COMMERCE DEPARTMENT

August 23, 2019 **PUBLIC DOCUMENT**

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, Minnesota 55101-2147

RE: **PUBLIC Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. G011/M-19-282

Dear Mr. Wolf:

Attached are the **PUBLIC** Comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

> In the Matter of the Petition of Minnesota Energy Resources Corporation [MERC] for Approval of 2020 Gas Utility Infrastructure Cost [GUIC] Rider Revenue Requirement and Revised Surcharge Factor.

The Application was filed on April 24, 2019 by:

> Seth S. DeMerritt
> Senior Project Specialist
> 2685 145th Street West
> Rosemount, MN 55068

The Department recommends that the Minnesota Public Utilities Commission (Commission) **approve MERC's 2020 GUIC Rider with modifications.** The Department is available to answer any questions that the Commission may have.

Sincerely,

/s/ DOROTHY MORRISSEY
Financial Analyst

DM/ar
Attachments

Before the Minnesota Public Utilities Commission

PUBLIC Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. G011/M-19-282

I. INTRODUCTION

On April 24, 2019, Minnesota Energy Resources Corporation (MERC or the Company) requested approval from the Minnesota Public Utilities Commission (Commission) to recover capital costs and operations and maintenance (O&M) expenses, forecasted to be incurred in 2020, through a gas utility infrastructure cost (GUIC) rider (GUIC Rider), pursuant to Minn. Stat. § 216B.1635. In this petition, MERC requested recovery of an estimated $4.9 million revenue requirement for its 2020 test-year GUIC Rider period, effective January 1, 2020.[1] This instant filing is MERC's second GUIC petition since its last general rate case filed in Docket No. G011/GR-17-563 (17-563 Rate Case) in which final rates were implemented July 1, 2019.[2]

The Commission allowed MERC to establish a GUIC Rider, approved in the Commission's Order issued on February 5, 2019, in Docket No. G011/GR-18-281 (18-281 GUIC or 2019 GUIC). On April 25, 2019, the Commission approved MERC's 18-281 GUIC Rider compliance filing. MERC began charging its customers the approved 18-281 GUIC Rider rate on May 1, 2019.

On June 28, 2019, MERC filed in its 18-281 GUIC petition an emergency request to suspend charging its approved GUIC Rider to certain large-volume Direct Connect customers and consider whether to transfer recovery to all other MERC customers through a future true-up filing. The Commission heard MERC's rider rate suspension request at its August 1, 2019 Agenda Meeting, and orally decided to approve MERC's request.

In this petition, MERC indicated that it is evaluating the need to file a general rate case request. If the Company files a 2020 test-year general rate case, MERC stated that it would update this instant docket and make a proposal to (1) roll all planned capital investments and O&M projects presented herein into base rates, and (2) zero out the existing GUIC rider.[3] Effectively, under MERC's proposal a 2020 test-year general rate case would supersede this petition.

---

[1] Petition, p. 3. The $4.9 million estimated revenue requirement for 2020 test year does not include any true-up amounts for the existing 2019 GUIC revenue and costs; rather, absent a 2020 test-year general rate case filing, MERC proposes to incorporate a 2019 GUIC true-up into MERC's proposed 2021 GUIC Rider revenue requirement.
[2] In MERC's 17-563 Rate Case, which used a 2018 test year, the Commission's Order, issued December 26, 2018 approved an approximate $3.1 million increase in base rate revenues.
[3] Petition, pp. 32-33 and IR No. 26 included as Attachment 2.

II. SUMMARY OF PROPOSAL

A. OVERVIEW

MERC asserted that the GUIC Rider promotes the public interest by allowing the utility to pursue work required by state and federal requirements.[4] The Company stated that its planned GUIC-investments are generally to assess the integrity of MERC's system and to proactively repair and replace problematic equipment and materials.[5]

In this Petition, MERC proposed to recover a 2020 annual revenue requirement of approximately $4.9 million through a GUIC Rider rate effective January 1, 2020. The GUIC recovery rider is for costs of what MERC states are eligible gas utility projects that are in-service but were not included in the utility's most recent general rate case, or are planned to be in service during the period covered by the filing.[6] Specifically, the Company requested approval of:

- A 2020 revenue requirement of approximately $4.9 million related to MERC's projected 2019 and 2020 gas utility capital expenditures and incremental 2020 O&M expenses as defined in Minn. Stat. § 216B.1635, subd. 1, subject to future true-up; and

- A 2020 per-therm GUIC Rider rate factor, which MERC originally proposed at $0.00554 per therm applicable to all customer classes, to be effective January 1, 2020; including the corresponding tariff sheet updates.[7]

MERC's Exhibit B included in its Petition outlines where in the filing the information required by the GUIC Statute is included.

MERC stated that the costs it identified for recovery in its 2020 GUIC Rider filing reflect only incremental return on and of GUIC-eligible capital projects that are not included in the rate base of its most recent general rate case, and reflect only incremental O&M expense over and above costs included in base rates.[8] MERC stated it will separately track facilities 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.[9]

---

[4] Petition, p. 6 (Summary of Filing)
[5] Ibid.
[6] Minn. Stat. § 216B.1635, subd. 1(b)(2).
[7] Petition, p. 2 and Exhibit C. As noted above, the Commission approved MERC's subsequent request to suspend recovery of these costs from Direct Connect customers.
[8] Petition, p. 25 (Summary of Filing).
[9] Petition, p. 26 (Summary of filing).

B. REVENUE REQUIREMENTS

MERC stated that the $4.9 million proposed to be recovered under the 2020 GUIC Rider is related to costs for two overarching types of projects undertaken to comply with:

1) federal, state, and local governmental relocation requests of natural gas facilities located in the public right-of-way, and,
2) federal and state regulations that require natural gas utilities to implement integrity management programs to assess and improve safety, reliability, and integrity of its natural gas infrastructure.[10]

The Company stated that these categories of project costs are consistent with the eligibility requirements set forth in Minn. Stat. § 216B.1635 (GUIC Statute), subd. 1(c), build upon MERC's 2019 GUIC spending, and are the same types of costs approved by the Commission in the 18-281 GUIC petition.[11]

MERC stated that, of the proposed $4.9 million total revenue requirement for 2020, approximately $1.9 million is related to capitalized expenditures and the remaining $3.0 million is attributed to work activity treated as an expense.[12]

1. Distribution Integrity Management Program (DIMP) Capital Projects

MERC estimated a total of $13.6 million in capitalized expenditures for GUIC projects forecasted to be placed in service in 2020, of which $6.6 million is for right-of-way required facility replacement and/or relocations, and $7 million is for replacement of infrastructure that MERC stated is at risk due to obsolete materials. Below Table 1 summarizes and provides a breakdown of MERC's proposed capital project work anticipated to be placed in service in 2020; discussion of this information follows.

[10] Petition, p. 1.
[11] Petition, p. 5 (Section F).
[12] Petition, Exhibit D, p. 1.

Table 1

Summary of MERC Estimated Total Capital Expenditures Placing in Service in 2020: ($ - in Millions)			**$13.6**
GUIC Project Name	**Count**	**Cost Estimate**	
		Project Breakdown	Project Total
Right-of-Way (ROW) Projects	87		$6.6
Obsolete Materials			$7.0
Aldyl-A Mains			
Total Known Main Miles (inventory):	387.8		
Miles to be Replaced in 2020:	15	$3.98	
Aldyl-A Services			
No. of Services to be Replaced in 2020:	889	$2.32	
X-Trube Services			
Total Known Services (inventory):	997		
Services to be Replaced in 2020:	207		
Copper/bare steel services		$0.70	
Total Known Services (inventory):	n/a		
No. of Services to be Replaced in 2020:	50		
Faulty Meter Set valves/equipment	n/a		

To estimate revenue requirements attributed to these 2020 GUIC plant investments, MERC used the 13-month average balance of its estimated net GUIC plant-in-service as the GUIC rate base upon which to apply the return on investment. MERC included a total depreciation expense based on and calculated using the estimated monthly plant-in-service amounts.[13]

a) Right of Way (ROW) Projects

MERC projected incremental capital investments of approximately $6.6 million in 2020 to replace natural gas equipment due to right-of-way (ROW) requirements. This estimate is based upon the Company's actual expenditures in 2018 for 87 ROW projects.[14] MERC believes use of the actual costs incurred in 2018 as its basis is reasonable for its 2020 test-year cost estimate, because the Company's analysis of the 2015-2018 historical ROW spend amounts shows an increasing cost trend line which if continued, suggests 2020's costs could reach $8 million.[15] MERC stated that at the time of this filing, the Company had been notified of nine ROW projects for 2020; however, MERC attested that typically ROW projects are not known to the Company in advance and oftentimes it only knows within the month prior to ROW project

[13] Petition, Exhibit D, pp. 3, 6, 9.
[14] Petition, p. 2, 4 (Summary of Filing) and p. 6 (Section F).
[15] Petition, p. 14, Figure 1.

commencing.[16] MERC stated that this estimated expenditure amount will be trued up annually to actual costs, eliminating the possibility that such forecasted spending would result in over-recovery.

b) Obsolete Materials Replacement Project

In addition, MERC estimated $7 million in capital expenditures in 2020 for its Distribution Integrity Management Program (DIMP) Obsolete Materials Replacement Project.[17, 18] MERC indicated that this is a multi-year project, primarily targeted to remove and replace three types of materials posing known risks; in particular Aldyl-A, copper, and X-Trube pipes.[19] Though MERC has replaced all known bare steel pipelines on its system, if additional bare steel pipe is discovered, the bare steel pipe would be immediately scheduled for replacement and costs to do so would be recorded as part of this DIMP Project.[20]

MERC stated that its system has a total of 387.8 main miles of Aldyl-A pipeline installed from 1960 – 1983.[21] In 2020, MERC plans to replace 15 miles of Aldyl-A main as well as 889 Aldyl services at an estimated cost of $3.98 million and $2.32 million, respectively.[22] MERC stated that it has removed nearly all the copper and X-Trube service piping from its system; however, in 2020, MERC expects to replace 207 of its total 997 known X-Trube services and 50 copper/bare steel services at a combined total cost of $0.70 million.[23] MERC also mentioned that, while it conducts its DIMP Stop Valve Surveys work, should the Company discover meter set valves or other equipment posing an immediate threat, such equipment will be replaced and accounted for as part MERC's Obsolete Materials Program.[24] Specific projects expected to be undertaken and placed into service in 2020 are discussed in Exhibits E and I of the Petition.

[16] Petition, p. 4 (Summary of Filing).
[17] Petition, p. 2, 4, 11 (Summary of Filing).
[18] The federal Pipeline and Hazardous Materials Safety Administration (PHMSA) published rules, 49 C.F.R. Part 192, subpart P requires all system operators to adopt written distribution integrity management plans for distribution pipelines. Petition, p. 5, Footnotes 6 and 7 (Summary of Filing).
[19] Petition, p. 12, 18 (Summary of Filing); Adlyl-A projects Table 3, Exhibit I
[20] Petition, Footnote 36 and p. 18 (Summary of Filing).
[21] MERC stated that some installed Aldyl-A was classified generically as polyethylene (PE) pipe. See Petition, Footnote 38.
[22] Petition, Table 4, p. 20.
[23] Petition, Table 5, p. 22, and Table 3, p. 19.
[24] Petition, p. 22 (Summary of Filing).

2. DIMP Operation and Maintenance Projects

MERC estimated and included a total of $3 million in incremental O&M expenses for 2020 GUIC-related DIMP project work. Specifically, MERC estimated $2 million in O&M spending to continue its Stop Valve Survey Project, and $1 million in O&M costs to continue its Sewer Cross Bore Survey Project work.[25]

a) Stop Valve Survey Project (a/k/a Meter Set Survey)

In 2019, MERC began a multi-year initiative to survey all meter sets to assess their valve failure risks. In particular, MERC identified two types of valves that are known to fail, the Rockford Eclipse and Mueller Luboseal valves; therefore, the Company determined it must survey the equipment of all its meter sets and replace the suspect facilities.[26] MERC proposed to continue and complete this survey project in 2020, at an estimated annual cost of $2 million. MERC contracted with a third-party contractor to conduct this survey, at an approximate cost of $15 per meter for its metropolitan serviced areas (planned 2019 surveys) and $20 per meter for its more disperse outlying serviced areas (planned 2020 surveys).[27]

b) Sewer Cross Bore Survey

MERC stated that it has developed and implemented a safety plan in an attempt to address the system threat of installed gas lines inadvertently cross-bored through other facilities, such as sewer lines. MERC stated that it has been inspecting sewer laterals and mains under an ongoing Sewer Line Lateral Inspection Program since 2014 (which should mean that costs incurred before 2018 should already be charged to ratepayer in base rates), but stated that MERC expanded these efforts beginning in 2019, spending an additional $1 million over and above the approved amount included in MERC's 2018 base rates test year. The Commission approved recovery of this additional spending through MERC's 2019 GUIC Rider, and MERC has proposed to continue this multi-year program effort in 2020, similarly expecting to spend $1 million over and above the approved base rates level. In 2020, MERC has planned for an additional 6,500 surveys to be completed by the third-party contractor at an approximate cost of $150 per survey.

c) Other O&M Items

MERC indicated that it may incur other incremental O&M expense related to its GUIC projects. Specifically, MERC stated that it has not forecasted or included incremental property tax expense related to its proposed 2020 test-year capital expenditures, or accounted for the potential O&M treatment of ROW activity that does not merit capitalization treatment.

---

[25] Petition, p. 2, 4, 11 (Summary of Filing).
[26] Petition, p. 23 (Summary of Filing).
[27] Petition, Table 6, p. 24.

