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October 16, 2025



PUBLIC DOCUMENT - NOT PUBLIC

(OR PRIVILEGED) DATA HAS BEEN EXCISED

Ms. Sasha Bergman
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East
Suite 350
St. Paul, MN 55101-2147

RE: In the Matter of Otter Tail Power Company's Petition for Approval of the Hoot Lake Battery
Docket No. E017/M-25Initial Filing

Dear Ms. Bergman:

Otter Tail Power Company (Otter Tail) hereby submits to the Minnesota Public Utilities Commission (Commission) its Petition in the above-referenced matter.

Otter Tail has taken reasonable efforts to maintain the secrecy of the information marked as PROTECTED DATA in the Petition and TRADE SECRET Appendix A and TRADE SECRET Appendix B consist of confidential bidding information, which derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use (the "Protected Data"). The Protected Data is therefore "trade secret information" and "nonpublic data" under Minn. Stat. § 13.37.

We have electronically filed this document with the Commission and copies have been served on all parties on the attached service list. A Certificate of Service is also enclosed.

Please contact me at 218-739-8774 or <u>ldonofrio@otpco.com</u> if you have any questions regarding this filing.

Sincerely,

/s/ Lauren D. Donofrio Lauren D. Donofrio Senior Associate General Counsel - Regulatory

kde
Enclosures
By electronic filing
c: Service List
An Equal Opportunity Employer



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

In the Matter of Otter Tail Power Company's Petition for Approval of the Hoot Lake Battery

Docket No. E017/M-25-

PETITION

I. INTRODUCTION

Otter Tail Power Company (Otter Tail Power) respectfully requests approval by the Minnesota Public Utilities Commission (Commission) to invest in and recover costs for the Hoot Lake Battery Project (the Battery or the Project). Otter Tail Power seeks a determination that (a) approves Otter Tail Power's investment in the Project, and (b) authorizes future cost recovery of the Project through Otter Tail Power's Renewable Resources Cost Recovery Rider (RRCR Rider or Renewable Rider), subject to Commission review and approval of specific costs to be presented by Otter Tail Power in future petitions under Minn. Stat. § 216B.1645, subd. 2a.

The Project will be located in Otter Tail County, Minnesota adjacent to Otter Tail Power's Hoot Lake Solar Plant (Hoot Lake Solar) and will be constructed, owned, and operated by Otter Tail Power. With an operational capacity of 75 MW the Hoot Lake Battery will be a four-hour battery expected to discharge 300 MWh of electricity per day. Otter Tail Power proposes to interconnect the Project using a new interconnection to be established under the Midcontinent Independent System Operator's (MISO) Expedited Resource Addition Study (ERAS) interconnection process.

The Project will provide capacity support for the renewable resources Otter Tail Power is adding to meet the Eligible Energy Technologies Standard (EETS) and the Carbon Free Standard (CFS) in Minn. Stat. § 216B.1691. The Project implements the battery generation resources authorized by the Commission's July 22, 2024 Integrated Resource Plan Order (IRP Order), which authorizes Otter Tail Power to acquire "no less than 20 MWs and up to 75 MWs of battery storage resources with a minimum of four hour duration with a commercial operation date of December 31, 2029 or as soon as practicable thereafter."² The costs and benefits of this low-cost capacity resource will be 100 percent allocated to Minnesota. To

 $^{^1}$ Respectively Minn. Stat. § 216B.1691, subd. 2a and subd. 2g. The Eligible Energy Technologies Standards was formerly referred to as the Renewable Energy Standard. 2 In the Matter of Otter Tail Power's 2023–2037 Integrated Resource Plan, MPUC Docket No. E017/RP-21-339, July 22, 2024 Order Modifying Otter Tail Power's 2023–2037 Integration Resource Plan, Ordering Point 11.

preserve the Project timelines Otter Tail Power Company respectfully requests that the Commission act on this Petition by November 20, 2025.

