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August 1, 2023



Mr. Steve Kahl
Director of Administration/Executive Secretary
North Dakota Public Service Commission
State Capitol
600 East Boulevard, Dept. 408
Bismarck, ND 58505-0408

**RE: In the Matter of Otter Tail Power Company's Request for Approval of the Annual Rate Update to Rate Schedule, Section 13.11, Advanced Metering and Distribution Technology Cost Recovery Rider
Case No. PU-23-
Initial Filing**

Dear Mr. Kahl:

Enclosed are an original and copies of Otter Tail Power Company's (Otter Tail's) Application for Approval of the Annual Rate Update to its Advanced Metering and Distribution Technology Cost Recovery Rider.

An electronic copy of this filing is being sent to the North Dakota Public Service Commission at ndpsc@nd.gov. Should you have any questions, please feel free to contact me at 218-739-8313 or eketelsen@otpc.com.

Sincerely,

/s/ EMILY KETELSEN
Emily Ketelsen
Rates Analyst
Regulatory Economics

lcd
Enclosures
By electronic filing and US mail

**STATE OF NORTH DAKOTA
BEFORE THE
NORTH DAKOTA PUBLIC SERVICE COMMISSION**

**In the Matter of Otter Tail Power
Company's Application for Approval
of the Initial Rate of the Advanced
Grid Infrastructure Cost
Recovery Rider, Rate Schedule 13.11**

Case No. PU-23-

APPLICATION

I. SUMMARY

- A. This filing is Otter Tail Power Company's (Otter Tail or Company) Advanced Metering and Distribution Technology (AMDT Rider or Rider) Cost Recovery Rider, which includes updated actual and forecasted costs and collections associated with:
 - 1. Advanced Metering Infrastructure (AMI),
 - 2. Demand Response (DR), and
 - 3. Outage Management System (OMS)
- B. Otter Tail proposes the updated rates go into effect January 1, 2024.
- C. The North Dakota projected revenue requirement for the January 2024 to December 2024 recovery period is \$1,343,206.
- D. The timing of costs, anticipated savings, and implementation has been delayed for the AMI project, but provisions are being made to still complete substantial implementation by the end of 2024 within the initial budget for the project.
- E. Otter Tail proposes to maintain a per meter charge for the AMDT Rider.
- F. The proposed residential rate decreases from \$1.71 per meter per month to \$0.76. The proposed Large General Service (LGS) rate decreases from \$71.76 per meter per month to \$21.80.

II. INTRODUCTION

Otter Tail Power Company (Otter Tail or Company) respectfully submits this Application to the North Dakota Public Service Commission (Commission) for an Order approving the 2023 adjustment to its Advanced Metering and Distribution Technology

(ADMT Rider or Rider) cost recovery rider for Advanced Metering Infrastructure (AMI), Demand Response (DR), and Outage Management System (OMS). The Application is filed pursuant to Otter Tail's approved AMDT Rate Schedule 13.11, which was originally approved by the Commission on November 10, 2022.¹

The net revenue requirement for January 2024 through December 2024, upon which rates are developed, is \$1,343,206. The impact of the change from current rates to those proposed in this update for a residential customer is a decrease of \$0.95 per meter per month for a total rate of \$0.76. For a Large General Service (LGS) customer, the bill impact of this update is a decrease of \$49.96 per meter per month for a total rate of \$21.80. The decreases in the per meter rates are primarily due to project delays stemming from integration requirements of the software systems.

III. GENERAL FILING INFORMATION

Pursuant to § 69-02-02-04 of the Commission's Rules of Practice and Procedure, the following information is provided:

A. Name, address, and telephone number of the utility making the filing

Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
Phone (218) 739-8200

B. Name, address, and telephone number of utility attorney

Cary Stephenson
Associate General Counsel
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
Phone (218) 739-8956

C. Title of utility employee responsible for filing

Emily Ketelsen
Rates Analyst, Regulatory Economics
215 South Cascade Street
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Fergus Falls, MN 56538-0496
(218) 739-8313

¹ Case No. PU-22-312, Order, November 10, 2022.

Paula Foster
Supervisor, Regulatory Analysis, Regulatory Economics
Otter Tail Power Company
215 South Cascade Street
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(218) 739-8042

D. The Company also requests that the following contact(s) be placed on the Commission’s official service list for this matter

Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
regulatory_filing_coordinators@otpc.com

E. The date of filing and the date changes will take effect

The date of this filing is August 1, 2023. Otter Tail proposes a rate effective date of January 1, 2024.

F. Other requirements of North Dakota Rules Part 69-02-02-04

A certified copy of Otter Tail's Articles of Incorporation is on file with the Commission, as an original certificate of good standing.

G. Customer Notification

Otter Tail will include a notice of proposed update to the AMDT Rider to North Dakota customers on August customer bills. Attachment 12 provides a sample of the bill message that will be included. Otter Tail will also include a bill insert implementation notice to North Dakota customers during the month the approved rates are implemented following Commission approval of the new AMDT Rider. Attachment 13 is a sample of the bill insert implementation notice.

IV. DESCRIPTION AND PURPOSE OF FILING

A. Background

Otter Tail has spent the past several years evaluating and planning its approach to grid modernization as part of the Company’s “Innovation 2030” (I2030) initiative – a portfolio of projects focused on upgrading the Company’s communications and technology assets to improve system data communications

and allow better identification of issues and improve system performance. I2030 has three main objectives: (1) improve reliability and safety of the Otter Tail system, (2) improve customer engagement, and (3) improve business processes.

Projects in the overall I2030 initiative includes: (1) Advanced Metering Infrastructure (AMI); (2) Demand Response (DR) System replacement; (3) Telecommunications Infrastructure; (4) Outage Management System (OMS) with required Geographic Information System (GIS) enhancements; (5) Transmission and Distribution replacement programs as well as grid technologies; and (6) a Work Asset Management System (WAMS). The AMI and Telecommunications projects have the largest scope, and implementation of them will occur over multiple years.

In 2022, Otter Tail made its initial request for the establishment of the AMDT Rider for recovery of AMI, OMS, and DR system replacement from the overall I2030 initiative. All three projects were approved for recovery on November 10, 2022, and the new per meter rate went into effect January 1, 2023. This filing is the first annual update to the AMDT rider.

Otter Tail requests the continuation of the AMDT recovery mechanism as costs are incurred for the AMI, OMS, and DR projects outside of a general rate case. These projects will allow Otter Tail to meet all three of the I2030 objectives mentioned above, while continuing to provide cost-effective, reliable service.

B. Overview of Projects included in this Filing

This section contains information about each of the three projects for which Otter Tail is seeking recovery outside of a general rate case.

1. Advanced Metering Infrastructure

AMI is a foundational part of the I2030 initiative and will involve the deployment of the following infrastructure: (1) approximately 175,000 AMI meters, of which approximately 76,000 will be located in North Dakota; (2) local data collectors in a Field Area Network (FAN) that will collect and transmit meter data back to Otter Tail; and (3) a head-end system and Meter Data Management System (MDM) where data will be routed and stored, as needed, to facilitate automated meter reading, DR, and automated distribution control in the Company's provision of electric service.

