

February 12, 2021

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E111/M-21-45

Dear Mr. Seuffert:

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

In the Matter of a Filing by Dakota Electric Association Regarding the Monthly Fixed Charge per Meter for the Advanced Grid Infrastructure Rider.

The Petition was filed on January 13, 2021 by:

Douglas R. Larson
Vice President of Regulatory Services
Dakota Electric Association
4300 220th Street West
Farmington, MN 55024

The Department recommends that the Minnesota Public Utilities Commission (Commission) **approve Dakota Electric Association's Petition**. The Department is available to answer any questions that the Commission may have in this matter.

Sincerely,

/s/ GEMMA MILTICH
Financial Analyst, CPA

GM/ja
Attachment



Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. E111/M-21-45

I. INTRODUCTION

On January 13, 2021, Dakota Electric Association (Dakota Electric or the Cooperative) filed a petition (Petition) requesting that the Minnesota Public Utilities Commission (Commission) approve the Cooperative's proposed 2021 Advanced Grid Infrastructure (AGI) Rider monthly fixed charges per meter for certain rate classes. The proposed charges would appear on member bills as a separate line item identified as "Advanced Meter Recovery."

II. DEPARTMENT ANALYSIS

The Minnesota Department of Commerce, Division of Energy Resources (Department) reviewed the Cooperative's Petition to determine whether it complies with applicable orders and statutes and to verify that the Cooperative used the approved rate design to calculate the proposed 2021 monthly AGI Rider fixed charge per meter for each applicable class. The following is a discussion of the Department's review.

A. PURPOSE OF RATE RIDER

Rate riders supplement the base rates set in a utility's most recent general rate case and allow a utility to recover certain qualifying costs from and provide associated credits to customers, provided that the costs and credits are not already reflected in base rates. In the instant Petition, Dakota Electric proposes to bill its members specific amounts, in addition to its established base rates, for select incremental costs associated with the Cooperative's AGI initiatives.

B. BACKGROUND ON DAKOTA ELECTRIC'S AGI RIDER

In its May 8, 2018 *Order* in Docket No. E111/M-17-821, the Commission approved Dakota Electric's AGI Rider pursuant to Minnesota Statutes §216B.1636, the Electric Utility Infrastructure Cost (EUIC) statute. The Commission's approval of the AGI Rider authorized Dakota Electric to recover, on a fixed, per-meter basis, the return on incremental rate base, incremental property taxes, and incremental depreciation expense associated with the Cooperative investments in advanced metering infrastructure (AMI) and the AGI meter data management (MDM) system.

The AMI costs recovered through the Cooperative's AGI Rider are comprised primarily of the capital investments made to replace existing meters with new AMI meters, which can read 15-minute usage intervals as well as report data on voltage, temperature, reverse power flows, and tampering. Dakota Electric's AMI includes a system-wide network that facilitates two-way communication among devices on the Cooperative's system.

Dakota Electric's AGI Rider cost recovery captures the Cooperative's investments in its AGI MDM system, a database equipped to store, validate, analyze, and report data collected by the AMI and other communication systems. This database interfaces with other Dakota Electric software systems and is designed to provide members with a web portal to view their load over 15-minute intervals.

In its April 20, 2020 *Order* in Docket No. E111/M-20-78, the Commission approved Dakota Electric's first set of AGI Rider charges by rate class¹ and approved the following modifications to the rider:

- The Cooperative removed its Lighting class from the AGI Rider, because the rates for this class are established at fixed amounts per month that do not rely on meters, making the meter based AGI Rider charges inapplicable to the Lighting class.
- Dakota Electric excluded the incremental property taxes associated with its AGI investments from recovery through the AGI Rider, because increases and decreases in the Cooperative's property taxes are already accounted for through its Resource and Tax Adjustment (RTA).

Consistent with the rider changes approved in Docket No. E111/M-20-78, the Cooperative excluded the Lighting class and property taxes from its AGI Rider proposals in the instant Petition.

