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October 14, 2022



Mr. Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East
Suite 350
St. Paul, MN 55101-2147

**PUBLIC DOCUMENT – NOT PUBLIC
(OR PRIVILEGED) DATA HAS BEEN EXCISED**

**RE: In the Matter of Otter Tail Power Company's 2022-2036 Resource Plan
Docket No. E017/RP-21-339
Supplemental Filing and Request for Changes in Procedural Schedule**

Dear Mr. Seuffert:

Otter Tail Power Company (Otter Tail) hereby submits to the Minnesota Public Utilities Commission (Commission) the following update to our Initial Filing dated September 1, 2021. The purpose of this letter is to address developments since the Initial Filing and to respectfully request that the Commission amend the current procedural schedule to permit Otter Tail to update its modeling in light of recent developments.¹ For the reasons noted below we are also asking the Commission to maintain the current IRP procedural schedule as it relates to dual fuel at Astoria Station.

Please note that this Supplemental Filing contains non-public information marked below concerning updated development costs (the "Protected Data"). The Protected Data has economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by other persons and is subject to the efforts by Otter Tail to protect the information from public disclosure. The Protected Data therefore: (1) constitutes trade secret information, as defined in Minn. Stat. § 13.37, subd. 1(b); (2) is classified as nonpublic data pursuant to Minn. Stat. § 13.37, subd. 2; (3) is also not public data, as defined in Minn. Stat. § 13.02, subd. 8a; and (4) is protected data under Minn. R. 7829.0100, subp. 19a(A).

Recent Developments Support Changes to Procedural Schedule

The primary basis of our request to amend the procedural schedule is recent action by the Federal Energy Regulatory Commission (FERC) and the Midcontinent Independent System Operator (MISO). On August 31, 2022, FERC approved MISO Tariff revisions that include the adoption of a seasonal resource adequacy construct and capacity requirements.² These changes allow MISO to move forward with seasonal capacity auctions with each season having its own capacity

¹ The deadline for filing initial comments is November 14, 2022. The reply comments deadline is January 17, 2023. *Fourth Notice of Extended Comment Period*, September 14, 2022.

² 180 FERC ¶ 61,141 Order Accepting Proposed Tariff Revisions Subject to Condition, August 31, 2022. FERC Docket Nos. ER22-495-000, ER22-495-001.

requirement based on seasonal coincident peak loads and a seasonal reserve margin. The changes also allow MISO to accredit resources based on their historic availability during Resource Adequacy (RA) hours rather than on the forced outage rate methodology where all hours are treated equally. These changes will be implemented in the 2023/2024 planning year.

On September 6, 2022, the MISO Loss of Load Expectation Working Group (LOLE Working Group) published draft results for the 2023/2024 Planning Reserve Margin and Local Reliability Requirements.³ The LOLE Working Group proposed the following planning reserve margins (PRM):

Season	PRM Percentage
Summer	7.40
Fall	14.90
Winter	25.50
Spring	24.50

These reserve margins are significant deviations from MISO's 2022/2023 annual planning reserve margin of 8.7 percent. While the change to a seasonal construct was expected, the substantial increases in PRM percentages for the winter and spring seasons exceed anticipated changes. Of particular consequence for our Company is the PRM percentage of 25.50 percent for the winter season.⁴ By November 1, 2022, MISO will apply final values to an updated seasonal load forecast for the 2023/2024 planning Module E Capacity Tracking Tool (MECT). It is possible the PRM percentages will change; however, we do not expect significant revisions.

The PRM percentages to be adopted by MISO differ significantly from those forecast in the modeling for our Initial Filing. We are still analyzing our forecasted capacity position given the proposed PRM percentages. Our preliminary review indicates that Otter Tail's seasonal capacity position could differ materially under a seasonal construct than what was contemplated in our Initial Filing.

In addition to modeling the impact of MISO's adoption of a seasonal construct we believe it prudent to update our modeling to account for the recently enacted Inflation Reduction Act (IRA), which President Biden signed into law on August 16, 2022. The IRA provides approximately \$369 billion toward wind, solar, clean energy storage, and clean energy manufacturing projects. Notably the IRA extends tax incentives for wind and solar facilities that were set to expire and creates other new tax credits for renewable energy projects, including new clean electricity and clean hydrogen tax credits, and extends tax credits for carbon capture and sequestration.