Instead, to the extent that actual O&M-related expenses are identified for those 2020 projects, the Company proposed to include them in its true-up/reconciliation in 2021.[28]

3. Rate of Return

In estimating the GUIC recovery rider revenue requirement, the Company proposed to use an overall rate of return of 6.6971%, which is the rate approved by the Commission in MERC's last rate case, Docket No. G011/GR-17-563.

4. Taxes

a) Tax Cuts and Jobs Act of 2017 (TCJA)

For the revenue requirement tax gross-up multiplier, the Company uses 1.402, which reflects the *Tax Cuts and Jobs Act of 2017* (TCJA 2017) income tax rate changes passed by the federal government.

b) Prorated Accumulated Deferred Income Tax (ADIT)

MERC also stated it included a proration of the projected federal monthly accumulated deferred income taxes (ADIT), per Internal Revenue Code (IRC) normalization rules and proration formula and assuming that the GUIC rates will be placed in effect in January 2020.[29] For purposes of the true-up, MERC proposed to adjust the prorated ADIT with the 13-month average of the differences between projected and actual ADIT balances.[30]

C. TRUE-UP

Currently, there is no true-up amount from any prior year's GUIC projects and costs included in MERC's GUIC Rider rate, nor have the actual 2019 projects for which the costs being charged to ratepayers in the 2019 GUIC been identified. MERC stated it will submit a true-up for its 2019 GUIC project costs by April 1, 2020, and any over- or under-collection would be included in the 2021 GUIC Rider rate factor. Consequently, the future true-up of MERC's 2020 GUIC Rider would be incorporated in its 2022 GUIC Rider rate. MERC committed that it will ensure that all costs are trued-up to actual costs and there would be no double recovery of costs.[31]

However, MERC indicated that, should the Company file a general rate case with a 2020 test-year, not only would doing so supersede this 2020 GUIC Rider recovery request, but the Company would include any unrecovered 2019 GUIC revenue requirement within its rate case filing, and thus eliminate need for a 2019 GUIC true-up filing.

---

[28] Petition, pp. 27-28 (Summary of Filing) and Footnote 43.
[29] Treasury Reg. 1.167(1)-(h)(6)(ii)
[30] Petition, p. 28 (Summary of Filing).
[31] Petition, p. 26 (Summary of Filing).

MERC proposed that it would be through the annual true-up process that parties would have opportunity to evaluate, review and determine if actual costs for projects included in the prior year's (2019) GUIC were not prudent.[32]

D. COST ALLOCATION AND RATE FACTOR

The Company proposed to allocate the GUIC Rider revenue requirement on a volumetric, or per therm, basis; doing so would establish a single rate factor to be charged to all customers. The Company initially proposed a 2020 GUIC Rider rate factor of $0.00554 per therm, which is the result of the total revenue requirement of $4,888,615 divided by the total annual throughput of 879 million therms (inclusive of all customers in all classes, including Michigan sales). MERC stated that the throughput value used the total system throughput approved in its last rate case, adjusted for additional Rochester-area projected growth.[33]

MERC proposes to apply the resulting $0.00554 per therm rate uniformly across all customers regardless of size or service selection (except the Direct Connect customers that the Commission later exempted from the GUIC, at MERC's emergency request, at the August 1, 2019 Agenda meeting, as noted above). MERC stated that its proposed allocation basis is consistent with the public interest and with the Commission's decision in the 18-281 GUIC petition. MERC stated that a flat-rate design would (1) ease rider implementation, tracking, true-ups and administration, and (2) recognize the project benefits received by all MERC customers as consistent with their use of the facilities being replaced/reinforced and reliance on the system as a whole.[34] Table 7 in MERC's petition outlines the bill impacts on various customer classes should their single-rate design be approved. However, the figures in this table do not reflect any future adjustment to the per-therm rate that would apply in the future in the true-up for the 2019 GUIC.

[32] Petition, p. 33 (Summary of Filing).
[33] Petition, p. 31.
[34] Petition, p. 30.

E. MAGNITUDE OF GUIC REQUEST[35]

The GUIC Statute subdivisions 4(vi), 4(vii) and 4(viii) require utility companies seeking use of the GUIC recovery to discuss the magnitude of its GUIC recovery request with respect to future projects, its most recent general rate case approved base revenues and its capital expenditures since its most recent general rate case, respectively.

1. Future Projects

Aside from its ongoing ROW and DIMP projects, MERC indicated that the future potential projects it may request to include in the Company's GUIC Rider are:

- replacement of farm tap customer-owned fuel lines with utility-owned lines;
- costs related to excess flow valves and compliance the Commission directives related to excess flow valves; and
- system upgrades and replacements to address system pressure issues.

MERC did not provide any further information as to the cost magnitude or the timing for these potential projects that it may request to include in its GUIC Rider.

2. Relative to Approved Base Revenues

In MERC's last rate case, the Commission approved a $3.1 million increase in base rate revenues, which was a 2.89 percent increase over MERC's 2018 test-year $107.4 million non-gas revenue margin. Herein, MERC's proposed 2020 GUIC revenue requirement of $4.9 million represents an additional 4.41 percent increase over the Commission-approved non-gas margin of $110.5 million[36] result MERC's 2018 test-year used in its last rate case; in other words, MERC's proposed 2020 GUIC charge is over 150 percent of the total increase from the rate case.[37]

3. Relative to Capital Spend Since Most Recent General Rate Case

MERC's last rate case used a 2018 test-year. The magnitude of MERC's GUIC planned capital expenditures (plant additions) of $13.6 million measures to be nearly 20 percent of MERC's actual total 2018 capital expenditures of $68.6 million.[38] This Petition was filed on April 24, 2019, and no information on MERC's expected total 2019 capital expenditures was provided.

---

[35] Petition, Exhibit F.

[36] In 17-563 Rate Case, the Commission approved base rate revenue was approximately $249.9M, including gas cost revenues. When the 2018 test year cost of gas amount of $139.4M is removed, the result is the $110.5M for non-gas margin revenues.

[37] $4.9 million/$3.1 million * 100 = 158%.

[38] Petition, Exhibit F. In its last rate case, Docket No. G011/GR-17-563, MERC projected a $66.6 million capital spend Ex. MERC-36, Witness DeMerritt Direct Testimony, Schedule SSD-3.

F. CUSTOMER NOTIFICATION

MERC proposed to provide a customer bill message to notify its customers of any updated update to its GUIC Rider rate.[39]

III. DEPARTMENT ANALYSIS

A. GENERAL

In accordance with Minn. Stat. 216B.1635, subd. 2, MERC submitted this Petition at least 150 days in advance of its proposed rate implementation date.

B. REVENUE REQUIREMENTS

1. DIMP Capital Projects

a) General Analysis and Concerns

The Department first discusses some non-project specific observations and general concerns regarding MERC's proposed GUIC capital investments recovery with respect to capital spend, depreciation rate used and incremental cost recognition.

i. Capital Spend Inclusion in Rate Base

The GUIC statute specifies that eligible recovery is limited to plant-in-service; an amount identified as capital spend does not necessarily represent plant-investments that are in service. Through discovery, MERC clarified that what it described as "capital expenditures" did not include any construction-work-in-progress amounts and that only projected amounts for plant investments being placed in service were included in its recovery request.[40]

[39] Petition, Footnote 2.
[40] IR No. 6 included as Attachment 3.

ii. Depreciation Rate

The Department verified that MERC used the approved depreciation rates for the capitalized GUIC projects.[41] MERC's expected GUIC capitalized projects involves replacement of plant recorded in Accounts 376 – Gas Mains, 380 – Gas Services and 379 – Measuring and Regulating Station Equipment.

iii. Base Rate Recovery Adjustments (Incremental Costs)

MERC has not included any adjustments to its rider revenue requirements model to offset the base rate recovery of assets that are being replaced through these GUIC capital projects. MERC indicated that it would provide for such an adjustment in its true-up process once the Company knows what existing assets were replaced.[42]

The Department opposes MERC's proposal not to adjust its proposed 2020 GUIC rate for costs already recovered in base rates because it goes against the Reasonable Rate statute Minn. Stat. § 216B.03, and the "incremental" cost recovery provision specified in the GUIC Statute, thus is unreasonable.

First, MERC's approach would result in the rider rate deliberately set too high, based upon a known overstated revenue requirement for the 2020 GUIC. Although MERC reasoned that it does not know with certainty what the downward adjustment to the 2020 GUIC rate should be to reflect recovery of costs in base rates, MERC's proposal to charge rates that are known to be too high cannot be said to satisfy the statutory requirement that "Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable." [43]

Second, this proposed approach would not resolve the "doubt" or uncertainty in favor of the consumer (ratepayers), as required by Minn. Stat. § 216B.03.[44] A true-up should be designed only to adjust for any easily quantified and verifiable changes to specific estimates in a rate calculation, such as actual sales compared to forecasted sales. By contrast, MERC's proposed process would knowingly set the 2020 GUIC rate to double-recover costs, and account for this overcharge in the true-up process. The Department cannot recommend approval of a rate developed from a model designed to overcharge ratepayers and delay the inclusion of any adjustments that are necessary to correct the overcharges to ratepayers to a later time. Such a process does not resolve doubt in favor of customers.

[41] IR No. 2.A and 2.B included as Attachment 4.
[42] IR No. 17 included as Attachment 5.
[43] Minn. Stat. §216B.03.
[44] Minn. Stat. §216B.03: "Any doubt as to reasonableness should be resolved in favor of the consumer."

Third, setting the rider rate too high is not reasonable as it would force captive customers to give MERC a loan for which ratepayers not only do not earn interest on but also (for capital costs, discussed below) pay a rate of return upon.

Fourth, the GUIC Statute limits cost recovery through the rider to incremental costs that are not being recovered in other rates. When estimating the GUIC test-year revenue requirement, MERC needs to make a good faith effort to recognize, reasonably calculate and include an estimated adjustment for the base rate cost recovery of existing assets that were or are being replaced by projects included in the 2020 GUIC Rider (both 2019 and 2020 work).

Thus, the Department requests that the MERC provide in Reply Comments adjustments to remove the 2018 level of cost recovery imbedded in base rates related to the assets being replaced due to the proposed GUIC project work included in this rider recovery mechanism. Therefore, the Department expects to conduct further analysis of MERC's forthcoming Reply Comments.

b) ROW Projects

MERC stated that at the time of this filing, the Company had been notified of 9 ROW projects for 2020, however included in its 2020 GUIC revenue requirements a cost recovery level equivalent to the completion of 82 new ROW projects in 2020. Per GUIC Statute subd. 1(b)(2), eligible gas utility infrastructure costs are costs incurred in gas utility projects that are not already included in base rates, that are in service, or are planned to be in service during the period covered by the report.

Accordingly, the Department recommends that the 2020 GUIC Rider revenue requirement and rate be limited to the estimated costs of the projects that are in service or planned to be placed in service in 2020, that are not already included in MERC's base rates. Therefore, the Department recommends that MERC modify the amount attributed to the 2020-placed-in-service ROW Project costs, and at this time only include in the 2020 GUIC revenue requirements the estimated cost amount for the 9 planned 2020 projects. If MERC completes and places in-service more than these 9 planned projects during 2020, then in its GUIC true-up filing, MERC can include and request recovery of any additional ROW work it completed. By contrast, if fewer than 9 of the projects are completed, the true-up should reflect that fact.

This approach is fair and reasonable for customers, in whose favor doubt is to be resolved, and MERC, which will be allowed to recover costs of any projects in addition to the 9 ROW projects that are in service in 2020. Rider mechanisms are extraordinary ratemaking tools and allow utilities to begin recovery of costs sooner than when the facilities are used and useful, which is the standard that otherwise applies. The true-up feature of the rider gives utilities assurance for recovery commencement of the planned and the additional rider-eligible work that gets completed. This recommendation provides the necessary assurance to ratepayers that the rate is based on the estimated costs of the in-service and planned project work presented to regulators.

The Department recommends this approach particularly for MERC, due to the following facts. First, 2019 is the first year in which MERC has a GUIC, and would not be filing a true-up for 2019 until 2021. As evidenced by the discussion at the Commission's August 1, 2019 Agenda meeting, there have been concerns about MERC's roll-out of the 2019 GUIC. In addition, as discussed above, MERC's proposal to knowingly overcharge ratepayers is inconsistent with basic ratemaking principles. Given that MERC is new to this process and has had some difficulties, it is important to use a careful approach.

Second, unlike any other natural gas utility, MERC's 2019 GUIC is based on an estimate of costs (for the years 2015-2017) rather than specific projects. Thus, no information is known at this time as to what MERC's 2019 projects are and no assurance that the rates being charged in the 2019 GUIC are just and reasonable. Thus, a more extensive analysis in MERC's true-ups will be needed, including examination of MERC's 2018, 2019 and 2020 projects to ensure that there is no double-recovery of costs. During this time, there should be reasonable assurance that ratepayers are not being overcharged.

Third, the data MERC used to tabulate as 2018 ROW project expenditures is questionable and overstated (Petition, Exhibit D-1). It appears that MERC accurately reported the 2018 project count in Table 2 of the Petition (replicated below); however, the summed amount reported as 2018 project costs in Table 2 is overstated. The summed amount of approximately $6.6 million for 2018 included costs associated with projects that were placed in service in 2017; the Department determined that MERC's 2018 project cost totals are overstated by approximately $137K.[45] This kind of misclassification of costs in years indicates further need to be cautious about overstating MERC's GUIC rates.

[45] See Petition, Table 2 and Exhibit D-1.

To be clear, MERC will need to provide extensive documentation of the timing, amount and nature of costs incurred for GUIC and rate base projects.