Otter Tail provides retail electric service to approximately 133,000 customers, including approximately 62,400 customers in Minnesota, 59,200 customers in North Dakota, and 11,800 customers in South Dakota. Currently, about 99 percent of Otter Tail's customer meters are a

combination of electromechanical and digital meters that are manually read each month.² This means that Otter Tail employees or a contracted meter reading service provider must physically visit almost all of our customers' premises to read their meters. This is a significant expense given Otter Tail's rural 70,000 square-mile service territory. Full implementation of AMI will enable two-way communication between the Company and the meters, allowing Otter Tail to read meters, turn service on and off, and check meter status remotely. This will reduce costs and safety risks by reducing driving miles and the need to be physically on customer property for these utility functions.

AMI meters, and their associated communications infrastructure and software, have significant benefits over Otter Tail's existing equipment and processes. By deploying AMI meters along with the associated communications network and enabling software, Otter Tail will enhance its visibility into its distribution network and increase safety and reliability. AMI voltage readings will be a foundation for potential future grid modernization functions such as Voltage and Reactive Power (Volt/Var) optimization, or automated system restoration which would rely on a communication network.

AMI will allow for improved outage communications with customers as well as give customers access to usage information online, whether it is via a future Otter Tail platform or third-party applications enabled by AMI. Additionally, AMI investments will benefit customers by enabling the Company to create new rate offerings and support customer located generation. AMI will also make numerous conservation and clean energy resource programs possible, including time-differentiated rates that can encourage efficient use of resources and incorporation of energy conserving consumer technologies.

The original implementation plan for the AMI project anticipated business process development, system integration, and initial deployment from late 2021 to the fourth quarter of 2022, with full deployment from late 2022 to the third quarter 2024. The deployment schedule has been delayed due to the integration requirements of the software systems. The AMI pilot of 1,000 meters is set to begin in the Fall of 2023, with the remaining meters

² The Company has a small number of AMI meters that are used for interruption monitoring purposes, and a small number of automatic meter reading (AMR) meters in use for some larger customers and substations.

being installed in 2024. Otter Tail estimates each quarter will have approximately 43,750 additional meters installed, with all 175,000 meters being installed by the end of the fourth quarter. While it is anticipated that all AMI meters will be installed by the end of 2024, any additional integration challenges could potentially result in some meters being installed early in 2025. Otter Tail expects to incur some final AMI related costs in 2025 as the project reaches final completion. Otter Tail continues to expect to complete this project within the original budget of \$56.1 million.

Realized AMI savings have not been calculated for the AMI project in 2023. Otter Tail had originally anticipated that the AMI project savings would be realized beginning in 2023 in the amount of approximately \$1.7 million. However, because the timeline of the meter installation has been delayed, the estimated savings presented in this filing are not based on original Otter Tail estimates (largely the reduction of costs related to physical meter reading), but the period in which those savings are expected to materialize has been updated to match the new AMI deployment schedule. Table 1 reflects the changes in estimated total company cost savings from the initial filing to the current update. Actual savings that are realized in 2023 will be presented in the 2024 AMDT update.

Table 1
Total Company Estimated Cost Savings Shift
Due to Updated AMI Project Timeline

	2023	2024	2025
Initial Filing	\$1,744,453	\$5,390,360	\$7,402,761
2023 Update	\$0	\$2,426,523	\$5,275,051

In the initial analysis and tracker file, Otter Tail used the total company cost savings when displaying the credit to customers. Upon further analysis, it was noted that the total savings were being escalated annually to demonstrate estimated cost increases over time. Because base rates do not escalate as cost increase, the credit to customers will be lower than the calculated future savings to the company. Otter Tail will track actual savings and will credit the rider with savings up to the amount customers are being charged in approved base rates. With this change, Otter Tail estimates that \$5.3 million of the total company escalated savings of \$7.4 million in 2025 will be refunded to customers.

2. Outage Management System

Otter Tail's OMS offers many operational and customer benefits related to outage response as well as a foundation that will be beneficial in future grid modernization plans. The OMS allows Otter Tail to identify outages more rapidly and deploy crews more efficiently to reduce the number and length of outages. It will also allow Otter Tail to better communicate with customers before, during and after outage events, by sending outage notifications, updates on estimated time of restoration, and restoration notices. The communication enhancements will be realized with the implementation of the Customer Experience Portal (CEP) targeted to be implemented in August 2023.

As part of the OMS project, Otter Tail is in the process of developing the electrical connectivity model from meter to substation and specific attribution data of Otter Tail's GIS features. The data collection effort will ensure the Company has accurate and complete data and can track how each customer on the delivery system is connected from the meter to a delivery transformer, to a feeder, and finally to a distribution substation. This updated data will facilitate better outage prediction and response when outage information is received by the OMS. The GIS attribution collection work is being performed by a third-party vendor that has extensive experience updating GIS models in preparation for grid modernization tools. In addition, the attribution data will be leveraged by Otter Tail engineers to refine various asset health programs, such as underground cable replacement and overhead line replacement projects. The connectivity model will also be utilized by the Advanced Grid Analysis (AGA) tool and will be available for future tools such as Volt/Var optimization, DR controls, and automated system reconfiguration. Lastly, the implementation of AMI will enhance the speed in which the OMS receives outage information and therefore improve restoration times even further. The individual meters will provide power-off and power-on notification to be utilized by the OMS.

The GIS update portion of the OMS project is nearing completion and is expected to be completed by August 2023. The first phase of the OMS installation was completed in December 2022. The final go-live improvements to the OMS system, including modeling improvements as part of the GIS portion of the project, are expected to be completed by Fall 2023. Even though the project is not fully completed, these items have

already improved available outage and restoration information and communications, as noted below.

The updated Outage Map on the Otter Tail website went live in early December 2022, along with a new Interactive Voice Response (IVR) system. The updated outage map can be found on the Otter Tail website and includes real time information on current outages.³ The map allows customers to see physical location of active outages with the estimated number of impacted customers and the Otter Tail crew status with anticipated restoration time. Along with real time data, the site allows customers to look at a graphic showing information on outages that have occurred in the past 48 hours. The outage map also includes a banner which displays the number for customers to call to report an outage. From a mobile device, a customer can click on the banner to automatically dial the number to report an outage. This banner can be quickly updated to provide customers with important messages about outages.

The next stage of OMS development ties closely with the installation of the AMI and the implementation of the new CEP. Integration with the AMI project will begin its pilot implementation in Fall 2023 and continue its full deployment through 2024. OMS and AMI together will improve the customer experience featuring two-way communication for service outages and speeding up the restoration process. The CEP system will enable customers to receive communication based on their preferences and will give customers the ability to sign up for outage and estimated restoration notifications that pertain specifically to their service.

