

Staff Briefing Papers

Meeting Date	November 6, 2025	Agenda Item 2*
Company	Otter Tail Power Co.	
Docket No.	E-017/M-25-253	
	In the Matter of Otter Tail Power Co.'s Petition for Approval of a Thermal Technology Market Energy Rate Section 14.16	
Issues	Should the Commission approve Otter Tail Power's TMEP Rider?	
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✓ Relevant Documents	Date
Otter Tail Power Company-Initial Filing	June 6, 2025
Department of Commerce- Comments	August 11, 2025
Otter Tail Power Company- Reply Comments	August 20, 2025

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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I. Background

On June 6, 2025, Otter Tail Power Company (OTP or the Company) filed a petition with the Minnesota Public Utilities Commission (Commission) seeking approval of a new Thermal Market Energy Pricing (TMEP) rider, Tariff Section 14.16. The rider is designed to provide a market-based pricing option for large thermal storage customers whose electric load is directly tied to the output of a specific renewable generator. OTP proposed that the tariff take effect January 1, 2026.

On August 11, 2025, the Minnesota Department of Commerce (Department) filed its comments recommending the Commission approve Otter Tail Power's proposed Thermal Market Energy Pricing (TMEP) Rider and the associated customer notice.

On August 20, 2025, Otter Tail Power filed reply comments supporting the Department's recommendation to approve its proposed Thermal Market Energy Pricing (TMEP) Rider.

II. Discussion

A. Otter Tail Power- Initial Petition

OTP developed the TMEP rider to address the unique operating needs of thermal storage facilities that consume electricity to create and store heat, with consumption limited to the real-time output of a designated wind or solar generator not owned by the Company. Customers eligible for this service must be new greenfield facilities with at least 25 MW of demand, a load factor below 50 percent, and register as a load modifying resource in the MISO market.¹

At present, no Minnesota customers are prepared to take service under the tariff. However, OTP has filed identical petitions in South Dakota and North Dakota. The South Dakota filing was prioritized to serve a specific customer expected to begin taking service in late summer 2025. By establishing the tariff in Minnesota effective January 1, 2026, OTP seeks to provide regulatory certainty and ensure consistent treatment of potential customers across its multi-state service territory.

1. Customer Eligibility

To qualify for service under the TMEP rider, a customer must be a new greenfield facility with a minimum demand of 25 megawatts and a load factor below 50 percent. The customer must

¹ Otter Tail Initial Filing at 5.

employ thermal storage technology that consumes electricity to create and store heat, with all load tied to the hourly output of a specifically identified nearby wind or solar generator that is not owned by Otter Tail Power. The facility's entire load must be registered with the Midcontinent Independent System Operator (MISO) as a Load Modifying Resource and assigned its own Asset Owner and Commercial Pricing Node for market settlement purposes. In addition, customers are prohibited from having behind-the-meter generation except for emergency backup use.

2. Service Characteristics

Under the TMEP rider, participating customers would receive a non-firm, market-based service rather than traditional firm service from OTP's generation fleet.² Energy for these customers will be procured through MISO Day-Ahead (DA) and Real-Time (RT) markets, with hourly prices determined at the customer's assigned Commercial Pricing Node.

Customers must provide OTP with expected hourly load and a maximum willingness-to-pay price for the next business day. OTP will submit this load to MISO as a price-sensitive bid, ensuring that energy clears only if the market price is at or below the customer's threshold. If the DA price exceeds the bid, the customer may still operate during those hours but will pay RT market prices instead. This structure allows customers to respond directly to market signals while remaining bound by the output of their designated renewable generator.

Operationally, all TMEP load is coincident with and limited to the hourly production of a nearby wind or solar resource that the customer identifies in its Electric Service Agreement (ESA). Because OTP does not own these renewable resources, the Company's own generation is not used to serve the TMEP load. Importantly, this means that the non-firm load is fully curtailable if needed for system reliability, and all costs are isolated from OTP's generation and from other customers through separate MISO settlement statements.³

Customers remain responsible for all MISO charges, adders, and applicable riders associated with their non-firm energy consumption. While non-firm load under the TMEP rider is excluded from the Energy Adjustment Rider (EAR) and other generation-based riders, it remains subject to the Energy Conservation and Optimization (ECO) Rider and the Energy-Intensive Trade-Exposed (EITE) Rider.⁴ Additionally, incremental fixed and variable costs necessary to serve the customer will be addressed individually through the ESA to ensure net benefits are maintained.