Table 2

MERC Table 2: ROW 2015-2018		DOC Modifications	
		Shift 2017 project costs from 2018 to 2017	Avg $/project
2015	$ 4,573,401	$ 4,573,401	$ 63,519
2016	$ 5,171,722	$ 5,171,722	$ 71,829
2017	$ 6,257,343	$ 6,394,343	$ 74,353
2018	$ 6,589,132	$ 6,452,132	$ 74,162
3 Yr Avg	**$ 6,006,066**	**$ 6,006,066**	**$ 73,448**

c) Obsolete Materials Replacement Project

Of the materials MERC is targeting in its Obsolete Materials Replacement project, replacement of Aldyl-A manufactured pipelines appears will be the bulk of the work to be done, with at least 370 known miles of this pipe expected to be remaining on MERC's system after completion of the 2019 planned work. The Company could not provide the Department an estimated timeline or an overall total project cost to complete this effort.[46] To monitor this extensive undertaking, the Department requests that MERC report certain Aldyl-A project accomplishment details in its annual true-up filings. These requested reporting details should include, by project site:

- a locational description of the work completed,
- the associated work order number(s),
- the size of Aldyl-A pipe mains replaced,
- the size of replacement pipe installed,
- footage of main replaced,
- total costs net of embedded labor, vehicles, fuel, overhead, etc. and
- total replacement costs.

For the Obsolete Materials Replacement project, MERC's 2020 request included an estimated $7 million total capital replacement cost for mains and services, $3.98 million and $3.02 million respectively. MERC outlined the expected work locations, quantity of facility replacements and their estimated costs in Table 3 of its Petition. As discussed further below, the Department concludes that MERC's estimate is overstated and recommends that the estimated Obsolete Materials capital cost amount to use for setting the 2020 rider rate be reduced to a total of $5.0 million, a $2 million reduction.

[46] IR No. 23 included as Attachment 6.

In Department IR No. 20, the Department requested MERC to explain the basis for the project per unit costs.[47] In its response, MERC indicated that, for main replacements, its estimated cost of $50 per main foot was based on historical spend and included contingency costs. The Department has two issues with MERC's cost estimate. First, the Commission recently ordered MERC in the Natural Gas Extension Project (NGEP) rider docket (G011/M-18-281) to remove contingency costs from that rider's total cost projection.[48] The same principle pertains to this rider. That is, MERC should not include in its rider stepped-up costs in its estimate attributed to possible contingencies. Given that this rider is subject to true up, if MERC does incur such costs and can demonstrate that it legitimately incurred higher costs in a reasonable manner, the Company may be allowed to recover such costs. However, it is not reasonable set rates to recover costs that are inflated for conditions that MERC may not sustain.

Second, MERC did not provide historical spend data support specific to its Obsolete Material Project, as this project did not begin until 2019. However, as shown in Table 3 below, the historical cost data for main and service replacements categorized under ROW work was provided and, in 2018, MERC's experienced cost for main replaced was $43.20 per foot, a notable unit cost increase when compared to the prior two years' average actual cost-per-foot, yet less than what MERC used for its 2020 GUIC cost estimates. The Department notes that Exhibit D-1 of MERC's Petition did include a few remarks on certain 2018 work indicating that rock was encountered, a condition which likely contributed to the increased average cost per-main-foot in 2018. Given that actual per unit cost MERC experienced since 2015 has ranged from $31.67 to $43.20, with ups and downs during those four years, no predictable cost pattern is supported. Thus, the Department concludes that MERC's $50 per foot cost basis for 2020 is not supported and appears too high.

[47] IR No. 20 included as Attachment 7.
[48] Commission Order (issued June 18, 2019) *In the Matter of the Petition of Minnesota Energy Resources Corporation for Approval of a Natural Gas Extension Project (NGEP) Cost Rider Surcharge for the Recovery of 2019 Rochester Project Costs*

Table 3

MERC Historic Right-of-Way Project Costs

Petition, Exhibit D-1 details

Source: DOC IR No. 11

Year	Total Main Cost	Total Main Footage Installed	# of Service Lines	Total Service Line Cost	Total Service Line Footage	Related Station Costs	Total ROW Costs
	a	b	c	d	e	f	= a+d+f
2015	$ 4,215,270	102,410	196	$ 358,132	14,952	$ -	$4,573,401
2016	$ 3,922,339	123,862	479	$ 857,348	31,545	$ 392,035	$5,171,722
2017	$ 4,802,435	141,801	714	$ 1,262,009	46,924	$ 192,899	$6,257,343
2018	$ 5,444,981	126,037	620	$ 1,117,712	36,733	$ 26,439	$6,589,132

	Main Cost per foot		Cost per Service
	=a/b		=d/c
2015	$ 41.16		$ 1,827.20
2016	$ 31.67		$ 1,789.87
2017	$ 33.87		$ 1,767.52
2018	$ 43.20		$ 1,802.76

For these two reasons, the Department determined that an adjustment to MERC's 2020 project cost estimate is warranted. A more appropriate estimate of the per-foot cost would be an average of the costs over the four years, which results in $37.48 per foot. Thus, the total estimated replacement cost for the 79,525 feet of 2020 main pipeline work planned should be approximately $2.98 million ($37.48 X 79,545 feet). The $2.98 million result is $1 million lower than MERC's proposed total estimate using $50 per main foot ($3.98 - $2.98 = $1). Thus, the Department recommends that the Commission require MERC to reduce its capital cost estimate for main replacement by $1 million.

Regarding the replacement cost of services, MERC estimated a total cost of $3.02 million to replace 1,139 services. This amount calculates to an average replacement cost of $2,654 per service replaced. As shown in Table 3 above, the actual replacement cost per service experienced in each of the past four years has remained steady at a cost of approximately $1,800 per service. Thus, the Department concludes that MERC's cost estimate for replacement of services is overstated and likewise should be adjusted. Using overstated rate base estimates will lead to setting this rider rate too high and, as noted above, it is not reasonable for a captive customer base to be forced to give MERC a loan for which ratepayers not only do not earn interest on but also pay a rate of return upon. For the service replacement capital cost estimate, the Department recommends an approximate $1 million reduction to MERC's cost estimate ($3.02 – ($1,800 * 1,139) = $0.97 million).

The Department's two recommended Obsolete Material Replacement capital cost adjustments together total an approximate $2 million ($1 million + $0.97 million = $1.97 million) reduction to MERC's estimated plant investment to be placed in service in 2020. The Department recommends that the Commission require MERC to make these adjustments to determine the initial test-year rider rate to avoid establishing excessive rates.

2. DIMP Operation and Maintenance Projects

a) Stop Valve Survey Project (a/k/a Meter Set Survey

Based on trade secret information provided in discovery, the Department concluded that MERC's $2 million estimated expense amount for MERC's Stop Valve Survey Project has not been supported.[49] The Department's concern is that MERC appears to have overstated its 2019 project cost estimate, and may have likewise overstated its 2020 cost estimate for this project, leading to a rate being set too high.

In this petition, MERC stated that for 2019, it secured the services of a third-party contractor at an estimated cost of $15 per meter, and that its 2020 estimated cost was $20 per meter. Though MERC stated it has not yet issued an RFP for 2020, the Department reviewed MERC's 2019 request for proposal (RFP) and the secured contracts. From its review of this information, the Department discovered that for 2019 **[TRADE SECRET DATA HAS BEEN EXCISED]**. Because MERC's representation of its 2019 cost per meter survey appears to overstate contracted per unit cost by **[TRADE SECRET DATA HAS BEEN EXCISED]**, the Department questions MERC's estimated costs used to develop its 2020 test-year project cost.

Therefore, the Department recommends that the Commission require MERC to reduce its estimated cost amount included in its 2020 GUIC for this project work by $1.25 million, calculated **[TRADE SECRET DATA HAS BEEN EXCISED]**. This adjustment is necessary since MERC's information casts doubt on the reasonableness of this particular project's cost estimate.

[49] IR No. 16 (Non-public) included as Attachment 8.

b) Sewer Cross Bore Survey

In response to sewer cross bore issues, the Minnesota Office of Pipeline Safety (MNOPS) issued notice of acceptable installation practices and documentation requirements for natural gas mains and services installed beginning in 2010 to prevent future cross bored facilities.[50] In response to the Department's discovery, MERC indicated that its sewer cross bore surveys were for facilities installed prior to the issue date of the MNOPS notice.[51] Therefore, as long as operators have abided by and are being held to the MNOPS requirements for installations beginning in 2010, the Department concludes that MERC's project appears to be appropriately focused on its facilities at risk.

In response to Department IR No. 13, MERC stated that no Sewer Lateral Inspection Program costs are included in MERC's base rates.[52] MERC also provided its 5-year historical costs (2014 – 2018) for these inspections, which amounted to a cumulative total of 4,305 inspections costing an approximate total of $680K.

The Department concludes that MERC's estimated cost for the expected 2020 inspection activity level appears reasonable. However, the Department notes that over the 5-year period, MERC inspected a cumulative total of 4,305 laterals, which means this work activity averaged 861 lateral inspections per year. As such, MERC's estimate of 6,500 inspections in one year's time appears aggressive. Though MERC has yet to contract this work for 2020, the Department has confirmed that MERC successfully contracted with a third-party to carry out a similarly large amount of sewer inspections for 2019.[53] Therefore, the Department concludes that MERC reasonably supported this project's estimated cost for the 2020 GUIC.

c) Other O&M Items

MERC indicated that it may incur other incremental O&M expense related to its GUIC projects and proposed to include them in its true-up/reconciliation in 2021.[54]. The Department recommends that the Commission require that, if MERC includes in its true-up filing any O&M expense not expressly included in the derivation of this petition's requested revenue requirements, the Company must identify and discuss each expense, the account number, the reasoning for why MERC believes any such costs are GUIC–eligible, the amount included, how the requested recovery amount was determined and demonstration that no amount of this type of expense was included in base rates.

---

[50] 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/formsdocuments/Documents/Alert%20Notice%2001-2010.pdf.
[51] IR No. 19 included as Attachment No. 9.
[52] IR No. 13 (and/or No. 18) included as Attachment 10.
[53] IR No. 18 included as Attachment No. 11.
[54] Petition, pp. 27-28 (Summary of Filing) and Footnote 43.

3. Rate of Return

The Department agrees with MERC's use of the Commission's recently approved overall rate of return calculated by using the approved return on equity of 9.70 percent and capital structure, as determined in the Company's recent rate case. The overall rate of return is detailed in Table 4, below:

Table 4

MERC Approved Capital Structure and Cost of Capital G011/GR-17-563			
	Capital Structure (%)	Cost of Capital (%)	Weighted Cost of Capital (%)
Equity	50.90	9.70	4.9373
Long-term Debt	39.16	3.58	1.4019
Short-term Debt	9.94	3.60	0.3578
Weighted Average Cost of Capital:			**6.6971**

4. Taxes

a) Tax Cuts and Jobs Act of 2017 (TCJA)

The Department verified that the Company applied the current income tax rates when determining its revenue requirements.

In the Matter of a Commission Investigation into the Effect of the 2017 Federal Tax Act on Utility Rates and Services (Docket No. E,G999/CI-17-895, on August 9, 2018, the Commission met, heard and approved compliance filings and required rate reductions (Order issued May 10, 2019). In that proceeding, the Commission required utilities to separately incorporate the effects of the *Tax Cuts and Jobs Act of 2017* (TCJA 2017) in each rider mechanism.

Since the implementation of MERC's GUIC recovery rider began after the federal income tax rate changed, there is no excess deferred income tax balances associated with this rider's projects that needs to be accounted for separately.

b) Prorated Accumulated Deferred Income Tax (ADIT)

In its response to the Department's inquiry asking MERC to explain the progression of the reported accumulated depreciation balances and corresponding ADIT proration adjustments, MERC discovered formula errors in its model, and provided updated schedules for Exhibit D of its Petition.[55] The impact of MERC's corrected schedules reduced its 2020 test-year rate base

[55] IR No. 3 included in part as Attachment 12 (page 2 of Exhibit D).

by approximately $141K. Though the impact of this update on the Company's overall requested 2020 revenue requirement was small (about a $13K reduction), the Department appreciates MERC's corrective measures and requests that MERC reflect these adjustments in any compliance and future GUIC filing schedules.

The handling of prorated ADIT in rider true-ups is addressed in the TRUE-UP section.

C. TRUE-UP

1. Treatment of Disallowances Determined during True-up

In MERC's 18-281 GUIC docket, the Commission Order stated,

> When MERC submits its annual GUIC true-up filing, it will submit the project-specific information required by Minn. Stat. § 216B.1635, subds. 3-4, at which point the Commission will review the projects and costs for reasonableness and prudence.[56]

The Department asked the Company to explain its position if, through the true-up review and process, some portion of an incurred cost included in the 2019 GUIC was determined not to be recoverable. In response, MERC proposed that any GUIC cost disallowances would be returned to ratepayers through the GUIC true-up process.[57]

As noted above, unlike any other natural gas utility, MERC's 2019 GUIC is based on an estimate of costs (for the years 2015-2017) rather than specific projects and no information is known at this time as to what MERC's 2019 projects are. Thus, a more extensive analysis in MERC's true-ups will be needed, similar to the kinds of issues investigated above for the 2020 GUIC, along with examining MERC's 2018, 2019 and 2020 projects to ensure that there is no double-recovery of costs. Given these unique circumstances, MERC will need to provide extensive documentation of the timing, amount and nature of costs incurred for the 2019 GUIC and rate base projects.

Further, given that MERC's requested revenue requirements for the 2020 GUIC are based on the recovery of projects yet to be revealed (i.e., the ROW Project) and given the concerns noted above about MERC overstating costs on a year-to-year basis, it is critical that MERC must be able to isolate and demonstrate the type and expense amount of integrity management program costs that was included in its base rates test-year[58] and show that these costs or a reasonably representative amount of these costs have not already been charged to ratepayers. To avoid the regulatory review of a true-up being an exercise in futility, the Department

---

[56] Docket No. G011/M-18-281 *In the Matter of Minnesota Energy Resources Corporation's Request for Approval of a Gas Utility Infrastructure Cost Rider* (Order Approving Compliance Filing issued April 25, 2019).
[57] IR No. 27 included as Attachment 13.
[58] IR No. 14.B included as Attachment 14.

recommends that the Commission remind MERC that the utility bears the burden of showing that its proposed rates and true-ups are just and reasonable.

