



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

April 24, 2019

VIA ELECTRONIC FILING

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

**Re: In the Matter of the Petition of Minnesota Energy Resources Corporation
for Approval of 2020 Gas Utility Infrastructure Cost Rider Revenue
Requirement and Revised Surcharge Factor
Docket No. G011/M-19-_____**

Dear Mr. Wolf:

Minnesota Energy Resources Corporation (“MERC” or the “Company”) submits this Petition to the Minnesota Public Utilities Commission (the “Commission”) for approval to recover eligible capital costs and operations and maintenance (“O&M”) expense to be undertaken in 2020 through the Company’s gas utility infrastructure cost (“GUIC”) rider (“GUIC Rider”) pursuant to Minn. Stat. § 216B.1635.

MERC first requested and received approval to establish a GUIC Rider under Minn. Stat. § 216B.1635 in Docket No. G011/M-18-281 for the Company’s forecasted 2019 GUIC-eligible projects and costs. The Commission issued an Order Approving Gas Utility Infrastructure Cost Rider with Modifications and Requiring Compliance Filing in that docket on February 5, 2019, finding that MERC’s proposed forecasted 2019 GUIC Rider costs were “incremental; required by federal, state or local agencies; and supported by sufficient detail to meet the information requirements of the GUIC statute.”¹

This Petition reflects the Company’s second GUIC Rider filing and seeks approval of the forecasted 2020 revenue requirement and GUIC surcharge inclusive of MERC’s 2020 GUIC-eligible costs and projects. The GUIC projects and costs planned for 2020 and proposed for recovery in this filing build upon the previously-approved 2019 GUIC Rider approved by the Commission by continuing implementation of MERC’s multiyear integrity management and safety initiatives. Continuation of this proactive approach to distribution system safety and integrity management in 2020 is consistent with the GUIC statute and benefits customers because work undertaken systematically and strategically reduces costs compared to work undertaken in a reactionary or immediate threat mode, and allows utilities to engage in regional planning to minimize inconvenience and costs to customers.

¹ *In the Matter of Minn. Energy Res. Corp.’s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6 (Feb. 5, 2019).

Mr. Daniel P. Wolf
April 24, 2019
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Under Minn. Stat. § 216B.1635, a natural gas utility may seek to recover gas utility infrastructure costs outside of a general rate case through a rider. As proposed in this filing, MERC's 2020 revenue requirement and rate adjustment are based on incremental costs to be incurred in 2020 over and above those investments and costs included in MERC's authorized rates as approved in Docket No. G011/GR-17-563.

Because this 2020 GUIC Rider filing is being submitted in 2019—the first year of MERC's approved GUIC Rider—no true-up from any prior year's GUIC projects and costs is being submitted at this time. Consistent with the Commission's decisions in Docket No. G011/M-18-281, MERC will submit a true-up for its 2019 GUIC projects and costs by April 1, 2020.

Through this filing, MERC requests approval of:

- MERC's 2020 GUIC revenue requirement of approximately \$4.9 million, which is calculated to recover the 2020 depreciation expense and return on the Company's forecasted 2019 and 2020 gas utility infrastructure capital expenditures as well as incremental 2020 O&M expense as defined in Minn. Stat. § 216B.1635, subd. 1, subject to future true up;
- A 2020 per-therm GUIC rate factor of \$0.00554 per therm applicable to all customer classes to be effective January 1, 2020; and
- Updated tariff sheets to reflect the 2020 GUIC rate factor effective January 1, 2020.

A copy of this miscellaneous filing has been served on the Minnesota Department of Commerce, Division of Energy Resources and the Minnesota Office of the Attorney General – Residential Utilities and Antitrust Division.

Exhibit H to this filing has been designated as non-public in its entirety, as it contains information MERC considers to be Trade Secret as defined by Minn. Stat. § 13.37, subd. 1(b). The information is not generally known to, and not readily ascertainable by, vendors and competitors of MERC, who could obtain economic value from their disclosure. MERC maintains this information as trade secret. Public and Nonpublic versions of Exhibit H are being filed contemporaneously with this Petition.

Please contact me at (920) 433-2926 if you have any questions regarding the information in this Petition. Thank you for your attention to this matter.

Sincerely,



Seth S. DeMerritt
Minnesota Energy Resources Corporation
Senior Project Specialist

Enclosures
cc: Service List

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**Katie J. Sieben
Dan Lipschultz
Valerie Means
Matthew Schuerger
John A. Tuma**

**Chair
Commissioner
Commissioner
Commissioner
Commissioner**

In the Matter of the Petition of Minnesota
Energy Resources Corporation for Approval
of 2020 Gas Utility Infrastructure Cost Rider
Revenue Requirement and Revised
Surcharge Factor

Docket No. G-011/M-19-_____

PETITION

Pursuant to Minnesota Statutes section 216B.1635 and in accordance with Minnesota Rules part 7829.1300, Minnesota Energy Resources Corporation (“MERC” or the “Company”) submits this Petition to the Minnesota Public Utilities Commission (the “Commission”) for approval of a Gas Utility Infrastructure Cost (“GUIC”) rider (“GUIC Rider”) surcharge of \$0.00554 effective January 1, 2020, to recover the forecasted 2020 revenue requirement of approximately \$4.9 million, which is calculated to recover the 2020 depreciation expense and return on the Company’s forecasted 2019 and 2020 gas utility infrastructure capital expenditures as well as incremental 2020 O&M expense as defined in Minn. Stat. § 216B.1635, subd. 1, subject to future true up.

MERC’s forecasted revenue requirement of approximately \$4.9 million is based on projects to be undertaken in 2020 to comply with federal, state, and local governmental requests to relocate natural gas facilities located in the public right-of-way and to comply with federal and state regulations that require natural gas utilities to implement integrity management programs to assess and improve the safety, reliability, and integrity of its natural gas infrastructure. These costs are consistent with the eligibility requirements set forth in Minn. Stat. § 216B.1635 (the “GUIC Statute”) and build upon MERC’s 2019 GUIC spending, as approved by the Commission in Docket No. G011/M-18-281.

Because this 2020 GUIC Rider filing is being submitted in 2019—the first year of MERC’s approved GUIC Rider—no true-up from any prior year’s GUIC projects and costs is being submitted at this time. Consistent with the Commission’s decisions in Docket No.

G011/M-18-281, MERC will submit a true-up for its 2019 GUIC projects and costs by April 1, 2020.

Through this filing, MERC requests approval of:

- MERC's 2020 GUIC revenue requirement of approximately \$4.9 million, which is calculated to recover the 2020 depreciation expense and return on the Company's forecasted 2019 and 2020 gas utility infrastructure capital expenditures as well as incremental 2020 operations and maintenance ("O&M") expense as defined in Minn. Stat. § 216B.1635, subd. 1, subject to future true up;
- A 2020 per-therm GUIC rate factor of \$0.00554 per therm applicable to all customer classes to be effective January 1, 2020; and
- Updated tariff sheets to reflect the 2020 GUIC rate factor effective January 1, 2020.

This filing includes the following:

- A one paragraph summary of filing, in accordance with Minn. R. 7829.1300, subp.1;
- Petition for Approval of 2020 Gas Utility Infrastructure Cost Rider Revenue Requirement and Revised Surcharge Factor;
- Exhibit A: A copy of Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs;
- Exhibit B: Matrix of information included within the petition as required by Minn. Stat. § 216B.1635;
- Exhibit C: Updated tariff sheets to reflect the 2020 GUIC rate factor effective January 1, 2020 (MERC Tariff Sheets 7.20-7.21);
- Exhibit D: Calculations of the proposed 2020 GUIC-eligible revenue requirement and proposed GUIC Rider surcharge to be effective January 1, 2020;
- Exhibit D-1: Historical detail of MERC's road relocation projects required to accommodate public projects in the right-of-way;
- Exhibit D-1.1: MERC's known 2019 and 2020 Road Relocation Projects;
- Exhibit E: MERC's 2020 Gas Infrastructure Project Plan Report;
- Exhibit F: Discussion of the magnitude of known future natural gas projects and the proposed GUIC recovery as required by Minn. Stat. § 216B.1635, subd.4(vi), (vii), and (viii);
- Exhibit G: Illustrative example of MERC's proposed GUIC true-up calculation.

- Exhibit H: Maps of Aldyl-A Main Replacement (2020) [Public and Nonpublic versions filed separately];and
- Exhibit I: Project Schedule for Obsolete Material Replacements (2020).

As discussed in the Petition, MERC proposes to notify customers of the implementation of the new GUIC rate via the following bill message on bills effective the first month the GUIC surcharge takes effect.²

Effective Jan. 1, 2020, an updated Gas Utility Infrastructure Cost Adjustment, which recovers the cost of assessments, modifications, and replacement of natural gas facilities as required by state and federal safety programs and public works projects will be included on your bill as an Infrastructure Rider. The updated Surcharge is \$0.00554 per therm.

I. Summary of Filing

Pursuant to Minn. R. 7829.1300, subp. 1, a one-paragraph summary of the filing is attached.

II. Service

Pursuant to Minn. R. 7829.1300, subp. 2, MERC has served a copy of this petition on the Minnesota Department of Commerce, Division of Energy Resources and the Minnesota Office of the Attorney General – Residential Utilities and Antitrust Division. The summary of the filing has been served on all parties on the attached general service list.

III. General Filing Information

Pursuant to Minn. R. 7829.1300, subp.3, the following information is provided:

A. Name, Address, and Telephone Number of Filing Party

Minnesota Energy Resources Corporation
2685 145th Street West
Rosemount, MN 55068
(651) 322-8901

² Notably, while the Commission ordered MERC to provide a customer bill message and bill insert explaining its 2019 GUIC Rider surcharge in its February 5, 2019, Order Approving Gas Utility Infrastructure Cost Rider with Modifications and Requiring Compliance Filing in Docket No. G011/M-18-281, MERC is proposing only a bill message (without bill insert) to notify customers regarding the updated GUIC rate. Customers will already have been provided more detailed information regarding the GUIC Rider in 2019, a bill message will help reduce overall customer costs, and is more likely to be read because it appears directly on the bill.

B. Name, Address, Electronic Address, and Telephone Number of Attorney for the Utility

Kristin M. Stastny
Briggs and Morgan, P.A.
2200 IDS Center
80 South 8th Street
Minneapolis, MN 55402
KStastny@briggs.com
(612) 977-8656

C. Date of the Filing and Date Proposed Agreement Will Take Effect

Date of Filing: April 24, 2019

Proposed Effective Date: Upon Commission Approval

MERC respectfully requests that the Commission rule on this filing so recovery under the GUIC Rider may begin during the first billing period in January 2020. In accordance with Minn. Stat. § 216B.1635, subd. 2, MERC is submitting this Petition more than 150 days in advance of the proposed date for implementation:

A public utility submitting a petition to recover gas infrastructure costs under this section must submit to the commission, the department, and interested parties a gas infrastructure project plan report and a petition for rate recovery of only incremental costs associated with projects under subdivision 1, paragraph (c). The report and petition must be made at least 150 days in advance of implementation of the rate schedule, provided that the rate schedule will not be implemented until the petition is approved by the commission pursuant to subdivision 5. The report must be for a forecast period of one year.

D. Statute Controlling Schedule for Processing the Filing

MERC submits its request for approval of rider recovery under Minn. Stat. § 216B.1635, which authorizes a public utility to petition the Commission outside a general rate case for a rider to recover certain gas utility infrastructure costs. In accordance with Minn. Stat. § 216B.1635, subd. 5,

Upon receiving a gas utility report and petition for cost recovery under subdivision 2 and assessment and verification under subdivision 4, the commission may approve the annual GUIC rate adjustments provided that, after notice and comment, the costs included for recovery through the rate schedule are prudently incurred and achieve gas facility improvements at the lowest reasonable and prudent cost to ratepayers.

Under Minn. R. 7829.0100, subp. 11, this petition is a “miscellaneous” filing because no determination of MERC’s general revenue requirement is necessary. Comments on a miscellaneous filing are due within 30 days of filing, with replies due 10 days thereafter.³

E. Signature, Electronic Address, and Title of Utility Employee Responsible for the Filing



Seth S. DeMerritt
Senior Project Specialist
Seth.DeMerritt@wecenergygroup.com
2685 145th Street West
Rosemount, MN 55068
(920) 433-2926

F. Description of the Filing, Impact on Rates and Services, and Reasons for the Filing

Pursuant to Minn. Stat. § 216B.1635, MERC is requesting approval of an updated GUIC Rider surcharge effective January 1, 2020, to recover the revenue requirement associated with eligible GUIC projects forecasted to be completed and placed into service through 2020. Under Minn. Stat. § 216B.1635, subd. 1(c), the following natural gas projects are eligible for GUIC Rider recovery subject to additional requirements within the statute:

- (1) replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision; and
- (2) replacement or modification of existing natural gas facilities, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure that is required by a federal or state agency.

As discussed in this filing, MERC’s proposed GUIC Rider surcharge will allow the Company to recover costs and expenses that have been incurred and will be undertaken in 2020 within these two categories. The GUIC projects and costs planned for 2020 and proposed for recovery in this filing build upon the previously-approved 2019 GUIC Rider approved by the Commission by continuing implementation of MERC’s multiyear integrity management and safety initiatives. Continuation of this proactive approach to distribution system safety and

³ See Minn. R. 7829.1400, subps. 1, 4.

integrity management in 2020 is consistent with the GUIC Statute and benefits customers because work undertaken systematically and strategically reduces costs and minimizes inconvenience to customers.

Regarding the 2020 GUIC filing, within category (1) above, MERC is projecting incremental capital investments of approximately \$6.6 million in 2020, for the replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of roads, public buildings, or other public works. The forecast for the right-of-way relocation work is based on our actual spend on right-of-way projects in 2018. Based on historical data, right-of-way relocation costs have been increasing over the past four years, indicating a clear trend in the costs associated with annual right-of-way projects. Actual annual spending for right-of-way relocation projects is out of MERC's control as the Company is required to remove and relocate its natural gas facilities located in the public right-of-way whenever requested to do so to accommodate a public works project such as a road or sewer project.

Regarding the second category of costs, MERC has forecasted capital and O&M spending of approximately \$10 million to comply with federal regulations that set standards for how operators validate the integrity of gas distribution assets by identifying risks, systematically performing health and conditions assessments, and evaluating and prioritizing repairs to mitigate the risks. Consistent with MERC's approved 2019 scope of GUIC-eligible costs, this category of work for 2020 includes (1) the replacement of existing obsolete natural gas facilities, (2) the survey and assessment of meter sets to identify the need for replacement or modification of existing infrastructure, and (3) the survey and assessment of sewer laterals and mains to identify the need for the repair or replacement of damaged natural gas pipelines as a result of sewer cross bores. The \$10 million forecast for 2020 spending is in line with the Commission-approved 2019 GUIC but also reflects the Company's forecast of specific identified projects to be undertaken and placed into service in 2020.

All of the costs for work to be undertaken in 2020, as proposed in this filing, are incremental; required by federal, state, or local agencies; and supported by the specific information required to meet the requirements of the GUIC Statute. All required information and supporting data required under the GUIC Statute is provided in this filing and supporting exhibits.

If additional information is required, please contact Seth DeMerritt at (920) 433-2926 or Kristin Stastny at (612) 977-8656.

DATED: April 24, 2019

Respectfully submitted,

BRIGGS AND MORGAN, P.A.

/s/ Kristin M. Stastny

Kristin M. Stastny

2200 IDS Center

80 South 8th Street

Minneapolis, MN 55402

Telephone: (612) 977-8656

KStastny@Briggs.com

Attorney for Minnesota Energy
Resources Corporation

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**Katie J. Sieben
Dan Lipschultz
Valerie Means
Matthew Schuerger
John A. Tuma**

**Chair
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In the Matter of the Petition of Minnesota
Energy Resources Corporation for Approval
of 2020 Gas Utility Infrastructure Cost Rider
Revenue Requirement and Revised
Surcharge Factor

Docket No. G-011/M-19-_____

SUMMARY OF FILING

Please take notice that on April 24, 2019, pursuant to Minnesota Statutes section 216B.1635, and in accordance with Minnesota Rules part 7829.1300, Minnesota Energy Resources Corporation (“MERC” or the “Company”) filed with the Minnesota Public Utilities Commission a Petition for approval of 2020 Gas Utility Infrastructure Costs (“GUIC”) for recovery through the Company’s GUIC Rider and a proposed GUIC surcharge of \$0.00554 per therm applicable to all customers and to be effective January 1, 2020. The proposed 2020 GUIC surcharge is based on the annual revenue requirement for MERC’s forecasted spend for 2019 and 2020 in two GUIC-eligible categories:

- 1) return on and of capital investment of approximately \$6.6 million for the replacement of natural gas facilities located in the public right-of-way; and
- 2) capital investment and operations and maintenance (“O&M”) expense of approximately \$10.0 million to be incurred in the assessment and replacement or modification of existing facilities required by federal and state agencies as part of the Company’s compliance with distribution integrity management regulations, including:
 - a) return on and of approximately \$7 million of capital expenditures related to planned replacements of obsolete materials;
 - b) \$2 million of O&M expense to conduct further meter set safety surveys; and
 - c) \$1 million of O&M expense to continue sewer cross bore surveys.

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**Katie J. Sieben
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In the Matter of the Petition of Minnesota Energy Resources Corporation for Approval of 2020 Gas Utility Infrastructure Cost Rider Revenue Requirement and Revised Surcharge Factor

Docket No. G-011/M-19-_____

I. INTRODUCTION

Pursuant to Minn. Stat. § 216B.1635 (the “GUIC Statute”), Minnesota Energy Resources Corporation (“MERC” or the “Company”) submits this Petition to the Minnesota Public Utilities Commission (the “Commission”) for approval of its 2020 Gas Utility Infrastructure Cost (“GUIC”) revenue requirement for recovery through a GUIC surcharge to be effective January 1, 2020. In order to continue to address federal, state, and local requests for the relocation of natural gas assets in the public right-of-way to accommodate public work projects and to continue to promote improved safety and reliability in the natural gas distribution system, MERC is requesting recovery of a 2020 revenue requirement of approximately \$4.9 million. The costs included in this request are consistent with the eligibility requirements set forth in the GUIC Statute.⁴

MERC has forecasted significant multi-year program spending for system integrity and safety projects and relocations of infrastructure in the public right-of-way, necessitating out-of-test year rider recovery under the GUIC Statute. Use of the GUIC Rider to recover GUIC-eligible costs will help to reduce rate volatility by introducing gradual rate increases to support the material yet necessary capital investments eligible for GUIC Rider recovery.

⁴ Minn. Stat. § 216B.1635.

Gas utility infrastructure costs are costs, not already reflected in the utility's rates, that are incurred for projects involved in (1) the replacement of natural gas facilities required by road construction or other public works by or on behalf of a government agency, or (2) the replacement or modification of existing facilities required by a federal or state agency, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure.

MERC seeks approval of a GUIC Rider to recover the costs incurred for these two types of projects: (1) return on and of capital investment of approximately \$6.6 million in public right-of-way relocation projects; and (2) projects undertaken to comply with MERC's distribution integrity management program ("DIMP"). This includes the following:

- (1) return on and of capital investment of approximately \$7 million for the replacement of obsolete materials;
- (2) O&M expense of approximately \$2 million for stop valve survey work; and
- (3) O&M expense of approximately \$1 million for sewer cross bore survey work.

These projects are the same types of projects for which the Company received approval by the Commission in the 2018 GUIC Rider in Docket No. G011/M-18-281.

Regarding the relocation projects, the GUIC Statute permits the recovery of costs necessary to relocate natural gas facilities that must be moved to accommodate state and local projects within the public right-of-way.⁵ MERC requests approval of a GUIC Rider surcharge to recover the costs to be incurred in 2020 to relocate facilities in the public right-of-way as required by governmental agencies. Typically right-of-way projects are not known in advance. Federal, state and local government units request MERC to relocate facilities within the right-of-way according to their own schedules and as a result, MERC oftentimes only knows within the month or a week prior to a right-of-way project commencing.

⁵ Minn. Stat. § 216B.1635, subd. 1(c)(1).

Regarding MERC's DIMP projects, MERC must comply with federal and state regulations that require natural gas utilities to implement integrity management programs to assess and improve the safety, reliability, and integrity of its natural gas infrastructure. Pursuant to the federal Pipeline Inspection, Protection, Enforcement and Safety Act and Pipeline and Hazardous Materials Safety Administration ("PHMSA") rules, all system operators must know the make-up of their distribution system and adopt written distribution integrity management plans for distribution pipelines.⁶ The law requires distribution system operators to continually identify and assess risks on their distribution systems to remediate conditions that present a potential threat to the integrity of their pipeline system. As a result, MERC must incur annual costs and expenses necessary to implement its DIMP program.⁷ Minnesota Statutes section 216B.1635, the GUIC Statute, provides a mechanism for gas utilities to recover costs and expenses of gas utility infrastructure costs associated with the replacement or modification of transmission and distribution facilities required by a federal or state agency.⁸ As discussed in this filing, MERC requests approval of a GUIC Rider surcharge to recover the costs to be incurred in 2020 for projects included in the Company's DIMP program; the same types of projects for which the Company received approval from the Commission in the 2019 GUIC Rider filing in Docket No. G011/M-18-281.

MERC's Petition includes the following exhibits:

- | | |
|-----------|--|
| Exhibit A | Copy of Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs; |
| Exhibit B | Matrix of information included within the Petition as required by Minn. Stat. § 216B.1635; |
| Exhibit C | Updates to the GUIC Rider Tariff (MERC Tariff Sheets 9.30 – 9.32); |

⁶ PHMSA published the Integrity Management Program for Gas Distribution Pipelines Rule or the "DIMP Rule" (49 C.F.R. Part 192, subpart P) in December 2009. MERC formally implemented its DIMP in 2011 and before that time, MERC's integrity projects were assessed, prioritized, and implemented as part of its life-cycle planning.

⁷ MERC has also implemented a Transportation Integrity Management Program ("TIMP"), but the Company is not requesting recovery for any 2020 projects attributable to the TIMP in this filing.

⁸ Minn. Stat. § 216B.1635, subd. 1(c)(2).

- Exhibit D Calculations of the proposed 2020 GUIC-eligible revenue requirement and proposed GUIC Rider surcharge to be effective January 1, 2020;
- Exhibit D-1 MERC's Actual 2018 Road Relocation Costs as compared to Historical detail of MERC's 2016-2018 road relocation projects required to accommodate public projects in the right-of-way;
- Exhibit D-1.1 MERC's 2019 and 2020 road relocation projects (to-date);
- Exhibit E MERC's 2020 Gas Infrastructure Project Plan Report;
- Exhibit F Discussion of the magnitude of known future natural gas projects and the proposed GUIC recovery as required by Minn. Stat. § 216B.1635, subd. 4(vi), (vii), and (viii);
- Exhibit G Illustrative example of MERC's proposed GUIC Rider true-up calculation;
- Exhibit H Maps of Aldyl-A Main Replacement (2020) [Public and Nonpublic versions filed separately]; and
- Exhibit I Project Schedule for Obsolete Material Replacements (2020).

The requested 2020 revenue requirement of approximately \$4.9 million will allow MERC to continue to recover the Company's forecasted 2020 DIMP spending based on planned capital replacement projects and planned assessments. The proposed revenue requirement also reflects the impact of the ongoing GUIC projects already approved by the Commission for 2019, subject to future true-up based on actual costs. The GUIC Rider promotes the public interest by allowing MERC to continue to pursue work required by state and federal requirements. MERC is dedicated to operating a safe and reliable gas system for both our customers and the general public. Accordingly, it is of crucial importance that the Company dedicates investments to assess the integrity of our system and to proactively repair and replace problematic equipment and materials. MERC's integrity projects are aimed at updating our gas infrastructure to reduce the likelihood of leaks or incidents within the communities we serve.

II. COMPLIANCE WITH COMMISSION ORDERS AND STATUTE

Generally, a public utility may not change its rates without undergoing a general rate case in which the Commission comprehensively reviews the utility's costs and revenues. However, the Legislature has created exceptions to this general policy, allowing a utility to

implement a rider with a rate-adjustment mechanism to expedite recovery of certain costs not reflected in the utility's base rates.