² Otter Tail Initial Filing at 5.

³ Otter Tail Initial Filing at 10.

⁴ Otter Tail Initial Filing at 6.

3. Billing Design

Billing under the TMEP Rider is divided into three distinct parts, reflecting the different types of service provided to participating customers.

a. Firm Load (Baseline Demand)

Energy consumed up to and including the customer's established Baseline Demand is billed under the standard Large General Service (LGS) tariff. This includes the energy rate, customer charges, facilities charges, and demand charges, along with the full set of mandatory riders normally applied to firm service. These riders include the Energy Adjustment Rider (EAR), Energy Conservation and Optimization (ECO) Rider, Transmission Cost Recovery (TCR) Rider, Renewable Resource Cost Recovery (RRCR) Rider, Uplift Program Rider, Environmental Cost Recovery (ECR) Rider, Revenue Decoupling Mechanism (RDM), Energy-Intensive Trade-Exposed (EITE) Rider, and the Electric Utility Infrastructure Cost (EUIC) Recovery Rider.⁵ Thus, firm load continues to be treated consistently with other large general service customers.

b. Non-Firm Load (Above Baseline Demand)

Consumption above the Baseline Demand is billed at market prices through MISO settlement. Specifically, charges reflect the net of Day-Ahead and Real-Time market settlements at the customer's Commercial Pricing Node, combined with Network Integrated Transmission Service (NITS) charges and a customer charge. Unlike firm load, these non-firm kWhs are not subject to the EAR, RRCR, ECR, EUIC, RDM, or TCR, ensuring that market-based procurement is separated from OTP's generation costs. However, they remain subject to the ECO Rider and the EITE Rider.⁶ This approach ensures that non-firm customers bear their own market costs while continuing to support statewide policy riders.

c. Incremental Service Costs

In addition to Parts a and b, each customer's Electric Service Agreement (ESA) may specify incremental fixed or variable costs unique to serving that facility. These costs reflect the large size of the load (minimum 25 MW), which can influence system operations and cost recovery. OTP designed this structure to ensure that any additional costs are directly assigned to the customer, thereby maintaining net benefits for all ratepayers. This may include special infrastructure, integration expenses, or negotiated rate elements, and ensures that no cross-subsidization occurs between TMEP and non-TMEP customers.

⁵ Otter Tail Initial Filing at 6.

⁶ *Id.*

d. Exclusion from the E2 Allocation Factor

Normally, OTP's E2 allocator is used in rate cases to allocate a large portion of the Company's generation-related costs across its jurisdictions and customer classes. OTP proposed that all kWhs served under the TMEP rider be excluded from this allocator.⁷ The reason is that TMEP service does not rely on OTP's owned generation resources; instead, customers are served entirely through MISO market procurement. Including these kWhs in the allocator would artificially shift generation costs to Minnesota ratepayers in future proceedings. By excluding TMEP kWhs, OTP ensures that these market-based loads do not distort cost allocations across customer classes or jurisdictions.

4. Administrative Updates

To integrate the new TMEP Rider, Section 14.16, OTP proposed several administrative revisions across its tariff documents. These changes are largely technical in nature and are intended to ensure consistency and proper cross-referencing once the rider is approved.

Key Updates Include:

- General Index (Section 00.00): Added Section 14.16 (Thermal Market Energy Pricing Rider) to the tariff index.
- Voluntary Riders – Availability Matrix (Section 14.00): Incorporated the new TMEP Rider into the listing of available voluntary riders.
- Mandatory Riders – Applicability Matrix (Section 13.00): Added the TMEP Rider to clarify which mandatory riders apply.
- Energy Adjustment Rider (Section 13.01): Updated language to specifically exclude TMEP-related market energy from EAR cost calculations, ensuring that market-based kWhs do not influence other customers' EAR rates.
- Energy Conservation and Optimization (ECO) Rider (Section 13.02): Revised to note that the ECO Rider applies to non-firm TMEP energy, consistent with state policy objectives.
- Environmental Cost Recovery (ECR) Rider (Section 13.08): Updated to exempt TMEP Rider energy from application of environmental cost recovery factors.