In its most recent rate case in Docket No. E111/GR-19-478, the Cooperative agreed to adjust its future AGI Rider calculations to credit members for expected decreases in depreciation expense and return on rate base associated with Accounts 37020 – *Meters Used* and 37000 – *Meters*. As Dakota Electric replaces old meters with new AMI meters through its AGI initiative, the Cooperative's actual depreciation expense and return on rate base related to old meters will be less than the corresponding amounts collected through approved base rates. Rather than adjusting its base rates, the Cooperative agreed to pass these cost reductions back to ratepayers through the AGI Rider. Credits related to Account 37020 – *Meters Used* are applicable to the AGI Rider 2020 true up and in each subsequent year, until Dakota Electric files its next rate case. Credits related to Account 37000 – *Meters* are applicable to the 2021 true up and in each subsequent year, until Dakota Electric files its next rate case.²

¹ Although the Commission approved Dakota Electric's AGI Rider in Docket No. E111/M-17-821, the Cooperative's May 14, 2018 compliance filing in the same docket showed that, since there were not yet any costs to be recovered through the rider, Dakota Electric calculated its initial AGI Rider charges at \$0.00 for each rate class. Subsequently, in Docket No. E111/M-20-78, the Cooperative proposed its first set of AGI Rider charges to begin recovery of the AMI and MDM system costs incurred.

² See pages 5 and 18 – 20 of the Office of Administrative Hearings' (OAH) April 17, 2020 *Findings of Fact, Conclusions of Law, and Recommendations* in Docket No. E111/GR-19-478. Note that the Commission adopted the OAH's *Findings of Fact, Conclusions of Law, and Recommendations*, with minor clarifications and corrections, in its July 20, 2020 *Findings of Fact, Conclusions, and Order* in the same docket. For additional details on the estimated credit amounts and timing of credits for

Dakota Electric inadvertently omitted the credits required by the agreement reached in Docket No. E111/GR-19-478 from the Cooperative's AGI Rider calculations in the instant Petition. In response to an informal Department information request, Dakota Electric provided updated AGI Rider calculations that, pursuant to the Docket No. E111/GR-19-478 agreement, included \$18,474³ in credits associated with the decreases in depreciation expense and return on rate base for Account 37020 – *Meters Used*. Dakota Electric agreed that the credits should have been reflected in its proposed 2021 AGI Rider charges. However, rather than modify the proposed charges now to account for this credit, the Cooperative expressed its preference that these credits be incorporated into the calculations of its next AGI Rider filing in 2022. The Company explained that because the new AGI Rider charges have already taken effect, changing them now, and potentially "unwinding" amounts already billed to customers, would be administratively burdensome, and the dollar amount is too small to have a meaningful impact on rates.

The Department agrees that the impact of adjusting the proposed rates to include the credits would be too small⁴ to justify the administrative burden associated with updating the rates. The Department recommends that the Commission allow Dakota Electric to defer incorporating the credits required by Docket No. E111/GR-19-478 until the Cooperative's next AGI Rider filing in 2022. However, if the Commission instead requires the Cooperative to adjust its AGI Rider calculations in the current Petition for these credits, then the Department recommends that the Commission approve the adjusted 2021 AGI Rider charges shown in column (m) of Schedule G-2a in Department Attachment 1.

C. STATUTORY AUTHORITY FOR DAKOTA ELECTRIC'S AGI RIDER COST RECOVERY

Minnesota Statutes §216B.1636, the EUC statute, authorizes electric utilities to petition the Commission to recover a rate of return, income taxes on the rate of return, incremental property taxes, and incremental depreciation expense for certain electric utility infrastructure projects. In its May 8, 2018 *Order* in Docket No. E111/M-17-821, the Commission agreed with the Department's assessment that the Cooperative is authorized to seek recovery of grid modernization costs pursuant to Minnesota Statutes §216B.1636 and that Dakota Electric's finalized AGI Rider proposal met the following statutory requirements for approval:

- 1) The proposed rider would include only costs that were not in Dakota Electric's rate base in the Cooperative's most recent general rate case, per §216B.1636, subd. 1(b).

Accounts 37020 (Meters Used) and 37000 (Meters), see pages 2 – 4 of Ms. Shoua Lee's January 30, 2020 Surrebuttal Testimony in Docket No. E111/GR-19-478.

³ Department Attachment 1, Schedule G-1, $(\$703 + \$17,771) = \$18,474$.