Minnesota Statutes section 216B.1635 allows utilities to seek rider recovery of gas utility infrastructure costs—costs incurred in gas utility projects that are in-service but were not included in the utility's rate base in its most recent general rate case or are planned to be in service during the period covered by the filing.⁹ "Gas utility projects" involve either (1) the replacement of natural gas facilities required by road construction or other public works by or on behalf of a government agency, or (2) the replacement or modification of existing facilities required by a federal or state agency, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure.¹⁰

A utility seeking approval of a GUIC rider must file a petition, accompanied by a "gas infrastructure project plan report," at least 150 days before the rider is to be implemented. The report must be for a forecast period of one year.¹¹ The report and petition must list the projects and costs proposed for recovery, including, but not limited to:

- project description and scope, estimated costs, and in-service date;
- the government entity ordering or requiring the project and the purpose for which the project is undertaken;
- a description of the estimated costs and salvage value, if any, associated with the existing infrastructure replaced or modified as a result of the project;
- a comparison of the utility's estimated costs and the actual costs incurred, including a description of the utility's efforts to ensure that the costs of the facilities are reasonable and prudently incurred;
- calculations to establish that the rate adjustment is consistent with the terms of the rate schedule, including the proposed rate design and an explanation of why the proposed rate design is in the public interest;

⁹ Minn. Stat. § 216B.1635, subd. 1(b)(2).

¹⁰ Minn. Stat. § 216B.1635, subd. 1(b), (c).

¹¹ Minn. Stat. § 216B.1635, subd. 2.

- the magnitude and timing of any known future projects that the utility may seek to recover under the GUIC statute;
- the magnitude of the costs in relation to the utility’s base revenue as approved by the Commission in the utility’s most recent general rate case, exclusive of gas-purchase costs and transportation charges;
- the magnitude of the costs in relation to the utility’s capital expenditures since its most recent general rate case; and
- the amount of time since the utility last filed a general rate case and the utility’s reasons for seeking recovery outside of a general rate case.¹²

The Commission may approve a GUIC rider if the costs proposed for recovery through the rider are prudently incurred and achieve gas facility improvements at the lowest reasonable and prudent cost to ratepayers.¹³ Costs eligible for rider recovery include not only the plant investment itself but also a rate of return on that investment, income taxes on the rate of return, incremental property taxes, incremental depreciation expense, and any incremental O&M costs.¹⁴ As outlined below and in the attached exhibits, MERC’s proposed 2020 GUIC meets each of the requirements of the statute.

In MERC’s 2019 GUIC Rider docket, Docket No. G011/M-18-281, the Minnesota Department of Commerce, Division of Energy Resources (the “Department”) and the Minnesota Office of the Attorney General—Residential Utilities and Antitrust Division (“OAG”) both argued that MERC had failed to provide all information required by Minn. Stat. § 216B.1635 including project descriptions and scope, estimated project costs, and project in-service dates. The OAG also argued that MERC failed to demonstrate that the costs it sought to recover were incremental and failed to sufficiently identify the government requirements supporting its request for cost recovery. The Commission ultimately disagreed, concluding that the costs MERC “seeks to recover through its proposed GUIC rider are incremental; required by federal, state, or

¹² Minn. Stat. § 216B.1635, subd. 3, 4.

¹³ Minn. Stat. § 216B.1635, subd. 5.

¹⁴ Minn. Stat. § 216B.1635, subd. 4.

local agencies; and supported by sufficient detail to meet the information requirements of the GUIC statute.”¹⁵

With respect to MERC’s proposed costs being incremental, the Commission found:

Both the capital costs and the O&M costs derive from new projects that are not currently reflected in the Company’s base rates or the rates that will flow from the pending rate case; the costs are therefore incremental as required by the GUIC statute.¹⁶

Similarly, with respect to this 2020 GUIC filing, as outlined below, MERC’s proposed 2020 capital costs and O&M costs derive from new projects to be undertaken in 2020 that are not currently reflected in MERC’s base rates or the rates that will be implemented in MERC’s pending rate case in Docket No. G011/GR-17-563. Consistent with the Commission’s prior determinations, those costs are incremental in accordance with the GUIC Statute.

With respect to the OAG’s assertion that MERC had failed to adequately identify the federal, state, or local governmental requirements supporting the proposed projects and costs under its DIMP initiatives, the Commission concluded that MERC’s “efforts to comply with federal DIMP regulations, or with state guidance pursuant to federal safety regulations, meets the definition of a ‘gas utility project’ under the statute.”¹⁷ The Commission has reiterated in various GUIC rider proceedings that utility compliance with federal and state distribution integrity management requirements satisfies the requirements of the GUIC Statute.

Regarding the level of detail required for each project proposed under the GUIC Statute, the Commission’s concluded that MERC’s reliance on historic trends and spending was reasonable and sufficient to support the statutory requirements:

¹⁵ *In the Matter of Minn. Energy Res. Corp.’s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6 (Feb. 5, 2019).

¹⁶ *In the Matter of Minn. Energy Res. Corp.’s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6 (Feb. 5, 2019).

¹⁷ *In the Matter of Minn. Energy Res. Corp.’s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6-7 (Feb. 5, 2019).

Both the Department and the OAG expressed concern that MERC did not provide sufficient detail about its right-of-way relocation costs. This concern is misplaced. The GUIC statute anticipates the use of estimated costs. As MERC has explained, it generally is not informed of future right-of-way relocation work with enough lead time to include specific projects in its forecasts. Therefore, MERC's petition relies on historic spending to support its requested amount. This amount will be trued up annually to actual costs, eliminating any possibility that forecasting will result in overrecovery.

...
[T]he Commission finds MERC's use of a three-year average of relocation costs reasonable both because these costs have been trending higher in recent years and because any overestimation can be corrected for in the true-up.¹⁸

The GUIC Statute expressly provides that a GUIC project plan report “must be for a forecast period of one year.”¹⁹ Further, the statute does not specify the level of detail in which “projects” must be identified in a GUIC plan; for example, whether each specific right-of-way relocation project must be identified in the petition and plan or whether the broad project category and scope is what is required. The GUIC Statute directs the Commission to evaluate prudence and actual costs as part of an annual review or true-up process.²⁰ Through that process, a utility with an approved GUIC rider is able to report on details regarding the specific work and cost of the work that is completed. The Commission has recognized the challenges as well as the significant value of forecasted rider recovery under the GUIC Statute, noting that “[t]he costs of [GUIC-eligible] investments can vary widely from year to year and are difficult to forecast with accuracy. Approving a rider ... [provides] the ability to implement multi-year pipeline-replacement programs, adjusting the rates annually to correct for over- or under-recovery.”²¹

¹⁸ *In the Matter of Minn. Energy Res. Corp.'s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6-7 (Feb. 5, 2019).

¹⁹ Minn. Stat. § 216B.1635, subd. 2.

²⁰ In particular, Minn. Stat. § 216B.1635, subd. 4(2)(iv) requires “a comparison of the utility's estimated costs included in the gas infrastructure project plan and the actual costs incurred, including a description of the utility's efforts to ensure the costs of the facilities are reasonable and prudently incurred.”

²¹ *In the Matter of the Petition of N. States Power Co. d/b/a Xcel Energy, for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G002/M-14-336, ORDER APPROVING RIDER WITH MODIFICATIONS at 7 (Jan. 27, 2015) (“The clear thrust of the GUIC statute is to establish a mechanism by which utilities may

Ultimately, while MERC acknowledged that details regarding each individual right-of-way relocation project would not be known in advance, the Company provided extensive details regarding historic right-of-way projects, the annual year-over-year increases in spending on such projects, and the planned work to be completed to replace obsolete materials as well as with respect to stop-valve survey work and sewer cross bore survey work. MERC submitted extensive information, including detailed maps showing proposed main replacements and costs related to the replacement of obsolete materials.²² Based on the information submitted, the Commission reasonably concluded MERC's proposed 2019 GUIC spending is supported by "sufficient detail to meet the statutory requirements of the GUIC statute."²³

For 2020, as discussed in detail below, MERC continues to face the same constraints regarding the timing of when the Company is informed of right-of-way relocation projects. In particular, MERC is not informed of all specific future right-of-way relocation work with enough lead time to identify all projects that will occur in a subsequent year. For purposes of this filing, the Company has performed trend analysis based on historic right-of-way relocation projects and spending in order to most accurately forecast 2020 right-of-way project costs. Consistent with MERC's 2019 GUIC Rider, MERC proposes to account for any over- or under-estimation of costs in its future true-up filing, which will include a reconciliation and reporting on actual specific projects and costs relative to MERC's 2020 forecast.

With respect to MERC's 2020 DIMP projects, the Company's forecasted 2020 costs for DIMP-related Obsolete Materials Replacement Project, Stop Valve Survey Project, and Sewer Cross Bore Survey Project are based on the specific work to be undertaken during 2020.

recover out-of-test-year infrastructure investments mandated by federal or state agencies. The costs of these investments can vary widely from year to year and are difficult to forecast with accuracy. Approving a rider ... [provides] the ability to implement multi-year pipeline-replacement programs, adjusting the rates annually to correct for over- or under-recovery.").

²² *In the Matter of Minn. Energy Res. Corp.'s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, MERC REPLY COMMENTS at Attachment E, pp. 6-8 (Aug. 17, 2018).

²³ *In the Matter of Minn. Energy Res. Corp.'s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6 (Feb. 5, 2019).

MERC developed this proposed detailed scope of work based on what the Company concluded would be reasonable annual costs in light of the fact that these projects will be multi-year efforts.

A. Proposed Projects are Gas Utility Projects

Similar to MERC’s 2019 GUIC filing, MERC is requesting approval for GUIC rider recovery related to two categories of work that are eligible for rider recovery under the GUIC Statute: (1) right-of-way relocation projects, and (2) investments and expense to be incurred in the assessment and replacement or modification of existing facilities required by federal and state agencies as part of the Company’s compliance with DIMP regulations. Each of these categories is discussed below, and the individual infrastructure and survey projects are detailed in Exhibit E, including project descriptions and scope, an explanation of the necessity and benefits to customers, estimated costs, and in-service dates.

Table 1: Proposed MERC GUIC Rider Budget	
Road Relocations	\$ 6,589,132
Obsolete Materials	\$ 7,000,000
Stop-Valve Survey (O&M)	\$ 2,000,000
Sewer Cross Bore Survey (O&M)	\$ 1,000,000
Total	\$16,589,132

Recovery of these costs through the GUIC Rider is in the public interest, as it enables the Company to continue to invest in the safety of our natural gas system and facilitate public infrastructure projects in MERC’s service area throughout the state.

1. Right-of-Way Relocations

For 2020, MERC has projected approximately \$6.6 million in capital spending for road and public work projects meeting the definition of gas utility project under Minn. Stat. § 216B.1635. Consistent with MERC’s approved 2019 scope of GUIC-eligible costs, this category of work for 2020 includes replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public

building, or other public work by the state or a political subdivision.²⁴ Such projects fit squarely within the GUIC Statute’s definition of gas utility projects, which includes “replacement of natural gas facilities located in the public right-of- way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision.”²⁵

Consistent with the Commission’s decision on MERC’s 2019 GUIC Rider, MERC has forecasted 2020 right-of-way costs based on historic spending for such projects. Notably, this amount will be trued up annually to actual costs, eliminating the possibility that such forecasting will result in over-recovery.²⁶ Based on historical data, right-of-way relocation costs have been increasing year-over-year over the past four years as MERC has been asked to relocate natural gas infrastructure to accommodate these public projects. As shown in Table 2, below, the number of these requests has increased significantly since 2016.

Table 2: MERC’s Relocation Projects 2015-2018		
Project Year	Number of Relocation Projects	Annual Road Relocation Costs
2015	72	\$4,573,401
2016	72	\$5,171,722
2017	86	\$6,257,343
2018	87	\$6,589,132
3-Year Average (2016-2018)	82	\$6,006,066

In order to better understand the increasing trend of right-of-way relocation projects and costs, and to most accurately forecast 2020 right-of-way project costs for purposes of

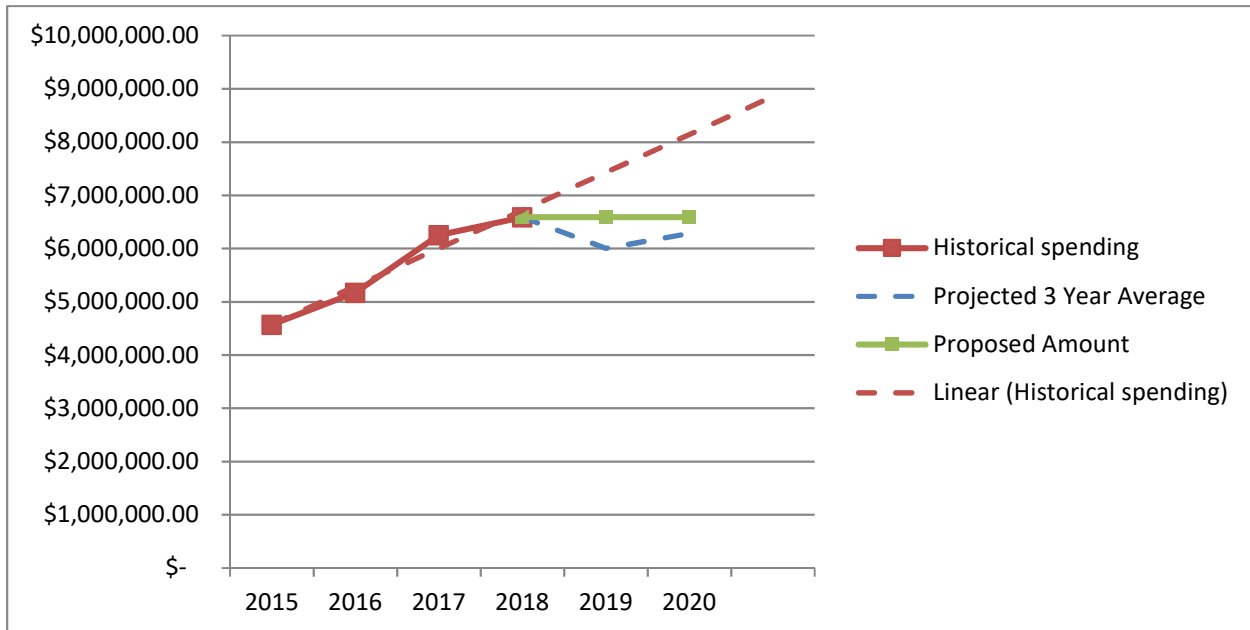
²⁴ See Minn. Stat. § 216B.1635 at subd. 1(c)(1) (defining eligible “gas utility projects” to mean “replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision”).

²⁵ Minn. Stat. § 216B.1635.

²⁶ *In the Matter of Minn. Energy Res. Corp.’s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6 (Feb. 5, 2019).

forecasted GUIC recovery, MERC performed a trend analysis of spending related to these projects. Figure 1, below, illustrates the results of that trend analysis.

Figure 1: Right-of-Way Project Cost Trend Analysis



As shown in Figure 1, historic spending year-over-year indicates an increasing trend line, while the most recent three-year average (2016-2018) results in projected costs below actual 2018 experience. As a result of this increasing trend, the estimate for the right-of-way work for 2020 is based on MERC's actual spending on right-of-way projects in 2018. MERC believes that use of 2018 actual spending is a more accurate forecast for 2020. This approach is consistent with Commission precedent in light of MERC's trend analysis. In particular, "[t]he Commission often employs averaging in ratemaking to smooth costs that vary from year to year. However, where the variation follows a clear trend, averaging can obscure the trend, resulting in inaccurate rates."²⁷

Details regarding the historic right-of-way relocation work MERC completed during the period 2015-2018, including an identification of each project, the governmental agency requiring

²⁷ *In the Matter of a Petition by Minn. Energy Res. Corp. for Auth. to Increase Nat. Gas Rates in Minn.*, Docket No. G011/GR-13-617, FINDINGS OF FACT, CONCLUSIONS, AND ORDER at 18 (Oct. 28, 2014).

the relocation work, the month the project was placed into service, the project cost, and total footage of main and service line installed for each project is provided in Exhibit D-1.

At the time this filing was being prepared, MERC had been notified of 72 right-of-way projects for 2019 and 9 right-of-way projects for 2020, and yet, based on historical projects and costs, we anticipate even greater project numbers and costs to occur in 2019 and 2020 as occurred in the past three years throughout the state.²⁸ Thus, while MERC cannot currently identify the specific relocation requests that will be made for 2020, based on the historic trend line it is reasonable to expect that the Company will continue to receive these requests at the same pace as in recent years and that the resulting costs will continue to increase relative to previous years. As a result, MERC's proposal to use 2018 actual costs as the basis for the GUIC revenue requirement calculation for this category of work provides a reasonable estimate of projected costs to be incurred for the replacement of natural gas facilities located in the public right-of-way required by governmental agencies and any difference between the estimated costs and actual expenditures will be subject to future true up.

2. *Distribution Integrity Management Work*

For 2020, MERC has projected approximately \$10 million in capital and O&M spending for DIMP-related work meeting the definition of gas utility project under Minn. Stat. § 216B.1635. Consistent with MERC's approved 2019 scope of GUIC-eligible costs, this category of work for 2020 includes (1) the replacement of existing obsolete natural gas facilities; (2) the survey and assessment of meter sets to identify the need for replacement or modification of existing infrastructure; and (3) the survey and assessment of sewer laterals and mains to identify the need for repair or replacement of damaged natural gas pipelines as a result of sewer cross bores. Such projects fit squarely within the GUIC Statute's definition of gas utility projects, which include "replacement or modification of existing natural gas facilities, including surveys,

²⁸ See Attachment D-1.1 for a list of currently-known right-of-way projects for 2019 and 2020.

assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure that is required by a federal or state agency.”²⁹ The \$10 million estimate is in line with the Commission-approved 2019 GUIC but also reflects the Company’s forecast of specific projects to be undertaken and placed into service in 2020. Details regarding each project category are discussed in Exhibit E and summarized below.

Despite the fact that MERC approaches its DIMP programs with a concrete plan of action, ongoing pipeline inspections may result in the reprioritization of projects as we discover risks that may require more immediate intervention. The need for flexibility in planning is critical in pipeline work, and emergent projects can result in fluctuating costs year over year. The Commission has previously recognized this dynamic in other GUIC rider proceedings, noting that the costs of these investments can vary widely from year to year and are difficult to forecast with accuracy.³⁰ As a result, rider recovery allows the utility the ability to implement multi-year pipeline safety and assessment programs, and adjust the rates annually to correct for over- or under-recovery.³¹

In accordance with the PHMSA Integrity Management Program for Gas Distribution Pipelines Rule, 49 C.F.R. Part 192, subpart P, MERC must determine and implement measures designed to reduce the risks from failures of its gas distribution and transmission facilities. Under Subpart P, all natural gas distribution companies are required to develop, write, and implement an integrity management program with the following elements:

- Understand system design and material characteristics, operating conditions and environment, and maintenance and operating history;
- Identify existing and potential threats;
- Evaluate and rank risks;

²⁹ Minn. Stat. § 216 B.1635, subd. 1(c)(2).

³⁰ See *In the Matter of the Petition of N. States Power Co., d/b/a Xcel Energy, for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G002/M-14-336, ORDER APPROVING RIDER WITH MODIFICATIONS at 7 (Jan. 27, 2015).

³¹ See *In the Matter of the Petition of N. States Power Co., d/b/a Xcel Energy, for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G002/M-14-336, ORDER APPROVING RIDER WITH MODIFICATIONS at 7 (Jan. 27, 2015).

- Measure integrity management program performance, monitor results, and evaluate effectiveness;
- Periodically assess and improve the integrity management program; and
- Report performance results to PHMSA, and where applicable, also to states.

In addition to federal regulatory requirements, MERC is obligated to comply with state agency (in this case, the Minnesota Office of Pipeline Safety or “MNOPS”) requirements, where MNOPS is enforcing federal regulations. For example, MERC has undertaken the sewer cross bore surveys to comply with the acceptable practices and documentation requirements for the installation of gas pipelines outlined in a 2010 safety alert issued by MNOPS.³² The safety notice was issued after gas lines had been punctured by sewer cleaning contractors and, on several occasions, “the gas ignited, resulting in significant injuries and property damage.”³³ Thereafter, the acceptable practices and documentation requirements were issued by MNOPS to help avoid the recurrence of these significant safety issues posed by cross bores when utilities are installing gas mains and services. This MNOPS alert imposes obligations on natural gas system operators to take specified actions for any new installations and also highlights an industry-wide potential safety issue affecting legacy installations.

The Commission has expressly recognized in prior GUIC rider dockets that utility compliance with federal DIMP and state implementation of federal safety requirements meets the requirement under the GUIC Statute that the replacement, modification, survey, assessment, or other work be required by a federal or state agency. The Commission has specifically stated that:

³² See MINN. DEP’T OF PUB. SAFETY, *Alert Notice – MNOPS AL-01-2010 to Natural Gas Pipeline Operators – Preventing Sewer Service Lateral Cross Bores: Acceptable Practices and Documentation Requirements* (May 10, 2010), available at <https://dps.mn.gov/divisions/ops/forms-documents/Documents/Alert%20Notice%2001-2010.pdf>.

³³ MINN. DEP’T OF PUB. SAFETY, *Alert Notice – MNOPS AL-01-2010 to Natural Gas Pipeline Operators – Preventing Sewer Service Lateral Cross Bores: Acceptable Practices and Documentation Requirements* (May 10, 2010).

Under the federal Pipeline Safety Improvement Act of 2002 and regulations issued by the U.S. Department of Transportation's Pipeline and Hazardous Material Safety Administration, operators of natural-gas transmission and distribution pipelines *must* implement pipeline integrity management programs to assess and improve the safety, reliability, and integrity of their natural-gas infrastructure.³⁴

The Commission has consistently approved rider recovery of DIMP investments, determining that these costs meet the statutory requirements for rider recovery as gas utility infrastructure costs. The Commission also concluded with respect to MERC's specific DIMP-related investments and assessments, that MERC's "efforts to comply with federal DIMP regulations, or with state guidance pursuant to federal safety regulations, meets the definition of a 'gas utility project' under the statute."³⁵

Details regarding each of the proposed projects, project costs, and other information are provided in the following sections.

a. Replacement of Obsolete Materials—\$7 Million Capital Costs

In its 2019 GUIC filing, MERC explained that with GUIC Rider recovery, the Company was proposing to implement a multi-year plan in accordance with its DIMP targeted at the removal and replacement of three types of materials that pose known risks to the Company's distribution system. In particular, MERC identified known risks related to Aldyl-A pipe, copper, and X-Trube pipe.

Additionally, MERC's filing discussed the need to remove and replace other materials known to pose a significant risk as they are discovered. For example, when bare steel is discovered it must be replaced to mitigate the risk of future failure.³⁶ For the 2020 GUIC rider,

³⁴ *In the Matter of the Petition of N. States Power Co., d/b/a Xcel Energy, for Approval of a Gas Utility Infrastructure Cost Rider*, Docket No. G002/M-14-336, ORDER APPROVING RIDER WITH MODIFICATIONS at 3 (Jan. 27, 2015).

³⁵ *In the Matter of Minn. Energy Res. Corp.'s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6 (Feb. 5, 2019).

³⁶ While MERC has replaced all known bare steel on its system, occasionally we discover additional bare steel while working on our lines. Once discovered, we schedule the bare steel for immediate

MERC has forecasted \$7 million of capital costs for the replacement of obsolete materials.

Each specific project including the location, obsolete material to be replaced, vintage in the case of Aldyl-A, footage of main and number of services, and cost estimates broken out by main and service, is summarized in Table 3, below. Maps showing the specific location of the identified projects are included as Exhibit H to this filing. A schedule of planned work and in-service dates for each project is included as Exhibit I.

Table 3: Obsolete Material Replacement 2020							
Obsolete Material	City	Vintage	Main (footage)	Services (# of services)	Main Estimate	Services Estimate	Total
Aldyl-A	Detroit Lakes	1960s	7,405	98	\$370,250	\$255,780	\$626,030
Aldyl-A	Frazee	1960s, 1970s, 1980s	8,140	69	\$407,000	\$180,090	\$587,090
Aldyl-A	Hoyt Lakes	1960s	7,420	59	\$371,000	\$153,990	\$524,990
Aldyl-A	Albert Lea	1970s	10,470	136	\$523,500	\$354,960	\$878,460
Aldyl-A	Blooming Prairie	1960s, 1970s, 1980s	3,500	43	\$175,000	\$112,230	\$287,230
Aldyl-A	Mora	1970s	11,030	80	\$551,500	\$208,800	\$760,300
Aldyl-A	Pine City	1960s	3,580	12	\$179,000	\$31,320	\$210,320
Aldyl-A	Eyota	1960s, 1970s	10,000	147	\$500,000	\$383,670	\$883,670
Aldyl-A	La Crescent	1970s	2,220	43	\$111,000	\$112,230	\$223,230
Aldyl-A	Rochester	1980s	3,980	98	\$199,000	\$255,780	\$454,780
Aldyl-A	Worthington	1970s	11,800	104	\$590,000	\$271,440	\$861,440
X-Trube	Various			200	\$0	\$562,000	\$562,000
Copper/ Bare Steel	Various			50	\$0	\$140,460	\$140,460
TOTAL			79,545	1,139	\$3,977,250	\$3,022,750	\$7,000,000

(1) Obsolete Materials – Aldyl-A

PHMSA has issued several Advisory Bulletins about certain polyethylene pipe material called Aldyl-A, a plastic material that becomes brittle over time and is subject to sudden failure

replacement. Beginning in 2019, replacement of bare steel will be tracked as part of our Obsolete Materials Program.

from cracking.³⁷ Additionally, some of these obsolete installations have been identified as not being locatable, creating additional risk of third-party or MERC contractor damage. MERC’s system contains Aldyl-A pipe that was installed beginning in the 1960s and through 1983. The currently-identified installed mileage of Aldyl-A on MERC’s system is summarized in Table 4 below.³⁸ While MERC is beginning its efforts in 2019 with the oldest vintage Aldyl-A piping, the Company intends to continue to replace all Aldyl-A in future years.