This project will be the first studied through MISO's ERAS process. Study work began in early September and MISO will deliver the results on November 4, 2025. This means the final interconnection costs³ will not be known until that date. The ERAS process also requires that the Company provide a Notice to Proceed to MISO within five (5) business days of receipt of the draft study results, i.e. on or before November 11, 2025. The Company will then have approximately twenty business days to negotiate the Expedited Generator Interconnection Agreement (EGIA). Once the Company executes the EGIA, Otter Tail Power will be committed to the cost of the implicated transmission upgrades, even if the Project does not come to fruition. While this expedited MISO process compresses the time for regulatory review, it comes with several advantages described below. The value of Otter Tail Power's ongoing procurement process is demonstrated through the Company's readiness to respond to market opportunities as presented by the Hoot Lake Battery and ERAS. While the time allowed for regulatory review may be abbreviated, the Company has thoroughly vetted the Project, which presents a prudent opportunity to meet the needs of our Minnesota customers.

II. **SUMMARY OF FILING**

of commitment.

Pursuant to Minn. Rules 7829.1300, subp. 1, a summary of the filing accompanies this Petition.

III. **GENERAL FILING INFORMATION**

Pursuant to Minn. Rules 7829.1300, subp. 3, the following information is provided.

Name, address, and telephone number of utility

(Minn. Rules 7829.1300, subp. 3(A))

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

³ While we anticipate receiving MISO interconnection costs on November 4, 2025, we may not have the results of the Affected System Study prior to the date Otter Tail Power will be required to execute the Expedited Generator Interconnection Agreement. Because of Otter Tail Power Will be required to execute the Expedited Generator Interconnection Agreement. Because of Otter Tail's service territory location and participation in the MISO-SPP Joint Targeted Interconnection Queue (JTIQ), MISO does not require SPP to conduct an Affected System Study. The only affected system in this instance is that of Minnkota Power Cooperative. The Company's internal studies do not show significant impact upon Minnkota's system, however, as a condition of participation in the ERAS process, Otter Tail Power will have to commit to fund any network upgrades identified by the Affected System Study, without knowing what they are at the time of commitment.

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

(Minn. Rules 7829.1300, subp. 3(B))

Lauren Donofrio Senior Associate General Counsel – Regulatory Otter Tail Power Company 215 South Cascade Street P.O. Box 496 Fergus Falls, Minnesota 56538-0496 (218) 739-8774 Idonofrio@otpco.com

C. Date of filing and proposed effective date of rates

(Minn. Rules 7829.1300, subp. 3(C))

The date of this filing is October 16, 2025. No rates or changes to rates are proposed by this filing.

D. Statutes controlling schedule for processing the filing

(Minn. Rules 7829.1300, subp. 3(D))

This filing is a "miscellaneous tariff filing" as defined by Minn. Rule 7829.0100, subp. 11. No determination of Otter Tail Power's overall revenue requirement is necessary under Minn. Stat. §§ 216B.1691 or 216B.1645. Minn. Rule, 7829.1400, subps. 1 and 4 permit comments in response to a miscellaneous tariff filing to be filed within 30 days and reply comments to be filed no later than 10 days thereafter. The past practice of the Commission, however, is to issue a notice setting a schedule for comments and reply comments from interested parties. To accommodate the Commission's approval prior to the Company having to sign the EGIA, the Company requests an abbreviated comment period. The Company proposes a 20-day comment period, with comments due on or before November 6, 2025 and a 5-day reply comment period, with reply comments due on or before November 12, 2025 (November 11, 2025 is a Commission holiday).

E. Title of utility employee responsible for filing

(Minn. Rules 7829.1300, subp. 3(E))

Nathan Jensen Manager, Resource Planning Otter Tail Power Company 215 South Cascade Street P.O. Box 496 Fergus Falls, MN 56537-0496 (218) 739-8989 njensen@otpco.com

F. Service List

(Minn. Rules 7829.0700)

Otter Tail Power requests that the following persons be placed on the Commission's official service list for this matter and that any trade secret comments, requests, or information be provided to the following on behalf of Otter Tail Power:

Lauren Donofrio Senior Associate General Counsel Regulatory Otter Tail Power Company 215 South Cascade Street P.O. Box 496 Fergus Falls, MN 56538-0496 (218) 739-8774 Idonofrio@otpco.com

Nathan Jensen
Manager, Resource Planning
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56537-0496
(218) 739-8989
njensen@otpco.com

We request that all communications regarding this proceeding, including data requests, also be directed to:

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

G. Service on other parties

(Minn. Rules 7829.1300, subp. 2; Minn. Rules 7829.0600)

Pursuant to Minn. Rule 7829.1300, subp. 2, Otter Tail Power served a copy of this Petition on the Division of Energy Resources of the Department of Commerce and the Residential Utilities Division of the Office of the Attorney General. A summary of the filing prepared in accordance with Minn. Rule 7829.1300, subp. 1 was served on all parties on Otter Tail Power's general service list.