⁷ Petition at 10.

- Electric Utility Infrastructure Cost (EUIC) Recovery Rider (Section 13.11): Updated to exclude TMEP Rider energy from EUIC charges, as the load is market-based and not served by OTP-owned infrastructure.
- Administrative Edits: Replaced the name of OTP's tariff contact (Bruce G. Gerhardson) with the current Manager of Regulation & Retail Energy Solutions, Stuart D. Tommerdahl, in tariff footers.

5. Customer Notification

OTP plans to include a bill insert/notice to Minnesota customers in January 2026, informing them of the implementation of the new rider (Attachment C to the Petition).

B. Department of Commerce- Comments

1. Evaluation Criteria

a. Fair Return on Investment

The Department evaluated the TMEP Rider under Minnesota Statute § 216B.16, subd. 6, which requires that utility rates provide both adequate service to the public and a fair and reasonable return on the utility's investment.

In its Petition, OTP stated that each customer's Electric Service Agreement (ESA) will include provisions to cover any incremental fixed or variable costs necessary to serve that customer and maintain overall net benefits. This means that if OTP must make additional investments or incur extra service costs to accommodate a TMEP customer, those expenses will be recovered directly from that customer rather than spread across the broader customer base.

The Department concluded that this structure ensures OTP will recover any new costs associated with TMEP service while maintaining protections for other ratepayers.⁸ As such, the TMEP Rider satisfies the principle of providing a fair return on investment for the Company.

b. Reasonable and Non-Discriminatory

Minn. Stat. §§ 216B.03 and 216B.07 requires that utility rates be reasonable and not unreasonably discriminatory. The Department found that the TMEP Rider meets this test because its scope is intentionally narrow and voluntary.⁹ Only large, new thermal storage

⁸ Department comments at 3.

⁹ Department comments at 4.



facilities with specific operating criteria can participate, and these customers are sophisticated enough to evaluate the risks of market-based pricing.

Importantly, the ESA ensures that each TMEP customer covers its own incremental fixed and variable costs. This protects other customer classes from subsidizing TMEP service. Since non-participants are shielded from added costs, and participation is optional, the Department concluded the tariff does not result in unreasonable discrimination.¹⁰

c. Energy Conservation & Use of Renewables

Minnesota statutes¹¹ encourage rate designs that promote energy conservation and the use of renewable resources. The Department observed that customers on the TMEP Rider do not directly purchase energy from a specific renewable generator. Instead, their load is structured so that it only operates concurrent with the hourly output of a nearby wind or solar facility not owned by OTP.¹²

By tying thermal storage consumption to renewable generation output, the TMEP Rider can serve as a sink for excess renewable energy, reducing curtailments and making better use of available clean resources. In this way, the Rider supports renewable integration and advances Minnesota's policy goals on conservation and renewable energy use.

d. Reasonableness in Favor of Consumer

Minn. Stat. § 216B.03 requires that if there is any doubt about the reasonableness of a utility rate, it must be resolved in favor of consumers. In reviewing the TMEP Rider, the Department emphasized that non-TMEP customers will not be negatively impacted. OTP explained that all MISO administrative, interconnection, and transmission costs for TMEP customers are included in the Network Integration Transmission Service (NITS) component of the rider, which is updated annually. Since NITS costs are already reflected in base rates, this structure ensures no additional burden is placed on non-participants.

The only exception is MISO Schedule 26A expenses, but these will be credited back through the Transmission Cost Recovery Rider (TCR) to avoid double recovery. Based on these safeguards, the Department concluded that the TMEP Rider meets the statutory requirement that rates be reasonable and protect consumers.¹³

¹⁰ Department comments at 4.

¹¹ Minn. Stat. § 216B.03 and Minn. Stat. § 216C.05.