Table 4: Known Aldyl-A Main on MERC’s System by Decade	
DOT Decade	Miles
1960-1969	25.4
1970-1979	254.5
1980-1983	107.8
Total	387.8

MERC is targeting the replacement of approximately 17 miles of Aldyl-A main in 2019. Following completion of replacement projects in 2019, MERC estimates that it will have approximately 370 miles of Aldyl-A pipe remaining across the distribution system. In 2020, MERC is planning to remove 15 miles of 1960s and 1970s vintage Aldyl-A piping as well as 1980s vintage Aldyl-A in the Rochester area. Work on replacement of Aldyl-A in Rochester is beginning in 2019, as discussed in Docket No. G011/M-18-182, but will continue into 2020.

Maps showing the specific location of the identified projects are included as Exhibit H to this filing and a schedule of planned work and in-service dates for each project is included as Exhibit I. MERC will separately track any replacement of Aldyl-A mains and services associated

³⁷ PHMSA, Pipeline Safety: Updated Notification of the Susceptibility to Premature Brittle-Like Cracking of Older Plastic Pipe, Docket No. PHMSA-2004-19856 (Sept. 6, 2007), available at <https://www.phmsa.dot.gov/regulations-fr/notices/07-4309>.

³⁸ While MERC has undertaken efforts to verify all installed Aldyl-A main on its system, during some periods, Aldyl-A was classified in MERC’s system generically as polyethylene (“PE”) pipe. The total amount of known Aldyl-A reflected in Table 4 is greater than MERC had previously identified and reported in its 2019 GUIC Rider filing as a result of some quantities of this material having been categorized generically as PE pipe. Table 4 reflects the best available data as of the time this filing was prepared. MERC will provide any updates in future filings.

with road relocations or other integrity projects. Measures of replacement footage by decade will be tracked annually to show progress towards eliminating older Aldyl-A pipe.

(2) Obsolete Piping and Fittings—Copper and X-Trube

MERC has removed nearly all the remaining copper and x-Trube piping on its distribution system. X-Trube piping, thin-walled steel tubing, was installed throughout the industry in the 1960s as a cost-saving measure because it was less expensive than other piping. It is generally not durable, and cannot be repaired. Similarly, copper facilities are some of the oldest and the lines and fittings have been prone to leak and failure. Replacement of these materials is required because these materials have been known to fail and any repair would increase the risk of failure. As a result, MERC must replace the facilities at issue.

As indicated in Table 3, above, MERC has allocated a small dollar amount related to the removal and replacement of facilities that contain x-Trube piping, bare steel, and copper. Specifically, we are planning to replace approximately 207 x-Trube services in our Southwest, Southeast, and Northwest regions in 2020 as provided in the table below, and will replace bare steel and copper as discovered.

Table 5: Planned X-Trube Replacements			
Region	Town	Known X-Trube Services	2020 Replacements
Northwest	Thief River Falls	46	46
Northwest	Bemidji	54	
Southwest	Tracy	39	39
Southwest	Trimont	54	
Southwest	Walnut Grove	135	
Southwest	Truman	20	
Southwest	Jackson	7	7
Southwest	Lamberton	5	5
Southwest	Sherburn	2	2
Southeast	Byron	86	
Southeast	Chatfield	116	
Southeast	Spring Valley	27	27
Southeast	Kasson	60	
Southeast	Dodge Center	34	34
Southeast	Preston	37	
Southeast	Rochester	157	
Southeast	Harmony	71	
Southeast	Spring Grove	35	35
Southeast	Canton	2	2
Southeast	Caledonia	10	10
Statewide		997	207

MERC will track both planned and unplanned replacements of obsolete material as part of its Obsolete Materials Program.

(3) Obsolete and Faulty Meter Set Valves and Equipment

MERC plans to continue with its program to survey meter set valves in 2020. MERC anticipates we will be able to complete the survey of all meter sets in 2020, one year ahead of schedule. Any valves that are identified in the survey to be at risk of failure, as well as any obsolete equipment posing an immediate threat, will be replaced and accounted for as part of our Obsolete Materials Program. Identified risks that do not pose an immediate risk of failure will be tracked, analyzed, and scheduled for replacement beginning in 2021.

b. Meter Set Survey—\$2 Million O&M

Beginning in 2019, MERC budgeted \$2 million in incremental O&M to begin a multi-year initiative to survey all meter sets to assess any risk of failure of valves and other meter set components and to identify the need for replacement of faulty valves. MERC proposes to continue and complete this multi-year effort in 2020, one year ahead of schedule.

As explained in the Company's 2019 GUIC Rider filing, certain types of valves, e.g., the Rockford Eclipse and Mueller Luboseal valves, are known to fail. MERC has had one incident with the failure of a Rockford valve at a commercial facility in Grand Rapids, Minnesota. A gas leak was detected at the facility and the valve disintegrated during the turnoff process, causing gas to blow until our crew could isolate the failure. To detect these known risks, MERC must survey the equipment at all of its meter sets and replace the facilities found to be suspect.

Because of the large scope of the project and the nature of MERC's dispersed service territory, MERC engaged a third-party contractor to perform the survey work. Upon approval of the 2019 GUIC Rider, MERC issued a request for proposals ("RFP") and secured the services of a third-party contractor at a cost of approximately \$15 per meter for the work to be performed in 2019.

While MERC had initially proposed to complete these assessments over the course of three years, we have determined that we are able to achieve additional cost savings related to travel and coordination efforts by completing the surveys in two years. MERC anticipates completing surveys in the Rochester and Rosemount areas in 2019 and is proposing to conduct the remainder of surveys on all remaining meter sets during 2020 at a cost of approximately \$20 per meter. This cost estimate is based on the bids MERC received for the work to be performed in 2019 and consideration of the travel time that will be required to survey the more disperse portions of MERC's service area that will remain after 2019. During 2020, MERC is planning to complete surveys as outlined in Table 6, below.

Region	Meter Count
Northwest	27,017
Northeast	29,821
Central	10,693
Southwest	36,408
Total	103,939

c. Sewer Cross Bore Survey—\$1 Million O&M

As discussed in the Company’s 2019 GUIC Rider filing, MERC has developed and implemented safety plans to reduce the risk to customers and minimize the threat of sewer cross bores. PHMSA’s Gas Distribution Pipeline Integrity Management Enforcement Guidance notes that:

Cross bores of gas lines in sewers have been reported at 2-3 per mile in high risk areas – predominately where trenchless installation methods were used for gas line installs and where sewers and gas lines are in proximity of each other. As such, operators must determine the potential for cross bore of sewers resulting in gas lines intersecting with sewers.³⁹

While MERC has been inspecting sewer laterals and mains under an ongoing Sewer Line Lateral Inspection Program since 2014, the Company determined that expanded inspections are prudent and necessary to identify and mitigate the risk posed by a cross bore. As a result, beginning in 2019, MERC expanded its surveys to identify conflicts with the help of a third-party contractor,⁴⁰ spending an additional \$1 million over and above the amount approved for recovery in MERC’s 2018 base rates. That \$1 million in additional spending was

³⁹ PHMSA, Gas Distribution Integrity Management Program: FAQs, *available at* <https://primis.phmsa.dot.gov/dimp/faqs.htm>.

⁴⁰ As discussed in MERC’s 2019 GUIC Rider filing, although MERC tries to minimize outsourcing DIMP work when possible, in certain instances, external expertise is needed to ensure the safe and efficient completion of system assessments. The camera inspection and some administrative aspects of the Sewer Cross Bore Survey project will be outsourced because the Company has neither the internal expertise nor the equipment available to perform the specialized inspection aspect of the program.

approved for recovery in the 2019 GUIC Rider. MERC proposes to continue this multi-year effort in 2020.

MERC issued an RFP to obtain bids for a third-party contractor to complete 6,500 proposed surveys beginning in 2019. Based on responses to that RFP, MERC selected a contractor to begin these assessments in 2019, at a cost of approximately \$150 per sewer survey. MERC anticipates completing an additional 6,500 surveys in 2020 in the Southeast and Central regions. As with all of our programs included under DIMP, the reconciliation feature of the GUIC Rider will ensure that only actual program costs will be recovered, and any over- or under-recovery will be accounted for in the annual true-up process.

B. Costs Proposed for Rider Recovery are Incremental

Minnesota Statutes section 216B.1635 provides that only incremental costs shall be recoverable through an approved GUIC rider. In particular, gas utility projects that are in service but were not included in the gas utility's rate base in its most recent general rate case, or are planned to be in service during the period covered by the GUIC report, but in no case longer than the one-year forecast period in the report, are recoverable through a GUIC rider. Further, the GUIC Statute authorizes recovery of incremental property taxes, incremental depreciation expense, and any incremental O&M costs.⁴¹

The costs identified for recovery in the 2020 GUIC Rider as outlined in this filing reflect only incremental return on and of GUIC-eligible capital projects which are not included in rate base in MERC's most recent general rate case in Docket No. G011/GR-17-563 and incremental 2020 O&M expense over and above costs that are included under existing base rates.

In MERC's 2019 GUIC Rider, the OAG took the position that the capital and O&M costs MERC proposed for recovery through the GUIC rider were not incremental and therefore were not entitled to recovery under the GUIC Statute. The Commission rejected those arguments,

⁴¹ Minn. Stat. § 216B.1635, subd. 4.

concluding that “[b]oth the capital costs and the O&M costs derive from new projects that are not currently reflected in the Company’s base rates or the rates that will flow from the pending rate case; the costs are therefore incremental as required by the GUIC statute.”⁴²

Consistent with the clear language and intent of the GUIC Statute and the Commission’s determinations in Docket No. G011/M-18-281, MERC’s 2020 GUIC revenue requirement proposal is structured to ensure that there is no double recovery of costs, and the Company’s true-up proposal ensures all costs are trued up to actuals. None of the costs that are proposed to be included in the GUIC Rider are included in rate base or base rates.

Consistent with MERC’s 2019 GUIC, the Company will separately track the facilities that are replaced and removed in 2020 and will include an adjustment related to the associated depreciation expense in the true-up to be submitted in 2021 to fully account for that expense.

C. Details Regarding the Magnitude and Timing of Costs

Minnesota Statutes section 216B.1635, subdivision 4(2)(vi)-(viii) requires that a petition for approval to recover GUIC costs through a rider include information regarding (1) the magnitude and timing of any known future gas utility projects that the utility may seek to recover through the GUIC Rider; (2) the magnitude of GUIC in relation to the gas utility’s base revenue as approved by the commission in the gas utility’s most recent general rate case, exclusive of gas purchase costs and transportation charges; and (3) the magnitude of GUIC in relation to the gas utility’s capital expenditures since its most recent general rate case. This information is provided in Exhibit F to this filing.

The projects included for recovery via the proposed GUIC Rider can often individually be relatively small in scope, but taken together can account for a material portion of MERC’s ongoing capital investment. Average annual spending over the last three years on road projects

⁴² *In the Matter of Minn. Energy Res. Corp.’s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 6 (Feb. 5, 2019).

and DIMP work alone has consistently been in excess of \$12 million per year, representing over 17 percent of MERC's 2018 actual total capital expenditure.

D. Gas Infrastructure Project Plan Report

Minnesota Statutes section 216B.1635, subdivisions 2 and 3 require that a petition for approval of a GUIC Rider include a project plan report providing pertinent information and supporting data on each proposed project including estimated project costs. Additionally, Subdivision 4(2)(iii) requires that the utility provide a description of the estimated costs and salvage value, if any, associated with the existing infrastructure replaced or modified as a result of the project. Detailed project information is included in Exhibit E to this filing.

III. GUIC RIDER CALCULATION, IMPLEMENTATION, TRACKER, AND TARIFF

A. Revenue Requirement Calculation

In accordance with Minn. Stat. § 216B.1635, subd. 4, MERC's 2020 revenue requirement calculation, as attached in Exhibit D, includes the currently-authorized rate of return, incremental income taxes, and incremental depreciation expense, related to GUIC investments through 2020, inclusive of the applicable GUIC capital expenditures forecasted in 2019.

MERC calculated the 2020 revenue requirement of approximately \$4.9 million based on recovery of the annual depreciation and return on for the Company's forecasted 2019 and 2020 spending for planned capital replacement projects and 2020 planned O&M survey project costs. The 2019 GUIC Rider approved capital projects impact the 2020 revenue requirement as they are still being depreciated and still earning a return in 2020, but have yet to be incorporated into base rates via a rate case. At this time, MERC has not forecasted incremental O&M or property tax expense related to the 2020 right-of-way relocations or obsolete materials projects. To the

extent that actual expenses are identified as those projects progress in 2020, MERC will seek recovery via the GUIC reconciliation in 2021.⁴³

The calculation of the revenue requirement was performed using (1) tax laws in effect in 2018, including the 2017 Tax Cuts and Jobs Act (“TCJA”)⁴⁴; (2) the 9.7 percent return on equity authorized in MERC’s 2018 rate case, Docket No. G011/GR-17-563; and (3) prorated accumulated deferred income taxes (“ADIT”) in compliance with Internal Revenue Service normalization rules. In particular, the tax gross-up factor of 1.402 reflects the gross revenue conversion factor approved in MERC’s 2018 test year rate case in Docket No. G011/GR-17-563. MERC proposes that the GUIC surcharge rate be based on the 2018 test year final authorized weighted average cost of capital of 6.6971 as approved in Docket No. G011/GR-17-563. As shown in Exhibit D, the annual revenue requirement is calculated based on the 13-month average incremental addition to rate base. MERC has also included a proration of the projected federal monthly ADIT, per the formula provided in the Treasury Reg. 1.167(1)-(h)(6)(ii).

For purposes of the true-up, the proration requirement does not apply to the differences between the projected and actual ADIT. Furthermore, pursuant to some recent IRS private letter rulings (“PLRs”), the true-up cannot reverse the effects of the proration. As a result, for the true-up, the Company would propose to adjust the prorated ADIT with the 13-month average of the differences between projected and actual ADIT balances. This methodology preserves the original proration requirement embedded in the projected rates, avoids applying the proration to the projected versus actual differences, and assures the Company complies with the Consistency rule, Code 168(i)(9)(B) (applying a 13-month average to all components of rate

⁴³ Historically, there has been little O&M expense associated with MERC’s DIMP and Relocation projects and MERC has forecasted no specific O&M for its 2020 Relocation projects and Obsolete Materials Program. In some instances, however, it has been necessary to charge an individual relocation project to O&M expense, e.g., for projects that require only a lowering, rather than replacement, of the main within the right-of-way. MERC will include these O&M charges, to the extent they occur, in the reconciliation filing for the 2020 GUIC Rider.

⁴⁴ The official title of the TCJA is “[a]n Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018.” Public Law No. 115-97 (Dec. 22, 2017).

base). The proration and the true-up adjustment will have a minimal impact on the GUIC Rider rate as proposed, ensures compliance with IRS normalization rules, and do not justify delaying implementation of MERC's GUIC Rider.

B. Proposed Rate of Return

The GUIC Statute allows a utility to recover a rate of return on rider investments and provides that the rate “shall be at the level approved by the commission in the public utility’s last general rate case, unless the commission determines that a different rate of return is in the public interest.”⁴⁵ In MERC’s 2019 GUIC Rider, the Commission set the rate of return for the GUIC rider equal to MERC’s authorized rate of return in the Company’s then-pending 2018 general rate case. The Commission expressly rejected the OAG’s proposal to set the rate of return equal to the cost of long-term debt, noting that “MERC’s GUIC investments are financed through a mix of equity and debt financing, and concluded that MERC’s overall rate of return, which reflects a mixture of equity and debt risk, is the most reasonable rate for its GUIC rider.”⁴⁶

MERC proposes that the 2020 GUIC surcharge rate also be based on the 2018 test year final authorized weighted average cost of capital of 6.6971 as approved in Docket No. G011/GR-17-563 and the associated gross revenue conversion factor of 1.402. Exhibit D summarizes those revenue requirement calculations.

C. Proposed Allocation

Minnesota Statutes section 216B.1635, subdivision 4(2)(v) provides that a utility’s petition for approval of a rate schedule to recover GUIC costs outside of a general rate case must include “calculations to establish that the rate adjustment is consistent with the terms of the rate schedule, including the proposed rate design and an explanation of why the proposed rate design is in the public interest.”

⁴⁵ Minn. Stat. § 216B.1635, subd. 6.

⁴⁶ *In the Matter of Minn. Energy Res. Corp.’s Request for Approval of a Gas Util. Infrastructure Cost Rider*, Docket No. G011/M-18-281, ORDER APPROVING GAS UTILITY INFRASTRUCTURE COST RIDER WITH MODIFICATIONS AND REQUIRING COMPLIANCE FILING at 8 (Feb. 5, 2019).

As shown in Exhibits C and D, similar to MERC's approved 2019 GUIC Rider surcharge, MERC is proposing to allocate recovery of the proposed 2020 GUIC revenue requirement on a per-therm basis for all customers in all customer classes (industrial, commercial, residential, system-sales, and transportation). Specifically, the calculated annual revenue deficiency of \$4,888,615 has been divided by total system throughput of approximately 879 million therms to derive a per-therm rate of \$0.00554. This per-therm rate is proposed to be applied to all customers regardless of size or service selection (i.e., sales or transportation) beginning with service rendered in 2020.

Allocation of the GUIC costs across all customer classes on a per-therm basis is reasonable, consistent with the public interest, and consistent with the Commission's decision in MERC's 2019 GUIC Rider in Docket No. G011/M-18-281. A flat per-therm charge is simpler to implement, track, and true-up, thereby making the administration of the GUIC Rider easier and more cost effective to manage. It also recognizes the benefits of the GUIC-eligible projects received by all MERC customers and customer classes on a volumetric basis consistent with their use of the facilities that are being replaced or reinforced. In MERC's 2019 GUIC Rider proceeding, the Department proposed varying the per-therm charge by class according to the non-gas revenue allocation approved in MERC's pending rate case. The Department argued that this allocation would better reflect the fact that GUIC investments are distribution-related rather than energy-related. Ultimately, the Commission approved MERC's proposed per-therm proposal.

MERC's proposed per-therm allocation method results in the following average annual impacts by customer class:

Table 7 – Proposed GUIC Rider Surcharge Average Annual Customer Impact	
Customer Class	Average Annual Rate Impact of GUIC Rider Surcharge
Residential	\$4.84
Commercial & Industrial Class 1	\$5.53
Commercial & Industrial Class 2	\$43.36
Commercial & Industrial Class 3	\$2,238.04
Commercial & Industrial Class 4	\$8,052.70
Commercial & Industrial Class 5	\$73,313.05
Agricultural Grain Dryer Class 1	\$37.18
Agricultural Grain Dryer Class 2	\$280.41
Agricultural Grain Dryer Class 3	\$8,887.26
Power Generation Class 1	\$131.20
Power Generation Class 2	\$111,433.18

In accordance with Minn. Stat. § 216B.1635, subd. 1, the GUIC projects do not serve to increase revenues by connecting infrastructure to new customers. Therefore, no adjustment has been factored into the calculation of the GUIC rate for additional customer revenues. MERC has used total system throughput as approved in its last rate case, Docket No. G011/GR-17-563, with additional projected growth in the Rochester area, for the allocation of costs and the derivation of the per-therm rate. Any difference between actual rate recovery and actual costs incurred for GUIC projects will be captured in the reconciliation process so that customers are held harmless.

D. Proposed Rider Surcharge Implementation

1. Notice to Customers

MERC proposes to notify customers of the implementation of the GUIC rate via the following bill message, which will appear on bills effective the first month the GUIC surcharge takes effect:⁴⁷

⁴⁷ Notably, while the Commission ordered MERC to provide a customer bill message and bill insert explaining its 2019 GUIC Rider surcharge in its February 5, 2019, Order Approving Gas Utility Infrastructure Cost Rider with Modifications and Requiring Compliance Filing in Docket No. G011/M-18-

Effective Jan. 1, 2020, an updated Gas Utility Infrastructure Cost Adjustment, which recovers the cost of assessments, modifications, and replacement of natural gas facilities as required by state and federal safety programs and public works projects will be included on your bill as an Infrastructure Rider. The updated Surcharge is \$0.00554 per therm.

2. *Proposed Termination Date*

MERC is proposing that the 2020 GUIC Rider surcharge become effective January 1, 2020. As discussed in MERC's approved February 7, 2019, Compliance Filing submitted in Docket No. G011/M-18-281, in the event the commission does not approve implementation of MERC's 2020 GUIC rider rates on January 1, 2020, the \$0.00413 per therm 2019 GUIC rider surcharge would continue to be applied until the Commission authorizes implementation of a new 2020 GUIC rider rate. This is necessary in order to ensure MERC is able to recover its annual revenue requirements on the already-approved GUIC-eligible projects. Actual costs and recoveries will be tracked through the tracker mechanism to ensure any over-recoveries are refunded or that any under-recoveries are collected in a future true-up adjustment. Similarly, once implemented, MERC would continue the 2020 GUIC Rider surcharge until the Commission approves a revised surcharge rate or implementation of interim rates in a future rate case proceeding.

At the time of this filing, MERC continues to evaluate the need to file a 2020 test year rate case. MERC would like to avoid a general rate case filing, if possible, in the interest of reducing overall ratepayer impacts and expense, and timely approval of this 2020 GUIC Rider Petition will facilitate avoidance of a general rate case filing. In the event the Company has the need to file a 2020 test year general rate case, we will provide an update to this Petition to notify interested parties and will make a proposal to roll all of the planned capital investments and

281, MERC is proposing only a bill message (without bill insert) to notify customers regarding the updated GUIC rate. Customers will already have been provided more detailed information regarding the GUIC Rider in 2019, a bill message will help reduce overall customer costs, and is more likely to be read because it appears directly on the bill.

O&M projects as presented herein into base rates. Further, MERC would propose to zero out the existing GUIC rider with respect to the unrecovered rate base value of all GUIC project plant in service as of a date certain.

Through the annual true-up process, MERC will demonstrate that its actual costs for GUIC-eligible projects were prudently incurred. At that time, parties will have an opportunity to review, and the Commission will have an opportunity to determine if costs were not prudently incurred.

When MERC files its next rate case, the GUIC Rider would zero out with respect to the unrecovered rate base value of all GUIC project plant in service as of the beginning of the test year. Unrecovered GUIC-eligible plant balance would be put into rate base for the test year.

IV. CONCLUSION

Based on the foregoing information, MERC respectfully requests that the Commission approve the Company's proposed GUIC Rider and surcharge to recover the 2020 revenue requirement as outlined in this Petition.

DATED: April 24, 2019

Respectfully submitted,

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Exhibit A

Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs

216B.1635 RECOVERY OF GAS UTILITY INFRASTRUCTURE COSTS.

Subdivision 1. **Definitions.** (a) "Gas utility" means a public utility as defined in section 216B.02, subdivision 4, that furnishes natural gas service to retail customers.

(b) "Gas utility infrastructure costs" or "GUIC" means costs incurred in gas utility projects that:

(1) do not serve to increase revenues by directly connecting the infrastructure replacement to new customers;

(2) are in service but were not included in the gas utility's rate base in its most recent general rate case, or are planned to be in service during the period covered by the report submitted under subdivision 2, but in no case longer than the one-year forecast period in the report; and

(3) do not constitute a betterment, unless the betterment is based on requirements by a political subdivision or a federal or state agency, as evidenced by specific documentation, an order, or other similar requirement from the government entity requiring the replacement or modification of infrastructure.