IV. DESCRIPTION AND PURPOSE OF FILING

Otter Tail Power is seeking a Commission determination that the Project qualifies for cost recovery through Otter Tail Power's Renewable Rider, subject to Commission review and approval of specific costs to be presented by Otter Tail Power in future petitions.

This Petition is authorized by Minn. Stat. §216B.1645. Subdivision 1 of that statute authorizes the Commission to "approve or disapprove power purchase contracts, investments, or expenditures entered into or made by the utility to satisfy the wind and biomass mandates contained in sections 216B.169, 216B.2423, and 216B.2424, and to satisfy the renewable energy objectives and standards set forth in section 216B.1691" This includes reasonable investments and expenditures to provide storage facilities for renewable energy generation facilities that contribute to the reliability, efficiency, or cost-effectiveness of the renewable facilities. Under Subdivision 2a(a)3, utilities may petition the Commission to approve a rate schedule with an automatic adjustment of charges that allows the utility to recover appropriate energy storage expenses:

allows recovery of other expenses incurred that are directly related to a renewable energy project, including expenses for energy storage, provided that the utility demonstrates to the commission's satisfaction that the expenses...advance research and understanding of how storage devices may improve renewable energy projects, or facilitate coordination with the development of transmission necessary to transport energy produced by the project.

The Project will be the first utility-scale storage project implemented by the Company. It will be dispatched to the electric grid through a new, independent interconnection but will be immediately adjacent to the Company's 50 MW Hoot Lake Solar generation. The close proximity of the solar energy resource and the battery capacity resource located in Fergus Falls, MN, which is one of the largest communities Otter Tail Power serves, will certainly provide useful experience in how these resources may be deployed in the future. The Project is designed to support a carbon-free system, including supporting integration and reliability of renewable energy resources. The Battery will be deployed and operated as a MISO system asset that can meet energy and capacity needs that may otherwise need to be met by non-renewable resources. The market dispatch, charge and discharge timing, and revenues generated by the storage resource, are all aspects of grid integrated renewable and storage resources for which this project will provide valuable insights.

The Commission established Otter Tail Power's Renewable Rider in Docket No. E017/M-08-119. Otter Tail Power seeks authority to use this vehicle to recover certain costs of the Project as a qualified resource addition, recognizing that specific project costs must be reviewed and approved in subsequent filings.

V. PROJECT DESCRIPTION

A. Project Location & Description

Otter Tail Power proposes to construct and operate the Project, a four-hour battery facility with a nameplate capacity of 75 MW in Fergus Falls in Otter Tail County, Minnesota.

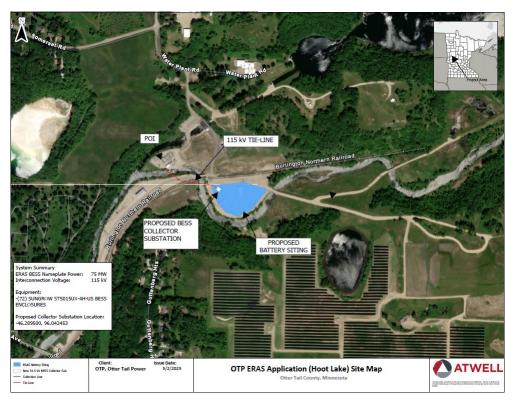


Figure 1 - Project Map

Otter Tail Power proposes to interconnect the Project using the MISO ERAS process which will result in a standalone interconnection for the battery project itself. Otter Tail Power filed a request with MISO using its ERAS process on August 6, 2025. For the purposes of this filing, and for considering the Project against other potential battery projects, the Company has used a placeholder value for interconnection costs based on internal analysis and subsequent estimates. We anticipate receiving MISO interconnection costs November 4, 2025.⁴ The Project will utilize the Lithium-Iron Phosphate (LFP) technology most common in utility-scale battery energy storage systems (BESS) today. Lithium-Iron Phosphate batteries are known for their safety because they have a lower risk of thermal runaway compared to other lithium-ion batteries; they

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⁴ As set out more fully in the preceding footnote, while we anticipate receiving MISO interconnection costs on November 4, 2025, we may not have the results of the Minnkota Affected System Study prior to the date Otter Tail Power will be required to execute the EGIA.

endure more charge and discharge cycles and are less toxic and more environmentally friendly than other lithium-ion battery alternatives. The Project's daily energy output is expected to be approximately 300 MWh a day as the most efficient way to operate this technology is at a rate of one full cycle per day.