⁴ Incorporating the \$18,474 credit into Dakota Electric's 2021 AGI Rider calculations would reduce the proposed charges by less than 3 percent for each class (compare the originally proposed 2021 AGI Rider charges in Petition Schedule G-2a with the credit-adjusted charges shown in Schedule G-2a of Department Attachment 1).

- 2) The proposed project would increase energy conservation or efficiency, consistent with §216B.241, subd. 1c, by replacing or modifying existing electric utility infrastructure per §216B.1636, subd. 1(c);
- 3) The proposed rider would be the only request submitted by Dakota Electric under §216B.1636 at any other time during the year, per §216B.1636, subd. 2(b)(1);
- 4) The petition contained the filing requirements under §216B.1636, subd. 2(b)(2); and
- 5) The proposed rider would be in the public interest, supported at a minimum by a justification of the proposed rate design, per §216B.1636, subd. 2(b)(2)(v), and a cost-benefit analysis of the project, per §216B.1636, subd. 2(b)(2)(xi).

The Cooperative did not propose cost recovery for any new projects, modification to approved projects, or changes to the approved rate design for its 2021 AGI Rider. As of the date of the instant comments, the current Petition is the only filing Dakota Electric has made under Minnesota Statutes §216B.1636 in 2021. Dakota Electric excluded its AGI Rider investments from its rate base approved in the Cooperative's most recent rate case, Docket No. E111/GR-19-478. The Department concludes that Dakota Electric's 2021 AGI Rider proposals in the instant Petition are consistent with the Commission's initial approval of the Cooperative's AGI Rider under the EUIC statute in Docket No. E111/M-17-821.

D. AGI IMPLEMENTATION PROGRESS

According to the Cooperative, progress on its AGI initiatives in 2019 included configuring, testing, integrating, and developing the functionality of the AMI, MDM, and Load Management systems. Dakota Electric also stated that in 2019 it "completed the installation of a 5,000 meter and 1,000 load control receiver performance acceptance pilot program on members' homes and business[es]"⁵ for the purpose of identifying and resolving system issues prior to beginning widespread meter and load control receiver installation.

In its most recently approved AGI Rider filing, Docket No. E111/M-20-78, Dakota Electric indicated that it expected to (1) complete the Cooperative's performance acceptance program and (2) begin widespread meter and load control receiver installations.⁶ The Cooperative explained in the instant Petition that it met those two 2020 objectives and will continue meter and load control receiver installations throughout 2021.⁷

Table 1 shows Dakota Electric's cumulative capital investments forecasted through 2021 for its AGI initiative:

⁵ Petition, page 2.

⁶ Page 2 of Dakota Electric's AGI Rider petition filed January 15, 2020 in Docket No. E111/M-20-78.

⁷ Petition, page 2.

Table 1: Dakota Electric’s Cumulative AGI Capital Investments Forecasted through 2021⁸

<i>AGI Capital Asset Description</i>	<i>Capital Costs Added to Rate Base (Forecasted through 2021)</i>
Meters	\$16,863,272
Radio Frequency Network Infrastructure	\$871,653
IT Network Security	\$29,684
Testing Facility	\$405,885
Software	\$514,743
System Integration	\$627,142
Project Management & Consulting	\$778,468
Warehouse Forklift	\$54,441
<i>Total</i>	\$20,145,288

The capital cost total of \$20,145,288 in Table 1 includes \$9,495,769⁹ and \$10,649,519¹⁰ in AGI investments for 2020 and 2021, respectively. Table 1 shows that the costs associated with new meters represent the largest portion of Dakota Electric’s AGI investments.

E. DAKOTA ELECTRIC’S PROPOSED AGI RIDER RECOVERY FOR 2021

Table 2 summarizes Dakota Electric’s calculation of the costs eligible for recovery through its AGI Rider in 2021, net of savings:

Table 2: Dakota Electric’s AGI Rider Eligible for Recovery in 2021¹¹

<i>2021 AGI Rider Recovery Component</i>	<i>Amount \$</i>
Return Earned on AGI Incremental Rate Base	\$931,074
Incremental Depreciation Expense	\$1,290,007
Operational Savings	(\$377,000)
<i>AGI Rider Revenue Requirement, Net Savings</i>	\$1,844,081

⁸ Table 1 data retrieved from Petition Schedule G-3.