(c) "Gas utility projects" means:

(1) replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision; and

(2) replacement or modification of existing natural gas facilities, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure that is required by a federal or state agency.

Subd. 2. **Gas infrastructure filing.** A public utility submitting a petition to recover gas infrastructure costs under this section must submit to the commission, the department, and interested parties a gas infrastructure project plan report and a petition for rate recovery of only incremental costs associated with projects under subdivision 1, paragraph (c). The report and petition must be made at least 150 days in advance of implementation of the rate schedule, provided that the rate schedule will not be implemented until the petition is approved by the commission pursuant to subdivision 5. The report must be for a forecast period of one year.

Subd. 3. **Gas infrastructure project plan report.** The gas infrastructure project plan report required to be filed under subdivision 2 shall include all pertinent information and supporting data on each proposed project including, but not limited to, project description and scope, estimated project costs, and project in-service date.

Subd. 4. **Cost recovery petition for utility's facilities.** Notwithstanding any other provision of this chapter, the commission may approve a rate schedule for the automatic annual adjustment of charges for gas utility infrastructure costs net of revenues under this section, including a rate of return, income taxes on the rate of return, incremental property taxes, incremental depreciation expense, and any incremental operation and maintenance costs. A gas utility's petition for approval of a rate schedule to recover gas utility infrastructure costs outside of a general rate case under section 216B.16 is subject to the following:

(1) a gas utility may submit a filing under this section no more than once per year; and

(2) a gas utility must file sufficient information to satisfy the commission regarding the proposed GUIC. The information includes, but is not limited to:

- (i) the information required to be included in the gas infrastructure project plan report under subdivision 3;
- (ii) the government entity ordering or requiring the gas utility project and the purpose for which the project is undertaken;
- (iii) a description of the estimated costs and salvage value, if any, associated with the existing infrastructure replaced or modified as a result of the project;
- (iv) a comparison of the utility's estimated costs included in the gas infrastructure project plan and the actual costs incurred, including a description of the utility's efforts to ensure the costs of the facilities are reasonable and prudently incurred;
- (v) calculations to establish that the rate adjustment is consistent with the terms of the rate schedule, including the proposed rate design and an explanation of why the proposed rate design is in the public interest;
- (vi) the magnitude and timing of any known future gas utility projects that the utility may seek to recover under this section;
- (vii) the magnitude of GUIC in relation to the gas utility's base revenue as approved by the commission in the gas utility's most recent general rate case, exclusive of gas purchase costs and transportation charges;
- (viii) the magnitude of GUIC in relation to the gas utility's capital expenditures since its most recent general rate case; and
- (ix) the amount of time since the utility last filed a general rate case and the utility's reasons for seeking recovery outside of a general rate case.

Subd. 5. **Commission action.** Upon receiving a gas utility report and petition for cost recovery under subdivision 2 and assessment and verification under subdivision 4, the commission may approve the annual GUIC rate adjustments provided that, after notice and comment, the costs included for recovery through the rate schedule are prudently incurred and achieve gas facility improvements at the lowest reasonable and prudent cost to ratepayers.

Subd. 6. **Rate of return.** The return on investment for the rate adjustment shall be at the level approved by the commission in the public utility's last general rate case, unless the commission determines that a different rate of return is in the public interest.

Subd. 7. **Commission authority; rules.** The commission may issue orders and adopt rules necessary to implement and administer this section.

History: 2005 c 97 art 10 s 1,3; 2013 c 85 art 7 s 2,9

NOTE: This section expires June 30, 2023. Laws 2005, chapter 97, article 10, section 3, as amended by Laws 2013, chapter 85, article 7, section 9.

Exhibit B

Matrix of information included within the petition as required by Minn. Stat. § 216B.1635

Matrix of Information Required by Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs

<u>Citation/Source of Requirement</u>	<u>Information Required/Provided</u>	<u>Section and Page of Application</u>
§ 216B.1635 Subd. 1(b)	<p>(b) “Gas utility infrastructure costs” or “GUIC” means costs incurred in gas utility projects that:</p> <p>(1) do not serve to increase revenues by directly connecting the infrastructure replacement to new customers;</p> <p>(2) are in service but were not included in the gas utility's rate base in its most recent general rate case, or are planned to be in service during the period covered by the report submitted under subdivision 2, but in no case longer than the one-year forecast period in the report; and</p> <p>(3) do not constitute a betterment, unless the betterment is based on requirements by a political subdivision or a federal or state agency, as evidenced by specific documentation, an order, or other similar requirement from the government entity requiring the replacement or modification of infrastructure.</p>	<p>The projects proposed for inclusion in MERC’s 2020 GUIC Rider (1) do not serve to increase revenues by directly connecting to new customers; (2) are not included in current or proposed rates and are planned to be in service by the end of the plan period, 2020; and (3) do not constitute a betterment.</p> <p>Petition at Section II B and III C</p> <p>Exhibit E- MERC’s 2020 Gas Infrastructure Project Plan Report</p>
§ 216B.1635 Subd. 1(c)	<p>(c) “Gas utility projects” means:</p> <p>(1) replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision; and</p> <p>(2) replacement or modification of existing natural gas facilities, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure that is required by a federal or state agency.</p>	<p>Petition at Section II A</p> <p>Exhibit D-1- Historical detail of MERC’s 2018 right-of-way relocation projects</p> <p>Exhibit D-1.1- MERC’s 2019 and 2020 road relocation projects (to-date)</p> <p>Exhibit E- MERC’s 2020 Gas Infrastructure Project Plan Report</p>

Matrix of Information Required by Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs

<u>Citation/Source of Requirement</u>	<u>Information Required/Provided</u>	<u>Section and Page of Application</u>
		Exhibit H-Maps of Aldyl-A Main Replacement (2020) Exhibit I- Project Schedule for Obsolete Material Replacements (2020)
§ 216B.1635 Subd. 2	Gas infrastructure filing. A public utility submitting a petition to recover gas infrastructure costs under this section must submit to the commission, the department, and interested parties a gas infrastructure project plan report and a petition for rate recovery of only incremental costs associated with projects under subdivision 1, paragraph (c). The report and petition must be made at least 150 days in advance of implementation of the rate schedule, provided that the rate schedule will not be implemented until the petition is approved by the commission pursuant to subdivision 5. The report must be for a forecast period of one year.	Petition
§ 216B.1635 Subd. 3	Gas infrastructure project plan report. The gas infrastructure project plan report required to be filed under subdivision 2 shall include all pertinent information and supporting data on each proposed project including, but not limited to, project description and scope, estimated project costs, and project in-service date.	Petition at Section II A Exhibit D-1- Historical detail of MERC's 2018 right-of-way relocation projects Exhibit D-1.1- MERC's 2019 and 2020 road relocation projects (to date)

Matrix of Information Required by Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs

<u>Citation/Source of Requirement</u>	<u>Information Required/Provided</u>	<u>Section and Page of Application</u>
		<p>Exhibit E- MERC's 2020 Gas Infrastructure Project Plan Report</p> <p>Exhibit H-Maps of Aldyl-A Main Replacement (2020)</p> <p>Exhibit I- Project Schedule for Obsolete Material Replacements (2020)</p>
§ 216B.1635 Subd. 4	<p>Cost recovery petition for utility's facilities. Notwithstanding any other provision of this chapter, the commission may approve a rate schedule for the automatic annual adjustment of charges for gas utility infrastructure costs net of revenues under this section, including a rate of return, income taxes on the rate of return, incremental property taxes, incremental depreciation expense, and any incremental operation and maintenance costs. A gas utility's petition for approval of a rate schedule to recover gas utility infrastructure costs outside of a general rate case under section 216B.16 is subject to the following:</p>	<p>Petition at Section III</p> <p>Exhibit D- Calculations of the proposed 2020 GUIC revenue requirement and proposed GUIC Rider surcharge to be effective January 1, 2020.</p>
§ 216B.1635 Subd. 4(1)	<p>(1) a gas utility may submit a filing under this section no more than once per year; and</p>	<p>This request for GUIC Rider recovery is MERC's only request for 2020. MERC's previously approved GUIC Rider was for calendar year 2019 costs and projects.</p> <p>Petition at Section II.</p>

Matrix of Information Required by Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs

<u>Citation/Source of Requirement</u>	<u>Information Required/Provided</u>	<u>Section and Page of Application</u>
§ 216B.1635 Subd. 4(2)	(2) a gas utility must file sufficient information to satisfy the commission regarding the proposed GUIC. The information includes, but is not limited to:	
§ 216B.1635 Subd. 4(2)(i)	(i) the information required to be included in the gas infrastructure project plan report under subdivision 3;	Petition at Section II and II D. Exhibit D-1- Historical detail of MERC's 2018 right-of-way relocation projects Exhibit D-1.1- MERC's 2019 and 2020 road relocation projects (to-date) Exhibit E- MERC's 2020 Gas Infrastructure Project Plan Report Exhibit H-Maps of Aldyl-A Main Replacement (2020) Exhibit I- Project Schedule for Obsolete Material Replacements (2020)
§ 216B.1635 Subd. 4(2)(ii)	(ii) the government entity ordering or requiring the gas utility project and the purpose for which the project is undertaken;	Petition at Section II

Matrix of Information Required by Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs

<u>Citation/Source of Requirement</u>	<u>Information Required/Provided</u>	<u>Section and Page of Application</u>
		<p>Exhibit D-1- Historical detail of MERC's 2018 right-of-way relocation projects</p> <p>Exhibit D-1.1- MERC's 2019 and 2020 road relocation projects (to-date)</p> <p>Exhibit E- MERC's 2020 Gas Infrastructure Project Plan Report</p> <p>Exhibit H-Maps of Aldyl-A Main Replacement (2020)</p> <p>Exhibit I- Project Schedule for Obsolete Material Replacements (2020)</p>
§ 216B.1635 Subd. 4(2)(iii)	(iii) a description of the estimated costs and salvage value, if any, associated with the existing infrastructure replaced or modified as a result of the project;	<p>Petition at Section II A and Section III</p> <p>Exhibit D- Calculations of the proposed 2020 GUIC-eligible revenue requirement and proposed GUIC Rider surcharge to be effective January 1, 2020</p>

Matrix of Information Required by Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs

<u>Citation/Source of Requirement</u>	<u>Information Required/Provided</u>	<u>Section and Page of Application</u>
		<p>Exhibit D-1- Historical detail of MERC's 2018 right-of-way relocation projects</p> <p>Exhibit D-1.1- MERC's 2019 and 2020 road relocation projects (to-date)</p> <p>Exhibit E- MERC's 2020 Gas Infrastructure Project Plan Report</p>
§ 216B.1635 Subd. 4(2)(iv)	(iv) a comparison of the utility's estimated costs included in the gas infrastructure project plan and the actual costs incurred, including a description of the utility's efforts to ensure the costs of the facilities are reasonable and prudently incurred;	N/A Because this 2020 GUIC Rider filing is being submitted in 2019—the first year of MERC's approved GUIC Rider—no comparison of estimated costs to actual costs incurred is available at this time. MERC will submit a true-up for its 2019 GUIC projects and costs in 2020.
§ 216B.1635 Subd. 4(2)(v)	(v) calculations to establish that the rate adjustment is consistent with the terms of the rate schedule, including the proposed rate design and an explanation of why the proposed rate design is in the public interest;	<p>Petition at Section III C</p> <p>Exhibit D- Calculations of the proposed 2020 GUIC-eligible revenue requirement and proposed GUIC Rider surcharge to be effective January 1, 2020.</p>
§ 216B.1635 Subd. 4(2)(vi)	(vi) the magnitude and timing of any known future gas utility projects that the utility may seek to recover under this section;	Exhibit F- Discussion of the magnitude of known future natural

Matrix of Information Required by Minn. Stat. § 216B.1635, Recovery of Gas Utility Infrastructure Costs

<u>Citation/Source of Requirement</u>	<u>Information Required/Provided</u>	<u>Section and Page of Application</u>
		gas projects and the proposed GUIC recovery as required by Minn. Stat. § 216B.1635, subd. 4(vi), (vii), and (viii)
§ 216B.1635 Subd. 4(2)(vii)	(vii) the magnitude of GUIC in relation to the gas utility's base revenue as approved by the commission in the gas utility's most recent general rate case, exclusive of gas purchase costs and transportation charges;	Exhibit F- Discussion of the magnitude of known future natural gas projects and the proposed GUIC recovery as required by Minn. Stat. § 216B.1635, subd. 4(vi), (vii), and (viii)
§ 216B.1635 Subd. 4(2)(viii)	(viii) the magnitude of GUIC in relation to the gas utility's capital expenditures since its most recent general rate case; and	Exhibit F- Discussion of the magnitude of known future natural gas projects and the proposed GUIC recovery as required by Minn. Stat. § 216B.1635, subd. 4(vi), (vii), and (viii)
§ 216B.1635 Subd. 4(2)(ix)	(ix) the amount of time since the utility last filed a general rate case and the utility's reasons for seeking recovery outside of a general rate case.	Petition at Sections II and III.
§ 216B.1635 Subd. 6	Rate of return. The return on investment for the rate adjustment shall be at the level approved by the commission in the public utility's last general rate case, unless the commission determines that a different rate of return is in the public interest.	Petition at Section III B. Exhibit D- Calculations of the proposed 2020 GUIC-eligible revenue requirement and proposed GUIC Rider surcharge to be effective January 1, 2020.

Exhibit C

Clean and Redline tariff sheets to reflect the 2020 GUIC rate factor effective January 1, 2020 (MERC Tariff Sheets 7.20-7.21)

Clean Tariff Sheets

GAS UTILITY INFRASTRUCTURE COST RIDER

Original Sheet No. 7.20

1. APPLICABILITY

Applicable to bills for natural gas service provided under all utility rate schedules as approved by the Minnesota Public Utilities Commission (MPUC).

2. RIDER

The Gas Utility Infrastructure Cost (GUIC) rider statute (Minn. Stat. § 216B.1635) permits a public utility to petition the MPUC outside of a general rate case for a rider to be billed to all of the utility's customers, including transport customers, to recover the revenue deficiency from projects not already included in utility rates that have been incurred for:

- A. replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision; and
- B. replacement or modification of existing natural gas facilities, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure that is required by a federal or state agency.

3. RATE

The GUIC Rider rate for any customer class will be the MPUC-approved rate for that customer class. Such GUIC Rider rates may be volumetric, a flat fee, or some other form of approved recovery.

4. TERM

The GUIC Rider rate will be established for each customer group and be based on the annual revenue requirements for costs associated with forecasted natural gas infrastructure projects eligible for recovery under Minnesota Statute Sections 216B.1635 that are determined by the Commission to be eligible for recovery under this GUIC Rider.

The Company will file a GUIC Annual Report each April 1, which will include a reconciliation of the previous full calendar year's GUIC Tracker Account balance, if applicable, as well as support for any request to change the GUIC Rider Rate for a subsequent calendar year. (For example, the year-end 2019 GUIC Rider Tracker Account balance will be applied as a true-up adjustment to the 2021 GUIC Rider rate.) The GUIC Rider rate will be adjusted to reflect new Recoverable GUIC Costs as well as the amortization of the prior year's GUIC Tracker balance as approved by the Commission.

GAS UTILITY INFRASTRUCTURE COST RIDER
(Continued)

1st Revised Sheet No. 7.21

5. DEFINITIONS

- A. GUIC Tracker: An accounting process used to accumulate any difference between the actual revenue requirement impact of Recoverable GUIC Costs and the actual revenues recovered through the GUIC Rider.
- B. GUIC Rider Reconciliation: The GUIC Factor for each customer group may be adjusted annually with approval of the MPUC. The Company will file a GUIC Annual Report on or before April 1, which will include a reconciliation of the previous full calendar year's GUIC Tracker Account balance, if applicable, as well as support for any request to change the GUIC Factor for the subsequent calendar year.
- C. Qualifying Projects: Projects eligible for recovery via the GUIC Rider under Minn. Stat. § 216B.1635 include:
 - i. replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision; and
 - ii. replacement or modification of existing natural gas facilities, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure that is required by a federal or state agency.
- D. Recoverable GUIC Costs: The revenue requirement related to Qualifying Projects not already reflected in rates. The annual revenue requirement for costs associated with the Qualifying Projects includes the currently authorized rate of return on capital investment, incremental income taxes, incremental property taxes, incremental depreciation expense, and any incremental operation and maintenance costs relative to the Qualifying Project(s). A standard model will be used to calculate the revenue requirement related to Qualifying Project(s) for the filing period.

6. GUIC RIDER RATES

A. Currently Authorized GUIC Rider Rate

A separate GUIC Rate may be calculated for each customer class or the same rate may be applied across all or a portion of customer classes, as approved by the MPUC. The GUIC rate shall be calculated to recover the Recoverable GUIC Costs over the period approved by the MPUC.

The GUIC Rate effective January 1, 2020 shall be \$0.00554 per therm for all customer classes.

B. Adjustment to GUIC Tracker Account with Changes in Base Rates

Whenever the Company implements changes in base rates as the result of a final Commission order in a general rate case, the Company shall simultaneously adjust the GUIC Tracker Account to remove all costs that have been included in the approved base rates.

Redline Tariff Sheets

GAS UTILITY INFRASTRUCTURE COST RIDER

Original Sheet No. 7.20

1. APPLICABILITY

Applicable to bills for natural gas service provided under all utility rate schedules as approved by the Minnesota Public Utilities Commission (MPUC).

2. RIDER

The Gas Utility Infrastructure Cost (GUIC) rider statute (Minn. Stat. § 216B.1635) permits a public utility to petition the MPUC outside of a general rate case for a rider to be billed to all of the utility's customers, including transport customers, to recover the revenue deficiency from projects not already included in utility rates that have been incurred for:

- A. replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision; and
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3. RATE

The GUIC Rider rate for any customer class will be the MPUC-approved rate for that customer class. Such GUIC Rider rates may be volumetric, a flat fee, or some other form of approved recovery.

4. TERM

The GUIC Rider rate will be established for each customer group and be based on the annual revenue requirements for costs associated with forecasted natural gas infrastructure projects eligible for recovery under Minnesota Statute Sections 216B.1635 that are determined by the Commission to be eligible for recovery under this GUIC Rider.

The Company will file a GUIC Annual Report each April 1, which will include a reconciliation of the previous full calendar year's GUIC Tracker Account balance, if applicable, as well as support for any request to change the GUIC Rider Rate for a subsequent calendar year. (For example, the year-end 2019 GUIC Rider Tracker Account balance will be applied as a true-up adjustment to the 2021 GUIC Rider rate.) The GUIC Rider rate will be adjusted to reflect new Recoverable GUIC Costs as well as the amortization of the prior year's GUIC Tracker balance as approved by the Commission.

GAS UTILITY INFRASTRUCTURE COST RIDER
(Continued)

1st Revised Sheet~~Original Sheet~~ No. 7.21

5. DEFINITIONS

- A. GUIC Tracker: An accounting process used to accumulate any difference between the actual revenue requirement impact of Recoverable GUIC Costs and the actual revenues recovered through the GUIC Rider.
- B. GUIC Rider Reconciliation: The GUIC Factor for each customer group may be adjusted annually with approval of the MPUC. The Company will file a GUIC Annual Report on or before April 1, which will include a reconciliation of the previous full calendar year's GUIC Tracker Account balance, if applicable, as well as support for any request to change the GUIC Factor for the subsequent calendar year.
- C. Qualifying Projects: Projects eligible for recovery via the GUIC Rider under Minn. Stat. § 216B.1635 include:
- i. replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by or on behalf of the United States, the state of Minnesota, or a political subdivision; and
 - ii. replacement or modification of existing natural gas facilities, including surveys, assessments, reassessment, and other work necessary to determine the need for replacement or modification of existing infrastructure that is required by a federal or state agency.
- D. Recoverable GUIC Costs: The revenue requirement related to Qualifying Projects not already reflected in rates. The annual revenue requirement for costs associated with the Qualifying Projects includes the currently authorized rate of return on capital investment, incremental income taxes, incremental property taxes, incremental depreciation expense, and any incremental operation and maintenance costs relative to the Qualifying Project(s). A standard model will be used to calculate the revenue requirement related to Qualifying Project(s) for the filing period.

6. GUIC RIDER RATES

A. Currently Authorized GUIC Rider Rate

A separate GUIC Rate may be calculated for each customer class or the same rate may be applied across all or a portion of customer classes, as approved by the MPUC. The GUIC rate shall be calculated to recover the Recoverable GUIC Costs over the period approved by the MPUC.

The GUIC Rate effective January~~May~~ 1, 2020~~19~~ shall be \$0.00554~~413~~ per therm for all customer classes.

B. Adjustment to GUIC Tracker Account with Changes in Base Rates

Whenever the Company implements changes in base rates as the result of a final Commission order in a general rate case, the Company shall simultaneously adjust the GUIC Tracker Account to remove all costs that have been included in the approved base rates.

Exhibit D

Calculations of the proposed 2020 GUIC-eligible revenue requirement and proposed GUIC Rider surcharge to be effective January 1, 2020

Revenue Requirement on GUIC Projects

Line	Description	Reference	2019	2020
1	Expense	O&M Expense	3,000,000	3,000,000
2	Expense	Depreciation Expense	133,090	351,489
3	Rate Base	13-Month Average Net Plant Value	5,250,459	16,005,916
4	Accumulated Deferred Income Tax Proration Adjustment		2,263	151,600
5	Adjusted Rate Base	13-Month Average Net Plant Value	5,252,722	16,157,516
6	Rate of Return	Commission Authorized 2018 Rate Case	6.6971%	6.6971%
7	Earnings on Rate Base	Line 5 x Line 6	351,780	1,082,085
8	Gross Revenue Conversion Factor	2018 Rate Case Adjusted for Tax Reform	1.402	1.402
9	Return on Rate Base	Line 7 x Line 8	493,196	1,517,083
10				
11	Total Revenue Requirement	Line 1 + Line 2 + Line 9	3,626,285	4,868,572
12				
13	Offsetting Project Revenue			
14				
15	Project Revenue Deficiency	Line 11 less line 13	3,626,285	4,868,572
16				
17	Total Therms		877,001,389	878,741,019
18				
19	Per therm Increase	Line 15 / Line 17	\$ 0.00413	\$ 0.00554
20				
21	Average use per Residential Customer	2018 Rate Case Sales Forecast	874	874
22	Average annual cost increase to Residential Customer	Line 19 x Line 21	\$ 3.61	\$ 4.84
23				
24	Average use per C&I Class 1 Customer	2018 Rate Case Sales Forecast	999	999
25	Average annual cost increase to C&I Class 1 Customer	Line 19 x Line 24	\$ 4.13	\$ 5.53
26				
27	Average use per C&I Class 2 Customer	2018 Rate Case Sales Forecast	7,827	7,827
28	Average annual cost increase to C&I Class 2 Customer	Line 19 x Line 27	\$ 32.36	\$ 43.36
29				
30	Average use per C&I Class 3 Customer	2018 Rate Case Sales Forecast	403,949	403,949
31	Average annual cost increase to C&I Class 3 Customer	Line 19 x Line 30	\$ 1,670.28	\$ 2,238.04
32				
33	Average use per C&I Class 4 Customer	2018 Rate Case Sales Forecast	1,453,452	1,453,452
34	Average annual cost increase to C&I Class 4 Customer	Line 19 x Line 33	\$ 6,009.83	\$ 8,052.70
35				
36	Average use per C&I Class 5 Customer	2018 Rate Case Sales Forecast	13,232,459	13,232,459
37	Average annual cost increase to C&I Class 5 Customer	Line 19 x Line 36	\$ 54,714.48	\$ 73,313.05
38				
39	Average use per Agriculture Dryer Class 1 Customer	2018 Rate Case Sales Forecast	6,711	6,711
40	Average annual cost increase to Agriculture Dryer Class 1 Customer	Line 19 x Line 39	\$ 27.75	\$ 37.18
41				
42	Average use per Agriculture Dryer Class 2 Customer	2018 Rate Case Sales Forecast	50,612	50,612
43	Average annual cost increase to Agriculture Dryer Class 2 Customer	Line 19 x Line 42	\$ 209.27	\$ 280.41
44				
45	Average use per Agriculture Dryer Class 3 Customer	2018 Rate Case Sales Forecast	1,604,084	1,604,084
46	Average annual cost increase to Agriculture Dryer Class 3 Customer	Line 19 x Line 45	\$ 6,632.68	\$ 8,887.26
47				
48	Average use per Power Generation Class 1 Customer	2018 Rate Case Sales Forecast	23,680	23,680
49	Average annual cost increase to Power Generation Class 1 Customer	Line 19 x Line 48	\$ 97.91	\$ 131.20
50				
51	Average use per Power Generation Class 2 Customer	2018 Rate Case Sales Forecast	20,112,859	20,112,859
52	Average annual cost increase to Power Generation Class 2 Customer	Line 19 x Line 51	\$ 83,164.03	\$ 111,433.18

