	stribution Margin	E	ffective Rate
	2019	1	\$	0.56154	\$	0.24686	\$	0.8084
	2019	2	\$	0.50825	\$	0.24686	\$	0.7551
	2019	3	\$	0.47960	\$	0.24686	\$	0.7264
	2019	4	\$	0.46912	\$	0.24686	\$	0.7159
	2019	5	\$	0.45907	\$	0.24686	\$	0.7059
	2019	6	\$	0.45822	\$	0.24686	\$	0.7050
	2019	7	\$	0.46872	\$	0.24686	\$	0.7155
	2019	8	\$	0.47072	\$	0.24686	\$	0.7175
	2019	9	\$	0.46577	\$	0.24686	\$	0.7126
	2019	10	\$	0.46867	\$	0.24686	\$	0.7155
	2019	11	\$	0.49527	\$	0.24686	\$	0.7421
	2019	12	\$	0.57707	\$	0.24686	\$	0.8239
	2020	1	\$	0.61052	\$	0.24686	\$	0.8573
	2020	2	\$	0.60302	\$	0.24686	\$	0.8498
	2020	3	\$	0.50397	\$	0.24686	\$	0.7508
		4	\$		\$		\$	
	2020			0.46167		0.24686		0.7085
	2020	5	\$	0.45227	\$	0.24686	\$	0.6991
	2020	6	\$	0.44982	\$	0.24686	\$	0.6966
	2020	7	\$	0.46447	\$	0.24686	\$	0.7113
	2020	8	\$	0.46502	\$	0.24686	\$	0.7118
	2020	9	\$	0.45757	\$	0.24686	\$	0.7044
	2020	10	\$	0.46142	\$	0.24686	\$	0.7082
	2020	11	\$	0.48822	\$	0.24686	\$	0.7350
	2020	12	\$	0.55222	\$	0.24686	\$	0.7990
	2021	1	\$	0.57277	\$	0.24686	\$	0.8196
	2021	2	\$	0.56702	\$	0.24686	\$	0.8138
	2021	3	\$	0.51872	\$	0.24686	\$	0.7655
	2021	4	\$	0.45577	\$	0.24686	\$	0.7026
	2021	5	\$	0.44727	\$	0.24686	\$	0.6941
	2021	6	\$	0.44682	\$	0.24686	\$	0.6936
						0.24686		
	2021	7	\$	0.45397	\$		\$	0.7008
	2021	8	\$	0.45522	\$	0.24686	\$	0.7020
		9	\$	0.45222	\$	0.24686	\$	0.6990
	2021			0.HOLLL				
	2021 2021	10	\$	0.45732	\$	0.24686	\$	0.7041
					\$ \$			
nsolidated Resid	2021 2021 2021	10	\$ \$ \$	0.45732	\$ \$	0.24686	\$ \$ \$	0.7393
nsolidated Resid	2021 2021 2021 Iential Year	10 11 12 Month	\$ \$ Comr	0.45732 0.49252 0.54077 nodity Cost	\$ \$ Di	0.24686 0.24686 0.24686 stribution Margin	\$ \$ \$	0.7393 0.7876 Effective Rate
nsolidated Resid	2021 2021 2021 lential Year 2019	10 11 12 Month 1	\$ \$ Comr pe	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902	\$ \$ Di \$	0.24686 0.24686 0.24686 stribution Margin 0.24686	\$ \$ E	0.7393 0.7876 Effective Rate 0.7058
nsolidated Resid	2021 2021 2021 lential Year 2019 2019	10 11 12 Month 1 2	\$ \$ Comr pe \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052	\$ \$ Di \$ \$	0.24686 0.24686 0.24686 stribution Margin 0.24686 0.24686	\$ \$ E	0.7393 0.7876 Effective Rate 0.7058 0.6573
nsolidated Resid	2021 2021 2021 Iential Year 2019 2019 2019	10 11 12 Month 1 2 3	\$ \$ Comr pe \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890	\$ 5 5 5 5	0.24686 0.24686 0.24686 <b>Stribution</b> Margin 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457
nsolidated Resid	2021 2021 2021 Iential Year 2019 2019 2019 2019	10 11 12 Month 1 2 3 4	\$ \$ Comr pe \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021	\$ 5 5 5 5 5	0.24686 0.24686 0.24686 <b>Margin</b> 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6370
nsolidated Resid	2021 2021 2021 Iential Year 2019 2019 2019	10 11 12 Month 1 2 3	\$ \$ Comr pe \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890	\$ 5 5 5 5	0.24686 0.24686 0.24686 <b>Stribution</b> Margin 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6370
nsolidated Resid	2021 2021 2021 Iential Year 2019 2019 2019 2019	10 11 12 Month 1 2 3 4	\$ \$ Comr pe \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021	\$ 5 5 5 5 5	0.24686 0.24686 0.24686 <b>Margin</b> 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015
nsolidated Resid	2021 2021 2021 Iential Year 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806	\$ \$ <b>Di</b> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686 0.24686 <b>Margin</b> 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049
nsolidated Resid	2021 2021 2021 <b>lential</b> Year 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 3 4 5 6 7	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35806 0.35806 0.36056	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6074
nsolidated Resid	2021 2021 2021 Iential 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 5 6 7 7 8	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6074 0.6061
nsolidated Resid	2021 2021 2021 <b>Vear</b> 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.35931 0.35911	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6074 0.6061 0.6059
nsolidated Resid	2021 2021 2021 <b>Iential</b> <b>Year</b> 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 9 10	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35806 0.36056 0.35931 0.35911 0.35911 0.36001	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6074 0.6061 0.6059 0.6068
nsolidated Resid	2021 2021 2021 ential 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 9 10 11	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36056 0.35911 0.35911 0.36001 0.41486	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6064 0.6064 0.6059 0.6068 0.6068
nsolidated Resid	2021 2021 2021 ential 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 9 10 11 11 12	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931 0.35911 0.35911 0.36001 0.41486 0.43016	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6064 0.6064 0.6064 0.6058 0.6058 0.6058
nsolidated Resid	2021 2021 2021 ential 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 9 10 11	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36056 0.35911 0.35911 0.36001 0.41486	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6064 0.6064 0.6064 0.6058 0.6058 0.6058
nsolidated Resid	2021 2021 2021 ential 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 9 10 11 11 12	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931 0.35911 0.35911 0.36001 0.41486 0.43016	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6015 0.6015 0.6049 0.6061 0.6059 0.6068 0.6667 0.6670 0.6672 0.6059 0.6059 0.6058 0.6573 0.6059 0.6770 0.77700 0.77700 0.77700 0.77700 0.77700 0.77700 0.77700 0.77700 0.77700 0.77700 0.777000 0.777000 0.777000 0.777000 0.7770000000000
nsolidated Resid	2021 2021 2021 <b>Vear</b> 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 3 4 5 6 7 7 8 9 10 11 12 1 2	\$ \$ Comr pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.35931 0.35931 0.35911 0.36001 0.43836 0.43286	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6457 0.6370 0.6015 0.6049 0.6049 0.6064 0.6059 0.6070 0.6070 0.6070 0.6070 0.6079 0.6079 0.6079 0.6079 0.6079 0.6079 0.6790 0.6790 0.6797
nsolidated Resid	2021 2021 2021 <b>Iential</b> 2019 2019 2019 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 6 7 7 8 9 10 11 12 1 2 3	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.36006 0.41486 0.43266 0.43266 0.42006	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6074 0.6074 0.6079 0.6068 0.6068 0.6068 0.6617 0.6770 0.6852 0.6777 0.6669
nsolidated Resid	2021 2021 2021 2021 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35066 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.36001 0.41486 0.43016 0.43286 0.42006 0.34101	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Effective</b> Rate 0.7058 0.6573 0.6370 0.6370 0.6015 0.6049 0.6074 0.6061 0.6059 0.60648 0.60617 0.6770 0.6852 0.6797 0.66852 0.6797
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 6 7 7 8 9 9 10 11 11 2 1 2 3 4 5 5	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931 0.35911 0.35911 0.41486 0.43016 0.43836 0.43266 0.43266 0.43266 0.34101 0.33761	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Ffective</b> Rate 0.7058 0.6573 0.6370 0.60457 0.6074 0.6061 0.6059 0.6068 0.6617 0.6770 0.6852 0.6797 0.6669 0.5878 0.5844
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 6 7 8 9 10 11 12 1 12 1 2 3 4 5 6	\$ \$ Comm per \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.36056 0.360511 0.35911 0.35911 0.35911 0.36001 0.41486 0.43266 0.43266 0.43286 0.43286 0.34011 0.33761 0.34041	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6457 0.6370 0.6015 0.6049 0.60649 0.60649 0.60649 0.6068 0.6617 0.6770 0.6852 0.6797 0.6852 0.6797 0.685878
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 4 5 6 6 7	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.36056 0.360511 0.35911 0.35911 0.36001 0.43836 0.43286 0.43486 0.43486 0.43486 0.434860 0.43486 0.4346	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6457 0.6049 0.6049 0.6061 0.6059 0.6068 0.6617 0.674 0.6061 0.6059 0.6682 0.6677 0.6797 0.6852 0.6797 0.5878 0.5874 0.5890
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 8	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.36001 0.41486 0.43286 0.34011 0.34311 0.34311 0.34331	\$ \$ DI \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6074 0.6059 0.6068 0.6617 0.6669 0.6682 0.6770 0.6852 0.6777 0.6669 0.5878 0.5844 0.5872 0.5904
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 4 5 6 6 7	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.36056 0.360511 0.35911 0.35911 0.36001 0.43836 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34331	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6074 0.6074 0.6061 0.6059 0.6068 0.6617 0.6059 0.6068 0.6669 0.5878 0.5844 0.5872 0.5904
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 8	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.36001 0.41486 0.43286 0.34011 0.34311 0.34311 0.34331	\$ \$ DI \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6074 0.6074 0.6079 0.6068 0.66617 0.6770 0.66852 0.6797 0.6669 0.5878 0.5844 0.5891 0.5901
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 6 7 8 9 10 11 12 1 2 3 4 5 6 6 7 8 9 9 10 7 8 9 9 10 7 7 8 9 9	\$ \$ <b>Comm</b> <b>per</b> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39820 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.34361 0.34331 0.34361 0.3431	\$ \$ <b>D</b> <b>D</b> <b>D</b> <b>D</b> <b>D</b> <b>D</b> <b>D</b> <b>D</b>	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Rate 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6074 0.6061 0.6059 0.6068 0.6617 0.6770 0.6852 0.6797 0.66852 0.5878 0.5878 0.5844 0.5872 0.5901
nsolidated Resid	2021 2021 2021 2021 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 6 7 8 9 10 11 12 1 2 3 4 5 6 6 7 8 9 10 11	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.35931 0.35911 0.35911 0.36001 0.43836 0.43286 0.43401 0.34101 0.34311	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6049 0.6049 0.6059 0.6068 0.6617 0.6770 0.6659 0.66797 0.6669 0.5844 0.5872 0.5904 0.5894 0.58904 0.59904
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 10 11 2 2 3 4 5 6 6 7 7 8 9 10 11 2 3 4 5 6 7 7 8 9 10 11 12 12	\$ \$ Comm pe \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.36056 0.35931 0.35911 0.35911 0.36001 0.43836 0.43286 0.34011 0.34401 0.34401 0.34006	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6457 0.6457 0.6049 0.6049 0.6049 0.6061 0.6059 0.6068 0.6617 0.6770 0.6852 0.6797 0.6669 0.5878 0.5878 0.5894 0.5897 0.5904 0.5991 0.5994
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 10 11 12 2 3 4 11 12 12 12 12 12 12 12 12 12 12 12 12	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.36001 0.41486 0.43286 0.44206 0.4448 0.44206 0.444860.44486 0.44666 0.446860.44686 0.446860.44686 0.446860.44686 0.446860.44686 0.446860.44686 0.446860.44686 0.446860.44686 0.446860.44686 0.446860.44686 0.44686 0.446860.44686 0.446860.44686 0.446860.446860.	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Ffective</b> <b>Rate</b> 0.7058 0.6573 0.6457 0.6074 0.6015 0.6049 0.6049 0.6049 0.6049 0.6059 0.6068 0.6617 0.6059 0.6669 0.5878 0.5844 0.5872 0.5904 0.5904 0.6379 0.65379 0.6637
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 4 5 6 6 7 7 8 9 10 11 12 1 2 1 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost r Therm 0.45902 0.41052 0.39890 0.39021 0.35406 0.35806 0.35056 0.35931 0.35911 0.36001 0.41486 0.43016 0.43836 0.42066 0.34101 0.34041 0.34361 0.34361 0.3431 0.34361 0.34191 0.34401 0.34401 0.34401 0.34106 0.41686 0.41236	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6074 0.6074 0.6068 0.6068 0.6617 0.6770 0.6852 0.6797 0.68572 0.5904 0.5904 0.5904 0.5908 0.6379 0.6592
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 6 7 7 8 9 10 11 12 1 2 3 4 5 6 6 7 8 9 10 11 12 1 2 3 4 5 5 6 7 7 8 9 9 10 11 12 2 3 3 4 5 5 6 7 7 8 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost r Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.36056 0.36056 0.36091 0.41486 0.43266 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34101 0.34101 0.34401 0.34431 0.34431 0.34431 0.344191 0.34401 0.39106 0.41686 0.41236 0.41236 0.39956	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Rate 0.7058 0.6457 0.6370 0.6015 0.6049 0.6074 0.6061 0.6059 0.6068 0.6617 0.6797 0.6852 0.6797 0.6852 0.5844 0.58908 0.58908 0.63799 0.58908 0.58908 0.6379 0.58908 0.6379 0.58908
nsolidated Resid	2021 2021 2021 2021 2019 2019 2019 2019	10 11 12 Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 12 12 12 12 12 12 12 12	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35931 0.35911 0.35911 0.36006 0.36056 0.35931 0.35911 0.36001 0.43836 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34101 0.34401 0.34401 0.34401 0.34401 0.34191 0.34401 0.34191 0.34401 0.34193 0.34401 0.34193 0.34401 0.34193 0.34401 0.34193 0.34401 0.34126 0.41236 0.41236 0.41236 0.42811	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6457 0.6370 0.6015 0.6049 0.6049 0.6049 0.6068 0.6059 0.6068 0.6617 0.6770 0.6669 0.6797 0.68522 0.5904 0.5844 0.5872 0.5904 0.5894 0.6379 0.6637 0.6592 0.6637 0.6592 0.6444 0.5749
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 6 7 7 8 9 10 11 12 1 2 3 4 5 6 6 7 8 9 10 11 12 1 2 3 4 5 5 6 7 7 8 9 9 10 11 12 2 3 3 4 5 5 6 7 7 8 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost r Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.36056 0.36056 0.36091 0.41486 0.43266 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34101 0.34101 0.34401 0.34431 0.34431 0.34431 0.344191 0.34401 0.39106 0.41686 0.41236 0.41236 0.39956	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 Effective Rate 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6049 0.6049 0.6059 0.6068 0.6617 0.6770 0.6659 0.6797 0.68522 0.5904 0.5844 0.5892 0.6379 0.6592 0.6637 0.6592
nsolidated Resid	2021 2021 2021 2021 2019 2019 2019 2019	10 11 12 Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 12 12 12 12 12 12 12 12	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35931 0.35911 0.35911 0.36006 0.36056 0.35931 0.35911 0.35911 0.36001 0.43836 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34101 0.34401 0.34401 0.34401 0.34401 0.34191 0.34401 0.34191 0.34401 0.34193 0.34401 0.34193 0.34401 0.34193 0.34401 0.34193 0.34401 0.34126 0.41236 0.41236 0.41236 0.32811	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6457 0.6673 0.6049 0.6015 0.6049 0.6059 0.6068 0.6617 0.6770 0.6659 0.6687 0.5878 0.5878 0.5884 0.5892 0.5901 0.5904 0.5990 0.6529 0.6637 0.6529 0.6637
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 Month 1 2 3 4 5 6 7 8 9 10 11 12 3 4 5 6 7 8 9 10 11 12 3 4 5 6 6 7 8 9 10 11 12 3 4 5 6 6 7 8 9 10 11 12 3 4 5 6 7 8 9 10 11 12 3 4 5 6 7 8 9 10 11 12 3 4 5 6 7 8 9 10 11 12 3 4 5 6 7 8 9 10 11 12 3 4 5 6 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 10 11 12 5 6 6 7 8 9 10 11 12 5 6 6 7 8 9 10 11 12 5 6 6 7 7 8 9 10 11 12 5 6 6 7 7 8 9 10 11 12 5 6 6 6 7 6 6 7 7 8 8 9 11 12 5 6 6 6 6 7 7 8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost or Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.36001 0.41486 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34311 0.34401 0.34331 0.34361 0.34361 0.34361 0.34361 0.34301 0.34301 0.34301 0.34301 0.34301 0.34301 0.34301 0.34301 0.34301 0.34201 0.39956 0.32811 0.32461 0.32791	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Effective</b> <b>Rate</b> 0.7058 0.6573 0.6457 0.6074 0.6074 0.6069 0.6068 0.60617 0.6059 0.6068 0.6669 0.5878 0.5844 0.5877 0.5908 0.6379 0.6592 0.6637 0.6592 0.6637 0.5744 0.5747
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 <b>Month</b> 1 2 3 4 5 6 7 7 8 9 9 10 11 12 1 2 3 4 4 5 6 6 7 8 9 9 10 11 11 2 3 4 4 5 6 7 7 8 9 10 11 12 2 3 4 5 5 6 7 7 8 9 9 10 11 12 2 3 10 11 12 12 12 12 12 12 12 12 12 12 12 12	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36056 0.36056 0.36091 0.34041 0.41486 0.43016 0.43016 0.43836 0.43266 0.42066 0.34101 0.34401 0.34401 0.34361 0.34401 0.34401 0.34191 0.34401 0.34191 0.34401 0.34106 0.41686 0.41236 0.41236 0.41236 0.41236 0.32811 0.32461 0.32461 0.32791 0.33131	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6074 0.6015 0.6049 0.6068 0.6061 0.6059 0.6068 0.6669 0.5878 0.5844 0.5904 0.5904 0.5904 0.5904 0.5904 0.5749 0.6572 0.6592 0.6749 0.5741 0.5741 0.5741
nsolidated Resid	2021 2021 2021 2019 2019 2019 2019 2019	10 11 12 Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 12 12 12 12 12 12 12 12	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.35931 0.35911 0.35911 0.36001 0.41486 0.43266 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34101 0.33761 0.34041 0.34401 0.34431 0.34431 0.34431 0.34431 0.344191 0.344191 0.344191 0.344191 0.344191 0.344191 0.344191 0.344191 0.344191 0.344191 0.34211 0.32791 0.32791 0.33131 0.33231	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6457 0.6370 0.6015 0.6049 0.6074 0.6061 0.6059 0.6068 0.6617 0.6797 0.6700 0.6852 0.6797 0.6872 0.5844 0.5872 0.5901 0.58878 0.5890 0.58878 0.5890 0.58878 0.5890 0.58878 0.5904 0.57871 0.5791
nsolidated Resid	2021 2021 2021 2021 2019 2019 2019 2019	10 11 12 Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 12 12 12 12 12 12 12 12	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost r Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35931 0.35911 0.35911 0.36001 0.43836 0.43016 0.43836 0.43286 0.43206 0.43286 0.43286 0.43206 0.34101 0.34331 0.34361 0.34401 0.34401 0.34401 0.34401 0.34186 0.41236 0.41236 0.41236 0.32911 0.32461 0.32791 0.33131 0.33231 0.33181	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Rate</b> 0.7058 0.6573 0.6457 0.6370 0.6015 0.6049 0.6061 0.6059 0.6068 0.6617 0.6770 0.6652 0.6797 0.6669 0.5878 0.5874 0.5904 0.5887 0.5904 0.5904 0.5749 0.6572 0.6747 0.5741 0.5741 0.57781 0.5778
nsolidated Resid	2021 2021 2021 2021 2019 2019 2019 2019	10 11 12 Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 3 4 5 6 6 7 8 9 10 11 12 3 4 5 6 6 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 3 4 5 6 6 7 7 8 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 9 10 11 12 3 4 5 6 6 7 7 8 9 9 10 11 12 3 4 5 6 6 7 7 8 9 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 9 10 11 12 1 2 3 4 4 5 6 6 7 7 8 9 9 10 11 12 1 2 3 4 4 5 6 7 7 8 9 9 10 11 12 1 7 8 9 9 10 11 12 1 8 9 9 10 11 12 1 8 9 9 10 11 11 12 1 8 8 9 9 10 11 11 12 10 11 11 12 11 11 12 11 11 12 11 11	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost r Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.36056 0.36056 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.34016 0.43836 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34101 0.34401 0.34401 0.34401 0.34401 0.34211 0.32791 0.32811 0.32831 0.33131 0.33181 0.33441	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.7393 0.7876 <b>Ffective</b> Rate 0.7058 0.6457 0.6673 0.6049 0.6049 0.6059 0.6068 0.6617 0.6797 0.6689 0.6689 0.5878 0.5878 0.5887 0.5901 0.5904 0.5892 0.6637 0.6592 0.6637 0.6592 0.6637 0.5714 0.5781 0.5781 0.5781 0.5781 0.5781
Insolidated Resid	2021 2021 2021 2021 2019 2019 2019 2019	10 11 12 Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 12 12 12 12 12 12 12 12	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.45732 0.49252 0.54077 modity Cost r Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35931 0.35911 0.35911 0.36001 0.43836 0.43016 0.43836 0.43286 0.43206 0.43286 0.43286 0.43206 0.34101 0.34331 0.34361 0.34401 0.34401 0.34401 0.34401 0.34186 0.41236 0.41236 0.41236 0.32911 0.32461 0.32791 0.33131 0.33231 0.33181	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0.24686 0.24686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	

	Year	Month		modity Cost er Therm	D	istribution Margin	E	Effective Rate
	2019	1	\$	0.56154	\$	0.22251	\$	0.7840
	2019	2	\$	0.50825	\$	0.22251	\$	0.7307
	2019	3	\$	0.47960	\$	0.22251	\$	0.7021
	2019	4	\$	0.46912	\$	0.22251	\$	0.6916
	2019	5	\$	0.45907	\$	0.22251	\$	0.6815
	2019	6	\$	0.45822	\$	0.22251	\$	0.6807
	2019	7	\$	0.46872	\$	0.22251	\$	0.69123
	2019	8	\$	0.47072	\$	0.22251	\$	0.69323
	2019	9	\$	0.46577	\$	0.22251	\$	0.6882
	2019	10	\$	0.46867	\$	0.22251	\$	0.6911
		10	\$	0.49527	\$		\$	
	2019					0.22251		0.7177
	2019	12	\$	0.57707	\$	0.22251	\$	0.7995
	2020	1	\$	0.61052	\$	0.22251	\$	0.83303
	2020	2	\$	0.60302	\$	0.22251	\$	0.8255
	2020	3	\$	0.50397	\$	0.22251	\$	0.7264
	2020	4	\$	0.46167	\$	0.22251	\$	0.6841
	2020	5	\$	0.45227	\$	0.22251	\$	0.6747
	2020	6	\$	0.44982	\$	0.22251	\$	0.6723
	2020	7	\$	0.46447	\$	0.22251	\$	0.6869
	2020	8	\$	0.46502	\$	0.22251	\$	0.6875
	2020	9	\$	0.45757	\$	0.22251	\$	0.6800
	2020	10	\$	0.46142	\$	0.22251	\$	0.6839
	2020	11	\$	0.48822	\$	0.22251	\$	0.7107
	2020	12	\$	0.55222	\$	0.22251	\$	0.7747
	2021	1	\$	0.57277	\$	0.22251	\$	0.7952
	2021	2	\$	0.56702	\$	0.22251	\$	0.7895
	2021	3	\$	0.51872	\$	0.22251	\$	0.7412
	2021	4	\$	0.45577	\$	0.22251	\$	0.6782
	2021	5	\$	0.44727	\$	0.22251	\$	0.6697
	2021	6	\$	0.44682	\$	0.22251	\$	0.6693
		7	\$			0.22251		
	2021			0.45397	\$		\$	0.6764
	2021	8	\$	0.45522	\$	0.22251	\$	0.6777
	2021	9	\$	0.45222	\$	0.22251	\$	0.6747
	2021	10	\$	0.45732	\$	0.22251	\$	0.6798
	2021	11	\$	0.49252	\$	0.22251	\$	0.7150
	2021	12	\$	0.54077	\$	0.22251	\$	0.7632
onsolidated Small	C/I		-		-		-	
onsolidated Small	Year	Month	р	modity Cost er Therm		istribution Margin	E	Effective Rate
onsolidated Small	<b>Year</b> 2019	1	р \$	er Therm 0.45902	\$	Margin 0.22251	\$	Rate 0.6815
onsolidated Small	Year		р	er Therm		Margin		Rate 0.6815
onsolidated Small	<b>Year</b> 2019	1	р \$	er Therm 0.45902	\$	Margin 0.22251	\$	Rate 0.6815 0.6330
onsolidated Small	Year 2019 2019 2019	1 2 3	9 \$ \$ \$	er Therm 0.45902 0.41052 0.39890	\$ \$ \$	Margin 0.22251 0.22251 0.22251	\$ \$ \$	Rate 0.6815 0.6330 0.6214
onsolidated Small	Year 2019 2019 2019 2019 2019	1 2 3 4	<b>p</b> \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021	\$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251	\$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127
onsolidated Small	Year 2019 2019 2019 2019 2019 2019	1 2 3 4 5	<b>p</b> \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466	\$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6	> p \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806	\$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056	\$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8	p \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5838
Insolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7	<b>P</b> S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056	\$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5838
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8	p \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9	<b>P</b> S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931 0.35911	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825
Insolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36931 0.35911 0.36001 0.41486	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825 0.6373
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931 0.35931 0.36001 0.41486 0.43016	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5830           0.5818           0.5816           0.5825           0.6373           0.6526
Insolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.35931 0.35911 0.36001 0.41486 0.43016 0.43836	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.5771           0.5805           0.5830           0.5816           0.5816           0.5825           0.6373           0.6526           0.6608
Insolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35911 0.36001 0.41486 0.43016 0.43836 0.43286	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5830           0.5818           0.5825           0.6373           0.6526           0.6608           0.6553
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 7 8 9 10 11 11 12 1 2 3	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35911 0.36001 0.41486 0.43016 0.43836 0.43286 0.42006	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825 0.6373 0.6526 0.6053 0.6553 0.6425
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35911 0.36001 0.41486 0.43016 0.43836 0.43286	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825 0.6373 0.6526 0.6053 0.6553 0.6425
Insolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 7 8 9 10 11 11 12 1 2 3	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35911 0.36001 0.41486 0.43016 0.43836 0.43286 0.42006	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825 0.6373 0.6526 0.6608 0.6653 0.6425 0.5635
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4	P S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36056 0.359311 0.359311 0.36001 0.41486 0.43016 0.43286 0.42006 0.34101	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6214           0.6127           0.5771           0.5805           0.5830           0.5818           0.5818           0.5816           0.5825           0.6373           0.6526           0.6608           0.6553           0.5635           0.5635           0.5601
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6	P           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S           S         S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36056 0.35931 0.36001 0.41486 0.43016 0.43286 0.44206 0.44101 0.33761 0.44486 0.	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825 0.6373 0.6526 0.6608 0.6553 0.6425 0.5635 0.5635
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 6 7	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.45902 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.43286 0.43286 0.42006 0.34101 0.33761 0.34041 0.34331	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5830           0.5818           0.5818           0.5816           0.5825           0.6262           0.6525           0.6553           0.6553           0.56635           0.5658
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 9 10 11 12 1 2 3 4 5 6 6 7 8	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.45902 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.41486 0.43206 0.43206 0.42006 0.34101 0.34041 0.34331 0.34361	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5816           0.5816           0.5825           0.6373           0.6526           0.6526           0.6526           0.6526           0.6526           0.6526           0.6526           0.5635           0.5601           0.5658           0.5661
Insolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 12 1 2 3 4 5 6 6 7 8 8 9	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.35466 0.35806 0.36056 0.36056 0.359311 0.36001 0.41486 0.43016 0.43286 0.42006 0.34101 0.33761 0.34041 0.34331 0.34381 0.34191	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5830           0.5816           0.5825           0.6373           0.6526           0.6526           0.6523           0.6526           0.6526           0.5635           0.5656           0.56681           0.5654
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 6 7 8 9 9 10	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36056 0.359311 0.35911 0.36011 0.41486 0.43016 0.43286 0.42006 0.34101 0.34041 0.34361 0.34191 0.34401	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825 0.6373 0.6526 0.6608 0.6553 0.6455 0.5665 0.5665 0.5665
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 0 10 11 12 1 2 3 4 4 5 6 7 7 8 9 9 10 11	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.34101 0.34341 0.34341 0.343451 0.343401 0.343401 0.343401 0.343401 0.34401 0.343401 0.34401 0.34401 0.34401 0.34401 0.34401 0.34401 0.34401 0.34101 0.34401 0.34401 0.34401 0.39106	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5805           0.5805           0.5805           0.5805           0.5805           0.5816           0.5825           0.6526           0.6526           0.6526           0.6526           0.65635           0.56641           0.56642           0.56643           0.56644           0.56643           0.56643           0.56643
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 6 7 8 9 9 10	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36056 0.359311 0.35911 0.36011 0.41486 0.43016 0.43286 0.42006 0.34101 0.34041 0.34361 0.34191 0.34401	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5805           0.5805           0.5806           0.5807           0.5816           0.5816           0.5825           0.6373           0.6526           0.6526           0.6535           0.65635           0.56611           0.56626           0.56644           0.56645           0.6135
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 0 10 11 12 1 2 3 4 4 5 6 7 7 8 9 9 10 11	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.34101 0.34341 0.34341 0.343451 0.343401 0.343401 0.343401 0.343401 0.34401 0.343401 0.34401 0.34401 0.34401 0.34401 0.34401 0.34401 0.34401 0.34101 0.34401 0.34401 0.34401 0.39106	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825 0.6373 0.6526 0.6608 0.6553 0.6425 0.5635 0.5601 0.5658 0.56658
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 2 3 4 5 6 7 8 9 10 11 12 1	P S S S S S S S S S S S S S S S S S S S	er Therm 0.45902 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.34041 0.34206 0.34101 0.34041 0.34041 0.34031 0.34041 0.34041 0.34041 0.34041 0.34041 0.34061 0.340606 0.41686	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5816 0.5816 0.5825 0.6373 0.6526 0.6608 0.6553 0.6425 0.56635 0.5661 0.5664 0.5665 0.5664 0.5665 0.6135 0.6283 0.6393
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 1 2	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.359311 0.36001 0.41486 0.43016 0.43286 0.42006 0.34101 0.33761 0.34331 0.34361 0.34331 0.34361 0.34361 0.34191 0.34401 0.34401 0.34401 0.34191 0.34401 0.34168 0.41236	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5830           0.5816           0.5825           0.6373           0.6526           0.6526           0.6533           0.6526           0.6533           0.6526           0.5635           0.56636           0.5664           0.5664           0.6285           0.6285           0.6393           0.6348
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 6 7 7 8 9 10 11 12 1 12 1 2 3 3	p           S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.36056 0.36056 0.359311 0.36011 0.41486 0.43016 0.43286 0.42006 0.34101 0.33761 0.34041 0.34041 0.34331 0.34191 0.34401 0.34191 0.34101 0.34102 0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate 0.6815 0.6330 0.6214 0.6127 0.5771 0.5805 0.5830 0.5818 0.5816 0.5825 0.6373 0.6526 0.6608 0.6553 0.6425 0.5635 0.5661 0.56658 0.56658 0.56644 0.56658 0.56644 0.56658 0.6135 0.6348 0.63488
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 9 10 11 12 1 12 1 12 3 4 4 5 3 4	P S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.43286 0.42006 0.34101 0.34101 0.34331 0.34361 0.34361 0.34361 0.34361 0.34361 0.34191 0.34401 0.34191 0.34191 0.34191 0.34102 0.39106 0.41686 0.41236 0.41236 0.32811	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5830           0.5816           0.5830           0.5816           0.5825           0.6127           0.5818           0.5816           0.5826           0.6127           0.5816           0.5826           0.6263           0.6526           0.5635           0.5635           0.5661           0.5658           0.6135           0.6285           0.6135           0.6285           0.6393           0.6285           0.6393           0.6348           0.6220           0.5506
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 4 5 5	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.45902 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.43286 0.43286 0.42006 0.34101 0.34101 0.34331 0.34361 0.34361 0.343916 0.40606 0.41686 0.41236 0.39956 0.32811 0.32461	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5816           0.5816           0.5816           0.5816           0.5825           0.6373           0.6526           0.6608           0.6526           0.6608           0.6553           0.6658           0.5658           0.5668           0.5658           0.66393           0.6285           0.6348           0.6220           0.5506           0.5507           0.5508           0.52471
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 9 10 11 12 1 12 1 12 2 3 4	P S S S S S S S S S S S S S	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.43286 0.42006 0.34101 0.34101 0.34331 0.34361 0.34361 0.34361 0.34361 0.34361 0.34191 0.34401 0.34191 0.34191 0.34191 0.34102 0.39106 0.41686 0.41236 0.41236 0.32811	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5816           0.5816           0.5816           0.5816           0.5825           0.6373           0.6526           0.6608           0.6526           0.6608           0.6553           0.6658           0.5658           0.5668           0.5658           0.66393           0.6285           0.6348           0.6220           0.5506           0.5507           0.5508           0.52471
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 4 5 5	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.45902 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.43286 0.43286 0.42006 0.34101 0.34101 0.34331 0.34361 0.34361 0.343916 0.40606 0.41686 0.41236 0.39956 0.32811 0.32461	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5816           0.5816           0.5816           0.5816           0.5825           0.6373           0.6526           0.66533           0.66533           0.66535           0.56635           0.56638           0.56644           0.56645           0.6338           0.6285           0.63933           0.6348           0.6220           0.5504           0.5504
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 8 9 10 11 12 1 12 1 2 3 4 5 5 6 7 7	P \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35931 0.35931 0.35931 0.34041 0.34361 0.34361 0.34361 0.34361 0.344011 0.34401 0.34401 0.34401 0.34401 0.34401 0.34401 0.34401 0.34286 0.41236 0.41236 0.41236 0.39956 0.32811 0.32461 0.32791 0.33131	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5830           0.5816           0.5825           0.6373           0.6526           0.6526           0.6533           0.6526           0.6526           0.6533           0.6526           0.5635           0.56638           0.5664           0.5664           0.5665           0.6285           0.6393           0.6348           0.6220           0.5506           0.5544           0.5504           0.5538
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 8 9 10 11 11 12 1 2 3 4 5 5 6 7 8 9 9 10 10 11 11 12 1 5 5 6 7 8 9 9 10 10 11 11 12 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 11 12 10 10 11 11 12 11 11 12 11 11 12 11 11 12 11 11	p           \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43281 0.34101 0.34101 0.34101 0.34101 0.341236 0.41686 0.42811 0.32411 0.32431 0.33231	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6214           0.5771           0.5805           0.5805           0.5805           0.5805           0.5805           0.5816           0.5816           0.5825           0.6526           0.6526           0.6526           0.6526           0.6526           0.5658           0.56641           0.56658           0.6135           0.6285           0.6348           0.6220           0.5506           0.5504           0.5538           0.5548
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 6 7 8 9 9 10 11 12 7 8 9 9 10 11 11 2 3 4 5 5 7 8 9 9 10 11 11 12 7 8 9 9 9 10 10 11 11 12 7 8 9 9 10 11 11 12 8 9 9 10 11 11 12 8 9 9 10 11 11 12 8 9 9 10 11 11 12 8 9 9 10 11 11 12 8 9 9 10 11 11 12 8 9 9 10 11 11 12 8 9 9 10 11 11 12 8 9 9 10 11 11 12 2 3 8 9 10 11 11 12 2 3 8 9 9 10 11 11 12 2 3 8 9 10 11 11 12 2 3 8 9 10 11 11 12 2 3 3 4 4 5 5 6 6 7 7 8 9 9 10 11 11 12 2 3 3 4 4 5 5 6 6 7 7 8 9 9 10 11 11 12 2 3 3 4 4 5 5 6 6 7 7 8 9 9 10 11 11 12 2 3 3 4 4 5 6 6 7 7 8 9 9 10 11 11 12 2 7 7 8 9 9 10 11 11 12 2 7 8 8 9 9 10 11 11 12 2 7 8 8 9 9 10 11 11 12 2 7 8 8 9 9 10 11 11 2 2 8 8 9 9 10 11 1 12 2 7 8 8 9 9 10 11 11 2 2 8 8 9 10 11 1 12 2 7 8 8 9 9 10 11 11 2 2 8 8 9 10 11 1 2 8 8 9 9 10 7 8 8 9 9 10 11 1 12 2 7 8 8 9 9 10 7 8 8 9 9 10 7 8 8 9 9 10 7 8 8 9 9 10 7 8 8 9 9 10 7 8 8 9 9 9 10 10 11 1 12 8 1 10 10 11 11 12 2 8 1 10 10 11 11 11 11 11 12 1 11 11 11 11 11 11 1	p           \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35911 0.36001 0.41486 0.43016 0.43286 0.42006 0.42006 0.42006 0.42006 0.43286 0.42006 0.43286 0.42006 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.34101 0.34401 0.34401 0.34401 0.34261 0.32811 0.32211 0.33131 0.33231	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6127           0.5771           0.5805           0.5830           0.5816           0.5816           0.5825           0.6373           0.6526           0.6373           0.6526           0.6526           0.6526           0.6526           0.6527           0.5635           0.5635           0.5668           0.5668           0.66135           0.6285           0.6393           0.6348           0.5506           0.5506           0.5543           0.5543
onsolidated Small	Year 2019 2019 2019 2019 2019 2019 2019 2019	1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 9 10 11 12 1 2 3 4 5 6 7 7 8 8 9 10 11 11 12 1 2 3 4 5 5 6 7 8 9 9 10 10 11 11 12 1 5 5 6 7 8 9 9 10 10 11 11 12 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 10 10 11 11 12 11 12 10 10 11 11 12 11 11 12 11 11 12 11 11 12 11 11	p           \$	er Therm 0.45902 0.41052 0.39890 0.39021 0.35466 0.35806 0.35931 0.35931 0.35931 0.35931 0.35911 0.36001 0.41486 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43286 0.43281 0.34101 0.34101 0.34101 0.34101 0.341236 0.41686 0.42811 0.32411 0.32431 0.33231	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Margin 0.22251	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Rate           0.6815           0.6330           0.6214           0.6214           0.5771           0.5805           0.5805           0.5805           0.5805           0.5805           0.5816           0.5816           0.5825           0.6526           0.6526           0.6526           0.6526           0.6526           0.5658           0.56641           0.56658           0.6135           0.6285           0.6348           0.6220           0.5506           0.5504           0.5538           0.5548

IOVERALL THERIVI VOLUIVIES: MERC FORECAST 2019-2021 FROM MOST RECENT BUDGET FORECAST.	L THERM VOLUMES: MERC FORECAST 2019-2021 FROM MOST RECENT BUDGET FORECAST.	OVERALL THERM VOLUMES: MERC FORECAST 2019-2021 FROM MOST RECENT BUDGET FOR	ST.
---	--	--	-----

SERVICECLASS	2019	2020	2021
SC_INTERR	36,399,374	36,399,865	36,214,761
SC_JOINT	395,835	397,779	396,036
SC_LCI	100,241,429	99,872,624	99,644,295
SC_RES	184,923,670	185,858,206	186,516,936
SC SCI	8,020,426	7,941,511	7,885,406
SC TRNSP	559,247,448	562,299,420	571,040,127
Grand Total	889,228,182	892,769,405	901,697,561

OVERALL FIXED CHARGE/CUSTOMER COUNTS: MERC FORECAST 2019-2021 FROM MOST RECENT BUDGET FORECAST.