To ensure that our resource plan is optimized for our customers and accurately addresses the criteria by which the Commission evaluates resource plans, we respectfully urge the Commission to amend the procedural schedule to allow us to revise our modeling and provide any necessary updates to our Initial Filing. We would propose the following procedural schedule:

³ <https://cdn.misoenergy.org/20220906%20LOLEWG%20Item%2003%20PY%202023-24%20Preliminary%20LOLE%20Study%20Results626211.pdf>.

⁴ Otter Tail is a winter peaking utility in the summer peaking MISO region. While the proposed spring season PRM percentage is similar to the proposed winter season PRM percentage, the impact is not nearly as great because of lower spring coincidental peak loads and a likely increase in non-thermal units' accreditation.

- March 31, 2023 – Otter Tail files updated IRP based on revised modeling
- July 31, 2023 - Initial Comments due on updated IRP
- September 29, 2023 – Reply Comments due on updated IRP

We anticipate our updated filing will also address changes in MISO Planning Resource Auction (PRA) prices and changes to capacity projections that have occurred since our Initial Filing.⁵ MISO warns of potential capacity deficits through at least the 2027/2028 planning year, depending on the pace of generator retirements and new capacity additions.⁶ We also anticipate the updated modeling will address load forecast changes that have occurred since our Initial Filing.

We have discussed this matter with parties to this docket and other key stakeholders in our resource plan. The proposed changes to the procedural schedule for updating our modeling as described above is supported the Department of Commerce - Division of Energy Resources, the Office of Attorney General - Residential Utilities Division, and the Midwest Large Energy Consumers. We have also discussed the occurrences described above with the Clean Energy Organizations and informed them of our plans to make this request.⁷ If the Commission approves this proposed amended procedural schedule, our updated IRP filing will include revised modeling assumptions and results.

Dual Fuel at Astoria Station

As noted above, we respectfully request that this proposed amended procedural schedule not apply to that part of our Initial Filing concerning dual fuel at Astoria Station. We believe it is appropriate to address dual fuel at Astoria Station without delay to strengthen the resilience and availability of the unit during extreme conditions. We believe this is necessary to protect our customers from extreme events and related market volatility. Our preferred plan anticipates 2026 commercial operation of dual fuel at Astoria Station and we are currently engaged in development activities with that target date in mind. Current supply chain issues and inflationary pressures are sufficiently complex that delays on this particular element of our IRP filing would expose our customers to cost increases and would not be in the public interest.

⁵ PRA prices for planning year 2022-2023 recently cleared at the cost of new entry (CONE) compared to the much lower historical PRA clearing prices of sub-\$5/MW-Day. Clearing prices from MISO's 2022-2023 PRA reflect capacity shortfalls in four zones, exposing nearly 8 GW in MISO North/Central to the Cost of New Entry. For reference, zone 1 auction clearing prices have been no higher than \$5.00 per MW-Day since planning year 2017-2018. In 2022 zone 1 auction clearing prices were \$236.66 per MW-Day. *MISO Planning Resource Auction (PRA) for Planning Year 2022-2023 Results Posting, May 14, 2022.* The change in PRA prices is due to a MISO capacity surplus shifting to a capacity shortfall. This shift was expressed by MISO in May, 2022, when it projected insufficient firm resources to cover peak 2022 summer forecasts under typical demand and generation outages, and that "[e]mergency resources and non-firm energy imports are projected to be needed to maintain system reliability. MISO Summer Readiness Workshop Summer 2022.

⁶ *2022 OMS-MISO Survey Results Posting June 10, 2022.* These capacity deficits follow a concentrated period of generation plant retirements within MISO. Capacity in the MISO North/Central region fell by 3.2 GW since the last capacity auction. *MISO Planning Resource Auction (PRA) for Planning Year 2022-2023 Results Posting May 14, 2022.* MISO notes that unless more reliable generation is built, shortfalls such as this will continue.

⁷ The Clean Energy Organizations are Fresh Energy, the Sierra Club, the Clean Grid Alliance, and the Minnesota Center for Environmental Advocacy.

Dual fuel at Astoria Station mitigates the risk of intra-day pricing volatility and overall energy pricing risk.⁸ It also mitigates the risk of natural gas pipeline supply disruption. These risks were evident during Winter Storm Uri in February 2021. While Astoria Station did not lose physical delivery of natural gas during that event, pipeline constraints caused timely daily Ventura hub natural gas to settle in excess of \$180/MMBtu. Dual fuel at Astoria supports the resilience and availability of the unit when natural gas is constrained, excessively priced, or altogether unavailable.