Assumptions

- 1 GUIC related road and replacement service construction expenditures go into service as spent.
- 2 Assumes a 20 year life based on current Distribution Assets at MERC
- 3 Sales are based off of MERC's 2018 filed rate case data in Docket No. G011/GR-17-563
- 4 Assumes no AFUDC, but a return on CWIP in Rate Base
- 5 The project revenue deficiency is treated as a Distribution Costs and allocated on a Demand basis per the Class Cost of Service filed by MERC in Docket No. G011/GR-17-563

GUIC Rider
Total Mains, Services, Stations
Revenue Requirement

											Revenue			
											Total			
Month	Construction Expenditures	CWIP	Plant	Accumulated Depreciation	Accumulated Deferred Tax	Rate Base	ADIT Proration Adjust	Adjusted Rate Base	Return On	Depreciation Return of	O&M	Total Revenue Requirement		
2018	Dec-18	-	-	-	-	-	-	-	-	-	-	-		
2019	Jan-19	9,983	-	9,983	(22)	(7,986)	1,975	0	1,975	-	22	4,200	4,222	
2019	Feb-19	12,122	-	22,105	(71)	(15,973)	6,062	410	6,472	15	49	5,100	5,164	
2019	Mar-19	34,940	-	57,045	(196)	(23,959)	32,890	779	33,669	51	125	14,700	14,876	
2019	Apr-19	1,093,471	-	1,150,516	(2,301)	(31,946)	1,116,270	1,108	1,117,377	263	2,105	168,300	170,669	
2019	May-19	1,791,010	-	2,941,527	(7,789)	(39,932)	2,893,806	1,395	2,895,200	8,743	5,488	372,000	386,231	
2019	Jun-19	2,207,739	-	5,149,266	(17,477)	(47,919)	5,083,870	1,642	5,085,512	22,653	9,689	480,000	512,342	
2019	Jul-19	1,478,943	-	6,628,209	(30,091)	(55,905)	6,542,213	1,848	6,544,061	39,791	12,613	397,800	450,204	
2019	Aug-19	1,628,133	-	8,256,342	(45,826)	(63,892)	8,146,625	2,012	8,148,637	51,204	15,735	370,800	437,739	
2019	Sep-19	1,378,816	-	9,635,158	(64,364)	(71,878)	9,498,917	2,136	9,501,053	63,759	18,538	423,000	505,296	
2019	Oct-19	1,326,624	-	10,961,782	(85,556)	(79,864)	10,796,362	2,219	10,798,580	74,340	21,193	378,600	474,133	
2019	Nov-19	1,136,096	-	12,097,878	(108,952)	(87,851)	11,901,075	2,262	11,903,337	84,493	23,396	276,000	383,889	
2019	Dec-19	366,953	-	12,464,831	(133,090)	(95,837)	12,235,904	2,263	12,238,167	93,137	24,138	109,500	226,775	
2020	Jan-20	165	-	12,464,996	(157,227)	(110,413)	12,197,355	74,734	12,272,089	95,757	24,138	261	120,155	
2020	Feb-20	330	-	12,465,325	(181,365)	(124,989)	12,158,971	79,327	12,238,298	96,022	24,138	261	120,421	
2020	Mar-20	1,319	-	12,466,644	(205,503)	(139,569)	12,121,572	83,995	12,205,567	95,758	24,138	1,565	121,462	
2020	Apr-20	230,740	-	12,697,384	(229,644)	(154,972)	12,312,768	88,824	12,401,592	95,502	24,140	320,115	439,757	
2020	May-20	505,157	-	13,202,541	(254,150)	(171,912)	12,776,479	93,926	12,870,405	97,036	24,506	397,861	519,402	
2020	Jun-20	1,065,362	-	14,267,903	(279,456)	(192,540)	13,795,907	99,526	13,895,433	100,704	25,306	725,020	851,030	
2020	Jul-20	1,545,632	-	15,813,535	(306,450)	(217,604)	15,289,481	105,855	15,395,335	108,724	26,994	581,529	717,247	
2020	Aug-20	1,800,930	-	17,614,464	(335,893)	(246,564)	17,032,007	113,041	17,145,048	120,460	29,443	362,640	512,543	
2020	Sep-20	1,996,400	-	19,610,864	(368,190)	(279,508)	18,963,166	121,168	19,084,334	134,150	32,296	255,935	422,382	
2020	Oct-20	2,076,170	-	21,687,034	(403,649)	(315,838)	20,967,547	130,280	21,097,827	149,324	35,459	139,577	324,361	
2020	Nov-20	2,166,653	-	23,853,687	(442,398)	(355,835)	23,055,455	140,414	23,195,869	165,079	38,749	158,622	362,450	
2020	Dec-20	2,200,275	-	26,053,963	(484,579)	(399,091)	25,170,293	151,600	25,321,893	181,495	42,181	56,614	280,290	

Minnesota Energy Resources Corporation
GUIC Revenue Requirement

Gas Services Summary

Month	Net Plant In Service			Depr. Calculation			Accumulated Depreciation				
	Additions	Retirements	Net Accumulated Investment	Beginning of the Month Addition	Annual Depr. Rate	Deprec Exp (NetDep)	Depreciation	Retirement	Cost Of Removal	Salvage	End Bal
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]
12/1/2018	\$ -	\$ -	\$ -								
1/1/2019	\$ 2,202	\$ -	\$ 2,202	\$ -	\$ -	\$ 4	\$ (4)	\$ -	\$ -	\$ -	\$ (4)
2/1/2019	\$ 2,674	\$ -	\$ 4,876	\$ 2,202	\$ -	\$ 9	\$ (9)	\$ -	\$ -	\$ -	\$ (14)
3/1/2019	\$ 7,707	\$ -	\$ 12,582	\$ 4,876	\$ -	\$ 24	\$ (24)	\$ -	\$ -	\$ -	\$ (38)
4/1/2019	\$ 195,591	\$ -	\$ 208,174	\$ 12,582	\$ -	\$ 402	\$ (402)	\$ -	\$ -	\$ -	\$ (440)
5/1/2019	\$ 335,417	\$ -	\$ 543,591	\$ 208,174	\$ -	\$ 1,051	\$ (1,051)	\$ -	\$ -	\$ -	\$ (1,491)
6/1/2019	\$ 416,812	\$ -	\$ 960,403	\$ 543,591	\$ -	\$ 1,857	\$ (1,857)	\$ -	\$ -	\$ -	\$ (3,348)
7/1/2019	\$ 291,135	\$ -	\$ 1,251,538	\$ 960,403	\$ -	\$ 2,420	\$ (2,420)	\$ -	\$ -	\$ -	\$ (5,768)
8/1/2019	\$ 310,013	\$ -	\$ 1,561,551	\$ 1,251,538	\$ -	\$ 3,019	\$ (3,019)	\$ -	\$ -	\$ -	\$ (8,787)
9/1/2019	\$ 279,571	\$ -	\$ 1,841,122	\$ 1,561,551	\$ -	\$ 3,560	\$ (3,560)	\$ -	\$ -	\$ -	\$ (12,346)
10/1/2019	\$ 264,552	\$ -	\$ 2,105,675	\$ 1,841,122	\$ -	\$ 4,071	\$ (4,071)	\$ -	\$ -	\$ -	\$ (16,417)
11/1/2019	\$ 219,021	\$ -	\$ 2,324,696	\$ 2,105,675	\$ -	\$ 4,494	\$ (4,494)	\$ -	\$ -	\$ -	\$ (20,912)
12/1/2019	\$ 73,923	\$ -	\$ 2,398,620	\$ 2,324,696	\$ -	\$ 4,637	\$ (4,637)	\$ -	\$ -	\$ -	\$ (25,549)
	\$ 2,398,620	\$ -				\$ 25,549	\$ (25,549)	\$ -	\$ -	\$ -	
											\$ (25,549)
1/1/2020	\$ 50	\$ -	\$ 2,398,670	\$ 2,398,620	\$ -	\$ 4,637	\$ (4,637)	\$ -	\$ -	\$ -	\$ (30,186)
2/1/2020	\$ 100	\$ -	\$ 2,398,770	\$ 2,398,670	\$ -	\$ 4,637	\$ (4,637)	\$ -	\$ -	\$ -	\$ (34,824)
3/1/2020	\$ 402	\$ -	\$ 2,399,172	\$ 2,398,770	\$ -	\$ 4,638	\$ (4,638)	\$ -	\$ -	\$ -	\$ (39,461)
4/1/2020	\$ 70,304	\$ -	\$ 2,469,476	\$ 2,399,172	\$ -	\$ 4,638	\$ (4,638)	\$ -	\$ -	\$ -	\$ (44,100)
5/1/2020	\$ 153,916	\$ -	\$ 2,623,392	\$ 2,469,476	\$ -	\$ 4,774	\$ (4,774)	\$ -	\$ -	\$ -	\$ (48,874)
6/1/2020	\$ 324,604	\$ -	\$ 2,947,996	\$ 2,623,392	\$ -	\$ 5,072	\$ (5,072)	\$ -	\$ -	\$ -	\$ (53,946)
7/1/2020	\$ 470,937	\$ -	\$ 3,418,934	\$ 2,947,996	\$ -	\$ 5,699	\$ (5,699)	\$ -	\$ -	\$ -	\$ (59,646)
8/1/2020	\$ 548,724	\$ -	\$ 3,967,657	\$ 3,418,934	\$ -	\$ 6,610	\$ (6,610)	\$ -	\$ -	\$ -	\$ (66,255)
9/1/2020	\$ 608,281	\$ -	\$ 4,575,939	\$ 3,967,657	\$ -	\$ 7,671	\$ (7,671)	\$ -	\$ -	\$ -	\$ (73,926)
10/1/2020	\$ 632,587	\$ -	\$ 5,208,526	\$ 4,575,939	\$ -	\$ 8,847	\$ (8,847)	\$ -	\$ -	\$ -	\$ (82,773)
11/1/2020	\$ 660,156	\$ -	\$ 5,868,681	\$ 5,208,526	\$ -	\$ 10,070	\$ (10,070)	\$ -	\$ -	\$ -	\$ (92,843)
12/1/2020	\$ 670,400	\$ -	\$ 6,539,082	\$ 5,868,681	\$ -	\$ 11,346	\$ (11,346)	\$ -	\$ -	\$ -	\$ (104,189)
	\$ 4,140,462	\$ -				\$ 78,640	\$ (78,640)	\$ -	\$ -	\$ -	

Deferred Income Taxes									
Month	Tax Addition	Tax Depr.	Tax Gain/(Loss) on Retirements	Book/Tax Difference	Bonus Effect	NOL	Deferred Tax	End Bal	Rate Base
	[L]	[M]	[N]	[O]	[P]	[Q]	[R]	[S]	[T] = [C] + [K] + [S]
12/1/2018					0.0000%	0.0000%	-		
1/1/2019	\$ 2,202	\$ (7)	\$ -	\$ (3)	\$ -	\$ -	\$ (1)	\$ (1)	\$ 2,197
2/1/2019	\$ 2,674	\$ (23)	\$ -	\$ (14)	\$ -	\$ -	\$ (4)	\$ (5)	\$ 4,857
3/1/2019	\$ 7,707	\$ (88)	\$ -	\$ (64)	\$ -	\$ -	\$ (18)	\$ (23)	\$ 12,521
4/1/2019	\$ 195,591	\$ (2,484)	\$ -	\$ (2,082)	\$ -	\$ -	\$ (597)	\$ (620)	\$ 207,114
5/1/2019	\$ 335,417	\$ (5,892)	\$ -	\$ (4,841)	\$ -	\$ -	\$ (1,388)	\$ (2,007)	\$ 540,092
6/1/2019	\$ 416,812	\$ (9,514)	\$ -	\$ (7,657)	\$ -	\$ -	\$ (2,195)	\$ (4,202)	\$ 952,853
7/1/2019	\$ 291,135	\$ (9,369)	\$ -	\$ (6,949)	\$ -	\$ -	\$ (1,992)	\$ (6,194)	\$ 1,239,576
8/1/2019	\$ 310,013	\$ (11,662)	\$ -	\$ (8,643)	\$ -	\$ -	\$ (2,477)	\$ (8,672)	\$ 1,544,092
9/1/2019	\$ 279,571	\$ (12,743)	\$ -	\$ (9,183)	\$ -	\$ -	\$ (2,632)	\$ (11,304)	\$ 1,817,472
10/1/2019	\$ 264,552	\$ (14,020)	\$ -	\$ (9,949)	\$ -	\$ -	\$ (2,852)	\$ (14,156)	\$ 2,075,102
11/1/2019	\$ 219,021	\$ (14,109)	\$ -	\$ (9,615)	\$ -	\$ -	\$ (2,756)	\$ (16,912)	\$ 2,286,873
12/1/2019	\$ 73,923	\$ (10,037)	\$ -	\$ (5,400)	\$ -	\$ -	\$ (1,548)	\$ (18,460)	\$ 2,354,611
	\$ 2,398,620	\$ (89,948)	\$ -	\$ (64,399)	\$ -	\$ -	\$ (18,460)		
							21.0000%		
							7.6646%		
					0.0000%	0.0000%			
					[P]	[Q]			
1/1/2020	\$ 50	\$ (14,430)	\$ -	\$ (9,793)	\$ -	\$ -	\$ (2,807)	\$ (18,460)	\$ 2,347,217
2/1/2020	\$ 100	\$ (14,430)	\$ -	\$ (9,793)	\$ -	\$ -	\$ (2,807)	\$ (21,267)	\$ 2,339,873
3/1/2020	\$ 402	\$ (14,434)	\$ -	\$ (9,796)	\$ -	\$ -	\$ (2,808)	\$ (24,074)	\$ 2,332,829
4/1/2020	\$ 70,304	\$ (15,311)	\$ -	\$ (10,673)	\$ -	\$ -	\$ (3,059)	\$ (26,882)	\$ 2,332,829
5/1/2020	\$ 153,916	\$ (17,055)	\$ -	\$ (12,281)	\$ -	\$ -	\$ (3,520)	\$ (29,941)	\$ 2,395,435
6/1/2020	\$ 324,604	\$ (21,219)	\$ -	\$ (16,147)	\$ -	\$ -	\$ (4,629)	\$ (33,461)	\$ 2,541,057
7/1/2020	\$ 470,937	\$ (26,448)	\$ -	\$ (20,749)	\$ -	\$ -	\$ (5,947)	\$ (38,090)	\$ 2,855,960
8/1/2020	\$ 548,724	\$ (31,337)	\$ -	\$ (24,727)	\$ -	\$ -	\$ (7,088)	\$ (44,037)	\$ 3,315,251
9/1/2020	\$ 608,281	\$ (36,440)	\$ -	\$ (28,769)	\$ -	\$ -	\$ (8,247)	\$ (51,125)	\$ 3,850,277
10/1/2020	\$ 632,587	\$ (41,003)	\$ -	\$ (32,156)	\$ -	\$ -	\$ (9,217)	\$ (59,372)	\$ 4,442,641
11/1/2020	\$ 660,156	\$ (45,903)	\$ -	\$ (35,833)	\$ -	\$ -	\$ (10,271)	\$ (68,589)	\$ 5,057,163
12/1/2020	\$ 670,400	\$ (50,413)	\$ -	\$ (39,067)	\$ -	\$ -	\$ (11,198)	\$ (78,861)	\$ 5,696,978
	\$ 4,140,462	\$ (328,423)	\$ -	\$ (249,783)	\$ -	\$ -	\$ (71,599)	\$ (90,059)	\$ 6,344,834
							21.0000%		
							7.6646%		

	2018 & Fwd
Federal Tax Rate	0.21
MN Tax Rate	0.098
MN Apportionment Factor	0.989671
MI Tax Rate	0.06
MI Apportionment Factor	0.000542

Month	Book/Tax Differ Balance	Bonus Effect Balance	NOL Balance	Deferred Tax Federal 21.0000%	Deferred Tax Federal NOL 21.0000%	Deferred Tax State 7.6646%	Federal Def Tax Activity	Federal Def Tax Annual (Not Used)	Proration Adjusted Activity Factor * Activity	Prorated Balance Adjust	Federal 13-Mo Ave DFIT	Monthly Prorated Balance To Use
12/1/2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
1/1/2019	\$ (3)	\$ -	\$ -	\$ (1)	\$ -	\$ (0)	2019 \$ (0.58)	\$ (13,523.77)	\$ (0.04)	\$ 0.54		\$ (0)
2/1/2019	\$ (16)	\$ -	\$ -	\$ (3)	\$ -	\$ (1)	2019 \$ (2.85)	\$ (13,523.77)	\$ (78.99)	\$ (75.61)		\$ (79)
3/1/2019	\$ (80)	\$ -	\$ -	\$ (17)	\$ -	\$ (6)	2019 \$ (13.37)	\$ (13,523.77)	\$ (71.02)	\$ (133.25)		\$ (150)
4/1/2019	\$ (2,162)	\$ -	\$ -	\$ (454)	\$ -	\$ (166)	2019 \$ (437.12)	\$ (13,523.77)	\$ (63.30)	\$ 240.57		\$ (213)
5/1/2019	\$ (7,003)	\$ -	\$ -	\$ (1,471)	\$ -	\$ (537)	2019 \$ (1,016.62)	\$ (13,523.77)	\$ (55.32)	\$ 1,201.87		\$ (269)
6/1/2019	\$ (14,660)	\$ -	\$ -	\$ (3,079)	\$ -	\$ (1,124)	2019 \$ (1,608.02)	\$ (13,523.77)	\$ (47.60)	\$ 2,762.29		\$ (316)
7/1/2019	\$ (21,609)	\$ -	\$ -	\$ (4,538)	\$ -	\$ (1,656)	2019 \$ (1,459.36)	\$ (13,523.77)	\$ (39.62)	\$ 4,182.03		\$ (356)
8/1/2019	\$ (30,252)	\$ -	\$ -	\$ (6,353)	\$ -	\$ (2,319)	2019 \$ (1,815.03)	\$ (13,523.77)	\$ (31.65)	\$ 5,965.41		\$ (388)
9/1/2019	\$ (39,436)	\$ -	\$ -	\$ (8,281)	\$ -	\$ (3,023)	2019 \$ (1,928.54)	\$ (13,523.77)	\$ (23.93)	\$ 7,870.02		\$ (411)
10/1/2019	\$ (49,385)	\$ -	\$ -	\$ (10,371)	\$ -	\$ (3,785)	2019 \$ (2,089.29)	\$ (13,523.77)	\$ (15.95)	\$ 9,943.36		\$ (427)
11/1/2019	\$ (58,999)	\$ -	\$ -	\$ (12,390)	\$ -	\$ (4,522)	2019 \$ (2,019.06)	\$ (13,523.77)	\$ (8.23)	\$ 11,954.18		\$ (436)
12/1/2019	\$ (64,399)	\$ -	\$ -	\$ (13,524)	\$ -	\$ (4,936)	2019 \$ (1,133.93)	\$ (13,523.77)	\$ (0.26)	\$ 13,087.86		\$ (436)
				21.0000%	21.0000%	7.6646%						
1/1/2020	\$ (64,399)	\$ -	\$ -	\$ (13,524)	\$ -	\$ (4,936)	2020 \$ (2,056.46)	\$ (52,454.44)	\$ (157.32)	\$ 1,899.14		\$ (14,395)
2/1/2020	\$ (74,192)	\$ -	\$ -	\$ (15,580)	\$ -	\$ (5,686)	2020 \$ (2,056.44)	\$ (52,454.44)	\$ (143.74)	\$ 3,811.83		\$ (15,279)
3/1/2020	\$ (83,984)	\$ -	\$ -	\$ (17,637)	\$ -	\$ (6,437)	2020 \$ (2,057.24)	\$ (52,454.44)	\$ (129.28)	\$ 5,739.79		\$ (16,178)
4/1/2020	\$ (93,781)	\$ -	\$ -	\$ (19,694)	\$ -	\$ (7,188)	2020 \$ (2,241.25)	\$ (52,454.44)	\$ (125.53)	\$ 7,855.51		\$ (17,118)
5/1/2020	\$ (104,453)	\$ -	\$ -	\$ (21,935)	\$ -	\$ (8,006)	2020 \$ (2,578.94)	\$ (52,454.44)	\$ (126.25)	\$ 10,308.20		\$ (18,132)
6/1/2020	\$ (116,734)	\$ -	\$ -	\$ (24,514)	\$ -	\$ (8,947)	2020 \$ (3,390.89)	\$ (52,454.44)	\$ (142.83)	\$ 13,556.26		\$ (19,288)
7/1/2020	\$ (132,881)	\$ -	\$ -	\$ (27,905)	\$ -	\$ (10,185)	2020 \$ (4,357.19)	\$ (52,454.44)	\$ (152.78)	\$ 17,760.67		\$ (20,654)
8/1/2020	\$ (153,629)	\$ -	\$ -	\$ (32,262)	\$ -	\$ (11,775)	2020 \$ (5,192.69)	\$ (52,454.44)	\$ (145.42)	\$ 22,807.94		\$ (22,266)
9/1/2020	\$ (178,357)	\$ -	\$ -	\$ (37,455)	\$ -	\$ (13,670)	2020 \$ (6,041.53)	\$ (52,454.44)	\$ (127.93)	\$ 28,721.54		\$ (24,149)
10/1/2020	\$ (207,126)	\$ -	\$ -	\$ (43,496)	\$ -	\$ (15,875)	2020 \$ (6,752.80)	\$ (52,454.44)	\$ (95.33)	\$ 35,379.01		\$ (26,313)
11/1/2020	\$ (239,282)	\$ -	\$ -	\$ (50,249)	\$ -	\$ (18,340)	2020 \$ (7,524.97)	\$ (52,454.44)	\$ (54.83)	\$ 42,849.15		\$ (28,768)
12/1/2020	\$ (275,115)	\$ -	\$ -	\$ (57,774)	\$ -	\$ (21,086)	2020 \$ (8,204.04)	\$ (52,454.44)	\$ (1.87)	\$ 51,051.33	\$ (32,923)	\$ (31,520)

