October 30, 2023

Mr. Will Seuffert

**Executive Secretary** 

121 7<sup>th</sup> Place East

Minnesota Public Utilities Commission



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

 Suite 350
 St. Paul, MN 55101-2147
 RE: In the Matter of Otter Tail Power Company's 2022-2036 Integrated Resource Plan Docket No. E017/RP-21-339

**Reply Comments** 

Dear Mr. Seuffert:

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

This filing includes protected data, as defined by Minn. Rule 7829.0100, subp. 19a. Specifically the filing includes trade secret information (1) designated as such by the Clean Energy Organizations in their Comments, (2) confidential information concerning prospective market purchases, and (3) confidential analysis of Otter Tail PPA revenues and costs. Otter Tail has taken reasonable efforts to maintain the secrecy of the information marked as PROTECTED DATA in these Reply Comments, 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 218-739-8989 or <a href="mailto:njensen@otpco.com">njensen@otpco.com</a> if you have any questions regarding this filing.

Sincerely,

/s/ NATHAN JENSEN Nathan Jensen Manager, Resource Planning

kaw Enclosures By electronic filing c: Service List

An Equal Opportunity Employer



# Otter Tail Power Company's Reply Comments

# **Integrated Resource Plan**

# 2023-2037

# PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED

Minnesota Public Utilities Commission: Docket No. E017/RP-21-339

October 30, 2023



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

In the Matter of Otter Tail Power Company's 2022-2036 Integrated Resource Plan Docket No. E017/RP-21-339 REPLY COMMENTS

# I. INTRODUCTION

Otter Tail Power Company (Otter Tail or Company) submits to the Minnesota Public Utilities Commission (Commission) these Reply Comments to the September 14, 2023, Comments received in the above-referenced docket. As discussed herein, Otter Tail's supplemental preferred plan (Supplemental Preferred Plan) set forth in our March 31, 2023, supplemental filing (Supplemental Filing) continues the Company's long tradition of providing reliable and reasonably priced electric service while responding to rapid change in an uncertain and dynamic planning environment. Our Supplemental Preferred Plan adds significant renewable resources to Otter Tail's generation fleet, ensures the Company's ability to respond to extreme weather events and market volatility, and responsibly plans for the Company's withdrawal from its ownership interest in Coyote Station if Otter Tail is required to make a material, non-routine capital investment in the plant. Our Supplemental Preferred Plan provides a strong and flexible foundation for the future.

As background, Otter Tail submitted its initial 2022-2036 Integrated Resource Plan (Initial Filing) in this docket on September 1, 2021. The preferred plan in our Initial Filing proposed (1) the addition of dual fuel capability at our Astoria Station natural gas plant, (2) the addition of 150 MW of solar generation in 2025, and (3) the commencement of the process of withdrawal from our thirty-five percent (35%) ownership interest in Coyote Station.

Since our Initial Filing we have observed a series of significant events affecting our resource planning, including the following:

- The Midcontinent Independent System Operator's (MISO) adoption of a seasonal resource adequacy construct and capacity requirements that increase required planning reserve margins (PRMs);
- Pending MISO resource accreditation changes, coupled with changes in MISO's methodology for setting PRMs;
- MISO's projection for capacity deficits and warnings from MISO and the Federal Energy Regulatory Commission (FERC) about the rapid pace of baseload thermal unit retirements and the potential consequences for grid stability and reliability;
- Increased volatility in energy and fuel markets;
- Winter Storm Elliott, which reinforced concerns about fuel availability and cost, and exposure to excessive market risk previously witnessed during Winter Storm Uri;
- Enactment of the federal Inflation Reduction Act (IRA), which provides renewed and new incentives for wind, solar, energy storage, and clean energy manufacturing projects, such as the restoration and extension of full-value wind and solar tax incentives that were being ratcheted down and had been set to expire, and the creation of other new tax credits for renewable energy projects;
- Enactment of the Minnesota Clean Energy Law, directing electric utilities to generate or procure sufficient electricity from carbon-free resources to provide retail customers in Minnesota with 100 percent carbon-free electric energy by 2040; and
- Changes to Otter Tail's load forecasts.

These events led Otter Tail to supplement its Initial Filing on March 31, 2023. Our Supplemental Filing acknowledged this uncertain and dynamic planning environment and proposed a Supplemental Preferred Plan with these key features:

- The addition of on-site liquified natural gas (LNG) fuel storage at Astoria Station in 2026;
- The addition of approximately 200 MW of solar generation in the 2027-2028 timeframe;

- The advancement of plans and initial steps to add approximately 200 MW of wind generation in the 2029 timeframe; and
- The withdrawal from our thirty-five percent (35%) ownership interest in Coyote Station if Otter Tail is required to make a material, nonroutine capital investment in the plant.

Compared to our Initial Preferred Plan, our Supplemental Preferred Plan increases the amount of renewable generation resources we intend to add to our generation portfolio, calls for on-site LNG storage at Astoria Station, and establishes a cautious and deliberate approach to withdrawing from our thirty five percent (35%) ownership interest in Coyote Station, thereby affording prudent optionality in this uncertain and dynamic environment.

Under our Supplemental Preferred Plan, we would increase our generation portfolio's installed renewable capacity forty-four percent (44%) by 2028 and one hundred seventeen percent (117%) by 2032. At the same time, our Supplemental Preferred Plan would ensure that we have the dispatchable resources necessary to bridge the transition to a new energy future. This will allow us to continue providing reliable and reasonably priced electric service to the small rural Minnesota communities we serve on a foundation that anticipates and accommodates potential market change.

# II. OTTER TAIL'S SUPPLEMENTAL PREFERRED PLAN IS THE MOST REASONABLE RESPONSE TO AN UNCERTAIN AND DYNAMIC ENVIRONMENT

The uncertain and dynamic planning environment requires a plan that is appropriately cautious, flexible, and reasonable. Over the next five years, the electric industry anticipates significant change as it transitions to a new energy future. Otter Tail expects its entire resource mix to evolve. However, prudence militates against irreversible decisions when the future is uncertain, and the new energy future comes into focus.

Between now and Otter Tail's next IRP, it is expected that MISO's capacity accreditation methodology, capacity values, and PRMs will be clearer than they are today. Additionally, new technologies, including energy storage, will continue to be tested and refined, allowing Otter Tail to deploy them most effectively.

Finally, a multi-jurisdictional utility like Otter Tail can only function effectively if all of its regulators endorse an outcome, or if one jurisdiction is willing to undertake its own,

independent planning and resource selection. Considering the uncertain and dynamic planning environment, Otter Tail's Supplemental Preferred Plan prudently avoids imprudent irreversible decisions while supporting ongoing decarbonization in Minnesota in a manner that is consistent with Otter Tail's obligation to provide reliable and reasonably priced services in an integrated, multi-jurisdictional system. Such an approach yields significant economies of scale that ultimately benefit electric consumers.