A. Estimated Project Schedule

For ERAS compliance, the Project must be commercially operational by August 4 of 2028.⁵ The Company's proposed project can meet this deadline. Moreover, the Company continues to evaluate options to pursue a Commercial Operation Date (COD) in December of 2027 as well, if that option becomes more economical due to various market influences. Otter Tail Power anticipates filing a Site Permit Application for the Project before the Commission in the near future. The following schedule (Table 1) is the anticipated timeline for the various phases of development. This schedule is based on information known at the time of this Petition filing.

Table 1 - Hoot Lake Battery Project Schedule

Activity	Description	Timeline			
Land Acquisition	Secure land rights necessary for development of the Project.	Complete			
Interconnection Application	Approval from MISO to connect the Project to the grid and signed Interconnection Agreement.	Submitted August 6, 2025			
Site Permit	Site Permit Application filed for the Project.	Q1 2026 (2027 COD) or Q3 2026 (2028 COD)			
Other Permits	Obtain all federal, state, local, and tribal government permits and approvals necessary for construction and operation of the Project.	Prior to Construction			
Equipment Procurement and Contractor Selection	Procurement of Project equipment. Final contractor selections will be made contingent on the Site Permit Application being approved by the Commission.	July through September 2026 – although vendors conversations are occurring monthly			
Construction	Physical Construction of the Project on site.	After Site Permit issuance			
Testing and Commissioning	Testing and commissioning of project related equipment.	Q3-Q4 2027 or Q2-Q3 2028			
Operation	Commercial operation of the Project following construction and testing/commissioning activities.	December of 2027 or by August 4, 2028			

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⁵ The ERAS process allows for limited extension of this date for a maximum of three years for certain delays to the in-service date that are outside of Company control.

B. Projected Project Cost

Otter Tail Power estimates the total capital cost of the Hoot Lake Battery Project will be approximately **[PROTECTED DATA BEGINS...**

...PROTECTED DATA ENDS]

The table is inclusive of the placeholder value for interconnection costs, as Otter Tail Power will not know what these are until approximately November 4, 2025.⁶ The Company will update the Commission as soon as it is aware of these costs from MISO. As discussed below, the projected levelized cost of capacity (LCOC) for the Project is [PROTECTED DATA BEGINS... ...PROTECTED DATA ENDS].

VI. JURISDICTIONAL ALLOCATIONS

Otter Tail Power intends to construct and operate the Project for the benefit of the Company's Minnesota customers. Otter Tail Power will allocate 100 percent of the Project's cost and output to Minnesota customers. The Project will operate like the Hoot Lake Solar Project, with 100 percent of the Project's output allocated for use by Minnesota customers and 100 percent of Otter Tail Power's investment eligible for future recovery from Minnesota customers through Otter Tail Power's RRCR Rider. North Dakota's approved Integrated Resource Plan does not include the addition of any new battery project. There is no

⁶ As set out more fully in footnote 3, while we anticipate receiving MISO interconnection costs on November 4, 2025, we may not have the results of the Minnkota Affected System Study prior to the date Otter Tail Power will be required to execute the EGIA.

Power will be required to execute the EGIA.

In the Company's North Dakota Integrated Resource Plan (NDPSC Case No. PU-21-380) the North Dakota Public Service Commission noted that "the Commission does not support the addition of new wind or solar generation or battery storage through 2030." See Order and Guidance on Integrated Resource Plan, December 4, 2024, p. 2 at https://www.psc.nd.gov/database/documents/21-0380/032-010.pdf accessed October 16, 2025.

Integrated Resource Planning process or Advanced Determination of Prudence review process in South Dakota that would give rise to the Relevant Electric Retail Rate Authority (RERRA) certification required for participation in the MISO ERAs process. In addition, the IRP Order contemplates exit from a current capacity resource for Minnesota customers. South Dakota has not issued a similar order. It was for these reasons that the Company requested, and the Commission granted, certification to MISO of a need for the entire 75 MW battery project on August 11, 2025.

