STATE OF SOUTH DAKOTA
BEFORE THE
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's Petition for Approval of a Thermal Technology Market Energy Rate Section 14.16	**Docket No. EL25-** **PETITION**

I. INTRODUCTION

Otter Tail Power Company (Otter Tail Power or Company) hereby petitions the South Dakota Public Utilities Commission (Commission) for approval of a new Thermal Market Energy Pricing (TMEP) rider, Tariff Section 14.16. This tariff is only available to customers who meet specific operational and technological criteria as outlined in this Petition. Otter Tail Power proposes to use this tariff with a new customer for whom service is proposed to begin in July of 2025.[1]

This proposed Tariff has similar attributes to a new Market Energy Rate tariff the Company will also be seeking approval of in a separate docket that will replace currently closed portions of it's voluntary Large General Service (LGS) Rider, Tariff Section 14.03 related to System Marginal Energy Pricing (SMEP) and the voluntary Real Time Pricing (RTP or RT Pricing) Tariff Section 14.02. Service provided under the new TMEP rider would not be subject to the Company's Energy Adjustment Rider (EAR), nor would the associated kWhs be included in the calculation of the Company's EAR rates other retail customers pay, which is consistent with how similar LGS Rider market rates, namely the SMEP and RTP, are handled today. Customers on the new Market Energy Rate tariff the Company will propose will likewise not be subject to the EAR.

Service under these market rates (TMEP, SMEP or RTP) does not rely directly on Otter Tail Power generation resources but rather will rely on the broader Midcontinent Independent System Operator (MISO) market for procurement and associated hourly market pricing. As such, the Company proposes that loads served under these rates would be excluded from Otter Tail Power's E2 allocation factor, which allocates significant portions of the Company's generation resources jurisdictionally and across customer classes. The Company proposes the effective date of Section 14.16 to be August 1, 2025.[2]

[1]The Company is seeking approval of the customer's ESA in a separate docket filed contemporaneously.

[2] The current schedule contemplates an August of 2025 proposed commercial operation date of the new customer who would take service under the TMEP rate.

II. GENERAL FILING INFORMATION

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 the attorney for Otter Tail Power Company

Lauren Donofrio
Senior Associate General Counsel
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
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Phone (218) 739-8774

C. Title of utility employee responsible for filing

Amber Grenier
Manager, Regulatory Economics
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
Phone (218) 739-8728

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@otpco.com

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

The date of this filing is April 21, 2025. Otter Tail proposes the update to the rates be applied to usage on or after August 1, 2025 for a new customer taking service under the TMEP rider.

F. Statutes controlling schedule for processing the filing

Pursuant to the authority granted to the Commission by South Dakota Codified Laws (SDCL) Chapters 49-34A-4 and 49-34A-10, Otter Tail Power's filing of this new tariff is governed by the terms of the Administrative Rules of South Dakota (ARSD) § 20:10:13:15. As required by that rule, Otter Tail Power includes a copy of the new Tariff Section 14.16 as Attachment A and other Tariffs impacted by the inclusion of this new Rider as Attachment B.

Included in this filing is Attachment C, which is the proposed Customer Notice required by both ARSD §§ 20:10:13:15 and 20:10:13:19, which will be sent to customers with the first bill rendered when the rate is effective.

Lastly, Otter Tail Power includes Attachment D to comply with ARSD §§ 20:10:13:15 and 20:10:13:26, which require the Utility to report all rate schedule changes and customer rate impacts.

III. REQUEST FOR CONFIDENTIAL TREATMENT

Portions of this Petition contain trade secret information that must be protected from public disclosure. As such, Attachment E – Request for Confidential Treatment, contains a request for confidential treatment of the statements contained in this Petition that should be protected, namely those on pages 5 and 6.