# A. Otter Tail's Plan is Appropriately Cautious, Flexible, and Reasonable

A reliable system must have sufficient capacity to serve its customers and be sufficiently robust to be available when needed most. Otter Tail's Supplemental Preferred Plan accomplishes this by ensuring Otter Tail retains sufficient capacity to meet its needs into the future and has on-site fuel storage at its Astoria Station. By assuming Otter Tail's thermal resources will continue to serve its customers through at least this IRP's five-year plan,<sup>1</sup> Otter Tail's Supplemental Preferred Plan accounts for the significant likelihood of changes to capacity accreditation methodology and PRMs for Otter Tail's fleet and heeds cautionary MISO and FERC guidance regarding the pace of thermal unit retirements. At base, Otter Tail's proposals for both Astoria Station and Coyote Station allow Otter Tail to responsibly and reliably serve its customers without overreliance on MISO (and, therefore, on other utilities) for capacity and energy that the Company needs. Otter Tail believes it is neither prudent nor in the public interest to rely solely on MISO to ensure the Company's customers in Minnesota, North Dakota, and South Dakota can be reliably served.

Otter Tail's Supplemental Preferred Plan puts reliability first while also limiting significant market and fuel supply risk and, therefore, unforeseen cost impacts to its customers. In addition to providing fuel security, on-site fuel storage at Astoria Station also provides a market hedge in times of severe weather and other unexpected events that create sharp spikes in intraday pricing and ultimately in customers' bills. Further, retaining Coyote Station until such time as a material, non-routine capital investment is required provides a low-cost hedge against the uncertainty underlying this planning cycle.

<sup>&</sup>lt;sup>1</sup> Otter Tail's Initial Filing complied with Minn. Rule 7843.0400, subp. 3(C), by modeling and developing an action plan covering a five-year period beginning with the filing date of September 1, 2021. As noted in our March 31, 2023, Supplemental Filing, and as noted above, our Supplemental Preferred Plan in general pertains to the five-year period that would commence with the Commission's order in this docket. In that sense, it may be more appropriate to reference the time period contemplated by our Supplemental Preferred Plan as Otter Tail's near-term plan.

Ultimately, Otter Tail's Supplemental Preferred Plan mitigates risk by providing the Commission an opportunity to advance Minnesota's clean energy priorities while ensuring Otter Tail's system is sufficiently robust and reliable. By adopting Otter Tail's Supplemental Preferred Plan, the Commission need not make irreversible decisions and can continue to evaluate our thermal resources in Otter Tail's next IRP.

# B. The Company's Supplemental Preferred Plan Supports Minnesota Energy Policy

Ensuring that Otter Tail's system remains reliable and affordable does not mean that Otter Tail will lag in the transition to the clean energy future contemplated by Minnesota energy policies. To the contrary, Otter Tail's Supplemental Preferred Plan includes over 525 MW of renewable resource additions by 2032, more than doubling the renewable generation currently in our fleet. Of that figure, 400 MW of renewable generation is planned by 2029. Currently, Otter Tail is on par with and, in some cases, ahead of its Minnesota peer utilities in decarbonization, as reflected by **Table 1**:

	OTP	XCEL*	MP
Peak Load (winter)	1,039	9,200	1,818
Nameplate Wind (MW)	391	4,400	873
Wind (% of Peak Load)	38%	48%	48%
Nameplate Solar (MW)	50	1100	33
Solar (% of Peak Load)	5%	12%	2%
Nameplate Hydro (MW)	10	150	370
Hydro (% of Peak Load)	1.0%	1.6%	20%
Nameplate Biomass (MW)	0	110	60
Biomass (% of Peak Load)	0%	1%	3%
Demand Response (MW)	185	950	250
Demand Response (% of Peak Load)	18%	10%	14%
MN Residential Rates (Cents/kWh)	10.91	15.38	13.6

**OTTER TAIL TABLE 1<sup>2</sup>** 

\*Xcel has 1700 MW of carbon-free nuclear generation that is not reflected in this table

Our Supplemental Preferred Plan expands on this solid foundation. Otter Tail's commitment to decarbonization is evidenced by our recently completed Hoot Lake Solar Project, where we creatively used the existing interconnection rights from our retired thermal Hoot Lake Plant to develop and construct an extraordinarily low-cost solar project for the benefit of our Minnesota customers. The currently contemplated solar additions would similarly take advantage of existing interconnection capacity on Otter Tail's generation fleet. We have achieved a strong renewable portfolio while maintaining

<sup>&</sup>lt;sup>2</sup> Average rate for the 12 months ending December 2022.

some of the lowest rates in the country. Adopting Otter Tail's Supplemental Preferred Plan will allow us to maintain this customer advantage while ensuring reliability.

Otter Tail's Supplemental Preferred Plan ensures Otter Tail's fleet transition complies with state and federal law and puts Otter Tail on track to fully comply with Minnesota's carbon free standard by 2040. Otter Tail's Supplemental Preferred Plan puts Otter Tail in a position to maintain an integrated system that affords significant economies of scale for customers in three states. Modifications to Otter Tail's Supplemental Preferred Plan may make it impossible for Otter Tail to comply with all of the laws in the states it serves. Should that occur, Otter Tail would have to tailor solutions to meet the priorities of all three Otter Tail jurisdictions, potentially on a non-integrated basis. Affording time to determine the future of Coyote Station and the size, type, timing, and location of renewable additions prudently provides Otter Tail and all of its stakeholders an opportunity to optimize Otter Tail's generation fleet while ensuring the Otter Tail system is reliable and affordable for our customers.

Finally, we note our fundamental disagreements and concerns with the Comments of the Clean Energy Organizations (CEOs) in the following section. We have also identified areas where our interests appear to overlap and align; specifically, the nature and amount of renewable generation to be added in the short term, which we identify as approximately the five-year period following the Commission's anticipated order in this docket. These areas of common interest are discussed in Section III (G) herein. We believe these points of alignment will further support Minnesota energy policy.

# **III. REPLY TO CEO COMMENTS**

# A. The CEOs Fail to Adequately Consider Reliability.

The CEOs' recommended modifications to Otter Tail's Supplemental Preferred Plan would hinder what we believe are prudent resource decisions and strategies. As noted herein, the CEOs would unnecessarily expose our customers to operational risk and excessive cost by transitioning Otter Tail's generation portfolio at a pace and scope that is not justifiable, given the uncertain and dynamic environment in which we now find ourselves.

The risks and uncertainties that inform our Supplemental Preferred Plan are given little consideration by the CEOs, emblematic of the fact that they are not obliged, as our Company is, to reliably provide electric service to our customers. In particular, the CEO

Comments do not acknowledge the repeated warnings from MISO, FERC, and others concerning the rapid and uncoordinated retirement of dispatchable thermal units and the potential impacts on reliability and grid stability.<sup>3</sup> MISO and FERC officials have not been reticent to sound the alarm about these phenomena.