SERVICECLASS	2019	2020	2021
SC_INTERR	489	489	488
SC_JOINT	20	20	20
SC_LCI	13,900	13,722	13,620
SC_RES	213,615	214,928	216,349
SC_SCI	9,063	9,176	9,264
SC_TRNSP	200	201	203
Grand Total	237,287	238,535	239,944

#### USE PER CUSTOMER: MERC FORECAST 2019-2021 FROM MOST RECENT BUDGET FORECAST.

	AVE	AVE	AVE
SERVICECLASS	2019	2020	2021
SC_INTERR	74,284	74,247	73,981
SC_JOINT	19,971	20,069	19,982
SC_LCI	7,198	7,268	7,307
SC_RES	864	864	861
SC_SCI	884	864	850
SC_TRNSP	2,795,880	2,802,911	2,811,361
Grand Total	2,899,081	2,906,223	2,914,342

#### OVERALL THERM VOLUMES: {GS RATE SCHEDULES}: MERC FORECAST 2019-2021.

SERVICECLASS	2019	2020	2021
SC_INTERR			
SC_JOINT			
SC_LCI	100,241,429	99,872,624	99,644,295
SC_RES	184,923,670	185,858,206	186,516,936
SC_SCI	8,020,426	7,941,511	7,885,406
SC_TRNSP			
Grand Total	293,185,525	293,672,341	294,046,637

OVERALL **DISTRIBUTION RATES FOR FORECAST**: **{GS** RATE SCHEDULES}: MERC FORECAST 2019-2021.

SERVICECLASS	2019	2020	2021
SC_INTERR			
SC_JOINT			
SC_LCI	0.16857	0.16857	0.16857
SC_RES	0.24686	0.24686	0.24686
SC_SCI	0.22251	0.22251	0.22251
SC_TRNSP			
Grand Total			

OVERALL MARGIN REVENUES BY RATE SCHEDULE: {GS RATE SCHEDULES}: MERC FORECAST 2019-202

SERVICECLASS	2019	2020	2021
SC_INTERR			
SC_JOINT			
SC_LCI	\$16,897,698	\$16,835,528	\$16,797,039
SC_RES	\$45,650,257	\$45,880,957	\$46,043,571
SC_SCI	\$1,784,625	\$1,767,066	\$1,754,582
SC_TRNSP			
Grand Total	\$64,332,580	\$64,483,551	\$64,595,191

H. Impact on MERC Low-Income and LIHEAP Customers

#### H. Impact on MERC Low-Income and LIHEAP Customers

MERC currently provides an annual CIP Status Report to the Department that includes a discussion of the Company's low-income CIP programs and participation.

The information that is provided for each CIP program includes:

- The approved participation goal and the actual number of participants served;
- The estimate of low-income and renter Residential customer participation levels anticipated in the CIP plan and an estimate of low-income and renter participation levels actually achieved, if applicable;
- The approved budget and actual expenditures;
- The approved energy and demand savings goals and the actual energy and demand savings achieved; and
- The cost effectiveness of the program based upon actual results from the utility, participant, ratepayer, and societal perspectives.

# H.1. Did the Company change its natural gas therm savings through Company sponsored low-income programs for the post-decoupling implementation time period, as compared with the pre-decoupling time period? What were the annual audited low-income CIP savings (completed program basis) for the post-decoupling implementation time period for Company sponsored low-income programs?

The Company's savings through Company-sponsored low-income programs for the post-decoupling implementation time period increased as compared with the predecoupling time period primarily due to the increasing success of the 4U2 program and its inclusion in the Low-Income sector. Savings decreased from 2015 to 2016 for the Low Income Weatherization program. This decrease was due in part to impacts from the ARRA funding and the reduction of contractor work crews, increased requirements for health and safety measures that do not provide savings, the increased number of homes with vermiculite and other safety issues that customers must mitigate prior to being able to weatherize the home, and the difficulty in finding eligible customers to participate in the programs. In addition, CAP agencies prefer to spend their federal dollars first, rather than use utility dollars, to safeguard the best chance for future funding.

In 2018, the Low Income Weatherization program performed extremely well, nearly reaching the program savings goal at 99 percent. The 4U2 program achieved 73 percent of its savings goal.

Table H1 - Low Income CIP Savin	DIE H1 - LOW INCOME CIP Savings									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	
LI Weatherization - PNG	7,959	5,851	2,862							
LI Weatherization - NMU	2,231	1,228	308							
LI Weatherization - Total	10,190	7,079	3,169	3,644	2,733	2,855	2,072	3,478	4,035	
4U2 - PNG	378	158	2,848							
4U2 - NMU	0	6	1,646							
4U2 - Total	378	164	4,495	7,563	5,406	5,259	6,316	8,778	5,556	
LI Total - PNG	8,337	6,009	5,710							
LI Total - NMU	2,231	1,235	1,954							
LI Total	10,567	7,244	7,664	11,207	8,139	8,114	8,388	12,256	9,592	

#### H.2. What were the associated lost margins from Company sponsored lowincome CIP programs?

Lost margins from low-income programs are detailed in Table H2.

	2010	2011	2012	2013	2014	2015	2016	2017	2018
LI Weatherization - PNG	\$14,124	\$11,361	\$5,557						
LI Weatherization - NMU	\$4,854	\$2,970	\$745						
LI Weatherization - Total	\$18,978	\$14,331	\$6,302	\$7,198	\$5,960	\$6,226	\$4,969	\$8,387	\$10,489
4U2 - PNG	\$671	\$307	\$5,530						
4U2 - NMU	\$0	\$15	\$3,982						
4U2 - Total	\$671	\$321	\$9,511	\$14,940	\$11,788	\$11,468	\$15,145	\$21,170	\$14,443
LI Total - PNG	\$14,795	\$11,668	\$11,087						
LI Total - NMU	\$4,854	\$2,985	\$4,727						
LI Total	\$19,649	\$14,653	\$15,814	\$22,138	\$17,748	\$17,693	\$20,113	\$29,557	\$24,932

Table H2 - Low Income Lost Margins

Table U.A. Landa and CID Co. So

H.3. Did MERC make any commitments to program funding, or program changes or expansions as part of any rate cases or other regulatory proceedings during 2010-2012 (pre-decoupling)? Identify the regulatory proceeding, and provide the program funding, or program changes or expansions MERC made in response.

MERC did not make any commitments to program funding, changes, or expansions as part of the rate case or any other regulatory proceeding, with the exception of the agreement made to increase its commitment to CIP if the decoupling mechanism was approved and to obtain input from interested parties regarding how that could be accomplished.

H.4. What program funding or program changes or expansions were implemented during 2013, 2014, 2015, 2016, 2017, or 2018 (post-decoupling implementation time period) for natural gas low-income CIP programs as compared with the 2010-2012 pre-decoupling time period? Identify each new, revised, or expanded programmatic change including scope and funding. Since 2013, budgets for Low-Income sector programs have increased over predecoupling budgets representing a significant increase in available funding for lowincome CIP programs. This is represented in Table H4.

#### Table H4 - Low Income Sector Budgets

	2010	2011	2012	2013	2014	2015	2016	2017	2018
LI Sector Total - PNG	\$515,535	\$834,675	\$912,278						
LI Sector Total - NMU	\$166,179	\$277,993	\$302,446						
LI Total	\$681,714	\$1,112,668	\$1,214,724	\$1,279,730	\$1,329,085	\$1,479,855	\$1,508,432	\$1,850,824	\$1,855,439

The 2015-2016 CIP Plan Extension added a measure option available for direct installation for the 4U2 program.

In 2017, MERC filed a modification to lift the 40 Percent Cap on Funding of Emergency Replacements for the Low Income Weatherization program. This same modification added two additional measure options available for direct installation for the 4U2 program.

In 2018, MERC filed a program modification to waive the co-pay associated with the 4U2 program to help remove barriers to participation.

# H.5. Identify any other factors that may have contributed to an increase in limited-income CIP savings and/or new or expanded limited-income CIP program offerings.

Minimum CIP low-income spending requirements went from 0.2 percent of annual gross operating revenues to 0.4 percent in 2015.

MERC continues to deploy geographic targeting to promote the 4U2 program more efficiently. MERC intends to continue geographic outreach to its gas affordability program ("GAP") participants. MERC researches and pursues individually-metered low-income housing developments to ensure they are aware of their eligibility to participate in the low-income programs. MERC has also participated in key stakeholder groups to build program awareness.

H.6. What low-income CIP customer educational, informational, and outreach programs were implemented by the Company during the decoupling pilot period being evaluated? What were the primary messages, including dates of publication or broadcast, and estimated costs of each of these programs? Were any therm savings attributed to such programs referenced above in Section A, and if so, how much, and using what assumptions or studies?

During the Base Years, MERC worked with Community Action of Minneapolis ("CAM") to perform direct mail marketing for Low Income Weatherization. CAM tried to obtain

information on those who were denied Low Income Home Energy Assistance Program ("LIHEAP") assistance because they exceeded the income guidelines, and market information to those households. CAM held quarterly meetings with CAP agencies and reminded them to refer customers ineligible for Low Income Weatherization to 4U2. In the fall of 2014, the contract with CAM to oversee MERC's Low Income Weatherization program was terminated. On a temporary basis, each CAP agency that was engaged with MERC customers dealt directly with MERC's implementation contract administrator. In 2015, MERC contracted with the Sustainable Resources Center ("SRC") to replace CAM as contract administrator for the Low Income Weatherization program.

MERC has continued to market the 4U2 program through bill inserts, e-blasts, MERC's website, brochures, community posters, and with application forms. These brochures were passed out to customers at events such as the Minnesota State Fair, county fairs, and other local events in which MERC participated. MERC has also developed and disseminated flyers and posters through senior centers, libraries, Meals on Wheels, etc. One proven tactic so far was to drop off flyers about the 4U2 program in neighborhoods where we have served customers without conducting door-to-door solicitations. We are also finding that community champions can help promote these programs. In addition, our representatives are readily available to provide program information.

# H.7. What information is captured and retained by MERC to track service provided to low-income customers in the normal course of business, including monitoring of participation in CIP and rate assistance programs?

As indicated in this report and in the annual CIP Status Report, low-income and limitedincome participants were tracked separately (from other Residential customers) through Low-Income sector programs—Low Income Weatherization and the 4U2 programs. The CIP Multifamily Direct Install program also tracks low-income participants as defined by Department guidance for multifamily properties.

All LIHEAP recipient households are tracked in the State of Minnesota's eHeat system, which MERC personnel have access to and can work with Department staff and local energy assistance agency staff to run participation reports related to Energy Assistance for a number of low-income strategies and tactics. This access also benefits the CIP programs and other customer assistance efforts. MERC regularly uses this data to attempt to increase awareness of and promote customer participation in Minnesota's Energy Assistance program.

MERC also uses its customer information system to track Energy Assistance credits on the accounts of low-income households who apply for Cold Weather Rule ("CWR") protection, enabling these households to enter into a low-income payment agreement without having to provide any household income verification. MERC also does direct promotion of the CWR protections to all Residential customers. CWR data is tracked and reported to the Commission via the monthly CWR compliance questionnaire. MERC's GAP enrollments have been fairly consistent over the past couple years. MERC's surcharge remained at zero in 2018, but re-established a positive surcharge, effective April 1, 2019, of \$0.00905 per therm. There continues to be an increase in the number of customers with credit balances (some quite significant) who continue to take advantage of the monthly affordability credit on their gas bill. This continues to provide a monthly billing adjustment based on annual household income and gas consumption, making winter bills much more affordable. Customers can remain enrolled in this component indefinitely, as long as they remain Energy Assistance program recipients each program year. MERC's GAP continues to be very successful, maintaining a very high retention rate. The program spending was \$652,346 in the 2018 program year.<sup>2</sup> All participation and the financial impacts are reported through an annual GAP report filing.

In addition, in 2018, the 4U2 program provided weatherization and emergency heating and water heating equipment replacements at little to no cost to customers. This is being done to further help those who are trying to reduce or eliminate arrearages and pay their bills.

Besides the CIP Low Income Weatherization program, MERC also promotes Minnesota's Weatherization Assistance program ("WAP"). Households that participate in WAP and the jobs completed are tracked in a separate section of the eHeat system to which MERC does not have direct access rights.

In 2018, MERC attempted to obtain information on Minnesota's WAP from the Minnesota Department of Commerce as it pertained to MERC's customers. However, this information was not available statewide by utility. Instead, MERC had to survey the CAP agencies in the MERC service territory in an attempt to obtain this information. Of the seven CAP agencies responding, 50 MERC households were weatherized (by the CAP agencies) through the State of Minnesota's WAP. These were standalone jobs using only federal LIHEAP dollars. These WAP jobs are separate from the jobs completed jointly with CIP and LIHEAP dollars, as reported in section H.1. MERC believes the number of completed jobs reported is considerably less than 2017 because not all jobs were identified by the individual CAP agencies and some of the agencies did not complete any WAP jobs in 2018.

# H.8. Identify and summarize any further information or data available that would assist in the determination of whether or not decoupling has a disproportionate impact on low-income customers.

MERC is unaware of any further information or data that is available that would assist in the determination of whether or not decoupling has a disproportionate impact on low-income customers.

<sup>&</sup>lt;sup>2</sup> By order dated September 25, 2015, in Docket No. G011/M-15-539, MERC's GAP surcharge was set at \$0.00 per therm through 2018.

H.9. What were the total low-income CIP expenditures for the period being evaluated? Did MERC make any commitments regarding funding levels as part of any rate cases or other regulatory proceedings? What is MERC's best estimate of the proportion of low-income participation in each of its conservation programs and how were such estimates derived?

The total expenditures for the Low-Income sector by program are detailed below.

Table H9(A) - Low income Project expenditures									
	2010	2011	2012	2013	2014	2015	2016	2017	2018
LI Weatherization - PNG	\$543,644	\$400,130	\$218,945						
LI Weatherization - NMU	\$173,617	\$89,705	\$24,184						
LI Weatherization - Total	\$717,261	\$489,834	\$243,129	\$276,522	\$288,493	\$369,137	\$293,083	\$423,762	\$535,865
4U2 - PNG	\$51,801	\$67,248	\$345,858						
4U2 - NMU	\$0	\$16,119	\$169,123						
4U2 - Total	\$51,801	\$83,367	\$514,980	\$767,901	\$662,259	\$667,377	\$826,145	\$1,172,699	\$999,665
LI Total - PNG	\$595,445	\$467,377	\$564,803						
LI Total - NMU	\$173,617	\$105,824	\$193,307	]					
LI Total	\$769,062	\$573,201	\$758,110	\$1,044,422	\$950,752	\$1,036,515	\$1,119,228	\$1,596,460	\$1,535,529

Table H9(A) - Low Income Project Expenditures

In addition to low-income sector projects, not reflected in table H9(A), MERC had an additional \$112,168 in low-income spending in programs that are outside of the Low-Income sector. This primarily comes from the Multifamily program where, starting in 2014, MERC has been allowed to claim low-income spending when properties are verified using Department guidance on multifamily properties.

The total low-income participation for all CIP programs is detailed below. This only represents participation when incomes are verified by Department-approved methods.

Project	2010	2011	2012	2013	2014	2015	2016	2017	2018
LI Weatherization - PNG	278	240	118						
LI Weatherization - NMU	87	32	10						
LI Weatherization - Total	365	272	128	131	124	158	109	195	190
4U2 - PNG	10	0	13						
4U2 - Total	0	0	34						
4U2 - NMU	10	0	47	270	219	246	339	429	698
Res Sector Support - PNG	31	82	109						
Res Sector Support - NMU	7	3	2						
Res Sector Support - Total	38	85	111	198	232	n/a	n/a	n/a	n/a
<b>Res</b> Rebates - PNG	1,747	2,694	1,483						
Res Rebates - NMU	643	749	342						
Res Rebates - Total	2,390	3,443	1,825	1,854	1,692	n/a	n/a	2	2
Multifamily Project	0	0	0	197	3,809	3,811	1,706	4,204	2,302
All Projects - Total	2,803	3,800	2,111	2,650	6,076	4,215	2,154	4,830	3,192

Table H9(B) - Low Income Participation in All Projects

Note the 2018 CIP Status Report is not approved yet; therefore, the 2018 data in Table H9(A) and H9(B) should be considered preliminary. It should also be noted that low income status data is no longer being collected through self-reporting from application forms starting 2015 for Residential Sector Support or Residential Rebates. In addition, MERC received approval to include Low Income new construction activity in participation and spending rates.

It is a challenge for all utilities, including MERC, to estimate the proportion of lowincome customers who participate in conservation programs, similar to the state's challenge in estimating what percentage of income-eligible households apply for and receive assistance from its Energy Assistance program. As indicated in Table H10 below, 13,129 eligible MERC customers received grants from Minnesota's Energy Assistance program in 2018.

Collectively, MERC's Low-Income sector CIP programs delivered 888 measures to 476 individual customers in 2018. When considering participation outside of the Low-Income sector, all CIP programs delivered 3,192 measures to low-income customers in 2018.

The Low Income Weatherization program provided a total of 190 measures to 120 individual customers, all of whom would have been eligible for Energy Assistance. The 4U2 program provided 698 measures to 286 customers. Within the 4U2 program, 129 individual customers were identified as up to 200 percent of the poverty guideline (the income qualification threshold for WAP and MERC's Low Income Weatherization program) and 157 customers were defined as up to 300 percent of the poverty guidelines (the income qualification threshold for the 4U2 program). Therefore, only one percent of MERC's LIHEAP recipients participated in the CIP Low Income Weatherization program in 2018. Based on the most recent Department data available, approximately 29 percent of the estimated income-eligible Minnesota households receive Energy Assistance benefits. The implication is that Minnesota utilities have not reached a saturation point with the Low-Income sector programs.

### H.10. What was the total distribution of LIHEAP funds to low-income customers for the period being evaluated?

The following chart provides the total amount of Minnesota Energy Assistance program credits (funded by Federal LIHEAP dollars) to MERC customers:

Table Hito - Low medine Energy Assistance (Energy A									
Federal Fiscal Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Primary Heat Received	\$6,679,917	\$4,764,886	\$3,800,469	\$4,229,929	\$4,347,618	\$4,310,273	\$4,055,197	\$4,150,638	\$4,434,267
Crisis Received	\$553,701	\$699,473	\$223,455	\$329,027	\$594,148	\$296,737	\$139,771	\$257,757	\$430,348
PH & Crisis Total	\$7,233,618	\$5,464,359	\$4,023,924	\$4,558,956	\$4,941,766	\$4,607,010	\$4,194,968	\$4,408,395	\$4,864,615
# of Households Served	14,414	14,727	13,610	12,717	13,204	13,731	12,675	12,320	13,129

Table H10 - Low Income Energy Assistance (LIHEAP) Recipients

I. Other Information

#### I. <u>Other Information</u>

# I.1. Was the decoupling pilot program in Minnesota recognized in any public reports issued by credit rating agencies or financial analysts? If so, provide a copy of the report.

#### Credit Rating Agencies

To our knowledge, there was no mention of MERC's decoupling pilot program within any credit rating agency reports during 2018.

#### Financial Analysts

To our knowledge, there has been no mention of MERC's decoupling pilot program within financial analyst reports during 2018.

## I.2. Is there any other information that would be helpful to the Commission in the evaluation of the decoupling pilot program?

# a. A comparison of how revenues under traditional regulation would have differed from those collected under the decoupling pilot program;

Under the RDM, MERC created a revenue adjustment which resulted in an overall regulatory liability. For 2018, this net liability is comprised of a surcharge for Small C&I customers, and a credit for Residential customers. MERC began collecting and crediting to customers effective March 1, 2019. Had the RDM not been in place in 2018, MERC would have recognized higher revenues of \$3,152,862 for Residential and lower revenues of \$42,301 for Small C&I. Concurrently with the results of the 2018 RDM, the over-collected amount of \$90,177 for Residential customers and the under-collected amount of \$25,025 for Small C&I customers related to the 2016 RDM customer surcharge in effect March 1, 2017, through February 28, 2018, was added to the credit and surcharge rate calculations for Residential and Small C&I customers, respectively.

#### b. An evaluation of if the pilot stabilized revenues for the classes under the pilot and how has such stabilization impacted the utility's overall risk profile;

The decoupling deferral for 2018 was \$3.1 million, or about 1.13 percent of total revenue. Thus, the program had little impact on total revenue.

## c. An evaluation of any problems encountered and improvements/ suggestions for the future;

MERC's decoupling pilot was recently evaluated by the Commission and interested stakeholders in Docket No. G011/GR-17-563, and during the course of that evaluation MERC agreed to discontinue application of the RDM to the Small C&I customer class

beginning January 1, 2019. At this time, MERC has no suggestions for improvements to the RDM in the future.

- d. MERC will continue to provide annual service quality reports which currently measure and report:
  - 1) Call center response times;
  - 2) Meter reading performance data;
  - 3) Reference to service disconnection data submitted under Minn. Stat. §§ 216B.091 and 216B.096;
  - 4) Service extension request response time data;
  - 5) Customer deposit data;
  - 6) Customer complaint data;
  - 7) Telephone answer times for gas emergency phone line;
  - 8) Mislocate data;
  - 9) Damaged gas lines;
  - **10)** Service interruptions;
  - 11) Summaries of major events that are immediately reportable to the Minnesota Office of Pipeline Safety and summaries of all service interruptions caused by system integrity pressure issues;
  - 12) Gas emergency response times; and
  - 13) Customer-service related operations and maintenance expenses.

MERC agrees that it will continue to provide the annual service quality reports with the currently-reported data. These reports are typically filed on May 1 of each year.

e. As part of its initial Evaluation Report Filing, MERC will also provide recent historical information on the above metrics in subsection d, which it has available in order to assist the Commission in determining a "baseline" service quality level prior to implementation of the pilot program, and will fully comply with any other service quality reporting obligations established in other dockets. Attachment C is MERC's 2012 Annual Gas Service Quality Report to serve as the "baseline" service quality level prior to implementation of the pilot program.

#### f. Compliance with Prior Commission Orders

In its September 26, 2014, Order accepting MERC's 2013 revenue decoupling evaluation report, the Commission required MERC to include in its 2014 annual decoupling report an estimate of each class' revenues under the following decoupling scenarios:

- No Decoupling
- Partial Decoupling
- Full Decoupling

As explained in MERC's Reply Comments filed on June 30, 2014, based on conversations with the Department, MERC understands that the Department intended the term "full decoupling" to mean MERC's currently-approved pilot decoupling program. MERC notes that its approved decoupling mechanism applies only to Residential and Small C&I customer classes and includes a symmetrical 10 percent cap on surcharges and refunds. For purposes of the information required to be provided, MERC will assume decoupling applies to all rate classes. Additionally, MERC understands partial decoupling to be a revenue-per-customer decoupling mechanism that removes the effect of weather from decoupling deferrals (i.e., Weather Normalized Decoupling). Included as Attachment D is a spreadsheet estimating each class' revenues with no decoupling, under full decoupling (both with and without a 10 percent cap), and under a Weather Normalized Decoupling (both with and without a 10 percent cap). This attachment organizes the customers and sales beginning in 2018 into MERC's new customer classes as approved by the Commission in Docket No. G011/GR-17-563.

On August 17, 2016, the Commission issued an Order in Docket No. G011/GR-10-977, accepting MERC's 2015 Decoupling Evaluation Report and requiring MERC to file, no later than May 1, 2017, an Excel file that revises the December 2015 data for the Small Volume Transport, Large Volume Transport and Super Large Volume Interruptible and Joint customer classes. On November 15, 2016, MERC submitted a restated Excel file revised to restate the December 2015 customer counts for customers who were not billed in December 2015 and were billed twice in January 2016. In accordance with the Commission's April 17, 2016, Order and MERC's November 15, 2016, Compliance Filing in Docket No. G011/GR-10-977, Attachment D includes both actual data for 2015 and 2016 based on MERC's billing data from its billing system (under the tabs labeled "actual") and restated December 2015 and January 2016 data to restate customer counts for customers who were not billed in December 2015 and January 2016. The restated data is highlighted in yellow on the tabs labeled "2015 Restated" and "2016 Restated."

In its October 31, 2016, Order in Docket No. G011/GR-15-736, the Commission required that in MERC's future annual decoupling evaluation filings, the Company include an analysis of the financial consequences for ratepayers and MERC of extending the decoupling program to all customer classes with more than 50 customers. MERC may also include an analysis of the financial consequences of extending its decoupling program to any other combination of customer classes. Additionally, with the removal of the General Service Small C&I customer class from decoupling beginning on January 1, 2019, in Docket No. G011/GR-17-563, the Commission ordered this reporting requirement extended to the General Service Small C&I customer class.

An analysis of the financial consequences for ratepayers and MERC of extending decoupling to each customer class is included in Attachment D. In 2018, MERC's decoupling program was only applicable to Residential and Small C&I customers.

In Column P of each of the actual results tabs within Attachment D is a surcharge rate based on an estimation of each class' revenues under full decoupling (both with and without a 10 percent cap), and under a Weather Normalized Decoupling (both with and without a 10 percent cap). This surcharge is then applied to the average customer usage in that class (Column R), as well as a hypothetical low end usage customer (50 percent of actual average usage) (Column Q) and high end usage customer(150 percent of actual average usage) (Column S). For purposes of this analysis in 2009 -2017, MERC grouped the customers into the following categories: Residential, General Service Small C&I, General Service Large C&I, Small Volume Interruptible & Joint Sales, Large Volume Interruptible & Joint Sales, Small Volume Interruptible & Joint Transport, Large Volume Interruptible & Joint Transport (inclusive of Flex customers), and Super Large Volume Interruptible & Joint Transport. Beginning in 2018, MERC grouped the customers into the approved rate classifications from Docket No. G011/GR-17-563 as follows: Residential, Firm Class 1, Firm Class 2, Firm Class 3, Agricultural Grain Dryer Class 1, Agricultural Grain Dryer Class 2, Agricultural Grain Dryer Class 3, Power Generation Class 1, Power Generation Class 2, Interruptible Class 2, Interruptible Class 3, Interruptible Class 4, and Interruptible Class 5.

Using 2018 as an example, an average Firm Class 1 customer under MERC's current program with the 10 percent cap would experience a surcharge rate of \$0.00465 per therm (cell P45), and with average 2018 usage of 975 therms, would expect an annual surcharge of \$4.54. A customer that is on the high end for this example would experience an annual surcharge of \$6.81, based on 1,463 annual therms usage.

In its December 1, 2017, Order in Docket No. G011/GR-15-736, the Commission ordered MERC to include in its 2017 RDM report an analysis of how extending the RDM to other customer classes would impact overall rates for the period 2013-2017. To provide this analysis, a rate analysis tab was included in Attachment D, which calculates what the actual revenue refunded or surcharged to each customer grouping would have been if decoupling was applicable to all customer classes. For example, in 2017, MERC would have collected revenues totaling \$235,283,538, absent the existence of any decoupling. However, based on decoupling rates that would have been in effect

during 2017, MERC would have collected an additional \$5,641,254 for a total revenue collection of \$240,924,792. MERC has continued this analysis into 2018, and it is provided in Attachment D.

In its December 26, 2018, Findings of Fact, Conclusions, and Order in Docket No. G011/GR-17-563, the Commission required MERC to provide an updated analysis of the impact on customers of extending its RDM to all classes with 50 or more customers when MERC files its next rate case. MERC will address this requirement in the Company's next rate case, but notes that the Company continues to have concerns with the expansion of decoupling to other rate classes. Most notably, MERC is concerned about the expansion of decoupling to interruptible customers. To the extent these customers are interruptible, it would mean that if MERC were to interrupt their usage, thereby reducing sales, then all else equal, MERC would effectively recoup at least a portion of this revenue via the decoupling mechanism for sales that did not occur because MERC interrupted those customers. MERC could effectively recover its lost revenues for sales MERC did not provide due to limitations within MERC's own system. Such a result seems contrary to the purpose of interruptible natural gas service.

While MERC has identified concerns with expanding decoupling to its larger customer classes, consistent with the Commission's Findings of Fact, Conclusions, and Order in Docket No. G011/GR-17-563, MERC will continue to evaluate its program parameters and the effect of decoupling on additional classes. MERC appreciates the concerns and ideas the stakeholders have raised and we look forward to working with them to determine the program parameters that will yield the most value to the Company and our customers.

## g. Any other information that can provide assistance to the Commission in its evaluation.

Colder than normal weather was experienced in 2018, and, because of that, Residential customers will be credited an over-collection of revenues. The rate for the credit will be \$0.01765. This rate is calculated by dividing the balance of the over-collection in 2018 and the over-collected amount from MERC's 2016 decoupling refund by the sales forecast approved in Docket No. G011/GR-17-563. In addition, it should be noted that the 10 percent cap on distribution revenue was not exceeded by either Residential or Small C&I customers.

