



Your Touchstone Energy® Partner 

January 15, 2020

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

***Subject: In the Matter of a Filing by Dakota Electric Association
Regarding the Monthly Fixed Charge per Meter for the
Advanced Grid Infrastructure (AGi) Rider
Docket No. E-111/M-20-_____***

Dear Mr. Wolf:

Enclosed is the first annual filing by Dakota Electric Association® (Dakota Electric® or Cooperative) regarding the Monthly Fixed Charge per Meter for the Advanced Grid Infrastructure (AGi) Rider. The AGi Rider, approved by the Minnesota Public Utilities Commission (MPUC or Commission) on May 8, 2018 in Docket No. E-111/M-17-821, allows the Cooperative to recover certain net distribution grid modernization and load management investments that occur between Cooperative general rate cases. This filing establishes the 2020 AGi Rider Monthly Fixed Charge per Meter for various rate classes.

If you have any questions about the information in this filing, please call me at (651) 463-6258.

Sincerely,

/s/ Douglas R. Larson

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

Enclosure

Certificate of Service

I, Cherry Jordan, hereby certify that I have this day served copies of the attached document to those on the following service list by e-filing, personal service, or by causing to be placed in the U.S. mail at Farmington, Minnesota.

Docket No. E-111/M-20-

Dated this 15th day of January 2020

/s/ Cherry Jordan

Cherry Jordan

**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

Katie Sieben
Valerie Means
Matthew Schuerger
John Tuma

Chair
Commissioner
Commissioner
Commissioner

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

E-111/M-20-____
January 15, 2020

SUMMARY OF FILING

Please take notice that on January 15, 2020, Dakota Electric Association® (Dakota Electric® or Cooperative) submitted a filing regarding the Monthly Fixed Charge per Meter for the Advanced Grid Infrastructure (AGi) Rider. The AGi Rider, approved by the Minnesota Public Utilities Commission (MPUC or Commission) on May 8, 2018 in Docket No. E-111/M-17-821, allows the Cooperative to recover certain net distribution grid modernization and load management investments that occur between Cooperative general rate cases. **This filing establishes the 2020 AGi Rider Monthly Fixed Charge per Meter for various rate classes.**

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In the Matter of a Filing by Dakota Electric Association
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E-111/M-20-____
January 15, 2020

**PETITION OF
DAKOTA ELECTRIC ASSOCIATION**

Introduction

The Advanced Grid Infrastructure (AGi) Rider, approved by the Minnesota Public Utilities Commission (MPUC or Commission) on May 8, 2018 in Docket No. E-111/M-17-821, allows Dakota Electric Association® (Dakota Electric® or Cooperative) to recover certain net distribution grid modernization and load management investments that occur between Cooperative general rate cases.

This filing establishes the 2020 AGi Rider Monthly Fixed Charge per Meter for various rate classes.

Advanced Grid Infrastructure (AGi) Rider

This filing 1) provides an overview of the AGi project implementation, 2) describes specific schedules used to determine/calculate the AGi Rider Monthly Fixed Charges per Meter, 3) proposes a modification to applicable classes, and 4) presents the 2020 “Advanced Meter Recovery” fees associated with the AGi Rider.

AGi Project Implementation Overview

In 2019 Dakota Electric and our contracted vendors initiated several steps in the process of implementing AGi including:

Vendors

- Set up and configured software for the AMI, MDM and Load Management systems. This includes Development, Testing and Production environments for the software.
- Developed and implemented integration between the AGi systems and existing Dakota Electric systems.
- Developed some of the unique advanced functionality.

Dakota Electric

- Developed and implemented much of the utility side of the integration between the existing Dakota Electric systems and the new AGi systems.
- Installed an on-premise testing facility where meters and load control receivers are installed and monitored under typical operating conditions using Development and Testing AGi software environments.
- Purchased and installed advanced testing boards for the AGi meters to allow simulated testing of meter functionality.
- Dakota Electric completed the installation of a 5,000 meter and 1,000 load control receiver performance acceptance pilot program on members' homes and business. The program is currently being monitored by DEA and vendor staff to identify and fix any potential system related issues before widespread meter and load control receiver installation begins.

In 2020, Dakota Electric plans to complete the performance acceptance program and begin widespread meter and load control receiver installations.

The equipment that was in service as of January 1, 2020, and will be installed throughout 2020, as identified in this filing for the AGi project, is owned by the Cooperative. The data collected and administered through the meter data management system will allow Dakota Electric to operate the distribution system more efficiently and size equipment properly, all of which will conserve energy and use energy more efficiently.

Calculation of 2020 Monthly Fixed Charge per Meter

Implementation of the AGi Rider establishes a new line item on Dakota Electric bills for the net costs associated with installing advanced metering infrastructure, meter data management equipment and related systems between general rate cases.

Dakota Electric received Commission approval to recover rate of return, incremental property taxes, and incremental depreciation expense associated with capitalized AGi equipment that will become part of the Cooperative's rate base. The

calculation of the AGi recovery fee is filed with the Commission at the beginning of the calendar year just like we have done for over two decades with the Resource and Tax Adjustment (RTA). The AGi Adjustment is implemented with bills mailed after January 1, subject to any correction or modification after regulatory review and Commission approval. This is the same annual process that Dakota Electric uses for the RTA. The AGi Rider applies a per meter charge to metered retail rate schedules. This charge will appear as a separate line item on bills identified as “Advanced Meter Recovery”.

