

**STATE OF SOUTH DAKOTA
BEFORE THE
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION**

**In the Matter of Otter Tail Power
Company's Petition for Approval
of an Electric Service Agreement
for Big Stone South Energy Storage
Project, LLC and associated Tariff
Revisions**

Docket No. EL25-

PETITION

I. PETITION SUMMARY

Otter Tail Power Company (Otter Tail Power or Company) hereby Petitions the South Dakota Public Utilities Commission for approval of a new Electric Service Agreement (ESA) with deviations between Otter Tail Power and Big Stone Energy Storage Project, LLC (BSESP) and associated revisions to the Company's Electric Tariff. The proposed revised rate schedule, Section 16.00, Ninth Revised Sheet No. 1 Cancelling Eighth Revised Sheet No. 1, Summary of Contracts with Deviations, includes a reference to a new ESA between Otter Tail Power and BSESP. The Company respectfully requests Commission approval of the proposed ESA and proposed Tariff revision.

II. INTRODUCTION

BSESP will be a large load at a new location with an estimated partially controllable demand of 155,000 kW, of which [**PROTECTED DATA BEGINS...**

...PROTECTED DATA ENDS]

when operating at full capacity. Otter Tail Power requests approval so that BSESP may obtain reliable and competitive electric service at its proposed location near Big Stone City, South Dakota (the Customer Facility).

BSESP plans to run a thermal storage facility. BSESP will use electricity to heat blocks of carbon, which store heat, which in turn will be used to heat water to create steam. BSESP will then pipe the steam to nearby bio-fuels company, POET Biorefining – Big Stone, LLC (POET) for use in its industrial processes. Except for [**PROTECTED DATA BEGINS...**

...PROTECTED DATA ENDS], the remaining BSESP load is highly controllable, meaning that it does not need to consume energy all the time. In fact, once fully heated, the blocks will keep and emit sufficient heat to run POET's biorefining process for multiple days without recharge.

This novel attribute of the thermal storage facility allows BSESP to heat the carbon blocks primarily when market prices for energy are very low. **[PROTECTED DATA BEGINS...**

...PROTECTED DATA ENDS].

Using this fairly new technology, BSESP will provide steam service to POET. With this new steam service, POET is working to qualify for federal tax credits under IRC § 45z that will help POET to remain competitive in the biorefining industry and lower its Carbon Intensity (CI) score, which is used for pricing in Low Carbon Fuel Standard (LCFS) markets. Otter Tail Power plans to serve BSESP via new distribution assets including two new transformers and two new sections of underground cable that will connect BSESP and POET through Otter Tail Power's Big Stone South Substation. Otter Tail Power has entered into an ESA with BSESP, conditioned upon Commission approval, with a twenty-year term and protections for other customers and the Company, where the customer would take service of its firm load via the Large General Service (LGS) Tariff Section 10.04, and its non-firm load via the Company's new Thermal Market Energy Pricing Rider.¹

III. 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
(218) 739-8200

B. Name, address, and telephone number of the attorney for Otter Tail Power Company

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

¹ Proposed in a separate filing made contemporaneously with this filing.

C. Title of utility employee responsible for filing

Christopher Waltz
Manager Sales & Economic Development
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8492

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 April 21, 2025. Otter Tail Power requests approval as of the earliest possible date, or by August 1, 2025. The ESA is subject to Commission approval, and BSESP plans to begin commercial operation in August 2025.

F. Statutes controlling schedule for processing the filing

Otter Tail Power makes this filing pursuant to Administrative Rules of South Dakota (ARSD) § 20:10:13:36, which requires the Utility to file one copy of all its contracts with deviations for the sale of public utility service. Otter Tail Power attaches hereto a copy of the ESA, as Confidential Exhibit C – Proposed ESA, for which the Company requests confidential treatment pursuant to ARSD § 20:10:01:41 (see Exhibit B – Request for Confidential Treatment). This filing is also subject to ARSD § 20:10:13:39, providing the filing requirements associated with a filing to change the provisions of a rate schedule. Each of the filing requirements is set forth below.

IV. FILING REQUIREMENTS

As required by ARSD § 20:10:13:39, Otter Tail Power provides the filing information required to accompany a request for approval of a change in the provisions of a rate schedule.