# **ATTACHMENT A**

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 1 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2011	1	0.61103	0.17746	-0.00428		0.78421		Final Rates per Docket No. G007,011/GR-08-836
2011	2	0.61794	0.19417	-0.00428		0.80783	0.02362	Interim Rates per Docket No. G007,011/GR-10-977
2011	3	0.60496	0.19417	-0.00428		0.79485	-0.01298	
2011	4	0.6133	0.19417	-0.00428		0.80319	0.00834	
2011	5	0.61012	0.19417	-0.00428		0.80001	-0.00318	
2011	6	0.60734	0.19417	-0.00428		0.79723	-0.00278	
2011	7	0.60414	0.19417	-0.00428		0.79403	-0.00320	
2011	8	0.61333	0.19417	-0.00428		0.80322	0.00919	
2011	9	0.56851	0.19417	-0.01609		0.74659	-0.05663	
2011	10	0.54608	0.19417	-0.01609		0.72416	-0.02243	
2011	11	0.5966	0.19417	-0.01609		0.77468	0.05052	
2011	12	0.58007	0.19417	-0.01609		0.75815	-0.01653	
2012	1	0.56467	0.19417	-0.01609		0.74275	-0.01540	
2012	2	0.52995	0.19417	-0.01609		0.70803	-0.03472	
2012	3	0.5344	0.19417	-0.01609		0.71248	0.00445	
2012	4	0.51893	0.19417	-0.01609		0.69701	-0.01547	
2012	5	0.46855	0.19417	-0.01609		0.64663	-0.05038	
2012	6	0.45904	0.19417	-0.01609		0.63712	-0.00951	
2012	7	0.47173	0.19417	-0.01609		0.64981	0.01269	
2012	8	0.5087	0.19417	-0.01609		0.68678	0.03697	
2012	9	0.46959	0.19417	0.02602		0.68978	0.00300	
2012	10	0.4965	0.19417	0.02602		0.71669	0.02691	
2012	11	0.53469	0.19417	0.02602		0.75488	0.03819	
2012	12	0.5503	0.19417	0.02602		0.77049	0.01561	
2013	1	0.51287	0.19754	0.02602		0.73643	-0.03406	Final Rates per Docket No. G007,011/GR-10-977
2013	2	0.50785	0.19754	0.02602		0.73141	-0.00502	
2013	3	0.52124	0.19754	0.02602		0.74480	0.01339	
2013	4	0.56577	0.19754	0.02602		0.78933	0.04453	
2013	5	0.60472	0.19754	0.02602		0.82828	0.03895	
2013	6	0.60947	0.19754	0.02602		0.83303	0.00475	

NNG Residential

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 2 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2011	1	0.52445	0.17746	0.20306		0.90497		Final Rates per Docket No. G007,011/GR-08-836
2011	2	0.52275	0.19417	0.20306		0.91998	0.01501	Interim Rates per Docket No. G007,011/GR-10-977
2011	3	0.51315	0.19417	0.20306		0.91038	-0.00960	
2011	4	0.50728	0.19417	0.20306		0.90451	-0.00587	
2011	5	0.52233	0.19417	0.20306		0.91956	0.01505	
2011	6	0.51753	0.19417	0.20306		0.91476	-0.00480	
2011	7	0.51662	0.19417	0.20306		0.91385	-0.00091	
2011	8	0.51659	0.19417	0.20306		0.91382	-0.00003	
2011	9	0.46953	0.19417	0.01253		0.67623	-0.23759	
2011	10	0.46334	0.19417	0.01253		0.67004	-0.00619	
2011	11	0.48621	0.19417	0.01253		0.69291	0.02287	
2011	12	0.4644	0.19417	0.01253		0.67110	-0.02181	
2012	1	0.46355	0.19417	0.01253		0.67025	-0.00085	
2012	2	0.43105	0.19417	0.01253		0.63775	-0.03250	
2012	3	0.43226	0.19417	0.01253		0.63896	0.00121	
2012	4	0.38021	0.19417	0.01253		0.58691	-0.05205	
2012	5	0.29945	0.19417	0.01253		0.50615	-0.08076	
2012	6	0.33517	0.19417	0.01253		0.54187	0.03572	
2012	7	0.36502	0.19417	0.01253		0.57172	0.02985	
2012	8	0.39395	0.19417	0.01253		0.60065	0.02893	
2012	9	0.36502	0.19417	-0.00344		0.55575	-0.04490	
2012	10	0.40817	0.19417	-0.00344		0.59890	0.04315	
2012	11	0.40874	0.19417	-0.00344		0.59947	0.00057	
2012	12	0.40857	0.19417	-0.00344		0.59930	-0.00017	
2013	1	0.41512	0.19754	-0.00344		0.60922	0.00992	Final Rates per Docket No. G007,011/GR-10-977
2013	2	0.40918	0.19754	-0.00344		0.60328	-0.00594	
2013	3	0.42975	0.19754	-0.00344		0.62385	0.02057	
2013	4	0.44931	0.19754	-0.00344		0.64341	0.01956	
2013	5	0.51036	0.19754	-0.00344		0.70446	0.06105	
2013	6	0.50946	0.19754	-0.00344		0.70356	-0.00090	

Viking Residential

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 3 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2011	1	0.51121	0.17746	0.14934		0.83801		Final Rates per Docket No. G007,011/GR-08-836
2011	2	0.5091	0.19417	0.14934		0.85261	0.01460	Interim Rates per Docket No. G007,011/GR-10-977
2011	3	0.50022	0.19417	0.14934		0.84373	-0.00888	
2011	4	0.49917	0.19417	0.14934		0.84268	-0.00105	
2011	5	0.514	0.19417	0.14934		0.85751	0.01483	
2011	6	0.50902	0.19417	0.14934		0.85253	-0.00498	
2011	7	0.50797	0.19417	0.14934		0.85148	-0.00105	
2011	8	0.5078	0.19417	0.14934		0.85131	-0.00017	
2011	9	0.46098	0.19417	0.02222		0.67737	-0.17394	
2011	10	0.44674	0.19417	0.02222		0.66313	-0.01424	
2011	11	0.46845	0.19417	0.02222		0.68484	0.02171	
2011	12	0.44711	0.19417	0.02222		0.66350	-0.02134	
2012	1	0.44613	0.19417	0.02222		0.66252	-0.00098	
2012	2	0.41409	0.19417	0.02222		0.63048	-0.03204	
2012	3	0.41533	0.19417	0.02222		0.63172	0.00124	
2012	4	0.36725	0.19417	0.02222		0.58364	-0.04808	
2012	5	0.28703	0.19417	0.02222		0.50342	-0.08022	
2012	6	0.32263	0.19417	0.02222		0.53902	0.03560	
2012	7	0.35229	0.19417	0.02222		0.56868	0.02966	
2012	8	0.38104	0.19417	0.02222		0.59743	0.02875	
2012	9	0.3523	0.19417	-0.00883		0.53764	-0.05979	
2012	10	0.39509	0.19417	-0.00883		0.58043	0.04279	
2012	11	0.40698	0.19417	-0.00883		0.59232	0.01189	
2012	12	0.40544	0.19417	-0.00883		0.59078	-0.00154	
2013	1	0.406	0.19754	-0.00883		0.59471	0.00393	Final Rates per Docket No. G007,011/GR-10-977
2013	2	0.40018	0.19754	-0.00883		0.58889	-0.00582	
2013	3	0.42071	0.19754	-0.00883		0.60942	0.02053	
2013	4	0.44326	0.19754	-0.00883		0.63197	0.02255	
2013	5	0.5047	0.19754	-0.00883		0.69341	0.06144	

Great Lakes Residential

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 4 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2011	1	0.56243	0.21759	0.00679		0.78681		Final Rates per Docket No. G007,011/GR-08-836
2011	2	0.56379	0.24189	0.00679		0.81247	0.02566	Interim Rates per Docket No. G007,011/GR-10-977
2011	3	0.55312	0.24189	0.00679		0.80180	-0.01067	
2011	4	0.5536	0.24189	0.00679		0.80228	0.00048	
2011	5	0.56176	0.24189	0.00679		0.81044	0.00816	
2011	6	0.55741	0.24189	0.00679		0.80609	-0.00435	
2011	7	0.55563	0.24189	0.00679		0.80431	-0.00178	
2011	8	0.55905	0.24189	0.00679		0.80773	0.00342	
2011	9	0.51299	0.24189	-0.01096		0.74392	-0.06381	
2011	10	0.49179	0.24189	-0.01096		0.72272	-0.02120	
2011	11	0.53329	0.24189	-0.01096		0.76422	0.04150	
2011	12	0.51374	0.24189	-0.01096		0.74467	-0.01955	
2012	1	0.50747	0.24189	-0.01096		0.73840	-0.00627	
2012	2	0.47422	0.24189	-0.01096		0.70515	-0.03325	
2012	3	0.4766	0.24189	-0.01096		0.70753	0.00238	
2012	4	0.43686	0.24189	-0.01096		0.66779	-0.03974	
2012	5	0.36777	0.24189	-0.01096		0.59870	-0.06909	
2012	6	0.38641	0.24189	-0.01096		0.61734	0.01864	
2012	7	0.40973	0.24189	-0.01096		0.64066	0.02332	
2012	8	0.4416	0.24189	-0.01096		0.67253	0.03187	
2012	9	0.40895	0.24189	0.01007		0.66091	-0.01162	
2012	10	0.44586	0.24189	0.01007		0.69782	0.03691	
2012	11	0.47119	0.24189	0.01007		0.72315	0.02533	
2012	12	0.47647	0.24189	0.01007		0.72843	0.00528	
2013	1	0.47933	0.19754	0.01007		0.68694	-0.04149	Final Rates per Docket No. G007,011/GR-10-977
2013	2	0.47379	0.19754	0.01007		0.68140	-0.00554	
2013	3	0.49147	0.19754	0.01007		0.69908	0.01768	
2013	4	0.52209	0.19754	0.01007		0.72970	0.03062	
2013	5	0.57446	0.19754	0.01007		0.78207	0.05237	
2013	6	0.57653	0.19754	0.01007		0.78414	0.00207	

NMU Residential

### Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 5 of 14

	\$/therm Change in	EFFECTIVE	Decoupling	ACA	DIST	GAS		
Notes					MARGIN	COSTS	Month	
Notes	Rate	RATE	Factor	Factor			Month	ar 2
PGA Consolidation	0.00100	0.75547		0	0.19754	0.55793	7	13
	0.00100	0.75647		0	0.19754	0.55893	8	13
	-0.01624	0.74023		-0.0004	0.19754	0.54309	9	13
	0.00051	0.74074		-0.0004	0.19754	0.5436	10	13
	0.03292	0.77366		-0.0004	0.19754	0.57652	11	13
	-0.00311	0.77055		-0.0004	0.19754	0.57341	12	13
Docket No. G011/GR-13-617 Interim	0.09282	0.86337		-0.0004	0.2229	0.64087	1	14
	0.05626	0.91963		-0.0004	0.2229	0.69713	2	14
	0.07248	0.99211		-0.0004	0.2229	0.76961	3	14
Implementation of 2013 Decoupling	-0.10952	0.88259	-0.01247	-0.0004	0.2229	0.67256	4	14
	-0.00209	0.88050	-0.01247	-0.0004	0.2229	0.67047	5	14
	-0.01786	0.86264	-0.01247	-0.0004	0.2229	0.65261	6	14
	0.00829	0.87093	-0.01247	-0.0004	0.2229	0.6609	7	14
	-0.07818	0.79275	-0.01247	-0.0004	0.2229	0.58272	8	14
	0.06347	0.85622	-0.01247	0.04714	0.2229	0.59865	9	14
	-0.00445	0.85177	-0.01247	0.04714	0.2229	0.5942	10	14
	0.00613	0.85790	-0.01247	0.04714	0.2229	0.60033	11	14
	0.07541	0.93331	-0.01247	0.04714	0.2229	0.67574	12	14
	-0.10052	0.83279	-0.01247	0.04714	0.2229	0.57522	1	15
	0.00726	0.84005	-0.01247	0.04714	0.2229	0.58248	2	15
	0.00446	0.84451	-0.01247	0.04714	0.2229	0.58694	3	15
Implementation of 2014 Decoupling	-0.07896	0.76555	-0.01936	0.04714	0.21806	0.51971	4	15
implementation of 2014 Decoupling	-0.05209	0.71346	-0.01936	0.04714	0.21806	0.46762	5	15
	0.00435	0.71340	-0.01936	0.04714	0.21806	0.46762	6	15
	-0.00830	0.70951	-0.01936	0.04714	0.21806	0.46367	7	15
	-0.00010	0.70941	-0.01936	0.04714	0.21806	0.46357	8	15
	-0.07633	0.63308	-0.01936	-0.01703	0.21806	0.45141	9	15
	-0.00308	0.63000	-0.01936	-0.01703	0.21806	0.44833	10	15
	-0.01951	0.61049	-0.01936	-0.01703	0.21806	0.42882	11	15
	0.00765	0.61814	-0.01936	-0.01703	0.21806	0.43647	12	15
Interim rate implementation	0.02412	0.64226	-0.01936	-0.01703	0.23980	0.43885	1	16
	-0.00666	0.63560	-0.01936	-0.01703	0.23980	0.43219	2	16
Implementation of 2015 Decoupling	0.00781	0.64341	0.02022	-0.01703	0.23980	0.40042	3	16
	-0.01796	0.62545	0.02022	-0.01703	0.23980	0.38246	4	16
	0.06061	0.68606	0.02022	-0.01703	0.23980	0.44307	5	16
	-0.13347	0.55259	0.02022	-0.01703	0.23980	0.3096	6	16
	0.07264	0.62523	0.02022	-0.01703	0.23980	0.38224	7	16
	0.00741	0.63264	0.02022	-0.01703	0.23980	0.38965	8	16
1 month delay in implementation of ACA factor	0.05315	0.68579	0.02022	0.00000	0.23980	0.42577	9	16
	0.00574	0.69153	0.02022	0.00301	0.23980	0.4285	10	16
	-0.02849	0.66304	0.02022	0.00301	0.23980	0.40001	11	16
	0.02917	0.69221	0.02022	0.00301	0.23980	0.42918	12	16
	0.05765	0.74986	0.02022	0.00301	0.23980	0.48683	1	17
	-0.04852	0.70134	0.02022	0.00301	0.23980	0.43831	2	17
Implementation of 2016 Decoupling	-0.05028	0.65106	0.01761	0.00301	0.23980	0.39064	3	17
Implementation of Final Rates 15-763	0.01155	0.66261	0.01761	0.00301	0.24116	0.40083	4	17
	0.00955	0.67216	0.01761	0.00301	0.24116	0.41033	5	17
	0.00955	0.69451	0.01761	0.00301	0.24116	0.41038	6	17
	-0.02235	0.66804	0.01761	0.00301	0.24116	0.43273	7	17
	-0.00523	0.66281	0.01761	0.00301	0.24116	0.40103	8	17
ACA Factor Implementation	0.02956	0.69237	0.01761	0.01072	0.24116	0.42288	9	17
	-0.02254	0.66983	0.01761	0.01072	0.24116	0.40034	10	17
	0.01775	0.68758	0.01761	0.01072	0.24116	0.41809	11	17
	0.01758	0.70516	0.01761	0.01072	0.24116	0.43567	12	17
Interim rate implementation	0.01754	0.72270	0.01761	0.01072	0.26284	0.43153	1	18
	0.11038	0.83308	0.01761	0.01072	0.26284	0.54191	2	18
Implementation of 2017 Decoupling	-0.13634	0.69674	0.01643	0.01072	0.26284	0.40675	3	18
Interim rate adjustment for TCJA	-0.01197	0.68477	0.01643	0.01072	0.25727	0.40035	4	18
	0.00988	0.69465	0.01643	0.01072	0.25727	0.41023	5	18
	-0.00126	0.69339	0.01643	0.01072	0.25727	0.40897	6	18
	0.00676	0.70015	0.01643	0.01072	0.25727	0.41573	7	18
	-0.00282	0.69733	0.01643	0.01072	0.25727	0.41291	8	18
		0.71386	0.01643	0.02234	0.25727	0.41782	9	18
ACA Factor Implementation	0.01653							
ACA Factor Implementation			0.01643	0.02234		0.44154	10	18
ACA Factor Implementation	0.01653 0.02372 0.05506	0.73758 0.79264	0.01643 0.01643	0.02234 0.02234	0.25727 0.25727	0.44154 0.4966	10 11	18 18

NNG Residential

### Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 6 of 14

Consolidated Residential

	\$/therm Change in	EFFECTIVE	Decounting	ACA	DIST	GAS		
Notos	Change in Rate		Decoupling		MARGIN		Month	Zoor
Notes PGA Consolidation	Rate	0.67415	Factor	Factor 0.00000	0.19754	COSTS 0.47661	Month 7	' <b>ear</b> 013
PGA Consolidation	0.00259	0.67057		0.00000				
	-0.00358				0.19754	0.47303 0.47474	8 9	2013
	-0.02915	0.64142		-0.03086	0.19754			2013
	0.00372	0.64514		-0.03086	0.19754	0.47846	10	2013
	-0.01134	0.63380		-0.03086	0.19754	0.46712	11	2013
	0.02350	0.65730		-0.03086	0.19754	0.49062	12	2013
Docket No. G011/GR-13-617 Interim	0.04860	0.70590		-0.03086	0.22290	0.51386	1	2014
	0.13807	0.84397		-0.03086	0.22290	0.65193	2	2014
	0.09610	0.94007		-0.03086	0.22290	0.74803	3	2014
Implementation of 2013 Decoupling	-0.17843	0.76164	-0.01247	-0.03086	0.22290	0.58207	4	2014
	0.00532	0.76696	-0.01247	-0.03086	0.22290	0.58739	5	2014
	-0.03093	0.73603	-0.01247	-0.03086	0.22290	0.55646	6	2014
	-0.00312	0.73291	-0.01247	-0.03086	0.22290	0.55334	7	2014
	-0.06487	0.66804	-0.01247	-0.03086	0.22290	0.48847	8	2014
	0.13267	0.80071	-0.01247	0.08726	0.22290	0.50302	9	2014
	0.00994	0.81065	-0.01247	0.08726	0.22290	0.51296	10	2014
	0.06042	0.87107	-0.01247	0.08726	0.22290	0.57338	11	2014
	0.02182	0.89289	-0.01247	0.08726	0.22290	0.5952	12	2014
	-0.07005	0.82284	-0.01247	0.08726	0.2229	0.52515	1	2015
	-0.04993	0.77291	-0.01247	0.08726	0.2229	0.47522	2	2015
	0.04053	0.81344	-0.01936	0.08726	0.2229	0.52264	3	2015
Implementation of 2014 Decoupling	-0.09536	0.71808	-0.01936	0.08726	0.21806	0.43212	4	2015
	-0.04267	0.67541	-0.01936	0.08726	0.21806	0.38945	5	2015
	0.01730	0.69271	-0.01936	0.08726	0.21806	0.40675	6	2015
	-0.01051	0.68220	-0.01936	0.08726	0.21806	0.39624	7	2015
	0.00985	0.69205	-0.01936	0.08726	0.21806	0.40609	8	2015
	-0.07986	0.61219	-0.01936	0.01468	0.21806	0.39881	9	2015
	0.00035	0.61254	-0.01936	0.01468	0.21806	0.39916	10	2015
	-0.00616	0.60638	-0.01936	0.01468	0.21806	0.393	10	2015
	-0.00482	0.60156	-0.01936	0.01468	0.21806	0.38818	12	2015
Interim rate implementation	0.02946	0.63102	-0.01936	0.01468	0.23980	0.3959	12	2015
internit rate implementation	-0.00837	0.62265	-0.01936	0.01468	0.23980	0.38753	2	2016
Implementation of 2015 Decoupling	0.02382		0.02022			0.38733	3	2016
Implementation of 2015 Decoupling		0.64647		0.01468	0.23980			
	-0.05688	0.58959	0.02022	0.01468	0.23980	0.31489	4	2016
	-0.01503	0.57456	0.02022	0.01468	0.23980	0.29986	5	2016
	-0.00440	0.57016	0.02022	0.01468	0.23980	0.29546	6	2016
	0.09521	0.66537	0.02022	0.01468	0.23980	0.39067	7	2016
	-0.04284	0.62253	0.02022	0.01468	0.23980	0.34783	8	2016
1 month delay in implementation of ACA factor	0.02105	0.64358	0.02022	0.00000	0.23980	0.38356	9	2016
	0.00837	0.65195	0.02022	-0.00355	0.23980	0.39548	10	2016
	-0.02160	0.63035	0.02022	-0.00355	0.23980	0.37388	11	2016
	0.01181	0.64216	0.02022	-0.00355	0.23980	0.38569	12	2016
	0.03647	0.67863	0.02022	-0.00355	0.23980	0.42216	1	2017
	-0.02575	0.65288	0.02022	-0.00355	0.23980	0.39641	2	2017
Implementation of 2016 Decoupling	-0.02258	0.63030	0.01761	-0.00355	0.23980	0.37644	3	2017
Implementation of Final Rates 15-763	-0.00603	0.62427	0.01761	-0.00355	0.24116	0.36905	4	2017
	0.00464	0.62891	0.01761	-0.00355	0.24116	0.37369	5	2017
	0.00810	0.63701	0.01761	-0.00355	0.24116	0.38179	6	2017
	-0.01511	0.62190	0.01761	-0.00355	0.24116	0.36668	7	2017
	-0.00763	0.61427	0.01761	-0.00355	0.24116	0.35905	8	2017
ACA Factor Implementation	-0.00183	0.61244	0.01761	-0.00711	0.24116	0.36078	9	2017
	-0.00159	0.61085	0.01761	-0.00711	0.24116	0.35919	10	2017
	-0.02237	0.58848	0.01761	-0.00711	0.24116	0.33682	10	2017
	-0.022990	0.55858	0.01761	-0.00711	0.24116	0.30692	11	2017
Interim rate implementation	0.00326	0.56184	0.01761	-0.00711	0.24110	0.2885	12	2017
interni rate infpienentation	0.00326	0.62062	0.01761	-0.00711		0.2885	2	2018
Inclementation of 2017 Descention					0.26284		2	
Implementation of 2017 Decoupling	-0.00911	0.61151	0.01643	-0.00711	0.26284	0.33935 0.32916		2018
Interim rate adjustment for TCJA	-0.01576	0.59575	0.01643	-0.00711	0.25727		4	2018
	0.01209	0.60784	0.01643	-0.00711	0.25727	0.34125	5	2018
	-0.00083	0.60701	0.01643	-0.00711	0.25727	0.34042	6	2018
	0.01503	0.62204	0.01643	-0.00711	0.25727	0.35545	7	2018
	0.01307	0.63511	0.01643	-0.00711	0.25727	0.36852	8	2018
ACA Factor Implementation	0.03010	0.66521	0.01643	0.02053	0.25727	0.37098	9	2018
	0.00332	0.66853	0.01643	0.02053	0.25727	0.3743	10	2018
	0.02359	0.69212	0.01643	0.02053	0.25727	0.39789	11	2018

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 7 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2013	7					0.00000		
2013	8					0.00000	0.00000	
2013	9					0.00000	0.00000	
2013	10					0.00000	0.00000	
2013	11					0.00000	0.00000	
2013	12					0.00000	0.00000	
2013	1					0.00000	0.00000	
2014	2					0.00000	0.00000	
2014	3					0.00000	0.00000	
2014	4					0.00000	0.00000	
2014	5					0.00000	0.00000	
2014	6					0.00000	0.00000	
2014	7					0.00000	0.00000	
2014	8					0.00000	0.00000	
2014	9					0.00000	0.00000	
2014	10					0.00000	0.00000	
2014	10					0.00000	0.00000	
2014	12					0.00000	0.00000	
2015	1					0.00000	0.00000	
2015	2					0.00000	0.00000	
2015	3					0.00000	0.00000	
2015	4					0.00000	0.00000	Acquisition of MERC-AL customers from IPL Docket No PA-14-10
		0.2027	0.0100-	~	0.00000			-
2015	5	0.3932	0.21806	0	0.00000	0.61126	0.61126	
2015	6	0.42673	0.21806	0	0.00000	0.64479	0.03353	
2015	7	0.41821	0.21806	0	0.00000	0.63627	-0.00852	
2015	8	0.42253	0.21806	0	0.00000	0.64059	0.00432	
2015	9	0.4165	0.21806	-0.00054	0.00000	0.63402	-0.00657	
2015	10	0.41205	0.21806	-0.00054	0.00000	0.62957	-0.00445	
2015	11	0.37257	0.21806	-0.00054	0.00000	0.59009	-0.03948	
2015	12	0.38323	0.21806	-0.00054	0.00000	0.60075	0.01066	
2016	1	0.40102	0.23980	-0.00054	0.00000	0.64028	0.03953	Interim rate implementation
	2							internit rate implementation
2016		0.38964	0.23980	-0.00054	0.00000	0.62890	-0.01138	
2016	3	0.36288	0.23980	-0.00054	0.02022	0.62236	-0.00654	Implementation of 2015 Decoupling
2016	4	0.33509	0.23980	-0.00054	0.02022	0.59457	-0.02779	
2016	5	0.39574	0.23980	-0.00054	0.02022	0.65522	0.06065	
2016	6	0.32027	0.23980	-0.00054	0.02022	0.57975	-0.07547	
2016	7	0.39804	0.23980	-0.00054	0.02022	0.65752	0.07777	
2016	8	0.3928	0.23980	-0.00054	0.02022	0.65228	-0.00524	
2016	9	0.4065	0.23980	0.00000	0.02022	0.66652	0.01424	1 month delay in implementation of ACA factor
2016	10	0.42055	0.23980	0.01256	0.02022	0.69313	0.02661	
2016	11	0.40769	0.23980	0.01256	0.02022	0.68027	-0.01286	
2016	12	0.4324	0.23980	0.01256	0.02022	0.70498	0.02471	
2017	1	0.47454	0.23980	0.01256	0.02022	0.74712	0.04214	
2017	2	0.4444	0.23980	0.01256	0.02022	0.71698	-0.03014	
2017	3	0.40055	0.23980	0.01256	0.01761	0.67052	-0.04646	Implementation of 2016 Decoupling
2017	4	0.41009	0.24116	0.01256	0.01761	0.68142	0.01090	Implementation of Final Rates 15-763
2017	5	0.40966	0.24116	0.01256	0.01761	0.68099	-0.00043	
2017	6	0.42416	0.24116	0.01256	0.01761	0.69549	0.01450	
2017	7	0.41947	0.24116	0.01256	0.01761	0.69080	-0.00469	
2017	8	0.41947	0.24116	0.01256	0.01761	0.68557	-0.00523	
2017	9	0.44564	0.24116	0.01072	0.01761	0.71513	0.02956	ACA Factor Implementation
2017	10	0.4231	0.24116	0.01072	0.01761	0.69259	-0.02254	
2017	11	0.44085	0.24116	0.01072	0.01761	0.71034	0.01775	
2017	12	0.45843	0.24116	0.01072	0.01761	0.72792	0.01758	
2018	1	0.43153	0.26284	0.01072	0.01761	0.72270	-0.00522	Interim rate implementation
2018	2	0.54191	0.26284	0.01072	0.01761	0.83308	0.11038	
2018	3	0.40675	0.26284	0.01072	0.01643	0.69674	-0.13634	Implementation of 2017 Decoupling
2018	4	0.40035	0.25727	0.01072	0.01643	0.68477	-0.01197	Interim rate adjustment for TCJA
								merm rac adjustment for TCJA
2018	5	0.41023	0.25727	0.01072	0.01643	0.69465	0.00988	
2018	6	0.40897	0.25727	0.01072	0.01643	0.69339	-0.00126	
2018	7	0.41573	0.25727	0.01072	0.01643	0.70015	0.00676	
2018	8	0.41291	0.25727	0.01072	0.01643	0.69733	-0.00282	
	9	0.41782	0.25727	0.02234	0.01643	0.71386	0.01653	ACA Factor Implementation
2018	9							
	9 10	0.44154	0.25727	0.02234	0.01643	0.73758	0.02372	
2018		0.44154 0.4966	0.25727 0.25727	0.02234 0.02234	0.01643 0.01643	0.73758 0.79264	0.02372 0.05506	

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 8 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2011	1	0.61103	0.15022	-0.00428		0.75697		Final Rates per Docket No. G007,011/GR-08-836
2011	2	0.61794	0.16437	-0.00428		0.77803	0.02106	Interim Rates per Docket No. G007,011/GR-10-977
2011	3	0.60496	0.16437	-0.00428		0.76505	-0.01298	
2011	4	0.6133	0.16437	-0.00428		0.77339	0.00834	
2011	5	0.61012	0.16437	-0.00428		0.77021	-0.00318	
2011	6	0.60734	0.16437	-0.00428		0.76743	-0.00278	
2011	7	0.60414	0.16437	-0.00428		0.76423	-0.00320	
2011	8	0.61333	0.16437	-0.00428		0.77342	0.00919	
2011	9	0.56851	0.16437	-0.01609		0.71679	-0.05663	
2011	10	0.54608	0.16437	-0.01609		0.69436	-0.02243	
2011	11	0.5966	0.16437	-0.01609		0.74488	0.05052	
2011	12	0.58007	0.16437	-0.01609		0.72835	-0.01653	
2012	1	0.56467	0.16437	-0.01609		0.71295	-0.01540	
2012	2	0.52995	0.16437	-0.01609		0.67823	-0.03472	
2012	3	0.5344	0.16437	-0.01609		0.68268	0.00445	
2012	4	0.51893	0.16437	-0.01609		0.66721	-0.01547	
2012	5	0.46855	0.16437	-0.01609		0.61683	-0.05038	
2012	6	0.45904	0.16437	-0.01609		0.60732	-0.00951	
2012	7	0.47173	0.16437	-0.01609		0.62001	0.01269	
2012	8	0.5087	0.16437	-0.01609		0.65698	0.03697	
2012	9	0.46959	0.16437	0.02602		0.65998	0.00300	
2012	10	0.4965	0.16437	0.02602		0.68689	0.02691	
2012	11	0.53469	0.16437	0.02602		0.72508	0.03819	
2012	12	0.5503	0.16437	0.02602		0.74069	0.01561	
2013	1	0.51287	0.18525	0.02602		0.72414	-0.01655	Final Rates per Docket No. G007,011/GR-10-977
2013	2	0.50785	0.18525	0.02602		0.71912	-0.00502	
2013	3	0.52124	0.18525	0.02602		0.73251	0.01339	
2013	4	0.56577	0.18525	0.02602		0.77704	0.04453	
2013	5	0.60472	0.18525	0.02602		0.81599	0.03895	
2013	6	0.60947	0.18525	0.02602		0.82074	0.00475	

NNG Small C&I

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 9 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2011	1	0.52445	0.15022	0.20306		0.87773		Final Rates per Docket No. G007,011/GR-08-836
2011	2	0.52275	0.16437	0.20306		0.89018	0.01245	Interim Rates per Docket No. G007,011/GR-10-977
2011	3	0.51315	0.16437	0.20306		0.88058	-0.00960	
2011	4	0.50728	0.16437	0.20306		0.87471	-0.00587	
2011	5	0.52233	0.16437	0.20306		0.88976	0.01505	
2011	6	0.51753	0.16437	0.20306		0.88496	-0.00480	
2011	7	0.51662	0.16437	0.20306		0.88405	-0.00091	
2011	8	0.51659	0.16437	0.20306		0.88402	-0.00003	
2011	9	0.46953	0.16437	0.01253		0.64643	-0.23759	
2011	10	0.46334	0.16437	0.01253		0.64024	-0.00619	
2011	11	0.48621	0.16437	0.01253		0.66311	0.02287	
2011	12	0.4644	0.16437	0.01253		0.64130	-0.02181	
2012	1	0.46355	0.16437	0.01253		0.64045	-0.00085	
2012	2	0.43105	0.16437	0.01253		0.60795	-0.03250	
2012	3	0.43226	0.16437	0.01253		0.60916	0.00121	
2012	4	0.38021	0.16437	0.01253		0.55711	-0.05205	
2012	5	0.29945	0.16437	0.01253		0.47635	-0.08076	
2012	6	0.33517	0.16437	0.01253		0.51207	0.03572	
2012	7	0.36502	0.16437	0.01253		0.54192	0.02985	
2012	8	0.39395	0.16437	0.01253		0.57085	0.02893	
2012	9	0.36502	0.16437	-0.00344		0.52595	-0.04490	
2012	10	0.40817	0.16437	-0.00344		0.56910	0.04315	
2012	11	0.40874	0.16437	-0.00344		0.56967	0.00057	
2012	12	0.40857	0.16437	-0.00344		0.56950	-0.00017	
2013	1	0.41512	0.18525	-0.00344		0.59693	0.02743	Final Rates per Docket No. G007,011/GR-10-977
2013	2	0.40918	0.18525	-0.00344		0.59099	-0.00594	
2013	3	0.42975	0.18525	-0.00344		0.61156	0.02057	
2013	4	0.44931	0.18525	-0.00344		0.63112	0.01956	
2013	5	0.51036	0.18525	-0.00344		0.69217	0.06105	
2013	6	0.50946	0.18525	-0.00344		0.69127	-0.00090	

Viking Small C&I

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 10 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2011	1	0.51121	0.15022	0.14934		0.81077		Final Rates per Docket No. G007,011/GR-08-836
2011	2	0.5091	0.16437	0.14934		0.82281	0.01204	Interim Rates per Docket No. G007,011/GR-10-977
2011	3	0.50022	0.16437	0.14934		0.81393	-0.00888	
2011	4	0.49917	0.16437	0.14934		0.81288	-0.00105	
2011	5	0.514	0.16437	0.14934		0.82771	0.01483	
2011	6	0.50902	0.16437	0.14934		0.82273	-0.00498	
2011	7	0.50797	0.16437	0.14934		0.82168	-0.00105	
2011	8	0.5078	0.16437	0.14934		0.82151	-0.00017	
2011	9	0.46098	0.16437	0.02222		0.64757	-0.17394	
2011	10	0.44674	0.16437	0.02222		0.63333	-0.01424	
2011	11	0.46845	0.16437	0.02222		0.65504	0.02171	
2011	12	0.44711	0.16437	0.02222		0.63370	-0.02134	
2012	1	0.44613	0.16437	0.02222		0.63272	-0.00098	
2012	2	0.41409	0.16437	0.02222		0.60068	-0.03204	
2012	3	0.41533	0.16437	0.02222		0.60192	0.00124	
2012	4	0.36725	0.16437	0.02222		0.55384	-0.04808	
2012	5	0.28703	0.16437	0.02222		0.47362	-0.08022	
2012	6	0.32263	0.16437	0.02222		0.50922	0.03560	
2012	7	0.35229	0.16437	0.02222		0.53888	0.02966	
2012	8	0.38104	0.16437	0.02222		0.56763	0.02875	
2012	9	0.3523	0.16437	-0.00883		0.50784	-0.05979	
2012	10	0.39509	0.16437	-0.00883		0.55063	0.04279	
2012	11	0.40698	0.16437	-0.00883		0.56252	0.01189	
2012	12	0.40544	0.16437	-0.00883		0.56098	-0.00154	
2013	1	0.406	0.18525	-0.00883		0.58242	0.02144	Final Rates per Docket No. G007,011/GR-10-977
2013	2	0.40018	0.18525	-0.00883		0.57660	-0.00582	
2013	3	0.42071	0.18525	-0.00883		0.59713	0.02053	
2013	4	0.44326	0.18525	-0.00883		0.61968	0.02255	
2013	5	0.5047	0.18525	-0.00883		0.68112	0.06144	
2013	6	0.50674	0.18525	-0.00883		0.68316	0.00204	

Great Lakes Small C&I

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 11 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
 Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2011	1	0.56243	0.18564	0.00679		0.75486		Final Rates per Docket No. G007,011/GR-08-836
2011	2	0.56379	0.20637	0.00679		0.77695	0.02209	Interim Rates per Docket No. G007,011/GR-10-977
2011	3	0.55312	0.20637	0.00679		0.76628	-0.01067	
2011	4	0.5536	0.20637	0.00679		0.76676	0.00048	
2011	5	0.56176	0.20637	0.00679		0.77492	0.00816	
2011	6	0.55741	0.20637	0.00679		0.77057	-0.00435	
2011	7	0.55563	0.20637	0.00679		0.76879	-0.00178	
2011	8	0.55905	0.20637	0.00679		0.77221	0.00342	
2011	9	0.51299	0.20637	-0.01096		0.70840	-0.06381	
2011	10	0.49179	0.20637	-0.01096		0.68720	-0.02120	
2011	11	0.53329	0.20637	-0.01096		0.72870	0.04150	
2011	12	0.51374	0.20637	-0.01096		0.70915	-0.01955	
2012	1	0.50747	0.20637	-0.01096		0.70288	-0.00627	
2012	2	0.47422	0.20637	-0.01096		0.66963	-0.03325	
2012	3	0.4766	0.20637	-0.01096		0.67201	0.00238	
2012	4	0.43686	0.20637	-0.01096		0.63227	-0.03974	
2012	5	0.36777	0.20637	-0.01096		0.56318	-0.06909	
2012	6	0.38641	0.20637	-0.01096		0.58182	0.01864	
2012	7	0.40973	0.20637	-0.01096		0.60514	0.02332	
2012	8	0.4416	0.20637	-0.01096		0.63701	0.03187	
2012	9	0.40895	0.20637	0.01007		0.62539	-0.01162	
2012	10	0.44586	0.20637	0.01007		0.66230	0.03691	
2012	11	0.47119	0.20637	0.01007		0.68763	0.02533	
2012	12	0.47647	0.20637	0.01007		0.69291	0.00528	
2013	1	0.47933	0.18525	0.01007		0.67465	-0.01826	Final Rates per Docket No. G007,011/GR-10-977
2013	2	0.47379	0.18525	0.01007		0.66911	-0.00554	
2013	3	0.49147	0.18525	0.01007		0.68679	0.01768	
2013	4	0.52209	0.18525	0.01007		0.71741	0.03062	
2013	5	0.57446	0.18525	0.01007		0.76978	0.05237	
2013	6	0.57653	0.18525	0.01007		0.77185	0.00207	