For example, in recent testimony before the U.S. Senate Energy and Natural Resources Committee, FERC Chairman Willie Phillips testified that he is "extremely concerned when it comes to the pace of retirements that we're seeing of generators that are needed for reliability on our system."4 In the same proceeding, FERC Commissioner Mark Christie stated the following:

The United States is heading for a reliability crisis. I do not use the term "crisis" for melodrama, but because it is an accurate description of what we are facing. I think anyone would regard an increasing threat of systemwide, extensive power outages as a crisis. In summary, the core problem is this: Dispatchable generating resources are retiring far too quickly and in quantities that threaten our ability to keep the lights on. The problem generally is not the *addition* of intermittent resources, primarily wind and solar, but the far too rapid subtraction of dispatchable resources, especially coal and gas.<sup>5</sup>

In testimony before the U.S. House Committee on Energy and Commerce Subcommittee on Energy, Climate and Grid Security, MISO's Senior Vice President of Markets and Digital Strategy, Todd Ramey, expressed MISO's concern that "[c]ontrollable, dispatchable resources are being retired and replaced primarily with weatherdependent, non-dispatchable, and variable generation types to achieve carbon reduction goals." Mr. Ramey noted the reliability risks arising from this situation:

<sup>&</sup>lt;sup>3</sup> Moreover, in discounting our plans for on-site fuel storage at Astoria Station, the CEOs ignore well-founded concerns about the growing interdependency of the natural gas and electric industries. <sup>4</sup> May 4, 2023, U.S. Senate Energy and Natural Resources Committee Hearing, at time stamps 2:08.05 through 2:08.38 https://www.energy.senate.gov/hearings/2023/5/full-committee-hearing-to-conduct-oversight-of-ferc.

<sup>&</sup>lt;sup>5</sup> Opening Statement of Mark C. Christie, May 4, 2023, U.S. Senate Energy and Natural Resources https://www.energy.senate.gov/services/files/1D618EDD-7CED-4BC5-8F09-Committee Hearing, <u>C8F0668FE608</u>. Commissioner Christie also noted the following at an SPP Resource Adequacy Summit held on September 9, 2023: "The first rule of holes is if you're in one, stop digging. If the fundamental problem we're facing is we're shutting down dispatchable resources far too prematurely, then the answer dispatchable far is to stop shutting down resources too prematurelu." https://mysppmeeting.webex.com/recordingservice/sites/mysppmeeting/recording/77abb00b2fae103c bbfd005056818079/playback at time stamp 47:44.

Diminishing resource attributes – Certain resource attributes – such as the ability to start up expediently, ramp output up or down quickly, and produce electricity at a high volume for long periods of time - are required to maintain reliability. Those attributes have historically been provided by the traditional resources that are now being retired at an accelerating pace, and very few planned new generators possess them. Until new technologies reach commercial maturity, generators currently capable of providing needed reliability attributes will be required.<sup>6</sup>

These concerns should not be dismissed or characterized as issues for others to address. Reliable and reasonably priced electric service is a statutory benchmark that Otter Tail is obliged to meet.<sup>7</sup> Otter Tail's Supplemental Preferred Plan squarely addresses these concerns, while maintaining Otter Tail's status as a leader in responsible and reliable decarbonization.

B. The CEOs' Proposed Modifications to Otter Tail's Supplemental Preferred Plan Expose Otter Tail's Customers To Unreasonable Market, Reliability, and Rate Impact Risk, Which Must be Weighed Against Externalities.

The CEOs' recommended changes to Otter Tail's Supplemental Preferred Plan seek a rapid and massive transition to renewable resources and battery storage between now and 2032, while inordinately exposing customers to market, reliability, and rate impact risk from the elimination of most of the Company's dispatchable resources By way of illustration, the CEOs' plan would increase the amount of intermittent generation on our system by three hundred twenty-seven percent (327%) between now and 2032.

<sup>6</sup> September 28, 2023, Testimony of Todd Ramey Before the U.S. House Committee on Energy and Commerce Subcommittee on Energy, Climate and Grid Security, "Powering America's Economy, Security, and Our Way of Life: Examining the State of Grid Reliability" <u>https://dldth6e84htgma.cloudfront.net/09\_28\_23\_ENG\_Testimony\_Ramey\_9a96ce2034.pdf</u>, at page

<sup>1.</sup> <sup>7</sup> Minn. Stat. § 216B.01 declares that it is in the public interest that public utilities be regulated "in order to provide the retail consumers of natural gas and electric service in this state with adequate and reliable services at reasonable rates ...."



#### **OTTER TAIL TABLE 2**

Over the same period, it would reduce dispatchable resources on our system by fifty-eight percent (58%).





This differs substantially from the more prudent and justifiable pace of decarbonization proposed by the Company, a pace that recognizes we are a winter peaking utility serving small, rural Minnesota communities that are especially sensitive to cost impacts.<sup>8</sup>

The CEOs base their proposed modifications to our Supplemental Preferred Plan in large part on the societal costs of carbon (i.e., externalities) due to Otter Tail's continued reliance on dispatchable thermal resources. The CEOs applied the externality values established by recent changes to Minn. Stat. § 216B.2422, subd. 3 and the Commission's September 14, 2023 hearing in in Dockets E999/CI-07-1199 and E999/DI-22-236.9 To what extent the new externality modeling can retroactively be applied in this ongoing docket is unclear.<sup>10</sup> Regardless of which values and methodology are applied, however, externality costs are but one consideration for the Commission as it evaluates resource plans under Minn. Rule 7843.0500, subp. 3:

Subp. 3 Factors to consider. In issuing its findings of fact and conclusions, the commission shall consider the characteristics of the available resource options and of the proposed plan as a whole. Resource options and resource plans must be evaluated on their ability to:

- A. maintain or improve the adequacy and reliability of utility service:
- B. keep the customers' bills and the utility's rates as low as practicable, given regulatory and other constraints:
- *C. minimize* adverse socioeconomic effects and adverse effects upon the environment;
- D. enhance the utility's ability to respond to changes in the financial, social, and technological factors affecting its operations: and
- *E. limit the risk of adverse effects on the utility and its customers* from financial, social, and technological factors that the utility cannot control.

<sup>&</sup>lt;sup>8</sup> By way of example, a median-sized community we serve is Winger in northwest Minnesota's Polk County. According to the most recent U.S. Census Bureau statistics, Winger has a population of 174 people and its median household income is \$38,500.

median household income is \$38,500. <sup>9</sup> As noted by footnote 19 of the CEO Comments, the "Commission is required to provisionally adopt and apply the EPA's draft Social Cost of Greenhouse Gas estimates released in 2022, "including the time horizon, global estimates of damages, and the full range of discount rates from 2.5 to 1.5 percent, with two percent as the central estimate." The Commission must adopt the EPA's final estimates when available, or the estimates by the federal Interagency Working Group if higher. Laws of Minnesota 2023, chapter 7, section 18, amending Minn. Stat. § 216B.2422, subd. 3." <sup>10</sup> The legislative changes to externality values were effective February 8, 2023. The Commission issued a Notice for Comment on March 29, 2023, in Dockets 999/CI-07-1199; E999/DI-22-236 on how to implement this and related energy legislation and held a hearing on the same on September 14, 2023. The Commission's deliberations at hearing suggested that the application of revised externality values and methodology would apply prospectively. The Commission has yet to issue its Order from that proceeding. Given the timing of the legislation and the Commission's hearing on its implementation, Otter Tail's September 1, 2021, Initial Filing and March 31, 2023, Supplemental Filing modeled externalities in the manner it has in prior IRP proceedings.

The CEOs' externality analysis demonstrates that the newly adopted externality methodology will preclude the selection of practically all dispatchable thermal resources except for limited peaker plants, even as large-scale energy storage is now available only for shorter durations and at high cost. Such an outcome underscores the importance of the holistic, multi-factor analysis the Commission's rules require when assessing resource plans. Absent reasonable line-drawing during this fleet transition period, Minnesota's ambitious decarbonization efforts could be threatened by overreliance on variable resources and nascent energy storage technologies, and a lack of dispatchable resources. The Commission should also consider that the consequences of emissions reduction (for which externalities serve as a proxy) and the corresponding benefits of avoiding those emissions are not assured, even if the Commission adopts the CEOs' modifications. The CEOs themselves acknowledge that Otter Tail's withdrawal from Coyote Station may not result in reduced carbon emissions, as the plant may continue to be operated by the plant's co-owners. The same would be true for any future withdrawal from Big Stone Plant, all of which diminishes the weight the Commission should assign to the CEOs' externality analysis.