3. Demand Response System

Otter Tail has taken several actions to move the Demand Response System project forward over the past several months. The Request for Proposals for the DR replacement system was released, and six responses were received in November 2022. Otter Tail reviewed the responses in conjunction with its consultant Katama Technologies. Vendor demonstrations were held in February 2023. Follow-up questions were posed to and answered by vendors in separate meetings. Best and Final Offers have been received for the remaining vendors of interest. Otter Tail

³ <https://outages.otpc.com/>.

expects to make its vendor selection by September 2023, allowing the Company to meet the proposed project schedule.

Otter Tail was also invited to submit a full application for grant opportunities related to the 2021 Infrastructure Investment and Jobs Act. An award through this act would reduce overall project costs. An application was submitted by the deadline and Otter Tail awaits the final decision.

C. Proposed Recovery Mechanism

Attachments 1-4 to this Application are, respectively, the Revenue, Revenue Requirement Summary, Rate Design, and Tracker Summary calculations used for Otter Tail's proposed rate update. Attachments 5-7 provide the revenue requirement calculations for the Projects for which Otter Tail requests AMDT recovery. Attachment 8 provides the AMI adjustment reflecting the estimated O&M savings due to the AMI implementation in North Dakota. The per meter charge is allocated to all customers based on the weighted average cost of the AMI meters per class to recover costs for the included systems between general rate cases.

Specifically, the calculations of the revenue requirement in this Application include the following:

- *Rate base section.* This section provides details on the amount of plant in service, accumulated depreciation (if applicable), construction work in progress (CWIP), accumulated deferred taxes including the effect of proration on Federal amounts, and a 13-month average rate base calculation.
- *Expense section.* The expenses applicable to a project are listed here and include operating costs, property taxes, depreciation, and income taxes.
- *Revenue requirements section.* This section shows the components of the revenue requirements, including expenses and return on rate base.
- *Return on investment (cost of capital).* The return on investment utilizes the return on equity approved in Otter Tail's last Rate Case.
- *Depreciation expense.* Depreciation expense is calculated using the Company's current estimated depreciation rates.

- *Property taxes.* The property tax calculation is based on a weighted average of Otter Tail's composite tax rate for the jurisdictions using a weight of 50 percent (MN), 40 percent (ND) and 10 percent (SD) and applied in accordance with the procedures specified by the states.
- *Operation and maintenance expense.* Once the project is in service, Otter Tail will track operation and maintenance costs specifically related to each project in Attachments 5-7. Annual O&M expenses related to these projects include operating costs, property taxes, and depreciation.
- *Operation and maintenance savings.* Once the projects are in service, Otter Tail will track operation and maintenance savings specifically related to this project in Attachment 8. Annual O&M savings related to AMDT implementation primarily include costs related to manual meter reading, of which a certain portion is completed by third party contract services and the remainder is conducted internally by service reps across Otter Tail's system.
- *Proration of Federal Accumulated Deferred Income Taxes (ADIT).* Once the project is in service, Otter Tail will include proration of Federal ADIT, as shown in Attachment 10. The methodology used for proration of Federal ADIT is in adherence to United States Internal Revenue Service (IRS) rules related to proration, including recently issued IRS private letter rulings. Otter Tail interprets this to include proration of Federal ADIT for the (forward-looking) recovery period and, in future filings, preserving the effect of the application of the proration methodology for the true-up period. This calculation methodology is necessary in order to comply with Section 1.167(l)-1(h)(6)(ii) of the IRS regulations and to avoid a tax normalization violation.⁴ In annual Updates, Otter Tail will include a workpaper with the details of the calculation of the proration of Federal ADIT for the recovery period and whether it results in an increase or decrease to the revenue requirement.

⁴See Treas. Reg. SS 1.167(l)-1(h)(6)(ii).

- *Jurisdictional Allocation Factors.* Jurisdictional allocators are used to allocate system cost among jurisdictions. The Commission approved Otter Tail’s North Dakota jurisdictional allocations for the 2018 Test Year in the Rate Case.

V. RATE DESIGN

Otter Tail proposes to continue to use a monthly per meter charge rate design for the AMDT Rider. The proposed rate calculation starts with the determination of the average cost per meter for materials and labor for each customer class. The weighted average cost per customer class is then used to determine the percentage of AMI, OMS, and DR project costs to be charged to each class. The weighted average cost per class, divided by the average annual number of meters per class, equals the monthly per meter charge.

VI. REVENUE REQUIREMENT, RATE APPLICATION AND IMPACT

Otter Tail proposes to collect a total annual revenue requirement of \$1,343,206 for the recovery period of January 2024 through December 2024. Recovery under the AMDT Rider is a per meter monthly charge determined by rate class and displayed as a separate line item on customer bills. North Dakota residential customers will see a monthly bill decrease of \$0.95. The customer Notice and Rate Impact is contained in Attachment 12.

The decreases in the per meter rates are primarily due to project delays stemming from integration requirements of the software systems. The LGS rate decrease is also caused in part by updated meter cost estimates that moved costs away from the LGS class and into other customer classes.

VII. AMDT COST RECOVERY RIDER RATE SCHEDULE

Otter Tail’s updated AMDT Rider tariff sheet (Section 13.11) is Attachment 11 to this Application. The rates listed in the RATE section of the tariff sheet reflect the AMDT per meter charge as described in this Application.

VIII. CONCLUSION

Otter Tail respectfully requests that the Commission approve the AMDT annual rate adjustment as set forth in this Annual Update filing to be in effect on and after January 1, 2024.

Date: August 1, 2023

Respectfully submitted,

OTTER TAIL POWER COMPANY

/s/ EMILY KETELSEN

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Phone (218) 739-8313

Attachments

Attachment 1	Projection of Revenue
Attachment 2	Summary of Revenue Requirements
Attachment 3	Class Allocation and Rate Design
Attachment 4	Advanced Metering and Distribution Technology Tracker
Attachment 5	Advanced Metering Infrastructure
Attachment 6	Outage Management System
Attachment 7	Demand Response System
Attachment 8	AMI Cost Savings Adjustment
Attachment 9	Impact of Federal ADIT Proration on Revenue Requirement
Attachment 10	Federal ADIT Proration Preservation
Attachment 11	Advanced Metering and Distribution Technology Cost Recovery Rider, Electric Rate Schedule 13.11
Attachment 12	Customer Notice – Proposed update Bill Message
Attachment 13	Customer Notice – Implementation Bill Insert