NMU Small C&I

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 12 of 14

	\$/therm							
	\$/tnerm Change in	EFFECTIVE	Decoupling	ACA	DIST	GAS		
Notes	Rate	RATE	Factor	Factor	MARGIN	COSTS	Month	<i>l</i> ear
PGA Consolidation	Kale	0.74318	Factor	0	0.18525	0.55793	7	2013
TON Consolidation	0.00100	0.74418		0	0.18525	0.55893	8	2013
	-0.01624	0.72794		-0.0004	0.18525	0.54309	9	2013
	0.00051	0.72794		-0.0004	0.18525	0.54360	10	2013
	0.03292	0.72345		-0.0004	0.18525	0.57652	10	2013
				-0.0004				
Docket No. G011/GR-13-617 Interim	-0.00311 0.09125	0.75826 0.84951		-0.0004	0.18525 0.20904	0.57341 0.64087	12 1	2013 2014
Docket No. GOTI/GK-15-017 Internit	0.05626	0.90577		-0.0004	0.20904	0.69713	2	014
	0.07248	0.90377		-0.0004	0.20904	0.76961	3	2014
Implementation of 2013 Decoupling	-0.11406	0.97823	-0.01701	-0.0004	0.20904	0.67256	4	2014
Implementation of 2015 Decoupring	-0.00209		-0.01701	-0.0004			4 5	
	-0.01786	0.86210 0.84424	-0.01701	-0.0004	0.20904 0.20904	0.67047 0.65261		2014 2014
	0.00829	0.84424	-0.01701	-0.0004	0.20904	0.66090	6 7	014
	-0.07818	0.77435	-0.01701	-0.0004	0.20904	0.58272	8	2014
	0.06347	0.83782	-0.01701	0.04714	0.20904	0.59865	9	2014
	-0.00445	0.83337	-0.01701	0.04714	0.20904	0.59420	10	2014
	0.00613	0.83950	-0.01701	0.04714	0.20904	0.60033	11	014
	0.07541	0.91491	-0.01701	0.04714	0.20904	0.67574	12	014
	-0.10052	0.81439	-0.01701	0.04714	0.20904	0.57522	1	015
	0.00726	0.82165	-0.01701	0.04714	0.20904	0.58248	2	015
	0.00446	0.82611	-0.01701	0.04714	0.20904	0.58694	3	2015
Implementation of 2014 Decoupling	-0.09377	0.73234	-0.01567	0.04714	0.18116	0.51971	4	015
	-0.05209	0.68025	-0.01567	0.04714	0.18116	0.46762	5	2015
	0.00435	0.68460	-0.01567	0.04714	0.18116	0.47197	6	2015
	-0.00830	0.67630	-0.01567	0.04714	0.18116	0.46367	7	2015
	-0.00010	0.67620	-0.01567	0.04714	0.18116	0.46357	8	015
	-0.07633	0.59987	-0.01567	-0.01703	0.18116	0.45141	9	2015
	-0.00308	0.59679	-0.01567	-0.01703	0.18116	0.44833	10	015
	-0.01951	0.57728	-0.01567	-0.01703	0.18116	0.42882	11	015
	0.00765	0.58493	-0.01567	-0.01703	0.18116	0.43647	12	015
Interim rate implementation	0.02044	0.60537	-0.01567	-0.01703	0.19922	0.43885	1	2016
	-0.00666	0.59871	-0.01567	-0.01703	0.19922	0.43219	2	016
Implementation of 2015 Decoupling	-0.00376	0.59495	0.01234	-0.01703	0.19922	0.40042	3	016
	-0.01796	0.57699	0.01234	-0.01703	0.19922	0.38246	4	016
	0.06061	0.63760	0.01234	-0.01703	0.19922	0.44307	5	016
	-0.13347	0.50413	0.01234	-0.01703	0.19922	0.30960	6	016
	0.07264	0.57677	0.01234	-0.01703	0.19922	0.38224	7	016
	0.00741	0.58418	0.01234	-0.01703	0.19922	0.38965	8	016
1 month delay in implementation of ACA factor	0.05315	0.63733	0.01234	0.00000	0.19922	0.42577	9	016
	0.00574	0.64307	0.01234	0.00301	0.19922	0.42850	10	016
	-0.02849	0.61458	0.01234	0.00301	0.19922	0.40001	11	016
	0.02917	0.64375	0.01234	0.00301	0.19922	0.42918	12	016
	0.05765	0.70140	0.01234	0.00301	0.19922	0.48683	1	017
	-0.04852	0.65288	0.01234	0.00301	0.19922	0.43831	2	017
Implementation of 2016 Decoupling	-0.04617	0.60671	0.01384	0.00301	0.19922	0.39064	3	017
Implementation of Final Rates 15-763	0.03162	0.63833	0.01384	0.00301	0.22065	0.40083	4	017
	0.00955	0.64788	0.01384	0.00301	0.22065	0.41038	5	017
	0.02235	0.67023	0.01384	0.00301	0.22065	0.43273	6	017
	-0.02647	0.64376	0.01384	0.00301	0.22065	0.40626	7	017
	-0.00523	0.63853	0.01384	0.00301	0.22065	0.40103	8	017
ACA Factor Implementation	0.02956	0.66809	0.01384	0.01072	0.22065	0.42288	9	017
	-0.02254	0.64555	0.01384	0.01072	0.22065	0.40034	10	017
	0.01775	0.66330	0.01384	0.01072	0.22065	0.41809	11	017
	0.01758	0.68088	0.01384	0.01072	0.22065	0.43567	12	017
Interim rate implementation	0.01570	0.69658	0.01384	0.01072	0.24049	0.43153	1	018
	0.11038	0.80696	0.01384	0.01072	0.24049	0.54191	2	018
Implementation of 2017 Decoupling	-0.13126	0.67570	0.01774	0.01072	0.24049	0.40675	3	018
Interim rate adjustment for TCJA	-0.01150	0.66420	0.01774	0.01072	0.23539	0.40035	4	018
	0.00988	0.67408	0.01774	0.01072	0.23539	0.41023	5	018
	-0.00126	0.67282	0.01774	0.01072	0.23539	0.40897	6	018
	0.00676	0.67958	0.01774	0.01072	0.23539	0.41573	7	018
	-0.00282	0.67676	0.01774	0.01072	0.23539	0.41291	8	018
ACA Easter Implementation	0.01653	0.69329	0.01774	0.02234	0.23539	0.41782	9	018
ACA Factor Implementation		0.71701	0.01774	0.02234	0.23539	0.44154	10	018
ACA Factor Implementation	0.02372							
ACA Factor Implementation	0.02372 0.05506	0.77207	0.01774	0.02234	0.23539	0.4966	10	018

NNG Small C&I

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 13 of 14

Consolidated	Small	C&I	
comonnuticu			

		Consolidated Sma						
	\$/therm		<b>D</b>		DIGE	<b>G</b> 1 <b>G</b>		
<b>N</b> 4	Change in	EFFECTIVE	Decoupling	ACA	DIST	GAS		
Notes	Rate	RATE	Factor	Factor 0	MARGIN	COSTS	Month	ar
PGA Consolidation	0.00259	0.66186 0.65828		0	0.18525 0.18525	0.47661 0.47303	7 8	13 13
	-0.00358							
	-0.02915	0.62913		-0.03086	0.18525	0.47474	9	13
	0.00372	0.63285		-0.03086	0.18525	0.47846	10	13
	-0.01134	0.62151		-0.03086	0.18525	0.46712	11	13
	0.02350	0.64501		-0.03086	0.18525	0.49062	12	13
Docket No. G011/GR-13-617 Interim	0.04703	0.69204		-0.03086	0.20904	0.51386	1	14
	0.13807	0.83011		-0.03086	0.20904	0.65193	2	14
	0.09610	0.92621		-0.03086	0.20904	0.74803	3	14
Implementation of 2013 Decoupling	-0.18297	0.74324	-0.01701	-0.03086	0.20904	0.58207	4	14
	0.00532	0.74856	-0.01701	-0.03086	0.20904	0.58739	5	14
	-0.03093	0.71763	-0.01701	-0.03086	0.20904	0.55646	6	14
	-0.00312	0.71451	-0.01701	-0.03086	0.20904	0.55334	7	14
	-0.06487	0.64964	-0.01701	-0.03086	0.20904	0.48847	8	14
	0.13267	0.78231	-0.01701	0.08726	0.20904	0.50302	9	14
	0.00994	0.79225	-0.01701	0.08726	0.20904	0.51296	10	14
	0.06042	0.85267	-0.01701	0.08726	0.20904	0.57338	11	14
	0.02182	0.87449	-0.01701	0.08726	0.20904	0.5952	12	14
	-0.07005	0.80444	-0.01701	0.08726	0.20904	0.52515	1	15
	-0.04993	0.75451	-0.01701	0.08726	0.20904	0.47522	2	15
	0.04742	0.80193	-0.01701	0.08726	0.20904	0.52264	3	15
Implementation of 2014 Decoupling	-0.11706	0.68487	-0.01567	0.08726	0.18116	0.43212	4	15
implementation of 2014 Decoupting	-0.04267	0.64220	-0.01567	0.08726	0.18116	0.38945	5	15
			-0.01567			0.38945	6	
	0.01730	0.65950		0.08726	0.18116		6 7	15
	-0.01051	0.64899	-0.01567	0.08726	0.18116	0.39624		15
	0.00985	0.65884	-0.01567	0.08726	0.18116	0.40609	8	15
	-0.07986	0.57898	-0.01567	0.01468	0.18116	0.39881	9	15
	0.00035	0.57933	-0.01567	0.01468	0.18116	0.39916	10	15
	-0.00616	0.57317	-0.01567	0.01468	0.18116	0.393	11	15
	-0.00482	0.56835	-0.01567	0.01468	0.18116	0.38818	12	15
Interim rate implementation	0.02578	0.59413	-0.01567	0.01468	0.19922	0.3959	1	16
	-0.00837	0.58576	-0.01567	0.01468	0.19922	0.38753	2	16
Implementation of 2015 Decoupling	0.01225	0.59801	0.01234	0.01468	0.19922	0.37177	3	16
	-0.05688	0.54113	0.01234	0.01468	0.19922	0.31489	4	16
	-0.01503	0.52610	0.01234	0.01468	0.19922	0.29986	5	16
	-0.00440	0.52170	0.01234	0.01468	0.19922	0.29546	6	16
	0.09521	0.61691	0.01234	0.01468	0.19922	0.39067	7	16
	-0.04284	0.57407	0.01234	0.01468	0.19922	0.34783	8	16
1 month delay in implementation of ACA factor	0.02105	0.59512	0.01234	0.00000	0.19922	0.38356	9	16
	0.00837	0.60349	0.01234	-0.00355	0.19922	0.39548	10	16
	-0.02160	0.58189	0.01234	-0.00355	0.19922	0.37388	11	16
	0.01181	0.59370	0.01234	-0.00355	0.19922	0.38569	12	16
	0.03647	0.63017	0.01234	-0.00355	0.19922	0.42216	12	17
	-0.02575	0.60442	0.01234	-0.00355	0.19922	0.39641	2	17
Implementation of 2016 Decompling							2	
Implementation of 2016 Decoupling	-0.01847	0.58595	0.01384	-0.00355	0.19922	0.37644		17
Implementation of Final Rates 15-763	0.01404	0.59999	0.01384	-0.00355	0.22065	0.36905	4	17
	0.00464	0.60463	0.01384	-0.00355	0.22065	0.37369	5	17
	0.00810	0.61273	0.01384	-0.00355	0.22065	0.38179	6	17
	-0.01511	0.59762	0.01384	-0.00355	0.22065	0.36668	7	17
	-0.00763	0.58999	0.01384	-0.00355	0.22065	0.35905	8	17
ACA Factor Implementation	-0.00183	0.58816	0.01384	-0.00711	0.22065	0.36078	9	17
	-0.00159	0.58657	0.01384	-0.00711	0.22065	0.35919	10	17
	-0.02237	0.56420	0.01384	-0.00711	0.22065	0.33682	11	17
	-0.02990	0.53430	0.01384	-0.00711	0.22065	0.30692	12	17
Interim rate implementation	0.00142	0.53572	0.01384	-0.00711	0.24049	0.2885	1	18
	0.05878	0.59450	0.01384	-0.00711	0.24049	0.34728	2	18
Implementation of 2017 Decoupling	-0.00403	0.59047	0.01774	-0.00711	0.24049	0.33935	3	18
Interim rate adjustment for TCJA	-0.01529	0.57518	0.01774	-0.00711	0.23539	0.32916	4	18
-	0.01209	0.58727	0.01774	-0.00711	0.23539	0.34125	5	18
	-0.00083	0.58644	0.01774	-0.00711	0.23539	0.34042	6	18
	0.01503	0.60147	0.01774	-0.00711	0.23539	0.35545	7	18
		0.61454	0.01774	-0.00711	0.23539	0.36852	8	18
	0.01307	0.01404	0.01774	0.00711			0	
ACA Factor Implamentation	0.01307	0.64464	0.01774	0.02052	0 23520	0 37009	0	18
ACA Factor Implementation	0.03010	0.64464	0.01774	0.02053	0.23539	0.37098	9	18
ACA Factor Implementation	0.03010 0.00332	0.64796	0.01774	0.02053	0.23539	0.3743	10	18
ACA Factor Implementation	0.03010							

## Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment A Page 14 of 14

							\$/therm	
		GAS	DIST	ACA	Decoupling	EFFECTIVE	Change in	
Year	Month	COSTS	MARGIN	Factor	Factor	RATE	Rate	Notes
2013	7					0.00000		
2013	8					0.00000	0.00000	
2013	9					0.00000	0.00000	
2013	10					0.00000	0.00000	
2013	11					0.00000	0.00000	
2013	12					0.00000	0.00000	
2014	1					0.00000	0.00000	
2014	2					0.00000	0.00000	
2014	3					0.00000	0.00000	
2014	4					0.00000	0.00000	
2014	5					0.00000	0.00000	
2014	6					0.00000	0.00000	
2014	7					0.00000	0.00000	
2014	8					0.00000	0.00000	
2014	9					0.00000	0.00000	
2014	10					0.00000	0.00000	
2014	11					0.00000	0.00000	
2014	12					0.00000	0.00000	
2015	1					0.00000	0.00000	
2015	2					0.00000	0.00000	
2015	3					0.00000	0.00000	
2015	4					0.00000	0.00000	Acquisition of MERC-AL customers from IPL Docket No PA-14-107
								requisition of MERCE THE customers from the Docket from the 100
2015	5	0.39320	0.18116	0	0.00000	0.57436	0.57436	
2015	6	0.42673	0.18116	0	0.00000	0.60789	0.03353	
2015	7	0.41821	0.18116	0	0.00000	0.59937	-0.00852	
2015	8	0.42253	0.18116	0	0.00000	0.60369	0.00432	
2015	9	0.41650	0.18116	-0.00054	0.00000	0.59712	-0.00657	
2015	10	0.41205	0.18116	-0.00054	0.00000	0.59267	-0.00445	
2015	11	0.37257	0.18116	-0.00054	0.00000	0.55319	-0.03948	
2015	12	0.38323	0.18116	-0.00054	0.00000	0.56385	0.01066	
2016	1	0.40102	0.19922	-0.00054	0.00000	0.59970	0.03585	Interim rate implementation
2016	2	0.38964	0.19922	-0.00054	0.00000	0.58832	-0.01138	
2016	3	0.36288	0.19922	-0.00054	0.01234	0.57390	-0.01442	Implementation of 2015 Decoupling
2016	4	0.33509	0.19922	-0.00054	0.01234	0.54611	-0.02779	
2016	5	0.39574	0.19922	-0.00054	0.01234	0.60676	0.06065	
2016	6	0.32027	0.19922	-0.00054	0.01234	0.53129	-0.07547	
2016	7	0.39804	0.19922	-0.00054	0.01234	0.60906	0.07777	
2016	8	0.39280	0.19922	-0.00054	0.01234	0.60382	-0.00524	
2016	9	0.40650	0.19922	0.00000	0.01234	0.61806	0.01424	1 month delay in implementation of ACA factor
2016	10	0.42055	0.19922	0.01256	0.01234	0.64467	0.02661	
2016	11	0.40769	0.19922	0.01256	0.01234	0.63181	-0.01286	
2016	12	0.43240	0.19922	0.01256	0.01234	0.65652	0.02471	
2017	1	0.47454	0.19922	0.00301	0.01234	0.68911	0.03259	
2017	2	0.44440	0.19922	0.00301	0.01234	0.65897	-0.03014	
2017	3	0.40055	0.19922	0.00301	0.01384	0.61662	-0.04235	Implementation of 2016 Decoupling
2017	4	0.41009	0.22065	0.00301	0.01384	0.64759	0.03097	Implementation of Final Rates 15-763
2017	5	0.40966	0.22065	0.00301	0.01384	0.64716	-0.00043	
2017	6	0.42416	0.22065	0.00301	0.01384	0.66166	0.01450	
2017	7	0.41947	0.22065	0.00301	0.01384	0.65697	-0.00469	
2017	8	0.41424	0.22065	0.00301	0.01384	0.65174	-0.00523	
2017	9	0.44564	0.22065	0.01072	0.01384	0.69085	0.03911	ACA Factor Implementation
2017	10	0.42310	0.22065	0.01072	0.01384	0.66831	-0.02254	
2017	11	0.44085	0.22065	0.01072	0.01384	0.68606	0.01775	
2017	12	0.45843	0.22065	0.01072	0.01384	0.70364	0.01758	
2018	1	0.43153	0.24049	0.01072	0.01384	0.69658	-0.00706	Interim rate implementation
2018	2	0.54191	0.24049	0.01072	0.01384	0.80696	0.11038	·····
								Implementation - 60017 December
2018	3	0.40675	0.24049	0.01072	0.01774	0.67570	-0.13126	Implementation of 2017 Decoupling
2018	4	0.40035	0.23539	0.01072	0.01774	0.66420	-0.01150	Interim rate adjustment for TCJA
2018	5	0.41023	0.23539	0.01072	0.01774	0.67408	0.00988	
2018	6	0.40897	0.23539	0.01072	0.01774	0.67282	-0.00126	
2018	7	0.41573	0.23539	0.01072	0.01774	0.67958	0.00676	
2018	8	0.41291	0.23539	0.01072	0.01774	0.67676	-0.00282	
								ACA Easter Implementation
2018	9	0.41782	0.23539	0.02234	0.01774	0.69329	0.01653	ACA Factor Implementation
2018	10	0.44154	0.23539	0.02234	0.01774	0.71701	0.02372	
2018	11	0.4966	0.23539	0.02234	0.01774	0.77207	0.05506	
2018	12	0.57017	0.23539	0.02234	0.01774	0.84564	0.07357	

Albert Lea Small C&I

# **ATTACHMENT B**

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 1 of 14

#### NNG Residential

		GAS*	1	MARGIN
Year	Month	COSTS	R	EVENUE
2011	1	0.61103	\$	5,193,548
2011	2	0.61794	\$	4,714,185
2011	3	0.60496	\$	3,391,061
2011	4	0.6133	\$	1,911,850
2011	5	0.61012	\$	1,003,226
2011	6	0.60734	\$	(19,554)
2011	7	0.60414	\$	278,402
2011	8	0.61333	\$	384,170
2011	9	0.56851	\$	463,786
2011	10	0.54608	\$	801,292
2011	11	0.5966	\$	1,880,409
2011	12	0.58007	\$	3,832,648
2012	1	0.56467	\$	4,163,182
2012	2	0.52995	\$	4,009,436
2012	3	0.5344	\$	2,789,361
2012	4	0.51893	\$	100,490
2012	5	0.46855	\$	939,924
2012	6	0.45904	\$	98,837
2012	7	0.47173	\$	377,511
2012	8	0.5087	\$	401,463
2012	9	0.46959	\$	451,711
2012	10	0.4965	\$	980,690
2012	11	0.53469	\$	2,261,933
2012	12	0.5503	\$	3,423,687
2013	1	0.51287	\$	4,515,141
2013	2	0.50785	\$	5,635,357
2013	3	0.52124	\$	3,824,256
2013	4	0.56577	\$	2,754,359
2013	5	0.60472	\$	1,500,597
2013	6	0.60947	\$	(361,209)

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 2 of 14

#### Viking Residential

		GAS*	N	IARGIN
Year	Month	COSTS	R	EVENUE
2011	1	0.52445	\$	134,582
2011	2	0.52275	\$	123,362
2011	3	0.51315	\$	96,217
2011	4	0.50728	\$	54,171
2011	5	0.52233	\$	21,786
2011	6	0.51753	\$	(5,334)
2011	7	0.51662	\$	912
2011	8	0.51659	\$	5,451
2011	9	0.46953	\$	7,472
2011	10	0.46334	\$	23,885
2011	11	0.48621	\$	49,222
2011	12	0.4644	\$	108,474
2012	1	0.46355	\$	103,978
2012	2	0.43105	\$	113,431
2012	3	0.43226	\$	80,943
2012	4	0.38021	\$	9,607
2012	5	0.29945	\$	19,438
2012	6	0.33517	\$	(1,951)
2012	7	0.36502	\$	4,524
2012	8	0.39395	\$	6,234
2012	9	0.36502	\$	7,389
2012	10	0.40817	\$	31,549
2012	11	0.40874	\$	67,797
2012	12	0.40857	\$	105,484
2013	1	0.41512	\$	120,158
2013	2	0.40918	\$	139,315
2013	3	0.42975	\$	113,693
2013	4	0.44931	\$	55,821
2013	5	0.51036	\$	71,303
2013	6	0.50946	\$	(28,353)

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 3 of 14

#### Great Lakes Residential

		GAS*	N	IARGIN
Year	Month	COSTS	R	EVENUE
2011	1	0.51121	\$	170,883
2011	2	0.5091	\$	149,564
2011	3	0.50022	\$	132,559
2011	4	0.49917	\$	65,641
2011	5	0.514	\$	23,478
2011	6	0.50902	\$	(7,889)
2011	7	0.50797	\$	(977)
2011	8	0.5078	\$	6,069
2011	9	0.46098	\$	9,096
2011	10	0.44674	\$	28,020
2011	11	0.46845	\$	70,029
2011	12	0.44711	\$	141,660
2012	1	0.44613	\$	134,147
2012	2	0.41409	\$	144,637
2012	3	0.41533	\$	98,805
2012	4	0.36725	\$	22,140
2012	5	0.28703	\$	29,307
2012	6	0.32263	\$	(6,479)
2012	7	0.35229	\$	2,126
2012	8	0.38104	\$	5,795
2012	9	0.3523	\$	9,581
2012	10	0.39509	\$	42,624
2012	11	0.40698	\$	84,457
2012	12	0.40544	\$	138,870
2013	1	0.406	\$	163,646
2013	2	0.40018	\$	180,072
2013	3	0.42071	\$	118,950
2013	4	0.44326	\$	93,627
2013	5	0.5047	\$	81,538
2013	6	0.50674	\$	(23,261)

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 4 of 14

#### NMU Residential

		GAS*	ľ	MARGIN
Year	Month	COSTS	R	EVENUE
2011	1	0.56243	\$	1,476,451
2011	2	0.56379	\$	1,424,182
2011	3	0.55312	\$	1,051,814
2011	4	0.5536	\$	690,876
2011	5	0.56176	\$	315,036
2011	6	0.55741	\$	(21,885)
2011	7	0.55563	\$	72,309
2011	8	0.55905	\$	41,711
2011	9	0.51299	\$	97,851
2011	10	0.49179	\$	266,325
2011	11	0.53329	\$	699,060
2011	12	0.51374	\$	1,290,398
2012	1	0.50747	\$	1,319,370
2012	2	0.47422	\$	1,276,601
2012	3	0.4766	\$	829,505
2012	4	0.43686	\$	356,144
2012	5	0.36777	\$	320,643
2012	6	0.38641	\$	(39,527)
2012	7	0.40973	\$	43,150
2012	8	0.4416	\$	74,322
2012	9	0.40895	\$	95,819
2012	10	0.44586	\$	374,212
2012	11	0.47119	\$	795,148
2012	12	0.47647	\$	1,247,845
2013	1	0.47933	\$	1,150,915
2013	2	0.47379	\$	1,405,649
2013	3	0.49147	\$	829,715
2013	4	0.52209	\$	555,765
2013	5	0.57446	\$	629,111
2013	6	0.57653	\$	111,993

#### NNG Residential

		GAS*		MARGIN
Year	Month	COSTS	I	REVENUE
2013	7	0.55793	\$	237,519
2013	8	0.55893	\$	435,771
2013	9	0.54309	\$	499,354
2013	10	0.5436	\$	769,591
2013	11	0.57652	\$	3,000,545
2013 2014	12	0.57341 0.64087	\$ \$	5,565,923 8,619,437
2014	2	0.69713	э \$	6,904,807
2014	3	0.76961	\$	5,642,037
2014	4	0.67256	\$	3,419,462
2014	5	0.67047	\$	972,197
2014	6	0.65261	\$	(82,648)
2014	7	0.6609	\$	163,246
2014	8	0.58272	\$	547,583
2014	9	0.59865	\$	591,757
2014	10	0.5942	\$	1,251,490
2014	11	0.60033	\$	2,998,781
2014	12	0.67574	\$	7,193,917
2015	1	0.57522	\$	5,910,516
2015	2	0.58248	\$	5,642,159
2015	3	0.58694	\$	6,399,870
2015	4	0.51971	\$ \$	1,164,510
2015 2015	5	0.46762 0.47197	ծ \$	694,662 259,323
2013	7	0.46367	ۍ \$	259,525
2015	8	0.46357	\$	523,625
2015	9	0.45141	\$	562,973
2015	10	0.44833	\$	918,998
2015	11	0.42882	\$	1,812,128
2015	12	0.43647	\$	4,414,768
2016	1	0.43885	\$	6,720,320
2016	2	0.43219	\$	7,895,131
2016	3	0.40042	\$	3,142,865
2016	4	0.38246	\$	2,204,390
2016	5	0.44307	\$	773,880
2016	6	0.3096	\$	675,833
2016	7	0.38224	\$	258,792
2016 2016	8	0.38965 0.42577	\$ \$	582,243 795,174
2010	10	0.42377	\$	795,174
2016	10	0.40001	\$	2,411,527
2016	12	0.42918	\$	5,435,482
2017	1	0.48683	\$	6,448,269
2017	2	0.43831	\$	3,759,516
2017	3	0.39064	\$	4,503,874
2017	4	0.40083	\$	2,367,239
2017	5	0.41038	\$	1,470,166
2017	6	0.43273	\$	989,014
2017	7	0.40626	\$	1,266,149
2017	8	0.40103	\$	574,511
2017 2017	9 10	0.42288 0.40034	\$ \$	662,748 1,023,130
2017 2017	10	0.40034	\$ \$	1,023,130 3,847,632
2017	11	0.41809	э \$	5,308,653
2017	12	0.43153	\$	10,233,516
2018	2	0.54191	\$	7,057,298
2018	3	0.40675	\$	5,518,023
2018	4	0.40035	\$	4,182,190
2018	5	0.41023	\$	887,943
2018	6	0.40897	\$	156,841
2018	7	0.41573	\$	551,277
2018	8	0.41291	\$	538,772
2018	9	0.41782	\$	959,497
2018	10	0.44154	\$	2,413,631
2018	11	0.4966	\$ ¢	3,908,435
2018	12	0.57017	\$	6,017,961

#### Consolidated Residential

Year	Month	GAS* COSTS		MARGIN REVENUE
2013	7	0.47661	\$	(26,623)
2013	8	0.47303	\$	(22,012)
2013	9	0.47303	\$	
				44,953
2013	10	0.47846	\$	140,645
2013	11	0.46712	\$	550,795
2013	12	0.49062	\$	978,683
2014	1	0.51386	\$	1,516,389
2014	2	0.65193	\$	1,238,674
2014	3	0.74803	\$	1,004,186
2014	4	0.58207	\$	551,446
2014	5	0.58739	\$	253,029
2014	6	0.55646	\$	(50,956)
2014	7	0.55334	\$	(57,321)
2014	8	0.48847	\$	39,754
2014	9	0.50302	\$	69,448
2014	10	0.51296	\$	218,769
2014	11	0.57338	\$	590,910
2014	12	0.5952	\$	1,293,095
2015	1	0.52515	\$	1,052,921
2015	2	0.47522	\$	991,242
2015	3	0.52264	\$	1,141,948
2015	4	0.43212	\$	230,997
2015	5	0.38945	\$	137,386
2015	6	0.40675	\$	17,903
2015	7	0.39624	\$	(28,686)
2015	8	0.40609	\$	48,285
2015	9	0.39881	\$	62,110
2015	10	0.39916	\$	168,343
2015	11	0.393	\$	385,256
2015	12	0.38818	\$	809,662
2016	1	0.3959	\$	1,229,485
2016	2	0.38753	\$	1,300,960
2016	3	0.37177	\$	651,664
2016	4	0.31489	\$	402,315
2016	5	0.29986	\$	201,158
2016	6	0.29546	\$	16,972
2016	7	0.39067	\$	17,853
2016	8	0.34783	\$	56,887
2016	9	0.38356	\$	64,992
2016	10	0.39548	\$	220,532
2016	11	0.37388	\$	485,323
2016	12	0.38569	\$	881,224
2017	1	0.42216	\$	1,144,104
2017	2	0.39641	\$	2,338,185
2017	3	0.37644	\$	951,266
2017	4	0.36905	\$	397,562
2017	5	0.37369	\$	320,451
2017	6	0.38179	\$	101,547
2017	7	0.36668	\$	2,062
2017	8	0.35905	\$	65,769
2017	9	0.36078	\$	44,226
2017	10	0.35919	\$	207,593
2017	11	0.33682	\$	732,968
2017	12	0.30692	\$	1,047,575
2018	1	0.2885	\$	1,837,882
2018	2	0.34728	\$	1,284,342
2018	3	0.33935	\$	1,016,156
2018	4	0.32916	\$	743,317
2018	5	0.34125	\$	147,784
2018	6	0.34042	\$	22,977
2018	7	0.35545	ծ \$	45,811
2018	8	0.36852	\$	57,224
A	-			90,195
2018	9	0.37098	\$	
2018	10	0.3743	\$	499,253

#### Albert Lea Residential

Vaar	Month	GAS* COSTS		IARGIN EVENUE
2013	Month 7	0515	K	EVENUE
2013	8			
2013	9			
2013	10			
2013	10			
2013	11			
2013	12			
	2			
2014 2014	2			
2014	4			
2014	4 5			
2014	6			
2014	7			
2014	8			
2014	9			
2014	10			
2014	10			
2014	12			
2014 2015	12			
2015	2			
2015	3			
2015	4			
2015	4 5	0.3932	\$	27,176
2015	6	0.42673	\$	100,732
2015	7	0.42073	э \$	7,787
2015	8	0.42253	\$	26,766
2015	9	0.42255	\$	31,954
2015	10	0.41205	\$	47,679
2015	10	0.37257	\$	103,832
2015	12	0.38323	\$	261,590
2015	12	0.40102	\$	386,922
2016	2	0.38964	\$	425,652
2016	3	0.36288	\$	179,752
2016	4	0.33509	\$	140,067
2016	5	0.39574	\$	50,626
2016	6	0.32027	\$	23,424
2016	7	0.39804	\$	21,304
2016	8	0.3928	\$	28,607
2016	9	0.4065	\$	37,838
2016	10	0.42055	\$	43,896
2016	11	0.40769	\$	129,610
2016	12	0.4324	\$	294,168
2017	1	0.47454	\$	367,136
2017	2	0.4444	\$	205,342
2017	3	0.40055	\$	255,811
2017	4	0.41009	\$	136,338
2017	5	0.40966	\$	65,674
2017	6	0.42416	\$	55,757
2017	7	0.41947	\$	44,465
2017	8	0.41424	\$	31,880
2017	9	0.44564	\$	30,845
2017	10	0.4231	\$	51,669
2017	11	0.44085	\$	221,729
2017	12	0.45843	\$	288,668
2018	1	0.43153	\$	565,402
2018	2	0.54191	\$	390,384
2018	3	0.40675	\$	304,581
2018	4	0.40035	\$	233,767
2018	5	0.41023	\$	49,689
2018	6	0.40897	\$	7,743
2018	7	0.41573	\$	24,769
2018	8	0.41291	\$	32,278
2018	9	0.41782	\$	38,987
2018	10	0.44154	\$	128,783
2018	11	0.4966	\$	219,850
2018	12	0.57017	\$	283,487

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 8 of 14

#### NNG Small C&I

			N	IARGIN
Year	Month	COSTS	R	EVENUE
2011	1	0.61103	\$	260,878
2011	2	0.61794	\$	228,393
2011	3	0.60496	\$	157,892
2011	4	0.6133	\$	76,942
2011	5	0.61012	\$	(13,217)
2011	6	0.60734	\$	(11,948)
2011	7	0.60414	\$	3,650
2011	8	0.61333	\$	8,469
2011	9	0.56851	\$	15,218
2011	10	0.54608	\$	19,387
2011	11	0.5966	\$	54,421
2011	12	0.58007	\$	128,167
2012	1	0.56467	\$	164,016
2012	2	0.52995	\$	162,252
2012	3	0.5344	\$	105,012
2012	4	0.51893	\$	(17,247)
2012	5	0.46855	\$	23,248
2012	6	0.45904	\$	(1,258)
2012	7	0.47173	\$	5,621
2012	8	0.5087	\$	10,295
2012	9	0.46959	\$	13,565
2012	10	0.4965	\$	43,608
2012	11	0.53469	\$	79,274
2012	12	0.5503	\$	159,598
2013	1	0.51287	\$	252,592
2013	2	0.50785	\$	376,418
2013	3	0.52124	\$	220,088
2013	4	0.56577	\$	159,065
2013	5	0.60472	\$	50,324
2013	6	0.60947	\$	(52,759)

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 9 of 14

#### Viking Small C&I

			GAS*	M	IARGIN
	Year	Month	COSTS	RI	EVENUE
_	2011	1	0.52445	\$	10,022
	2011	2	0.52275	\$	9,098
	2011	3	0.51315	\$	7,607
	2011	4	0.50728	\$	2,539
	2011	5	0.52233	\$	256
	2011	6	0.51753	\$	(265)
	2011	7	0.51662	\$	153
	2011	8	0.51659	\$	545
	2011	9	0.46953	\$	476
	2011	10	0.46334	\$	1,508
	2011	11	0.48621	\$	2,440
	2011	12	0.4644	\$	7,739
	2012	1	0.46355	\$	7,022
	2012	2	0.43105	\$	9,535
	2012	3	0.43226	\$	5,602
	2012	4	0.38021	\$	(230)
	2012	5	0.29945	\$	1,181
	2012	6	0.33517	\$	146
	2012	7	0.36502	\$	313
	2012	8	0.39395	\$	420
	2012	9	0.36502	\$	624
	2012	10	0.40817	\$	2,035
	2012	11	0.40874	\$	5,242
	2012	12	0.40857	\$	10,492
	2013	1	0.41512	\$	13,811
	2013	2	0.40918	\$	18,745
	2013	3	0.42975	\$	11,630
	2013	4	0.44931	\$	8,191
	2013	5	0.51036	\$	6,777
	2013	6	0.50946	\$	(2,387)

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 10 of 14

#### Great Lakes Small C&I

		GAS*	MA	RGIN
Year	Month	COSTS	REV	ENUE
 2011	1	0.51121	\$	22,915
2011	2	0.5091	\$	15,307
2011	3	0.50022	\$	13,632
2011	4	0.49917	\$	5,056
2011	5	0.514	\$	(2,535)
2011	6	0.50902	\$	(935)
2011	7	0.50797	\$	(179)
2011	8	0.5078	\$	223
2011	9	0.46098	\$	379
2011	10	0.44674	\$	1,346
2011	11	0.46845	\$	3,670
2011	12	0.44711	\$	11,516
2012	1	0.44613	\$	10,266
2012	2	0.41409	\$	13,459
2012	3	0.41533	\$	7,843
2012	4	0.36725	\$	1,021
2012	5	0.28703	\$	1,278
2012	6	0.32263	\$	(812)
2012	7	0.35229	\$	241
2012	8	0.38104	\$	481
2012	9	0.3523	\$	660
2012	10	0.39509	\$	2,545
2012	11	0.40698	\$	8,253
2012	12	0.40544	\$	14,512
2013	1	0.406	\$	24,340
2013	2	0.40018	\$	27,682
2013	3	0.42071	\$	17,653
2013	4	0.44326	\$	14,229
2013	5	0.5047	\$	9,563
2013	6	0.50674	\$	(3,644)

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 11 of 14

#### NMU Small C&I

			GAS*	M	IARGIN
	Year	Month	COSTS	RI	EVENUE
_	2011	1	0.56243	\$	106,958
	2011	2	0.56379	\$	64,508
	2011	3	0.55312	\$	80,890
	2011	4	0.5536	\$	35,029
	2011	5	0.56176	\$	2,070
	2011	6	0.55741	\$	(6,535)
	2011	7	0.55563	\$	3,347
	2011	8	0.55905	\$	1,984
	2011	9	0.51299	\$	3,802
	2011	10	0.49179	\$	8,119
	2011	11	0.53329	\$	29,195
	2011	12	0.51374	\$	67,461
	2012	1	0.50747	\$	71,219
	2012	2	0.47422	\$	79,630
	2012	3	0.4766	\$	45,465
	2012	4	0.43686	\$	12,789
	2012	5	0.36777	\$	16,545
	2012	6	0.38641	\$	(5,075)
	2012	7	0.40973	\$	1,257
	2012	8	0.4416	\$	4,032
	2012	9	0.40895	\$	4,468
	2012	10	0.44586	\$	15,227
	2012	11	0.47119	\$	41,301
	2012	12	0.47647	\$	97,612
	2013	1	0.47933	\$	81,245
	2013	2	0.47379	\$	114,977
	2013	3	0.49147	\$	62,373
	2013	4	0.52209	\$	47,062
	2013	5	0.57446	\$	46,200
	2013	6	0.57653	\$	(16,533)

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment B Page 12 of 14

#### NNG Small C&I

		GAS*	MARGIN	
Year	Month	COSTS	R	EVENUE
2013	7	0.55793	\$	3,345
2013	8	0.55893	\$	15,573
2013	9	0.54309	\$	17,228
2013	10	0.54360	\$	148,092
2013	11	0.57652	\$	129,069
2013	12	0.57341	\$	326,616
2014	1	0.64087	\$	583,804
2014	2	0.69713	\$	491,316
2014	3	0.76961	\$	370,117
2014	4	0.67256	\$	182,445
2014	5	0.67047	\$	8,344
2014	6	0.65261	\$	(31,521)
2014	7	0.66090	\$	(5,742)
2014	8	0.58272	\$	16,477
2014	9	0.59865	\$	20,991
2014	10	0.59420	\$	73,595
2014	11	0.60033	\$	197,614
2014	12	0.67574	\$	501,087
2015	1	0.57522	\$	1,052,921
2015	2	0.58248	\$	991,242
2015	3	0.58694	\$	1,141,948
2015	4	0.51971	\$	230,997
2015	5	0.46762	\$	137,386
2015 2015	6 7	0.47197 0.46367	\$ \$	17,903 (28,686)
2015	8	0.46367	5 5	(28,086) 48,285
2015	8 9	0.46357	ծ \$	48,285
2015	10	0.45141	\$ \$	168,343
2015	10	0.44833	\$	385,256
2015	12	0.42682	\$	809,662
2015	12	0.43885	\$	227,056
2016	2	0.43219	\$	249,001
2016	3	0.40042	\$	298,713
2010	4	0.38246	\$	(273,902)
2016	5	0.44307	\$	238,655
2016	6	0.30960	\$	(61,912)
2016	7	0.38224	\$	157,829
2016	8	0.38965	s	(64,921)
2016	9	0.42577	s	(44,251)
2016	10	0.42850	\$	17,456
2016	11	0.40001	\$	153,053
2016	12	0.42918	\$	106,826
2017	1	0.48683	\$	329,060
2017	2	0.43831	\$	424,619
2017	3	0.39064	\$	117,024
2017	4	0.40083	\$	71,392
2017	5	0.41038	\$	198,568
2017	6	0.43273	\$	(223,503)
2017	7	0.40626	\$	11,205
2017	8	0.40103	\$	30,108
2017	9	0.42288	\$	18,011
2017	10	0.40034	\$	25,862
2017	11	0.41809	\$	202,129
2017	12	0.43567	\$	200,399
2018	1	0.43153	\$	714,358
2018	2	0.54191	\$	139,382
2018	3	0.40675	\$	166,384
2018	4	0.40035	\$	135,446
2018	5	0.41023	\$	61,401
2018	6	0.40897	\$	(14,871)
2018	7	0.41573	\$	7,714
2018	8	0.41291	\$	12,434
2018	9	0.41782	\$	15,247
2018	10	0.44154	\$	66,930
2018	11	0.4966	\$	233,294
2018	12	0.57017	\$	180,659