2. Qualification of Billed Rider Rate Revenue Effective January 1st

MERC indicated that its 2019 GUIC true-up filing results will be incorporated in the 2021 GUIC Rider. According to MERC's tariff language (below from Tariff Sheet 7.20), the calendar year marks the period of time considered for true-up purposes.

> 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.

Therefore, regardless of when an approved 2020 GUIC Rider rate change goes into effect, it appears that MERC proposes to treat the rider charge in effect as of January 1, 2020 as billed revenues to be applied toward its 2020 revenue requirements. The Department does not object to this approach. However, the GUIC Statute is currently set to expire June 30, 2023; thus, as this termination period nears, MERC may need to adjust its tariff language and the 2023 revenue requirements test-period term accordingly.

3. Accounting Updates Should General Rate Case Be Filed

MERC indicated that, should the Company file a general rate case with a 2020 test-year, not only would doing so supersede this 2020 GUIC Rider recovery request, but the Company would include any unrecovered 2019 GUIC revenue requirement within its rate case filing, thus eliminating need for a 2019 GUIC true-up filing. Though the Department does not oppose this proposal, the estimated rate case amount for unrecovered 2019 GUIC costs initially included may require an update because the timing of the rate case filing may not match when the rider's billing is halted. In addition, the amounts for 2020 would likely need to be adjusted, as noted above; therefore supplemental rate case filing material may be required.

4. Treatment of Prorated ADIT in Rider True-up

Accumulated deferred income taxes (ADIT) keeps track of the difference between a utility's actual federal income taxes and the amount of federal income taxes included in rates.[59] This difference in federal income taxes happens because of assumptions about depreciation that utilities are allowed to make in calculating federal income taxes, compared to what they charge ratepayers in rates. Because utilities are allowed to use accelerated depreciation in calculating annual federal income taxes, the amount of federal income taxes they pay has historically been much lower than the amount of income taxes they charge to ratepayers. By contrast, utilities charge rates to consumers based on uniform depreciation. Thus, in essence, ADIT keeps track of the amount by which ratepayers are prepaying a utility's federal income taxes.

While there are few if any problems with ADIT in rate cases, a significant issue has developed in riders, whenever the rider is implemented prior to the end of the "test year" used to set rates (in this case, 2020). In 2015, in response to the emergence of riders and formula rates, the Internal Revenue Service (IRS) stated that, when formula or rider rates are implemented before the end of the test year the utility must "prorate" ADIT – essentially not crediting ratepayers for the total amount by which they are prepaying a utility's rates. By contrast, the IRS ruled that no such proration is required if the utility implements the rider or formula rates the day after the test year.[60]

MERC stated that some recent IRS Private Letter Rulings (PLRs) indicated that rider true-ups cannot reverse the effects of ADIT proration. As a result, MERC proposes not only to prorate its ADIT balance for true-up purposes but also to reflect an additional proration of ADIT to reflect the 13-month average of the difference between its forecasted non-prorated ADIT balance and its actual non-prorated ADIT balance. As this is a new issue, the Department requests that MERC include as an attachment to its Reply Comments schedules demonstrating its ADIT true-

[59] As a rate base item, ADIT affects the amount of a utility's cost of capital that is charged to ratepayers. A higher ADIT balance reduces the amount the utility charges to ratepayers since ADIT credits ratepayers for their prepayment of a utility's federal income taxes; by contrast, a lower ADIT balance increases rates.
[60] Similarly, because rates in general rate cases are implemented after the test year, no proration is required in final rates; however, proration is required in interim rates.

up proposal under various scenarios, which result in adjustments that increase, decrease or do not affect the prorated ADIT used in setting the rider rate. The Department would appreciate MERC also including in its Reply Comments identification of the IRS PLRs it believes support the Company's proposed true-up method.

D. COST ALLOCATION AND RATE FACTOR

1. Allocation/Rate Design

MERC proposed to apportion the rider revenue requirement based on volumetric throughput. For several reasons, the Department disagrees with MERC's proposal and recommends that the GUIC rider revenue requirement be apportioned using the non-gas revenue apportionment approved in MERC's last rate case (17-563 Rate Case). The Department's reasons for this proposal are as follows.

First, given that GUIC investment is in distribution facilities and not energy, a more appropriate allocation would be to base recovery from classes on the non-gas revenue allocation. The revenue apportionment approved in a rate case is informed by analysis of system cost causation and rate-design considerations, thus strives to reasonably recover costs from customers in manner reflective of what it costs to serve them and any policy decisions the Commission used in setting rates. Allocating the GUIC cost based on energy would disregard the recognition that different customer classes impose different system costs and have differing policy factors.

Second, a rider rate design that resembles base-rates' design will mitigate the potential for unintentional rate shock, here and in future rate cases. To explain, in a future general rate case filing, when these GUIC Rider assets are folded into the rate case's rate base, the recovery of the GUIC Rider investment will take on the rate case's cost allocation method. Having a cost recovery design basis in a rider that differs significantly from the cost allocation basis used in the base rates design could lead to unintentional rate shock situations for some customer classes simply by rolling in a such rider, more so from the roll-in of a potentially high-dollar-recovery riders like the GUIC Rider. Therefore, the Department recommends use of a rate design methodology to closely resemble how these costs would be assigned to a class as part of base rates in a general rate case. Using volumetric data provided by MERC[61], Table 5 below shows the diversion between the proposed volumetric based rate design and the non-gas revenue apportionment rate design approved in MERC's last rate case.

[61] This volumetric data includes Michigan sales in this rider Petition, which were not included in the approved base rates sales forecast.

Table 5
Comparison of Apportionment (as filed)

	Volumetric-based rate revenue apportionment result				GR-17-563 Base Rates Revenue Apportionment	Rate Diversion (<100% = undercharged; >100% overcharged)
Total Therms by Customer Class	**2019**		**2020**			
Residential	184,494,768	21.0%	185,270,758	21.1%	62.50%	33.7%
Firm	102,086,987	11.6%	102,273,167	11.6%	23.50%	49.5%
Interruptible	36,565,992	4.2%	36,578,662	4.2%	3.50%	118.9%
Transportation	553,853,642	63.2%	554,618,432	63.1%	10.50%	601.1%
Total	877,001,389	100.0%	878,741,019	100.0%		

As initially filed and proposed by MERC, and assuming that the approved apportionment of revenue responsibility remains unchanged in its next rate case, residential customers would likely face rate shock. Under MERC's proposal, this customer class would be charged about one-third of their share of 2020 GUIC costs when recovery occurs through the rider mechanism, but once the rider costs are rolled into base rates, the residential customers would see nearly three times more than the amount they were surcharged through the rider mechanism.

For example, if the GUIC rider surcharge summed to an overall annual bill impact of $4.80, once these GUIC costs are rolled into base rates, the customer's overall annual bill impact would increase to $14.25 for the recovery of the same project work without regard to any other authorized base revenue changes.[62] Conversely, under the Company's proposal MERC's transportation customer class would pay six times their share of GUIC costs through the rider mechanism, but once the GUIC costs are rolled into base rates, the transportation customers would experience a relative rate decrease with respect to the portion of their bill attributed to GUIC recovery. As noted above MERC's initial GUIC rate design has already proven problematic.

Third, for two other natural gas distribution utilities establishing GUIC Riders (Xcel Gas and Great Plains), the Commission has approved their GUIC rider rate design to be based on the apportionment of revenue responsibility approved in their respective general rate case dockets for GUIC project cost recovery.[63] These utility companies' rate designs align better with non-gas cost recovery allocations, thus their customers are less likely to experience bill impact swings from the mere fact of folding GUIC project costs into base rates.

---

[62] The average residential therm usage of 867 therms multiplied by the proposed $0.00554 per therm charge equals $4.80. The $14.25 is calculated by dividing the $4.80 by 33.7% (the portion of residential base-rates cost allocation the MERC-proposed rider charge rate recovers.).
[63] Docket No. G002/M-14-336 and G004/M-16-1066, the in inaugural GUIC rider requests for Xcel Gas and Great Plains Natural Gas Co., respectively.

2. Sales Forecast

i) Michigan Sales

Though MERC stated that its proposed rate factor was based on the sales forecast approved in its last rate case, this statement is not correct. The 2018 sales forecast approved in MERC's 17-563 Rate Case included only Minnesota sales, which totaled 753,081,025 therms. When calculating its proposed 2020 GUIC rate, MERC included the sales volume to a Michigan located customer, using a throughput forecast of 122,055,654 attributed to this facility outside of Minnesota.[64] The Department views the inclusion of sales to this Michigan-located customer as a de facto jurisdictional allocator of costs to Michigan. To ensure that this understanding is correct, the Department requests that MERC affirm this understanding in its Reply Comments.

ii) Direct Connect Customers

Since the filing of this petition, the Company petitioned the Commission on June 28, 2019 requesting permission to suspend charging the GUIC Rider to its Direct Connect customers. On August 1, 2019, the Commission met and heard this special request and did grant MERC permission to suspend its GUIC Rider surcharge for Direct Connect customers; the Order remains pending at the time these comments were written. As a result of these recent actions, the Department anticipates that MERC may modify its 2020 GUIC Rider proposal. The Department requests that in its Reply Comments MERC include and distinguish any updates to its request related to the recent Commission decision concerning the exclusion of the GUIC surcharge to Direct Connect customers.

E. CUSTOMER NOTIFICATION

If the rate design decided for the 2020 GUIC Rider is based upon the non-gas revenue apportionment approved in MERC's last rate case, thus is a changed rate design than initially implemented in the 18-281 GUIC, then the Department recommends that a bill insert customer notification be created to more fully explain the rider rate approved for the various classes of customers. However, should a uniform rate design be continued and approved, then the Department does not object to MERC's proposed bill message notification.

[64] IR No. 29 included as Attachment No. 15.

IV. DEPARTMENT CONCLUSIONS AND RECOMMENDATIONS

The Department concludes that modifications to MERC's request are necessary and in the public interest in order to avoid establishing a rider rate that overcharges ratepayers upfront.

The Department requests that the Company provide the following information in its Reply Comments:

- adjustments to remove the 2018 level of cost recovery imbedded in base rates related to the assets being replaced due to the proposed GUIC project work included in this rider recovery mechanism,

- schedules demonstrating its ADIT true-up proposal under various scenarios, which result in adjustments that increase, decrease and do not affect the prorated ADIT used in setting the rider rate;

- identification of the IRS PLRs MERC believes support the Company's proposed true-up method,

- affirmation or revision to the understanding that the inclusion of sales to this Michigan-located customer as a jurisdictional allocator of costs to Michigan, and

- updates to its request as needed to reflect the recent Commission decision concerning the exclusion of the GUIC surcharge to Direct Connect customers.

Based on the information available at this time, the Department recommends that the Commission:

- Remind MERC that the utility bears the burden of showing that its proposed rates and true-ups are just and reasonable.

- Require MERC to include adjustments to remove the 2018 level of cost recovery imbedded in base rates related to the assets being replaced due to the proposed GUIC project work included in this rider recovery mechanism.

- Require the amount for plant placed in service for 2020 for ROW project work be adjusted to reflect only the nine planned 2020 ROW projects, with MERC allowed to request recovery of any additional completed projects or refund costs for any projects not completed in its true-up.

- Require that the estimated Obsolete Materials capital cost amount to use for setting the 2020 rider rate be reduced to a total of $5.0 million, which is a $2 million reduction to MERC's estimated cost.

- Require MERC to report certain information on its Obsolete Material Replacement project. Specifically, require MERC to report Aldyl-A project accomplishment details in its annual true-up filings. The requested reporting details should include, by listed project site:
    - a locational description of the work completed,
    - the associated work order number(s),
    - the size of Aldyl-A pipe mains replaced,
    - the size of replacement pipe installed,
    - footage of main replaced,
    - total costs net of embedded labor, vehicles, fuel, overhead, etc. and
    - total replacement costs.

- Require the estimated cost amount included in its 2020 test-year for the Stop Valve Survey project to be decreased by $1.25 million.

- Determine that MERC's estimated cost for the expected 2020 Sewer Cross Bore Survey activity level appears reasonable.

- Determine that MERC's requested rate of return and income tax gross up factors are reasonable.

- Require MERC to transparently disclose in its true-up filing any O&M expense not expressly included in the derivation of this petition's requested revenue requirements. Specifically, require MERC to report, identify and discuss each expense, the account number, the reasoning it is GUIC–eligible, the amount included, how the requested recovery amount was determined and whether a representative amount of this type of expense was included in base rates.

- Require MERC to reflect the corrected revenue requirements model in any compliance and future GUIC filing schedules.

- For rate design, determine that MERC's GUIC rider revenue requirement be apportioned using the non-gas revenue apportionment approved in MERC's last rate case (17-563 Rate Case).

- If the rate design decided for the 2020 GUIC Rider is based upon the non-gas revenue apportionment approved in MERC's last rate case, then require MERC to create and include a bill insert as the form of customer notification to more fully explain the rider rate approved for the various classes of customers.

The Department intends to update these recommendations as needed in supplemental comments after reviewing MERC's Reply Comments.

/ar

THIS PAGE INTENTIONALLY LEFT BLANK

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**26**
Topic:	General Rate Case using 2020 Test Year
Reference(s):	Petition, pp. 32 - 33

Request:

Please explain in detail and specify the relative timing of the stated action, "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 date certain", in the event the Company files a 2020 test year general rate case.