As detailed below there are significant market, reliability, and rate impact risks that must be considered and weighed against externality values. When viewed in the aggregate, these risks clearly demonstrate that the CEOs' proposed changes to our Supplemental Preferred Plan are not in our customers' and the public interest.

# Reliability & Market Risk

Historically, resource plans have focused primarily on energy and capacity metrics to assess a utility's ability to produce electricity cost-effectively and reliably for its customers. With changes that have occurred in the marketplace over the past several years, however, the full scope of generation attributes has grown in significance for resource planning, going beyond just the attributes of capacity and energy. Consistent with Minnesota's resource planning requirements, a well-crafted resource plan must be analyzed as a whole<sup>11</sup> and consider important resource attributes like dispatchability, fuel supply and deliverability, price assurance, and other attributes that contribute to the resilience and affordability of the resource portfolio. The importance of these attributes was illustrated during events such as the 2014 Polar Vortex, the 2021 Winter Storm Uri, and the 2022 Winter Storm Elliott, where renewable generation and natural gas supply were periodically limited, and electricity market prices and natural gas prices were extremely high.

<sup>&</sup>lt;sup>11</sup> <u>See</u> Minn. Rule 7843.0500, subp. 3.

Recent MISO proposals highlight its increased awareness of planning attributes extending beyond capacity accreditation, borne from MISO's increasing concern about the reliability of the larger system. Long-duration energy and fuel assurance are part of MISO's six proposed reliability attributes. These attributes are at the forefront of MISO's planning and are part and parcel of the discussion to identify future requirements.<sup>12</sup>

In our Initial Filing, we noted the three characteristics that define fuel assured generation resources: (a) dispatchability, (b) reliable fuel supply, and (c) energy price protection. Like Otter Tail's Initial Filing, our Supplemental Filing compares our total current fuel assured generation in 2023 to our Supplemental Preferred Plan's fuel assured generation in 2030, assuming for the sake of analysis that on-site fuel capability is added at Astoria Station.<sup>13</sup>

The foregoing provides context to a significant difference between Otter Tail's Supplemental Preferred Plan and the plan promoted by the CEOs. That difference is the amount of fuel assured resources that are available when intermittent resources are not. The higher the percentage of load that is not covered by fuel assured resources, the higher the potential to experience outages in severe events. Moreover, the less fuel assured resources in our portfolio, the more likely we will need to rely on market purchases at inopportune times, such as when intermittent resources have low output during extreme cold or extreme heat weather conditions.

**Otter Tail Figure 1** compares the amount of fuel assured resources in our generation portfolio in 2029 under our Supplemental Preferred Plan and the CEOs' plan. The CEOs' 2029 Fuel Assured Resources figure assumes that our Company has withdrawn from Coyote Station in 2028 and that Astoria Station fuel storage has not been put in place. As reflected in the figure, the CEOs' plan has significant fuel assured generation deficit – more than twice that of Otter Tail's plan.

<sup>&</sup>lt;sup>12</sup>MISO's September 21, 2022, System Attributes Stakeholder Workshop presentation: <u>https://cdn.misoenergy.org/20220921%20System%20Attributes%20Workshop%20Presentation626391</u>.pdf.

<sup>&</sup>lt;sup>13</sup> Otter Tail Supplemental Filing, March 31, 2023, pp. 18-19.

# **OTTER TAIL FIGURE 1**





That gap in fuel assured resources widens to more than four times by the year 2031, which is the year following Big Stone Plant's retirement in the CEOs' plan:



#### **OTTER TAIL FIGURE 2**



As demonstrated above, the CEOs' plan would have Otter Tail rely entirely on MISO to serve the Company's customers by allowing for significant deficits in fuel assured generation. The CEOs propose that Otter Tail's customers be exposed to significant levels of energy market purchases at inopportune times, which is not prudent utility planning and exposes customers to significant financial risk.

Market and reliability risks of the CEOs' plan are even more evident during expected unserved energy (EUE) events, which results in significant market exposure at the worst possible times. This is demonstrated by the CEOs' own production cost modeling in section 4 of Attachment 1 to the CEOs' Comments. The 2029 analysis shows a winter peak day and lower wind output on January 26, 2029, in CEO Figure 8.14

# **[PROTECTED DATA BEGINS...**

# ...PROTECTED DATA ENDS]

The figure demonstrates that Otter Tail would be almost entirely reliant on the market during **[PROTECTED DATA BEGINS**... **...PROTECTED DATA ENDS**], which coincides with the hours that MISO identifies as having the greatest risk for EUE, as shown in MISO's September 21, 2023, System Reliability Attributes Analysis and Roadmap Workshop with Figure 3 below<sup>15</sup>:

 <sup>&</sup>lt;sup>14</sup> CEO Comments, Attachment 1, p. 32.
 https://cdn.misoenergy.org/20230921%20System%20Attributes%20Workshop%20Item%2002-06%20Presentations630246.pdf.



It should also be noted that CEO Figure 8 relies on Astoria Station's maximum output for a majority of the day. This reliance on Astoria Station assumes there are no disruptions to Astoria Station's pipeline-delivered fuel supply, an assumption at odds with our recent experience during Winter Storm Elliot.

An even more worrisome reliance on the market is demonstrated in CEO Figure 10. Focusing on the winter peak day and lower wind output in Figure 10, the CEOs' model shows a need to buy from the market during **[PROTECTED DATA BEGINS**...

# ... PROTECTED DATA ENDS]

To be clear, these are winter hours in January, typically the coldest time of the year for customers in our winter-peaking system. This is especially worrisome because Otter Tail serves many small communities that lack natural gas service, with many of our customers relying on electricity as a primary heat source. The CEOs conclude section 4 in Attachment 1 with "[t]he CEOs Preferred Plan was able to meet the peak demand in every hour of the high stress periods evaluated for this analysis."<sup>16</sup> This statement can only be true if market purchases are considered a reasonable and viable option during MISO defined loss-of-load hours, which is not the case.

The CEOs' assertion that their plan will save our customers \$816 million during the planning period should also be viewed with skepticism. The \$816 million in claimed savings is extrapolated by comparing our Supplemental Preferred Plan with the CEOs' proposed plan that assumes substantial MISO market sales, without accounting for the impact on pricing that so many renewable additions will cause. Otter Tail's base modeling assumption is that any excess generation on our system will receive no value from the MISO market. On its face, this may seem unduly conservative, but it is not uncommon for excess generation to be worth less than zero dollars because additional monetary production incentives (such as renewable energy credits or production tax credits) enable negative bids for renewable energy. Indeed, negative LMPs predominantly occur across our system during times of low load and high wind production. CEO Table 10 shows that the \$816 million benefit cited by the CEOs assumes that excess energy receives full market value.