Projected Revenue for January 2024 to December 2024 Recovery Period

Line No.	Class	Meters (Yearly Count)	Monthly Rate per Unit	Amount
1	Residential	523,096	\$0.76	\$395,606
2	Residential RDC	38,826	\$1.84	\$71,331
3	Farm	13,405	\$1.80	\$24,110
4	General Service	147,166	\$2.92	\$429,902
5	General Service - TOU	36	\$5.99	\$216
6	Large General Service - Primary	171	\$21.80	\$3,728
7	Large General Service - Secondary	3,068	\$7.04	\$21,592
8	Irrigation	535	\$4.92	\$2,633
9	Outdoor Lighting	1,673	\$1.87	\$3,130
10	OPA	6,741	\$2.09	\$14,100
11	Controlled Service - Water Heating	62,876	\$1.84	\$115,516
12	Controlled Service - Interruptible Small Dual Fu	90,554	\$1.87	\$169,480
13	Controlled Service - Interruptible Large Dual Fu	6,568	\$7.53	\$49,446
14	Controlled Service - Deferred Load	18,522	\$2.29	\$42,416
15	Total revenue			<u>\$1,343,206</u>

Summary of Revenue Requirements

Line No.	Revenue Requirements	January 2024 - December 2024
1	Revenue Requirements	3,431,771
2	Carrying Charge	(90,566)
3	True-Up	(1,998,000)
4	Net Revenue Requirement	<u>\$1,343,206</u>

Class Allocation and Current Rate Design

Line No.		January 2024 - December 2024	Percent of Total	Annual Meter Count	Per Meter Charge	Revenue Requirements by Class
1	Total 2024 North Dakota Revenue Requirements	\$1,343,206				
2	Residential		29.45%	523,096	\$0.76	\$395,606
3	Residential RDC		5.31%	38,826	\$1.84	\$71,331
4	Farm		1.79%	13,405	\$1.80	\$24,110
5	General Service		32.01%	147,166	\$2.92	\$429,902
6	General Service - TOU		0.02%	36	\$5.99	\$216
7	Large General Service - Primary		0.28%	171	\$21.80	\$3,728
8	Large General Service - Secondary		1.61%	3,068	\$7.04	\$21,592
9	Irrigation		0.20%	535	\$4.92	\$2,633
10	Outdoor Lighting		0.23%	1,673	\$1.87	\$3,130
11	OPA		1.05%	6,741	\$2.09	\$14,100
12	Controlled Service - Water Heating		8.60%	62,876	\$1.84	\$115,516
13	Controlled Service - Interruptible Small Duel Fuel		12.62%	90,554	\$1.87	\$169,480
14	Controlled Service - Interruptible Large Duel Fuel		3.68%	6,568	\$7.53	\$49,446
15	Controlled Service - Deferred Load		3.16%	18,522	\$2.29	\$42,416
16	Total North Dakota Revenue Requirements		100.00%	913,237		\$1,343,206

Rate Impact				
	Meter Count (Month)	Current Rate (\$ per meter)	Proposed Rate (\$ per meter)	Monthly Impact (Increase or decrease from prior rate)
Residential	43,591	1.71	\$0.76	-\$0.95
Residential RDC	3,236	4.28	\$1.84	-\$2.44
Farm	1,117	4.33	\$1.80	-\$2.54
General Service	12,264	6.61	\$2.92	-\$3.69
General Service - TOU	3	13.87	\$5.99	-\$7.88
Large General Service - Primary	14	71.76	\$21.80	-\$49.96
Large General Service - Secondary	256	16.31	\$7.04	-\$9.27
Irrigation	45	11.13	\$4.92	-\$6.21
Outdoor Lighting	139	4.41	\$1.87	-\$2.54
OPA	562	4.43	\$2.09	-\$2.33
Controlled Service - Water Heating	5,240	4.28	\$1.84	-\$2.44
Controlled Service - Interruptible Small Duel Fuel	7,546	4.33	\$1.87	-\$2.46
Controlled Service - Interruptible Large Duel Fuel	547	17.74	\$7.53	-\$10.22
Controlled Service - Deferred Load	1,544	5.31	\$2.29	-\$3.02
	76,103			

Line No.	TRACKER SUMMARY Requirements Compared to Billed:	2023												Year End Projected
		January Actual	February Actual	March Actual	April Actual	May Actual	June Actual	July Projected	August Projected	September Projected	October Projected	November Projected	December Projected	
1	Revenue Requirements													
2	Advanced Metering Infrastructure	41,470	41,398	41,458	41,390	41,624	42,056	42,117	42,077	42,132	42,068	42,082	42,008	501,880
3	Outage Management System	10,242	10,242	10,242	10,242	10,242	10,242	35,047	40,387	62,232	62,569	62,569	62,569	386,827
4	Demand Response	899	899	899	899	899	899	899	899	899	899	899	899	10,784
5	Total Revenue Requirements	52,611	52,539	52,599	52,531	52,764	53,197	78,063	83,364	105,263	105,536	105,549	105,475	899,491
6														
7	ADIT Preservation of Proration	1,056	1,056	1,056	1,056	1,056	1,056	1,056	1,056	1,056	1,056	1,056	1,056	12,669
8														
9	O&M Savings due to AMI Implementation	0	0	0	0	0	0	0	0	0	0	0	0	0
10														
11	Net Revenue Requirement	53,667	53,594	53,655	53,586	53,820	54,252	79,119	84,419	106,319	106,591	106,605	106,531	912,160
12														
13	Billed (forecast meter x adj factor)	85,151	234,687	240,889	249,082	237,846	260,146	255,805	255,805	255,805	255,805	255,805	255,805	2,842,628
14														
15	Monthly Revenue Difference	(31,484)	(181,093)	(187,234)	(195,495)	(184,026)	(205,893)	(176,685)	(171,385)	(149,486)	(149,213)	(149,200)	(149,274)	(1,930,469)
16	Carrying Charge	0	(201)	(1,355)	(2,556)	(3,817)	(5,014)	(6,357)	(7,522)	(8,662)	(9,669)	(10,681)	(11,699)	(67,531)
17	Life-to-Date Revenue Requirement (Cumulative Difference)	(31,484)	(212,778)	(401,367)	(599,418)	(787,261)	(998,168)	(1,181,210)	(1,360,118)	(1,518,265)	(1,677,147)	(1,837,028)	(1,998,000)	(1,998,000)
18														
19														
20	Carrying Charge Calculation	(201)	(1,355)	(2,556)	(3,817)	(5,014)	(6,357)	(7,522)	(8,662)	(9,669)	(10,681)	(11,699)	(12,724)	
21	Cumulative Carrying Charge	(201)	(1,556)	(4,112)	(7,929)	(12,942)	(19,299)	(26,821)	(35,483)	(45,152)	(55,833)	(67,531)	(80,255)	
22	Carrying cost rate	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	
23														
24														
25	Forecasted Meter Count						76,103	76,103	76,103	76,103	76,103	76,103	76,103	532,722

SUMMARY		January 2023 - December 2023
Revenue requirements		3,073,397
Carrying Charge		(10,892)
True-up		-
Total requirements		3,062,505
Jan 2023 - Dec 2023 projected meter count		911,110
Average Rate		\$ 3.36129