As such, full allocation of costs and benefits to Minnesota customers is appropriate for the Hoot Lake Battery Project. Assuming for analysis that the Commission deems the Project eligible for RRCR Rider recovery, Otter Tail Power subsequent RRCR Rider filing(s) seeking recovery of specific project costs will account for the full allocation of the Projects' cost and benefits to Minnesota customers.

VII. INVESTMENT IN THE HOOT LAKE BATTERY PROJECT IS REASONABLE, PRUDENT, AND ELIGIBLE FOR INCLUSION IN THE RRCR RIDER

Based on the factors discussed below, Otter Tail Power requests the Commission approve Otter Tail Power's investment in the Project and determine that the investment is eligible for RRCR Rider recovery. In the Commission's recent IRP Order, the Commission ordered the Company to pursue a significant battery storage project:

[T]he Commission considers it important for Otter Tail to add a battery storage resource, which will not only provide Otter Tail with added capacity and reliability benefits, but also give Otter Tail an opportunity to learn about integrating and operating such resources. The Commission will therefore direct Otter Tail to pursue adding 20 to 75 MWs of battery storage by December 31, 2029, or as soon as practicable thereafter.

This cost-effective project is a reasonable and prudent way for Otter Tail Power to comply with the Commission's IRP Order, satisfy the Company's capacity needs, and support the Company's transition to carbon free generation for its Minnesota customers. The cost of the Project is less than the next most competitive project evaluated by Otter Tail Power, resulting in substantial savings for Minnesota customers. The Project will protect Minnesota customers from projected increases in capacity market prices and help the Company transition from current assets to a new portfolio characterized by higher reliance on variable resources.

The significant benefits provided by the Project come with risks. These risks can be mitigated in large part through continued collaboration with vendors and contractors, thoughtful design, and continued monitoring of potential legislative or other macroeconomic changes such as tariffs. Otter Tail Power believes the benefits the Project provides our customers outweigh these risks.

Capacity Position

Since the Company received its most recent IRP order, the FERC has approved several MISO resource adequacy reforms, and we expect MISO to file additional tariff reforms that will have capacity position implications. These include FERC's approval of Direct Loss of Load ("DLOL") accreditation⁸ and the Reliability Based Demand Curve (RBDC),9 which on their own may negatively impact the Company's capacity position. MISO is currently discussing reforms to the allocation of Planning Reserve Margin Requirement (PRMR) coinciding with DLOL, but the impact is unknown, adding significant uncertainty to the Company's capacity position beginning with Planning Year 2028-2029. The Company may not see the full offset to its PRMR that comes with DLOL depending on how the final methodology allocates PRMR based on Load Serving Entity load during times of system need. Additionally, MISO has filed several dockets with FERC for Load Modifying Resource (LMR) reform.¹⁰ These reforms include accreditation changes, potential increases to the maximum amount of curtailments, enhanced testing requirements, and increased penalties. The Company could see larger impacts from these LMR reforms than other Load Serving Entities as the Company has one of the highest Demand Response penetrations in the nation. The Company has evaluated its capacity position based on internal projections utilizing MISO's resource class accreditation forecast, with the Company's approved wind and solar projects included. This analysis shows that when the Company may no longer rely upon Minnesota customers' portion of Coyote Station¹¹ for capacity purposes, the Company will be significantly short of capacity for Minnesota customers. The addition of the 75 MW battery will allow the Company to satisfy its capacity needs, plus a very small cushion for moderate growth.

The IRP Order authorizes the Company to acquire 20-75 MWs of battery resources with a commercial operation date of December 31, 2029, or as soon as practicable thereafter.¹² The Project represents 75 MW of new battery storage resources. This figure meets the 20-75 MW of new battery resources called for in the The choice of the high end of the range for the sizing of the Project is IRP Order.

⁸ In re Midcontinent Independent System Operator, Inc., FERC Docket No. ER24-1638, October 25, 2024 Order Accepting Proposed Tariff Revisions, accessed October 16, 2025 at

https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20241025-3063.

In re Midcontinent Independent System Operator, Inc., FERC Docket No. ER-2977, June 27, 2024 Order Accepting Tariff Revisions, at https://www.ferc.gov/media/e-2-er23-2977-000 accessed October 16, 2025.