# CEO TABLE 10 Table 10. PVRR and Partial PVSC Results for CEO Modeling (\$000)

Plan	PVRR	Partial PVSC <sup>27</sup>
CEOs Preferred Plan	\$2,196,616	\$2,338,702
Revised OTP 2028 Plan	\$2,822,359	\$2,977,053
Revised OTP Preferred 2040 Plan	\$3,012,835	\$3,289,636

Full market value of excess energy is not a reasonable assumption for resource planning purposes. The CEOs' proposed plan results in a large amount of excess energy (sometimes called "dump energy") that the CEOs assume will be sold into the MISO market at our Wood Mackenzie market price forecasted value. Renewable production

<sup>&</sup>lt;sup>16</sup> CEO Comments at Attachment 1, section 4.2 (p. 34).

has a direct negative impact on LMPs, and this negative correlation will likely be more obvious as renewable penetration increases in the coming years. This relationship is demonstrated in **Otter Tail Figure 4** below. The blue line reflects the hourly day-ahead position (sorted from most negative to most positive) of Otter Tail's system in the winter months of 2021 and the dotted grey line is a moving average of the respective day-ahead LMPs. A moving average was used to make the graph more comprehendible in conjunction with the phenomenon of spiking LMPs.

# **OTTER TAIL FIGURE 4**

#### **Day-Ahead Position vs. LMP Prices**



For further background, the Day-Ahead Position was developed using the constant offers of thermal units near their maximums (which is reflective of winter 2021 actual operations) and wind generation day-ahead projections were then added to this MW amount. The results show that when our day-ahead position was negative (i.e., low wind production), LMPs tended to be high and vice-versa during times of high wind production.

In effect, the CEOs justify their resource selections on the unreasonable and unwarranted assumption that excess wind energy receives full market value. The CEOs provide the same data with market sales turned off, reducing the speculative \$816 million benefit to \$407 million; this is still a substantial figure, but one that must be weighed against the market and reliability risks noted in this section.

Finally, it should be noted that the selection of battery storage in the CEOs' proposed plan assumes Otter Tail's withdrawal from Big Stone Plant in 2030. As we note later in our Reply Comments, the record in this docket is not sufficiently developed for the Commission to consider action on Big Stone Plant.

#### <u>Rate Impact Risk</u>

The CEOs' proposed modifications to Otter Tail's Supplemental Preferred Plan would create significant rate pressure for our customers through the Company's early withdrawal from Coyote Station (2028) and Big Stone Plant (2030), coupled with a massive amount of new wind resource additions and a substantial premature investment in battery storage before anticipated technological advancements have been realized. **Table 4** compares our Supplemental Preferred Plan with the CEOs' proposed plan:

Column 1		Column 2	Column 3		
		OTP's Supplemental			
	Year	Preferred Plan	CEOs' Preferred Plan		
	2027	100 MW Solar	100 MW Solar		
	2028	100 MW Solar	100 MW Solar		
	2029	200 MW Wind	650 MW Wind		
	2030		100 MW Solar		
			250 MW Wind		
	2031		150 MW Battery		
		100 MW Solar	100 MW Solar		
	2032	25 MW Battery	25 MW Battery		

#### **OTTER TAIL TABLE 4**

Starting in 2029, the CEOs would have Otter Tail acquire 450 MW of wind resources above and beyond the 200 MW of wind resources called for by our Supplemental Preferred Plan. That is equivalent to adding *three* 150 MW Merricourt Wind Projects. Merricourt, Otter Tail's most recent wind project, was its largest ever. Indeed, it was the largest capital expenditure in the Company's history. By way of reference, Merricourt went into service in 2020 at a total cost of \$258 million, before recent inflationary pressure presented itself. Two years after adding the equivalent of three Merricourt Projects beyond that which is included in our Supplemental Preferred Plan, the CEOs would add an additional 250 MW of wind generation to the portfolio. In short, the CEOs would have Otter Tail add 700 MW of wind generation beyond what we have proposed – that is, nearly *five* Merricourt wind additions. Moreover, the CEOs would have Otter Tail

prematurely add 150 MW of nascent battery storage beyond what we have proposed. Given the scope of the proposed additions rate shock seems a certainty.

Assuming for the sake of analysis that Otter Tail withdrew from Coyote Station in 2028, the difference in the amount of wind resources between plans moderates, but only slightly. In that scenario, the CEOs would have Otter Tail acquire 550 MW of wind beyond what we believe is necessary and prudent. **Table 5** compares the CEOs' plan with our 2028 Preferred Plan, which assumes Coyote Station withdrawal in 2028:

Column 1	Column 2	Column 3		
	OTP's Supplemental 2028			
Year	Preferred Plan	CEOs' Preferred Plan		
2027	100 MW Solar	100 MW Solar		
2028	100 MW Solar	100 MW Solar		
2029	200 MW Wind	650 MW Wind		
2030	100 MW Solar	100 MW Solar		
	150 MW Wind	250 MW Wind		
2031		150 MW Battery		
	100 MW Solar	100 MW Solar		
2032	25 MW Battery	25 MW Battery		

#### **OTTER TAIL TABLE 5**

The acquisition of the extraordinarily large amount of wind resources sought by the CEOs would occur in the wake of the IRA's recent passage and when other utilities are presumably seeking wind resource additions to support their decarbonization efforts, potentially creating significant upward market pressure. We have already seen this dynamic at work on near term renewable costs. Moreover, the potential costs of interconnection in this dynamic environment should not be underestimated. Concurrent with the unprecedented acquisition of wind resources under the CEOs' plan, the CEOs would have our customers forego the benefit of dispatchable resources by Otter Tail withdrawing from Coyote Station and Big Stone Plant, while relying on a significant level of market purchases, which as noted above would expose our customers to significant market and reliability risk at the worst possible times.

These significant cost impacts would be on top of unrecovered net book depreciation for Coyote Station and Big Stone Plant. The cost impacts for our customers depends in part on whether the Commission would elect to accelerate depreciation or amortize a regulatory asset on a schedule consistent with the two plants' remaining depreciable

lives. <sup>17</sup> These costs would be especially significant for Big Stone Plant, given the recent installation of state-of-the-art air quality controls at that facility as more fully noted below. The foregoing is in addition to costs that may be triggered due to subsequent plant co-owner and fuel supplier negotiations and resolutions, and the potential impact on complex multistakeholder transmission rights.

In summary, the CEOs' proposal would result in an unnecessary, unsustainable, and unprecedented cost burden for our customers.

C. Much of the CEOs' Analysis Rests on Proposed EPA GHG Rules, a Flawed Analysis of the Minnesota Carbon Free Law, and a Health Report With Significant Inaccuracies That Has Limited Applicability To Resource Planning Proceedings.