Line No.	TRACKER SUMMARY Requirements Compared to Billed:	2024												Year End Projected
		January Projected	February Projected	March Projected	April Projected	May Projected	June Projected	July Projected	August Projected	September Projected	October Projected	November Projected	December Projected	
1	Revenue Requirements													
2	Advanced Metering Infrastructure	181,494	270,906	281,389	288,364	293,380	335,051	299,249	303,683	307,626	310,948	313,209	313,846	3,499,145
3	Outage Management System	57,562	57,562	57,562	57,562	57,562	57,562	57,562	57,562	57,562	57,562	57,562	57,562	690,749
4	Demand Response	21,351	23,425	23,425	23,425	23,425	23,425	23,425	23,425	23,425	23,425	23,425	23,425	279,030
5	Total Revenue Requirements	260,408	351,893	362,377	369,351	374,368	416,039	380,237	384,671	388,614	391,936	394,197	394,834	4,468,924
6														
7	ADIT Preservation of Proration	0	0	0	0	0	0	0	0	0	0	0	0	0
8														
9	O&M Savings due to AMI Implementation	(86,429)	(86,429)	(86,429)	(86,429)	(86,429)	(86,429)	(86,429)	(86,429)	(86,429)	(86,429)	(86,429)	(86,429)	(1,037,153)
10														
11	Net Revenue Requirement	173,978	265,464	275,947	282,922	287,939	329,609	293,807	298,242	302,185	305,506	307,768	308,405	3,431,771
12														
13	Billed (forecast meter x adj factor)	\$111,934	111,934	111,934	111,934	111,934	111,934	111,934	111,934	111,934	111,934	111,934	111,934	1,343,206
14														
15	Monthly Revenue Difference	62,044	153,530	164,013	170,988	176,005	217,675	181,874	186,308	190,251	193,572	195,834	196,471	2,088,566
16	Carrying Charge	(12,724)	(12,410)	(11,511)	(10,540)	(9,518)	(8,458)	(7,126)	(6,013)	(4,865)	(3,684)	(2,475)	(1,243)	(90,566)
17	Life-to-Date Revenue Requirement (Cumulative Difference)	(1,948,679)	(1,807,559)	(1,655,057)	(1,494,609)	(1,328,122)	(1,118,905)	(944,157)	(763,861)	(578,475)	(388,587)	(195,228)	(0)	(0)
18														
19														
20	Carrying Charge Calculation	(12,410)	(11,511)	(10,540)	(9,518)	(8,458)	(7,126)	(6,013)	(4,865)	(3,684)	(2,475)	(1,243)	(0)	
21	Cumulative Carrying Charge	(92,665)	(104,176)	(114,716)	(124,234)	(132,692)	(139,818)	(145,831)	(150,695)	(154,379)	(156,854)	(158,097)	(158,097)	
22	Carrying cost rate	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	7.64%	
23														
24														
25	Forecasted Meter Count	76,103	76,103	76,103	76,103	76,103	76,103	76,103	76,103	76,103	76,103	76,103	76,103	913,237

	January 2024 - December 2024
SUMMARY	
Revenue requirements	3,431,771
Carrying Charge	(90,566)
True-up	(1,998,000)
Total requirements	1,343,206
2024 projected meter count	913,237
Average Rate	\$ 1.47082

Otter Tail Power Company
North Dakota- Advanced Metering and Distribution Technology (AMDT)
Advanced Metering Infrastructure Revenue Requirements

Line No.	Year>>	2024												Year-End Projected
		January Projected	February Projected	March Projected	April Projected	May Projected	June Projected	July Projected	August Projected	September Projected	October Projected	November Projected	December Projected	
RATE BASE														
1	Plant Balance	25,525,311	31,232,708	34,501,954	37,415,922	38,506,195	41,285,622	44,289,615	47,415,544	50,091,473	52,386,180	53,839,492	55,292,105	55,292,105
2	Accumulated Depreciation	-	(206,931)	(441,669)	(696,089)	(966,243)	(1,244,018)	(1,534,882)	(1,839,406)	(2,156,638)	(2,484,749)	(2,822,287)	(3,165,733)	(3,165,733)
3	Net Plant in Service	25,525,311	31,025,777	34,060,285	36,719,833	37,539,952	40,041,604	42,754,733	45,576,138	47,934,835	49,901,431	51,017,205	52,126,372	52,126,372
4														
5	CWIP	-	-	-	-	-	-	-	-	-	-	-	-	-
6														
7	ADIT - NOL DTA													
8	Reversal of ADIT - NOL DTA													
9	ADIT Federal Proration Factors	0.9178	0.8411	0.7562	0.6740	0.5890	0.5068	0.4219	0.3370	0.2548	0.1699	0.0877	0.0027	
10	Accumulated Deferred Income Taxes - Federal only	(76,445)	(111,525)	(138,838)	(160,516)	(177,600)	(191,524)	(202,005)	(209,451)	(214,431)	(217,379)	(218,735)	(218,774)	(218,774)
11	Accumulated Deferred Income Taxes - Federal & State	(94,309)	(138,335)	(173,395)	(201,972)	(225,276)	(245,093)	(260,902)	(273,087)	(282,258)	(288,929)	(293,601)	(296,702)	(296,702)
12														
13	Ending rate base	25,431,002	30,887,443	33,886,891	36,517,862	37,314,676	39,796,511	42,493,831	45,303,050	47,652,576	49,612,501	50,723,603	51,829,669	51,829,669
14														
15	Average rate base	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662	3,292,662
16														
17	Return on Rate Base	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	3,019,502
18														
19	Available for return (equity portion of rate base)	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	2,026,666
20														
EXPENSES														
O&M and Depreciation														
22	Operating Costs	109,152	104,714	100,275	95,836	91,398	177,759	82,520	78,082	73,643	69,712	65,020	60,327	1,108,438
23	Property Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
24	Book Depreciation	-	206,931	234,738	254,421	270,154	277,775	290,864	304,524	317,232	328,110	337,538	343,446	3,165,733
25	Total O&M and Depreciation Expense	109,152	311,644	335,013	350,257	361,552	455,534	373,384	382,606	390,875	397,822	402,558	403,774	4,274,171
26														
27														
28	Income before Taxes													
29	Available for return (from above)	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	168,889	2,026,666
30	Taxable Income (grossed up)	223,412	223,412	223,412	223,412	223,412	223,412	223,412	223,412	223,412	223,412	223,412	223,412	2,680,949
31														
32	Income Taxes													
33	Current Income Tax	(46,631)	3,870	10,656	15,460	19,300	21,160	24,354	27,688	30,789	33,444	35,745	37,187	213,021
34	Deferred Income Tax	101,155	50,653	43,867	39,064	35,224	33,364	30,170	26,836	23,735	21,080	18,779	17,337	441,262
35	Total Income Tax Expense	54,524	54,524	54,524	54,524	54,524	54,524	54,524	54,524	54,524	54,524	54,524	54,524	654,283
36														
37														
REVENUE REQUIREMENTS														
39	Expenses	163,676	366,168	389,536	404,781	416,075	510,058	427,908	437,130	445,399	452,346	457,081	458,297	4,928,454
40	Return on rate base	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	251,625	3,019,502
41	Subtotal revenue requirements	415,301	617,793	641,162	656,406	667,700	761,683	679,533	688,755	697,024	703,971	708,707	709,922	7,947,957
42	Adjustments													
43	Total revenue requirements	415,301	617,793	641,162	656,406	667,700	761,683	679,533	688,755	697,024	703,971	708,707	709,922	7,947,957
44														
45	North Dakota share - Meters (C6)	109,192	180,815	193,642	204,118	209,064	245,286	224,792	234,143	241,921	247,941	252,316	254,564	2,597,795
46	North Dakota share - FAN (P60)	19,919	24,272	22,845	21,593	21,387	22,760	18,918	17,892	17,124	16,959	16,611	16,198	236,478
47	North Dakota share - Software (P90)	52,383	65,818	64,902	62,653	62,929	67,005	55,539	51,648	48,581	46,048	44,282	43,084	664,872
48	Total North Dakota Share	181,494	270,906	281,389	288,364	293,380	335,051	299,249	303,683	307,626	310,948	313,209	313,846	3,499,145