In re Midcontinent Independent System Operator, Inc., FERC Docket No. ER25-1886, April 4, 2025. MISO Transmittal Letter requesting Tariff Revisions at https://cdn.misoenergy.org/2025-04-04%20Docket%20No.%20ER25-1886-000689474.pdf, accessed October 16, 2025; In re Midcontinent <u>U4%2UDocket%2UNo.%2UER25-1886-000689474.pdf</u>, accessed October 16, 2025; *In re Midcontinent Independent System Operator, Inc.*, FERC Docket No. ER25-2845, July 14, 2025 MISO Transmittal Letter requesting Tariff Revisions, at https://cdn.misoenergy.org/2025-07-14%20Docket%20No.%20ER25-2845-000707828.pdf accessed October 16, 2025.

11 Coyote Station is a 427 MW coal-powered facility in North Dakota, co-owned by Otter Tail Power.

12 *In the Matter of Otter Tail Power's 2023-2037 Integrated Resource Plan*, MPUC Docket No. E017/RP-21-339, July 22, 2024 Order Modifying Otter Tail Power's 2023–2037 Integration Resource Plan, Ordering Paragraph 11 at 20.

warranted in part by the very favorable LCOC of the Project, the fact that smaller projects have higher LCOCs and the fact the additional megawatts of battery or other resources will be necessary to meet Otter Tail Power's capacity needs.

Figure 2 below depicts the Company's capacity position implementing the capacity additions and subtractions approved by the Commission in the IRP Order and accounting for the existing and expected MISO capacity reforms.

Figure 2 – OTP Winter Capacity Position – IRP Order [PROTECTED DATA BEGINS...

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B. Competitive Selection Process and Project Costs

Otter Tail Power identified and selected the Project through the Company's competitive, flexible acquisition process; a process where Otter Tail Power's Development, Engineering & Construction (DEC) staff have on-going, iterative discussions with developers and suppliers for projects in MISO Zone 1 that align with Otter Tail Power's resource needs. Discussions with developers and suppliers concerning battery projects have been on-going since 2023. Otter Tail Power has

described its flexible, competitive acquisition process, and evaluation criteria in compliance filings in Otter Tail Power's IRP docket.¹³

The on-going, iterative communications with developers and suppliers are part of a winnowing and narrowing process designed to identify viable, competitively priced projects that correspond to Otter Tail Power's resource needs. In the initial stages of this process a potential project's competitiveness refers in large measure to the project's pricing relative to the pricing assumptions in the Company's most recent IRP, which serves as an objective benchmark. This process allows Otter Tail Power to identify projects that warrant further discussion and evaluation. Competitive, viable projects where the developer has provided written indicative pricing and supporting information are compiled on a "green sheet," which is continuously updated as some projects drop out, and others are added. Through this process Otter Tail Power developed a final list of six competitive, viable projects. The DEC staff then submits the green sheet to the Resource Planning department, which validates the quotes, and evaluates the projects on the following criteria:

- 1. levelized cost of capacity to Otter Tail customers;
- 2. round-Trip Efficiency guarantees, if any;
- 3. battery Provider, if known;
- 4. indication of site commitment;
- 5. status of generation interconnection;
- 6. location of interconnection:
- 7. project permitting status;
- 8. developer's experience in developing energy facilities; and
- 9. other public interest benefits/considerations.

The Resource Planning department then selects a project for recommendation to the executive team. The Company retained LEIDOS Engineering, LLC, an independent auditor, to review its process, evaluation and selection of the Project. We expect the auditor's report by November 11, 2025. The Company will update the docket with that report as soon as it is available.

The following Table 3 provides a summary of the competitive proposals evaluated by Otter Tail Power. Proposal 6 is the Hoot Lake Battery Project. Supporting documentation regarding the competitive process and all evaluation criterion, namely the Green Sheet is attached hereto as Confidential Appendix A. Detailed information regarding individual projects is attached hereto as Confidential Appendix B.

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 $^{^{\}rm 13}$ Otter Tail Power's August 16, 2024, IRP Compliance Filing described the process the Company uses to evaluate, select and acquire Commission-authorized resources.

Table 3 – Competitive Project List Summary [PROTECTED DATA BEGINS...