Minnesota Energy Resources Corporation
GUIC Revenue Requirement

Gas Mains Summary

Month	Net Plant In Service			Depr. Calculation			Accumulated Depreciation				
	Additions	Retirements	Net Accumulated Investment	Beginning of the Month Addition	Annual Depr. Rate	Deprec Exp (NetDep)	Depreciation	Retirement	Cost Of Removal	Salvage	End Bal
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]
12/1/2018	\$ -	\$ -	\$ -								
1/1/2019	\$ 4,904	\$ -	\$ 4,904	\$ -	\$ -	\$ 7	\$ (7)	\$ -	\$ -	\$ -	\$ (7)
2/1/2019	\$ 5,955	\$ -	\$ 10,859	\$ 4,904	\$ -	\$ 15	\$ (15)	\$ -	\$ -	\$ -	\$ (22)
3/1/2019	\$ 17,165	\$ -	\$ 28,024	\$ 10,859	\$ -	\$ 40	\$ (40)	\$ -	\$ -	\$ -	\$ (62)
4/1/2019	\$ 757,256	\$ -	\$ 785,280	\$ 28,024	\$ -	\$ 1,119	\$ (1,119)	\$ -	\$ -	\$ -	\$ (1,181)
5/1/2019	\$ 1,167,646	\$ -	\$ 1,952,926	\$ 785,280	\$ -	\$ 2,783	\$ (2,783)	\$ -	\$ -	\$ -	\$ (3,964)
6/1/2019	\$ 1,423,156	\$ -	\$ 3,376,081	\$ 1,952,926	\$ -	\$ 4,811	\$ (4,811)	\$ -	\$ -	\$ -	\$ (8,775)
7/1/2019	\$ 895,838	\$ -	\$ 4,271,919	\$ 3,376,081	\$ -	\$ 6,087	\$ (6,087)	\$ -	\$ -	\$ -	\$ (14,863)
8/1/2019	\$ 1,036,844	\$ -	\$ 5,308,763	\$ 4,271,919	\$ -	\$ 7,565	\$ (7,565)	\$ -	\$ -	\$ -	\$ (22,428)
9/1/2019	\$ 795,863	\$ -	\$ 6,104,626	\$ 5,308,763	\$ -	\$ 8,699	\$ (8,699)	\$ -	\$ -	\$ -	\$ (31,127)
10/1/2019	\$ 787,151	\$ -	\$ 6,891,777	\$ 6,104,626	\$ -	\$ 9,821	\$ (9,821)	\$ -	\$ -	\$ -	\$ (40,948)
11/1/2019	\$ 710,481	\$ -	\$ 7,602,258	\$ 6,891,777	\$ -	\$ 10,833	\$ (10,833)	\$ -	\$ -	\$ -	\$ (51,781)
12/1/2019	\$ 214,128	\$ -	\$ 7,816,386	\$ 7,602,258	\$ -	\$ 11,138	\$ (11,138)	\$ -	\$ -	\$ -	\$ (62,919)
	\$ 7,816,386	\$ -				\$ 62,919	\$ (62,919)	\$ -	\$ -	\$ -	
											\$ (62,919)
1/1/2020	\$ 114	\$ -	\$ 7,816,500	\$ 7,816,386	\$ -	\$ 11,138	\$ (11,138)	\$ -	\$ -	\$ -	\$ (74,058)
2/1/2020	\$ 229	\$ -	\$ 7,816,729	\$ 7,816,500	\$ -	\$ 11,139	\$ (11,139)	\$ -	\$ -	\$ -	\$ (85,196)
3/1/2020	\$ 914	\$ -	\$ 7,817,643	\$ 7,816,729	\$ -	\$ 11,139	\$ (11,139)	\$ -	\$ -	\$ -	\$ (96,335)
4/1/2020	\$ 159,987	\$ -	\$ 7,977,630	\$ 7,817,643	\$ -	\$ 11,140	\$ (11,140)	\$ -	\$ -	\$ -	\$ (107,475)
5/1/2020	\$ 350,258	\$ -	\$ 8,327,889	\$ 7,977,630	\$ -	\$ 11,368	\$ (11,368)	\$ -	\$ -	\$ -	\$ (118,843)
6/1/2020	\$ 738,685	\$ -	\$ 9,066,573	\$ 8,327,889	\$ -	\$ 11,867	\$ (11,867)	\$ -	\$ -	\$ -	\$ (130,710)
7/1/2020	\$ 1,071,687	\$ -	\$ 10,138,261	\$ 9,066,573	\$ -	\$ 12,920	\$ (12,920)	\$ -	\$ -	\$ -	\$ (143,630)
8/1/2020	\$ 1,248,702	\$ -	\$ 11,386,962	\$ 10,138,261	\$ -	\$ 14,447	\$ (14,447)	\$ -	\$ -	\$ -	\$ (158,077)
9/1/2020	\$ 1,384,234	\$ -	\$ 12,771,197	\$ 11,386,962	\$ -	\$ 16,226	\$ (16,226)	\$ -	\$ -	\$ -	\$ (174,304)
10/1/2020	\$ 1,439,544	\$ -	\$ 14,210,741	\$ 12,771,197	\$ -	\$ 18,199	\$ (18,199)	\$ -	\$ -	\$ -	\$ (192,503)
11/1/2020	\$ 1,502,282	\$ -	\$ 15,713,022	\$ 14,210,741	\$ -	\$ 20,250	\$ (20,250)	\$ -	\$ -	\$ -	\$ (212,753)
12/1/2020	\$ 1,525,594	\$ -	\$ 17,238,617	\$ 15,713,022	\$ -	\$ 22,391	\$ (22,391)	\$ -	\$ -	\$ -	\$ (235,144)
	\$ 9,422,231	\$ -				\$ 172,225	\$ (172,225)	\$ -	\$ -	\$ -	

Deferred Income Taxes									
Month	Tax Addition	Tax Depr.	Tax Gain/(Loss) on Retirements	Book/Tax Difference	Bonus Effect	NOL	Deferred Tax	End Bal	Rate Base
	[L]	[M]	[N]	[O]	0.0000%	0.0000%	-	[S]	[T] = [C] + [K] + [S]
					[P]	[Q]	[R]		
12/1/2018									
1/1/2019	\$ 4,904	\$ (15)	\$ -	\$ (8)	\$ -	\$ -	\$ (2)	\$ (2)	\$ 4,895
2/1/2019	\$ 5,955	\$ (53)	\$ -	\$ (38)	\$ -	\$ -	\$ (11)	\$ (13)	\$ 10,824
3/1/2019	\$ 17,165	\$ (195)	\$ -	\$ (155)	\$ -	\$ -	\$ (44)	\$ (58)	\$ 27,904
4/1/2019	\$ 757,256	\$ (9,553)	\$ -	\$ (8,434)	\$ -	\$ -	\$ (2,418)	\$ (2,475)	\$ 781,623
5/1/2019	\$ 1,167,646	\$ (20,698)	\$ -	\$ (17,915)	\$ -	\$ -	\$ (5,135)	\$ (7,610)	\$ 1,941,351
6/1/2019	\$ 1,423,156	\$ (32,788)	\$ -	\$ (27,977)	\$ -	\$ -	\$ (8,020)	\$ (15,630)	\$ 3,351,676
7/1/2019	\$ 895,838	\$ (30,146)	\$ -	\$ (24,059)	\$ -	\$ -	\$ (6,896)	\$ (22,526)	\$ 4,234,530
8/1/2019	\$ 1,036,844	\$ (39,271)	\$ -	\$ (31,706)	\$ -	\$ -	\$ (9,088)	\$ (31,615)	\$ 5,254,721
9/1/2019	\$ 795,863	\$ (38,974)	\$ -	\$ (30,275)	\$ -	\$ -	\$ (8,678)	\$ (40,293)	\$ 6,033,206
10/1/2019	\$ 787,151	\$ (43,675)	\$ -	\$ (33,854)	\$ -	\$ -	\$ (9,704)	\$ (49,997)	\$ 6,800,833
11/1/2019	\$ 710,481	\$ (45,960)	\$ -	\$ (35,127)	\$ -	\$ -	\$ (10,069)	\$ (60,066)	\$ 7,490,411
12/1/2019	\$ 214,128	\$ (31,786)	\$ -	\$ (20,648)	\$ -	\$ -	\$ (5,919)	\$ (65,984)	\$ 7,687,482
	\$ 7,816,386	\$ (293,114)	\$ -	\$ (230,195)	\$ -	\$ -	\$ (65,984)		
							21.0000%		
							7.6646%		
					0.0000%	0.0000%			
					[P]	[Q]			
1/1/2020	\$ 114	\$ (47,022)	\$ -	\$ (35,884)	\$ -	\$ -	\$ (10,286)	\$ (65,984)	\$ 7,666,172
2/1/2020	\$ 229	\$ (47,024)	\$ -	\$ (35,885)	\$ -	\$ -	\$ (10,286)	\$ (76,270)	\$ 7,644,976
3/1/2020	\$ 914	\$ (47,032)	\$ -	\$ (35,893)	\$ -	\$ -	\$ (10,289)	\$ (86,557)	\$ 7,624,463
4/1/2020	\$ 159,987	\$ (49,026)	\$ -	\$ (37,886)	\$ -	\$ -	\$ (10,860)	\$ (96,845)	\$ 7,762,450
5/1/2020	\$ 350,258	\$ (52,998)	\$ -	\$ (41,630)	\$ -	\$ -	\$ (11,933)	\$ (107,705)	\$ 8,089,407
6/1/2020	\$ 738,685	\$ (62,471)	\$ -	\$ (50,604)	\$ -	\$ -	\$ (14,505)	\$ (119,638)	\$ 8,801,719
7/1/2020	\$ 1,071,687	\$ (74,373)	\$ -	\$ (61,453)	\$ -	\$ -	\$ (17,615)	\$ (134,144)	\$ 9,842,871
8/1/2020	\$ 1,248,702	\$ (85,495)	\$ -	\$ (71,048)	\$ -	\$ -	\$ (20,366)	\$ (151,759)	\$ 11,056,761
9/1/2020	\$ 1,384,234	\$ (97,112)	\$ -	\$ (80,886)	\$ -	\$ -	\$ (23,186)	\$ (172,125)	\$ 12,401,583
10/1/2020	\$ 1,439,544	\$ (107,492)	\$ -	\$ (89,293)	\$ -	\$ -	\$ (25,596)	\$ (195,310)	\$ 13,797,332
11/1/2020	\$ 1,502,282	\$ (118,645)	\$ -	\$ (98,395)	\$ -	\$ -	\$ (28,204)	\$ (220,906)	\$ 15,251,160
12/1/2020	\$ 1,525,594	\$ (128,909)	\$ -	\$ (106,518)	\$ -	\$ -	\$ (30,533)	\$ (249,110)	\$ 16,723,830
	\$ 9,422,231	\$ (917,599)	\$ -	\$ (745,374)	\$ -	\$ -	\$ (213,659)		
							21.0000%		
							7.6646%		

2018 & Fwd	
Federal Tax Rate	<u>0.21</u>
MN Tax Rate	<u>0.098</u>
MN Apportionment	<u>0.989671</u>
MI Tax Rate	<u>0.06</u>
MI Apportionment	<u>0.000542</u>

Month	Book/Tax Differ Balance	Bonus Effect Balance	NOL Balance	Deferred Tax Federal 21.0000%	Deferred Tax Federal NOL 21.0000%	Deferred Tax State 7.6646%	Federal Def Tax Activity	Federal Def Tax Annual (Not Used)	Proration Adjusted Activity Factor * Activity	Prorated Balance Adjust	Federal 13-Mo Ave DFIT	Monthly Prorated Balance To Use
12/1/2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			0			
1/1/2019	\$ (8)	\$ -	\$ -	\$ (2)	\$ -	\$ (1)	2019 \$ (1.68)	\$ (48,340.91)	\$ (0.13)	1.55		\$ (0)
2/1/2019	\$ (46)	\$ -	\$ -	\$ (10)	\$ -	\$ (3)	2019 \$ (7.88)	\$ (48,340.91)	\$ (282.36)	(272.93)		\$ (282)
3/1/2019	\$ (201)	\$ -	\$ -	\$ (42)	\$ -	\$ (15)	2019 \$ (32.57)	\$ (48,340.91)	\$ (253.84)	(494.20)		\$ (536)
4/1/2019	\$ (8,635)	\$ -	\$ -	\$ (1,813)	\$ -	\$ (662)	2019 \$ (1,771.13)	\$ (48,340.91)	\$ (226.25)	1,050.68		\$ (763)
5/1/2019	\$ (26,550)	\$ -	\$ -	\$ (5,575)	\$ -	\$ (2,035)	2019 \$ (3,762.17)	\$ (48,340.91)	\$ (197.74)	4,615.11		\$ (960)
6/1/2019	\$ (54,527)	\$ -	\$ -	\$ (11,451)	\$ -	\$ (4,179)	2019 \$ (5,875.19)	\$ (48,340.91)	\$ (170.15)	10,320.15		\$ (1,130)
7/1/2019	\$ (78,585)	\$ -	\$ -	\$ (16,503)	\$ -	\$ (6,023)	2019 \$ (5,052.29)	\$ (48,340.91)	\$ (141.64)	15,230.80		\$ (1,272)
8/1/2019	\$ (110,291)	\$ -	\$ -	\$ (23,161)	\$ -	\$ (8,453)	2019 \$ (6,658.26)	\$ (48,340.91)	\$ (113.13)	21,775.93		\$ (1,385)
9/1/2019	\$ (140,566)	\$ -	\$ -	\$ (29,519)	\$ -	\$ (10,774)	2019 \$ (6,357.73)	\$ (48,340.91)	\$ (85.53)	28,048.13		\$ (1,471)
10/1/2019	\$ (174,420)	\$ -	\$ -	\$ (36,628)	\$ -	\$ (13,369)	2019 \$ (7,109.38)	\$ (48,340.91)	\$ (57.02)	35,100.48		\$ (1,528)
11/1/2019	\$ (209,547)	\$ -	\$ -	\$ (44,005)	\$ -	\$ (16,061)	2019 \$ (7,376.63)	\$ (48,340.91)	\$ (29.43)	42,447.68		\$ (1,557)
12/1/2019	\$ (230,195)	\$ -	\$ -	\$ (48,341)	\$ -	\$ (17,644)	2019 \$ (4,336.00)	\$ (48,340.91)	\$ (0.92)	46,782.76		\$ (1,558)
				21.0000%	21.0000%	7.6646%						
1/1/2020	\$ (230,195)	\$ -	\$ -	\$ (48,341)	\$ -	\$ (17,644)	2020 \$ (7,535.57)	\$ (156,528.57)	\$ (576.49)	6,959.08		\$ (51,532)
2/1/2020	\$ (266,078)	\$ -	\$ -	\$ (55,876)	\$ -	\$ (20,394)	2020 \$ (7,535.95)	\$ (156,528.57)	\$ (526.76)	13,968.27		\$ (54,773)
3/1/2020	\$ (301,964)	\$ -	\$ -	\$ (63,412)	\$ -	\$ (23,144)	2020 \$ (7,537.56)	\$ (156,528.57)	\$ (473.67)	21,032.15		\$ (58,068)
4/1/2020	\$ (337,857)	\$ -	\$ -	\$ (70,950)	\$ -	\$ (25,895)	2020 \$ (7,956.03)	\$ (156,528.57)	\$ (445.62)	28,542.56		\$ (61,475)
5/1/2020	\$ (375,743)	\$ -	\$ -	\$ (78,906)	\$ -	\$ (28,799)	2020 \$ (8,742.28)	\$ (156,528.57)	\$ (427.96)	36,856.88		\$ (65,072)
6/1/2020	\$ (417,373)	\$ -	\$ -	\$ (87,648)	\$ -	\$ (31,990)	2020 \$ (10,626.79)	\$ (156,528.57)	\$ (447.62)	47,036.05		\$ (69,017)
7/1/2020	\$ (467,977)	\$ -	\$ -	\$ (98,275)	\$ -	\$ (35,869)	2020 \$ (12,905.15)	\$ (156,528.57)	\$ (452.50)	59,488.70		\$ (73,473)
8/1/2020	\$ (529,430)	\$ -	\$ -	\$ (111,180)	\$ -	\$ (40,579)	2020 \$ (14,920.08)	\$ (156,528.57)	\$ (417.84)	73,990.93		\$ (78,530)
9/1/2020	\$ (600,478)	\$ -	\$ -	\$ (126,100)	\$ -	\$ (46,024)	2020 \$ (16,985.97)	\$ (156,528.57)	\$ (359.68)	90,617.23		\$ (84,249)
10/1/2020	\$ (681,363)	\$ -	\$ -	\$ (143,086)	\$ -	\$ (52,224)	2020 \$ (18,751.54)	\$ (156,528.57)	\$ (264.71)	109,104.06		\$ (90,663)
11/1/2020	\$ (770,656)	\$ -	\$ -	\$ (161,838)	\$ -	\$ (59,068)	2020 \$ (20,662.89)	\$ (156,528.57)	\$ (150.55)	129,616.40		\$ (97,799)
12/1/2020	\$ (869,051)	\$ -	\$ -	\$ (182,501)	\$ -	\$ (66,609)	2020 \$ (22,368.76)	\$ (156,528.57)	\$ (5.09)	151,980.07	\$ (110,230)	\$ (105,681)

Minnesota Energy Resources Corporation
GUIC Revenue Requirement

Gas Stations Summary

Month	Net Plant In Service			Depr. Calculation			Accumulated Depreciation				
	Additions	Retirements	Net Accumulated Investment	Beginning of the Month Addition	Annual Depr. Rate	Deprec Exp (NetDep)	Depreciation	Retirement	Cost Of Removal	Salvage	End Bal
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]
12/1/2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11	\$ (11)	\$ -	\$ -	\$ -	\$ (11)
1/1/2019	\$ 2,877	\$ -	\$ 2,877	\$ 2,877	\$ -	\$ 24	\$ (24)	\$ -	\$ -	\$ -	\$ (34)
2/1/2019	\$ 3,493	\$ -	\$ 6,370	\$ 6,370	\$ -	\$ 61	\$ (61)	\$ -	\$ -	\$ -	\$ (95)
3/1/2019	\$ 10,069	\$ -	\$ 16,439	\$ 16,439	\$ -	\$ 584	\$ (584)	\$ -	\$ -	\$ -	\$ (679)
4/1/2019	\$ 140,624	\$ -	\$ 157,063	\$ 157,063	\$ -	\$ 1,654	\$ (1,654)	\$ -	\$ -	\$ -	\$ (2,333)
5/1/2019	\$ 287,947	\$ -	\$ 445,010	\$ 445,010	\$ -	\$ 3,021	\$ (3,021)	\$ -	\$ -	\$ -	\$ (5,354)
6/1/2019	\$ 367,771	\$ -	\$ 812,781	\$ 812,781	\$ -	\$ 4,106	\$ (4,106)	\$ -	\$ -	\$ -	\$ (9,460)
7/1/2019	\$ 291,971	\$ -	\$ 1,104,752	\$ 1,104,752	\$ -	\$ 5,151	\$ (5,151)	\$ -	\$ -	\$ -	\$ (14,611)
8/1/2019	\$ 281,276	\$ -	\$ 1,386,028	\$ 1,386,028	\$ -	\$ 6,279	\$ (6,279)	\$ -	\$ -	\$ -	\$ (20,890)
9/1/2019	\$ 303,382	\$ -	\$ 1,689,410	\$ 1,689,410	\$ -	\$ 7,301	\$ (7,301)	\$ -	\$ -	\$ -	\$ (28,191)
10/1/2019	\$ 274,920	\$ -	\$ 1,964,330	\$ 1,964,330	\$ -	\$ 8,069	\$ (8,069)	\$ -	\$ -	\$ -	\$ (36,260)
11/1/2019	\$ 206,594	\$ -	\$ 2,170,924	\$ 2,170,924	\$ -	\$ 8,362	\$ (8,362)	\$ -	\$ -	\$ -	\$ (44,622)
12/1/2019	\$ 78,901	\$ -	\$ 2,249,825	\$ 2,249,825	\$ -	\$ 44,622	\$ (44,622)	\$ -	\$ -	\$ -	\$ (44,622)
	\$ 2,249,825	\$ -									
1/1/2020	\$ 0	\$ -	\$ 2,249,826	\$ 2,249,826	\$ -	\$ 8,362	\$ (8,362)	\$ -	\$ -	\$ -	\$ (44,622)
2/1/2020	\$ 1	\$ -	\$ 2,249,826	\$ 2,249,826	\$ -	\$ 8,362	\$ (8,362)	\$ -	\$ -	\$ -	\$ (52,983)
3/1/2020	\$ 3	\$ -	\$ 2,249,829	\$ 2,249,826	\$ -	\$ 8,362	\$ (8,362)	\$ -	\$ -	\$ -	\$ (61,345)
4/1/2020	\$ 449	\$ -	\$ 2,250,278	\$ 2,249,829	\$ -	\$ 8,362	\$ (8,362)	\$ -	\$ -	\$ -	\$ (69,707)
5/1/2020	\$ 983	\$ -	\$ 2,251,261	\$ 2,250,278	\$ -	\$ 8,364	\$ (8,364)	\$ -	\$ -	\$ -	\$ (78,069)
6/1/2020	\$ 2,073	\$ -	\$ 2,253,333	\$ 2,251,261	\$ -	\$ 8,367	\$ (8,367)	\$ -	\$ -	\$ -	\$ (86,433)
7/1/2020	\$ 3,007	\$ -	\$ 2,256,341	\$ 2,253,333	\$ -	\$ 8,375	\$ (8,375)	\$ -	\$ -	\$ -	\$ (94,800)
8/1/2020	\$ 3,504	\$ -	\$ 2,259,844	\$ 2,256,341	\$ -	\$ 8,386	\$ (8,386)	\$ -	\$ -	\$ -	\$ (103,175)
9/1/2020	\$ 3,884	\$ -	\$ 2,263,729	\$ 2,259,844	\$ -	\$ 8,399	\$ (8,399)	\$ -	\$ -	\$ -	\$ (111,561)
10/1/2020	\$ 4,039	\$ -	\$ 2,267,768	\$ 2,263,729	\$ -	\$ 8,414	\$ (8,414)	\$ -	\$ -	\$ -	\$ (119,960)
11/1/2020	\$ 4,215	\$ -	\$ 2,271,983	\$ 2,267,768	\$ -	\$ 8,429	\$ (8,429)	\$ -	\$ -	\$ -	\$ (128,373)
12/1/2020	\$ 4,281	\$ -	\$ 2,276,264	\$ 2,271,983	\$ -	\$ 8,444	\$ (8,444)	\$ -	\$ -	\$ -	\$ (136,802)
	\$ 26,439	\$ -				\$ 100,624	\$ (100,624)	\$ -	\$ -	\$ -	\$ (145,246)

Deferred Income Taxes									
Month	Tax Addition	Tax Depr.	Tax Gain/(Loss) on Retirements	Book/Tax Difference	Bonus Effect	NOL	Deferred Tax	End Bal	Rate Base
	[L]	[M]	[N]	[O]	[P]	[Q]	[R]	[S]	[T] = [C] + [K] + [S]
12/1/2018					0.0000%	0.0000%	-		
1/1/2019	\$ 2,877	\$ (9)	\$ -	\$ 2	\$ -	\$ -	\$ 0	\$ 0	\$ 2,867
2/1/2019	\$ 3,493	\$ (31)	\$ -	\$ (7)	\$ -	\$ -	\$ (2)	\$ (2)	\$ 6,334
3/1/2019	\$ 10,069	\$ (114)	\$ -	\$ (53)	\$ -	\$ -	\$ (15)	\$ (17)	\$ 16,327
4/1/2019	\$ 140,624	\$ (1,809)	\$ -	\$ (1,225)	\$ -	\$ -	\$ (351)	\$ (368)	\$ 156,016
5/1/2019	\$ 287,947	\$ (4,990)	\$ -	\$ (3,336)	\$ -	\$ -	\$ (956)	\$ (1,324)	\$ 441,353
6/1/2019	\$ 367,771	\$ (8,287)	\$ -	\$ (5,266)	\$ -	\$ -	\$ (1,510)	\$ (2,834)	\$ 804,594
7/1/2019	\$ 291,971	\$ (8,926)	\$ -	\$ (4,820)	\$ -	\$ -	\$ (1,382)	\$ (4,215)	\$ 1,091,076
8/1/2019	\$ 281,276	\$ (10,485)	\$ -	\$ (5,334)	\$ -	\$ -	\$ (1,529)	\$ (5,744)	\$ 1,365,672
9/1/2019	\$ 303,382	\$ (12,864)	\$ -	\$ (6,585)	\$ -	\$ -	\$ (1,888)	\$ (7,632)	\$ 1,660,888
10/1/2019	\$ 274,920	\$ (13,870)	\$ -	\$ (6,569)	\$ -	\$ -	\$ (1,883)	\$ (9,515)	\$ 1,926,624
11/1/2019	\$ 206,594	\$ (13,241)	\$ -	\$ (5,172)	\$ -	\$ -	\$ (1,483)	\$ (10,998)	\$ 2,123,667
12/1/2019	\$ 78,901	\$ (9,742)	\$ -	\$ (1,380)	\$ -	\$ -	\$ (396)	\$ (11,393)	\$ 2,193,811
	\$ 2,249,825	\$ (84,368)	\$ -	\$ (39,746)	\$ -	\$ -	\$ (11,393)		
							21.0000%		
							7.6646%		
					0.0000%	0.0000%			
					[P]	[Q]			
1/1/2020	\$ 0	\$ (13,535)	\$ -	\$ (5,173)	\$ -	\$ -	\$ (1,483)	\$ (11,393)	\$ 2,183,966
2/1/2020	\$ 1	\$ (13,534)	\$ -	\$ (5,172)	\$ -	\$ -	\$ (1,483)	\$ (12,876)	\$ 2,174,122
3/1/2020	\$ 3	\$ (13,535)	\$ -	\$ (5,173)	\$ -	\$ -	\$ (1,483)	\$ (14,359)	\$ 2,164,280
4/1/2020	\$ 449	\$ (13,540)	\$ -	\$ (5,178)	\$ -	\$ -	\$ (1,484)	\$ (15,841)	\$ 2,154,883
5/1/2020	\$ 983	\$ (13,551)	\$ -	\$ (5,187)	\$ -	\$ -	\$ (1,487)	\$ (17,326)	\$ 2,146,015
6/1/2020	\$ 2,073	\$ (13,578)	\$ -	\$ (5,211)	\$ -	\$ -	\$ (1,494)	\$ (18,813)	\$ 2,138,227
7/1/2020	\$ 3,007	\$ (13,612)	\$ -	\$ (5,237)	\$ -	\$ -	\$ (1,501)	\$ (20,306)	\$ 2,131,358
8/1/2020	\$ 3,504	\$ (13,642)	\$ -	\$ (5,256)	\$ -	\$ -	\$ (1,507)	\$ (21,808)	\$ 2,124,970
9/1/2020	\$ 3,884	\$ (13,675)	\$ -	\$ (5,276)	\$ -	\$ -	\$ (1,512)	\$ (23,314)	\$ 2,118,942
10/1/2020	\$ 4,039	\$ (13,705)	\$ -	\$ (5,291)	\$ -	\$ -	\$ (1,517)	\$ (24,826)	\$ 2,113,051
11/1/2020	\$ 4,215	\$ (13,735)	\$ -	\$ (5,306)	\$ -	\$ -	\$ (1,521)	\$ (26,343)	\$ 2,107,317
12/1/2020	\$ 4,281	\$ (13,764)	\$ -	\$ (5,320)	\$ -	\$ -	\$ (1,525)	\$ (27,864)	\$ 2,101,629
	\$ 26,439	\$ (163,406)	\$ -	\$ (62,782)	\$ -	\$ -	\$ (17,996)	\$ (29,389)	
							21.0000%		
							7.6646%		