IV. BACKGROUND

Otter Tail Power designed the voluntary TMEP rider to provide a non-firm level of service to a customer using specific technology that uses electricity to create and store heat in a thermal storage facility. Thermal storage facilities are tied to a specific nearby wind and/or solar generation resource and only operate (procure electricity as a load) when that specific resource is actively producing electricity. The amount of electricity the specific generator produces limits the amount of electricity the thermal storage facility may consume. Currently the Company has one customer who would like to take service under the new TMEP rider. That customer's tied resource is a wind generator.[3] We anticipate that our customer would primarily require energy during times when the excess generation of the specifically identified wind resource would otherwise be curtailed. As outlined in Tariff Section 14.16, included as Attachment A to this Petition, a customer

[3] **[PROTECTED DATA BEGINS…**

…**PROTECTED DATA ENDS]**.

taking service under this tariff must meet several criteria to qualify for the TMEP rider. Generally, the customer must be a large (at least 25 MW), low-load factor (less than 50 percent), new greenfield thermal storage facility with its non-firm load tied to and limited by the output of a specific wind or solar generator, and be registered as a MISO load modifying resource, among other requirements set out in the tariff:

> **AVAILABILITY:**
> This rider is available on a voluntary basis only to new greenfield customers and locations that use specific thermal storage technology, have a Demand of at least 25 MW, and have a load factor less than 50 percent. The Customer's entire thermal load must be registered as a load modifying resource in Midcontinent Independent System Operator (MISO) and take service coincident with and not to exceed the hourly generating output of a nearby specifically identified wind and/or solar generation resource that is not owned by the Company. MISO must have established a new Asset Owner and Commercial Pricing Load Node (CP Node) associated with the Customer's load for market settlement purposes.

The TMEP rider supplements a firm level of service provided to the thermal facility, as will be specified in each new customer's ESA and billed under the Large General Service (LGS) rate schedule applicable to the customer.[4] The ESA must also address incremental fixed and/or variable service costs necessary to provide service to the customer and maintain net benefits. The customer's ESA will also establish the firm Baseline Demand level, which is used for standard LGS rate billing purposes, and to establish the level to which the non-firm level of service under the TMEP rider can be curtailed.

V. BILLING AND OPERATIONAL REQUIREMENTS UNDER THE TMEP RIDER:

Billing Components

As noted above, a customer's monthly bill for energy will be calculated in two parts: (1) energy consumed up to and including the Baseline Demand(s), and (2) energy consumed above the Baseline Demand(s).

The monthly bill for the firm energy consumed up to and including the Baseline Demand(s) will be calculated by multiplying the customer's metered energy consumption by the energy rate provided in the rate schedule applicable to the customer. Customers will also be responsible for the non-energy portions of the LGS tariff including the

[4] For example, the customer that would like to take service under the new TMEP has a firm load of up to 3 MW, which we will bill at the standard LGS rate.

customer charge, facilities charge and demand charges. Customers will also pay applicable riders, including, but not limited to, Energy Adjustment Rider (EAR), Transmission Cost Recovery (TCR) Rider, Phase-In Recovery Rider, and Energy Efficiency Program (EEP) Rider on their firm load.

The monthly bill for the non-firm energy consumed above the Baseline Demand(s) under the TMEP rider will be calculated by taking the net amount of the MISO market settlements that occur at the customer-specific Commercial Pricing (CP) node within MISO, then adding Network Integrated Transmission Service (NITS) charges, and the customer charge. Customers on the TMEP will also be responsible for the EEP Rider and the kWh portion of the TCR rider on their non-firm energy consumed above their Baseline Demand.

The bill will also include a third part, which will address any incremental fixed and/or variable service costs necessary to provide service to the customer and maintain net benefits. Each customer presents a unique set of circumstances with a minimum load of 25 MW, a level large enough to individually affect the recovery of system costs. For this reason, the Company designed the TMEP rider to allow for additional negotiated rate charges, **[PROTECTED DATA BEGINS…**

…PROTECTED DATA ENDS] that will appear in the customer's ESA.

Otter Tail Power intends that each customer on the TMEP rider will provide a benefit to the system. There are a number of reasons insufficient contribution to net benefits could arise; one example is when there is a high cost to connect the customer. In such an instance, the Company would negotiate a rate adder or fixed charge in the customer's ESA with deviations, which the Commission would review and approve prior to beginning to take service under the TMEP. Another is complex billing and required system integration. This method will allow the Company the flexibility to offer the TMEP rider, while ensuring that doing so does not have any detrimental effects on other customers' rates.