⁹ Petition Schedule G-1. Dakota Electric’s \$9,495,769 in AGI capital investments for 2020 reflects actuals for January – November 2020 and projections for December 2020.

¹⁰ (\$20,145,288 - \$9,495,769) = \$10,649,519.

¹¹ Data in Table 2 retrieved from Petition Schedules G-1.

The Cooperative’s forecasted \$1,844,081 in recoverable costs (net of savings) for 2021 is more than double the \$677,380 in recoverable costs (net of savings) approved for 2020 in the Cooperative’s AGI Rider filing in Docket No. E111/M-20-78. The increase in Dakota Electric’s requested AGI Rider cost recovery between 2020 and 2021 is consistent with the Cooperative’s continued investment in and expansion of its AGI system.

Dakota Electric incurred fewer AGI costs and had a higher total number of member meters in 2020 than the Cooperative initially forecasted in its AGI Rider filing in Docket No. E111/M-20-78. The difference between Dakota Electric’s 2020 AGI Rider forecasts and actuals caused the Cooperative to over-recover its 2020 AGI costs by approximately \$158,867.¹² To true up its 2020 over recovery, the Cooperative calculated an AGI Rider charge credit for each rate class, as summarized in Table 3:

Table 3: Dakota Electric’s 2020 AGI Rider Charge True Up¹³

<i>Rate Class</i>	<i>2020 AGI Rider Charge True Up Credit</i>
Residential	(\$0.07)
Irrigation	(\$1.44)
Small General	(\$0.08)
General	(\$1.68)
C&I Interruptible	(\$3.87)

Petition Schedule G-2a shows that Dakota Electric reduced its proposed 2021 AGI Rider charges for each rate class by the credit amounts documented in Table 3. Based on our review of Dakota Electric’s calculations, the Department concludes that the Cooperative calculated and applied its 2020 AGI Rider true up appropriately.

Table 4 below compares Dakota Electric’s currently approved and proposed AGI Rider charges:

¹² Petition Schedule G-2d.

¹³ Data in Table 3 retrieved from Petition Schedule G-2d.

Table 4: Comparison of Dakota Electric’s Approved and Proposed AGI Rider Charges¹⁴

Rate Class	Monthly Fixed AGI Rider Charge per Meter		Difference (B - A)	Percentage Increase/(Decrease)
	Approved (A) ¹⁵	Proposed (B) ¹⁶		
Residential	\$0.40	\$1.16	\$0.76	190%
Irrigation	\$2.43	\$2.14	(\$0.29)	(11%)
Small General	\$0.40	\$1.16	\$0.76	190%
General	\$3.51	\$3.51	\$0.00	0%
C&I Interruptible	\$13.58	\$16.33	\$2.75	20%

Table 4 shows that the Cooperative’s proposed AGI Rider charges represent a notable increase for the Residential, Small General, and C&I Interruptible rate classes, but a decrease for the Irrigation rate class and no change for the General rate class. Since metering costs constitute the vast majority of the Cooperative’s AGI investments and are allocated in proportion to the number of meters in each rate class,¹⁷ the Department concludes that the AGI Rider charge increases are reasonable, given Dakota Electric’s continued investment in its AGI, and especially in the AMI components. Given the 2020 over recovery and corresponding credit impact on the 2021 AGI Rider charges for the Irrigation and General rate classes,¹⁸ the Department concludes that the AGI Rider charge changes are reasonable for these two classes as well.

F. AGI RIDER CHARGE RATE DESIGN

In its February 5, 2018 Reply Comments in Docket No. E111/M-17-821, Dakota Electric provided the details on its proposed AGI Rider rate design.¹⁹ The Cooperative’s AGI Rider rate design groups rider costs and credits into three basic categories, including (1) AMI meter capital costs, (2) the shared infrastructure capital costs of the communication network and MDM system, and (3) operational savings. Dakota Electric calculates its AGI Rider charges by rate class on a fixed, per-meter basis and allocates the rider costs and credits in the following manner:

¹⁴ AGI Rider charge amounts retrieved from the AGI Rider tariff sheet (Section V, Sheet 59, Revision 2) attached to Dakota Electric’s Petition.

¹⁵ Dakota Electric’s initial AGI Rider charges approved by the Commission in Docket No. E111/M-20-78.