#### Proposed EPA GHG Rules

The CEOs emphasize that Otter Tail's continued participation in Coyote Station and Big Stone Plant after 2030 without greenhouse gas emissions abatement fails to meet the EPA's proposed limits. This position should be tempered with caution. As noted by the CEOs, the greenhouse gas rules proposed by the EPA are just that – proposed rules. Comments on the proposed rules were due by August 8, 2023, and the EPA is currently in the process of reviewing comments that were submitted. Final rules are anticipated in mid-2024. Although the EPA proposed presumptive standards for states to follow, the EPA also proposed that states be able to consider generation unit remaining useful lives and other factors, as well as compliance flexibilities, in determining the specific standards that will apply to individual units. For example, EPA took comments on what trading and averaging provisions may be appropriate for states to use for compliance purposes. This may allow units to participate in a trading program so long as it demonstrates emissions reductions equivalent to the presumptive performance standards. Moreover, as proposed, states would have 24 months from the effective date of the final emission guidelines to submit a state plan and such plans could also allow multiple sources to average their emissions to meet an emission-reduction goal. This proposed schedule means the soonest that Otter Tail and the Commission could expect

<sup>&</sup>lt;sup>17</sup> We have noted the potential cost impacts associated remaining net book value of Coyote Station in our Initial Filing and in our most recent depreciation filing, Docket No. E017-D-23-393, *In the Matter of Otter Tail Power Company's Petition for Approval of its 2023 Five-Year Review of Depreciation Certification*. The Commission intends to examine these issues in Docket No. CI-23-375, *In the Matter of a Commission Inquiry into the Ratemaking Treatment for Early Retiring Generating Facilities Owned by Regulated Electric Utilities*.

to have clarity on the compliance options being advanced to the EPA by our states would be mid-2026. Moreover, litigation is all but certain.

Additionally, it is important to keep in mind that this proposed rulemaking is the third iteration of Section 111 guidelines. Prior undertakings have included the Obama Administration's Clean Power Plan, first proposed in mid-2014, and the Trump Administration's Affordable Clean Energy Rule, first proposed in mid-2018. These iterations either failed to withstand legal challenges or were withdrawn or repealed after a change in administrations.

Otter Tail is closely monitoring the development of the proposed rules and has submitted comments to EPA. Even in their current form and separate and apart from litigation-related delays, the emission limits under the proposed rules would require greenhouse gas emissions abatement only after 2030, a time period that will allow Otter Tail and the Commission to assess and plan in Otter Tail's next IRP. Contrary to the CEOs' position, it is imprudent to make irreversible decisions about the composition of Otter Tail's generation portfolio in an uncertain environment based on proposed EPA rules.

#### Minnesota Carbon-Free Standard and Renewable Energy Credits

The CEOs argue that Otter Tail's use of Renewable Energy Credits (RECs) to comply with the Minnesota Carbon-Free Standard (CFS) would render the law meaningless, and that the Commission should disregard this form of alternative compliance with the CFS pending a Commission comment period scheduled for Q4 of 2024 and a Commission hearing in Q1 2025.<sup>18</sup> Otter Tail appreciates and looks forward to the Commission evaluating "considerations for the criteria and standards by which the Commission will measure an electric utility's compliance with the CFS."<sup>19</sup> That the Commission has appropriately opened a docket to consider the implementation of the CFS does not preclude consideration of what we believe is clear and unambiguous statutory language and legislative intent.

Minn. Stat. § 216B.1691, subd. 2g (as amended by the Clean Energy Law) reads:

Subd. 2g. **Carbon-free standard.** In addition to the requirements under subdivisions 2a and 2f, each electric utility must generate or procure sufficient electricity generated from a carbon-free energy technology to provide the electric utility's retail

<sup>&</sup>lt;sup>18</sup> Notice of Docket Process and Timeline, July 7, 2023, *In the Matter of an Investigation into Implementing Changes to the Renewable Energy Standard*, Docket E999/CI-23-151 and the Newly Created Carbon Free Standard under Minn. Stat. § 216B.1691. The DOC also defers to this docket on the issue of compliance with the CFS through RECs. <sup>19</sup> *Id*.

customers in Minnesota, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that the electric utility generates or procures an amount of electricity from carbon-free energy technologies that is equivalent to at least the following standard percentages of the electric utility's total retail electric sales to retail customers in Minnesota by the end of the year indicated:

(1)	2030	80 percent for public utilities; 60 percent for other electric utilities
(2)	2035	90 percent for all electric utilities
(3)	2040	100 percent for all electric utilities.

Minn. Stat. § 216B.1691, subd. 4 (as amended by the Minnesota Clean Energy Law) explains that renewable energy credits may be utilized to comply with the carbon-free requirements:

... (b) In lieu of generating or procuring energy directly to satisfy a standard obligation under subdivision 2a, 2f, or 2g, an electric utility may utilize renewable energy credits allowed under the program to satisfy the standard.

The plain language of Minn. Stat. § 216B.1691, subd. 2 and subd. 4 authorize the use of RECs as an alternative means to satisfy the CFS. These provisions neither limit nor restrict the use of RECs for this purpose. Indeed, House File 7 enacting the CFS clarified that while a credit may generally be used only once, "a credit may be used to satisfy both the carbon-free energy standard obligation under subdivision 2g and either the renewable energy standard obligation under subdivision 2a or the solar energy standard obligation under subdivision 2a or the solar energy standard obligation under subdivision." <u>See Minn. Stat. § 216B.1691, subd. 4 (as amended by the Minnesota Clean Energy Law).</u>

Similarly, nothing in the CFS and the related RECs provisions indicate the Legislature intended to subordinate the use of RECs to other legislative goals. Had the Legislature intended such an outcome, it would have said so. As we noted in our Supplemental Filing, Otter Tail is uniquely and well-positioned to comply with the CFS given the amount of renewable generation already in its fleet relative to its Minnesota load.

Legislative history also contradicts the CEOs' interpretation. **Attachment 1** to these reply comments is a transcribed discussion between Representative Pat Garofalo and Representative Jamie Long, the prime author of the House version of the CFS, illuminating this point. Representative Garofalo was concerned that RECs were a form

of "greenwashing," which Representative Long firmly indicated was not the case. The CEOs' construction would risk undermining a carefully crafted and necessary alternative means of compliance that acknowledges the fleet transition will require practical and flexible approaches that recognize variable generation resources and energy storage cannot today altogether displace dispatchable energy resources.<sup>20</sup>

Another concern is that the CEOs' comments appear to apply the CFS to generation and retail energy sales outside of Minnesota. This is evidenced by the CEOs' reference to Otter Tail's total systemwide retail sales relative to its carbon-free generation, which does not adhere to the CFS statute's application to Minnesota retail sales only.<sup>21</sup> Another important consideration is that by suggesting the Commission disregard the anticipated use of RECs for the purposes of this proceeding, the CEOs may expose the CFS to a legal challenge similar to the federal litigation that struck down portions of Minnesota's prior clean energy efforts.<sup>22</sup> In a letter to Senator Nick Frentz, Chair of the Senate Energy, Utilities, Environment, and Climate Committee, which was circulated on the Senate floor during debate on the CFS, the Director of Harvard Law School's Electricity Law Institute opined that the flexibility provided by RECs was a key to avoiding legal infirmities which have undermined prior clean energy legislation:

Nonetheless, [Senate File] 4 avoids each of those legal infirmities. It does not regulate energy imports, ban interstate purchases, or mandate carbon offsets. Instead, it provides Minnesota utilities with the flexibility to meet the carbon-free standard by generating or procuring power or by buying renewable energy credits. This model is on solid legal ground. More than half of states enforce similar laws.<sup>23</sup>

Senate File 4 was the identical Senate companion file to House File 7 enacting the CFS.