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The Company selected the Hoot Lake Battery Project primarily because its LCOC was the lowest among the proposals evaluated. In addition to having the lowest LCOC, the project scored positively on the other factors detailed above.

The favorable LCOC of the Hoot Lake Battery project produces savings as compared to the next least-cost project, as shown in Table 4 below, which shows the difference between these projects' net present value revenue requirement (NPVRR).

Table 4 - Comparison between Hoot Lake Battery and next project

		NPVRR	
75 MW HL BESS	[PROTECTED DATA BEGINS		
75 MW of Next Cheapest Projects			PROTECTED DATA ENDS]
OTP MN Customer NPVRR Savings		\$14,741,502	

The favorable LCOC for the Projects is based in part on the flexibility of Otter Tail Power's procurement process, which allows Otter Tail Power to adapt to market conditions in component procurement and other project inputs that are ever-changing in today's environment. Unless MISO interconnection costs are determined to be significantly higher than expected, the LCOC of the Project will remain the most favorable.

Another factor in the Project's favorable LCOC is the manner in which Otter Tail Power engineers, procures and constructs projects. Otter Tail Power will not utilize a

¹⁴ Guaranteed nameplate is an industry term that takes into account the fact that batteries, by their nature, degrade over time. It is standard in the industry to slightly overbuild batteries such that the desired MW output will be the measured output at some point in the future. Most battery manufacturers suggest augmenting the battery after ten years to prevent any degradation in overall maximum MW capacity. This measurement, i.e. how long the battery is guaranteed to maintain its nameplate capacity, is not relevant in the context of a PPA. This is because PPAs are typically billed on a per-kW-month basis. One would expect a battery PPA provider to maintain the nameplate capacity of its battery so the capacity value of the PPA is not impaired.

full engineering, procurement, and construction (EPC) firm to execute the project's ultimate completion. Within a full EPC "wrap" there are generally cascading margins throughout the project's life cycle. Instead, Otter Tail Power will limit margins by directly securing major component purchases and directly contracting with installers. Finally, the last driver for the low-cost project at Hoot Lake is land acquisition. Otter Tail Power is able to locate the Project on land already owned by the Company, eliminating land-acquisition costs or operational lease payments over the life of the project.

C. Related Benefits

The Project, as proposed, would provide Minnesota customers with additional reliability benefits. To quantify this benefit, Otter Tail Power compared expected unserved energy (EUE)¹⁵ results in a production cost model with the 75 MW Battery to results without the IRP battery in CY 2032. Results of this comparison are shown in Figure 3. In this comparison, market purchases are turned off so that the Company can evaluate the impact of the battery being on the system compared against without it being on the system from an EUE perspective, all other inputs being the same. The results show that having the battery on the Company's Minnesota system decreases EUE by 50%.

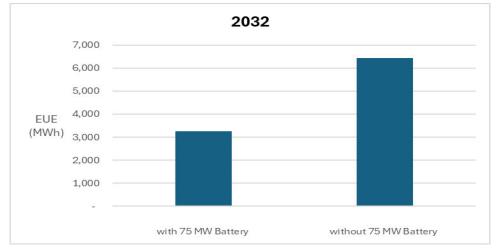


Figure 3 – Expected Unserved Energy

D. Risk of Stranded Costs

Due to the non-refundable nature of the network upgrade commitments required when a utility acquires interconnection via the ERAS process, the potential for stranded costs carries greater than typical risk. Specifically, should the project not come to fruition due to changes in the market, tariffs, vendor failure, or other reasons,

¹⁵ EUE measures the total amount of energy expected to be shed due to insufficient generation capacity.

the Company will remain responsible for making (or funding) the MISO-identified upgrades. This means that if the Company cannot, for example, reach an agreement with its battery vendor, the network upgrade costs will remain. The most significant monetary risk the Project faces is the fluctuating tariffs that we currently face. The Company will navigate this market by remaining flexible with COD commitments, consistent vendor conversations, as well as many other unique and/or creative solutions that we may discover along the way.

Otter Tail Power also anticipates the project will be eligible for investment tax credits (ITC) as passed in the Inflation Reduction Act (IRA) of 2022. The ITCs are a significant part of the overall economics for the Project. Battery projects remain eligible for ITCs through 2033, though there is always the risk of future legislation that could impact continued eligibility. In order to mitigate the risk of future legislative changes and avoid implications of the Foreign Entities of Concern provisions applicable to projects beginning in 2026, the Company plans to begin construction in 2025.