#### Consolidated Small C&I

		GAS*	ľ	MARGIN
Year	Month	COSTS	R	EVENUE
2013	7	0.47661	\$	(3,452)
2013	8	0.47303	\$	3,569
2013	9	0.47474	\$	4,224
2013	10	0.47846	\$	9,294
2013	11	0.46712	\$	69,980
2013 2014	12	0.49062 0.51386	\$ \$	84,468
2014	2	0.51386	\$ \$	175,597 139,998
2014	2	0.03193	ۍ ۲	121,066
2014	4	0.58207	\$	47,037
2014	5	0.58739	\$	13,251
2014	6	0.55646	\$	(4,389)
2014	7	0.55334	\$	(4,601)
2014	8	0.48847	\$	5,447
2014	9	0.50302	\$	5,872
2014	10	0.51296	\$	19,174
2014	11	0.57338	\$	52,915
2014	12	0.5952	\$	145,460
2015	1	0.52515	\$	131,228
2015	2	0.47522	\$	114,252
2015	3	0.52264	\$	138,386
2015	4	0.43212	\$	12,435
2015	5	0.38945	\$	4,725
2015 2015	6 7	0.40675 0.39624	s s	(9,092)
2013	8	0.39624	3 S	3,816
2015	9	0.39881	\$	3,180
2015	10	0.39916	\$	7,377
2015	11	0.393	\$	17,127
2015	12	0.38818	\$	45,070
2016	1	0.3959	\$	76,803
2016	2	0.38753	\$	87,964
2016	3	0.37177	\$	36,161
2016	4	0.31489	\$	20,867
2016	5	0.29986	\$	6,586
2016	6	0.29546	\$	28,238
2016	7	0.39067	\$	(25,603)
2016	8	0.34783	\$	1,348
2016	9	0.38356 0.39548	\$ \$	4,189
2016 2016	10 11	0.39548	ծ Տ	10,517 74,106
2016	11	0.38569	\$	15,299
2010	1	0.42216	\$	99,519
2017	2	0.39641	\$	83,440
2017	3	0.37644	\$	54,655
2017	4	0.36905	\$	32,485
2017	5	0.37369	\$	8,339
2017	6	0.38179	\$	4,073
2017	7	0.36668	\$	3,488
2017	8	0.35905	\$	4,207
2017	9	0.36078	\$	5,063
2017	10	0.35919	\$	11,394
2017	11	0.33682	\$	50,727
2017	12	0.30692	\$	83,478
2018 2018	1 2	0.2885	\$ \$	141,352 101,733
2018	3	0.33935	ۍ ۲	71,599
2018	4	0.32916	\$	43,735
2018	5	0.32910	\$	13,057
2018	6	0.34042	\$	(3,799)
2018	7	0.35545	\$	1,993
2018	8	0.36852	\$	3,744
2018	9	0.37098	\$	5,606
2018	10	0.3743	\$	34,386
2018	11	0.39789	\$	47,726
2018	12	0.49515	\$	73,864

#### Albert Lea Small C&I

		GAS*	м	IARGIN
Year	Month	COSTS	RI	EVENUE
2013	7			
2013	8			
2013	9			
2013	10			
2013	11			
2013	12			
2014	1			
2014	2			
2014	3			
2014	4			
2014	5			
2014	6			
2014	7			
2014	8			
2014	9			
2014 2014	10 11			
2014	12			
2015 2015	1 2			
2015	2			
2015	3 4			
2015	4	0.39320	\$	1,384
2013	6	0.39320	э \$	1,384
2015	7	0.42073	\$	(178)
2015	8	0.42253	\$	(972)
2015	9	0.41650	\$	6,823
2015	10	0.41205	\$	(1,700)
2015	11	0.37257	\$	11,401
2015	12	0.38323	\$	6,074
2015	12	0.40102	\$	14,015
2016	2	0.38964	\$	(14,436)
2016	3	0.36288	\$	17,253
2016	4	0.33509	\$	412
2016	5	0.39574	\$	1,305
2016	6	0.32027	\$	393
2016	7	0.39804	\$	2,316
2016	8	0.39280	\$	(1,148)
2016	9	0.40650	\$	1,646
2016	10	0.42055	\$	2,968
2016	11	0.40769	\$	8,299
2016	12	0.43240	\$	4,483
2017	1	0.47454	\$	9,197
2017	2	0.44440	\$	9,170
2017	3	0.40055	\$	5,478
2017	4	0.41009	\$	3,604
2017	5	0.40966	\$	1,633
2017	6	0.42416	\$	976
2017	7	0.41947	\$	961
2017	8	0.41424	\$	1,074
2017	9	0.44564	\$	1,368
2017	10	0.42310	\$	2,216
2017	11	0.44085	\$	14,958
2017	12	0.45843	\$	11,617
2018	1	0.43153	\$	14,123
2018	2	0.54191	\$	12,524
2018	3	0.40675	\$	15,715
2018	4	0.40035	\$	10,150
2018	5	0.41023	\$	3,132
2018	6	0.40897	\$	(543)
2018	7	0.41573	\$	424
2018	8	0.41291	\$	809
2018	9	0.41782	\$	1,140
2018	10	0.44154	\$	4,023
2018	11	0.4966	\$	10,141
2018	12	0.57017	\$	11,313

\*Gas Costs exclude the ACA Factor

# **ATTACHMENT C**



MICHAEL J. AHERN (612) 340-2881 FAX (612) 340-2643 ahern.michael@dorsey.com

May 1, 2013

## **VIA ELECTRONIC FILING**

Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 Seventh Place East, Suite 350 St. Paul, MN 55101

> Re: Minnesota Energy Resources Corporation Gas Service Quality Standards Report Docket No. G007,011/M-13-\_\_\_

Dear Dr. Haar:

Enclosed for filing is Minnesota Energy Resources Corporation's (MERC's) Annual Gas Service Quality Standards Report for 2012.

Please feel free to contact me at (612) 340-2881 if you have any questions regarding this matter.

Sincerely yours,

/s/ Michael J. Ahern

Michael J. Ahern

cc: Service List

## STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger J. Dennis O'Brien David C. Boyd Nancy Lange Betsy Wergin

Chair Commissioner Commissioner Commissioner

In the Matter of the Annual Service Quality Report for Minnesota Energy Resources Corporation for 2012 Docket No. G007,011/M-13-\_\_\_

# ANNUAL SERVICE QUALITY REPORT

Minnesota Energy Resources Corporation ("MERC" or the "Company") submits this Annual Report for 2012 in compliance with the Minnesota Public Utilities Commission's August 26, 2010 Order Setting Reporting Requirements in Docket No. G-999/CI-09-409 and March 6, 2012, Order Accepting Reports and Setting Further Requirements in Docket No. G-007,011/M-10-374.

# A. Call Center Response Time

Each utility is required to report call center response time in terms of the percentage of calls answered within 20 seconds.

MERC Response: The required information is provided in Attachment A.

# B. Meter Reading Performance Data

Each utility is required to report the meter reading performance data contained in Minn. Rules, part 7826.1400.

# 7826.1400 REPORTING METER-READING PERFORMANCE.

The annual service quality report must include a detailed report on the utility's meter-reading performance, including, for each customer class and for each calendar month:

- A. the number and percentage of customer meters read by utility personnel;
- B. the number and percentage of customer meters self-read by customers;

C. the number and percentage of customer meters that have not been read by utility personnel for periods of six to 12 months and for periods of longer than 12 months, and an explanation as to why they have not been read; and

D. data on monthly meter-reading staffing levels, by work center or geographical area.

**MERC Response:** The required information is provided in Attachment B. The data for self reads includes both estimates and customer self reads.

In its March 6, 2012, Order Setting Further Reporting Requirements, the Commission also requested utilities to explain in their annual reports whether the difference between the total percentage of meters (100%) and the percentage of meters read (by both the utility and the customers) is equal to the percentage of estimated meter reads.

**MERC Response**: MERC's system does not differentiate between an estimate and a customer read so the customer read numbers include both estimates and customer self reads.

# C. Involuntary Service Disconnections

In lieu of reporting data on involuntary service disconnections as contained in Minn. Rules, part 7826.1500, each utility shall reference the data that it submits under Minn. Stat. §§ 216B.091 and 216B.096.

**MERC Response**: MERC refers to its monthly reports filed with the Commission under Minn. Stat. §§ 216B.091 and 216B.096, and attached to this report as Attachment C. In particular:

- 1. The number of customers who received disconnection notices is reported in item 20 of MERC's monthly report.
- 2. The number of customers who sought Cold Weather Rule protection under chapter 7820 is reported in item 3, and the number of customers who sought Cold Weather Rule protection and whose service was disconnected is provided in item 22 of MERC's monthly report.
- 3. The total number of customers whose service was disconnected involuntarily is provided in item 23 of MERC's monthly report, and the number of customers whose service was disconnected for 24 hours or more is reported in item 34.
- 4. The number of customer accounts granted a reconnection request are reported in item 6 of MERC's monthly report.

# **D.** Service Extension Requests

Each utility shall report the service extension request response time data contained in Minn. Rules, part 7826.1600, items A and B, except that data reported under Minn. Stat. 216B.091 and 216B.096, subd. 11, is not required.

# 7826.1600 REPORTING SERVICE EXTENSION REQUEST RESPONSE TIMES.

The annual service quality report must include a report on service extension request response times, including, for each customer class and each calendar month:

A. the number of customers requesting service to a location not previously served by the utility and the intervals between the date service was installed and the later of the inservice date requested by the customer or the date the premises were ready for service; and

B. the number of customers requesting service to a location previously served by the utility, but not served at the time of the request, and the intervals between the date service was installed and the later of the in-service date requested by the customer or the date the premises were ready for service.

**MERC Response:** The required information is provided in Attachment E. "New installs" represent new service requests at locations where no gas service exists, either because the location is new construction or because an alternate fuel source has been used there previously. "Existing" installs represent any building that has previously had natural gas service, where the service has previously been disconnected.

In its March 6, 2012, Order Setting Further Reporting Requirements, the Commission also requested utilities to explain the types of extension requests included in the data on service extension request response times for locations previously served and not previously served.

**MERC Response:** For locations not previously served, new service requests are for service where no gas exists, usually for new construction or an existing customer who requests new service to convert to natural gas. For locations previously served, new service requests consist of requests to turn on service after the service was disconnected at the previous customer's request. Disconnections for non-payment are not included in MERC's response.

# E. Customer Deposits

Each utility shall report the customer deposit data contained in Minn. Rules, part 7826.1900.

# 7826.1900 REPORTING CUSTOMER DEPOSITS.

The annual service quality report must include the number of customers who were required to make a deposit as a condition of receiving service.

**MERC Response:** Twenty-three customers were required to make deposits in 2012, all due to diversion (theft).

In its March 6, 2012, Order Setting Further Reporting Requirements, the Commission also requested utilities to explain the types of deposits included in the reported number of "required customer deposits."

**MERC Response:** MERC had twenty-three new deposits in 2012 and all were required from customers because of theft of service. In total, MERC holds 695 deposits, 672 of which were required before 2012.

# F. Customer Complaints

Each utility shall report the customer complaint data contained in Minn. Rules, part 7826.2000.

# 7826.2000 REPORTING CUSTOMER COMPLAINTS.

The annual service quality report must include a detailed report on complaints by customer class and calendar month, including at least the following information:

A. the number of complaints received;

B. the number and percentage of complaints alleging billing errors, inaccurate metering, wrongful disconnection, high bills, inadequate service, and the number involving service-extension intervals, service-restoration intervals, and any other identifiable subject matter involved in five percent or more of customer complaints;

C. the number and percentage of complaints resolved upon initial inquiry, within ten days, and longer than ten days;

D. the number and percentage of all complaints resolved by taking any of the following actions:

(1) taking the action the customer requested;

(2) taking an action the customer and the utility agree is an acceptable compromise;

(3) providing the customer with information that demonstrates that the situation complained of is not reasonably within the control of the utility; or

(4) refusing to take the action the customer requested; and

E. the number of complaints forwarded to the utility by the commission's Consumer Affairs Office for further investigation and action.

**MERC Response:** The required information is provided in Attachment G.

# G. Telephone Answer Times

Each utility shall report data on telephone answer times to its gas emergency phone line calls.

**MERC Response:** The required information is provided in Attachment H.

# H. Mislocates

Each utility shall report data on mislocates, including the number of times a line is damaged due to a mismarked line or failure to mark a line.

**MERC Response:** The required information is provided in Attachment I. All of the mislocates noted in Attachment I resulted in a damaged line.

# I. Damaged Gas Lines

Each utility shall report data on the number of gas lines damaged. The damage shall be categorized according to whether it was caused by the utility's employees or contractors, or whether it was due to any other unplanned cause.

**MERC Response:** The required information is provided in Attachment J.

## J. Service Interruptions

Each utility shall report data on service interruptions. Each interruption shall be categorized according to whether it was caused by the utility's employees or contractors, or whether it was due to any other unplanned cause.

**MERC Response:** The required information is provided in Attachment K.

# K. MOPS Reportable Events

Each utility shall report summaries of major events that are immediately reportable to the Minnesota Office of Pipeline Safety (MOPS) according to the criteria used by MOPS to identify reportable events. Each utility shall also provide summaries of all service interruptions caused by system integrity pressure issues. Each summary shall include the following ten items:

- the location;
- when the incident occurred;
- how many customers were affected;
- how the company was made aware of the incident;
- the root cause of the incident;
- the actions taken to fix the problem;
- what actions were taken to contact customers;
- any public relations or media issues;
- whether the customer or the company relighted; and
- the longest any customer was without gas service during the incident.

**MERC Response:** The required information is provided in Attachment L.

# L. Notification of Reportable Events

Each utility shall provide the Commission and the OES with notification of reportable events as they are defined by MOPS, contemporaneous with the utility's notification of the event to MOPS. The notice should be sent to the Commission's Consumer Affairs Office at consumer.puc@state.mn.us and shall describe the location and cause of the event, the number of customers affected, the expected duration of the event, and the utility's best estimate of when service will be restored.

**MERC Response:** MERC is currently providing the Commission and the OES with notification of reportable events contemporaneous with the utility's notification of the event to MOPS through reporting to the Commission's Consumer Affairs Office.

## M. Gas Emergency Response Times

Each utility shall report data on gas emergency response times and include the percentage of emergencies responded to within one hour and within more than one hour. CenterPoint, IPL, and MERC shall also report the average number of minutes it takes to respond to an emergency.

**MERC Response:** The required information is provided in Attachment H. The gas emergency call response times include all calls reporting a suspected gas leak, as well as all line hits.

In its March 6, 2012, Order Setting Further Reporting Requirements, the Commission also requested utilities to describe the types of gas emergency calls included in their gas emergency response times, as well as the types of emergency calls included in their reports to the Minnesota Office of Pipeline Safety (MOPS). Further, utilities must explain any difference between the reports provided to the Commission and MOPS.

**MERC Response:** The information provided in Attachment H includes response time for all calls reporting a suspected gas leak and line hits. The information in Attachment H is the same information provided to MOPS.

## N. Customer-Service Related Operations and Maintenance Expenses

Each utility shall report customer-service related operations and maintenance expenses. The reports shall include only Minnesota-regulated, customer-service expenses and shall be based on the costs each utility records in its FERC accounts 901 and 903, plus payroll taxes and benefits.

MERC Response: The required information is provided in Attachment O.

#### Calls answered within 20 seconds

2012	January	February	March	April	May	June	July	August	September	October	November	December
Total calls Average	27,186	26,062	27,281	27,336	29,152	25,052	25,125	25,125	25,867	34,098	27,905	27,662
speed of answer % answered in 20	19	20	21	22	21	17	16	19	19	23	18	18
seconds	80.14%	81.19%	80.03%	80.30%	80.72%	83.69%	84.15%	83.19%	81.95%	79.13%	82.32%	81.87%

#### Answer time for gas emergency phone lines

2012

	January	February	March	April N	lay J	June J	uly	August	September	October	November	December	AVERAGE	TOTAL
Total calls Average speed of	1,628	1,312	1,235	1,244	1,339	1,279	1,337	1,317	1,401	1,720	1,912	1,617	1,445	17,341
answer % answered	7	7	7	6	7	7	7	7	5	6	9	7	7	
in 15 seconds	90.57%	91.39%	91.41%	92.96%	92.33%	92.81%	93.78%	92.71%	94.28%	95.20%	89.07%	91.46%	92.33%	

\*note: increase in Nov due to propane plant release resulting in over 300 leak calls

#### Meter Reading

2012

					#	not read in 6-12	% not read in 6-12				
2012	Total meters #	company read % co	ompany read # self-re	ead % of	self-read m	nonths	months	# not read > 12 months	% not read > 12 mont	hs Comments	
w/o farm taps											
January	212,620	207,986	97.82%	4,634	2.18%		0 0.000	00%	0 0.000	0% accessibility and dogs	
February	212,655	208,643	98.11%	4,012	1.89%		0 0.000	00%	0 0.000	0% accessibility and dogs	
March	212,395	207,809	97.84%	4,586	2.16%		0 0.000	00%	0 0.000	0% accessibility and dogs	
April	212,652	209,949	98.73%	2,703	1.27%		0 0.000	00%	0 0.000	0% accessibility and dogs	
May	212,669	210,502	98.98%	2,167	1.02%	:	1 0.000	)5%	0 0.000	0% accessibility and dogs	
June	212,728	207,384	97.49%	5,344	2.51%	:	1 0.000	)5%	0 0.000	0% accessibility and dogs	
July	212,592	207,680	97.69%	4,912	2.31%	:	1 0.000	)5%	0 0.000	0% accessibility and dogs	
August	212,787	207,871	97.69%	4,916	2.31%		1 0.000	05%	0 0.000	0% accessibility and dogs	
September	212,918	209,932	98.60%	2,986	1.40%	:	3 0.00	.4%	0 0.000	0% accessibility and dogs	
October	213,145	209,339	98.21%	3,806	1.79%	:	3 0.00	.4%	0 0.000	0% accessibility and dogs	
November	213,419	207,756	97.35%	5,663	2.65%	:	3 0.00	.4%	0 0.000	0% accessibility and dogs	
December	213,723	209,799	98.16%	3,924	1.84%	:	3 0.00	.4%	0 0.000	0% accessibility and dogs	
Total	2,554,303	2,504,650	98.06%	49653	1.94%	1	6 0.000	06%	0 0.000	0%	
with farm taps											
January	214,527	209,893	97.84%	6541	3.05%	:	8 0.003	37%	9 0.004	2%	
February	214,562	210,550	98.13%	5919	2.76%	1	2 0.005	6%	9 0.004	2%	
March	214,302	209,716	97.86%	6493	3.03%	1	2 0.005	6%	9 0.004	2%	
April	214,559	211,856	98.74%	4610	2.15%	1	7 0.00	'9%	9 0.004	2%	
May	214,576	212,409	98.99%	4074	1.90%	2	2 0.010	)3% 1	5 0.007	0%	
June	214,635	209,291	97.51%	7251	3.38%	2	3 0.010	)7% 2	0 0.009	3%	
July	214,499	209,587	97.71%	6819	3.18%	24	4 0.01	.2% 2	8 0.013	1%	
August	214,694	209,778	97.71%	6823	3.18%	2	6 0.012	21% 2	8 0.013	0%	
September	214,825	211,839	98.61%	4893	2.28%	13	1 0.063	.0% 3	1 0.014	4%	
October	215,052	211,246	98.23%	5713	2.66%	40	9 0.190	302%	2 0.014	9%	
November	215,326	209,663	97.37%	7570	3.52%	66	4 0.308	34% 3	7 0.017	2%	
December	215,630	211,706	98.18%	5831	2.70%	74	9 0.34	4% 4	3 0.019	9%	
Total	2,577,187	2,527,534	98.07%	72,537	2.81%	2,09	7 0.08	.4% 27	0 0.010	5%	
	January	February	March	April	May	June	July	August	September	October	November
Meter reading staffing*	32.54	33.34	31.88	39.19	26.15	23.38	24.07	25.32	24.29	36.56	23.92

\* approximate FTEs based on

labor reports

Minnesota Energy Resources Corporation Docket No. G0114M-19-201 Attachment C Page 9 of 85

December

28.5

Attachment C

#### Minnesota Energy Resources Service Quality Report

# Minnesota Cold Weather Rule Compliance Questionnaire Utility Monthly Reports (216B.091) Docket #12-02

Com	pany: Minnesota Energy Resources for report pe	riod ending: Jan-2012	Feb-2012	Mar-2012	Apr-2012	May-2012	Jun-2012	Jul-2012	Aug-2012	Sep-2012	Oct-2012	Nov-2012	Dec-2012
1 2 3	Number of Residential Customer Accounts: Number of Past Due Residential Customer Accounts: Number of Cold Weather Protection Requests :	190,743 26,780 675	190,925 28,578 654	190,816 31,857 334	<u>190,895</u> 34,455	<u>190,980</u> <u>32,851</u>	<u>191,221</u> 31,570	190,719 26,948	<u>190,924</u> 22,051	190,340 21,207	<u>191,264</u> <u>18,428</u> 2,639	191,497 19,781 629	191,963 20,338 476
RECO 4	NNECTION AT BEGINNING OF COLD WEATHER Number of "Right to Appeal" notices mailed to customers:	MONTHS 0	0	0	0	0	0	0	0	0	0	1	0
5 6	Intentionally Blank Number of customer accounts granted reconnection <u>request:</u>	86	127	183							1,218	289	96

#### INABILITY TO PAY (ITP)

10% PLAN (TPP)

#### Minnesota Energy Resources Service Quality Report

# Minnesota Cold Weather Rule Compliance Questionnaire Utility Monthly Reports (216B.091) Docket #12-02

Company: Minnesota Energy Resources for report pe	riod ending: Jan-2012	Feb-2012	Mar-2012	Apr-2012	May-2012	Jun-2012	Jul-2012	Aug-2012	Sep-2012	Oct-2012	Nov-2012	Dec-2012
PAYMENT SCHEDULE (PS)         16       Number of "Right to Appeal" notices mailed to customers:         a)       Number of PS requests received         17       Intentionally Blank         Number of PS negotiations mutually agreed upon:         19       Intentionally Blank	0 675 675	0 654 654	0 334 334							0 2,639 2,639	1 629 629	0 476 476
DISCONNECTIONS           20         Number of disconnection notices mailed to customers:           21         Number of customer accounts disconnected who did not seek protection:	6,834	6,808	10,370	8,386	7,433	4,648	2,356	1,416	961	1,114	1,419	3,866
Duplicate columns for use in April and October April 1-15 and October 1-15 in 1st column All other months, use 1st column only a) # Electric - heat affected b) # Electric - heat not affected c) # Gas - heat affected d) # Gas - heat affected e) Total # disconnected	65	159	354	 	1,529	1,371	1,314	514	269	152	15	14
<ul> <li>April 16-30 and October 16-31 in 2nd column All other months, use 1st column only</li> <li>a) # Electric - heat affected</li> <li>b) # Electric - heat not affected</li> <li>c) # Gas - heat affected</li> <li>d) # Gas - heat affected</li> <li>e) Total # disconnected</li> </ul>				463			0			114		
<ul> <li>a) Fotal # disconnected</li> <li>Number of customer accounts disconnected seeking protection: <ul> <li>a) # Electric - heat affected</li> <li>b) # Electric - heat not affected</li> <li>c) # Gas - heat affected</li> <li>d) # Gas - heat affected</li> <li>e) Total # disconnected (See Note)</li> </ul> </li> </ul>				463		0					0	
NOTE: Please report immediately the names and addresses of customers whose service has been disconnected more than 24 hours.	<u> </u>											
23 Number of customer accounts disconnected for nonpayment (auto-calculation of #21e+ #22e):	65	159	354	588	1,529	1,371	1,314	514	269	166	15	14

#### Minnesota Energy Resources Service Quality Report

# Minnesota Cold Weather Rule Compliance Questionnaire Utility Monthly Reports (216B.091) Docket #12-02

Company: Minnesota Energy Resources for report pe	riod ending: Jan-2012	Feb-2012	Mar-2012	Apr-2012	May-2012	Jun-2012	Jul-2012	Aug-2012	Sep-2012	Oct-2012	Nov-2012	Dec-2012
DOLLAR VALUE												
24 Total dollars past due on all residential accounts:	\$3,250,133	\$3,812,235	\$4,573,213	\$4,956,371	\$3,987,257	\$3,454,707	\$2,732,589	\$2,178,140	\$1,959	\$1,679,811	\$1,823,628	\$2,130,546
<b>Average</b> past due dollar amount per past due account (auto-calculation of #24 ÷ #2):	\$121	\$133	\$144	\$144	\$121	\$109	\$101	\$99	\$92	\$91	\$92	\$105
26 <b>Total</b> dollars received from energy assistance programs:	\$783,937	\$850,960	\$463,831	\$387,489	\$268,727	\$119,153	\$14,781	\$169	\$0	\$0	\$399,578	\$562,213
<ul> <li>Total dollars received from other sources (private organizations):</li> </ul>	\$0	\$0	\$0	\$0	\$0	\$0	\$1,931	\$0	\$0	\$0	\$0	\$0
<ul> <li>Total Revenue from sales to residential accounts:</li> </ul>	\$22,927,081	\$21,494,738	\$14,691,251	\$2,948,298	\$5,776,912	\$1,315,315	\$2,939,455	\$3,271,495	\$3,514,489	\$6,481,289	\$13,255,927	\$20,067,497
<ul> <li>Average monthly residential bill: (auto-calculation of #28 ÷ #1)</li> </ul>	\$120	\$113	\$77	\$15	\$30	\$7	\$15	\$17	\$18	\$34	\$69	\$105
<ul> <li>30 Intentionally Blank</li> <li>30 Average annual residential bill:</li> </ul>			••••	•••				•	•••			
<b>Total</b> residential account write-offs due to uncollectible:	\$116,686	\$86,385	\$74,299	\$161,146	\$158,702	\$212,391	\$148,935	\$133,246	\$134,318	\$77,856	\$70,034	\$71,818
DISCONNECTION DURATION Number of customer accounts disconnected 24 hours or more: a) # Electric - heat affected b) # Electric - heat not affected c) # Gas - heat affected d) # Gas - heat not affected e) Total # disconnected 33 Intentionally Blank	34 34 34	  	 			=	=			131	8	8
34 Number occupied heat-affected accounts disconnected 24 hours or more (to include customers who did and did not seek protection).	34	139	289							131	8	8
<ul><li>35 Intentionally Blank</li><li>36 Intentionally Blank</li></ul>												
RECONNECTION DATA												
37 # Accounts reconnected	86	127	183	270	423	590	673	503	577	1,218	289	96
<ul> <li>38 # Accounts remaining disconnected</li> <li>a) 1-30 days</li> <li>b) 31-60 days</li> <li>c) 61+ days</li> </ul>	452 18 4 430	385 58 17 310	419 185 56 178	534 289 179 66	1,572 1,098 281 193	2,322 826 1,037 459	2,754 649 792 1,313	2,671 142 507 2,022	2,191 46 110 2,035	950 32 41 877	563 3 30 530	422 3 2 417

a)	1-30 days
b)	31-60 days

#### Monthly CWR January 2012.xls

Minnesota	Public	Utilities	Commission	

Minnesota Cold Weather Rule Compliance Questionnaire						
Company Submitting Reply:	Minnesota Energy Resources People's Natural Gas	•	Required			
Reporting Year:	2012	•	Required			
Reporting Period:	January	•	Required			

#### Utility Monthly Reports (216B.091)

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: January, 2012

1	Number of Residential Customer Accounts:	190,743
2	Number of Past Due Residential Customer Accounts:	26,780
3	Number of Cold Weather Protection Requests:	675

#### RECONNECTION AT BEGINNING OF COLD WEATHER MONTHS

- 4 Number of "Right to Appeal"
- <sup>4</sup> notices mailed to customers:
- 5 Intentionally Blank
- 6 Number of customer accounts granted reconnection request:

	86

0

INABILITY TO PAY (ITP)

10% PLAN (TPP)

This entire section intentionally left blank

This entire section intentionally left blank

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: January, 2012

1 7 1				
16	Number of "Right to Appeal" notices mailed to			
	customers:	0		
	<ul> <li>a) Number of PS requests received</li> </ul>	675		
17	Intentionally Blank			
40	Number of PS negotiations mutually agreed			
18	upon:	675		
19	Intentionally Blank			
DISC	CONNECTIONS			
20	Number of disconnection notices mailed to			
20	customers:			Required
	Number of customer accounts disconnected who			
21	did not seek protection:			
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	a) # Electric - heat affected			Required
	b) # Electric - heat not affected			•
	,	CE		Required
	c) # Gas - heat affected	65		<b>5</b>
	d) # Gas - heat not affected			Required
	e) Total # disconnected	65	0	
22	Number of customer accounts disconnected			
	seeking protection:			
	<ul> <li>a) # Electric - heat affected</li> </ul>			CWR period only
	b) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected			CWR period only
	e) Total # disconnected (See Note)	0		
	- /			
	Number of customer accounts disconnected for			
23	nonpayment (auto-calculation of #21e+ #22e):	65	65	
	$\frac{1}{2} + \frac{1}{2} + \frac{1}$	00	65	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: January, 2012

#### DOLLAR VALUE

24	Total dollars past due on all residential accounts:	\$3,250,133
	Average past due dollar amount per past due	
25	account (auto-calculation of $#24 \div #2$ ):	\$121
	Total dollars received from energy assistance	
26	programs:	\$783,937
	Total dollars received from other sources	+ /
27	(private organizations):	\$0
	<b>Total</b> Revenue from sales to residential	
28	accounts:	\$22,927,081
	Average monthly residential bill: (auto-	<i> </i>
29	calculation of $#28 \div #1)$	\$120
30	Intentionally Blank	• •
	Total residential account write-offs due to	
31	uncollectible:	\$116,686
		. ,
DISCO	NNECTION DURATION	
	Number of customer accounts disconnected 24	
32	hours or more:	
а	) # Electric - heat affected	
	) # Electric - heat not affected	
	, ) # Gas - heat affected	34
	) # Gas - heat not affected	
	) Total # disconnected	34
33	Intentionally Blank	
	Number occupied heat-affected accounts	
34	disconnected 24 hours or more (to include	
	customers who did and did not seek protection).	34
35	Intentionally Blank	
35 36	Intentionally Blank	
30		
RECO		
37	# Accounts reconnected	86
31		00
38	# Accounts remaining disconnected	452
	1 20 days	102

- **a)** 1-30 days
- **b)** 31-60 days
- c) 61+ days

452
18
4
430

[END]

cwrutilrpt.xls ver 3.0

CWR period only CWR period only

CWR period only

#### Monthly CWR February 2012.xls

Minnesota Cold Weather Rule Compliance Questionnaire Version				
Company Submitting Reply	Minnesota Energy Resources People's Natural Gas	▼	Required	
Reporting Year	2012	•	Required	
Reporting Period	February	•	Required	

#### Utility Monthly Reports (216B.091)

**Minnesota Public Utilities Commission** 

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: February, 2012

1	Number of Residential Customer Accounts:	190,925
2	Number of Past Due Residential Customer Accounts:	28,578
3	Number of Cold Weather Protection Requests:	654

#### RECONNECTION AT BEGINNING OF COLD WEATHER MONTHS

- 4 Number of "Right to Appeal"
- <sup>4</sup> notices mailed to customers:
- 5 Intentionally Blank
- 6 Number of customer accounts granted reconnection request:

127

0

**INABILITY TO PAY (ITP)** 

10% PLAN (TPP)

This entire section intentionally left blank

This entire section intentionally left blank

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: February, 2012

16	Number of "Right to Appeal" notices mailed to customers:	0		
	a) Number of PS requests received	654		
17	· ·			
	Number of PS negotiations mutually agreed			
18	upon:	654		
19	•			
DISC	CONNECTIONS			
20	Number of disconnection notices mailed to			
20	customers:	6,808		
21	Number of customer accounts disconnected who did not seek protection:			
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	a) # Electric - heat affected			Required
	b) # Electric - heat not affected			Required
	c) # Gas - heat affected	159		. loquinou
	d) # Gas - heat not affected			Required
	e) Total # disconnected	159	0	
	Number of customer accounts disconnected			
22	seeking protection:			
	a) # Electric - heat affected			CWR period only
	<b>b</b> ) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected			CWR period only
	e) Total # disconnected (See Note)	0		
	Number of customer accounts disconnected for			
23	nonpayment (auto-calculation of #21e+ #22e):	159	159	
	· · · · · /			

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: February, 2012

#### DOLLAR VALUE

24	Total dollars past due on all residential accounts:	\$3,812,235
25	Average past due dollar amount per past due account (auto-calculation of $#24 \div #2$ ):	\$133
26	<b>Total</b> dollars received from energy assistance programs:	\$850,960
27	<b>Total</b> dollars received from other sources (private organizations):	\$0
28	Total Revenue from sales to residential accounts:	\$21,494,738
29	Average monthly residential bill: (auto- calculation of #28 ÷ #1)	\$113
30	Intentionally Blank	
31	<b>Total</b> residential account write-offs due to uncollectible:	\$86,385
	NNECTION DURATION	
	Number of customer accounts disconnected 24	
32	hours or more:	
	# Electric - heat affected	
-	# Electric - heat not affected	
	# Gas - heat affected	139
	# Gas - heat not affected	100
	Total # disconnected	139
33	Intentionally Blank	
34	Number occupied heat-affected accounts disconnected 24 hours or more (to include customers who did and did not seek protection).	139
35 36	Intentionally Blank Intentionally Blank	
RECONNECTION DATA		
37	# Accounts reconnected	127

38	# Accounts remaining disconnected	385
a)	1-30 days	58
b)	31-60 days	17
c)	61+ days	310

[END]

cwrutilrpt.xls ver 3.0

CWR period only CWR period only

CWR period only

#### Monthly CWR March 2012.xls

Minnesota Public Utilities Commission					
Minnesota Cold Weather Rule Compliance Questionna	aire		Version 3		
Company Submitting Reply:	Minnesota Energy Resources People's Natural Gas	•	Required		
Reporting Year:	2012	•	Required		
Reporting Period:	March	•	Required		

#### Utility Monthly Reports (216B.091)

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: March, 2012

1	Number of Residential Customer Accounts:	190,816
2	Number of Past Due Residential Customer Accounts:	31,857
3	Number of Cold Weather Protection Requests:	334

#### RECONNECTION AT BEGINNING OF COLD WEATHER MONTHS

- 4 Number of "Right to Appeal"
- <sup>4</sup> notices mailed to customers:
- 5 Intentionally Blank
- 6 Number of customer accounts granted reconnection request:

183

0

INABILITY TO PAY (ITP)

10% PLAN (TPP)