Finally, if the Commission is reticent to adopt a legal interpretation on RECs notwithstanding what we believe is clear statutory language and legislative intent, the Commission can look to the CFS compliance time frames -- there is time to comply

<sup>&</sup>lt;sup>20</sup> The Commission can also take notice of the incongruity of the CEOs arguing that the proposed EPA GHG regulations should be considered as if they were final, yet unambiguous and enacted Minnesota statutes

 <sup>&</sup>lt;sup>21</sup> CEO Comments, Figure 1, p. 11. Later the CEOs acknowledge that the CFS applies to Minnesota retail sales, notwithstanding their graphics and prior discussion to the contrary.
 <sup>22</sup> See North Dakota v. Heydinger, 825 F.3d 912 (8<sup>th</sup> Cir. 2016).
 <sup>23</sup> February 1, 2023, Letter from Ari Peskoe, Director of the Electricity Law Institute, Harvard Law School to Senator Nick Frentz, Chair, Minnesota Senate Energy, Utilities, Environment, and Climate Committee Attached as Attachement 2 Committee. Attached as Attachment 2.

without accepting the CEOs' (and OAG's) position on Otter Tail's thermal resources and jeopardizing customers through market and reliability risk.

#### **CEO Health and Equity Metrics Report**

Otter Tail has reviewed the Health and Equity Metrics report (PSE Report prepared by PSE Healthy Energy (PSE)) on behalf of the CEOs. This report appears to be similar to PSE's report in Minnesota Power's Resource Planning docket (Docket No. E015/RP-21-33). Otter Tail concurs with Minnesota Power's comments noting these types of reports are atypical for resource planning dockets:

In regards to the modeling utilized in the Health Equity Report, Minnesota Power notes that utilities typically do not conduct their own independent health impacts modeling as part of resource planning. This type of modeling is the responsibility of expert and disciplined state and federal environmental regulators who utilize such models to establish appropriate regulations and set permit/operational conditions that are protective of human health and the environment. As such, Minnesota *Power cannot comment on the specifics of the modeling platforms used or* the various output results presented in this Health Equity Report.<sup>24</sup>

Moreover, because the Commission's has previously declined to apply carbon dioxide externality costs for sources outside Minnesota's border, <sup>25</sup> and limited externality costs for criteria pollutants to sources within 200 miles of the Minnesota border, the PSE Report's implications for Coyote Station appears to be beyond the bounds of this proceeding. 26

Otter Tail has identified significant errors and missing context in the PSE Report that that undermine its conclusions. Throughout the report, PSE makes several statements that erroneously suggest Otter Tail charges its customers more than other utilities. For example, PSE states "Annual energy bills for Otter Tail's customers in Minnesota are

 <sup>&</sup>lt;sup>24</sup> Minnesota Power Reply Comments at 31, September 7, 2022, Docket No. E015/RP-21-33.
 <sup>25</sup> See Notice of Updated Externality Values, June 16, 2017, In the Matter of the Investigation into Environmental and Socioeconomic Costs Under Minn. Stat. §216B.2422, Subd. 3, Docket E-999/CI-00-1636.

<sup>&</sup>lt;sup>1636.</sup> <sup>26</sup> Id. See also Order Updating Environmental Costs Values, January 3, 2018, p. 44, *In the Matter of the Further Investigation into Environmental and Socioeconomic Costs Under Minnesota Statutes Section 216B.2422, Subdivision 3,* Docket No. E-999/CI-14-643. The Commission Order, when read in view of the ALJ's Conclusion of Fact 44 indicates retention of the 200-mile criteria pollutant limit. See OAH Order, Finding of Fact, Conclusion and Recommendations, June 15, 2016, in Docket No. E-999/CI-14-643. Coyote Station near Beulah, North Dakota is more than 200 miles from Minnesota's border.

roughly twenty percent (20%) higher than the average for Minnesota"27 and "Households served by Otter Tail Power in Minnesota are more energy burdened on average than the rest of Minnesota."<sup>28</sup> Unfortunately, PSE fails to recognize that Otter Tail is not a home heating fuel provider, which is the report's primary driver for higher energy bills and is not indicative of Otter Tail's electricity rates vis-à-vis other electric providers.

In fact, as highlighted in Otter Tail's 2022 ESG Report, our Company is focused on delivering safe, reliable energy at rates that are among the lowest in the nation. Otter Tail's average residential rate for Minnesota customers is more than twenty-six percent (26%) lower than the state average and nearly thirty-three percent (33%) lower than the national average.29

The PSE report also gives little, if any consideration to the regional socioeconomic benefits provided by Coyote Station and Big Stone Plant.<sup>30</sup> In reality, the socioeconomic benefits provided by these plants are significant.<sup>31</sup> The report also fails to acknowledge that Coyote Station and Big Stone Plant have strong track records of environmental compliance and sustainability. Notable accomplishments include:

- Big Stone Plant's installation of state-of-the-art air quality emissions controls • to comply with the Regional Haze and MATS Rules, thereby reducing emissions of sulfur dioxide and nitrogen oxides by approximately ninety percent (90%) and mercury emissions by approximately ninety percent (90%) compared to 2005 levels.
- Coyote Station's approximately forty percent (40%) reduction in nitrogen oxides emissions by installing separated overfire air in 2016, and its installation of EPA's top presumptive mercury control technology in 2015, resulting in an approximately seventy percent (70%) reduction in mercury emissions. Additionally, Coyote Station has improved its fabric filter baghouse

<sup>&</sup>lt;sup>27</sup> PSE Report at p. 4.

<sup>&</sup>lt;sup>27</sup> PSE Report at p. 4.
<sup>28</sup> PSE Report at p. 23.
<sup>29</sup> Source: U.S. Energy Information Administration, Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, October 2022.
<sup>30</sup> For example, the report curtly notes that for Coyote Station, "The nearby population does not have any particularly high EJScreen demographic indicators (e.g. percent of low-income populations) when compared to the rest of the state." PSE Report at p. 12.
<sup>31</sup> A 2023 study completed by the North Dakota State University (NDSU) Department of Agribusiness and Applied Economics found that the lignite coal industry represents 2.6 percent of the state's gross state product. Collectively, in 2021 the lignite industry was estimated to support 12,800 jobs in the state and generated over \$1 billion in labor income. Coyote Station is likely a key reason that the EJScreen report referenced by PSE reveals that there is a zero percent unemployment rate for a three-mile radius around referenced by PSE reveals that there is a <u>zero percent unemployment rate</u> for a three-mile radius around the plant, and there is a far lower percentage of low-income populations as compared to the state and national average.

over the years to allow it to remove particulate matter on par with far newer plants.<sup>32</sup>

- In 2018-2019 Big Stone Plant and Coyote Station closed and remediated their coal combustion residual (CCR) surface impoundments and installed a submerged flight conveyor to eliminate wet ash handling. All CCR material is now either dry disposed in the permanent landfill or beneficially re-used in accordance with state and federal requirements. Both plants operate an extensive network of groundwater monitoring wells and follow numerous EPA requirements, such as structural integrity assessments, fugitive dust plans, and closure and post-closure care, each of which has been reviewed by professional engineers.
- Both Big Stone Plant and Coyote Station operate closed-cycle cooling systems that qualify as best available technology under Section 316(b) of the Clean Water Act. Moreover, neither facility discharges ash transport water nor flue gas desulfurization wastewater.

In summary, Coyote Station and Big Stone Plant have strong environmental track records, comply with applicable law, provide significant benefits to the communities and regions in which they are located, and contribute to Otter Tail having some of the lowest residential rates in the United States.