2018 & Fwd	
Federal Tax Rate	0.21
MN Tax Rate	0.098
MN Apportionmen	0.989671
MI Tax Rate	0.06
MI Apportionment	0.000542

Month	Book/Tax Differ Balance	Bonus Effect Balance	NOL Balance	Deferred Tax Federal 21.0000%	Deferred Tax Federal NOL 21.0000%	Deferred Tax State 7.6646%	Federal Def Tax Activity	Federal Def Tax Annual (Not Used)	Proration Adjusted Activity Factor * Activity	Prorated Balance Adjust	Federal 13-Mo Ave DFIT	Monthly Prorated Balance To Use
12/1/2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
1/1/2019	\$ 2	\$ -	\$ -	\$ 0	\$ -	\$ 0	2019 \$ 0.36	\$ (8,346.75)	\$ 0.03	\$ (0.33)		\$ 0
2/1/2019	\$ (6)	\$ -	\$ -	\$ (1)	\$ -	\$ (0)	2019 \$ (1.54)	\$ (8,346.75)	\$ (48.75)	\$ (47.55)		\$ (49)
3/1/2019	\$ (59)	\$ -	\$ -	\$ (12)	\$ -	\$ (4)	2019 \$ (11.11)	\$ (8,346.75)	\$ (43.83)	\$ (80.27)		\$ (93)
4/1/2019	\$ (1,284)	\$ -	\$ -	\$ (270)	\$ -	\$ (98)	2019 \$ (257.30)	\$ (8,346.75)	\$ (39.07)	\$ 137.97		\$ (132)
5/1/2019	\$ (4,620)	\$ -	\$ -	\$ (970)	\$ -	\$ (354)	2019 \$ (700.57)	\$ (8,346.75)	\$ (34.14)	\$ 804.40		\$ (166)
6/1/2019	\$ (9,886)	\$ -	\$ -	\$ (2,076)	\$ -	\$ (758)	2019 \$ (1,105.90)	\$ (8,346.75)	\$ (29.38)	\$ 1,880.92		\$ (195)
7/1/2019	\$ (14,706)	\$ -	\$ -	\$ (3,088)	\$ -	\$ (1,127)	2019 \$ (1,012.20)	\$ (8,346.75)	\$ (24.46)	\$ 2,868.66		\$ (220)
8/1/2019	\$ (20,040)	\$ -	\$ -	\$ (4,208)	\$ -	\$ (1,536)	2019 \$ (1,120.06)	\$ (8,346.75)	\$ (19.53)	\$ 3,969.19		\$ (239)
9/1/2019	\$ (26,625)	\$ -	\$ -	\$ (5,591)	\$ -	\$ (2,041)	2019 \$ (1,382.85)	\$ (8,346.75)	\$ (14.77)	\$ 5,337.27		\$ (254)
10/1/2019	\$ (33,194)	\$ -	\$ -	\$ (6,971)	\$ -	\$ (2,544)	2019 \$ (1,379.54)	\$ (8,346.75)	\$ (9.85)	\$ 6,706.96		\$ (264)
11/1/2019	\$ (38,366)	\$ -	\$ -	\$ (8,057)	\$ -	\$ (2,941)	2019 \$ (1,086.21)	\$ (8,346.75)	\$ (5.08)	\$ 7,788.09		\$ (269)
12/1/2019	\$ (39,746)	\$ -	\$ -	\$ (8,347)	\$ -	\$ (3,046)	2019 \$ (289.83)	\$ (8,346.75)	\$ (0.16)	\$ 8,077.76		\$ (269)
				21.0000%	21.0000%	7.6646%						
1/1/2020	\$ (39,746)	\$ -	\$ -	\$ (8,347)	\$ -	\$ (3,046)	2020 \$ (1,086.36)	\$ (13,184.13)	\$ (83.11)	\$ 1,003.25		\$ (8,807)
2/1/2020	\$ (44,920)	\$ -	\$ -	\$ (9,433)	\$ -	\$ (3,443)	2020 \$ (1,086.15)	\$ (13,184.13)	\$ (75.92)	\$ 2,013.48		\$ (9,274)
3/1/2020	\$ (50,092)	\$ -	\$ -	\$ (10,519)	\$ -	\$ (3,839)	2020 \$ (1,086.36)	\$ (13,184.13)	\$ (68.27)	\$ 3,031.57		\$ (9,749)
4/1/2020	\$ (55,265)	\$ -	\$ -	\$ (11,606)	\$ -	\$ (4,236)	2020 \$ (1,087.41)	\$ (13,184.13)	\$ (60.91)	\$ 4,058.07		\$ (10,231)
5/1/2020	\$ (60,443)	\$ -	\$ -	\$ (12,693)	\$ -	\$ (4,633)	2020 \$ (1,089.37)	\$ (13,184.13)	\$ (53.33)	\$ 5,094.12		\$ (10,722)
6/1/2020	\$ (65,630)	\$ -	\$ -	\$ (13,782)	\$ -	\$ (5,030)	2020 \$ (1,094.27)	\$ (13,184.13)	\$ (46.09)	\$ 6,142.29		\$ (11,220)
7/1/2020	\$ (70,841)	\$ -	\$ -	\$ (14,877)	\$ -	\$ (5,430)	2020 \$ (1,099.79)	\$ (13,184.13)	\$ (38.56)	\$ 7,203.52		\$ (11,728)
8/1/2020	\$ (76,078)	\$ -	\$ -	\$ (15,976)	\$ -	\$ (5,831)	2020 \$ (1,103.75)	\$ (13,184.13)	\$ (30.91)	\$ 8,276.36		\$ (12,244)
9/1/2020	\$ (81,334)	\$ -	\$ -	\$ (17,080)	\$ -	\$ (6,234)	2020 \$ (1,107.94)	\$ (13,184.13)	\$ (23.46)	\$ 9,360.84		\$ (12,770)
10/1/2020	\$ (86,610)	\$ -	\$ -	\$ (18,188)	\$ -	\$ (6,638)	2020 \$ (1,111.21)	\$ (13,184.13)	\$ (15.69)	\$ 10,456.36		\$ (13,304)
11/1/2020	\$ (91,902)	\$ -	\$ -	\$ (19,299)	\$ -	\$ (7,044)	2020 \$ (1,114.36)	\$ (13,184.13)	\$ (8.12)	\$ 11,562.60		\$ (13,847)
12/1/2020	\$ (97,208)	\$ -	\$ -	\$ (20,414)	\$ -	\$ (7,451)	2020 \$ (1,117.16)	\$ (13,184.13)	\$ (0.25)	\$ 12,679.51	\$ (14,904)	\$ (14,399)

Exhibit D-1

Historical detail of MERC's road relocation projects required to accommodate public projects in the right-of-way

WR No	City	LGU Requiring Relocation	Project Description	Month in Service	Total Main Cost	Total Main Footage Installed	Number of Service Lines	Total Service Line Cost	Total Service Line Footage	Related Station Costs	Comment	Total
2495925	DODGE CENTER	City of Dodge Center	GMAP - 2017 STREET IMPROVEMENTS (PH 1) - DODGE CENTER	Oct-17	\$ -	0	1	\$ 1,690.44	33		Carry over from 2017, Service replacements only	
2171729	ROCHESTER	Olmsted County	55TH ST EXT ROAD PROJECT (48TH ST N	Nov-18	\$ 1,327,252.32	9425					Carry over from 2017, rock encountered	
2431390	ROCHESTER	City of Rochester	18TH AVE NW RD PROJECT	Dec-17	\$ 109,857.41	1091	2	\$ 2,836.64	62		Carry over from 2017	
2458998	KASSON	City of Kasson	GMAP - STREET IMPROVEMENT PROJECT (Oct-17	\$ 38.23	0					Carry over from 2017	
2484289	CHISHOLM	City of Chisholm	MAIN REPL. CHISHOLM, LAKEVIEW ADDITION IMPROVMENTS	Jun-18	\$ 172,753.60	3438	13	\$ 29,240.64	803			
2493732	AITKIN	City of Aitkin	MAIN REPL. AITKIN, 1ST STREET RECONSTRUCT	Jul-18	\$ 28,212.76	1139						
2494810	RANIER	State of Minnesota	MAIN REPL. RANIER, TH 11 RR BRIDGE_PLANS	May-18	\$ 38,460.87	460	1	\$ 3,077.15	142			
2529593	CHISHOLM	City of Chisholm	CHISHOLM WATER MAIN REPL.	Dec-18	\$ 50,222.03	697						
2532330	SPRING GROVE	City of Spring Grove	MAPLE DR RELOCATION	Dec-17	\$ 375.00	0					Carry over from 2017	
2563793	RANIER	Koochiching County	CR 130 ROAD RECONSTRUCT, RANIER	May-18	\$ 13,911.13	662	1	\$ 1,854.82	130			
2577006	ROCHESTER	City of Rochester	LENOX CT SW MAIN REPLACEMENT	Dec-17	\$ 1,606.52	0					Carry over from 2017	
2587024	ROCHESTER	City of Spring Grove	3RD AVE NW MAIN REPLACEMENT	Dec-17	\$ 1,120.56	0					Carry over from 2017	
2592266	NASHWALK	State of Minnesota	OFFSET MAIN MNDOT PROJECT 2018	Oct-18	\$ 7,600.90	176						
2596323	THIEF RIVER FALLS	State of Minnesota	MNDOT PROJECT - THIEF RIVER FALLS TH 1 & 59	Dec-18	\$ 6,350.63	0					Abandon Only	
2634601	WORTHINGTON	City of Stewartville	GMAP - WORTHINGTON - WEST LAKE AVENUE	Jun-18	\$ 57,662.71	640						
2640678	STEWARTVILLE	City of Stewartville	GMAP - 2018 CAPITAL IMPROVEMENT PLAN (PH 1) - STEWARTVILLE	Apr-18	\$ 16,908.90	640	1	\$ 1,418.30	30			
2648013	LAKEFIELD	City of Lakefield	GMAP - LAKEFIELD	Aug-18	\$ 61,450.16	2414	10	\$ 15,255.06	603			
2407224	LAKEVILLE	Dakota County	CSAH 50 EXPANSION PHASE 1	Dec-17	\$ -	0	5	\$ 11,493.53	466		Carry over from 2017, Service replacements only	
2650423	LAKEVILLE	Dakota County	GMAP - LAKEVILLE - CSAH 50 PHASE 2	Jun-18	\$ 69,551.02	3160						
2655781	BEMIDJI	City of Bemidji	REMOVE 6" DRIP LOOP, BEMIDJI, CITY ALLEY PROJECT	Jun-18	\$ 15,416.18	3					30' temp bypass	
2656495	INTERNATIONAL FALLS	City of International Falls	9TH AVE STREET IMPROVEMENTS, 2018, I FALLS	May-18	\$ 59,312.17	2073	32	\$ 81,548.00	3140			
2664534	PROCTOR	City of Proctor	PROCTOR STREET RECONSTRUCTION, 2018	Jul-18	\$ 87,110.96	2920	19	\$ 43,707.31	1789			
2666785	MOOSE LAKE	City of Moose Lake	STORM SEWER WORK, MOOSE LAKE, 2017	Oct-18	\$ 74,720.99	2547						
2668917	ELGIN	City of Elgin	GMAP - 2018 STREET & UTILITY IMPROVEMENTS - ELGIN	Jun-18	\$ 37,618.16	1302	6	\$ 9,941.98	349			
2670228	SPRING VALLEY	City of Spring Valley	GMAP - 2018 STREET & UTILITY IMPROVEMENT - SPRING VALLEY	Aug-18	\$ 503,266.37	13788	71	\$ 88,948.59	3024		Rock encountered	
2670320	INTERNATIONAL FALLS	City of International Falls	CRESCENT DRIVE STREET RECONSTRUCTION, 1 FALL 2018	May-18	\$ 58,461.73	2993	12	\$ 27,510.01	1311			
2674284	WELLS	State of Minnesota	GMAP - WELLS - SP 2206 - 13	Apr-18	\$ 7,718.17	172						
2674448	STEWARTVILLE	City of Stewartville	GMAP - 2018 CAPITAL IMPROVMENT PLAN (12TH AV) - STEWARTVILLE	Jun-18	\$ 72,700.23	3716	28	\$ 29,163.56	467			
2674870	HERMANTOWN	City of Hermantown	THEKE CIRCLE, MAIN REPL. HERMANTOWN, 2018	Nov-18	\$ 19,659.88	1092	6	\$ 32,234.37	1528			
2674892	BIWABIK	City of Biwabik	BIWABIK CITY WIDE IMPROVEMENTS 2018, PHAZE 3	Oct-18	\$ 99,347.00	6104	73	\$ 98,951.46	1745			
2675257	AITKIN	City of Aitkin	2018, AITKIN, 1ST STREET RECONSTRUCT.	Jul-18	\$ 38,536.30	678	3	\$ 3,751.36	186			
2676013	BEMIDJI	City of Bemidji	2018 STREET RENEWAL, BEMIDJI,	Jul-18	\$ 58,064.32	983	6	\$ 12,892.08	507			
2676041	ROCHESTER	Olmsted County	55TH ST PROJECT - PE PORTION	Aug-18	\$ 130,359.29	2865						
2677811	STEWARTVILLE	City of Stewartville	GMAP - 2018 CAPITAL IMPROVMENT PLAN (5TH AVE) - STEWARTVILLE	Nov-18	\$ 52,004.58	1382	12	\$ 26,215.32	675			
2682794	THIEF RIVER FALLS	State of Minnesota	8TH ST, THIEF RIVER, MAIN REPL	Jun-18	\$ 3,017.56	144	1	\$ 3,289.97	75			
2684733	GRAND RAPIDS	City of Grand Rapids	GRAND RAPIDS NE IMPROVEMENTS,	Jul-18	\$ 55,655.10	1384	3	\$ 4,183.05	172			
2686921	BEMIDJI	City of Bemidji	MINNESOTA AVE STREET RECONSTRUCT, BEMIDJI 2018	Jun-18	\$ 22,619.44	1060	5	\$ 7,448.02	168			
2687775	BEMIDJI	City of Bemidji	14TH ST RECONSTRUCTION, BEMIDJI, 2018	Jul-18	\$ 13,540.29	605	4	\$ 5,247.49	213			
2689104	CHISHOLM	State of Minnesota	8TH ST STREET IMPROVEMENTS, CHISHOLM, 2018	Jun-18	\$ 6,087.58	139						
2691367	ROCHESTER	City of Rochester	GMAP - RIVERVIEW STORM REPLACEMENT (CITY) - ROCHESTER	Jun-18	\$ 1,081.89	50						
2692006	LEWISTON	City of Lewiston	GMAP - 2018 STREET & UTILITY IMPROVEMENT - LEWISTON	Aug-18	\$ 282,239.15	10023	73	\$ 101,421.02	3161			
2692015	CALEDONIA	City of Caledonia	GMAP - NORTH KINGSTON STREET RECONSTRUCTION - CALEDONIA	Jul-18	\$ 113,811.52	3285	28	\$ 43,906.80	1584			
2692162	CLOQUET	City of Cloquet	CLOQUET CITY STREET PROJECTS, 2018	Jul-18	\$ 54,625.52	961	2	\$ 7,054.38	44			
2692471	DEER RIVER CITY	City of Deer River	DEER RIVER, STREET IMPROVEMENTS, 2018	Jul-18	\$ 46,923.48	1422	18	\$ 29,491.29	1111			
2694110	BEMIDJI	Beltrami County	BEMIDJI ROUNDABOUT PROJECT, 2018	Aug-18	\$ 42,946.32	541						
2695168	LACRESCENT	La Crescent Event Center	RO-MAIN RELO-CHESTNUT ST-LA CRESCENT	Aug-18	\$ 25,542.23	800						
2696942	BEMIDJI	City of Bemidji	BEMIDJI STREET PROJECT, 215 PAUL BUNYAN DR	Jul-18	\$ 7,782.59	440						
2697193	SANDSTONE	City of Sandstone	MERC-STREET PROJECT	Jun-18	\$ 17,935.56	668	12	\$ 28,138.38	1016			
2697758	BEMIDJI	Beltrami County	DIVISION ST AND ADAMS, ROUND ABOUT PROJECT, NW CORNER	Jun-18	\$ 7,597.29	309	1	\$ 1,371.41	2			
2697890	EYOTA	City of Eyota	GMAP - 2018 STREET & UTILITY IMPROVEMENTS - EYOTA	Jun-18	\$ 35,092.69	214	5	\$ 15,469.19	441			
2698413	ALBERT LEA	City of Albert Lea	JOHNSON ST ROAD PROJECT	Jun-18	\$ 41,899.49	1449	4	\$ 3,934.76	27			
2698995	WADENA	Wadena County	CASH 4, WADENA, ROAD IMPROVEMENTS	Nov-18	\$ 24,185.69	682	2	\$ 4,047.04	244			
2699046	RUSH CITY	Chisago County	CO RD 9 ROAD PROJECT	Jul-18	\$ 26,854.53	1732	3	\$ 7,749.34	316			
2700893	EAGAN	City of Eagan	ROAD PROJECT - NORTH MALMO LANE - EAGAN	Jun-18	\$ 1,359.42	0						
2702831	ROCHESTER	Olmsted County	GMAP - MAYWOOD RD CULVERT REPLACEMENT (OLMSTED) - ROCHESTER	Jul-18	\$ 40,897.66	1481	1	\$ 12,051.22	326			
2703173	ROCHESTER	City of Rochester	4TH ST SW 4" STL MAIN RETIRE	Jun-18	\$ 4,330.15	1					Retire	
2703174	ROCHESTER	City of Rochester	4TH ST SW ROAD PROJECT	Aug-18	\$ 233,666.95	4018	4	\$ 6,776.95	112			
2707287	ROSEAU	City of Roseau	STREET IMPROVEMENTS, ROSEAU, 2018	Jul-18	\$ 15,267.83	487	2	\$ 4,546.90	212			
2708487	CANNON FALLS	City of Cannon Falls	CANNON FALLS ROAD PROJECT	Aug-18	\$ 136,669.15	4312	49	\$ 95,465.86	2958			
2709717	RUC	Chisago County	ROAD PROJECT	Oct-18	\$ 10,952.41	786	5	\$ 12,076.49	464			
2711774	EAGAN	Dakota County	LEXINGTON & LONE OAK COUNTY ROAD PROJECT PHASE 1 (2018)	Dec-18	\$ 117,679.37	1770						
2711989	WORTHINGTON	City of Worthington	GMAP - OSLO STREET - WORTHINGTON	Oct-18	\$ 5,705.00	123						
2717681	WYKOFF	City of Wykoff	GMAP - SOUTH MAIN ST IMPROVEMENTS - WYKOFF	Jul-18	\$ 21,988.13	876	1	\$ 936.50	1			
2718297	THIEF RIVER FALLS	City of Thief River Falls	OFF SET MAIN, THIEF RIVERFALLS, CROSSWALK SIGNAL	Jul-18	\$ 6,023.24	29					25' temp bypass	
2718385	LACRESCENT	State of Minnesota	SKUNK HOLLOW RD PROJECT	Aug-18	\$ 104,680.55	2798	12	\$ 22,860.03	595	\$ 26,439.04		
2718748	EAGAN	Dakota County	DAKOTA COUNTY PROJ 28-56	Jul-18	\$ 2,653.79	1					Retire 130'	
2723190	NORTH BRANCH	City of North Branch	MERC-ROAD PROJECT	Dec-18	\$ 1,292.34	0					Abandon only (50')	
2726226	EAGAN	State of Minnesota	SP1925-56 (TH77) - CLIFF RD VERIFY MAIN DEPTH	Aug-18	\$ 1,793.76	0					Verify depth only	
2732473	BEMIDJI	Beltrami County	OFF SET CATCH BASIN	Jul-18	\$ 2,242.17	0					Move main only	
2735572	LACRESCENT	La Crescent Event Center	RO-Chestnut St 4PE Main (Storm Sewer conflict)	Jul-18	\$ 1,045.66	0					Move main only	
2736079	ZUMBROTA	City of Zumbrota	GMAP - 2018 STREET & UTILITY IMPROVEMENTS - ZUMBROTA	Aug-18	\$ 10,145.15	94						
2738568	CANBY	City of Canby	CANBY STREET PROJECT PHASE II & III	Nov-18	\$ 35,072.18	1520	2	\$ 1,597.58	138			
2739739	HERMANTOWN	City of Hermantown	LOWER MAIN, HERMANTOWN, FOR A CULVERT	Sep-18	\$ 2,219.27	69						
2739775	LAKEVILLE	Dakota County	DAKOTA COUNTY PROJ 50-23 (CSAH 50) PHASE 1	Dec-18	\$ 212,186.25	5246	4	\$ 16,278.50	832			
2742767	ELKO	City of Elko New Market	MERC MAIN ROUTE	Oct-18	\$ 4,282.88	17						
2743265	HERMANTOWN	City of Hermantown	CL-MERC-OFF SET MAIN-HERMANTOWN-FOR CULVERT	Aug-18	\$ 3,620.67	115						
2744029	LAKEVILLE	City of Lakeville	ROAD PROJECT	Sep-18	\$ 2,877.73	0					Move main only	
2753255	CANNON FALLS	City of Cannon Falls	CANNON FALLS ROAD PROJECT	Sep-18	\$ 9,033.13	362	2	\$ 2,804.82	72			
2753580	FRAZEE	City of Frazee	BM-OFFSET MAIN FRAZEE STORM SEWER	Aug-18	\$ 3,755.41	20						
2753734	WINDOM	State of Minnesota	STATE PROJ 1703-73 (TH60)	Nov-18	\$ 22,495.74	425	2	\$ 2,744.67	63			
2754487	FAIRMONT	City of Fairmont	CANYON DRIVE BASIN IMPROVEMENTS - CITY OF FAIRMONT	Oct-18	\$ 11,244.08	280						
2754505	MANTORVILLE	City of Mantorville	MANTORVILLE 5TH ST ROAD PROJECT	Nov-18	\$ 99,251.61	1842	6	\$ 8,888.69	443			
2759526	EVELETH	City of Eveleth	2018 DOUGLAS CT SEWER IMPROVEMENTS, EVELETH	Oct-18	\$ 27,343.03	503	11	\$ 20,035.46	681			
2761212	SPRING GROVE	City of Spring Grove	2ND AVE NE RD PROJECT	Oct-18	\$ 28,816.77	820						
2762932	LANSING	Mower County	GMAP - CSAH 25 STREET IMPROVEMENT(SAP 050-625-016) - LANSING	Nov-18	\$ 86,367.35	2863	29	\$ 57,762.16	2389			
2764213	ROCHESTER	City of Rochester	RO-West Circle Dr Grading Conflict	In progress	\$ 94.38	0					Not complete, permit only	