This entire section intentionally left blank

This entire section intentionally left blank

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: March, 2012

16	Number of "Right to Appeal" notices mailed to customers:	0		
		-		
	a) Number of PS requests received	334		
17	Intentionally Blank			
18	Number of PS negotiations mutually agreed			
10	upon:	334		
19	Intentionally Blank			
DISC	ONNECTIONS			
	Number of disconnection notices mailed to			
20	customers:	10,370		
	Number of customer accounts disconnected who	10,070		
21				
	did not seek protection:			
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	<ul> <li>a) # Electric - heat affected</li> </ul>			Required
	b) # Electric - heat not affected			Required
	c) # Gas - heat affected	354		
	d) # Gas - heat not affected			Required
	e) Total # disconnected	354	0	
	Number of customer accounts disconnected			
22	seeking protection:			
	a) # Electric - heat affected			CIVID pariad aphy
	b) # Electric - heat not affected			CWR period only
				CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected	-		CWR period only
	e) Total # disconnected (See Note)	0		
	Number of customer accounts disconnected for			
23	nonpayment (auto-calculation of #21e+ #22e):	354	354	
	$\frac{1}{2} + \frac{1}{2} + \frac{1}$	304	304	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: March, 2012

#### DOLLAR VALUE

24	Total dollars past due on all residential accounts:	\$4,573,213
25	Average past due dollar amount per past due account (auto-calculation of #24 ÷ #2):	\$144
26	<b>Total</b> dollars received from energy assistance programs:	\$463,831
27	<b>Total</b> dollars received from other sources (private organizations):	\$0
28	Total Revenue from sales to residential accounts:	\$14,691,251
29	Average monthly residential bill: (auto- calculation of #28 ÷ #1)	\$77
30	Intentionally Blank	
31	Total residential account write-offs due to	
31	uncollectible:	\$74,299
DISCO	NNECTION DURATION	
32	Number of customer accounts disconnected 24	
	hours or more:	
	) # Electric - heat affected	
	) # Electric - heat not affected ) # Gas - heat affected	289
	) # Gas - heat not affected	209
	) Total # disconnected	289
33	Intentionally Blank	209
55	Intentionally Dialik	
34	Number occupied heat-affected accounts disconnected 24 hours or more (to include customers who did and did not seek protection).	200
		289
35 36	Intentionally Blank Intentionally Blank	
RECO	NNECTION DATA	
-		

37	# Accounts reconnected	183
		110
38	# Accounts remaining disconnected	419
a)	1-30 days	185
b)	31-60 days	56
C)	61+ days	178

[END]

cwrutilrpt.xls ver 3.0

CWR period only CWR period only

CWR period only

## Monthly CWR April 2012.xls

Minnesota Public Utilities Commission				
Minnesota Cold Weather Rule Compliance Questionna	ire Version 3			
Company Submitting Reply:	Minnesota Energy Resources People's Natural Gas 🔹 Required			
Reporting Year:	2012  Required			
Reporting Period:	April   Required			
Utility Monthly Reports (216B.091) Company: Minnesota Energy Resources People's	Natural Gas for roport poriod anding: April 2012			
Company: Minnesota Energy Resources People's	Natural Gas for report period ending: April, 2012			
<ol> <li>Number of Residential Customer Accounts: Number of Past Due Residential Customer Accounts:</li> </ol>	<u>190,895</u> 34,455			
3 Number of Cold Weather Protection Requests:	CWR period only			
<ul> <li>RECONNECTION AT BEGINNING OF COLD WEATHER</li> <li>A Number of "Right to Appeal" notices mailed to customers:</li> </ul>	MONTHS << Invalid Number			
<ul> <li>5 Intentionally Blank</li> <li>6 Number of customer accounts granted reconnection request:</li> </ul>	CWR period only			
INABILITY TO PAY (ITP)	This entire section intentionally left blank			
10% PLAN (TPP)	This entire section intentionally left blank			

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: April, 2012

16	customers:			CWR period only
47	a) Number of PS requests received			CWR period only
17	Intentionally Blank Number of PS negotiations mutually agreed			
18	upon:			CWR period only
19				, i i i i i i i i i i i i i i i i i i i
DIS	CONNECTIONS			
20	Number of disconnection notices mailed to customers:	8,386		
21	Number of customer accounts disconnected who did not seek protection:	-,		
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	a) # Electric - heat affected			Required
	<b>b)</b> # Electric - heat not affected			Required
	c) # Gas - heat affected	588		
	d) # Gas - heat not affected	500		Required
	e) Total # disconnected	588	0	
22	Number of customer accounts disconnected			
	seeking protection:			
	a) # Electric - heat affected			CWR period only
	b) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	<ul> <li>d) # Gas - heat not affected</li> <li>e) Total # disconnected (See Note)</li> </ul>	0		CWR period only
	e) Total # disconnected (See Note)	0		
	Number of customer accounts disconnected for			
23	nonpayment (auto-calculation of #21e+ #22e):	588	588	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: April, 2012

#### DOLLAR VALUE

24	Total dollars past due on all residential accounts:	\$4,956,371	
25	Average past due dollar amount per past due	<u>Ф</u> ала	
	account (auto-calculation of #24 ÷ #2): <b>Total</b> dollars received from energy assistance	\$144	
26	programs:	\$387,489	
27	<b>Total</b> dollars received from other sources (private organizations):	\$0	
28	<b>Total</b> Revenue from sales to residential	φ0	
20	accounts:	\$2,948,298	
29	Average monthly residential bill: (auto- calculation of #28 ÷ #1)	\$15	
30	Intentionally Blank		
31	<b>Total</b> residential account write-offs due to uncollectible:	\$161,146	
		÷·•·,··•	
DISCO	NNECTION DURATION Number of customer accounts disconnected 24		
32	hours or more:		
	# Electric - heat affected		
	# Electric - heat not affected		
	# Gas - heat affected		
	) # Gas - heat not affected ) <b>Total</b> # disconnected	0	
33	Intentionally Blank	0	
00			
24	Number occupied heat-affected accounts		
34	disconnected 24 hours or more (to include		
	customers who did and did not seek protection).		
35	Intentionally Blank		
36	Intentionally Blank		
RECO	NNECTION DATA		
37	# Accounts reconnected	270	
38	# Accounts remaining disconnected	534	
	1-30 days	289	
b	31-60 days	179	

**c)** 61+ days

66

cwrutilrpt.xls ver 3.0

CWR period only CWR period only CWR period only CWR period only

CWR period only

#### Monthly CWR May 2012.xls

Minne	sota Public Utilities Commission				
Minne	sota Cold Weather Rule Compliance Questionna	ire	Version 3		
	Company Submitting Reply:	Minnesota Energy Resources People's Natural Gas	▼ Required		
	Reporting Year:	2012	▼ Required		
	Reporting Period:	Мау	▼ Required		
C	Utility Monthly Reports (216B.091) Company: Minnesota Energy Resources People's Natural Gas for report period ending: May, 2012				
1 2	Number of Residential Customer Accounts: Number of Past Due Residential Customer Accounts:	<u> </u>			
3	Number of Cold Weather Protection Requests:	CWR period	only		
RECO	NNECTION AT BEGINNING OF COLD WEATHER Number of "Right to Appeal" notices mailed to customers:	MONTHS CWR period	only		

5 Intentionally Blank
6 Number of customer accounts granted reconnection request: 423

INABILITY TO PAY (ITP)

10% PLAN (TPP)