SUPPORTING INFORMATION / DATA														
1	ND Cap Structure with allowed ROE per order.													
2														
3	Capital Structure	Ratio		Cost		WA Cost		Property tax						
4	Debt	47.50%		5.29%		2.51%		2024 composite rate				1.18%		
5	Preferred equity	0.00%		0.00%		0.00%								
6	Common equity	52.50%		9.77%		5.13%								
7	Total	100.00%				7.64%		Overall Return						
8														
9														
10	Project life (years)	Book		Tax										
11		20		20-year MACRS										
12														
13														
14	Statutory Tax Rate	24.40%		20.09%		4.31%								
15	Tax conversion factor	1.32284												
16	ND share - C6 factor	44.680%												
17	ND share - P90 factor	41.079%												
18	ND share - P60 factor	45.903%												
19	Book depreciation	-	206,931	234,738	254,421	270,154	277,775	290,864	304,524	317,232	328,110	337,538	343,446	3,165,733
20	Tax depreciation-Federal	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	4,973,822
21	Tax depreciation-State	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	414,485	4,973,822
22	Federal deferred income taxes	(83,290)	(41,708)	(36,120)	(32,165)	(29,003)	(27,472)	(24,842)	(22,097)	(19,543)	(17,357)	(15,462)	(14,275)	(363,334)
23	State deferred income taxes	(17,864)	(8,946)	(7,747)	(6,899)	(6,221)	(5,892)	(5,328)	(4,739)	(4,192)	(3,723)	(3,316)	(3,062)	(77,929)

Otter Tail Power Company
North Dakota- Advanced Metering and Distribution Technology (AMDT)
Outage Management Project Revenue Requirements

Line No.	Year>>	2021													2022													
		Year-End Actual	January Actual	February Actual	March Actual	April Actual	May Actual	June Actual	July Actual	August Actual	September Actual	October Actual	November Actual	December Actual	Year-End Actual	January Actual	February Actual	March Actual	April Actual	May Actual	June Actual	July Actual	August Actual	September Actual	October Actual	November Actual	December Actual	Year-End Actual
RATE BASE																												
1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4																												
5																												
6																												
7		383,089	129,953	65,260	283,807	138,943	396,382	278,643	13,983	531,932	50,940	50,606	504,824	99,242	2,544,513													
8			0	0	0	0	0	0	0	0	0	0	0	0	0													
9		3,517	1,822	2,401	3,029	3,681	5,253	6,892	10,648	(16,424)	7,053	7,161	9,618	10,560														
10		386,606	518,381	586,041	872,878	1,015,502	1,417,137	1,702,672	1,727,303	2,242,810	2,300,803	2,358,570	2,873,011	2,982,813	2,982,813													
11			1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000	1,0000														
12		0	381	381	381	381	381	381	381	381	381	381	381	381	4,569													
13		0	0	0	0	0	0	0	0	0	0	0	0	0	0													
14																												
15		386,606	518,381	586,041	872,878	1,015,502	1,417,137	1,702,672	1,727,303	2,242,810	2,300,803	2,358,570	2,873,011	2,982,813	2,982,813													
16																												
17		65,462	134,516	134,516	134,516	134,516	134,516	134,516	134,516	134,516	134,516	134,516	134,516	134,516	1,614,195													
18																												
19		5,003	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	123,357													
20																												
21		3,358	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	82,796													
22																												
EXPENSES																												
O&M and Depreciation																												
24		0	0	0	0	0	0	0	0	0	0	0	0	0	0													
25		0	0	0	0	0	0	0	0	0	0	0	0	0	0													
26		0	0	0	0	0	0	0	0	0	0	0	0	0	0													
27		0	0	0	0	0	0	0	0	0	0	0	0	0	0													
28		0	0	0	0	0	0	0	0	0	0	0	0	0	0													
29																												
30																												
31		3,358	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	82,796													
32		4,442	9,127	9,127	9,127	9,127	9,127	9,127	9,127	9,127	9,127	9,127	9,127	9,127	109,526													
33																												
34																												
35		1,084	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	26,730													
36		0	0	0	0	0	0	0	0	0	0	0	0	0	0													
37		1,084	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	26,730													
38																												
39																												
REVENUE REQUIREMENTS																												
41		1,084	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	2,227	26,730													
42		5,003	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	10,280	123,357													
43		6,087	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	150,086													
44		0	0	0	0	0	0	0	0	0	0	0	0	0	0													
45		6,087	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	12,507	150,086													
46																												
47			5,138	5,138	5,138	5,138	5,138	5,138	5,138	5,138	5,138	5,138	5,138	5,138	61,654													

Line No.	SUPPORTING INFORMATION / DATA																												
1	ND Cap Structure with allowed ROE per order.																												
2	Capital Structure																												
3		Ratio	Cost	WA Cost																								Property tax	
4	Debt	47.50%	5.29%	2.51%																								2022 composite rate	1.18%
5	Preferred equity	0.00%	0.00%	0.00%																									
6	Common equity	52.50%	9.77%	5.13%																									
7	Total	100.00%		7.64% Overall Return																									
8																													
9																													
10																													
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Otter Tail Power Company
North Dakota- Advanced Metering and Distribution Technology (AMDT)
Outage Management Project Revenue Requirements