MERC Response:

If the Company was to file a 2020 test year general rate case, the petition would be filed in the third quarter of 2019. The forecasted unrecovered rate base value of the 2019 GUIC projects in service as of 1/1/2020 would be included in the 2020 test year rate base. The 2020 GUIC projects proposed in this proceeding would also be included in the 2020 test year rate base. Both the 2019 approved GUIC rider and the 2020 proposed GUIC rider would be assumed to be zero as of 1/1/2020.

To be completed by responder

Response Date: May 28, 2019
Response by: Mary Wolter
Email Address: mary.wolter@wecenergygroup.com
Phone Number: (414) 221-2374

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number: 6
Topic: Character of Capital Expenditures Included in Rate Base
Reference(s): Petition Letter, page 2

Request:

The Petition stated that MERC's 2020 GUIC revenue requirement is calculated to recover 2020 depreciation expense and return on the Company's forecasted 2019 and 2020 capital expenditures. The total capital expenditures incurred during a measured period, such as a calendar year, does not necessarily reflect the plant investments actually placed in service during that same period.

A. Please identify in detail all stages/status of capital costs that MERC has characterized as eligible capital expenditures for purposes of GUIC rider recovery.

B. Please identify in detail all stages/status of capital expenditures incurred in conjunction with GUIC-eligible work that MERC considers not eligible for GUIC Rider recovery.

C. Please identify each stage/status of the capital expenditures included to calculate the dollar amount for "return on the Company's forecasted 2019 and 2020 capital expenditures."

MERC Response:

A. MERC's 2020 GUIC revenue requirement is calculated based on forecasted capital expenditures on GUIC-eligible projects that are forecasted to be placed into service (and will be used and useful) during 2020. As discussed in MERC's response to Department Information Request No. 2, no construction work in progress was included in MERC's calculation of the GUIC revenue requirement. MERC is not considering any other stages of plant besides plant in service in the

---

To be completed by responder

Response Date: May 31, 2019
Response by: Stacey Ainsworth
Email Address: Stacey.Ainsworth@wecenergygroup.com
Phone Number: (920) 433-1537

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

calculation of the GUIC revenue requirement. Referring to DOC-001 attach.xlsx from MERC's response to Department Information Request No. 1, tabs "Total Forecasted GUIC", "Mains", "Services" and "Stations", column C should be labeled *Construction Expenditures Placed in Service.* The dollars in this column reflect additions to plant in service and accumulated in the running total of the plant balance in column E. The calculation of the 2020 GUIC revenue requirement utilizes a 13 month average additions to rate base forecasted to be placed into service during 2020.

B. As discussed in response to Part A, all GUIC-eligible capital expenditures included in the revenue requirement are forecasted to be placed in service during 2020.

C. As discussed in response to Part A, all GUIC-eligible capital expenditures included in the revenue requirement are forecasted to be placed in service during 2020.

To be completed by responder

Response Date: May 31, 2019
Response by: Stacey Ainsworth
Email Address: Stacey.Ainsworth@wecenergygroup.com
Phone Number: (920) 433-1537

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/9/2019
Type of Inquiry:	Financial	Response Due: 5/20/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**2**
Topic:	Revenue Requirements Calculations
Reference(s):	Petition Exhibit D, page 1 schedule

Request:

A. Please provide the calculation for both the 2019 and the 2020 depreciation expense amounts, $133,090 and $351,489, respectively.

B. (1) Please identify the reference depreciation docket(s) that substantiates the use of, and is the basis for, *Assumption 2's* stated "Assumes a 20 year life;" (2) Include identification of applicable Account numbers, along with their descriptions, that were relied upon for the 20-year assumed life term; and (3) Please identify each schedule entry that applies *Assumption 2*.

C. For each year's Line 17 entry "Total Therms" value in this schedule, please provide a breakdown the total therm amount attributed to each of the following customer class categories: Residential, Firm Sales, Interruptible Sales, and Transportation.

D. (1) Please explain *Assumption 4* which reads "Assumes no AFUDC, but a return on CWIP in Rate Base;" (2) Please provide the industry definition of CWIP; (3) Please identify each schedule entry that applies *Assumption 4*; and (4) Please identify each schedule entry that includes CWIP in its derivation and identify the amount of CWIP included in the composition of each entry's value.

E. (1) Please explain *Assumption 5* and explain each schedule entry that the "allocated on a Demand basis" is applied; (2) Please identify each schedule entry that applies *Assumption 5;* and (3) Please explain the inconsistency between the Company's proposal to develop an energy-throughput-based rate when an "Demand based allocation" of revenue deficiency is stated as being applied.

To be completed by responder

Response Date: May 20, 2019
Response by: Stacey Ainsworth
Email Address: Stacey.Ainsworth@wecenergygroup.com
Phone Number: (920) 433-1537

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/9/2019
Type of Inquiry:	Financial	Response Due: 5/20/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

MERC Response:

A. Please see MERC's response to Department Information Request No. 1, "DOC-001 Attach.xlsx", tab "Depreciation Rate_Expense", for the calculation of the 2019 and 2020 depreciation expense calculation.

B. (1) *Assumption 2* stated "Assumes a 20 year life;" in error. The assumption should have stated, "Assumes an average life of 60 years based on current Distribution Assets at MERC" and has been updated with the response to Department Information Request No. 1.
(2) The account numbers that are relied upon for the updated verbiage of Assumption 2 are: 376 Mains, 379 Measuring and regulating station equipment – City gate check stations, 380 Services.
(3) The schedule entry that applies the updated verbiage of Assumption 2 relates to Depreciation Expense on line 2 of the Summary tab in DOC-001 Attach.xlsx and DOC-001 attach_Updated_05202019.xlsx.

C. The table below provides the total therms attributed to the specified customer class categories.

Total Therms by Customer Class	2019	2020
Residential	184,494,768	185,270,758
Firm	102,086,987	102,273,167
Interruptible	36,565,992	36,578,662
Transportation	553,853,642	554,618,432
Total Therms	**877,001,389**	**878,741,019**

D. (1) Assumption 4 should not pertain to our filing of the GUIC Rider. As Assumption 1 states, "GUIC related road and replacement service construction expenditures go into service as spent";

To be completed by responder

Response Date: May 20, 2019
Response by: Stacey Ainsworth
Email Address: Stacey.Ainsworth@wecenergygroup.com
Phone Number: (920) 433-1537

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/9/2019
Type of Inquiry:	Financial	Response Due: 5/20/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

there is a zero dollar balance in CWIP and no AFUDC is included in the calculation of the revenue requirement. This assumption has been removed in the response to DOC-001.
(2) Construction Work in Progress (CWIP) is an accounting method for accumulating expenditures related to the design and construction of major facilities before they are completed and put into service.[1]
(3) As stated in response to D.1, there is no CWIP in the calculation of the GUIC revenue requirement. See MERC response to Department Information Request No. 1, "DOC-001 attach.xlsx", tab "Total Forecasted GUIC", column D.
(4) As stated in response to D.1, there is no CWIP in the calculation of the GUIC revenue requirement. See MERC response to Department Information Request No. 1, "DOC-001 attach.xlsx", tab "Total Forecasted GUIC", column D.

E. *Assumption 5* is in error. The Company's proposal is to use an energy-throughput-based rate, and the computations for the rates provided are based on throughput, not demand. This assumption has been updated with the response to Department Information Request No. 1.

[1] Report to the Legislature: *Utility Rate Study as Required by Laws of Minnesota, 2009, Chapter 110*, Minnesota Public Utilities Commission (June 2010) (available at: https://mn.gov/puc/assets/012854_tcm14-5188.pdf?sourcePage=%2fpuc%2fpuc-documents%2freports%2findex.jsp%3fnull).

To be completed by responder

Response Date:	May 20, 2019
Response by:	Stacey Ainsworth
Email Address:	Stacey.Ainsworth@wecenergygroup.com
Phone Number:	(920) 433-1537

MERC Depreciation Rates	3760 RCG01 Gas Mains			3800 RCG01 Gas Services			3790 RCG01 Meas & Reg Eq-City G		
	Cost of Removal Rate	Depreciation Expense Rate	Monthly Depreciation Rate	Cost of Removal Rate: Cost of Removal Rate	Depreciation Expense Rate: Depreciation Expense Rate	Monthly Depreciation Rate	Cost of Removal Rate: Cost of Removal Rate	Depreciation Expense Rate: Depreciation Expense Rate	Monthly Depreciation Rate
Jan-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Feb-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Mar-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Apr-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
May-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Jun-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Jul-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Aug-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Sep-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Oct-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Nov-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717
Dec-19	0.004300	0.012800	0.00143	0.008200	0.015000	0.001933	0.014300	0.030300	0.003717

Plant Balance	**Total Mains**	**Total Services**	**Total Stations**	**Total**
Jan-19	4,904	2,202	2,877	**9,983**
Feb-19	10,859	4,876	6,370	**22,105**
Mar-19	28,024	12,582	16,439	**57,045**
Apr-19	785,280	208,174	157,063	**1,150,516**
May-19	1,952,926	543,591	445,010	**2,941,527**
Jun-19	3,376,081	960,403	812,781	**5,149,266**
Jul-19	4,271,919	1,251,538	1,104,752	**6,628,209**
Aug-19	5,308,763	1,561,551	1,386,028	**8,256,342**
Sep-19	6,104,626	1,841,122	1,689,410	**9,635,158**
Oct-19	6,891,777	2,105,675	1,964,330	**10,961,782**
Nov-19	7,602,258	2,324,696	2,170,924	**12,097,878**
Dec-19	7,816,386	2,398,620	2,249,825	**12,464,831**
Jan-20	7,816,386	2,398,620	2,249,825	**12,464,831**
Feb-20	7,816,500	2,398,670	2,249,826	**12,464,996**
Mar-20	7,816,729	2,398,770	2,249,826	**12,465,325**
Apr-20	7,817,643	2,399,172	2,249,829	**12,466,644**
May-20	7,977,630	2,469,476	2,250,278	**12,697,384**
Jun-20	8,327,889	2,623,392	2,251,261	**13,202,541**
Jul-20	9,066,573	2,947,996	2,253,333	**14,267,903**
Aug-20	10,138,261	3,418,934	2,256,341	**15,813,535**
Sep-20	11,386,962	3,967,657	2,259,844	**17,614,464**
Oct-20	12,771,197	4,575,939	2,263,729	**19,610,864**
Nov-20	14,210,741	5,208,526	2,267,768	**21,687,034**
Dec-20	15,713,022	5,868,681	2,271,983	**23,853,687**

Calculated Depreciation Expense				
Jan-19	7	4	11	**22**
Feb-19	15	9	24	**49**
Mar-19	40	24	61	**125**
Apr-19	1,119	402	584	**2,105**
May-19	2,783	1,051	1,654	**5,488**
Jun-19	4,811	1,857	3,021	**9,689**
Jul-19	6,087	2,420	4,106	**12,613**
Aug-19	7,565	3,019	5,151	**15,735**
Sep-19	8,699	3,560	6,279	**18,538**
Oct-19	9,821	4,071	7,301	**21,193**
Nov-19	10,833	4,494	8,069	**23,396**
Dec-19	11,138	4,637	8,362	**24,138**
Jan-20	11,138	4,637	8,362	**24,138**
Feb-20	11,139	4,637	8,362	**24,138**
Mar-20	11,139	4,638	8,362	**24,138**
Apr-20	11,140	4,638	8,362	**24,140**
May-20	11,368	4,774	8,364	**24,506**
Jun-20	11,867	5,072	8,367	**25,306**
Jul-20	12,920	5,699	8,375	**26,994**
Aug-20	14,447	6,610	8,386	**29,443**
Sep-20	16,226	7,671	8,399	**32,296**
Oct-20	18,199	8,847	8,414	**35,459**
Nov-20	20,250	10,070	8,429	**38,749**
Dec-20	22,391	11,346	8,444	**42,181**

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**17**
Topic:	Existing Facilities Replaced or Removed
Reference(s):	Petition, p. 26

Request:

A. Please provide the estimated 2019 depreciation expense associated with the facilities that are expected to be replaced and removed from service through the GUIC project activity in 2019.

B. Please provide the estimated 2020 depreciation expense of the facilities expected to be replaced and removed from service as a result of the collective 2019 – 2020 GUIC project activity.

MERC Response:

A. MERC has not forecast the estimated depreciation expense associated with facilities to be replaced and removed from service as a result of right-of-way relocations and DIMP projects because we do not know with specificity the plant that will be removed or replaced in 2019. The original cost of the plant in service varies widely based upon the size of main and other variables. As stated in the Company's Petition at page 26, "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."

B. See response to Part A. Because the specific assets to be replaced are not known with certainty, the Company does not have a forecast of 2020 depreciation expense associated with facilities to be removed. Consistent with 2019, MERC has proposed to separately track the replaced and removed plant and to include an adjustment related to the associated depreciation expense in the true-up to fully account for that expense.

To be completed by responder

Response Date: June 6, 2019
Response by: Mary Wolter
Email Address: mary.wolter@wecenergygroup.com
Phone Number: (414)221-2374

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**23**
Topic:	Aldyl-A Pipe
Reference(s):	Petition, Exhibit E and pages 20-21

Request:

A. Please provide the overall total cost estimate for replacement of all Aldyl-A main in MERC's system and provide the anticipated timeline for the completion of this pipeline replacement.

B. Please explain what the industry studies have estimated as the proximate point, or age, that Aldyl-A pipeline's component material most likely becomes brittle.

C. Please identify the information that MERC will be collecting, and have available for reporting requests, through its planned tracking of its Aldyl-A mains replacement progress achieved through the various GUIC projects, i.e., obsolete material replacement, right-of-way relocations, or other integrity projects.