A. The documents submitted with this filing include:

1. The proposed revised rate schedule Section 16.00, Ninth Revised Sheet No. 1 Cancelling Eighth Revised Sheet No. 1, Summary of Contracts with Deviations, which includes a reference to the proposed ESA, attached as Exhibit A. In addition, we are taking this opportunity to replace Bruce G. Gerhardson with our Manager of Regulation & Retail Energy Solutions, Stuart D. Tommerdahl, in the footer of this tariff sheet.
2. A copy of the executed proposed ESA, the Amended and Restated Electric Service Agreement, attached as Confidential Exhibit C – Proposed ESA, for which the Company requests confidential treatment pursuant to ARSD § 20:10:01:41 (see Exhibit B – Request for Confidential Treatment).
3. A copy of the workpapers that include the listing of the costs for Otter Tail Power to construct the electric facilities to serve BSESP, attached as Confidential Exhibit D – Capital Estimate, for which the Company requests confidential treatment pursuant to ARSD § 20:10:01:41 (see Exhibit B – Request for Confidential Treatment).
4. A copy of the workpaper that shows the cost recovery of capital expenditures to serve BSESP provided by the revenue from BSESP over the term of the proposed ESA, attached as Confidential Exhibit E – Cost Recovery, for which the Company requests confidential treatment pursuant to ARSD § 20:10:01:41 (see Exhibit B – Request for Confidential Treatment).
5. A copy of the Tariff Schedule Change Report pursuant to ARSD § 20:10:13:26, Exhibit F.

B. The proposed effective date for the tariff revision

The proposed effective date of the tariff revision and the proposed ESA is August 1, 2025, or when approved by the Commission. BSESP intends to begin commercial operation in August 2025.

C. The names and addresses of those to whom this filing has been emailed

Big Stone Energy Storage Project, LLC
c/o Lisa Agrimonti
Fredrikson & Byron, P.A.
60 South Sixth Street, Ste 1500
Minneapolis, MN 55402
lagrimonti@fredlaw.com

D. Brief description of the proposed tariff changes and proposed ESA deviations

The proposed revised rate schedule, Section 16.00, Summary of Contracts with Deviations, adds a reference to the ESA between Otter Tail Power and BSESP.

The proposed ESA with BSESP contemplates a large load at a new location, with an estimated partially controllable demand of 155,000 kW, of which **[PROTECTED DATA BEGINS...**

...PROTECTED DATA ENDS] when operating at capacity. Otter Tail Power will serve BSESP's firm load on primary service (Rate Code S602) of the LGS Tariff Section 10.04. Otter Tail will serve BSESP's non-firm load on the Company's new Thermal Market Energy Rate Rider² which will be Tariff Section 14.16. The Customer's ESA deviates from our standard ESA in several material ways, set out below. The proposed ESA has the following key deviations from the standard ESA: **[PROTECTED DATA BEGINS...**

² Proposed in a separate filing made contemporaneously with this filing.

³ Otter Tail Power will request MPUC and NDPSC approval of an identical Thermal Market Energy Rate Riders, planned to be filed in April of 2025.

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E. Reasons for the proposed tariff changes

Otter Tail Power requests approval so that BSESP can obtain reliable and competitive electric service at its new location near Big Stone City, South Dakota that allows BSESP to operate this very unique facility and technology in a way that delivers economically generated steam to its end-use customer, POET. Otter Tail Power can fairly and economically provide service via the ESA with deviations for the proposed term. Deviations are necessary because of the size of the load, its unique characteristic as a purely generation-following load (for BSESP's non-firm load), and the substantial capital costs Otter Tail Power will incur to serve BSESP. Deviations are necessary to allow for sufficient protection for the Company and its existing customers to insulate against stranded asset risk if BSESP's new venture fails. BSESP's new thermal storage technology has previously been demonstrated effective at one (1) MW but has not been commercially demonstrated. This will be the first commercial-scale deployment of BSESP's new technology. This exciting project, if successful, will foster economic development in South Dakota and could aid the state's ethanol producers to be more competitive and enter new markets for their fuels. Any new venture or new technology carries risks, and the proposed ESA appropriately apportions risk protecting Otter Tail Power customers and the Company. The added revenue from BSESP will appropriately cover the cost to serve this new customer and will provide net benefits to existing customers.

F. Number of customers whose cost of service will be affected and annual amounts of either increases or decreases, or both, in cost of service to such customers.

BSESP is the only customer affected by this filing. All other South Dakota electric customers will benefit indirectly from BSESP receiving service from Otter Tail Power.

V. 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.

VI. CONCLUSION

For the foregoing reasons, Otter Tail Power respectfully requests the Commission approve the new Electric Service Agreement with deviations between Otter Tail Power and Big Stone Energy Storage Project, LLC and Otter Tail Power's proposed revised rate schedule, Section 16.00, Summary of Contracts with Deviations, which includes a reference to the new Electric Service Agreement between Otter Tail Power and Big Stone Energy Storage Project, LLC.

Date: April 21, 2025

Respectfully submitted,

OTTER TAIL POWER COMPANY

/s/ CHRISTOPHER WALTZ

Christopher Waltz

Manager Sales & Economic Development

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