Line No.	Year>>	2023												Year-End Projected
		January Actual	February Actual	March Actual	April Actual	May Actual	June Actual	July Projected	August Projected	September Projected	October Projected	November Projected	December Projected	
RATE BASE														
1	Plant Balance	0	0	0	0	0	0	780,000	3,970,638	4,019,834	4,019,834	4,019,834	4,019,834	4,019,834
2	Accumulated Depreciation	0	0	0	0	0	0	0	(13,000)	(79,177)	(146,175)	(213,172)	(280,169)	(280,169)
3	Net Plant in Service	0	0	0	0	0	0	780,000	3,957,638	3,940,656	3,873,659	3,806,662	3,739,665	3,739,665
CWIP Calculation:														
5	Beginning Balance	2,982,813	3,117,191	3,295,935	3,372,941	3,425,200	2,118,215	2,121,793	2,266,215	0	0	0	0	0
6	Additional CWIP	134,377	178,745	77,005	52,260	(1,306,985)	3,578	924,423	924,423	49,196	0	0	0	0
7	Closings from CWIP	0	0	0	0	0	0	(780,000)	(3,190,638)	(49,196)	0	0	0	0
8	AFDUC	0	0	0	0	0	0	0	0	0	0	0	0	0
10	CWIP	3,117,191	3,295,935	3,372,941	3,425,200	2,118,215	2,121,793	2,266,215	0	0	0	0	0	0
11	ADIT Federal Proration Factors	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12	Accumulated Deferred Income Taxes - Federal only	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938
13	Accumulated Deferred Income Taxes - Federal & State	0	0	0	0	0	0	(54,497)	(105,821)	(144,167)	(182,313)	(220,459)	(258,604)	(258,604)
15	Ending rate base	3,117,191	3,295,935	3,372,941	3,425,200	2,118,215	2,121,793	2,991,719	3,851,817	3,796,490	3,691,347	3,586,204	3,481,060	3,481,060
17	Average rate base	268,158	268,158	268,158	268,158	268,158	268,158	268,158	268,158	268,158	268,158	268,158	268,158	268,158
19	Return on Rate Base	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493
21	Available for return (equity portion of rate base)	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755
EXPENSES														
O&M and Depreciation														
25	Operating Costs	0	0	0	0	0	0	60,384	60,384	60,384	60,384	60,384	60,384	60,384
26	Property Tax	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Book Depreciation	0	0	0	0	0	0	0	13,000	66,177	66,997	66,997	66,997	66,997
28	Total O&M and Depreciation Expense	0	0	0	0	0	0	60,384	73,384	126,561	127,381	127,381	127,381	127,381
30	Income before Taxes	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755
31	Available for return (from above)	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755	13,755
32	Taxable Income (grossed up)	18,195	18,195	18,195	18,195	18,195	18,195	18,195	18,195	18,195	18,195	18,195	18,195	18,195
34	Income Taxes	4,440	4,440	4,440	4,440	4,440	4,440	(50,056)	(46,883)	(33,906)	(33,705)	(33,705)	(33,705)	(33,705)
35	Current Income Tax	4,440	4,440	4,440	4,440	4,440	4,440	(50,056)	(46,883)	(33,906)	(33,705)	(33,705)	(33,705)	(33,705)
36	Def Income Tax	0	0	0	0	0	0	54,497	51,324	38,346	38,146	38,146	38,146	38,146
37	Total Income Tax Expense	4,440	4,440	4,440	4,440	4,440	4,440	4,440	4,440	4,440	4,440	4,440	4,440	4,440
REVENUE REQUIREMENTS														
41	Expenses	4,440	4,440	4,440	4,440	4,440	4,440	64,824	77,824	131,002	131,822	131,822	131,822	131,822
42	Return on rate base	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493	20,493
43	Subtotal revenue requirements	24,933	24,933	24,933	24,933	24,933	24,933	85,317	98,317	151,494	152,314	152,314	152,314	152,314
44	Adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Total revenue requirements	24,933	24,933	24,933	24,933	24,933	24,933	85,317	98,317	151,494	152,314	152,314	152,314	152,314
47	North Dakota share - P90 Factor	10,242	10,242	10,242	10,242	10,242	10,242	35,047	40,387	62,232	62,569	62,569	62,569	62,569

Line No.	SUPPORTING INFORMATION / DATA													
1	ND Cap Structure with allowed ROE per order.													
2	Capital Structure													
3		Ratio	Cost	WA Cost									Property tax	
4	Debt	47.50%	5.29%	2.51%									2023 composite rate	1.18%
5	Preferred equity	0.00%	0.00%	0.00%										
6	Common equity	52.50%	9.77%	5.13%										
7	Total	100.00%												
8														
9														
10	Project life (years)	Book	Tax											
11		5	3-year MACRS											
12														
13			Fed Portion	State Portion										
14	Statutory Tax Rate		24.40%	20.09%	4.31%									
15	Tax conversion factor		1.32284											
16	ND share - P90 factor		41.079%											
17	Deferred Tax													
18	Book depreciation	0	0	0	0	0	0	0	13,000	66,177	66,997	66,997	66,997	280,169
19	Tax depreciation-Federal	0	0	0	0	0	0	223,302	223,302	223,302	223,302	223,302	223,302	1,339,811
20	Tax depreciation-State	0	0	0	0	0	0	223,302	223,302	223,302	223,302	223,302	223,302	1,339,811
21	Federal deferred income taxes	0	0	0	0	0	0	(44,872)	(42,260)	(31,574)	(31,409)	(31,409)	(31,409)	(212,934)
22	State deferred income taxes	0	0	0	0	0	0	(9,624)	(9,064)	(6,772)	(6,737)	(6,737)	(6,737)	(45,671)

Otter Tail Power Company
North Dakota- Advanced Metering and Distribution Technology (AMDT)
North Dakota
O&M Savings due to AMI Implementation

Line No.	A	B	C	D	E
		Year>>	2022 Actuals	2023 Projected	2024 Projected
1	<i>SAVINGS</i>				
2	<i>O&M</i>				
3		Operations and Maintenance	0	0	2,426,523
4				0	0
5					
6		Total O&M	0	0	2,426,523
7					
8		North Dakota - C7 Meter Reading Allocation Factor	42.74%	42.74%	42.74%
9		O&M (OTP ND)	0	0	1,037,153
10					
11	<i>REVENUE REQUIREMENTS</i>				
12		Total Revenue Requirements (OTP ND) - Line 12 + Line 22	0	0	1,037,153
13					
14		Revenue Requirement Share back	0	0	1,037,153

**Otter Tail Power Company
North Dakota Advanced Metering & Distribution Technology Rider
Federal ADIT Proration**

(A) (B) (C) (D)

January 2024 - December 2024 Recovery Period				
Line No.	Month	All Projects' Revenue Requirements	All Projects' Revenue Requirements with ADIT-Prorate	Difference due to Federal ADIT Proration (B - A)
1	Jan-24	\$ 263,810	\$ 260,408	\$ (3,402)
2	Feb-24	355,295	351,893	(3,401)
3	Mar-24	365,778	362,377	(3,401)
4	Apr-24	372,752	369,351	(3,401)
5	May-24	377,769	374,368	(3,401)
6	Jun-24	419,439	416,039	(3,401)
7	Jul-24	383,637	380,237	(3,400)
8	Aug-24	388,071	384,671	(3,400)
9	Sep-24	392,014	388,614	(3,400)
10	Oct-24	395,335	391,936	(3,400)
11	Nov-24	397,597	394,197	(3,400)
12	Dec-24	398,234	394,834	(3,400)
13		\$ 4,509,730	\$ 4,468,924	\$ (40,806)
14				
15	Revenue Requirement Adjustment			
16	Related to Federal ADIT Proration			\$ (40,806)