MERC Response:

A. The timeline and total cost to complete replacement of Aldyl-A is not known. As discussed in MERC's petition, MERC anticipates the replacement of Aldyl-A to be a multi-year project but the timeline and total costs to complete replacement will depend on a variety of factors such as number of services impacted, ground conditions, and weather. In general, past obsolete materials replacement projects have been multi-year projects. Additionally, as explained in MERC's Petition, 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

To be completed by responder

Response Date: May 28, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

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.

B. On April 23, 1998, the National Transportation Safety Board (NTSB) issued its Special Investigation Report, *Brittle-Like Cracking in Plastic Pipe for Gas Service*, NTSB/SIR-98/01. The report described the results of the NTSB's special investigation of polyethylene gas service pipe, which addressed three major safety issues: (1) Vulnerability of plastic piping to premature failures due to brittle-like cracking; (2) adequacy of available guidance relating to the installation and protection of plastic piping connections to steel mains; and, (3) effectiveness of performance monitoring of plastic pipeline systems to detect unacceptable performance in piping systems.

The NTSB found that failures in polyethylene pipe in actual service are frequently brittle-like, slit failures, not ductile failures. It concluded the number and similarity of plastic pipe accident and non-accident failures indicate past standards used to rate the long-term strength of plastic pipe may have overrated the strength and resistance to brittle-like cracking for much of the plastic pipe manufactured and used for gas service from the 1960s through the early 1980s.

The NTSB made several recommendations to PHMSA and to trade organizations in its 1998 special investigation report. In response, PHMSA issued three advisory bulletins. The first advisory bulletin, ADB–99–01, Potential Failure Due to Brittle-Like Cracking of Certain Polyethylene Plastic Pipe Manufactured by Century Utility Products Inc, was published in the Federal Register (FR) on March 11, 1999 (64 FR 12211) to advise natural gas pipeline distribution system operators that brittle-like cracking may occur on certain polyethylene pipe manufactured by Century Utility Products, Inc.

The second advisory bulletin, ADB–99–02, Potential Failures Due to Brittle Like Cracking of Older Plastic Pipe in Natural Gas Distribution Systems, was also published in the Federal Register on March 11, 1999 (64 FR 12212) to advise natural gas pipeline distribution system operators of the potential for brittle-like cracking of plastic pipes installed between the 1960s and early 1980s.

To be completed by responder

Response Date: May 28, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

The third advisory bulletin, ADB–02–07, Notification of the Susceptibility To Premature Brittle-Like Cracking of Older Plastic Pipe, was published in the Federal Register on November 26, 2002 (67 FR 70806) to reiterate to natural gas pipeline distribution system operators the susceptibility of older plastic pipe to premature brittle-like cracking. The older polyethylene pipe materials specifically identified in ADB–02–07 included, but were not limited to: (1) Century Utility Products, Inc. products; (2) Low-ductile inner wall ‘‘Aldyl A’’ piping manufactured by DuPont Company before 1973; and Polyethylene gas pipe designated PE 3306. This third advisory bulletin also listed several environmental, installation and service conditions in which plastic piping is used that could lead to premature brittle-like cracking failure.

On May 26, 2016, the Plastic Pipe Database Committee (PPDC) released an update on in-service failures of plastic pipe and components. The PPDC is composed of representatives from the American Public Gas Association (APGA), the American Gas Association (AGA), Plastics Pipe Institute (PPI), National Association of Regulatory Utility Commissioners (NARUC), National Association of Pipeline Safety Representatives (NAPSR), National Transportation Safety Board (NTSB) and U.S. Department of Transportation’s (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). For over 19 years, the PPDC has been receiving information on in-service plastic piping system failures and/or leaks with the objective of identifying possible performance issues. According to the report:

> Aldyl failure data continues to be reported. Moreover, as depicted in Figure 1, there are now two peaks of failure data submissions (2000-2005, 2010-2014). Analysis has determined that the range of installation years for these peaks appears consistent. Therefore the installation years are more reflective of materials experiencing failures/leaks. Failure causes demonstrate that installation practices and the operating environment can greatly impact the service life of the Aldyl piping.
>
> Operators should look at the performance of their own piping systems. Each operator serves a unique and defined geographic area and their system

---

To be completed by responder

Response Date:	May 28, 2019
Response by:	Lindsay Lyle
Email Address:	lindsay.lyle@minnesotaenergyresources.com
Phone Number:	(651)322-8909

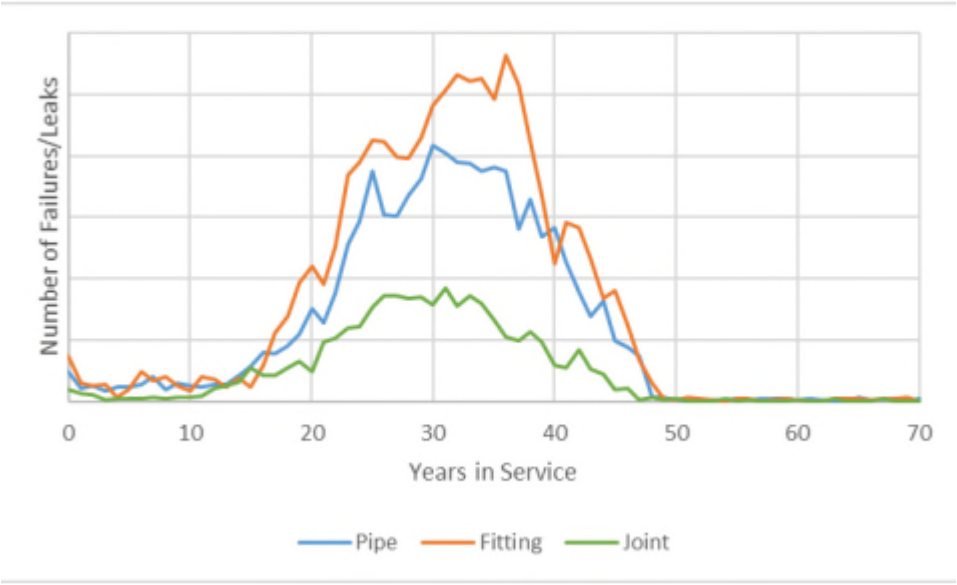
Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

infrastructures vary widely based on a multitude of factors, including facility condition, past engineering practices and materials. Each operator should evaluate the actions in light of system variables, the operator's independent integrity assessment, risk analysis and mitigation strategy.

PPDC has also compiled data regarding failures/leaks for Aldyl pipe, fittings, and joints, by years in service.



Source: Plastic Pipe Database Committee, Plastic Piping Data Collection Imitative Status Report at 23 (May 3, 2018).

C. MERC intends to track Aldyl-A mains replacement costs, footage of main replaced, size of pipe, and number of services for the various GUIC projects.

To be completed by responder

Response Date:	May 28, 2019
Response by:	Lindsay Lyle
Email Address:	lindsay.lyle@minnesotaenergyresources.com
Phone Number:	(651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**20**
Topic:	Obsolete Material Replacement Costs
Reference(s):	Petition, Table 3

Request:

A. Please explain the basis for the estimated cost per foot used for the Aldyl-A main replacement project locations.

B. Please explain the basis for the estimated cost amounts for service replacements done in conjunction with Aldyl-A main replacement, and include detailed breakdown of the calculated average cost per service replacement.

C. Please explain the basis, and provide the calculations, for the project cost estimate of $562,000 for the X-Trube project.

D. Please explain the basis, and provide the calculations, for the project cost estimate of $140,460 for the Copper/Bare Steel project.

E. Please explain the reason for the difference in the average per service replacement cost when comparing the X-Trube project's and the Aldyl-A project's average per service cost estimates.

MERC Response:

A. The cost per foot ($50) used to estimate the Aldyl-A main replacement was based on historical spend for Aldyl-A replacement projects. The estimate includes material, labor, and equipment costs associated with the main installation as well as a contingency for the potential to encounter

---

To be completed by responder

Response Date: June 6, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

unlocatable existing main, rock, or other unanticipated conditions.

B. MERC has planned to replace a total of 889 Aldyl-A services in 2020. The cost per service replacement ($2,610) was based on MERC's average cost to replace an Aldyl-A service in 2018. The total cost for Aldyl service replacements is estimated to be $2,320,290.

C. MERC is planning to replace 200 X-trube services in 2020 for a total cost of $562,000. The estimated cost per service replacement was $2,810, which was based on the average cost for MERC to replace an X-Trube service in 2018.

D. MERC will replace any copper or bare steel services if they are found in MERC's system during construction. The quantity of these services is unknown at this time, however MERC has anticipated up to 50 service replacements at a cost of $2,809 per service replacement.

E. X-trube replacements are service replacements only. Aldyl-A replacement services are often associated with main projects, which offers some cost savings during construction.

To be completed by responder

Response Date: June 6, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

PUBLIC DOCUMENT—TRADE SECRET DATA HAS BEEN EXCISED

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**16**
Topic:	Regulation and Order Identification - Meter Set/Stop Valve survey work
Reference(s):	Petition, page 23

Request:

A. Please identify the specific citation to government entity regulation, and/or jurisdictional entity order, and/or reference docket applicable to the Meter Set/Stop Valve survey project activity requested to be recovered through the GUIC rider.

B. Please identify the date the described incident "failure of a Rockford valve at a commercial facility in Grand Rapids, Minnesota" occurred and the date when the repair/replacement was completed.

C. Please explain when MERC began conducting Meter Set/Stop Valve surveys and identify the cost amount for this activity that is included in its 2018 rate case test year.

D. Please provide a copy of the RFP MERC issued to obtain bids for a third-party contractor to complete its Meter Set/Stop Valve surveys.

E. Please provide a copy of the contract(s) with the contractor(s) MERC selected to conduct the Meter Set/Stop Valve surveys for 2019 and for 2020.

MERC Response:

A. MERC's meter set/stop valve survey project has been implemented to comply with the federal Pipeline and Hazardous Materials Safety Administration's ("PHMSA") Integrity Management Program

---

To be completed by responder

Response Date: May 31, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

for Gas Distribution Pipelines Rule (49 CFR Part 192, subpart P). 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;
- 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.

49 C.F.R. 192.1007(a)(3) of PHMSA's DIMP regulations requires natural gas system operators to identify additional information needed and to develop a plan for gaining that information over time through normal activities including design, construction, and operations or maintenance activities. MERC's meter set/stop valve survey is intended to identify additional information necessary to understand and address risks on the Company's system.

The Minnesota Public Utilities Commission, 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, also previously recognized that MERC's meter set/stop valve survey project, undertaken in compliance with "federal DIMP regulations, or with state guidance pursuant to federal safety regulations, meets the definition of a 'gas utility project' under the statute."

To be completed by responder

Response Date:	May 31, 2019
Response by:	Lindsay Lyle
Email Address:	lindsay.lyle@minnesotaenergyresources.com
Phone Number:	(651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

B. The failure of the Rockford valve at a commercial facility in Grand Rapids, Minnesota occurred in the 2009-2010 timeframe and was repaired on the same day the incident occurred. MERC does not have records regarding the specific date of the incident.

C. MERC began conducting Meter Set/Stop Valve surveys in 2019. As a result, no costs associated with this project are included in the Company's current rates, which were set in Docket No. G011/GR-17-563 based on a 2018 test year rate case.

D. Please see Attachment_DOC_016_RFP.pdf for the 2019 request for proposals that was issued on February 5, 2019. Attachment_DOC_016_RFP.pdf is designated as Trade Secret in its entirety in accordance with Minn. Stat. §13.37, subd.1(b), and is maintained by MERC as nonpublic. The information contained in this document is not generally known to, and not readily ascertainable by vendors and competitors of MERC, who could obtain economic value from its disclosure. This RFP was issued only to bidders and is subject to a confidentiality provision.

E. Please see Attachment_DOC_016_Contract.pdf for the contract documents for the 2019 meter set/stop valve survey work to be undertaken in 2019. Contracts for work to be completed in 2020 have not been issued at this time. Attachment_DOC_016_Contract.pdf is designated as Trade Secret in its entirety in accordance with Minn. Stat. §13.37, subd.1(b), and is maintained by MERC as nonpublic. The information contained in these documents is not generally known to, and not readily ascertainable by vendors and competitors of MERC, who could obtain economic value from its disclosure.

To be completed by responder

Response Date: May 31, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**19**
Topic:	Sewer Cross Bore Issues
Reference(s):	Petition, Footnotes 32, 33

Request:

The Minnesota Office of Pipeline Safety document cited in Petition Footnotes 32 and 33 directs what the acceptable installation practices and documentation requirements are for natural gas mains and services installed beginning effectively in 2010. This cited document also requires televised inspections of installations made between January 1, 2010 and May 10, 2010.

A. For each year 2019 and 2020, please identify the number of MERC's proposed sewer cross bore surveys and inspections that are for facilities installed between January 1, 2010 and May 10, 2010.

B. For each of the years 2019 - 2020, please identify the number of MERC's proposed sewer cross bore surveys and inspections that are for facilities installed after May 10, 2010.

C. Please explain the scope of MERC's sewer cross bore surveys and inspection activity by discussing (1) whether or not the project focus is limited to areas where trenchless technologies were used to install natural gas pipelines, and (2) the total number of years expected to complete this project activity.

MERC Response:

A. There are no proposed sewer cross bore surveys and inspections identified for facilities installed between January 1, 2010 and May 10, 2010.
B. There are no proposed sewer cross bore surveys and inspections identified for facilities installed after May 10, 2010.

To be completed by responder

Response Date: May 31, 2019
Response by: Danny Quint
Email Address: Daniel.quint@minnesotaenergyresources.com
Phone Number: (651) 322-8926

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

C (1). MERC does not have the ability to determine installation method on service line installations prior to 2010. However, generally speaking the prevalent installation method for the majority of installations were completed using some form of trenchless technology (bore or plowing) while the use of open trench methods would be relatively rare in most situations.