¹² *Id.*

¹³ *Id.*

e. Completeness

Under Minn. R. 7829.0100, subp. 11, OTP's Petition is considered a miscellaneous filing because it does not require determining the Company's overall revenue requirement. A miscellaneous filing covers requests such as introducing a new service option or making changes to a utility's rates, services, or terms of service that are handled separately from a general rate case. The inclusion of such filings does not create new filing obligations or confer additional jurisdiction. Minn. R. 7829.1300 further outlines the completeness requirements for miscellaneous filings, including a one-paragraph summary of the filing, service requirements, and requirements for the content included in the filing. The Department reviewed the Petition and found it complies with these completeness requirements.¹⁴

2. Specific Issues Considered

After OTP filed its June 6, 2025 petition, the Commission issued a Notice of Comment Period seeking feedback on the proposed TMEP Rider. The notice asked whether the Rider should be approved now or deferred until OTP secures signed service agreements, whether it fairly compensates non-TMEP customers for administrative, interconnection, and transmission costs, and whether the Company's proposed customer notice should be approved.

a. Approval Timing

The Commission's Notice asked whether approval of the TMEP Rider should be deferred until OTP has a signed service agreement in Minnesota. The Department acknowledged that waiting could provide more context about how the tariff functions in practice. However, it emphasized that the scope of the rider is very narrow, participation is voluntary, and the customers eligible for this service are expected to be large, sophisticated facilities.

Because of these factors, the Department found little risk in approving the tariff now, even without a Minnesota customer ready to take service.¹⁵ Early approval would also give OTP certainty to market the rider to potential customers and establish clear terms upfront. On this basis, the Department recommended that the Commission approve the TMEP Rider.

b. MISO/RTO Costs

The Commission asked whether the TMEP Rider reasonably compensates non-TMEP customers for MISO/RTO administrative, interconnection, and transmission costs, and how those costs would be allocated to TMEP customers.

¹⁴ Department comments at 5.

¹⁵ *Id.*



OTP explained that each TMEP customer would be registered as a separate Asset Owner in MISO, with its load settled independently in the Day-Ahead and Real-Time markets. This ensures that all energy and market-related charges flow directly to the TMEP customer, isolated from other customers. The Network Integration Transmission Service (NITS) rate, which is updated annually by MISO, will be applied to TMEP usage. Because NITS costs are already reflected in base rates, non-TMEP customers will not be affected, except for MISO Schedule 26A charges. Those costs will be credited back through OTP's Transmission Cost Recovery Rider (TCR) to prevent double recovery.

The Department concluded that OTP's proposed treatment is reasonable: using MISO's own settlement system ensures accurate cost assignment, and the reliance on the existing NITS rate fairly allocates transmission-related expenses to TMEP customers.¹⁶ This approach prevents cost-shifting and protects non-participating customers.

c. Customer Notice

The Commission asked whether OTP's proposed customer notice for the TMEP Rider should be approved. The notice provided in OTP's petition was brief, but the Department observed that the only customers eligible for the rider are large, sophisticated industrial facilities with the technical expertise to understand market-based service arrangements. Because of the narrow scope and the sophistication of the target audience, the Department concluded that the proposed notice is adequate and reasonable.¹⁷ The Department recommended that the Commission approve OTP's customer notice as filed.

3. Department Recommendations

The Department recommended approval of OTP's proposed Thermal Market Energy Pricing Rider and its associated customer notice.

III. Staff Recommendation

Staff agrees with the Department's recommendation to approve Otter Tail Power's proposed TMEP Rider. The proposed rider is reasonable and voluntary, and it protects non-participating customers by ensuring that all associated costs and risks are borne by participating customers. The rider offers large thermal storage customers a market-based service linked to renewable generation, consistent with Minnesota's policy objectives of promoting conservation and

¹⁶ Department comments at 6.

¹⁷ Department comments at 7.



renewable energy integration.

IV. Decision Options

1. Approve Otter Tail Power's Thermal Market Energy Pricing (TMEP) Rider.
(Otter Tail Power, Department)
2. Approve Otter Tail Power's proposed customer notice. (Otter Tail Power, Department)