WR No	City	LGU Requiring Relocation	Project Description	Month in Service	Total Main Cost	Total Main Footage Installed	Number of Service Lines	Total Service Line Cost	Total Service Line Footage	Related Station Costs	Comment	Total
2766234	RUSH CITY	State of Minnesota	REPLACE 4" PE MAIN	Nov-18	\$ 42,929.61	1256						
2771141	EYOTA	City of Eyota	GMAP - 2018 STREET & UTILITY IMPROVEMENTS (MAIN RET)- EYOTA	Oct-18	\$ 1,796.34	0					Retire 110'	
2773916	RANIER	Koochiching County	MAIN REPL. RAINIER, 2018	Oct-18	\$ 20,683.86	655						
2781211	EAGAN	Dakota County	DAKOTA COUNTY PROJ 28-56	Oct-18	\$ 6,398.65	0					Expose pipe only	
	None	DEERWOOD	State of Minnesota	Oct-18	\$ -	0	1	\$ 768.10	5		Service replacements only	
	None	LA CRESCENT	City of La Crescent	Aug-18	\$ -	0	6	\$ 17,820.79	485		Service replacements only	
	None	ST CHARLES	City of St Charles	May-18	\$ -	0	1	\$ 2,848.97	10		Service replacement only	
2552417	MOOSE LAKE	City of Moose Lake	STORM SEWER WORK, MOOSE LAKE, 2017	Dec-17	\$ -	0	2	\$ 2,273.17	48		Carry over from 2017, Service replacements only	
2688313	LAKEVILLE	City of Lakeville	REPLACEMENT HOLYOKE AVENUE	Aug-18			12	\$ 30,747.75	1029		Service replacements only	
2703763	CALEDONIA	City of Caledonia	E SOUTH ST RD PROJECT	In progress			2	\$ 5,566.61	160		Service replacements only	
2721973	ALBERT LEA	City of Albert Lea	136 S BROADWAY	Jul-18	\$ -	0	1	\$ 2,221.83	9		Service replacements only	
2687779	Eagan	City of Eagan	3830 Pilot Knob Rd	Jul-18			1	\$ 1,336.81	2		Service replacements only	
2739626	Farmington	Dakota County	Bible Baptist Church Road Project	Aug-18			1	\$ 4,819.35	135		Service replacements only	
Total					\$ 5,444,980.77	126,037	620	\$ 1,117,711.97	36733	\$ 26,439.04		\$ 6,589,131.78

Exhibit D-1.1

MERC's known 2019 and 2020 Road Relocation Projects

Location/Town	Local Governmental Unit Requiring Relocation	Project Name
Rochester	City of Rochester	1st Ave SE - Phase 2
Rochester	City of Rochester	7th Ave NW/SW
Rochester	City of Rochester	10th St SW
Rochester	City of Rochester	Broadway Ave
Chatfield	State of Minnesota	Hwy 52 Relocations (5507-64)
Leroy	State of Minnesota	Hwy 56
Rochester	City of Rochester	16th Ave SW
Rochester	City of Rochester	13th Ave NW/SW
Rochester	City of Rochester	2nd St SW
Spring Valley	State of Minnesota	Hwy 16
Pine Island	State of Minnesota	TH 52
Rochester	State of Minnesota	TH 63 S
Stewartville	City of Stewartville	3rd and 4th Ave
Rochester	Olmsted County	CSAH 9
Rushford	City of Rushford	Grove St
Rushford	State of Minnesota	TH 30
LaCrescent	Houston County	CR 29
Caledonia	Houston County	CR 3
LaCrescent	Houston County	CSAH 6
Rochester	City of Rochester	3rd, 4th, and Center
Elgin	Wabasha County (ADA Improvements)	1st St SE - Sidewalk Improvements
Stewartville	City of Stewartville	10th St SW
Byron	City of Byron	7th St & 10th Ave - Roundabout
Byron	City of Byron	2nd Ave - Watermain
Wykoff	Filmore County	Gold St
Rochester	City of Rochester	Douglas Trail
Rochester	City of Rochester	Chester Bike Trail
New Market	New Market Township	Logan Ave
Eagan	Dakota County	Lexington & Lone Oak
Lakeville	Dakota County	CSAH 50 - Phase 2
Farmington	City of Farmington	Hickory, Westview, Westwood, Various
Empire Township	Empire Township	Chili, Chevelle, 200th St - 2019 Improvements
Lakeville	Dakota County	Hamburg Ave (CP19-05)
Credit River Township	Credit River Township	Nevada Ave
Lakeville	Dakota County	CSAH 70 - Cedar to Kenrick
Rosemount	State of Minnesota	Hwy 3 & 170th
Cedar Lake Township	Scott County	Cty Rd 8 - Turn Lanes
Jackson	Jackson County	South Hwy
Albert Lea	City of Albert Lea	Newton Ave/Fire Station
Albert Lea	City of Albert Lea	740th Ave, Itasca, Elm, Various
Welcome	City of Welcome	4th, 3rd, 2nd, 1st, Cambell - 2019 Street Improvements
Ortonville	City of Ortonville	Various Street Improvements
Canby	City of Canby	1st St S - Phase 2
Albert Lea	Freeborn County	Bridge Ave
Fairmont	City of Fairmont	Winnebago Ave
Lamberton	City of Lamberton	2019-2020 Improvements
Tracy	City of Tracy	2019 City Improvements
Revere	City of Revere	Watermain Replacement
Walnut Grove	State of Minnesota	Hwy 14 & Duncan Ave
Biwabik	City of Biwabik	West Railroad Ave
Rochester	City of Rochester	4th St SW
Hermantown	City of Hermantown	Hermantown Ditching
Bemidji	State of Minnesota	TH-71 and CSAH 15 Roundabout (004-615-019)
Wadena	State of Minnesota	TH-10 Reconstruction Part 2 (8001-40)
Wadena	State of Minnesota	TH-10 Reconstruction Part 3 - 2020
Pine City	State of Minnesota	I-35 and CSAH 7 Interchange (5880-194)
Park Rapids	State of Minnesota	TH-71 and CSAH 15/53 Roundabout (2904-15)
Aitkin	City of Aitkin	Northwest Street and Utility Improvements
Bemidji	City of Bemidji	30th and Hannah Reconstruction
Bemidji	City of Bemidji	2019 Street Reconstruction
Buhl	City of Buhl	City Wide Infrastructure

Location/Town	Local Governmental Unit Requiring Relocation	Project Name
Calumet	City of Calumet	SE Street and Utility Improvements
Cloquet	Carlton County	Washington Ave Reconstruction
Chisholm	City of Chisholm	13th St Infrastructure Improvements
Deer River	City of Deer River	TH-6 Utility Improvements
Deer River	State of Minnesota	TH-6 ADA and Mill and Overlay
Detroit Lakes	City of Detroit Lakes	West Avenue - Street and Utility Improvements
Detroit Lakes	City of Detroit Lakes	Willow Street - Street and Utility Improvements
Floodwood	State of Minnesota	TH-73 Reconstruct
Grand Rapids	City of Grand Rapids	2019 Street Improvements
North Branch	City of North Branch	Flink Ave Water and Sanitary
North Branch	City of North Branch/State of Minnesota	Hwy 95 and Hemingway Roundabout
Rush City	Chisago County	CSAH 39 Reconstruction
Sandstone	State of Minnesota	TH-123 reconstruct
Thief River Falls	City of Thief River Falls/State of Minnesota	Hwy 32 and Mark Blvd Roundabout
Carlton/Twin Lakes Township	Twin Lakes Township	Twin Lakes Watermain Extension - 2020
Eveleth	State of Minnesota	New MnDOT Headquarters - 2020 (9901-21)
International Falls	State of Minnesota	TH-53 Reconstruction - 2020 (3608-48)
Thief River Falls	State of Minnesota	Hwy 1 Reconstruction - 2020 (5702-47)
Bemidji	State of Minnesota	Hwy 2 Intersections - 2020 (0404-67)
Aitkin	State of Minnesota	TH-210 Unbonded Concrete Overlay - 2021 (0119-30)

Exhibit E

MERC's 2020 Gas Infrastructure Project Plan Report

2020 GAS INFRASTRUCTURE PROJECT PLAN REPORT

	Project	Project Description	Project Scope	Necessity and Benefits to Customers	Estimated Costs	In-Service Date
DIMP						
Capital						
1	Replacement of Obsolete Materials	<p>Aldyl-A: PHMSA has issued several Advisory Bulletins about certain polyethylene pipe material called Aldyl-A, a plastic material that becomes brittle over time and is subject to sudden failure from cracking. There is increased risk for Aldyl-A manufactured before 1973. MERC’s system contains polyethylene pipe that was installed beginning in the 1960s and MERC has identified 387.8 miles of Aldyl-A main across the distribution system. This multiyear project will continue efforts undertaken in 2019 to</p>	<p>Aldyl-A: MERC plans to replace 79,545 feet of main and approximately 889 services in 2020 across 11 communities.</p> <p>Specific details regarding the location, vintage of Aldyl-A, main footage, number of services, and costs are included in Table 3 of the Petition.</p> <p>Maps showing the specific location of the identified projects are included as Exhibit H and a schedule of planned work and in-service dates for each</p>	<p>These renewal and replacement projects will deliver an enhanced level of safety to MERC’s gas system and address several risk factors including external corrosion, legacy installation techniques, legacy manufacturing techniques, and third-party damage.</p>	<p>\$6,297,540 related to Aldyl-A replacements \$562,000 related to x-Trube service replacements \$140,460 related to copper/bare steel service replacements.</p> <p>Details regarding forecasted costs for each project are provided in Table 3.</p>	<p>Replacements planned for in-service by year-end 2020 and only replacements in service by year-end 2020 will be included for recovery in the GUIC Rider.</p> <p>Exhibit I includes forecasted project schedules and in-service dates for planned Aldyl-A</p>

	Project	Project Description	Project Scope	Necessity and Benefits to Customers	Estimated Costs	In-Service Date
		replace Aldyl-A main, with priority replacement of the main installed before 1973.	project is included as Exhibit I.			replacements.
		<p>X-Trube, Copper and Bare Steel: If a leak is detected on X-Trube or copper tubing, MERC must replace, rather than repair, the piping with polyethylene or steel. Replacement is required because these materials have been known to fail and a repair would increase the risk of failure. So when MERC detects issues on facilities composed of X-Trube or copper, the Company must replace the facility at issue.</p> <p>Replacement of bare steel is also important because known steel</p>	<p>X-Trube, Copper, and Bare Steel: MERC plans to replace approximately 200 X-trube services in our 2020.</p> <p>Details regarding planned X-Trube replacements in 2020 are provided in Table 3 of the Petition.</p> <p>Although MERC has removed all of its known copper and bare steel, any bare steel or copper services that are found will be removed and replaced. MERC will replace any identified copper or bare steel</p>			

	Project	Project Description	Project Scope	Necessity and Benefits to Customers	Estimated Costs	In-Service Date
		on MERC's system was installed in the 1930s and was prone to corrosion	that is identified and track it as part of our obsolete materials program.			
Operations and Maintenance						
1	Meter Set Surveys	Stop valves provide the ability to isolate sections of the system in the event of an emergency or incident. In this Program, MERC will begin to survey all meter set stop valves. Valves that are identified to pose a risk of failure will be	Survey work planned 2020 includes the survey of all meter sets that were not surveyed in 2019. In particular, MERC plans to complete surveys of approximately 103,939 meter sets across the Company's service	Stop valves provide the ability to isolate sections of the system in the event of an emergency or incident to better protect the public and minimize customer	\$2M	N/A Costs to be incurred in 2020

	Project	Project Description	Project Scope	Necessity and Benefits to Customers	Estimated Costs	In-Service Date
		replaced under MERC's Obsolete Materials Program, and the installation costs for the new valves will be tracked under that project.	area.	impacts. Ensuring that faulty or obsolete stop valves are replaced will help ensure the continued ability for these stop valves to safeguard the public and customers if an emergency were to occur.		
2	Sewer Cross Bore Surveys	MERC has been inspecting sewer laterals and mains under an ongoing Sewer Line Lateral Inspection Program since 2014, and has determined that further inspections are prudent and necessary to identify and mitigate the risk posed by cross bores. For 2020, MERC proposes to	MERC anticipates that approximately 6,500 surveys will be completed in 2020.	Reduce the risk to customers and minimize the threat of future cross bores.	\$1M	N/A Costs to be incurred in 2020

	Project	Project Description	Project Scope	Necessity and Benefits to Customers	Estimated Costs	In-Service Date
		continue its efforts to survey services to identify conflicts with the help of a third-party contractor.				
RIGHT-OF-WAY RELOCATION PROJECTS						
Capital						
1	Road and Public Work Projects	Replacement of natural gas facilities located in the public right-of-way required by the construction or improvement of a highway, road, street, public building, or other public work by the state or a political subdivision. Each year, MERC is asked to relocate natural gas infrastructure to accommodate public projects constructed within the right-of-way and the number and costs of these requests have increased since	MERC is not informed of specific future right-of-way relocation work with enough lead time to include such projects in the Company's forecast. Rather, federal, state, or local government units request MERC to relocate facilities within the right-of-way according to their own planning timelines. MERC is often not requested to relocate facilities until the month or week the right-of-way project begins. While MERC	Right-of-way relocations are needed to help ensure construction or improvements of road infrastructure and other public works are able to be completed in a timely, comprehensive, and safe manner.	\$6,589,132 See Table 2, Figure 1, and Section II.A.1 of MERC's Petition for a discussion of MERC's 2020 forecasted costs related to right-of-way relocations	Planned for in-service by year-end 2020; only replacements in service by year-end 2020 will be included for recovery in the GUIC Rider.

	Project	Project Description	Project Scope	Necessity and Benefits to Customers	Estimated Costs	In-Service Date
		2015.	cannot currently identify the specific number of road relocation requests that will be made for 2020, based on historic trends, it is likely the Company will continue to receive these requests at the same or greater pace as in previous years.			
Operations and Maintenance						
<p>At this time, MERC has not forecasted incremental O&M expense related to the 2020 Right-of-Way Relocation Projects. To the extent that actual expenses are identified as those projects progress in 2020, MERC will seek recovery via the GUIC reconciliation in 2021.</p>						

Exhibit F

Discussion of the magnitude of known future natural gas projects and the proposed GUIC recovery as required by Minn. Stat. § 216B.1635, subd.4(vi), (vii), and (viii)

Information Required by Minn. Stat. § 216B.1635, Subd. 4(vi), (vii), and (viii)

(1) Minn. Stat. § 216B.1635, subd. 4(2)(iv)

The magnitude and timing of any known future gas utility projects that the utility may seek to recover under this section.

MERC anticipates total capital spending on GUIC-eligible projects for road relocation and integrity work to continue at or above historical levels with a tracker and formal review process to ensure that only the return on and of GUIC-qualified projects will be recovered through the GUIC Rider. In addition, MERC requests GUIC Rider recovery for \$3 million incremental O&M costs to support the Sewer Lateral and Stop Valve Survey Projects.

Potential projects that could be evaluated for future GUIC rider recovery, other than the obvious right-of-way projects and DIMP projects, may ultimately include MERC's replacement of farm tap customer-owned fuel lines with utility-owned lines meeting federal and state safety and reliability standards, costs related to excess flow valves and compliance with Commission directives related to excess flow valves, and system upgrades and replacements to address system pressure issues.

Specifically, MERC's total projection of GUIC capital costs in 2020 is \$13,832,517. Costs are expected to be incurred throughout 2020, with the largest amount of costs being incurred in December (\$1.5 million). The 13-month average capital investment throughout 2020 is projected to be \$16,227,228, which includes the 2019 GUIC capital costs as well as the Accumulated Deferred Income Tax Proration Adjustment. Additionally, MERC has projected \$3,364,986 of incremental O&M and depreciation expense for 2019. Support for these estimates is provided in Exhibit D.

(2) Minn. Stat. § 216B.1635, subd. 4(2)(vii)

The magnitude of GUIC in relation to the gas utility's base revenue as approved by the commission in the gas utility's most recent general rate case, exclusive of gas purchase costs and transportation charges.

2020 GUIC Revenue Requirement	\$4,868,572
2018 Rate Case Approved Margin Revenues (Docket No. G011/GR-17-563)	\$110,507,391
GUIC as % of Margin	4.41%

(3) Minn. Stat. § 216B.1635, subd. 4(2)(viii)

The magnitude of GUIC in relation to the gas utility's capital expenditures since its most recent general rate case.

2020 GUIC-Eligible Projected Capital Expenditures	\$13,589,132
2018 Actual Capital Expenditures	\$68,622,507
GUIC Capital Expenditures as % of 2018 Actuals	19.80%

Exhibit G

Illustrative example of MERC's proposed GUIC true-up calculation

**Minnesota Energy Resources Corporation
2020 Gas Utility Infrastructure Cost (GUIC) Rider Calculation**

Line	Description	Reference	Forecasted 2020 GUIC	
			Rider	2020 Actual
1	Expenses	O&M Expense	3,000,000	3,133,090
2	Expenses (Net Retirements)	Depreciation Expense	351,489	373,319
3	Rate Base (Net Retirements)	13-Month Average Net Plant Value	\$ 16,005,916	\$ 17,000,000
4	Accumulated Deferred Income Tax Proration Adjustment		\$ 151,600	\$ -
5	Adjusted Rate Base	Line 3 + Line 4	\$ 16,157,516	\$ 17,000,000
6	Rate of Return	Docket No. G011/GR-17-563	6.6971%	6.6971%
7	Earnings on Rate Base	Line 5 x Line 6	\$ 1,082,085	\$ 1,138,507
8	Gross Revenue Conversion Factor (1)	Docket No. G011/GR-17-563	1.402	1.402
9	Return on Rate Base	Line 7 x Line 8	\$ 1,517,083	\$ 1,596,187
11	Total Revenue Requirement	Line 1 + Line 2 + Line 9	\$ 4,868,572	\$ 5,102,596
12	2020 Rider Revenue Collected			\$ 4,500,000
13	2022 True-up Revenue Requirement	Total shortfall to be added to the 2022 GUIC Rider calculation		\$ 602,596
14				
15	Total Therms			878,741,019
16				
17	Per therm Increase	Line 13 / Line 15		\$ 0.00069
18				
19	Average use per Residential Customer	2018 Rate Case Sales Forecast		874
20	Average annual cost increase to Residential Customer	Line 17 x Line 19	\$	0.60
21				
22	Average use per C&I Class 1 Customer	2018 Rate Case Sales Forecast		999
23	Average annual cost increase to C&I Class 1 Customer	Line 17 x Line 22	\$	0.69
24				
25	Average use per C&I Class 2 Customer	2018 Rate Case Sales Forecast		7,827
26	Average annual cost increase to C&I Class 2 Customer	Line 17 x Line 25	\$	5.37
27				
28	Average use per C&I Class 3 Customer	2018 Rate Case Sales Forecast		403,949
29	Average annual cost increase to C&I Class 3 Customer	Line 17 x Line 28	\$	277.01
30				
31	Average use per C&I Class 4 Customer	2018 Rate Case Sales Forecast		1,453,452
32	Average annual cost increase to C&I Class 4 Customer	Line 17 x Line 31	\$	996.70
33				
34	Average use per C&I Class 5 Customer	2018 Rate Case Sales Forecast		13,232,459
35	Average annual cost increase to C&I Class 5 Customer	Line 17 x Line 34	\$	9,074.15
36				
37	Average use per Agriculture Dryer Class 1 Customer	2018 Rate Case Sales Forecast		6,711
38	Average annual cost increase to Agriculture Dryer Class 1 Customer	Line 17 x Line 37	\$	4.60
39				
40	Average use per Agriculture Dryer Class 2 Customer	2018 Rate Case Sales Forecast		50,612
41	Average annual cost increase to Agriculture Dryer Class 2 Customer	Line 17 x Line 40	\$	34.71
42				
43	Average use per Agriculture Dryer Class 3 Customer	2018 Rate Case Sales Forecast		1,604,084
44	Average annual cost increase to Agriculture Dryer Class 3 Customer	Line 17 x Line 43	\$	1,100.00
45				
46	Average use per Power Generation Class 1 Customer	2018 Rate Case Sales Forecast		23,680
47	Average annual cost increase to Power Generation Class 1 Customer	Line 17 x Line 46	\$	16.24
48				
49	Average use per Power Generation Class 2 Customer	2018 Rate Case Sales Forecast		20,112,859
50	Average annual cost increase to Power Generation Class 2 Customer	Line 17 x Line 49	\$	13,792.37

Exhibit H

Maps of Aldyl-A Main Replacement (2020)
[Filed Separately as Public and Nonpublic
Versions]

Exhibit I

Project Schedule for Obsolete Material Replacements (2020)

ID	Task Name	Resource Names	Duration	Start	Finish	Gantt Chart (July, October, January, April, July, October, January)											
0	Project		479 days	Tue 1/1/19	Sun 11/1/20	Project [Summary Progress]											
1	Project Scope Determined	Engineering	2 mons	Tue 1/1/19	Mon 2/25/19	Engineering [Manual Progress]											
2	Preliminary Design	Engineering	1 mon	Tue 2/26/19	Mon 3/25/19	Engineering [Manual Progress]											
3	Design		85 days	Thu 1/23/20	Wed 5/20/20	Design [Manual Summary Rollup]											
4	Final Designs	Designers	1 mon	Thu 1/23/20	Wed 2/19/20	Designers [Manual Task]											
5	Permitting (when required)	Designers,Engineers	3 mons	Thu 2/20/20	Wed 5/13/20	Designers,Engineers [Manual Task]											
6	Land Acquisition (when required)	Real Estate	4 mons	Thu 1/23/20	Wed 5/13/20	Real Estate [Manual Task]											
7	Competitively Bid	Supply chain	2 mons	Thu 2/20/20	Wed 4/15/20	Supply chain [Manual Task]											
8	Release Work to Contractors	Designers	1 wk	Thu 5/14/20	Wed 5/20/20	Designers [Manual Task]											
9	Construction		100 days	Thu 5/21/20	Wed 10/7/20	Construction [Manual Summary Rollup]											
10	AA Replacement - Detroit Lakes	Construction Contractor	7 wks	Mon 6/15/20	Fri 7/31/20	Construction Contractor [Manual Task]											
11	AA Replacement - Frazee	Construction Contractor	8 wks	Mon 8/3/20	Fri 9/25/20	Construction Contractor [Manual Task]											
12	AA Replacement - Hoyt Lakes	Construction Contractor	7 wks	Mon 6/1/20	Fri 7/17/20	Construction Contractor [Manual Task]											
13	AA Replacement - Albert Lea	Construction Contractor	11 wks	Wed 7/1/20	Tue 9/15/20	Construction Contractor [Manual Task]											
14	AA Replacement - Blooming Prairie	Construction Contractor	4 wks	Thu 5/21/20	Wed 6/17/20	Construction Contractor [Manual Task]											
15	AA Replacement - Mora	Construction Contractor	11 wks	Wed 7/15/20	Tue 9/29/20	Construction Contractor [Manual Task]											
16	AA Replacement - Pine City	Construction Contractor	4 wks	Thu 5/21/20	Wed 6/17/20	Construction Contractor [Manual Task]											
17	AA Replacement - Eyota	Construction Contractor	10 wks	Thu 5/21/20	Wed 7/29/20	Construction Contractor [Manual Task]											
18	AA Replacement - La Crescent	Construction Contractor	3 wks	Thu 7/30/20	Wed 8/19/20	Construction Contractor [Manual Task]											
19	AA Replacement - Rochester	Construction Contractor	7 wks	Thu 8/20/20	Wed 10/7/20	Construction Contractor [Manual Task]											
20	AA Replacement - Worthington	Construction Contractor	13 wks	Thu 6/18/20	Wed 9/16/20	Construction Contractor [Manual Task]											
21	X-Trube Service Replacements - Various	Construction Contractor	3 wks	Wed 7/1/20	Tue 7/21/20	Construction Contractor [Manual Task]											
22	Project Complete		0 days	Sun 11/1/20	Sun 11/1/20	◆ 11/1											

Project: Project
Date: Fri 4/19/19

Task		Inactive Task		Manual Summary Rollup		External Milestone	◆	Summary Progress	
Split		Inactive Milestone	◇	Manual Summary		Deadline	↓		
Milestone	◆	Inactive Summary		Start-only		Progress			
Summary		Manual Task		Finish-only		Manual Progress			
Project Summary		Duration-only		External Tasks		Slack			

In the Matter of the Petition of Minnesota
Energy Resources Corporation for
Approval 2020 Gas Utility Infrastructure
Cost Rider Revenue Requirement and
Revised Surcharge Factor

Docket No. G011/M-19-____

CERTIFICATE OF SERVICE

I, Kristin M. Stastny, hereby certify that on the 24th day of April, 2019, on behalf of Minnesota Energy Resources Corporation (MERC) I electronically filed a true and correct copy of the enclosed Petition on www.edockets.state.mn.us. Said documents were also served via U.S. mail and electronic service as designated on the attached service list.

Dated this 24th day of April, 2019.

/s/ Kristin M. Stastny
Kristin M. Stastny

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

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Colleen	Sipiorski	Colleen.Sipiorski@wecenergygroup.com	Minnesota Energy Resources Corporation	700 North Adams St Green Bay, WI 54307	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List
Kristin	Stastny	kstastny@briggs.com	Briggs and Morgan, P.A.	2200 IDS Center 80 South 8th Street 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
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List
Mary	Wolter	mary.wolter@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)	231 West Michigan St Milwaukee, WI 53203	Electronic Service	No	GEN_SL_Minnesota Energy Resources Corporation_General Service List