Otter Tail Power Company
North Dakota Advanced Metering & Distribution Technology Rider
Federal ADIT Proration -- Preserve True-Up Period

	(A)	(B)	(C)	(D)
	January 2023 - December 2023			
Line No.	Month	Original ADIT Balance - All Projects	Federal ADIT Prorate Balance - All Projects	Difference due to Federal ADIT Proration (B - A)
1	Jan-23	\$ (296,913)	\$ 4,569	\$ 301,482
2	Feb-23	(311,369)	4,569	
3	Mar-23	(324,365)	4,569	
4	Apr-23	(382,069)	4,569	
5	May-23	(409,093)	4,569	
6	Jun-23	(432,213)	4,569	
7	Jul-23	(455,813)	(30,368)	
8	Aug-23	(472,360)	(61,233)	
9	Sep-23	(484,870)	(80,000)	
10	Oct-23	(493,193)	(97,142)	
11	Nov-23	(497,488)	(112,872)	
12	Dec-23	(497,850)	(127,142)	
13	Jan-24	-	-	-
14	Simple Average	\$ (148,457)	\$ 2,284	\$ 150,741
15				
16		Rate Base Rev Req Gross Up Factor		9.30%
17		Total Company Revenue Requirement	\$	14,016
18				
19		ND Revenue Requirement Related to Federal ADIT		
20		Proration-Preservation		\$ 12,669
21				
22				
23		Tax Conversion Factor	1.3228	(1/(1-24.4%))
24		Gross Up of Equity %	6.79%	(D23 * D31)
25		Equity Return %	5.13%	(D31)
26		Gross Up Factor	1.66%	(D24 - D25)
27				
28			Annual	Monthly
29		Debt Return %	2.51%	0.21%
30		Preferred Equity %	0.00%	0.00%
31		Equity Return %	5.13%	0.43%
32		Rate of Return	7.64%	0.64%
33		Tax RR on Equity Return	1.66%	0.14%
34		Rate Base Rev Req Gross Up Factor	9.30%	0.77%

Attachment 11
Legislative and Non-Legislative Version
Advanced Metering and Distribution Technology
Cost Recovery Rider
Electric Rate Schedule 13.11

RATE:

Service Category	Section	Per Meter Charge
Residential	9.01	\$0.761.71
Residential RDC	9.02	\$1.844.28
Farm	9.03	\$1.804.33
General Service	10.01, 10.02	\$2.926.61
General Service -TOU	10.03	\$5.9913.87
Large General Service - Primary / Transmission	10.04, 10.05, 10.06, 11.01	\$21.8071.76
Large General Service - Secondary	10.04, 10.05, 11.01	\$7.0416.31
Irrigation Service	11.02	\$4.9211.13
Outdoor Lighting (Metered)	11.03	\$1.874.41
OPA (Metered)	11.05	\$2.094.43
Controlled Service Water Heating	14.01	\$1.844.28
Controlled Service Interruptible - Small Dual Fuel	14.05	\$1.874.33
Controlled Service Interruptible - Large Dual Fuel	14.04, 14.12	\$7.5317.74
Controlled Service Deferred	14.06, 14.07	\$2.295.31

MANDATORY AND VOLUNTARY RIDERS: The amount of a bill for service will be modified by any Mandatory Rate Riders that must apply or Voluntary Rate Riders selected by the Customer, unless otherwise noted in this rider. See sections 12.00, 13.00 and 14.00 of the North Dakota electric rates for the matrices of riders.

RATE:

Service Category	Section	Per Meter Charge
Residential	9.01	\$0.76
Residential RDC	9.02	\$1.84
Farm	9.03	\$1.80
General Service	10.01, 10.02	\$2.92
General Service -TOU	10.03	\$5.99
Large General Service - Primary / Transmission	10.04, 10.05, 10.06, 11.01	\$21.80
Large General Service - Secondary	10.04, 10.05, 11.01	\$7.04
Irrigation Service	11.02	\$4.92
Outdoor Lighting (Metered)	11.03	\$1.87
OPA (Metered)	11.05	\$2.09
Controlled Service Water Heating	14.01	\$1.84
Controlled Service Interruptible - Small Dual Fuel	14.05	\$1.87
Controlled Service Interruptible - Large Dual Fuel	14.04, 14.12	\$7.53
Controlled Service Deferred	14.06, 14.07	\$2.29

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MANDATORY AND VOLUNTARY RIDERS: The amount of a bill for service will be modified by any Mandatory Rate Riders that must apply or Voluntary Rate Riders selected by the Customer, unless otherwise noted in this rider. See sections 12.00, 13.00 and 14.00 of the North Dakota electric rates for the matrices of riders.

Customer Notice – Bill Message

On August 1, 2023, we filed a request with the North Dakota Public Service Commission to decrease our Advanced Metering and Distribution Technology (AMDT) Cost Recovery Rider, which is part of the Advanced Meter and Distribution Technology Rider line on your bill. Our AMDT Cost Recovery Rider allows us to recover costs associated with Advanced Metering Infrastructure, an Outage Management System, and Demand Response investments.

The proposed change to our AMDT Cost Recovery Rider would begin January 1, 2024. The new rate for residential customers would be \$0.76 with a monthly bill impact of -\$0.95. This change is proposed only and, if suspended by the Commission, won't go into effect until the Commission acts. For more information, contact Customer Service at 800-257-4044 or visit otpc.com.

Customer notice

The North Dakota Public Service Commission approved an adjustment to our Advanced Meter and Distribution Technology (AMDT) Cost Recovery Rider. A decrease to per meter charges will become effective January 1, 2024.

Our AMDT Cost Recovery Rider allows us to recover costs associated with Advanced Metering Infrastructure, an Outage Management System, and Demand Response investments.

Class	Section	January 2024 - December 2024 Per meter charge
Residential	9.01	\$0.76
Residential RDC	9.02	\$1.84
Farm	9.03	\$1.80
General Service	10.01, 10.02	\$2.92
General Service TOU	10.03	\$5.99
Large General Service – Primary / Transmission	10.04, 10.05, 10.06, 11.01	\$21.80
Large General Service – Secondary	10.04, 10.05, 11.01	\$7.04
Irrigation Service	11.02	\$4.92
Outdoor Lighting (Metered)	11.03	\$1.87
OPA (Metered)	11.05	\$2.09
Controlled Service Water Heating	14.01	\$1.84
Controlled Service Interruptible - Small Dual Fuel	14.05	\$1.87
Controlled Service Interruptible - Large Dual Fuel	14.04, 14.12	\$7.53
Controlled Service Deferred	14.06, 14.07	\$2.29

For more information, contact Customer Service at 800-257-4044 or visit otpc.com.