While the Commission has approved recovery of incremental property taxes associated with AGi capitalized investments, Dakota Electric notes that the property tax component requires special consideration. Changes in property taxes (increases and decreases) are already automatically addressed through the property tax component in the Cooperative’s Resource and Tax Adjustment (RTA). That is, Dakota Electric’s base rates include recovery for property taxes. As relative annual property taxes change due to the addition of new AMI meters and removal of current meters, the property tax component of the RTA will track these changes and adjust revenue accordingly. Accordingly, property taxes are not included in the calculation of the monthly fee associated with the AGi Rider or the recovery of costs associated with load control receivers.

The calculations for return on rate base and depreciation associated with AGi are shown on the attached spreadsheets. These sheets and calculations are summarized as follows:

- **Schedule G-1** computes the AGi net recovery of \$677,380 for 2020.
- **Schedule G-2** summarizes AGi capital costs and related depreciation, ROE and annual operational savings. In addition, this schedule shows the allocation of AGi costs to the various rate schedules and calculates the per meter per month fee.

Modification to Applicable Classes

As Dakota Electric prepared this first AGi Rider filing, we determined that we need to remove a class previously identified for the Monthly Fixed Charge per Meter. Specifically, our original filing seeking approval to implement the AGi Rider included the lighting class in the sample calculations and AGi Rider tariff. However, as we worked through details, we realize that any meters that Dakota Electric has in place

related to lighting consumption are for distribution system operation purposes and are not used for any billing. All lighting rates are established and approved at fixed amounts per month that do not rely on meters. Accordingly, our Revision 1 to the AGi Rider removes the lighting class.

2020 “Advanced Meter Recovery” Fee

Attached is a redline version and clean version of Dakota Electric’s Advanced Grid Infrastructure Rider (Section V, Sheet 59, Revision 1) indicating the Monthly Fixed Charge per Meter. This fixed charge will appear on member bills on a line item identified as “Advanced Meter Recovery.”

Conclusion

Based on the information included in this filing, Dakota Electric respectfully requests Commission approval of the 2020 AGi Rider Monthly Fixed Charge per Meter amounts for various rate classes. If you have any questions about the information in this filing, please call me at (651) 463-6258.

Respectfully submitted,

/s/ Douglas R. Larson

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

Enclosures

Rate Recovery for AGI - Meters & Communication

		2020	Notes
Capitalized Costs - Added to Rate Base		\$ 11,868,223	<i>Capitalized outlay for meters, communication equipment, software and related integrations, project management</i>
Rate of Return Recovery	6.47%	\$ 395,715	<i>Rate from 2014 Rate Case (Docket No. E-111/GR-14-482)</i>
Income Taxes	N/A	\$ -	
Incremental Property Taxes	N/A	\$ -	<i>Captured in RTA property tax filing</i>
Incremental Depreciation		\$ 507,569	<i>Based on monthly detail</i>
Subtotal Before Savings		\$ 903,284	
Operational Savings		\$ (225,903)	<i>Savings from reduced meter reading costs</i>
Net to Recover		\$ 677,380	

AGI Rider

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
<i>Schedule</i>	<i>Meters</i>	<i>MWh Sales</i>	<i>Meters</i>	<u>Allocated Capitalized Costs</u>		<i>Sum</i>	<i>Annual Costs</i>	<i>Operational Savings</i>	<i>Net Recovery</i>	<i>Per Meter Per Mo.</i>
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
\$ 11,868,223	

\$ 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.
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.

ADVANCED GRID INFRASTRUCTURE RIDER

Application

Applicable to bills for electric service provided under the Association's metered retail rate schedules.

Rider

There shall be included on each member's monthly bill an Advanced Grid Infrastructure (AGi) Rider adjustment. The AGi Adjustment shall be applied on a per-meter basis before any city surcharge and sales tax.

Determination of AGi Adjustment

The AGi Adjustment shall be the quotient obtained by dividing the forecasted balance of the AGi Tracker Account for each member class by the applicable meters in each member class. The AGi Adjustment may be changed annually upon a filing with the Minnesota Public Utilities Commission (Commission). The AGi Adjustment shall apply to bills rendered on and after January 1st of the year.

The AGi Adjustment for each metered retail rate schedule is:

Member Class	Monthly Fixed Charge per Meter
Residential (Schedules 31, 32, 53, 56)	\$0.00 40
Irrigation (Schedule 36)	\$0.00 2.43
Lighting (Schedule 44-5)	\$0.00
Small General (Schedule 41)	\$0.00 40
General (Schedules 46, 54)	\$0.00 3.51
C&I Interruptible (Schedules 70, 71)	\$0.00 13.58

Recoverable AGi Costs shall be the annual revenue requirements associated with AGi capital costs (a) not recovered through base rates, (b) recorded in the AGi Tracker Account for the designated period, and (c) determined by the Commission to be eligible for recovery under this Rider. A standard model will be used to calculate the total forecasted revenue requirements for eligible projects for the designated period. All costs appropriately charged to the AGi Tracker Account shall be eligible for recovery through this Rider, and all revenues recovered from the AGi Adjustment shall be credited to the AGi Tracker Account.

True-Up

For each 12-month period ending December 31, a true-up adjustment to the AGi Tracker Account will be calculated reflecting the difference between the AGi Adjustment recoveries and the revenue requirements for such period. The true-up adjustment shall be calculated and included in the AGi recovery filing submitted to the Commission for the following calendar year. No carrying cost shall be applied to the AGi Tracker.

ADVANCED GRID INFRASTRUCTURE RIDER

Application

Applicable to bills for electric service provided under the Association's metered retail rate schedules.

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General (Schedules 46, 54)	\$3.51
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