This entire section intentionally left blank

This entire section intentionally left blank

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: May, 2012

16	Number of "Right to Appeal" notices mailed to customers:			CWR period only
	<ul> <li>a) Number of PS requests received</li> </ul>			CWR period only
17	<b>,</b>			
18	Number of PS negotiations mutually agreed			
	upon:			CWR period only
19	Intentionally Blank			
DISC	CONNECTIONS			
20	Number of disconnection notices mailed to			
20	customers:	7,433		
21	Number of customer accounts disconnected who			
21	did not seek protection:			
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	a) # Electric - heat affected			Required
	b) # Electric - heat not affected			Required
	c) # Gas - heat affected	1,529		
	d) # Gas - heat not affected			Required
	e) Total # disconnected	1,529	0	
22	Number of customer accounts disconnected			
~~~	seeking protection:			
	<ul> <li>a) # Electric - heat affected</li> </ul>			CWR period only
	b) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected			CWR period only
	e) Total # disconnected (See Note)	0		
23	Number of customer accounts disconnected for			
20	nonpayment (auto-calculation of #21e+ #22e):	1,529	1,529	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: May, 2012

#### DOLLAR VALUE

~ ~ ~				
24	Total dollars past due on all residential accounts:	\$3,987,257		
	Average past due dollar amount per past due			
25	account (auto-calculation of $#24 \div #2$ ):	\$121		
	Total dollars received from energy assistance			
26	programs:	\$268,727		
	Total dollars received from other sources	. ,		
27	(private organizations):	\$0		
	Total Revenue from sales to residential			
28	accounts:	\$5,776,912		
	Average monthly residential bill: (auto-			
29	calculation of $#28 \div #1)$	\$30		
30	Intentionally Blank			
~	Total residential account write-offs due to			
31	uncollectible:	\$158,702		
DISCO	NNECTION DURATION			
20	Number of customer accounts disconnected 24			
32	hours or more:			
a	# Electric - heat affected			
b	# Electric - heat not affected			
C	# Gas - heat affected			
d	# Gas - heat not affected			
e	Total # disconnected	0		
33	Intentionally Blank			
24	Number occupied heat-affected accounts			
34	disconnected 24 hours or more (to include			
	customers who did and did not seek protection).			
35	Intentionally Blank			
36	Intentionally Blank			
	-			
RECONNECTION DATA				
37	# Accounts reconnected	423		
		.20		
38	# Accounts remaining disconnected	1,572		
a	1-30 days	1,098		
b	31-60 days	281		

CWR period only

CWR period only CWR period only CWR period only CWR period only

#### R

37	# Accounts reconnected	423
b)	# Accounts remaining disconnected 1-30 days 31-60 days 61+ days	1,572 1,098 281 193

[END]

cwrutilrpt.xls ver 3.0

## Monthly CWR June 2012.xls

Minnesota Public Utilities Commission				
Minnesota Cold Weather Rule Compliance Questionna	ire Version 3			
Company Submitting Reply:	Minnesota Energy Resources People's Natural Gas			
Reporting Year:	2012  Required			
Reporting Period:	June   Required			
Utility Monthly Reports (216B.091) Company: Minnesota Energy Resources People's	Natural Gas for report period ending: June, 2012			
<ol> <li>Number of Residential Customer Accounts: Number of Past Due Residential Customer Accounts:</li> <li>Number of Cold Weather Protection Requests:</li> </ol>	<u>191,221</u> <u>31,570</u>			
	CWR period only			
<ul> <li>RECONNECTION AT BEGINNING OF COLD WEATHER</li> <li>Number of "Right to Appeal" notices mailed to customers:</li> </ul>	MONTHS           CWR period only			
<ul> <li>5 Intentionally Blank</li> <li>6 Number of customer accounts granted reconnection request:</li> </ul>	CWR period only			
INABILITY TO PAY (ITP)	This entire section intentionally left blank			
10% PLAN (TPP)	This entire section intentionally left blank			

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: June, 2012

16	a) Number of PS requests received			CWR period only CWR period only
17	, , , , , , , , , , , , , , , , , , ,			
18	Number of PS negotiations mutually agreed upon:			CWR period only
19	Intentionally Blank			
DISO 20	CONNECTIONS Number of disconnection notices mailed to customers: Number of customer accounts disconnected who	4,648		
21	did not seek protection:			
	Duplicate columns for use in April and October April 1-15 and October 1-15 in 1st column April 16-30 and October 16-31 in 2nd column <i>All other months, use 1st column only</i> a) # Electric - heat affected b) # Electric - heat not affected c) # Gas - heat affected d) # Gas - heat not affected	1,371		Required Required Required
	e) Total # disconnected	1,371	0	
22	<ul> <li>Number of customer accounts disconnected seeking protection:</li> <li>a) # Electric - heat affected</li> <li>b) # Electric - heat not affected</li> <li>c) # Gas - heat affected</li> <li>d) # Gas - heat not affected</li> <li>e) Total # disconnected (See Note)</li> </ul>	0		CWR period only CWR period only CWR period only CWR period only
23	Number of customer accounts disconnected for nonpayment (auto-calculation of #21e+ #22e):	1,371	1,371	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: June, 2012

#### DOLLAR VALUE

DOLLA	AR VALUE			
24	Tetel dellars post due on all residential accounts	Ф <u>р</u> 454 707		
	<b>Total</b> dollars past due on all residential accounts: <b>Average</b> past due dollar amount per past due	\$3,454,707		
25	account (auto-calculation of $#24 \div #2$ ):	\$109		
	<b>Total</b> dollars received from energy assistance	φ105		
26	programs:	\$119,153		
07	Total dollars received from other sources	+ -,		
27	(private organizations):	\$0		
28	Total Revenue from sales to residential			
20	accounts:	\$1,315,315		
29	Average monthly residential bill: (auto-			
	calculation of $#28 \div #1)$	\$7		
30	Intentionally Blank <b>Total</b> residential account write-offs due to			
31	uncollectible:	\$212,391		
		ψ212,391		
DISCO	NNECTION DURATION			
	Number of customer accounts disconnected 24			
32	hours or more:			
а	) # Electric - heat affected			
	) # Electric - heat not affected			
С	) # Gas - heat affected			
d	) # Gas - heat not affected			
е	) Total # disconnected	0		
33	Intentionally Blank			
34	Number occupied heat-affected accounts			
•	disconnected 24 hours or more (to include			
	customers who did and did not seek protection).			
<b>6 -</b>	la terre t'erre elle e Die se le			
35	Intentionally Blank			
36	Intentionally Blank			
RECONNECTION DATA				
37	# Accounts reconnected	590		
38	# Accounts remaining disconnected	2,322		
	) 1-30 days	826		
	) 31-60 days	1 037		

- **b)** 31-60 days
- c) 61+ days

2,322
826
1,037
459

[END]

cwrutilrpt.xls ver 3.0

CWR period only CWR period only CWR period only CWR period only

CWR period only

## Monthly CWR July 2012.xls

Minnesota Public Utilities Co	mmission			
Minnesota Cold Weather Rule	e Compliance Questionna	ire		Version 3
	Company Submitting Reply:	Minnesota Energy	Resources People's Natural Gas	▼ Required
	Reporting Year:	2012		▼ Required
	Reporting Period:	July		▼ Required
Utility Monthly Reports (216E	.091)			
Company: Minnesota En	ergy Resources People's	Natural Gas fo	or report period ending: Jul	ly, 2012
<ol> <li>Number of Residential Number of Past Due Residential ( 3 Number of Cold Weath</li> <li>RECONNECTION AT BEGINN Number of "Right to Ap notices mailed to custor</li> </ol>	Customer Accounts: her Protection Requests: IING OF COLD WEATHER opeal"	190,719 26,948 MONTHS	CWR period o CWR period o	
<ul> <li>5 Intentionally Blank</li> <li>6 Number of customer a reconnection request:</li> </ul>	ccounts granted		CWR period o	only
INABILITY TO PAY (ITP)			This entire set intentionally I	
10% PLAN (TPP)			This entire se	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: July, 2012

	Number of "Right to Appeal" notices mailed to customers: a) Number of PS requests received			CWR period only CWR period only
17	Intentionally Blank			
18	Number of PS negotiations mutually agreed upon:			CWR period only
19	Intentionally Blank			
DISC 20 21	ONNECTIONS Number of disconnection notices mailed to customers: Number of customer accounts disconnected who did not seek protection: Duplicate columns for use in April and October April 1-15 and October 1-15 in 1st column	2,356		
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	a) # Electric - heat affected			Required
	<b>b)</b> # Electric - heat not affected			Required
	c) # Gas - heat affected	1,314		
	d) # Gas - heat not affected			Required
	e) Total # disconnected	1,314	0	
22	Number of customer accounts disconnected seeking protection:			
	<ul> <li>a) # Electric - heat affected</li> </ul>			CWR period only
	b) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected			CWR period only
	e) Total # disconnected (See Note)	0		
23	Number of customer accounts disconnected for			
23	nonpayment (auto-calculation of #21e+ #22e):	1,314	1,314	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: July, 2012

-

#### DOLLAR VALUE

24	Total dollars past due on all residential accounts:	\$2,732,589	
25	<b>Average</b> past due dollar amount per past due account (auto-calculation of $#24 \div #2$ ):	\$101	
26	<b>Total</b> dollars received from energy assistance programs:	\$14,781	
27	<b>Total</b> dollars received from other sources (private organizations):	\$1,931	
28	<b>Total</b> Revenue from sales to residential accounts:	\$2,939,455	
29	Average monthly residential bill: (auto- calculation of #28 ÷ #1)	\$15	
30	Intentionally Blank		
31	<b>Total</b> residential account write-offs due to uncollectible:	\$148,935	
DISCO	NNECTION DURATION		
32	Number of customer accounts disconnected 24 hours or more:		
a)	# Electric - heat affected		
,	# Electric - heat not affected		
	# Gas - heat affected		
	# Gas - heat not affected		
,	Total # disconnected	0	
33	Intentionally Blank		
34	Number occupied heat-affected accounts disconnected 24 hours or more (to include customers who did and did not seek protection).		
35	Intentionally Blank		
36 36	Intentionally Blank		
RECON	INECTION DATA		
37	# Accounts reconnected	673	
38	# Accounts remaining disconnected	2,754	
a)	1-30 days	649	
b)	31-60 days	792	

[END]

792 1,313

cwrutilrpt.xls ver 3.0

CWR period only CWR period only CWR period only CWR period only

CWR period only

c) 61+ days

#### Monthly CWR August 2012.xls

Minne	sota Public Utilities Commission			
Minne	sota Cold Weather Rule Compliance Questionna	ire		Version 3
	Company Submitting Reply:	Minnesota Energy	Resources People's Natural Gas	▼ Required
	Reporting Year:	2012		▼ Required
	Reporting Period:	August		▼ Required
	Monthly Reports (216B.091) mpany: Minnesota Energy Resources People's N Number of Residential Customer Accounts:	atural Gas for 190,924	report period ending: Auູ	gust, 2012
2	Number of Past Due Residential Customer Accounts:	22,051		
3	Number of Cold Weather Protection Requests:		CWR period	only
RECO 4	NNECTION AT BEGINNING OF COLD WEATHER Number of "Right to Appeal" notices mailed to customers:	MONTHS	CWR period	only
5	Intentionally Blank			

6 Number of customer accounts granted reconnection request:

INABILITY TO PAY (ITP)

10% PLAN (TPP)

This entire section intentionally left blank

CWR period only

This entire section intentionally left blank

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: August, 2012

40	Number of "Right to Appeal" notices mailed to			
16	customers:			CWR period only
	a) Number of PS requests received			CWR period only
17	Intentionally Blank			
	Number of PS negotiations mutually agreed			
18	upon:			CWR period only
19	Intentionally Blank			CWIX period only
19	Intentionally blank			
DISC	ONNECTIONS			
	Number of disconnection notices mailed to			
20	customers:	1,416		
	Number of customer accounts disconnected who	, ,		
21	did not seek protection:			
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	a) # Electric - heat affected			Required
	b) # Electric - heat not affected			Required
	c) # Gas - heat affected	514		Nequiled
	d) # Gas - heat not affected	514		Required
	e) Total # disconnected	514	0	Nequileu
		514	0	
22	Number of customer accounts disconnected			
	seeking protection:			
	a) # Electric - heat affected			CWR period only
	b) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected			CWR period only
	e) Total # disconnected (See Note)	0		
	Number of customer accounts disconnected for			
23	nonpayment (auto-calculation of #21e+ #22e):	514	514	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: August, 2012

#### DOLLAR VALUE

DOLLA	AR VALUE			
24	<b>-</b> / · · · · · · · · · · · · · · · · · ·	<b>AO ATO A AO</b>		
	Total dollars past due on all residential accounts:	\$2,178,140		
25	Average past due dollar amount per past due	¢00		
	account (auto-calculation of #24 ÷ #2): <b>Total</b> dollars received from energy assistance	\$99		
26	•••	¢160		
	programs: Total dollars received from other sources	\$169		
27	(private organizations):	\$0		
	<b>Total</b> Revenue from sales to residential	ψυ		
28	accounts:	\$3,271,495		
	Average monthly residential bill: (auto-	ψ0,271,400		
29	calculation of #28 $\div$ #1)	\$17		
30	Intentionally Blank	ψΠ		
00	<b>Total</b> residential account write-offs due to			
31	uncollectible:	\$133,246		
		¢:00,2:0		
DISCO	NNECTION DURATION			
	Number of customer accounts disconnected 24			
32	hours or more:			
a	) # Electric - heat affected			
	# Electric - heat not affected			
	# Gas - heat affected			
	# Gas - heat not affected			
	<b>Total</b> # disconnected	0		
33	Intentionally Blank			
	Number occupied heat-affected accounts			
34	disconnected 24 hours or more (to include			
	customers who did and did not seek protection).			
35	Intentionally Blank			
36	Intentionally Blank			
00				
RECONNECTION DATA				
<b>6</b> -		500		
37	# Accounts reconnected	503		
20	# Accounts romaining disconnected	2 671		
38	# Accounts remaining disconnected 1-30 days	2,671 142		
	) 1-30 days ) 31-60 days	507		
	) 31-60 days ) 61+ days			
C	UTT UAYS	2,022		

[END]	
-------	--

cwrutilrpt.xls ver 3.0

CWR period only CWR period only CWR period only CWR period only

CWR period only

## Monthly CWR September 2012.xls

Minnesota Public Utilities Commission				
Minnesota Cold Weather Rule Compliance Questionna	ire Version 3			
Company Submitting Reply:	Minnesota Energy Resources People's Natural Gas 🔹 Required			
Reporting Year:	2012  Required			
Reporting Period:	September   Required			
Utility Monthly Reports (216B.091) Company: Minnesota Energy Resources People's Nat	tural Gas for report period ending: September, 2012			
<ol> <li>Number of Residential Customer Accounts: Number of Past Due Residential Customer Accounts:</li> </ol>	<u>190,340</u> 21,207			
3 Number of Cold Weather Protection Requests:	CWR period only			
<ul> <li>RECONNECTION AT BEGINNING OF COLD WEATHER</li> <li>Number of "Right to Appeal" notices mailed to customers:</li> </ul>	MONTHS CWR period only			
<ul> <li>5 Intentionally Blank</li> <li>6 Number of customer accounts granted reconnection request:</li> </ul>	CWR period only			
INABILITY TO PAY (ITP)	This entire section intentionally left blank			
10% PLAN (TPP)	This entire section intentionally left blank			

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: September, 2012

PA) 10 17 18 19	<ul> <li>a) Number of PS requests received</li> <li>7 Intentionally Blank</li> <li>8 Number of PS negotiations mutually agreed upon:</li> </ul>			CWR period only CWR period only CWR period only
DIS	CONNECTIONS			
20	Number of disconnection notices mailed to			
20	customers:	961		
21	Number of customer accounts disconnected w	ho		
2	did not seek protection:			
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			<b>.</b>
	a) # Electric - heat affected			Required
	<ul><li>b) # Electric - heat not affected</li><li>c) # Gas - heat affected</li></ul>	260		Required
	d) # Gas - heat not affected	269		Required
	e) Total # disconnected	269	0	Required
	Number of customer accounts disconnected	203	0	
22	2 seeking protection:			
	a) # Electric - heat affected			CWR period only
	b) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected			CWR period only
	e) Total # disconnected (See Note)	0		, ,
_	Number of customer accounts disconnected for	r		
23	3 nonpayment (auto-calculation of #21e+ #22e):	269	269	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: September, 2012

#### DOLLAR VALUE

24	Total dollars past due on all residential accounts:	\$1,958,867	
25	Average past due dollar amount per past due account (auto-calculation of #24 ÷ #2):	\$92	
26	<b>Total</b> dollars received from energy assistance	<u>\$92</u>	
20	programs: Total dollars received from other sources	\$0	
27	(private organizations):	\$0	
28	<b>Total</b> Revenue from sales to residential accounts:	\$3,514,489	
29	Average monthly residential bill: (auto-	φ3,514,469	
	calculation of #28 ÷ #1)	\$18	
30	Intentionally Blank Total residential account write-offs due to		
31	uncollectible:	\$134,318	
DISCO	NNECTION DURATION		
32	Number of customer accounts disconnected 24		
	hours or more:		
	<ul> <li># Electric - heat affected</li> <li># Electric - heat not affected</li> </ul>		
	# Gas - heat affected	215	
	# Gas - heat not affected	210	
	Total # disconnected	215	
33	Intentionally Blank		
34	Number occupied heat-affected accounts disconnected 24 hours or more (to include		
	customers who did and did not seek protection).		
35	Intentionally Blank		
36	Intentionally Blank		
RECO	NNECTION DATA		
<b>6</b> -			
37	# Accounts reconnected	577	
38	# Accounts remaining disconnected	2,191	
	1-30 days	46	
	31-60 days	110	
C)	) 61+ days	2,035	

[END]

cwrutilrpt.xls ver 3.0

CWR period only CWR period only

CWR period only

CWR period only

#### Monthly CWR October 2012.xls

Minnesota Cold Weather Rule Compliance Questionnaire			Version 3	
Company Submitting Reply	Minnesota Energy Resources People's Natural Gas	•	Required	
Reporting Year	2012	•	Required	
Reporting Period	October	•	Required	

#### Utility Monthly Reports (216B.091)

**Minnesota Public Utilities Commission** 

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: October, 2012

1	Number of Residential Customer Accounts:	191,264
2	Number of Past Due Residential Customer Accounts:	18,428
3	Number of Cold Weather Protection Requests:	2,639

#### RECONNECTION AT BEGINNING OF COLD WEATHER MONTHS

- 4 Number of "Right to Appeal"
- <sup>4</sup> notices mailed to customers:
- 5 Intentionally Blank
- 6 Number of customer accounts granted reconnection request:

1.218	

0

**INABILITY TO PAY (ITP)** 

10% PLAN (TPP)

This entire section intentionally left blank

This entire section intentionally left blank

# Company: Minnesota Energy Resources People's Natural Gas for report period ending: October, 2012

### PAYMENT SCHEDULE (PS)

1 7 1				
16	Number of "Right to Appeal" notices mailed to			
	customers:	0		
	<ul> <li>a) Number of PS requests received</li> </ul>	2,639		
17	Intentionally Blank			
40	Number of PS negotiations mutually agreed			
18	upon:	2,639		
19	Intentionally Blank	i		
סופנ	CONNECTIONS			
DISC				
20	Number of disconnection notices mailed to			
	customers:	1,114		
21	Number of customer accounts disconnected who			
	did not seek protection:			
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	<ul><li>a) # Electric - heat affected</li></ul>			Required
	b) # Electric - heat not affected			Required
	c) # Gas - heat affected	152	14	
	d) # Gas - heat not affected			Required
	e) Total # disconnected	152	14	
	Number of customer accounts disconnected			
22	seeking protection:			
	a) # Electric - heat affected			CWR period only
	b) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected			CWR period only
	e) Total # disconnected (See Note)	0		CWR period only
		0		
_	Number of customer accounts disconnected for			
23	nonpayment (auto-calculation of #21e+ #22e):	152	166	

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: October, 2012

### DOLLAR VALUE

DOLLA	AR VALUE				
24	Total dollars past due on all residential accounts:	\$1,679,811			
	Average past due dollar amount per past due	<i><i><i></i></i></i>			
25	account (auto-calculation of #24 ÷ #2):	\$91			
26	Total dollars received from energy assistance	<b>\$</b> 2			
	programs: Total dollars received from other sources	\$0			
27	(private organizations):	\$0			
	<b>Total</b> Revenue from sales to residential				
28	accounts:	\$6,481,289			
29	Average monthly residential bill: (auto-				
	calculation of $#28 \div #1)$	\$34			
30	Intentionally Blank <b>Total</b> residential account write-offs due to				
31	uncollectible:	\$77,856			
		ψ11,000			
DISCO	NNECTION DURATION				
	Number of customer accounts disconnected 24				
32	hours or more:				
	) # Electric - heat affected				
	# Electric - heat not affected				
	# Gas - heat affected	131			
	) # Gas - heat not affected	404			
е 33	) Total # disconnected Intentionally Blank	131			
33					
	Number occupied heat-affected accounts				
34	disconnected 24 hours or more (to include				
	customers who did and did not seek protection).	131			
	, , , , , , , , , , , , , , , , , , , ,	101			
35	Intentionally Blank				
36	Intentionally Blank				
RECONNECTION DATA					
37	# Accounts reconnected	1,218			
38	# Accounts remaining disconnected	950			
30		300			

 # Accounts remaining disconnected
 950

 a) 1-30 days
 32

 b) 31-60 days
 41

 c) 61+ days
 877

[END]

cwrutilrpt.xls ver 3.0

CWR period only CWR period only

CWR period only

#### Monthly CWR November 2012.xls

Minnesota Cold Weather Rule Compliance Questionnaire Versi			
Company Submitting Reply:	Minnesota Energy Resources People's Natural Gas	▼	Required
Reporting Year:	2012	•	Required
Reporting Period:	November	•	Required

#### Utility Monthly Reports (216B.091)

**Minnesota Public Utilities Commission** 

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: November, 2012

1	Number of Residential Customer Accounts:	191,497
2	Number of Past Due Residential Customer Accounts:	19,781
3	Number of Cold Weather Protection Requests:	629

#### RECONNECTION AT BEGINNING OF COLD WEATHER MONTHS

- 4 Number of "Right to Appeal"
- <sup>4</sup> notices mailed to customers:
- 5 Intentionally Blank
- 6 Number of customer accounts granted reconnection request:

289

**INABILITY TO PAY (ITP)** 

10% PLAN (TPP)

This entire section intentionally left blank

This entire section intentionally left blank

## Company: Minnesota Energy Resources People's Natural Gas for report period ending: November, 2012

### PAYMENT SCHEDULE (PS)

1 7 1			
16	Number of "Right to Appeal" notices mailed to		
	customers:	1	
	<ul> <li>a) Number of PS requests received</li> </ul>	629	
17	Intentionally Blank		
18	Number of PS negotiations mutually agreed		
10	upon:	629	
19	Intentionally Blank		
	ONNECTIONS		
DISC	Number of disconnection notices mailed to		
20		4 440	
	customers:	1,419	
21	Number of customer accounts disconnected who		
	did not seek protection:		
	Duplicate columns for use in April and October		
	April 1-15 and October 1-15 in 1st column		
	April 16-30 and October 16-31 in 2nd column		
	All other months, use 1st column only		
	a) # Electric - heat affected		Required
	b) # Electric - heat not affected		Required
	c) # Gas - heat affected	15	
	d) # Gas - heat not affected		Required
	e) Total # disconnected	15	0
	Number of customer accounts disconnected	10	0
22			
	seeking protection:		
	a) # Electric - heat affected		CWR period only
	b) # Electric - heat not affected		CWR period only
	c) # Gas - heat affected		CWR period only
	<ul> <li>d) # Gas - heat not affected</li> </ul>		CWR period only
	e) Total # disconnected (See Note)	0	
23	Number of customer accounts disconnected for		
	nonpayment (auto-calculation of #21e+ #22e):	15 1	5

# Company: Minnesota Energy Resources People's Natural Gas for report period ending: November, 2012

# DOLLAR VALUE

24	Total dollars past due on all residential accounts:	\$1,823,628
25	Average past due dollar amount per past due account (auto-calculation of #24 ÷ #2):	\$92
26	Total dollars received from energy assistance	
27	programs: Total dollars received from other sources	\$399,578
21	(private organizations): <b>Total</b> Revenue from sales to residential	\$0
28	accounts:	\$13,255,927
29	Average monthly residential bill: (auto- calculation of #28 ÷ #1)	\$69
30	Intentionally Blank	ψ00
31	<b>Total</b> residential account write-offs due to uncollectible:	\$70,034
DISCO		
32	Number of customer accounts disconnected 24 hours or more:	
а	) # Electric - heat affected	
b	) # Electric - heat not affected	
С	) # Gas - heat affected	8
d	) # Gas - heat not affected	
е	) Total # disconnected	8
33	Intentionally Blank	
	Number occupied heat-affected accounts	
34	disconnected 24 hours or more (to include	
	customers who did and did not seek protection).	8
35	Intentionally Blank	
36	Intentionally Blank	

**RECONNECTION DATA** 

37	# Accounts reconnected	289
b	# Accounts remaining disconnected 1-30 days 31-60 days 61+ days	563 3 30 530

[END]

cwrutilrpt.xls ver 3.0

CWR period only CWR period only

CWR period only

#### CWR Monthly December 2012.xls

Minnesota Cold Weather Rule Compliance Questionna	ire		Version 3
Company Submitting Reply:	Minnesota Energy Resources People's Natural Gas	•	Required
Reporting Year:	2012	•	Required
Reporting Period:	December	-	Required

#### Utility Monthly Reports (216B.091)

**Minnesota Public Utilities Commission** 

#### Company: Minnesota Energy Resources People's Natural Gas for report period ending: December, 2012

1	Number of Residential Customer Accounts:	191,963
2	Number of Past Due Residential Customer Accounts:	20,338
3	Number of Cold Weather Protection Requests:	476

#### RECONNECTION AT BEGINNING OF COLD WEATHER MONTHS

- 4 Number of "Right to Appeal"
- <sup>4</sup> notices mailed to customers:
- 5 Intentionally Blank
- 6 Number of customer accounts granted reconnection request:

96

0

**INABILITY TO PAY (ITP)** 

10% PLAN (TPP)

This entire section intentionally left blank

This entire section intentionally left blank

# Company: Minnesota Energy Resources People's Natural Gas for report period ending: December, 2012

### PAYMENT SCHEDULE (PS)

16	Number of "Right to Appeal" notices mailed to customers:	0		
	a) Number of PS requests received	476		
17	Intentionally Blank	470		
17	Number of PS negotiations mutually agreed			
18	upon:	476		
19	Intentionally Blank			
DISC	ONNECTIONS			
20	Number of disconnection notices mailed to			
20	customers:	3,866		
21	Number of customer accounts disconnected who			
21	did not seek protection:			
	Duplicate columns for use in April and October			
	April 1-15 and October 1-15 in 1st column			
	April 16-30 and October 16-31 in 2nd column			
	All other months, use 1st column only			
	a) # Electric - heat affected			Required
	b) # Electric - heat not affected			Required
	c) # Gas - heat affected	14		
	d) # Gas - heat not affected			Required
	e) Total # disconnected	14	0	
22	Number of customer accounts disconnected			
	seeking protection:			
	a) # Electric - heat affected			CWR period only
	b) # Electric - heat not affected			CWR period only
	c) # Gas - heat affected			CWR period only
	d) # Gas - heat not affected			CWR period only
	e) Total # disconnected (See Note)	0		
-	Number of customer accounts disconnected for			
23	nonpayment (auto-calculation of #21e+ #22e):	14	14	

# Company: Minnesota Energy Resources People's Natural Gas for report period ending: December, 2012

# DOLLAR VALUE

24	Total dollars past due on all residential accounts:	\$2,130,546
25	Average past due dollar amount per past due	
	account (auto-calculation of #24 ÷ #2): <b>Total</b> dollars received from energy assistance	\$105
26	programs:	\$562,213
27	<b>Total</b> dollars received from other sources (private organizations):	\$0
28	Total Revenue from sales to residential	<del>, vo</del>
20	accounts:	\$20,067,497
29	<b>Average</b> monthly residential bill: (auto- calculation of #28 ÷ #1)	\$105
30	Intentionally Blank	
31	Total residential account write-offs due to uncollectible:	\$71,818
DISC		
32	Number of customer accounts disconnected 24 hours or more:	
	a) # Electric - heat affected	
	b) # Electric - heat not affected	8
	<ul> <li>c) # Gas - heat affected</li> <li>d) # Gas - heat not affected</li> </ul>	8
	Total # disconnected	8
33	Intentionally Blank	
	Number occupied heat-affected accounts	
34	disconnected 24 hours or more (to include	
	customers who did and did not seek protection).	
35	Intentionally Blank	
36	Intentionally Blank	
PECO	DNNECTION DATA	
NLO(		
37	# Accounts reconnected	96
38	# Accounts remaining disconnected	422
	a) 1-30 days	3
	<b>b)</b> 31-60 days <b>c)</b> 61+ days	<u>2</u> 417
	-,	117

cwrutilrpt.xls ver 3.0

[END]

CWR period only CWR period only

CWR period only

CWR period only

Service extension requests

2012	Resid	ential	Com	mercial		Existing				
		Avg time		Avg time			residential			commercial
		between		between		# residential	average days			average days
		requested		requested	# of existing	completed	between	# of existing	# commercial	between
	new	date and	New	date and	residential	as	request and	commercial	completed as	request and
	Installs	install	Installs	install	requested	requested	completion	requested	requested	completion
January	26	7	12	17	422	418	1	39	38	1
February	16	27	1	78	393	392	1	28	28	0
March	61	26	2	35	365	364	1	20	20	0
April	123	20	8	61	465	461	1	22	22	0
May	133	23	16	29	572	571	1	27	27	0
June	164	21	9	21	637	633	1	23	23	0
July	164	18	12	52	625	624	1	26	26	0
August	237	24	14	37	831	829	1	35	35	0
September	275	19	29	27	1087	1084	1	61	61	0
October	272	18	16	36	1469	1460	1	149	149	0
November	170	9	14	11	831	821	1	113	113	0
December	37	2	7	0	538	534	1	64	64	0

		JANU	JARY			FEBR	UARY	
# OF COMPLAINTS		5	4			36	59	
	# of	% of	# of	% of	# of	% of	# of	% of
	complaints for	complaints for	complaints for	complaints for	complaints for	complaints for	complaints for	complaints for
	Commercial	Commercial	Residential	Residential	Commercial	Commercial	Residential	Residential
	Class	Class	Class	Class	Class	Class	Class	Class
Employee Action / Behavior Issue			3	5.55%	2	0.54%	12	3.25%
Billing / Meter Read Issue			11	20.37%	4	1.08%	41	11.11%
Collection / Disconnection Issue			4	7.41%	4	1.08%	60	16.26%
Service Quality			11	20.37%	2	0.54%	69	18.70%
Meter Adjustment			2					
Outage								
My bill is too high			9	16.67%	9	2.44%	75	20.33%
Service Restoration Intervals							1	0.27%
Service Extension Intervals								
Others	2	3.70%	12	22.22%	6	1.63%	84	22.76%
TIME TO RESOLVE COMPLAINT								
Initially	48				313			
Within 10 days	2				48			
> 10 days	4				8			
	# resolved by	taking listed	% resolved by	y taking listed	# resolved by	taking listed	% resolved by	rtaking listed
Complaint Resolution	act	ion	act	ion	act	ion	act	ion
Taking action as customer request	1	6	29.0	53%	16	50	43.3	36%
Agreeable Compromise	2	6	48.3	15%	12	28	34.0	59%
Not within the control of the Utility		7	12.9	96%	1	7	4.6	1%
Refuse		5	9.2	.6%	6	4	17.3	34%
PUC COMPLAINTS				7				3
PUC COMPLAINTS				7				3

	MA	RCH			AP	RIL	
	25	51			2	19	
			o ( ) 5		a ( - 5		
		-		-			% of
	-	-				•	complaints
							for Residential
					Class		Class
2							
3					0.91%		
2	0.80%	43	17.13%			30	13.70%
		1					
4	1.60%	48	19.12%	2	0.91%	45	20.55%
						1	0.46%
4	1.60%	62	24.70%	3	1.37%	77	35.16%
220				208			
30				6			
1				5			
# resolved by	taking listed	% resolved b	y taking listed	# resolved by	/ taking listed	% resolved b	y taking listed
act	ion	act	ion	act	ion	act	ion
10	)1	40.	23%	1	00	45.	66%
10	)4	41.	43%	g	1	41.	55%
4	1	1.5	59%		2	0.9	91%
4	2	16.	73%	2	26	11.	87%
			3				2
	2 4 220 30 1 # resolved by act 10 10	25 # of % of complaints for Commercial Class Class 1 0.40% 2 0.80% 3 1.20% 2 0.80% 4 1.60% 220	complaints for Commercialcomplaints for Commercialcomplaints for ResidentialClassClassClass1 $0.40\%$ 132 $0.80\%$ 413 $1.20\%$ 272 $0.80\%$ 434 $1.60\%$ 484 $1.60\%$ 622203011 $4$ $1.60\%$ 1 $4$ $1.60\%$ 4 $1.60\%$ 62220 $30$ $1$ 1 $4$ $1.60\%$ 4 $1.60\%$ $4$ 101 $40$ 104 $41$ 4 $1.5$ $42$ $16$	# of       % of       # of       % of         # of       % of       explaints for       complaints for       complaints for         Commercial       Commercial       Residential       Residential       Residential         Class       Class       Class       Class       Class       Class         1       0.40%       13       5.18%       2       0.80%       41       16.33%         2       0.80%       41       16.33%       3       17.13%         2       0.80%       43       17.13%       4       1.60%       48       19.12%         4       1.60%       62       24.70%       220       30       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3       3 <td><math display="block">\begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td> <td>2512# of% of# of% of# of% ofcomplaints forcomplaints forcomplaints forcomplaints forcomplaints forcomplaints forCommercialClassClassClassClassClassClassClass10.40%135.18%62.74%20.80%4116.33%62.74%31.20%2710.76%20.91%20.80%4317.13%20.91%41.60%6224.70%31.37%22030143.619%65# resolved by taking listed% resolved by taking listed6510140.23%10010010010441.43%9110041.59%226</td> <td><math display="block">\begin{array}{ c c c c c c c c } \hline 251 &amp; 219 \\ \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c</math></td>	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2512# of% of# of% of# of% ofcomplaints forcomplaints forcomplaints forcomplaints forcomplaints forcomplaints forCommercialClassClassClassClassClassClassClass10.40%135.18%62.74%20.80%4116.33%62.74%31.20%2710.76%20.91%20.80%4317.13%20.91%41.60%6224.70%31.37%22030143.619%65# resolved by taking listed% resolved by taking listed6510140.23%10010010010441.43%9110041.59%226	$\begin{array}{ c c c c c c c c } \hline 251 & 219 \\ \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$

		M	AY			JU	NE	
# OF COMPLAINTS		12	22			1:	13	
		a		o ( ) 5		a ( - 5		a (
	# of	% of	# of	% of	# of	% of	# of	% of
	complaints	complaints for	complaints for	•	complaints for	-		complaints for
	for Comercial	Commercial	Residential	Residential	Commercial	Commercial	Residential	Residential
	Class	Class	Class	Class	Class	Class	Class	Class
Employee Action / Behavior Issue							6	5.31%
Billing / Meter Read Issue	2		10				10	8.85%
Collection / Disconnection Issue	1	0.82%	22			0.88%	21	18.58%
Service Quality			26	21.31%			33	29.20%
Meter Adjustment								
Outage								
My bill is too high	3	2.46%	14	11.48%	2	1.77%	7	6.19%
Service Restoration Intervals								
Service Extension Intervals								
Others	1	0.82%	43	35.25%			33	29.20%
TIME TO RESOLVE COMPLAINT				5				2
Initially	108				107			
Within 10 days	13				4			
> 10 days	1				2			
	# resolved by	y taking listed	% resolved b	y taking listed	# resolved by	/ taking listed	% resolved b	y taking listed
Complaint Resolution	act	tion	act	ion	act	ion	act	ion
Taking action as customer request	4	17	38.	52%	3	3	29.	20%
Agreeable Compromise	4	18	39.	34%	3	5	30.	97%
Not within the control of the Utility		2	1.6	54%		4	3.5	4%
Refuse	2	25	24.	49%	4	1	36.	28%
PUC COMPLAINTS								

		JU	LY			AUG	GUST	
# OF COMPLAINTS		12	26			14	44	
				o( 5		o/ 5		
	# of	% of	# of	% of	# of	% of	# of	% of
	complaints for	•		complaints for				complaints for
	Commercial	Commercial	Residential	Residential	Commercial	Commercial	Residential	Residential
	Class	Class	Class	Class	Class	Class	Class	Class
Employee Action / Behavior Issue			1				4	2.78%
Billing / Meter Read Issue			8				9	
Collection / Disconnection Issue			20				26	
Service Quality	2	1.59%	48		2	1.39%	33	22.92%
Meter Adjustment			4					
Outage								
My bill is too high	1	0.0.79%	8	6.34%	2	1.39%	7	
Service Restoration Intervals							2	1.39%
Service Extension Intervals					1	0.69%		
Others	1	0.79%	33	26.19%	1	0.69%	51	35.42%
TIME TO RESOLVE COMPLAINT				7				2
Initially	112				135			
Within 10 days	13				7			
> 10 days	1				2			
	# resolved b	y taking listed	% resolved b	y taking listed	# resolved by	y taking listed	% resolved b	y taking listed
Complaint Resolution	ac	tion	act	ion	act	tion	act	ion
Taking action as customer request	3	30	23.	81%	4	10	27.	78%
Agreeable Compromise	2	19	38.	89%	5	50	34.	72%
Not within the control of the Utility		4	3.1	7%		8	5.5	6%
Refuse	4	13	34.	13%	4	16	31.	94%
PUC COMPLAINTS								

		SEPTE	MBER			OCT	OBER	
# OF COMPLAINTS		14	49			13	39	
	# of	% of	# of	% of	# of	% of	# of	% of
	complaints for	•	complaints for					complaints for
	Commercial	Commercial	Residential	Residential	Commercial	Commercial	Residential	Residential
	Class	Class	Class	Class	Class	Class	Class	Class
Employee Action / Behavior Issue			3				3	2.16%
Billing / Meter Read Issue	3		20					10.07%
Collection / Disconnection Issue	3	2.01%	29			2.16%	13	9.35%
Service Quality	1	0.67%	35	23.49%			56	40.29%
Meter Adjustment								
Outage								
My bill is too high	1	0.67%	5	3.36%	1	0.72%	4	2.88%
Service Restoration Intervals			1	0.67%				
Service Extension Intervals							1	0.72%
Others	2	1.34%	46	30.87%	3	2.16%	40	28.78%
TIME TO RESOLVE COMPLAINT				2				2
Initially	139				130			
Within 10 days	7				6			
> 10 days	3				3			
	# resolved by	/ taking listed	% resolved b	y taking listed	# resolved by	/ taking listed	% resolved by	/ taking listed
Complaint Resolution	act	ion	act	ion	act	ion	act	ion
Taking action as customer request	5	54	36.	24%	5	52	37.4	41%
Agreeable Compromise	5	57	38.	26%	5	6	40.2	29%
Not within the control of the Utility								
Refuse	3	8	25.	50%	3	31	22.3	30%
PUC COMPLAINTS								

119 of # of aints for complaints for nercial Residential ass Class 2 18 29 1.68% 20	Residential Class 1.68% 15.13% 24.40%
aints for complaints for nercial Residential ass Class 2 18 29	complaints for Residential Class 1.68% 15.13% 24.40%
aints for complaints for nercial Residential ass Class 2 18 29	complaints for Residential Class 1.68% 15.13% 24.40%
nercial Residential ass Class 2 18 29	Residential Class 1.68% 15.13% 24.40%
ass Class 2 18 29	Class 1.68% 15.13% 24.40%
2 18 29	1.68% 15.13% 24.40%
18 29	15.13% 24.40%
29	24.40%
1.68% 20	
	16.81%
2.52% 4	3.36%
1	
5.88% 33	27.73%
	2
	tion
	09%
50.	42%
18.	49%
	2.52% 4 1 5.88% 33 listed % resolved b act 31. 50.

#### Answer time for gas emergency phone lines

	2012 January	February March	a April	May	June	July	Augu	ist Sept	ember Octob	er Nove	ember Dece	mber AVE	RAGE TOTAL	
Total calls	1,628	1,312	1,235	1,244	1,339	1,279	1,337	1,317	1,401	1,720	1,912	1,617	1445	17,341
Average speed of answer	7	7	7	6	7	7	7	7	5	6	9	7	6.8	
% answered in 15 seconds	90.57%	91.39%	91.41%	92.96%	92.33%	92.81%	93.78%	92.71%	94.28%	95.20%	89.07%	91.46%	92.3%	

#### Tech Response Time From Time of Call to

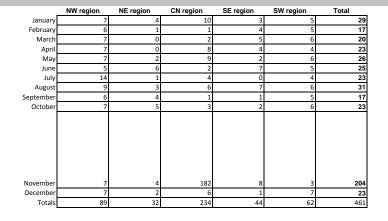
Arrival	January	February	March	April	May	June	July	August	September	October	November	December	Total
Calls responded to in Under 1 hour	491	387	404	401	433	409	426	448	572	610	676	503	5760
Calls responded to in Over 1 hour	29	17	20	23	26	25	23	31	17	23	204	23	461
Total Calls	520	404	424	424	459	434	449	479	589	633	880	526	6221

Calls	responded	to in	Under	1 ho	ur

nour	NW region	NE region	CN region	SE region	SW region	Total
January	48	85	110	179	69	491
February		70	85	136	44	387
March	55	70	93	141	45	404
April	36	83	88	145	49	401
May	53	84	126	129	41	433
June	33	114	85	127	50	409
July	47	95	80	157	47	426
August	52	85	109	157	45	448
September	76	116	127	167	86	572
October	79	111	134	207	79	610
November	54	105	239	205	73	676
December	45	82	171	153	52	503
Totals	630	1100	1447	1903	680	5760

MERC Average emergency response time in minutes	Month
January	0.28.33
February	0.26.58
March	0.27.48
April	0.27.46
May	0.29.28
June	0.28.44
July	0.28.22
August	0.28.32
September	0.28.12
October	0.26.37
November	0.49.59
December	0.29.07
YTD Average 2012	0:30:00

Calls responded to in Over 1 hour



MERC's emergency response time target is 30 minutes

\*note: Central increase in Nov due to propane plant release resulting in over 300 leak calls

Emergency re	ponse time												
2012													
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Total calls	520	404	424	424	459	434	449	479	589	633	880	526	6221
# responded													
to in < 1													
hour	491	387	404	401	433	409	426	448	572	610	676	503	5760
% responded to in < 1													
hour	94.4%	95.8%	95.3%	94.6%	94.3%	94.2%	94.9%	93.5%	97.1%	96.4%	76.8%	95.6%	92.6%
# responded to in > 1 hour	29	17	20	23	26	25	23	31	17	23	204	23	461
noui	25	17	20	23	20	2.5	23		17	23	204	2.5	401
% responded to in > 1													
hour	5.9%	4.4%	5.0%	5.7%	6.0%	6.1%	5.4%	6.9%	3.0%	3.8%	30.2%	4.6%	7.4%
Average minutes to													
respond	29	27	28	28	29	29	28	29	28	27	50	29	30

\*note: Central increase in Nov due to propane plant release resulting in over 300 leak calls

#### Mislocates

2012														
	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL	
Total locates	1561	856	2080	5624	9090	9480	8383	9579	4242	7976	9294	2831	70996	
Mislocates	0	0	0	0	1	3	4	5	4	2	3	2	24	
% mislocated	0.000%	0.000%	0.000%	0.000%	0.011%	0.032%	0.048%	0.052%	0.094%	0.025%	0.032%	0.071%	0.034%	

# Gas lines damaged

2012													
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Total Fault of Company employee or company	1	0	4	18	8	12	31	26	30	18	15	11	174
contractor damage by	0	0	1	2	1	3	5	8	3	2	3	4	32
others	1	0	3	16	7	9	26	18	27	16	12	7	142
System issue	0	0	0	0	0	0	0	0	0	0	0	0	0
Miles of Pipe as of 12/31/12	4,453	4,453	4,453	4,453	4,453	4,453	4,453	4,453	4,453	4,453	4,453	4,453	4,453
Damage per 100 miles of pipe													
Under the contr Caused by all ot		Employees											0.71 3.19

# Gas lines damaged

2012

			outage				
			caused by				
		Outage	MERC				
		caused by	employee	outage	Number of	outage	
		system	or MERC	caused by	customer	duration/m	Lost Gas
DATE	Address	issue	contractor	other	affected	inutes	Billed/Mcf
JANUARY							
1/5/2012	133 2nd Ave Worthington	Ν	N	Y	2	15	0.00
1/7/2012	120 N Dugan Welcome	N	Ν	Y	1	1200	8.19
1/19/2012	125 Center St Oronoco	Ν	N	Y	1	549	24.60
FEBRUARY							
MARCH							
3/20/2012	4916 Whispering Way Eagan	N	N	Y	1	15	9.06
3/27/2012	3355 Discovery Rd Eagan	N	N	Y	1	20	0.00
3/8/2012	13 South St Dodge Center	Ν	N	Y	1	96	4.97
3/19/2012	913 17th Ave NE Rochester	N	N	Y	1	60	0.57
3/29/2012	301 2nd St NW Kasson	Ν	N	Y	2	80	0.00
APRIL							
4/1/2012	428 Superior Ave Crosby	Ν	N	Y	1	300	0.16
4/2/2012	105 S Main Dover	Ν	Ν	Y	1	20	0.00
4/9/2012	221 7th St NW Rochester	Ν	N	Y	1	120	0.18
4/20/2012	1201 S Broadway Rochester	Ν	N	Y	3	60	0.72
4/11/2012	432 N Rebecca Ivanhow	Ν	Ν	Y	1	780	0.06
4/26/2012	15 W Front St Cottonwoood	Ν	N	Y	1	35	0.51
4/30/2012	310 Brown St Jackson	Ν	N	Y	1	1311	32.78
4/16/2012	39545 Government Rd Hinckley	Ν	N	Y	1	45	4.34
4/24/2012	850 Hwy 65 S Mora	Ν	Ν	Y	1	30	2.07
4/5/2012	21547 Harvest Hills Prior Lake	Ν	Ν	Y	1	90	4.65
4/24/2012	20195 Holyoke Ave Lakeville	Ν	Ν	Y	1	60	74.40
4/26/2012	123 NE 7th St Grand Rapids	Ν	Ν	Y	1	20	0.19
4/30/2012	50940Miller Highway Hermantown	Ν	Ν	Y	100	540	1.24
MAY							
5/15/2012	215 Highway 56 Hayfield	Ν	Ν	Y	1	93	2.46
5/26/2012	1619 Wishire Ct NE Rochester	Ν	N	Y	1	150	0.72

5/25/2012	418 E Eyota St Dover	N	N	Y	6	120	0.00
5/7/2012	350 S Edquist Appleton	N	N	Ý	1	15	0.26
5/30/2012	507 S Hwy Jackson	N	Ý	N	1	30	0.72
5/18/2012	940 W 4th St Rush City	N	N	Y	1	60	0.00
5/5/2012	1301 Trapp Rd Eagan	N	N	Ý	1	15	7.57
5/30/2012	15100 Cty Rd 23 Verndale	N	N	Y	1	160	0.46
5/2/2012	1237 Lake Ave Detroit Lakes	N	N	Y	1	60	2.15
5/16/2012	719 19th St NW Bemidji	N	N	Y	1	10	2.87
JUNE	· · · · · · · · · · · · · · · · · · ·						
6/1/2012	312 N 4th Ave Biwabik	N	N	Y	1	30	0.27
6/28/2012	100 Block E Main Ada	N	N	Y	1	20	0.00
6/25/2012	3259 Terminal Dr Eagan	N	N	Y	1	135	144.85
6/28/2012	5204 Oriole Dr Farmington	N	N	Y	1	15	4.65
6/26/2012	27920 Danville Ave Castle Rock	N	N	Y	1	190	148.80
6/24/2012	1654 Hickory Ln Eagan	N	N	Y	4	180	29.52
6/5/2012	2700 Schaeffer Ln NE Rochester	N	N	Y	1	60	5.36
6/4/2012	626 Chalet Dr Rochester	N	Y	N	1	60	1.12
6/12/2012	532 Willow Bend Ln SW Rochester	N	N	Y	2	40	24.16
6/20/2012	1104 6th Ave NW Rochester	N	Y	N	1	60	8.58
6/16/2012	6810 Chester Heights Rochester	N	N	Y	1	30	1.12
6/12/2012	705 3rd Ave Windom	N	N	Y	1	20	8.96
6/26/2012	857 Hwy 12 Ortonville	N	N	Y	1	30	0.00
6/12/2012	205 3rd St E Canby	N	N	Y	1	50	16.40
JULY							
7/9/2012	992 Gary St Calumet	N	N	Y	1	30	0.21
7/1/2012	5668 Miller Hwy Pike Lake	N	N	Y	1	90	0.31
7/13/2012	3113 Cty Rd 112 International Falls	N	N	Y	1	15	3.10
7/14/2012	4846 Morris Thomas Rd Hermantown	N	N	Y	1	5	0.00
7/16/2012	19563 Gama Beach Rd Grand Rapids	N	N	Y	2	150	6.70
7/18/2012	18394 520th St Deer River	N	N	Y	1	30	8.04
7/18/2012	1531 E 3rd Ave International Falls	N	N	Y	1	27	6.20
7/26/2012	1407 E Hwy 2 Grand Rapids	N	N	Y	1	40	10.72
7/9/2012	123 Carlton Dr SW Rochester	N	N	Y	1	90	21.00
7/19/2012	300 3rd Ave NW Pine Island	N	N	Y	1	120	0.00
7/31/2012	25510 625th St Kasson	N	N	Y	1	5	1.34
7/25/2012	120 E Main west Concord	N	N	Y	1	240	5.25
7/9/2012	14155 Abbeyfield Ct Rosemount	N	N	Y	1	60	18.60
7/23/2012	3805 Windcrest Ct Eagan	N	N	Y	2	120	2.46

7/40/0040					4		40.00
7/12/2012	3430 200th St W Farmington	N	N	Y	1	60	19.38
7/10/2012	37887 Lincoln Trail North Branch	N	N	Y	1	60	4.34
7/17/2012	5400 Oriole Dr Farmington	N	N	Y	1	15	4.02
7/18/2012	5417 Oriole Dr Farmington	N	N	Y	1	20	1.95
7/2/2012	2038 Knollwodd Dr Fairmont	N	N	Y	1	90	0.93
7/5/2012	1378 Springfield Pkwy Jackson	N	N	Y	1	143	32.75
7/3/2012	Weave & Cleveland Welcome	N	N	Y	7	60	14.58
7/9/2012	418 Weaver St Welcome	N	N	Y	9	1020	3.60
7/23/2012	216 1/2 Cleveland St Welcome	N	N	Y	1	60	0.80
7/24/2012	1208 River Rd Windom	N	N	Y	2	1020	45.80
7/12/2012	1156 River Rd Windom	N	N	Y	1	1200	0.24
7/24/2012	101 Shady Ln Jackson	N	N	Y	1	60	0.69
7/2/2012	111 Benjamin Jackson	N	N	Y	3	1140	111.90
7/20/2012	300 Block Hwy 9 Ada	N	N	Y	1	0	0.00
7/22/2012	1332 E Shore Dr Detroit Lakes	N	N	Y	2	20	4.65
7/23/2012	500 8th Ave Ironton	N	N	Y	1	0	0.00
7/31/2012	506 SE 7th Ave Roseau	N	N	Y	1	120	0.00
AUGUST		N	N	Y			
8/12/2012	609 18th St Cloquet	N	N	Y	1	120	8.67
8/16/2012	2014 Town Rd 416 Ranier	N	N	Y	1	5	1.55
8/17/2012	607 18th St Cloquet	N	N	Y	1	60	8.67
8/24/2012	Golf Course and Horseshoe Rd Cloquet	N	N	Y	74	245	30.20
8/8/2012	627 5th St SW Rochester	N	Y	N	1	60	4.29
8/8/2012	1408 Pahama Ct Rochester	N	Y	N	14	240	29.22
8/14/2012	7130 SE 30th St Rochester	N	N	Y	1	349	0.14
8/14/2012	1213 S Broadway Rochester	N	N	Y	1	90	0.10
8/21/2012	801 S Broadway Rochester	1	N	Y	1	180	0.46
8/15/2012	726 3rd St NW Rochester	N	N	Y	1	90	2.15
8/27/2012	30 Civic Center Dr Rochester	N	Y	N	1	30	17.19
8/30/2012	25055 608th St Mantorville	N	Y	N	1	20	5.36
8/1/2012	723 NW 2nd St Rochester	N	N	Y	1	360	2.86
8/9/2012	110 Center Ave S Hayfield	N	N	Y	2	345	160.08
8/2/2012	1392 Cleome Ln Eagan	N	Y	N	1	10	2.46
8/26/2012	350 Johnson Ave Pine City	N	N	Y	1	10	0.47
8/29/2012	1692 Covington Ln Eagan	N	N	Y	2	120	7.38
8/24/2012	669 Coventry Pkwy Eagan	N	N	Y	1	60	9.84
8/6/2012	14640 Diamond Path Rosemount	N	N	Y	1	120	22.92
8/15/2012	419 6th St Pine City	N	Ý	N	2	150	6.76

B2/20/2012         IE         Fit Main St Lamberton         N         N         Y         1         60         2.73           8/6/2012         511 Main St Lamberton         N         N         N         Y         1         5         22.32           8/27/2012         1429 6th Ave Mountain Lake         N         N         Y         1         60         3.20           8/28/2012         1403 6th Ave Mountain Lake         N         N         Y         1         260         3.20           8/28/2012         1403 6th Ave Mountain Lake         N         N         Y         1         260         3.20           9/10/2012         1715 17th St Int Falls         N         N         Y         1         30         9.30           9/11/2012         1711 17th Xirpot Rd Cloquet         N         N         Y         1         30         9.30           9/11/2012         106 Sharon St Buhl         N         N         Y         1         30         4.02           9/202012         104 91 25 ts Rochester         N         N         Y         1         30         33.21           9/14/2012         10 51 5 ts Kasson         N         N         Y         1         <	0/7/0040			N N			00	4.47	1
8/6/2012         511 Main St Lamberton         N         N         N         Y         1         5         22.32           8/27/2012         14/29 6th Ave Mountain Lake         N         N         N         Y         1         60         3.20           8/27/2012         14/30 6th Ave Mountain Lake         N         N         Y         1         260         3.20           9/10/2011         1108 Ugstad Rd Proctor         N         N         Y         1         1200         7.75           9/11/2012         1751 Afront Rd Cloquet         N         N         Y         1         240         0.000           9/11/2012         1571 Afront Rd Cloquet         N         N         Y         1         240         0.000           9/11/2012         160 Sharon St Buhl         N         N         Y         1         90         0.000           9/14/2012         100 Sharon St Buhl         N         N         Y         1         60         4.02           9/20/2012         248 O Chatled St Dover         N         N         Y         1         96         5.78           9/14/2012         100 9 1/2 St SE Rochester         N         N         Y         1	8/7/2012	10005 205th St W Rosmeount	N	Y	N	1	30	1.17	
8/27/2012         1429 6th Ave Mountain Lake         N         N         Y         1         60         3.20           8/28/2012         14/403 6th Ave Mountain Lake         N         N         Y         1         260         3.20           9/4/2011         1108 Ugstad Rd Proctor         N         N         Y         1         260         3.20           9/10/2012         715 17h St In Falls         N         N         Y         1         30         9.30           9/11/2012         1571 Airport Rd Cloquet         N         N         Y         1         30         9.30           9/11/2012         1609 18h St Cloquet         N         N         Y         1         60         4.02           9/20/2012         444 3rd St Int Falls         N         N         Y         1         60         4.02           9/6/2012         10 9 1/2 St SE Rochester         N         N         Y         267         390         39.60           9/14/2012         109 5 tt SE Rochester         N         N         Y         1         96         5.76           9/14/2012         103 5t SE Monchester         N         N         Y         1         10         1.66						-			
B/28/2012         1403 6th Ave Mountain Lake         N         Y         1         260         3.20           SEFTEMBER         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -									
SEPTEMBER         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D						-			
9/4/2011         1108 Ugstad Rd Proctor         N         N         Y         3         35         173.60           9/10/2012         715 17th St Int Falls         N         N         N         Y         1         120         7.75           9/11/2012         1721 151 Xi Int Falls         N         N         Y         1         30         9.30           9/11/2012         1571 Airport Rd Cloquet         N         N         Y         1         240         0.00           9/11/2012         106 Sharon St Buhl         N         N         Y         1         90         0.00           9/11/2012         106 Sharon St Buhl         N         N         Y         1         60         4.02           9/20/2012         144 4 3rd St Int Falls         N         N         Y         2         115         0.29           9/5/2012         109 19 1/2 St SE Rochester         N         N         Y         267         390         33.21           9/8/2012         1355 East Ln LaCrescent         N         N         Y         1         96         5.78           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         60         0.		1403 6th Ave Mountain Lake	N	N	Y	1	260	3.20	