E. Risk of Loss

The risk of loss of a battery facility comes from two most likely sources, weather and fire. Batteries are not directly exposed to the elements but could be damaged by extreme weather like tornadoes or floods. Batteries contain volatile electrolytes that can release flammable gases when damaged. Batteries also have the potential to overcharge or overheat, leading to high temperatures that can also cause release and ignition of flammable gases. The Company has not yet finalized its battery vendor but will work with that vendor to ensure that its facilities are appropriately equipped with monitoring and fire suppression equipment to mitigate these risks. Insurance coverage for these types of losses is another item that the Company will continue to monitor as the market evolves. The Company will ensure that potential insurance brokers have input into the engineering and construction phases to ensure the best possible outcome for our customers with regards to premiums and deductibles.

F. Other Risks

There are capacity accreditation risks to all storage projects as future accreditation will be dependent on resource class performance during highest system need. The depth and duration of these reliability events will be subject to future MISO load profiles and resource mix. The Project will be positioned to augment the battery capacity to extend the duration and improve accreditation levels if the Company determines a future need.

Finally, contract and counterparty risks associated with suppliers, vendors, and on-site contractors will be addressed through use of prudent contracting terms Otter Tail Power has applied in other large projects.

If the Commission sets a soft cap for costs associated with the Project, the Company should be entitled to request additional cost recovery for costs outside the Company's control.

VIII. CONCLUSION

Based on the foregoing, Otter Tail Power respectfully requests the Commission:

- a. approve Otter Tail Power's investment in the Project;
- b. authorize future cost recovery of the Project through the RRCR Rider, subject to Commission review and approval of specific costs to be presented by Otter Tail Power in a future petition under Minn. Stat. § 216B.1645, subd. 2a.

Dated: October 16, 2025 Respectfully submitted,

OTTER TAIL POWER COMPANY

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[PROTECTED DATA BEGINS...

Docket No. E017/M-25- $Appendix \, A \\ is \, CONFIDENTIAL \, in \, its \, Entirety \\$

...PROTECTED DATA ENDS]

[PROTECTED DATA BEGINS...

Docket No. E017/M-25-Appendix B is CONFIDENTIAL in its Entirety

...PROTECTED DATA ENDS]

CERTIFICATE OF SERVICE

RE: In the Matter of Otter Tail Power Company's Petition for Approval of the Hoot Lake Battery Docket No. E017/M-25-

I, Khris Ekstrom, hereby certify that I have this day served a copy of the following, or a summary thereof, on Sasha Bergman and Sharon Ferguson by e-filing, and to all other persons on the attached service list by electronic service or by First Class Mail.

Otter Tail Power Company Initial Filing

Dated this 16TH day of October, 2025.

/s/ KHRIS EKSTROM
Khris Ekstrom
Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
Fergus Falls MN 56537
(218) 739-8334

								Alternate	View	
#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Delivery Method	Trade	Service List Name
1	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
2	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
3	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
4	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	Minnesota Street Suite	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
5	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101- 2198 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
6	Jessica	Fyhrie	jfyhrie@otpco.com	Otter Tail Power Company		PO Box 496 Fergus Falls MN, 56538- 0496 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
7	Amber	Grenier	agrenier@otpco.com	Otter Tail Power Company		215 S. Cascade St. Fergus Falls MN, 56537 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
8	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
9	Nick	Kaneski	nick.kaneski@enbridge.com	Enbridge Energy Company, Inc.		11 East Superior St Ste 125 Duluth MN, 55802 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
10	James D.	Larson	james.larson@avantenergy.com	Avant Energy Services		220 S 6th St Ste 1300 Minneapolis MN, 55402 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
11	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
12	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	Trade	Service List Name
13	Matthew	Olsen	molsen@otpco.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
14	Generic Notice	Regulatory	regulatory_filing_coordinators@otpco.com	Otter Tail Power Company		215 S. Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
15	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
16	Cary	Stephenson	cstephenson@otpco.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment
17	Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company		215 S Cascade St PO Box 496 Fergus Falls MN, 56537 United States	Electronic Service		No	Otter Tail Power Company Renewable Resource Assessment