¹⁶ Dakota Electric’s proposed 2021 AGI Rider rates, as shown in Table 4, have been adjusted for the 2020 rider true up.

¹⁷ Petition Schedule G-2a shows that capitalized AGI Rider meter costs for all classes through the end of 2021 are \$16,863,272, with \$14,740,659 of this amount allocated to the Residential rate class (the rate class with the most meters).

¹⁸ Petition Schedule G-2a.

¹⁹ See the attachment labeled “AGI Rider Sample Rate Design Calculations” in Dakota Electric’s February 5, 2018 Reply Comments in Docket No. E111/M-17-821.

- Meter costs are allocated to rate classes based on the number of meters associated with a given rate class, such that each member class pays for the costs of its own meters.²⁰
- Communication network and MDM system (shared infrastructure) costs are allocated to each class based on energy usage.
- Project management costs are allocated to each rate class in proportion to the combined allocations of meter and shared infrastructure costs per rate class.
- Incremental depreciation and return on incremental rate base for the forecasted year (2021 in the instant Petition) are allocated to each rate class in proportion to the combined allocations of meter, shared infrastructure, and project management costs per rate class.
- Operational savings are allocated to each rate class in proportion to the allocation of incremental depreciation and return on incremental rate base per rate class.

The Commission's May 8, 2018 *Order* in Docket No. E111/M-17-821 approved the Cooperative's finalized AGI Rider charge rate design.

Based on our review of Petition Schedules G-2a – 2d, the Department concludes that Dakota Electric applied the approved rate design in allocating AGI Rider costs and computing the 2021 AGI Rider charges. Therefore, we recommend that the Commission approve the Cooperative's proposed 2021 AGI Rider charges, as shown in Petition Schedule G-2a.

III. CONCLUSION AND RECOMMENDATIONS

Based on our review, the Department concludes that Dakota Electric's Petition complies with the applicable statutes and orders and that the Cooperative's proposals are reasonable. We recommend that the Commission take the following action:

- Allow Dakota Electric to defer incorporating the credits required per Docket No. E111/GR-19-478 until the Cooperative's next AGI Rider filing in 2022 and approve the Cooperative's proposed 2021 AGI Rider charges, as shown in Petition Schedule G-2a. (Dakota Electric and Department preferred)

OR

- Require the Cooperative to adjust its AGI Rider calculations in the current Petition for the credits required per Docket No. E111/GR-19-478 and approve the 2021 AGI Rider charges, as shown in column (m) of Schedule G-2a in Department Attachment 1.

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²⁰ Petition Schedule G-2a shows that Dakota Electric's capitalized meter costs are grouped into (1) meter costs applicable to the Residential and Small General rate classes (\$15,399,895) and (2) meter costs applicable to the Irrigation, General, and C&I Interruptible rate classes (\$1,463,376). The Cooperative allocates these two groups of meter costs among the applicable rate classes, based on the number of meters in a given rate class.

Rate Recovery for AGI - Meters & Communication

	Per 2020 Filing	Estimated 2020*	Cumulative 2021
	2020	2020	2021
Capitalized Costs - Added to Rate Base	\$ 11,868,223	\$ 9,495,769	\$ 20,145,288
Rate of Return Recovery 6.47%/5.68%	\$ 395,715	\$ 301,747	\$ 931,074
Rate of Return Recovery Adjustment	\$ -	\$ (703)	\$ -
Income Taxes N/A	\$ -	\$ -	\$ -
Incremental Property Taxes N/A	\$ -	\$ -	\$ -
Incremental Depreciation	\$ 507,569	\$ 442,669	\$ 1,290,007
Incremental Depreciation Adjustment	\$ -	\$ (17,771)	\$ -
Subtotal Before Savings	903,284	725,943	2,221,081
Operational Savings	\$ (225,903)	\$ (225,903)	\$ (377,000)
Net to Recover	677,380	500,040	1,844,081

Notes

Capitalized outlay for meters, communication equipment, software and related integrations, project management

**Rate from 2014 Rate Case (Docket No. E-111/GR-14-482) through September 2020, Rate from 2019 Rate Case (Docket No. E-111/GR-19-478) starting in October 2020
OAH 60-2500-36475 / PUC E-111/GR-19-478**