9/10/2012         715 17h St Int Falls         N         N         Y         1         120         7.75           9/11/2012         1721 1st Ave E Int Falls         N         N         N         Y         1         30         9.30           9/11/2012         1571 Airport Rd Cloquet         N         N         Y         1         240         0.00           9/11/2012         609 18th St Cloquet         N         N         Y         1         90         0.00           9/11/2012         609 18th St Cloquet         N         N         Y         1         600         4.02           9/20/2012         10 9 1/2 St SE Rochester         N         N         Y         2         6.01           9/8/2012         21 8 N Chatfield St Dover         N         N         Y         1         96         5.78           9/14/2012         1305 East Ln LaCrescent         N         N         Y         1         210         1.06         5.54           9/8/2012         1135 E Rochester         N         N         Y         1         120         1.08           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         60         0.54									
9/11/2012         1721 1st Ave E Int Falls         N         N         Y         1         30         9.30           9/11/2012         1571 Airport Rd Cloquet         N         N         Y         1         240         0.00           9/11/2012         1609 18th St Cloquet         N         N         Y         1         90         0.00           9/11/2012         106 Sharon St Buhl         N         N         Y         1         600         4.02           9/20/2012         444 3rd St Int Falls         N         N         Y         1         600         4.02           9/5/2012         10 9 1/2 St SE Rochester         N         N         Y         N         3         42         6.01           9/8/2012         218 N Chattleld St Dover         N         N         Y         1         96         5.78           9/14/2012         100 9th St SE Kasson         N         N         Y         1         120         1.08           9/14/2012         2nd St & Th Ave Rochester         N         N         Y         1         120         1.08           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         510						-			
9/11/2012         1571 Airport Rd Cloquet         N         N         Y         1         240         0.00           9/11/2012         609 18th St Cloquet         N         N         Y         1         90         0.00           9/11/2012         609 18th St Cloquet         N         N         Y         1         60         4.02           9/20/2012         144 3rd St Int Falls         N         N         Y         2         115         0.29           9/5/2012         10 9 1/2 St SE Rochester         N         N         Y         2         115         0.29           9/5/2012         10 9 th St SE Kasson         N         N         Y         267         390         39.60           9/14/2012         100 9 th St SE Kasson         N         N         Y         1         96         5.78           9/14/2012         1355 East Ln LaCrescent         N         N         Y         1         120         1.08           9/14/2012         1355 East Ave Rochester         N         N         Y         1         510         5.54           9/8/2012         117 E Caledonia St Caledonia         N         N         Y         1         60         4.65 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
9/11/2012         609         18th St Cloquet         N         N         Y         1         90         0.00           9/14/2012         106         5haron St Buhl         N         N         Y         1         60         4.02           9/20/2012         104         3t Int Falls         N         N         Y         2         115         0.29           9/5/2012         109         1/2 St SE Rochester         N         Y         N         3         42         6.01           9/6/2012         218         N Chaffield St Dover         N         N         Y         1         96         5.78           9/14/2012         100 9th St SE Kasson         N         N         Y         1         96         5.78           9/14/2012         2355 East Ln LaCrescent         N         N         Y         1         90         33.21           9/14/2012         2955 21st SE Rochester         N         N         Y         1         60         0.54           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         60         4.65           9/9/2012         11300 235th St E Lakeville         N         N <t< td=""><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td></t<>						1			
9/14/2012         106 Sharon St Buhl         N         N         Y         1         60         4.02           9/20/2012         1443 rd St Int Falls         N         N         Y         2         1115         0.29           9/5/2012         109 1/2 St SE Rochester         N         Y         N         3         42         6.01           9/8/2012         218 N Chatfield St Dover         N         N         Y         1         96         5.78           9/14/2012         100 sth St SE Kasson         N         N         Y         1         96         5.78           9/14/2012         1355 East Ln LaCrescent         N         N         Y         1         96         5.78           9/14/2012         955 21st SE Rochester         N         N         Y         1         120         1.08           9/14/2012         723 2nd St NW Rochester         N         N         Y         1         50         0.00           9/8/2012         1117 E Caledonia St Caledonia         N         N         Y         1         50         0.00           9/8/2012         1330 ubut St Farmington         N         N         Y         1         60         10.20						1			
9/20/2012         444 3rd St Int Falls         N         N         Y         2         115         0.29           9/5/2012         10 9 1/2 St SE Rochester         N         Y         N         3         42         6.01           9/8/2012         218 N Chatfield St Dover         N         N         Y         267         390         39.60           9/14/2012         1355 East Ln LaCrescent         N         N         Y         1         96         5.78           9/14/2012         1355 East Ln LaCrescent         N         N         Y         1         96         5.78           9/14/2012         2955 21st SE Rochester         N         N         Y         1         120         1.08           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         50         0.00           9/4/2012         1117 E Caledonia St Caledonia         N         N         Y         1         50         0.00           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         60         4.65           9/28/2012         1313 Walnut St Farmington         N         N         Y         1         60 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
9/5/2012         10 9 1/2 St SE Rochester         N         Y         N         3         42         6.01           9/8/2012         218 N Chatfield St Dover         N         N         Y         267         390         39.60           9/14/2012         100 9th St SE Kasson         N         N         Y         1         96         5.78           9/14/2012         1355 East Ln LaCrescent         N         N         Y         19         45         11.46           9/8/2012         955 21st SE Rochester         N         N         Y         1         600         0.54           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         5         0.00           9/8/2012         11300 235th St Lakeville         N         N         Y         1         60         4.65           9/9/2012         11300 235th St E Lakeville         N         N         Y         1         60         10.20           9/6/2012         1696 Woodgate Ln Eagan         N         N         Y         1         60         2.46           9/19/2012         213 Cleveland Welcome         N         N         Y         1         60         24.40 <td></td> <td></td> <td>N</td> <td></td> <td></td> <td>1</td> <td></td> <td>4.02</td> <td></td>			N			1		4.02	
9/8/2012         218 N Chatfield St Dover         N         N         Y         267         390         39.60           9/14/2012         100 9th St SE Kasson         N         N         N         Y         1         96         5.78           9/14/2012         1355 East Ln LaCrescent         N         N         Y         3         90         33.21           9/14/2012         2nd St & 9Th Ave Rochester         N         N         Y         1         120         1.08           9/14/2012         2955 21st SE Rochester         N         N         Y         1         120         1.08           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         60         0.54           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         60         4.65           9/4/2012         17280 Sunset Trail Pine City         N         N         Y         1         60         4.65           9/9/2012         1130 0.235th St E Lakeville         N         N         Y         1         60         2.46           9/19/2012         131 Walnut St Farmington         N         N         Y         1									
9/14/2012         100 9th St SE Kasson         N         N         Y         1         96         5.78           9/14/2012         1355 East Ln LaCrescent         N         N         Y         3         90         33.21           9/14/2012         2nd St & 9Th Ave Rochester         N         N         Y         19         45         11.46           9/8/2012         955 21st SE Rochester         N         N         Y         1         120         1.08           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         60         0.54           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         60         4.65           9/4/2012         17280 Sunset Trail Pine City         N         N         Y         1         60         4.65           9/4/2012         11300 235th St E Lakeville         N         N         Y         1         60         10.20           9/6/2012         1696 Woodgate Ln Eagan         N         N         Y         1         45         0.40           9/27/2012         908 Milwaukee Lakefield         N         N         Y         1         1080		10 9 1/2 St SE Rochester	N			3	42	6.01	
9/14/2012         1355 East Ln LaCrescent         N         N         Y         3         90         33.21           9/14/2012         2nd St & 9Th Ave Rochester         N         N         Y         19         45         11.46           9/8/2012         955 21st SE Rochester         N         N         Y         1         120         1.08           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         60         0.54           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         510         5.54           9/4/2012         17280 Sunset Trail Pine City         N         N         Y         1         60         4.65           9/9/2012         8896 197th St Lakeville         N         N         Y         1         60         4.65           9/9/2012         130 Walnut St Farmington         N         N         Y         1         60         2.46           9/19/2012         213 Cleveland Welcome         N         N         Y         1         60         24.40           9/27/2012         908 Milwaukee Lakefield         N         N         Y         1         1080 <td< td=""><td></td><td></td><td>N</td><td></td><td></td><td>267</td><td></td><td></td><td></td></td<>			N			267			
9/14/2012         2nd St & 9Th Ave Rochester         N         N         Y         19         45         11.46           9/8/2012         955 21st SE Rochester         N         N         Y         1         120         1.08           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         60         0.54           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         510         5.54           9/4/2012         17280 Sunset Trail Pine City         N         N         Y         1         60         4.65           9/9/2012         11300 235th St E Lakeville         N         N         Y         1         60         4.65           9/9/2012         11300 235th St E Lakeville         N         N         Y         1         60         10.20           9/6/2012         1696 Woodgate Ln Eagan         N         N         Y         1         60         24.46           9/19/2012         213 Cleveland Welcome         N         N         Y         1         60         24.40           9/25/2012         1317 2nd Ave Mountain Lake         N         N         Y         1         1080	9/14/2012	100 9th St SE Kasson	N	N	Y	1	96	5.78	
9/8/2012         955 21st SE Rochester         N         N         Y         1         120         1.08           9/11/2012         723 2nd St NW Rochester         N         N         Y         1         60         0.54           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         60         0.54           9/4/2012         17280 Sunset Trail Pine City         N         N         Y         1         5         0.00           9/8/2012         11300 235th St E Lakeville         N         N         Y         1         60         4.65           9/9/2012         11300 235th St E Lakeville         N         N         Y         1         60         10.20           9/6/2012         1696 Woodgate Ln Eagan         N         N         Y         1         45         0.40           9/25/2012         131 7 2nd Ave Mountain Lake         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         Y         1         1080         77.50           9/10/22/2012         301 3rd St Nashwauk         N         Y         N         1         100	9/14/2012	1355 East Ln LaCrescent	N	N	Y	3	90	33.21	
9/11/2012         723 2nd St NW Rochester         N         N         Y         1         60         0.54           9/28/2012         1117 E Caledonia St Caledonia         N         N         Y         1         510         5.54           9/4/2012         17280 Sunset Trail Pine City         N         N         Y         1         5         0.00           9/8/2012         8896 197th St Lakeville         N         N         Y         1         60         4.65           9/9/2012         11300 235th St E Lakeville         N         N         Y         1         60         10.20           9/12/2012         313 Walnut St Farmington         N         N         Y         N         2         60         2.46           9/19/2012         213 Cleveland Welcome         N         N         Y         1         455         0.40           9/25/2012         1317 2nd Ave Mountain Lake         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         1         1080         77.50           9/15/2012         213 St SE 1st St Grand Rapids         N         N         Y         1	9/14/2012	2nd St & 9Th Ave Rochester	N	N	Y	19	45	11.46	
9/28/2012       1117 E Caledonia St Caledonia       N       N       Y       1       510       5.54         9/4/2012       17280 Sunset Trail Pine City       N       N       Y       1       5       0.00         9/8/2012       8896 197th St Lakeville       N       N       Y       1       60       4.65         9/9/2012       11300 235th St E Lakeville       N       N       Y       1       105       7.75         9/12/2012       313 Walnut St Farmington       N       N       Y       1       60       10.20         9/6/2012       1696 Woodgate Ln Eagan       N       N       Y       1       45       0.40         9/12/2012       213 Cleveland Welcome       N       N       Y       1       60       24.40         9/12/2012       1317 2nd Ave Mountain Lake       N       N       Y       1       1080       77.50         9/15/2012       213 Elm St Tracy       N       N       N       Y       1       1080       77.50         9/15/2012       213 Elm St Grand Rapids       N       N       Y       1       1080       77.50         10/11/2012       315 SE 1st St Grand Rapids       N       N	9/8/2012	955 21st SE Rochester	N	N	Y	1	120	1.08	1
9/4/2012         17280 Sunset Trail Pine City         N         N         Y         1         5         0.00           9/8/2012         8896 197th St Lakeville         N         N         Y         1         60         4.65           9/9/2012         11300 235th St E Lakeville         N         N         Y         1         105         7.75           9/12/2012         313 Walnut St Farmington         N         N         Y         1         60         10.20           9/6/2012         1696 Woodgate Ln Eagan         N         Y         N         2         60         2.46           9/19/2012         213 Cleveland Welcome         N         N         Y         1         60         24.40           9/25/2012         1317 2nd Ave Mountain Lake         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         Y         1         1080         77.50           9/15/2012         213 St St St Grand Rapids         N         N         Y         1         1000         77.50           10/11/2012         315 SE 1st St Grand Rapids         N         N         Y         1         15 <td< td=""><td>9/11/2012</td><td>723 2nd St NW Rochester</td><td>N</td><td>N</td><td>Y</td><td>1</td><td>60</td><td>0.54</td><td>1</td></td<>	9/11/2012	723 2nd St NW Rochester	N	N	Y	1	60	0.54	1
9/8/2012         8896 197th St Lakeville         N         N         Y         1         60         4.65           9/9/2012         11300 235th St E Lakeville         N         N         Y         1         105         7.75           9/12/2012         313 Walnut St Farmington         N         N         Y         1         60         10.20           9/6/2012         1696 Woodgate Ln Eagan         N         Y         N         2         60         2.46           9/19/2012         213 Cleveland Welcome         N         N         Y         1         60         24.40           9/25/2012         1317 2nd Ave Mountain Lake         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         1         10         House destroyed           0CTOBER	9/28/2012	1117 E Caledonia St Caledonia	N	N	Y	1	510	5.54	1
9/9/2012         11300 235th St E Lakeville         N         N         Y         1         105         7.75           9/12/2012         313 Walnut St Farmington         N         N         Y         1         60         10.20           9/6/2012         1696 Woodgate Ln Eagan         N         Y         N         2         60         2.46           9/19/2012         213 Cleveland Welcome         N         N         Y         1         60         24.40           9/25/2012         1317 2nd Ave Mountain Lake         N         N         Y         1         1080         27.50           9/15/2012         213 Elm St Tracy         N         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Grand Rapids         N         N         N         1         House destroyed           OCTOBER	9/4/2012	17280 Sunset Trail Pine City	N	N	Y	1	5	0.00	
9/12/2012         313 Walnut St Farmington         N         N         Y         1         60         10.20           9/6/2012         1696 Woodgate Ln Eagan         N         Y         N         2         60         2.46           9/19/2012         213 Cleveland Welcome         N         N         Y         1         45         0.40           9/19/2012         213 Cleveland Welcome         N         N         Y         1         60         24.40           9/25/2012         1317 2nd Ave Mountain Lake         N         N         Y         1         60         24.40           9/27/2012         908 Milwaukee Lakefield         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         1         House destroyed           OCTOBER	9/8/2012	8896 197th St Lakeville	N	N	Y	1	60	4.65	1
9/6/2012         1696 Woodgate Ln Eagan         N         Y         N         2         60         2.46           9/19/2012         213 Cleveland Welcome         N         N         N         Y         1         45         0.40           9/25/2012         1317 2nd Ave Mountain Lake         N         N         Y         1         60         24.40           9/25/2012         908 Milwaukee Lakefield         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         N         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         N         1         1080         77.50           9/15/2012         315 SE 1st St Grand Rapids         N         N         N         Y         1         15         0.29           10/22/2012         301 3rd St Nashwauk         N         Y         N         1         60         0.00           10/31/2012         34336 Chestnut Cir Moos Lake         N         N         Y         1         30         0.27           10/3/2012         61057 252nd Ave Mnatorville         N         N	9/9/2012	11300 235th St E Lakeville	N	N	Y	1	105	7.75	1
9/19/2012         213 Cleveland Welcome         N         N         Y         1         45         0.40           9/25/2012         1317 2nd Ave Mountain Lake         N         N         Y         1         60         24.40           9/25/2012         908 Milwaukee Lakefield         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         N         1         House destroyed           OCTOBER               15         0.29           10/11/2012         315 SE 1st St Grand Rapids         N         N         Y         1         15         0.29           10/22/2012         301 3rd St Nashwauk         N         Y         N         1         60         0.00           10/31/2012         34336 Chestnut Cir Moos Lake         N         N         Y         1         30         0.27           10/3/2012         61057 252nd Ave Mnatorville         N         N         Y         1         90         7.44           10/24/2012         200 2nd St Claremont         N         N         Y         1         240         1.08 <td>9/12/2012</td> <td>313 Walnut St Farmington</td> <td>N</td> <td>N</td> <td>Y</td> <td>1</td> <td>60</td> <td>10.20</td> <td></td>	9/12/2012	313 Walnut St Farmington	N	N	Y	1	60	10.20	
9/25/2012       1317 2nd Ave Mountain Lake       N       N       Y       1       60       24.40         9/27/2012       908 Milwaukee Lakefield       N       N       Y       1       1080       77.50         9/15/2012       213 Elm St Tracy       N       N       N       N       1       House destroyed         OCTOBER          N       Y       1       15       0.29         10/11/2012       315 SE 1st St Grand Rapids       N       N       Y       1       160       0.00         10/22/2012       301 3rd St Nashwauk       N       Y       N       1       60       0.27         10/31/2012       34336 Chestnut Cir Moos Lake       N       N       Y       1       30       0.27         10/3/2012       61057 252nd Ave Mnatorville       N       N       Y       1       90       7.44         10/24/2012       200 2nd St Claremont       N       N       Y       1       75       0.06         10/19/2012       2003 NE Parkwood Hills Dr Rochester       N       N       Y       1       240       1.08	9/6/2012	1696 Woodgate Ln Eagan	N	Y	N	2	60	2.46	
9/27/2012         908 Milwaukee Lakefield         N         N         Y         1         1080         77.50           9/15/2012         213 Elm St Tracy         N         N         N         N         1         House destroyed           OCTOBER           N         N         Y         1         155         0.29           10/11/2012         315 SE 1st St Grand Rapids         N         N         Y         1         155         0.29           10/22/2012         301 3rd St Nashwauk         N         Y         N         1         600         0.00           10/31/2012         34336 Chestnut Cir Moos Lake         N         N         Y         1         30         0.27           10/3/2012         61057 252nd Ave Mnatorville         N         N         Y         1         90         7.44           10/24/2012         200 2nd St Claremont         N         N         Y         1         75         0.06           10/19/2012         2003 NE Parkwood Hills Dr Rochester         N         N         Y         1         240         1.08	9/19/2012	213 Cleveland Welcome	N	N	Y	1	45	0.40	
9/15/2012       213 Elm St Tracy       N       N       N       N       1       House destroyed         OCTOBER       Image: Comparison of the system of t	9/25/2012	1317 2nd Ave Mountain Lake	N	N	Y	1	60	24.40	
OCTOBER         N         N         Y         1         15         0.29           10/11/2012         315 SE 1st St Grand Rapids         N         N         Y         1         15         0.29           10/22/2012         301 3rd St Nashwauk         N         Y         N         1         60         0.00           10/31/2012         34336 Chestnut Cir Moos Lake         N         N         Y         1         30         0.27           10/3/2012         61057 252nd Ave Mnatorville         N         N         Y         1         90         7.44           10/24/2012         200 2nd St Claremont         N         N         Y         1         75         0.06           10/19/2012         2003 NE Parkwood Hills Dr Rochester         N         N         Y         1         240         1.08	9/27/2012	908 Milwaukee Lakefield	N	N	Y	1	1080	77.50	
10/11/2012315 SE 1st St Grand RapidsNNY1150.2910/22/2012301 3rd St NashwaukNYN1600.0010/31/201234336 Chestnut Cir Moos LakeNNY1300.2710/3/201261057 252nd Ave MnatorvilleNNY1907.4410/24/2012200 2nd St ClaremontNNY1750.0610/19/20122003 NE Parkwood Hills Dr RochesterNNY12401.08	9/15/2012	213 Elm St Tracy	N	N	N	1			House destroyed
10/22/2012         301 3rd St Nashwauk         N         Y         N         1         60         0.00           10/31/2012         34336 Chestnut Cir Moos Lake         N         N         Y         1         30         0.27           10/3/2012         61057 252nd Ave Mnatorville         N         N         Y         1         90         7.44           10/24/2012         200 2nd St Claremont         N         N         Y         1         75         0.06           10/19/2012         2003 NE Parkwood Hills Dr Rochester         N         N         Y         1         240         1.08	OCTOBER								
10/31/2012         34336 Chestnut Cir Moos Lake         N         N         Y         1         30         0.27           10/3/2012         61057 252nd Ave Mnatorville         N         N         Y         1         90         7.44           10/24/2012         200 2nd St Claremont         N         N         Y         1         75         0.06           10/19/2012         2003 NE Parkwood Hills Dr Rochester         N         N         Y         1         240         1.08	10/11/2012	315 SE 1st St Grand Rapids	N	N	Y	1	15	0.29	
10/3/2012         61057 252nd Ave Mnatorville         N         N         Y         1         90         7.44           10/24/2012         200 2nd St Claremont         N         N         Y         1         75         0.06           10/19/2012         2003 NE Parkwood Hills Dr Rochester         N         N         Y         1         240         1.08	10/22/2012	301 3rd St Nashwauk	N	Y	Ν	1	60	0.00	
10/24/2012         200 2nd St Claremont         N         N         Y         1         75         0.06           10/19/2012         2003 NE Parkwood Hills Dr Rochester         N         N         Y         1         240         1.08	10/31/2012	34336 Chestnut Cir Moos Lake	N	N	Y	1	30	0.27	1
10/19/2012 2003 NE Parkwood Hills Dr Rochester N N Y 1 240 1.08	10/3/2012	61057 252nd Ave Mnatorville	N	N	Y	1	90	7.44	1
10/19/2012 2003 NE Parkwood Hills Dr Rochester N N Y 1 240 1.08	10/24/2012	200 2nd St Claremont	N	N	Y	1	75	0.06	1
	10/19/2012	2003 NE Parkwood Hills Dr Rochester	N	N	Y	1	240	1.08	1
	10/17/2012	116 E Main Hayfield	N	N	Y	1	65	17.18	

10/2/2012	1317 2nd Ave Mt Lake	N	Ν	Y	1	15	2.70
10/4/2012	1313 2nd Ave Mt Lake	N	Ν	Y	1	15	2.70
10/9/2012	401 Milwaukee Lakefield	N	Ν	Y	1	60	1.10
10/22/2012	262 State St Jackson	N	Ν	Y	1	420	0.51
10/6/2012	9596 Main St Elko	N	Ν	Y	1	60	1.17
10/13/2012	14429 565th St West Concord	N	Ν	Y	1	10	0.47
10/9/2012	3500 Dodd Rd Eagan	N	Y	Ν	1	90	128.76
10/12/2012	190 Shorewood Detroit Lakes	N	Ν	Y	1	15	4.65
10/2/2012	23402 Cross Dr Deerwood	N	Ν	Y	1	68	18.22
NOVEMBER							
11/1/2012	87 Outer Dr Silver Bay	N	Y	Ν	1	20	0.00
11/13/2012	702 NE 9th Ave Grand Rapids	N	Ν	Y	1	100	2.68
11/30/2012	1504 Edge Dr Cloquet	N	Ν	Y	1	150	0.78
11/6/2012	839 5th Ave SE Rochester	N	Y	Ν	1	60	0.14
11/13/2012	2138 Gemini Dr SW Rochester	N	Ν	Y	1	90	1.55
11/27/2012	416 State St West Concord	N	Ν	Y	1	315	22.03
11/1/2012	235 State St Jackson	N	Ν	Y	1	960	109.89
11/23/2012	37303 600th Ave Mt Lake	N	Ν	Y	1	60	39.41
11/8/2012	132 2nd St NE Crosby	N	Y	Ν	1	90	0.00
DECEMBER							
12/5/2012	1308 Hwy 33 Cloquet	N	Ν	Y	1	480	515.04
12/4/2012	2930 146th St W Rosemount	N	Ν	Y	1	120	0.00
12/4/2012	4462 Dodd Rd Eagan	N	Ν	Y	1	15	0.00
12/4/2012	24232 Pillsbury Lakeville	N	Ν	Y	1	150	304.50

### Service interruptions

2012													
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Total System	3	0	5	13	10	14	31	25	23	16	9	4	153
Integrity Company employee or company	0	0	0	0	0	0	0	0	0	0	0	0	0
contractor damage caused by	0	0	0	0	1	2	0	7	2	2	3	0	17
other	3	0	5	13	9	12	31	18	21	14	6	4	136

							1
		Outage	outage caused by MERC employee or	outage	Number of		
		caused by	MERC	caused by	customers	outage	
DATE	Address	, system issue	contractor	other	affected	duration	comments
1/19/2012	125 E Center Oronoco	N	N	Y	1	9.15 hours	vehicle ran off the road and hit a residential meter
5/18/2012	Cloquet	Ν	N	Y	2	0	Transmission pipeline experienced low pressure. Only 2 customers affected had alernate fuel source.
6/26/2012	27920 Danville Ave Castle Rock	Ν	Ν	Y	1	3.16	Service line severed, excavator had not requested a locate.
7/3/2012	Rochester International Airport	Ν	Ν	Ν	0	0	The service to the airport has it's own odorizer. During low load periods "slugging" can occur. Slugging is where odorant pools and eventually passes through the line. The liquid odorant can be easily detected through any of the gas burners. This is what occurred resulting in the the fire department evacuating the airport.
8/13/2012	1771 Yankee Doodle Rd Eagan	Y	Ν	Ν	0	0	Measurement Tech was testing large volume meter. When tech went to trun the inlet valve on the valve failed (broke). 2 buildings were evacuated while the valve was being replaced.
9/10/2012	218 N Chatfield St Dover	Ν	Ν	Y	267	390	Contractor severed main feed serving Dover, requiring turning gas off to the town. The contractor was determined to be at fault.
9/11/2012	1571 Airport Rd Cloquet	Ν	Ν	Y	1	240	Contractor severed service line to nursing home, resulting in the nursing home being evacuated. The contractor was determined to be at fault.
9/15/2012	213 Elm St Tracy	Ν	N	Ν	1		Home destroyed due to explosion. Investigation on-going.
12/6/2012	20802 Kensington Blvd Lakeville	Ν	N	Ν	0	0	200 people evacuated from commercial building by business management. No gas in building, only 3 small leaks were found.

O&M expenses FERC Account 901 and 903 plus payroll taxes and benefits

2012												
	January	February	March	April	May	June	July	August September	October	November	December	Total
\$	550,986 \$	454,909 \$	642,276 \$	549,033 \$	513,547 \$	522,441 \$	485,439 \$	488,944 \$ 474,394	\$ 753,406	\$ 393,197	\$ 580,755 \$	6,409,328
		901000	903000									
		501000	505000									
	Jan-13 \$	38,652 \$	512,335									
	Feb-13 \$	54,616 \$	400,293									
	Mar-13 \$	50,879 \$	591,397									
	Apr-13 \$	16,416 \$	532,618									
	May-13 \$	35,304 \$	478,243									
	Jun-13 \$	33,300 \$	489,141									
	Jul-13 \$	33,505 \$	451,934									
	Aug-13 \$	38,405 \$	450,538									
	Sep-13 \$	53,248 \$	421,147									
	Oct-13 \$	59,593 \$	693,813									
	Nov-13 \$	43,001 \$	350,196									
	12-Dec \$	48,223 \$	532,532									
	\$	505,142 \$	5,904,186 \$	6,409,328								

# AFFIDAVIT OF SERVICE

STATE OF MINNESOTA ) ) ss COUNTY OF HENNEPIN )

Kristin M. Stastny hereby certifies that on the 1st day of May, 2013, on behalf of Minnesota Energy Resources Corporation (MERC) she electronically filed a true and correct copy of MERC's Service Quality Report on <u>www.edockets.state.mn.us</u>. Said documents were also served via U.S. mail and electronic service as designated on the attached service list.

<u>/s/ Kristin M. Stastny</u> Kristin M. Stastny

Subscribed and sworn to before me this 1<sup>st</sup> Day of May, 2013.

<u>/s/ Paula Bjorkman</u> Notary Public, State of Minnesota

Minnesota Energy Resources Corporation Docket No. G011/M-19-201

Atta	chm	ent	С

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name	Page 70
Michael	Ahern	ahern.michael@dorsey.co m	Dorsey & Whitney, LLP	50 S 6th St Ste 1500 Minneapolis, MN 554021498	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Julia	Anderson	Julia.Anderson@ag.state.m n.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
<i>l</i> ichael	Bradley	bradleym@moss- barnett.com	Moss & Barnett	4800 Wells Fargo Ctr 90 S 7th St Minneapolis, MN 55402-4129	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Daryll	Fuentes	N/A	USG	550 W. Adams Street Chicago, IL 60661	Paper Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Richard	Haubensak	RICHARD.HAUBENSAK@ CONSTELLATION.COM	Constellation New Energy Gas	Suite 200 12120 Port Grace Boulevard La Vista, NE 68128	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Amber	Lee	lee.amber@dorsey.com	Dorsey & Whitney LLP	Suite 1500 50 South Sixth Street Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
lohn	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Brian	Meloy	brian.meloy@leonard.com	Leonard, Street & Deinard	150 S 5th St Ste 2300 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	

Minnesota Energy Resources Corporation

# Docket No. G011/M-19-201

Attachment C

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name	Page 71
Andrew	Moratzka	apmoratzka@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	
Gregory	Walters	gjwalters@minnesotaenerg yresources.com	Minnesota Energy Resources Corporation	3460 Technology Dr. NW Rochester, MN 55901	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List	



MICHAEL J. AHERN (612) 340-2881 FAX (612) 340-2643 ahern.michael@dorsey.com

July 8, 2013

# **VIA ELECTRONIC FILING**

Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 Seventh Place East, Suite 350 St. Paul, MN 55101

> Re: Minnesota Energy Resources Corporation's (MERC's) 2012 Annual Service Quality Report (Report) Docket No. G007, 011/M-13-355 Reply Comments

Dear Dr. Haar:

On June 27, 2013, the Department of Commerce, Division of Energy Resources filed Comments recommending that the Minnesota Public Utilities Commission (Commission) accept MERC's Report pending the provision of additional information in MERC's Reply Comments. The specific information the Department requested is provided in detail in the following pages.

Thank you for your attention to this matter.

Sincerely yours,

/s/ Michael J. Ahern

Michael J. Ahern

# STATE OF MINNESOTA

# BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger J. Dennis O'Brien David C. Boyd Nancy Lange Betsy Wergin

Chair Commissioner Commissioner Commissioner Commissioner

In the Matter of the Review of Minnesota Energy Resources Corporation's (MERC's) 2012 Annual Service Quality Report Docket No. G007, 011/M-13-355

# **REPLY COMMENTS OF MINNESOTA ENERGY RESOURCES CORPORATION**

Minnesota Energy Resources Corporation (MERC) submits the attached Reply Comments in response to the June 27, 2013, Minnesota Department of Commerce, Division of Energy Resources (Department) Comments in this docket. In its Comments, the Department recommended that MERC provide additional information in its Reply Comments, specifically:

- A. an explanation for the large increase in meters not read for 6-12 months at the end of 2012;
- B. an explanation detailing why the average commercial installation time increased from
   2011 to 2012 and why April's average commercial response time was significantly longer
   than other months in 2012;
- C. a full explanation of why meter adjustment and service quality complaints increased between 2011 and 2012. Specifically, MERC should address whether the increase in complaints, in particular service quality, resulted from additional changes in how the Company classifies complaints or whether those complaints are due to operational or other issues;
- D. a full explanation as to why the percentage of complaints resolved upon initial inquiry decreased from 2011 to 2012. Specifically, MERC should address whether the decrease

in complaints resolved upon initial inquiry was due changes in the way the Company processes disputes or whether the increase was due to some other issue;

- E. a copy of MERC's May 1, 2012 customer complaint report required by Minnesota Rule
   7820.0500
- F. a detailed explanation of each unusual service interruption, as defined in the Department's comments on the Company's 2011 Service Quality Report; including, what caused the service interruption and why the event impacted several customers or lasted for an extended period of time;
- G. further information regarding the residential explosion that occurred on September 15,
   2012 and updates on the status and findings of the investigation;
- H. an explanation detailing why monthly O&M expenses in October 2012 were noticeably different than the monthly average.

Below, MERC discusses the additional information requested by the Department.

# A. The large increase in meters not read for 6-12 months at the end of 2012

With the warmer than normal weather in 2012, MERC was able to perform the annual farm tap inspections earlier in the year, with the annual readings taken at the time of the inspection. Typically, these inspections are performed throughout the summer. With the readings being done earlier in the year, MERC experienced more accounts having 6-12 month reads. Farm tap accounts provide their own monthly readings with MERC being required to perform an annual read.

# B. Why the average commercial installation time increased from 2011 to 2012 and why April's average commercial response time was significantly longer than other months in 2012

In reviewing these applications, it appears several of these requests — while ready for service — decided to wait until there was not a winter construction charge. The date was not updated which resulted in the appearance of service extensions being delayed.

C. Why meter adjustment and service quality complaints increased between 2011 and 2012. Specifically, whether the increase in complaints, in particular service quality, resulted from additional changes in how the Company classifies complaints or whether those complaints are due to operational or other issues

MERC initiated a new customer complaint tracking system late in 2011. Prior to that

time, complaints to the Call Center were manually tracked and MERC felt not as accurate as a

more automated process. Now the customer service representative needs to complete a pop up

window before moving in the system. This consists of indicating whether the call is regarding a

complaint and if so, what type of complaint. There is also an automated follow up that requires

the customer service representative to provide the required reporting information. MERC does

not believe there were any more particular types of complaints in 2012, but rather more

accurate reporting.

D. Why the percentage of complaints resolved upon initial inquiry decreased from 2011 to 2012. Specifically, whether the decrease in complaints resolved upon initial inquiry was due changes in the way the Company processes disputes or whether the increase was due to some other issue

As explained above, MERC believes the complaint reporting is now more accurate than

in the past and it would be difficult to compare with previous years.

# E. A copy of MERC's May 1, 2012 customer complaint report required by Minnesota Rule 7820.0500

A copy of MERC's May 1, 2012 customer complaint report is attached (Attachment A).

F. Explanation of each unusual service interruption, as defined in the Department's comments on the Company's 2011 Service Quality Report; including, what caused the service interruption and why the event impacted several customers or lasted for an extended period of time

Attachment B to these reply comments provides additional information regarding the

twelve "unusual service interruptions" identified, including what caused the service interruption

(where known), and why the event impacted several customers or lasted for an extended period

of time.

G. Further information regarding the residential explosion that occurred on September 15, 2012 and updates on the status and findings of the investigation

The investigation of the incident of September 15, 2012 at 213 Elm Street, Tracy, MN is not complete. Post-incident inspections and testing show that there were no natural gas leaks from jurisdictional piping or equipment.

# H. Why monthly O&M expenses in October 2012 were noticeably different than the monthly average

In September 2012, MERC booked the performance incentive payout to its third party billing and call center vendor, Vertex. This resulted in an accrual being booked in October which overstated the October O&M. There was a reversal done in November which resulted in that month's O&M being less than other months. When averaging October and November you will note the amounts are similar to the other months.

DATED this 8th day of July, 2013.

Respectfully submitted, DORSEY & WHITNEY LLP

<u>/s/ Michael J. Ahern</u> Michael J. Ahern 50 South Sixth Street Minneapolis, MN 55402 (612) 340-2881

Attorney for Minnesota Energy Resources Corporation

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment C Page 77 of 85

Attachment A

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment C Page 78 of 85

Minnesota Public Utilities Commission

**Consumer Affairs Office** 121 7th Place East #350 St. Paul, MN 55101-2147

Number Unresolved

### Attachment A



ANNUAL SUMMARY OF CUSTOMER COMPLAINTS For Year End 2012 Due May 1st Docket 377 In accordance with MINN. Reg. PSC 284

Name of Utility: Minnesota Energy Resources Address: 2665 145TH STREET WEST, ROSEMOUNT, MN Prepared By: Nancy Lilienthal Phone: 651-322-8902

	Residential		Com	mercial/Indus	trial		Interruptible
Number	Number	Number	Number	Number	Number	Number	Number
Received	Resolved	Unresolved	Received	Resolved	Unresolved	Received	Resolved

I. Complai A Servi

I. Complaint Type				_			
A. Service	1040	1040			51	51	
B. Billing	199	199			20	20	
C. Rates	280	280			21	21	
D. Rules	224	224			29	29	
TOTAL COMPLAINTS	1743	1743	0		121	121	

0	0	0	

#### NUMBER OF DISCONNECTS FOR NON-PAYMENT (By Month)

	1	2	3
JAN	73	17	
FEB	181	15	
MAR	383	44	
APR	632	78	
MAY	1688	70	
JUNE	1536	71	
JULY	1477	30	
AUG	594	18	
SEPT	270	7	
OCT	169	16	
NOV	13	3	
DEC	13	8	
TOTAL	7,029	377	0

Commercial/ Residential Industrial Interruptible

II. A. Number of Disconnections for Nonpayment

B. Number of Escrow Forms Filed (per PSC Rule 302G)

III. A. Total Number of Customers (year end)

B. Number of Customer's Added During Year

7,029	377	0
0	0	0
191,448	21,331	461
965	-29	-47

- 1. Residential
- 2 Commercial/Industrial
- 3. Interruptible

Minnesota Energy Resources Corporation Docket No. G011/M-19-201 Attachment C Page 79 of 85

Attachment B

Date	Address	Cause (System issue, MERC employee/contractor, or other)	Number of customers affected	Outage Duration	Cause of unusual service interruption; explanation of length and number of customers affected
1/7/2012	120 N Dugan Welcome	Other	1	1200	An individual hit a meter set with his car, causing damage and a leak. The service interruption occurred on a Saturday night. The business affected was closed over the weekend and a crew repaired it the next business day.
4/30/2012	310 Brown St Jackson	Other	1	1311	A third party-contractor was using a boring machine, pulling back pipe. Contactor did not verify the depth of the boring machine reamer and struck the underside of a service line, forcing the pipe upward and breaking the pipe at the threaded connection. The service interruption occurred at approximately 9pm. The area was made safe and a repair crew repaired the following day.
4/30/2012	50940 Miller Highway Hermantown	Other	100	540	On April 30, 2012 a contractor working on a sewer project hit a service tee on a 2 inch PE main breaking the service tee off the main and allowing gas to blow. The main was squeezed off upstream of the damage, resulting in an interruption of natural gas service to one hundred customers. After repairs were completed the main was placed back in-service and service restored to the impacted customers.
7/2/2012	111 Benjamin Jackson	Other	3	1140	An unknown service line was hit during third party contractor boring. The service line was not on maps and the meter inside the home had not been in service for years. The service interruption occurred at

					approximately 4pm. The area was evacuated and made safe by 9pm and a repair crew restored service the following morning.
7/9/2012	418 Weaver St Welcome	Other	9	1020	A contractor was installing sewer and water north of a gas main and service tee. As the contractor was completing work for the day, he smelled gas and notified the fire department and MERC. It was discovered there was a leak from the service tee. The service interruption occurred around 7 pm. A construction crew made the area safe and completed repairs to the tee and services the next day.
7/12/2012	1156 River Rd Windom	Other	1	1200	A service line was pulled out because it was not supported during installation of a water line. The service interruption occurred at approximately 4pm. The area was made safe and repairs were made the next day.
7/24/2012	1208 River Rd Windom	Other	2	1020	A service line was pulled while a new water main was being installed. The root cause was determined to be a failure to hand dig while excavating the area. The service interruption occurred at approximately 4pm. The area was made safe and repairs were made the next day.
8/8/2012	1408 Pahama Ct Rochester	Other	14	240	Contractor severed dead end main resulting in service being lost to 14 customers.
8/24/2012	Golf Course and Horseshoe Rd Cloquet	Other	74	245	On August 21, 2012 a contractor working on a road rebuild project hit a 2 inch PE main. In order to safely repair the damage, the main was squeezed off. Seventy-four customers downstream of the squeeze

					point were impacted by a natural gas service interruption. Service to impacted customers was restored after repairs were completed on the damaged main.
9/8/2012	218 N Chatfield St Dover	Other	267	390	Contractor severed main feed serving Dover, requiring turning gas off to the town. The contractor was determined to be at fault.
9/14/2012	2nd St & 9th Ave Rochester	Other	19	45	Contractor severed dead end main resulting in service being lost to 19 customers.
9/27/2012	908 Milwaukee Lakefield	Other	1	1080	Operator for GM Contracting pulled the service line from the main while digging in sewer lines. Service interruption occurred at approximately 3pm. Temporary repairs were made on September 27 and service line and main repair was completed on September 28.

## AFFIDAVIT OF SERVICE

STATE OF MINNESOTA ) ) ss COUNTY OF HENNEPIN )

Kristin M. Stastny hereby certifies that on the 8th day of July, 2013, on behalf of Minnesota Energy Resources Corporation (MERC) she electronically filed a true and correct copy of these Reply Comments on <u>www.edockets.state.mn.us</u>. Said documents were also served via U.S. mail and electronic service as designated on the attached service list.

> <u>/s/ Kristin M. Stastny</u> Kristin M. Stastny

Subscribed and sworn to before me This 8th Day of July, 2013.

<u>/s/ Alice Jaworski</u> Notary Public, State of Minnesota

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name Pa
Michael	Ahern	ahern.michael@dorsey.co m	Dorsey & Whitney, LLP	50 S 6th St Ste 1500 Minneapolis, MN 554021498	Electronic Service	No	OFF_SL_13-355_M-13-355
Julia	Anderson	Julia.Anderson@ag.state.m n.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_13-355_M-13-355
<i>M</i> ichael	Bradley	bradleym@moss- barnett.com	Moss & Barnett	4800 Wells Fargo Ctr 90 S 7th St Minneapolis, MN 55402-4129	Electronic Service	No	OFF_SL_13-355_M-13-355
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_13-355_M-13-355
Daryll	Fuentes	N/A	USG	550 W. Adams Street Chicago, IL 60661	Paper Service	No	OFF_SL_13-355_M-13-355
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_13-355_M-13-355
Richard	Haubensak	RICHARD.HAUBENSAK@ CONSTELLATION.COM	Constellation New Energy Gas	Suite 200 12120 Port Grace Boulevard La Vista, NE 68128	Electronic Service	No	OFF_SL_13-355_M-13-355
Amber	Lee	lee.amber@dorsey.com	Briggs and Morgan	2200 IDS Center 80 South 8th Street Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-355_M-13-355
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_13-355_M-13-355
Brian	Meloy	brian.meloy@leonard.com	Leonard, Street & Deinard	150 S 5th St Ste 2300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-355_M-13-355

Minnesota Energy Resources Corporation Docket No. G011/M-19-201

### Attachment C

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name Pag
Andrew	Moratzka	apmoratzka@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-355_M-13-355
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_13-355_M-13-355
Gregory	Walters	gjwalters@minnesotaenerg yresources.com	Minnesota Energy Resources Corporation	3460 Technology Dr. NW Rochester, MN 55901	Electronic Service	No	OFF_SL_13-355_M-13-355

# **ATTACHMENT D**

Filed as separate Excel spreadsheet

Docket No. G011/GR-19-201

Minnesota Energy Resources Corporation's 2018 Decoupling Evaluation Report

## **CERTIFICATE OF SERVICE**

I, Lauren E. Pockl, hereby certify that on the 1st of May, 2019, on behalf of Minnesota Energy Resources Corporation, I electronically filed a true and correct copy of the enclosed Annual Decoupling Evaluation Report on <u>www.edockets.state.mn.us</u>. Said document was also served via U.S. mail and electronic service as designated on the attached service list.

Dated this 1st of May, 2019.

<u>/s/ Lauren E. Pockl</u> Lauren E. Pockl

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Ahern	ahern.michael@dorsey.co m	Dorsey & Whitney, LLP	50 S 6th St Ste 1500 Minneapolis, MN 554021498	Electronic Service	No	OFF_SL_19-201_M-19-20
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-201_M-19-20
Seth	DeMerritt	Seth.DeMerritt@wecenergy group.com	MERC (Holding)	700 North Adams PO Box 19001 Green Bay, WI 543079001	Electronic Service	No	OFF_SL_19-201_M-19-20
lan	Dobson	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_19-201_M-19-20
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_19-201_M-19-20
Daryll	Fuentes	dfuentes@usg.com	USG Corporation	550 W Adams St Chicago, IL 60661	Electronic Service	No	OFF_SL_19-201_M-19-20
Brian	Meloy	brian.meloy@stinson.com	Stinson,Leonard, Street LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-201_M-19-20
Andrew	Moratzka	andrew.moratzka@stoel.co m	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-201_M-19-20
Catherine	Phillips	catherine.phillips@we- energies.com	We Energies	231 West Michigan St Milwaukee, WI 53203	Electronic Service	No	OFF_SL_19-201_M-19-20
Elizabeth	Schmiesing	eschmiesing@winthrop.co m	Winthrop & Weinstine, P.A.	225 South Sixth Street Suite 3500 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-201_M-19-20

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Colleen	Sipiorski	Colleen.Sipiorski@wecener gygroup.com	Minnesota Energy Resources Corporation	700 North Adams St Green Bay, WI 54307	Electronic Service	No	OFF_SL_19-201_M-19-201
Kristin	Stastny	kstastny@briggs.com	Briggs and Morgan, P.A.	2200 IDS Center 80 South 8th Street Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-201_M-19-201
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_19-201_M-19-201
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_19-201_M-19-201
Mary	Wolter	mary.wolter@wecenergygr oup.com	Minnesota Energy Resources Corporation (HOLDING)	231 West Michigan St Milwaukee, WI 53203	Electronic Service	No	OFF_SL_19-201_M-19-201