Below is an example of how the Company would calculate a hypothetical bill under the TMEP rider:

Table 1 – Three-Part Billing Concept

Line	Billing Component	Charge Type	Component Source
Part I - Energy consumed up to and including the Baseline Demand			
1	**LGS Base Rate** (applicable rate code)	Per kW, per kWh and Customer Charges	Set in rate case
2	**Applicable Riders**		
3	Energy Adjustment	Per kWh charge	Set annually in EAR rider filing
4	Transmission Cost Recovery	Per kW and per kWh charges	Set annually in TCR rider filing
5	Phase-In Cost Recovery	Fixed + % of bill charge	Set annually in Phase-In rider filing
6	Energy Efficiency Program	Per kWh charge	Set annually in EEP Report filing
7			**Lines 3 + 4 + 5 + 6**
8		**Total Part I**	**Lines 1 + 7**
Part II – Energy consumed above Baseline Demand			
9	**TMEP Rider**		
10	Market Energy (Asset owner/CP node)	DA and RT charges and credits for all kWh plus other MISO market tariff charges	MISO settlement statement (Asset Owner /CP node)
11	Network Integration Transmission Service	KW and/or kWh charge, as applicable	Set by MISO
12	Customer Charge	Per customer	Set in Tariff
13			**Lines 10 + 11 + 12**
14	**Transmission Cost Recovery Rider**	Per kWh charge	Set annually in TCR rider filing
15	**Energy Efficiency Program Rider**	Per kWh charge	Set annually in EEP rider filing
16		**Total Part II**	**Lines 13 + 14 + 15**
Part III – ESA and Miscellaneous[5]			
[PROTECTED DATA BEGINS…			**…PROTECTED DATA ENDS]**
19		**Total Part III**	**Lines 17 + 18**
20		**TOTAL COMBINED BILL**	**Lines 8 + 16 + 19**

[5] Miscellaneous can include any voluntary riders, late charges, or other unrelated items that might appear on a customer's bill.

This billing example shows, in general terms, how the three parts of the Customer's bill will be calculated and provides the source of each component. There are of course other items that can appear on a customer's bill related to other voluntary riders, late fees, etc., or other services the customer may have, which are not shown in this example.

Operational Requirements

A customer taking service under the TMEP rider would be registered as a separate Asset Owner in MISO, which will allow costs related to energy procured in both the Day Ahead (DA) and Real Time (RT) markets to be isolated in separate settlement statements from MISO for each customer on this rate rider (see billing example Line 10).

Each day, the TMEP customer will provide the Company with its expected hourly load for the next business day,[6] if the hourly load can be procured at a price acceptable to the customer. The customer will also provide the maximum price it would be willing to pay for energy for the next day. The Company will submit that load to MISO and subsequently communicate back to the customer each day, the amount of load that cleared for each hour in the MISO DA market and the associated hourly DA price. MISO allows utilities to procure energy from the DA market through the use of a price sensitive bid, where the utility can set a maximum price that it is willing to pay for energy in any given hour. Otter Tail Power will use a price sensitive bid for customers on the TMEP based upon the pricing information the customers provide to the Company. If an hourly DA price clears above the price the utility is willing to pay, the energy will not clear for those hours. In such an instance, the Company would notify the customer that if it operates during those hours, it will do so at RT market prices, not DA market prices, and may be subject to additional MISO charges. During the operating day, the customer will operate its facility (manage its load) consistent with, but not in excess of, the output of the specifically identified wind or solar facility.

As mentioned above, MISO will provide separate settlements statements to Otter Tail Power for the hourly DA and RT energy costs incurred by the TMEP customer, as well as all other MISO market charges associated with the TMEP load and energy procured under this Tariff. Any deviations in the hourly load between the DA and RT will be settled at the RT prices. The separate MISO settlement statements for each TMEP customer will capture these costs. The TMEP customer will be responsible for all MISO costs, associated adders, and applicable Riders each month.

[6] On Fridays the TMEP customer will provide expected loads for Saturday through Monday to the Company. Similarly, the TMEP customer will provide expected loads for holidays by 7 am on last business day preceding a holiday.