**Captured in RTA property tax filing
Based on monthly detail
OAH 60-2500-36475 / PUC E-111/GR-19-478**

**Savings from reduced meter reading costs
(3 headcount in 2020, 4 headcount in 2021)**

* includes Jan-Nov 2020 Actuals, Dec 2020 estimate

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
Schedule	Meters	MWh Sales	Allocated Capitalized Costs				Sum	Annual Costs	Operational Savings	Net Recovery	Per Meter Per Mo.	2020 True-up Credit	2021 Final
			Meters	Comm & MDM	Proj Mgmt	Per Meter Per Mo.						Per Meter Per Mo.	
Residential	103,103	899,353	\$ 14,740,659	\$ 1,235,632	\$ 642,182	\$ 16,618,474	\$ 1,832,239	\$ (310,999)	\$ 1,521,240	\$ 1.23	\$ (0.08)	\$ 1.15	
Irrigation	391	7,642	\$ 165,705	\$ 10,499	\$ 7,083	\$ 183,287	\$ 20,208	\$ (3,430)	\$ 16,778	\$ 3.58	\$ (1.48)	\$ 2.10	
Lighting	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Small General	4,611	44,045	\$ 659,236	\$ 60,514	\$ 28,931	\$ 748,681	\$ 82,544	\$ (14,011)	\$ 68,534	\$ 1.24	\$ (0.09)	\$ 1.15	
General	2,801	468,180	\$ 1,187,060	\$ 643,238	\$ 73,571	\$ 1,903,869	\$ 209,908	\$ (35,629)	\$ 174,278	\$ 5.19	\$ (1.74)	\$ 3.44	
C&I Interruptible	261	402,984	\$ 110,611	\$ 553,665	\$ 26,701	\$ 690,977	\$ 76,182	\$ (12,931)	\$ 63,251	\$ 20.20	\$ (4.21)	\$ 15.98	
	111,167	1,822,204	\$ 16,863,272	\$ 2,503,549	\$ 778,468	\$ 20,145,288	\$ 2,221,081	\$ (377,000)	\$ 1,844,081				

Capitalized Costs

\$ 15,399,895	Meters (Residential and Single Phase)
\$ 1,463,376	Meters (Irrigation, General, C&I Interruptible)
\$ 2,503,549	Communication, MDM & Software
\$ 778,468	Project Management
<u>\$ 20,145,288</u>	

\$ 2,221,081	Annual ROE, Depreciation
\$ (377,000)	Annual Operational Savings

NOTES:

- Column a Dakota Electric rate classes.
- Columns b and c Calendar year 2021 meter and energy consumption data.
- Column d Relative applicable rate class meter costs.
- Column e Relative applicable rate class communication, MDM, and software costs.
- Column f Project management costs allocated based on proportion of costs from Columns d and e.
- Column g Sum of Columns d + e + f.
- Column h Estimated annual ROE, and Depreciation divided by relative allocated capital costs.
- Column i Estimated annual Operational Savings allocated based on allocated costs in Column h.
- Column j Sum of Columns h + i.
- Column k Column j divided by Column b divided by 12 months.
- Column l Estimated credit from 2020 over-recovery.
- Column m Sum of Columns k + l.

AGI Rider
*2020 Estimate

(a)	(b)	(c)	(d)	(e)		(f)	(g)	(h)	(i)	(j)	(k)
Schedule	Meters	MWh Sales	Meters	Allocated Capitalized Costs		Proj Mgmt	Sum	Annual Costs	Operational Savings	Net Recovery	Per Meter Per Mo.
				Comm & MDM							
Residential	102,083	923,792	\$ 5,582,255	\$ 1,219,811	\$ 607,434	\$ 7,409,500	\$ 566,450	\$ (176,271)	\$ 390,178	\$ 0.32	
Irrigation	391	9,682	\$ 65,180	\$ 12,785	\$ 6,962	\$ 84,927	\$ 6,493	\$ (2,020)	\$ 4,472	\$ 0.95	
Lighting	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Small General	4,565	38,919	\$ 249,630	\$ 51,390	\$ 26,882	\$ 327,902	\$ 25,068	\$ (7,801)	\$ 17,267	\$ 0.32	
General	2,773	427,423	\$ 462,262	\$ 564,385	\$ 91,681	\$ 1,118,329	\$ 85,495	\$ (26,605)	\$ 58,890	\$ 1.77	
C&I Interruptible	260	353,110	\$ 43,342	\$ 466,260	\$ 45,508	\$ 555,111	\$ 42,438	\$ (13,206)	\$ 29,232	\$ 9.37	
	110,072	1,752,926	\$ 6,402,670	\$ 2,314,631	\$ 778,468	\$ 9,495,769	\$ 725,943	\$ (225,903)	\$ 500,040		