Recent proposals by MISO highlight its increased awareness of planning attributes beyond unforced capacity (UCAP.) Long-duration energy, fuel assurance, and fuel availability are part of MISO's six proposed reliability attributes. These attributes are at the forefront of MISO's planning and are part of the discussion to address future requirements.⁹ Increased frequency of significant weather events,¹⁰ the impact on natural gas supply, and the attributes being contemplated by MISO all support the Astoria dual fuel project. Furthermore, other independent system operators are recognizing the importance of dual fuel and the risks that are prevalent with natural gas delivery.¹¹

By addressing dual fuel at Astoria Station without delay, the Commission does not presuppose the outcome of any other part of our preferred plan, including possible revisions premised on the updated modeling that we have proposed. Indeed, the Astoria dual fuel proposal is justified by the resiliency analysis in our Initial Filing, and therefore the updated assumptions to be included in our modeling will not impact the analysis supporting the dual fuel proposal. The dual fuel proposal stands on its own merits.

Our development work has allowed us to refine the plan for dual fuel at Astoria Station. Our Initial Filing proposed fuel oil as the secondary on-site fuel. Since then, **[PROTECTED DATA BEGINS...**

...PROTECTED DATA ENDS.]

Our Initial Filing sought approval to advance the dual fuel project with a preliminary estimated cost of **[PROTECTED DATA BEGINS...**

...PROTECTED DATA ENDS.] For reference, the estimated cost of converting Astoria Station to dual fuel using **[PROTECTED DATA BEGINS...**
...PROTECTED DATA ENDS.] The benefits for adding dual fuel to Astoria, as described in our Initial Filing, still exist despite the revised cost estimate.

⁸ Since our Initial Filing, natural gas and market energy pricing have experienced a period of heightened volatility. The natural gas forecast in our Initial Filing included a \$3.00 per MMBtu average price for 2022. Through August 2022, the Ventura Hub average timely price per MMBtu was \$6.21/MMBtu. Similarly, our 2022 market energy forecasts in our Initial Filing included peak energy of approximately \$28.50 and off-peak energy of \$21.00. Through August, the 2022 actual peak and off-peak pricing for Otter Tail's load zone were \$56.34 and \$38.21, respectively.

⁹MISO's September 21, 2022 System Attributes Stakeholder Workshop presentation: [prehttps://cdn.misoenergy.org/20220921%20System%20Attributes%20Workshop%20Presentation626391.pdf](https://cdn.misoenergy.org/20220921%20System%20Attributes%20Workshop%20Presentation626391.pdf)

¹⁰ MISO's September 14, 2022 Advisory Committee Resilience Presentation. Slide 2: <https://cdn.misoenergy.org/20220914%20AC%20Item%2008%20Current%20Issue%20Kick%20Off%20-%20Resilience%20626359.pdf>

¹¹https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.iso-ne.com%2Fstatic-assets%2Fdocuments%2F2022%2F09%2Fa05b_mc_2022_09_13-14_rca_raa_enhancements_presentation_.pptx&wdOrigin=BROWSELINK

Conclusion

Based on the foregoing, Otter Tail respectfully requests that the Commission revise the procedural schedule as follows:

- March 31, 2023 – Otter Tail files updated IRP based on revised modeling
- July 31, 2023 - Initial Comments due on updated IRP
- September 29, 2023 – Reply Comments due on updated IRP

Otter Tail also requests that its proposal for dual fuel at Astoria Station be addressed under the current procedural schedule or a reasonable schedule deviation that allows for a Commission decision in the first part of 2023. We recognize that our request to amend the procedural schedule to address the MISO seasonal construct and PRM percentage changes, while keeping the current procedural schedule to address dual fuel at Astoria Station, is somewhat unusual. However, this approach is supported by unusual circumstances, would protect our customers, and is in the public interest.

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 njensen@otpc.com or (218) 739-8989 if you have any questions regarding this filing.

Sincerely,

/s/ *NATHAN JENSEN*

Nathan Jensen
Manager, Resource Planning

/s/ *CARY STEPHENSON*

Cary Stephenson
Associate General Counsel

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Enclosures
By electronic service
c: Service List

CERTIFICATE OF SERVICE

**RE: In the Matter of Otter Tail Power Company's 2022-2036 Resource Plan
Docket No. E017/RP-21-339**

I, Kim Ward, hereby certify that I have this day served a copy of the following, or a summary thereof, on Will Seuffert 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
Supplemental Filing and Request for Changes in Procedural Schedule**

Dated this 14th day of **October, 2022**.

/s/ Kim Ward
Kim Ward
Lead Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
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(218) 739-8268

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