VI. APPLICABILITY OF RIDERS TO MARKET ENERGY

The TMEP rider provides an opportunity for the non-firm energy above the customer's Baseline Demand to be procured by the Company for the customer from the MISO market, provided the customer's load does not exceed the generation output of the nearby, specifically identified solar or wind resource designated in the customer's ESA. Because the designated solar or wind resource will not be one owned by Otter Tail Power, the Company's generation resources are not directly aligned with the load. This means that all costs associated with the TMEP rider market energy are isolated from the Company's existing generation and loads scheduled within the MISO market. Separate MISO settlement statements ensure all market costs are captured separate from Otter Tail Power's generation or loads in the MISO market. As such, sales under the TMEP rider will not be subject to the Energy Adjustment Rider as noted in the Mandatory Riders – Applicability Matrix, Section 13.00, included in Attachment B in this petition.

Unlike our generation assets, TMEP customers would rely on Otter Tail Power's transmission assets. For this reason, the non-firm kWhs procured under the TMEP rider would be subject to the annual Transmission Rider kWh charge, and the Energy Efficiency Program rider.

VII. MARKET ENERGY EXCLUDED FROM ENERGY ALLOCATOR

As noted above, non-firm market energy procured under the TMEP rider does not rely on the Company's generation resources. Otter Tail Power is also not obligated to provide capacity to support that energy. The non-firm load procured under the TMEP rider will be registered as a Load Modifying Resource (LMR) within MISO and is fully curtailable if needed for system reliability needs.[7] Otter Tail Power's E2 allocator is typically used to allocate a significant portion of the costs of the Company's energy generation resources across its jurisdictions and classes. Because all kWhs and associated energy costs are separately being captured through separate MISO settlement statements under this Tariff, and those kWhs are not included in Otter Tail Power's future resource planning, the kWhs should be excluded from the E2 allocation factor. The inclusion of TMEP rider kWhs in the E2 allocator would shift more costs to South Dakota in future rate setting proceedings.

[7] All of the non-firm load is curtailable, but the firm load is not.

VIII. ADMINISTRATIVE UPDATES TO OTHER TARIFF SECTIONS

Table 2 below summarizes administrative updates to a number of Tariff Sections that are included for purposes of incorporating the impacts of the TMEP Rider into Otter Tail Power's Tariff. Redline and clean versions of updated Tariff Sections listed below are included as Attachment B to this Petition.

Table 2

Tariff Section	Description	Changes
	All Tariff sheets included with this filing.	Replaced Bruce G. Gerhardson with our Manager of Regulation & Retail Energy Solutions, Stuart D. Tommerdahl, in the footer of each tariff.
00.00	South Dakota Index	Section 14.16 Thermal Market Energy Pricing Rider added to Section 14.00 on page 5.
13.00	Mandatory Riders - Applicability Index	Section 14.16 Thermal Market Energy Pricing Rider added on page 2.
13.01	Energy Adjustment Rider	The list of how the cost of energy shall be determined in this Rider has been updated on page 3 to exclude any Market Energy related costs under Section 14.16.
13.05	Transmission Cost Recovery Rider	Section 14.16 Thermal Market Energy Pricing Rider added to the footnotes within the Rate Box on page 1.
13.09	Phase-In Cost Recovery Rider	This Rider (pages 1 and 2) has been updated to clearly identify that Section 14.09 and Section 14.16 are an exception.
14.00	Voluntary Riders – Availability Matrix	Section 14.16 Thermal Market Energy Pricing Rider added on pages 1 and 2.

IX. FILING FEE

Under SDCL 49-1A-8, the Commission may require a deposit of up to fifty thousand dollars for the filing of a tariff for approval under the provisions of 49-34A-4. Otter Tail Power will pay such deposit amount as the Commission determines appropriate upon the Commission's Order assessing such fee.

X. CONCLUSION

Otter Tail Power will offer the voluntary TMEP rider to a new, unique type of customer seeking to utilize specific thermal storage technology and operated in a way that does not exceed the output of a specific solar or wind resource, among other criteria. For the reasons described in this Petition, Otter Tail Power respectfully requests approval of the new Thermal Market Energy Pricing rider, Tariff Section 14.16, and the administrative updates to the other Tariff Sections identified above.

Date: April 21, 2025

Respectfully submitted:
OTTER TAIL POWER COMPANY

/s/ Amber Grenier

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