Capitalized Costs

\$ 5,831,885	Meters (Residential and Single Phase)
\$ 570,784	Meters (Irrigation, General, C&I Interruptible)
\$ 2,314,631	Communication, MDM & Software
\$ 778,468	Project Management
\$ 9,495,769	

\$ 725,943	Annual ROE, Depreciation
\$ (225,903)	Annual Operational Savings

NOTES:

- Column a Dakota Electric rate classes.
- Columns b and c Calendar year 2020 meter and energy consumption data.
- Column d Relative applicable rate class meter costs.
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- Column g Sum of Columns d + e + f.
- Column h Estimated annual ROE, and Depreciation divided by relative allocated capital costs.
- Column i Estimated annual Operational Savings allocated based on allocated costs in Column h.
- Column j Sum of Columns h + i.
- Column k Column j divided by Column b divided by 12 months.

* includes Jan-Nov 2020 Actuals, Dec 2020 estimate

(a)	(b)	(c)	(d)	(e)		(f)	(g)	(h)	(i)	(j)	(k)
Schedule	Meters	MWh Sales	Meters	Allocated Capitalized Costs		Proj Mgmt	Sum	Annual Costs	Operational Savings	Net Recovery	Per Meter Per Mo.
				Comm & MDM							
Residential	101,463	885,124	\$ 6,561,678	\$ 1,257,763	\$ 671,039	\$ 8,490,480	\$ 646,205	\$ (161,610)	\$ 484,595	\$ 0.40	
Irrigation	392	7,661	\$ 173,467	\$ 10,886	\$ 15,821	\$ 200,174	\$ 15,235	\$ (3,810)	\$ 11,425	\$ 2.43	
Lighting	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Small General	4,540	43,373	\$ 293,605	\$ 61,633	\$ 30,485	\$ 385,723	\$ 29,357	\$ (7,342)	\$ 22,015	\$ 0.40	
General	2,752	460,116	\$ 1,217,810	\$ 653,826	\$ 160,618	\$ 2,032,254	\$ 154,674	\$ (38,682)	\$ 115,991	\$ 3.51	
C&I Interruptible	266	409,464	\$ 117,710	\$ 581,849	\$ 60,034	\$ 759,593	\$ 57,812	\$ (14,458)	\$ 43,354	\$ 13.58	
	109,413	1,805,738	\$ 8,364,270	\$ 2,565,957	\$ 937,996	\$ 11,868,223	\$ 903,284	\$ (225,903)	\$ 677,380		

Capitalized Costs

\$ 6,855,283	Meters (Residential and Single Phase)
\$ 1,508,987	Meters (Irrigation, General, C&I Interruptible)
\$ 2,565,957	Communication, MDM & Software
\$ 937,996	Project Management
<u>\$ 11,868,223</u>	

\$ 903,284	Annual ROE, Depreciation
\$ (225,903)	Annual Operational Savings

NOTES:

- Column a Dakota Electric rate classes.
- Columns b and c Calendar year 2020 meter and energy consumption data.
- Column d Relative applicable rate class meter costs.
- Column e Relative applicable rate class communication, MDM, and software costs.
- Column f Project management costs allocated based on proportion of costs from Columns d and e.
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- Column h Estimated annual ROE, and Depreciation divided by relative allocated capital costs.
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- Column j Sum of Columns h + i.
- Column k Column j divided by Column b divided by 12 months.