C (2). It is unknown what the duration of the project will be. It will be dependent on the budget available each year, contractor resources availability and quantity of targeted service lines.

To be completed by responder

Response Date: May 31, 2019
Response by: Danny Quint
Email Address: Daniel.quint@minnesotaenergyresources.com
Phone Number: (651) 322-8926

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**13**
Topic:	Sewer Cross Bore Surveys
Reference(s):	n/a

Request:

A. Please specify date when MERC began conducting sewer cross bore surveys and inspections of its natural gas operating system.

B. For each year 2014 – 2018, please provide the number of sewer cross bore inspections and surveys conducted and the total cost amount incurred for this activity.

C. Please identify the amount for sewer cross bore inspections and surveys included in MERC's most recent rate case and the accounts in which this cost is recorded.

D. Please describe and explain the procedures MERC follows to pursue recovery of any of the costs resulting from repairs to rectify the discovery that a natural gas pipeline installation had cross bored and damaged a sewer line (or other underground facilities).

MERC Response:

A. MERC began its sewer cross bore surveys in 2014.

B.

2014-2018 SEWER LINE INSPECTION PROGRAM				
Project Year	**Location**	**Number of Parcels Inspected**	**Project Cost**	**Cost per Parcel Inspected**
2014	Cannon Falls	1,950	$306,058.79	$156.95

To be completed by responder

Response Date: May 28, 2019
Response by: Robin Burke
Email Address: robin.burke@minnesotaenergyresources.com
Phone Number: 651-322-8961

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G011/M-19-282 ☐Nonpublic ☒Public
Requested From: Minnesota Energy Resource Corp. Date of Request: 5/17/2019
Type of Inquiry: Financial Response Due: 5/28/2019

Requested by: Dorothy Morrissey
Email Address(es): dorothy.morrissey@state.mn.us
Phone Number(s): 651-539-1797

2015	Rochester	513	$54,191.25	$105.63
2016	Farmington	384	$63,784.23	$166.10
2017	Farmington	359	$63,333.76	$176.42
2017	Mantorville	441	$92,798.06	$210.43
2018	Clarks Grove	235	$49,419.36	$210.30
2018	LaCrescent	423	$49,998.81	$118.20
TOTAL		4,305	$679,584.26	

C. No Sewer Lateral Inspection Program costs are included in MERC's 2018 base rate test year in the rate case, Docket No. G011-GR-17-563. MERC initially included a K&M reduction for 2016 costs associated with the Sewer Lateral Project expense to remove those project costs from the 2018 test year and ultimately agreed to the Department's proposal to update O&M expense to 2017 actuals, which similarly removed all costs associated with the Sewer Lateral Project from the 2018 test year. Please see page 53 and Exhibit SSD-25 from the direct testimony of S. DeMerritt.

D. If it is found that a natural gas pipeline installation had cross bored and damaged a sewer line (or other underground facilities), MERC bills the company that installed the gas line for the damage repair.

To be completed by responder

Response Date: May 28, 2019
Response by: Robin Burke
Email Address: robin.burke@minnesotaenergyresources.com
Phone Number: 651-322-8961

PUBLIC DOCUMENT—TRADE SECRET DATA HAS BEEN EXCISED

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**18**
Topic:	Sewer Line programs
Reference(s):	Petition, pp. 24-25

Request:

A. For the *Sewer Line Lateral Inspection Program*, please identify both the number of inspections, and the total cost for them that MERC included in the 2018 base rate test year and identify the accounts in which this program's costs are recorded.

B. Please explain and differentiate between MERC's referenced programs "Sewer Line Lateral Inspection program" and the "Sewer Cross Bore Survey Project."

C. Please provide a copy of the RFP MERC issued to obtain bids for a third-party contractor to complete sewer cross bore surveys and inspections.

D. Please provide a copy of the contract(s) with the contractor(s) MERC selected to conduct the sewer cross bore inspections and surveys for 2019 and for 2020.

MERC Response:

A. No Sewer Lateral Inspection Program costs are included in MERC's 2018 base rate test year in the rate case, Docket No. G011-GR-17-563. MERC initially included a K&M reduction for 2016 costs associated with the Sewer Lateral Project expense to remove those project costs from the 2018 test year and ultimately agreed to the Department's proposal to update O&M expense to 2017

To be completed by responder

Response Date: May 31, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

actuals, which similarly removed all costs associated with the Sewer Lateral Project from the 2018 test year. Please see page 53 and Exhibit SSD-25 from the direct testimony of S. DeMerritt.

B. These references are synonymous—the "Sewer Line Lateral Inspection Program" and the "Sewer Cross Bore Survey Project" are the same project.

C. Please see Attachment_DOC_018_RFP.pdf for a copy of the RFP MERC issued to obtain bids for a third-party contractor to complete sewer cross bore surveys and inspections. Attachment_DOC_018_RFP.pdf is designated as Trade Secret in its entirety in accordance with Minn. Stat. §13.37, subd.1(b), and is maintained by MERC as nonpublic. The information contained in this document is not generally known to, and not readily ascertainable by vendors and competitors of MERC, who could obtain economic value from its disclosure. This RFP was issued only to bidders and is subject to a confidentiality provision.

D. Please see Attachment_DOC_018_Contract.pdf for the contract documents for the 2019 sewer cross bore survey work to be undertaken in 2019. Contracts for work to be completed in 2020 have not been issued at this time. Attachment_DOC_018_Contract.pdf is designated as Trade Secret in its entirety in accordance with Minn. Stat. §13.37, subd.1(b), and is maintained by MERC as nonpublic. The information contained in this agreement is not generally known to, and not readily ascertainable by vendors and competitors of MERC, who could obtain economic value from its disclosure.

To be completed by responder

Response Date: May 31, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/9/2019
Type of Inquiry:	Financial	Response Due: 5/20/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number: **3**
Topic: Revenue Requirements Calculations
Reference(s): Petition Exhibit D, page 2 schedule

Request:

A. Please refer to the *January 2019* line entry. Given the total plant placed in service during the initial month of the GUIC test year totals $9,983, please explain the resulting accumulated deferred tax credit balance amount of $7,986 and provide the calculations and the income tax rate used to develop that balance.

B. Please refer to the *December 2019* and the *January 2020* line entries. The reported accumulated deferred tax credit balance amounts for December 2019 and January 2020 are $95,837 and $110,413, respectively; these reported numbers calculate to a $14,576 change (or increase) in the accumulated deferred tax credit balance from December to January. The reported ADIT Proration Adjustment amount for January 2020 is $74,734. The schedule also reports that the December 2019 ADIT proration adjustment is $2,263. Given the $14,576 change in accumulated deferred tax credit balance during the month of January 2020, the beginning of the forecasted test year, please explain the calculated ADIT Proration Adjustment amount of $74,734 (which is a $72,471 increase over the December 2019 reported ADIT proration adjustment of $2,263) and provide the detailed calculations.

MERC Response:

A. The deferred tax amount in January 2019 line represents 1/12 of the 2019 annual deferred tax amounts, rather than deferred taxes on the January 2019 activity. 2019 Annual deferred taxes were as follows: Mains – $65,984, Services – $18,460, and Stations – $11,393 for a total of $95,837, divided by 12 equals $7,986.

To be completed by responder

Response Date: May 20, 2019
Response by: Todd Nelson
Email Address: Todd.Nelson@wecenergygroup.com
Phone Number: (920) 433-1795

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/9/2019
Type of Inquiry:	Financial	Response Due: 5/20/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

The 2019 deferred tax activity computation has been revised in MERC's Response to Department Information Request No. 1, in Attachment DOC-001 attach_Updated_05202019.xlsx to be in line with the projected monthly book additions activity.

B. The ADIT proration adjustment modifies federal deferred tax activity and balances. Because the proration adjustment is applied after the 13-month average is applied, the 13-month average impact of the federal DIT activity must be removed in the computation of the proration adjustment.

The ADIT proration adjustment in 2019 is based upon the federal ADIT activity, which was 1/12 of the annual estimate times the applicable proration factor. The ADIT proration adjustment in 2020 is based upon the federal ADIT activity, which was based upon the 2020 monthly book addition activity, plus the impacts of the 2019 activity carried forward, times the applicable proration factor. There were formula errors in the computation of the proration adjustments as originally filed in Exhibit D. Please see the attachment "DOC-001 attach_Updated_05202019.xlsx" to MERC's response to Department Information Request No. 1 for revised computations, including the update to the monthly deferred tax activity, now in line with monthly book additions as noted in (A) above.

The overall impact of the revisions on revenue requirements, when comparing revised and original computations, was minimal.

To be completed by responder

Response Date: May 20, 2019
Response by: Todd Nelson
Email Address: Todd.Nelson@wecenergygroup.com
Phone Number: (920) 433-1795

Rate Case Revenue Requirement on GUIC projects

Line	Description	Reference	2019
1	Expense	O&M Expense	3,000,000
2	Expense	Depreciation Expense	133,090
3	Rate Base	13-Month Average Net Plant Value	5,265,080
4	Accumulated Deferred Income Tax Proration Adjustment		3,494
5	Adjusted Rate Base	13-Month Average Net Plant Value	5,268,574
6	Rate of Return	Commission Authorized 2018 Rate Case	6.6971%
7	Earnings on Rate Base	Line 5 x Line 6	352,842
8	Gross Revenue Conversion Factor	2018 Rate Case Adjusted for Tax Reform	1.402
9	Return on Rate Base	Line 7 x Line 8	494,684
10			
11	**Total Revenue Requirement**	**Line 1 + Line 2 + Line 9**	**3,627,774**
12			
13	Offsetting Project Revenue		
14			
15	**Project Revenue Deficiency**	**Line 11 less line 13**	**3,627,774**
16			
17	**Total Therms**		**877,001,389**
18			
19	**Per therm Increase**	**Line 15 / Line 17**	**$ 0.00414**
20			
21	Average use per Residential Customer	2018 Rate Case Sales Forecast	874
22	Average annual cost increase to Residential Customer	Line 19 x Line 21	$ 3.62
23			
24	Average use per C&I Class 1 Customer	2018 Rate Case Sales Forecast	999
25	Average annual cost increase to C&I Class 1 Customer	Line 19 x Line 24	$ 4.13
26			
27	Average use per C&I Class 2 Customer	2018 Rate Case Sales Forecast	7,827
28	Average annual cost increase to C&I Class 2 Customer	Line 19 x Line 27	$ 32.38
29			
30	Average use per C&I Class 3 Customer	2018 Rate Case Sales Forecast	403,949
31	Average annual cost increase to C&I Class 3 Customer	Line 19 x Line 30	$ 1,670.96
32			
33	Average use per C&I Class 4 Customer	2018 Rate Case Sales Forecast	1,453,452
34	Average annual cost increase to C&I Class 4 Customer	Line 19 x Line 33	$ 6,012.30
35			
36	Average use per C&I Class 5 Customer	2018 Rate Case Sales Forecast	13,232,459
37	Average annual cost increase to C&I Class 5 Customer	Line 19 x Line 36	$ 54,736.94
38			
39	Average use per Agriculture Dryer Class 1 Customer	2018 Rate Case Sales Forecast	6,711
40	Average annual cost increase to Agriculture Dryer Class 1 Customer	Line 19 x Line 39	$ 27.76
41			
42	Average use per Agriculture Dryer Class 2 Customer	2018 Rate Case Sales Forecast	50,612
43	Average annual cost increase to Agriculture Dryer Class 2 Customer	Line 19 x Line 42	$ 209.36
44			
45	Average use per Agriculture Dryer Class 3 Customer	2018 Rate Case Sales Forecast	1,604,084

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**27**
Topic:	Rider True Up
Reference(s):	Petition, p. 33

Request:

The Petition stated:

> 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.

Given the timing of the true-up process, please explain the Company's position in the event some portion of an incurred cost included in the rider recovery rate was determined to be not prudent, whether any recovery of that particular disallowed cost that occurred during the period being trued-up, would be returned to ratepayers through a future rate setting and/or refund mechanism.

MERC Response:

The Company proposes that any GUIC cost disallowances be returned through the GUIC true-up process.

To be completed by responder

Response Date: May 28, 2019
Response by: Mary Wolter
Email Address: mary.wolter@wecenergygroup.com
Phone Number: (414) 221-2374

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**14**
Topic:	DIMP historical costs
Reference(s):	Petition, Footnote 6

Request:

Footnote 6, stated that MERC formally implemented its DIMP in 2011.

A. For each of the years 2011 – 2018, please describe and provide the amount of actual annual costs and expenses MERC incurred implementing its DIMP program.

B. Please provide the DIMP expense amounts included in MERC's most recent general rate case (17-563), identifying the relevant accounts in which these costs are recorded.

MERC Response:

A. The table below provides MERC's actual capital investments related to its DIMP for the period 2011-2018. MERC has not, however, separately tracked the costs of indirect internal labor or any other O&M expenses that may have been associated with these projects.

Year	DIMP Capital Investments
2011	$ 6,445,417
2012	$ 3,409,586
2013	$ 4,312,795
2014	$ 3,199,413
2015	$ 2,292,632
2016	$ 5,380,098

To be completed by responder

Response Date: June 7, 2019
Response by: Lindsay Lyle
Email Address: Lindsay.Lyle@minnesotaenergyresources.com
Phone Number: (651) 322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G011/M-19-282 ☐Nonpublic ☒Public
Requested From: Minnesota Energy Resource Corp. Date of Request: 5/17/2019
Type of Inquiry: Financial Response Due: 5/28/2019

Requested by: Dorothy Morrissey
Email Address(es): dorothy.morrissey@state.mn.us
Phone Number(s): 651-539-1797

Year	DIMP Capital Investments
2017	$ 6,703,574
2018	$10,608,100

As discussed in MERC's Petition at page 5, MERC formally implemented its DIMP in 2011. In the past, all service line work was tracked under a single project number that was used for both new and replacement service lines. In 2015, MERC established separate capital project tracking for new versus replacement service lines in order to better track replacement work. Any related station work for relocation projects prior to 2015 also was not separately tracked. The following provides annual capital spending for all service replacement for 2011 through 2014.