AGI Rider

*2020 Estimate vs. 2020 Filing (difference)

(a)	(b)	(c)	(d)	(e)		(f)	(g)	(h)	(i)	(j)	(k)
Schedule	Meters	MWh Sales	Meters	Allocated Capitalized Costs		Proj Mgmt	Sum	Annual Costs	Operational Savings	Net Recovery	Per Meter Per Mo.
				Comm & MDM							
Residential	620	38,668	\$ (979,423)	\$ (37,952)	\$ (63,604)	\$ (1,080,979)	\$ (79,756)	\$ (14,661)	\$ (94,417)	\$ (0.08)	
Irrigation	(1)	2,021	\$ (108,287)	\$ 1,898	\$ (8,858)	\$ (115,247)	\$ (8,743)	\$ 1,790	\$ (6,953)	\$ (1.48)	
Lighting	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Small General	25	(4,454)	\$ (43,975)	\$ (10,243)	\$ (3,604)	\$ (57,821)	\$ (4,289)	\$ (459)	\$ (4,748)	\$ (0.09)	
General	21	(32,693)	\$ (755,548)	\$ (89,440)	\$ (68,937)	\$ (913,925)	\$ (69,178)	\$ 12,078	\$ (57,101)	\$ (1.74)	
C&I Interruptible	(6)	(56,354)	\$ (74,368)	\$ (115,589)	\$ (14,526)	\$ (204,482)	\$ (15,374)	\$ 1,252	\$ (14,122)	\$ (4.21)	
	659	(52,812)	\$ (1,961,600)	\$ (251,326)	\$ (159,528)	\$ (2,372,455)	\$ (177,341)	\$ -	\$ (177,341)		

Capitalized Costs

\$ (1,023,398)	Meters (Residential and Single Phase)
\$ (938,203)	Meters (Irrigation, General, C&I Interruptible)
\$ (251,326)	Communication, MDM & Software
\$ (159,528)	Project Management
\$ (2,372,455)	

\$ (177,341)	Annual ROE, Depreciation
\$ -	Annual Operational Savings

NOTES:

- Column a: Dakota Electric rate classes.
- Columns b and c: Calendar year 2020 meter and energy consumption data.
- Column d: Relative applicable rate class meter costs.
- Column e: Relative applicable rate class communication, MDM, and software costs.
- Column f: Project management costs allocated based on proportion of costs from Columns d and e.
- Column g: Sum of Columns d + e + f.
- Column h: Estimated annual ROE, and Depreciation divided by relative allocated capital costs.
- Column i: Estimated annual Operational Savings allocated based on allocated costs in Column h.
- Column j: Sum of Columns h + i.
- Column k: Column j divided by Column b divided by 12 months.

* includes Jan-Nov 2020 Actuals, Dec 2020 estimate

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Department Attachment 1
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AGi Project Cost Detail
2021 Forecast

Description	Capital Costs	Depreciation Expense	Notes
Meters	\$ 16,863,272	\$ 841,553	<i>Includes all meter costs</i>
Radio Frequency Network Infrastructure	871,653	\$ 186,705	<i>Access points, repeaters, and related network equipment</i>
IT Network Security	29,684	\$ 5,937	<i>Security software and hardware</i>
Testing Facility	405,885	\$ 27,422	
Software	514,743	\$ 81,419	<i>Software to operate the AGi system</i>
System Integration	627,142	\$ 91,781	<i>Software integration between AGi system and other DEA systems</i>
Administration	778,468	\$ 52,147	<i>Project management and consulting expenses</i>
Warehouse Forklift	54,441	3,043	<i>Material handling for remote warehouse location</i>
Total	\$ 20,145,288	\$ 1,290,007	

Operational Savings

Meter Reading Savings	\$ (432,000)
Incremental Contract Meter Reading and DEA Overtime	55,000
Net Benefit	\$ (377,000)

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, 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 No. E111/M-21-45

Dated this 12th day of February 2021

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_21-45_M-21-45
Eric	Fehlhaber	efehlhaber@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_21-45_M-21-45
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_21-45_M-21-45
Corey	Hintz	chintz@dakotaelectric.com	Dakota Electric Association	4300 220th Street Farmington, MN 550249583	Electronic Service	No	OFF_SL_21-45_M-21-45
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	Yes	OFF_SL_21-45_M-21-45
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_21-45_M-21-45
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_21-45_M-21-45
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_21-45_M-21-45
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_21-45_M-21-45
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_21-45_M-21-45