Year	Cost	Number of Services Replaced
2011	$1,946,192	1,495
2012	$5,025,731	2,010
2013	$3,191,761	1,085
2014	$3,440,820	1,121

B. MERC did not isolate DIMP expense in its general rate case O&M expense forecast. The DIMP O&M expense requested in this proceeding (stop valve survey work and sewer cross bore survey work) relates to separately identifiable incremental O&M costs that will be incurred to perform two specific surveys. These incremental expenses are not being recovered in current or proposed base rates.

To be completed by responder

Response Date: June 7, 2019
Response by: Lindsay Lyle
Email Address: Lindsay.Lyle@minnesotaenergyresources.com
Phone Number: (651) 322-8909

PUBLIC DOCUMENT—TRADE SECRET DATA HAS BEEN EXCISED

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic	☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request:	7/16/2019
Type of Inquiry:	Financial	Response Due:	7/26/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**29**
Topic:	Inclusion of Michigan Taconite Sales
Reference(s):	Petition Exhibit D, page 1, line 17

Request:

A. Please explain whether the Total Therms amount reported (877,001,389 in 2019, and 878,741,019 in 2020) includes natural gas throughput of customer facilities located outside of the state of Minnesota. If so, please identify the customers and the Total Therms throughput amount attributed to them.

B. Please explain whether **all** natural gas customers whose therms are included in the Total Therms (line 17) are charged the GUIC Rider rate factor.

C. Please provide any tariff, clause or other agreement between MERC and its customers with facilities located outside of the state of Minnesota that such non-Minnesota service points are subject to MERC's Minnesota natural gas tariff and rates.

Response:

A. Yes, the total therms included natural gas throughput of customer facilities outside of the state of Minnesota, specifically in Michigan. **[TRADE SECRET DATA BEGINS…** [redacted] **…TRADE SECRET DATA ENDS]** and the throughput forecast was 122,055,654 therms in 2019 and 2020 based on the 2018 MERC rate case forecast.

B. The intent in the initial filing was that all natural gas customers would be charged the GUIC Rider rate factor. MERC is awaiting the outcome of its emergency request in the 2019 GUIC Rider docket

---

To be completed by responder

Response Date: July 26, 2019
Response by: Mary Wolter
Email Address: mary.wolter@wecenergygroup.com
Phone Number: (414) 221-2374

PUBLIC DOCUMENT—TRADE SECRET DATA HAS BEEN EXCISED

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 7/16/2019
Type of Inquiry:	Financial	Response Due: 7/26/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

no. M-18-281 before determining if it is feasible to propose to exclude direct connect customers from the 2020 GUIC Rider as well.

C. The customer(s) referenced in (A) above are Direct Connect transportation customer(s) and are billed in accordance with MERC's transportation tariffs (MERC Tariff Secton 6.00). The tariff does not distinguish between jurisdictional and non-jurisdictional direct connect customers. As explained in (B) above, if MERC is successful in excluding direct connect customers from the 2019 GUIC Rider it will apply to do the same in this proceeding. That will make the jurisdictional question raised here moot.

To be completed by responder

Response Date:	July 26, 2019
Response by:	Mary Wolter
Email Address:	mary.wolter@wecenergygroup.com
Phone Number:	(414) 221-2374

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Request Number:	**24**
Topic:	Farm Tap Infrastructure
Reference(s):	Petition, Exhibit F

Request:

Physically starting at the transmission pipeline, please (1) identify and describe all the natural gas infrastructure components, beginning at the connect point and extend from the transmission pipeline, that are typically in place for Farm Tap customers served by direct connections to a gas transmission line, including (2) purpose/function, (3) identifying the entity owning the infrastructure component, and (4) the component's proximate location/distance relative to structure housing the burner tip appliance/equipment; (5) Please include a sample aerial diagram of the described infrastructure.

MERC Response:

See the figure and the table below for an identification of the components of a NNG farm tap including ownership of each infrastructure component. MERC owns no facilities serving farm tap customers. NNG owns all of the above-ground facilities at the tap including the meter, regulator, and interstate pipeline and tap. The customer owns all assets downstream from the tap including the odorizer tank, fuel lines, and any regulators. The distance between the tap/interstate meter and the farm tap customer's appliances and equipment varies significantly customer-by-customer. As discussed in Docket No. G011/M-17-409, MERC has undertaken planning and design work on a randomly selected statistically significant sample of farm tap customer lines. Based on a sample of 275 farm tap customers surveyed, the average distance to install replacement utility-owned main and service from the tap at the interstate pipeline to the buildings to be served by natural gas is 1,024 feet. The shortest distance identified through the sample was 39 feet and the longest distance is 9,677 feet. The number of buildings served from each tap also varies customer-by-customer.

To be completed by responder

Response Date: June 6, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G011/M-19-282 ☐Nonpublic ☒Public
Requested From: Minnesota Energy Resource Corp. Date of Request: 5/17/2019
Type of Inquiry: Financial Response Due: 5/28/2019

Requested by: Dorothy Morrissey
Email Address(es): dorothy.morrissey@state.mn.us
Phone Number(s): 651-539-1797

The components and their purpose(s) are as follows:

Component	Purpose	Ownership
Transmission Pipeline	Transports natural gas across state lines.	Northern Natural Gas
Inlet Valve inlet valve to each tap off of a transmission line	Inlet valve to each tap off of a transmission line can be used anytime maintenance is done on the regulation, relief valve, or meter change out.	Northern Natural Gas
First cut regulation	Regulators reduce pressure from the transmission pipeline to customer delivery pressure. Typical pressure from the transmission pipeline is 500-1,000 psig while typical customer delivery pressure is 10 psig.	Northern Natural Gas
Second cut regulation	Regulators reduce pressure from the transmission pipeline to customer delivery pressure. Typical pressure from the transmission pipeline is 500-1,000 psig while typical customer delivery pressure is 10 psig.	Northern Natural Gas
Relief valves	Relief valves are used for over pressure protection to protect downstream piping from over	Northern Natural Gas

To be completed by responder

Response Date: June 6, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number: G011/M-19-282 ☐Nonpublic ☒Public
Requested From: Minnesota Energy Resource Corp. Date of Request: 5/17/2019
Type of Inquiry: Financial Response Due: 5/28/2019

Requested by: Dorothy Morrissey
Email Address(es): dorothy.morrissey@state.mn.us
Phone Number(s): 651-539-1797

Component	Purpose	Ownership
	pressurization due to equipment failure.	
Farm Tap Meter	Measures gas used	Northern Natural Gas
Three-way valve (custody transfer)	Three way valve allows for the ability to shut off gas flow for any maintenance needed downstream on customer piping.	Customer
Odorizer	Wick style odorizer utilizes a wick in odorant solution. The gas passes by the saturated wick to odorize the gas downstream in customer piping.	Customer
Customer-owned fuel line(s)	Moves gas from the interstate tap to customer-owned buildings to serve natural gas appliances	Customer
Regulator (varies by customer and use)	Regulator reduces pressure from the customer service line to the building/appliance served.	Customer

To be completed by responder

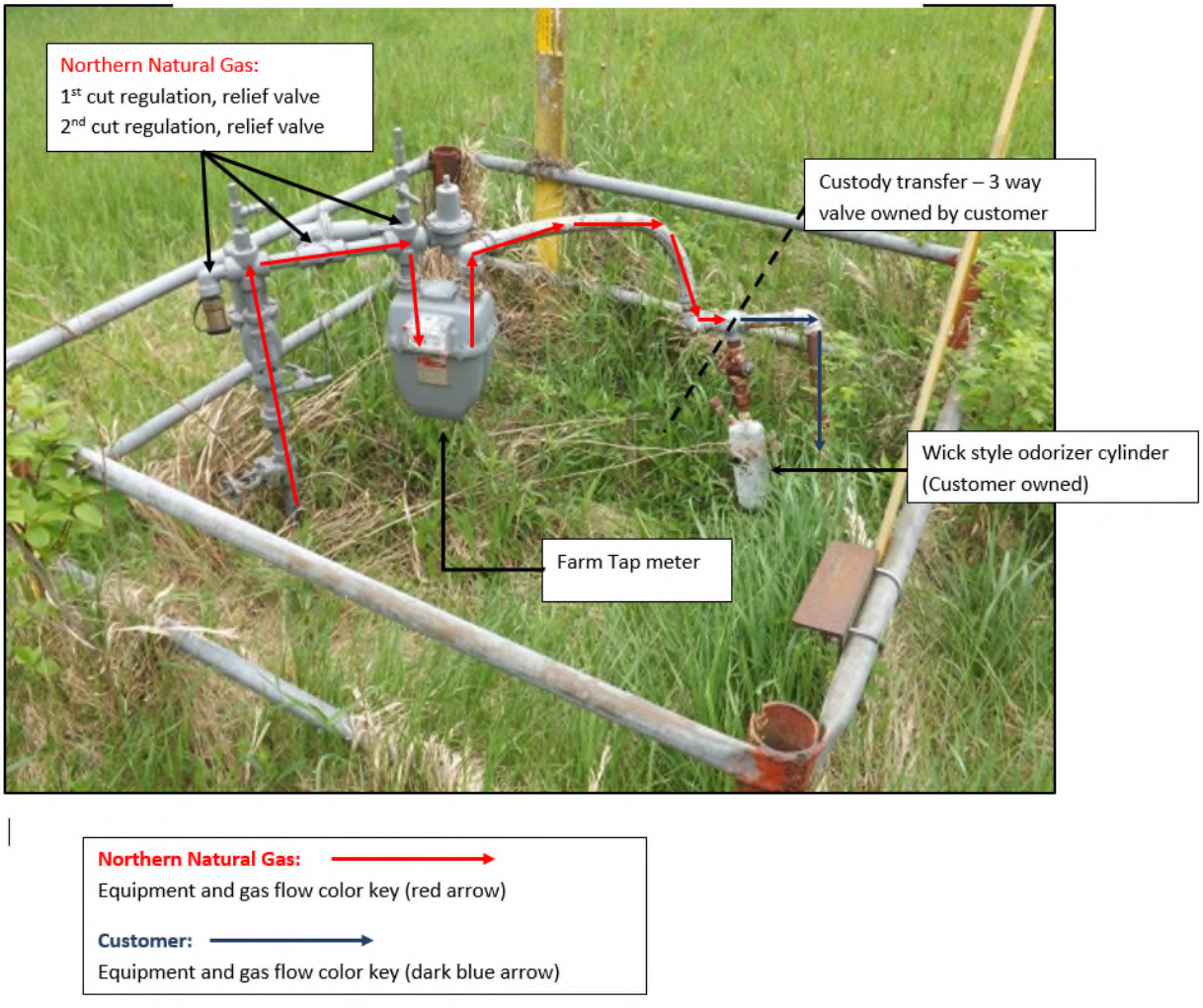
Response Date: June 6, 2019
Response by: Lindsay Lyle
Email Address: lindsay.lyle@minnesotaenergyresources.com
Phone Number: (651)322-8909

Minnesota Department of Commerce
Division of Energy Resources
Information Request

Docket Number:	G011/M-19-282	☐Nonpublic ☒Public
Requested From:	Minnesota Energy Resource Corp.	Date of Request: 5/17/2019
Type of Inquiry:	Financial	Response Due: 5/28/2019

Requested by:	Dorothy Morrissey
Email Address(es):	dorothy.morrissey@state.mn.us
Phone Number(s):	651-539-1797

Farm Tap Setting Overview



To be completed by responder

Response Date:	June 6, 2019
Response by:	Lindsay Lyle
Email Address:	lindsay.lyle@minnesotaenergyresources.com
Phone Number:	(651)322-8909

CERTIFICATE OF SERVICE

I, Linda Chavez, hereby certify that I have this day served copies of the following document on the attached list of persons by electronic filing, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

MINNESOTA DEPARTMENT OF COMMERCE – COMMENTS

Docket Nos. **G011/M-19-282**

Dated this **23rd** day of **August, 2019**.

/s/Linda Chavez

_____

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	OFF_SL_19-282_M-19-282
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	Yes	OFF_SL_19-282_M-19-282
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_19-282_M-19-282
Daryll	Fuentes	dfuentes@usg.com	USG Corporation	550 W Adams St Chicago, IL 60661	Electronic Service	No	OFF_SL_19-282_M-19-282
Brian	Meloy	brian.meloy@stinson.com	STINSON LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-282_M-19-282
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-282_M-19-282
Catherine	Phillips	catherine.phillips@we-energies.com	We Energies	231 West Michigan St Milwaukee, WI 53203	Electronic Service	No	OFF_SL_19-282_M-19-282
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_19-282_M-19-282
Elizabeth	Schmiesing	eschmiesing@winthrop.com	Winthrop & Weinstine, P.A.	225 South Sixth Street Suite 3500 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-282_M-19-282
Colleen	Sipiorski	Colleen.Sipiorski@wecenergygroup.com	Minnesota Energy Resources Corporation	700 North Adams St Green Bay, WI 54307	Electronic Service	No	OFF_SL_19-282_M-19-282

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Kristin	Stastny	kstastny@briggs.com	Briggs and Morgan, P.A.	2200 IDS Center 80 South 8th Street Minneapolis, MN 55402	Electronic Service	Yes	OFF_SL_19-282_M-19-282
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_19-282_M-19-282
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_19-282_M-19-282
Mary	Wolter	mary.wolter@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)	231 West Michigan St Milwaukee, WI 53203	Electronic Service	Yes	OFF_SL_19-282_M-19-282