# D. The CEOs' Position on Coyote Station is Not in the Public Interest

Otter Tail agrees with the CEOs that in nearly all scenarios, Otter Tail's modeling shows it is less expensive to withdraw from Coyote Station in 2028 than in later years. We noted this in our Supplemental Filing, where we also identified several scenarios where this was not the case. These modeling outcomes, combined with the uncertain and dynamic planning environment, support the cautious "wait and see" approach we outlined in our Supplemental Filing, where we stated:

In the current planning environment, having Coyote Station part of the Company's portfolio provides a cost-effective hedge against market volatility, unresolved accreditation questions, forecasting uncertainties

<sup>&</sup>lt;sup>32</sup> An early adopter on sulfur dioxide (SO<sub>2</sub>) controls, Coyote Station was originally constructed in 1981 with a dry scrubber, unlike several plants that only much more recently were required to install SO<sub>2</sub> controls. Since the year 2000, Otter Tail estimates that Coyote's scrubber has prevented more than 600,000 tons of sulfur dioxide from being emitted. Otter Tail acknowledges that Coyote Station is today one of the higher emitters of SO2, given that other plants added SO<sub>2</sub> controls after control technology advancements.

and related risk of errors, and unforeseen developments. This is a cautious and measured approach that preserves flexibility and limits risk pending more clarity on several fronts.

What we said then remains true today. Moreover, our approach to Coyote Station is consistent with reliability risks identified by MISO and FERC, and the additional uncertainties noted in these reply comments. When viewed in the aggregate, Otter Tail's approach to Coyote Station is reasonable, prudent, and in the public interest.

The following addresses the CEOs' core arguments regarding Coyote Station. Specifically, we address CEO criticisms about our Coyote Station modeling assumptions; perceived regulatory risks in remaining in Coyote Station, pending the requirement to make a material, non-routine capital investment in the plant; and issues concerning notice of withdrawal from Coyote Station, including claims that Otter Tail should have already withdrawn from the plant. We also respond to the CEOs' recommendation that Otter Tail request a Y-2 MISO study for Coyote Station.

# Otter Tail Modeling Assumptions for Coyote Station

Otter Tail's modeling assumptions concerning Coyote Station are reasonable, and neither excessively conservative nor extreme as characterized by the CEOs. Otter Tail's Coyote Station modeling, without externalities, shows that 15 of the total 22 sensitivities have a lower NPVRR when Otter Tail withdraws from Coyote in 2028 compared to 2040 scenarios. In all scenarios that include externalities, the NPVRR is lower with a Coyote 2028 withdrawal date when compared to a 2040 withdrawal date. Otter Tail considered all 43 modeling runs when developing our Supplemental Preferred Plan.

Different stakeholders may assign different weight to certain sensitivities, but the high level of uncertainty in the planning environment warrants abundant caution. The CEOs acknowledge this uncertainty, noting that "MISO's resource adequacy and accreditation methodologies are in flux and there is risk that renewable energy accreditation will drop in future years depending on MISO's final revised accreditation methodology."<sup>33</sup>

At the same time, they attempt to discredit Otter Tail's "Low Accreditation" scenario, which reasonably accounts for the "what ifs" that prudent planning requires. In the "Low Accreditation" scenario, a Coyote 2040 withdrawal is more economic than a 2028 withdrawal. To argue that the accreditation sensitivity paints a one-sided picture, as

<sup>&</sup>lt;sup>33</sup> CEO Comments at p. 25.

stated by the CEOs, and to subsequently state that "MISO's D-LOL methodology in August 2023... could change this picture yet again"<sup>34</sup> further bolsters the reasonableness in Otter Tail's sensitivity "Low Accreditation" as filed. Yet, the CEOs characterize this sensitivity as "extreme."

Another sensitivity that the CEOs dispute, again demonstrating that a 2040 withdrawal is more economic than a 2028 withdrawal, is the "Renewable High Cost" scenario that Otter Tail modeled. Here the CEOs agree with Otter Tail's use of a high renewable energy price forecast for near-term additions. In fact, the CEOs used that forecast in its modeling for near-term additions.<sup>35</sup> At the same time, the CEOs discount the possibility that these costs may extend past the near-term. Otter Tail is generally in agreement with the CEOs that the high near-term prices currently prevalent in the market will subside. That said, it is reasonable to account for a case where high renewable prices do not subside, given the potential for market volatility as we transition into a renewable energy economy. For the CEOs to say it is "unreasonable to assume such high costs will persist in the long-term"<sup>36</sup> is yet another example of the CEOs not accounting for the range of "what ifs" in resource planning.

Both the "Low Accreditation" and "Renewable High Cost" scenarios, each of which is characterized as "extreme" by the CEOs, demonstrate that there are risks involved in prematurely withdrawing from Coyote Station. Yet, the CEOs downplay these risks even as they are ultimately borne by Otter Tail's customers. Moreover, the CEOs counter their own characterization by acknowledging the potentials for such scenarios. Again, Otter Tail recognizes that the majority of modeled sensitivities have an economic benefit to withdrawing from Coyote Station in 2028 compared to 2040, but consistent with Minnesota resource planning requirements, this must be evaluated against uncertainty, risk, and the nature of irreversible choices in a rapidly changing environment. And it is a decision that need not occur during this resource planning cycle and can be deferred to the next cycle to better protect our customers.

# **Regulatory Risk**

The CEOs assert that regulatory risks warrant a 2028 withdrawal from Coyote Station, specifically citing risks from Regional Haze Rules, proposed EPA GHG rules, and MATS. We have addressed the problem of relying too heavily on mere proposed EPA GHG rules in Section III C. With respect to pending Regional Haze Rules, we are not aware of any

<sup>&</sup>lt;sup>34</sup> CEO Comments at p. 25-26.

<sup>&</sup>lt;sup>35</sup> Id. at p. 21.

<sup>&</sup>lt;sup>36</sup> Id.

significant developments since the North Dakota Department of Environmental Quality (ND DEO) submitted its proposed state implementation plan (SIP) to the EPA in August of 2022.<sup>37</sup> While we had anticipated that the EPA would have taken action on the ND DEQ's SIP by now, it is difficult to say when such action will occur and what, if any, litigation may follow if EPA rejects the state implementation plan in favor of its own federal implementation plan. The EPA has not altered its guidance supporting a 2028 compliance date, but presumably that may change given the delays noted above. Concerning MATS, the CEOs correctly note that the EPA recently proposed revisions to the MATS Rule that, among other things, would reduce the lignite mercury standard from 4.0 to 1.2 lb/TBtu. Although we are still in the process of understanding the impacts of this change, Coyote Station already uses an activated carbon injection system with halogenated sorbent, EPA's top presumptive mercury control technology.<sup>38</sup>

Regardless of the status of these regulations and their potential compliance costs, Otter Tail has proposed withdrawing from Coyote Station if compliance requires a material, non-routine capital investment, thereby mitigating the risks cited by the CEOs. Pending further clarity, our customers should continue to receive the benefits provided by Coyote Station.

Otter Tail acknowledges the CEOs' concern about Otter Tail's ability to manage regulatory risks in view of the Coyote Station Plant Ownership Agreement's requirement for five years advance written notice to terminate the agreement. This concern is predicated on the notion that Otter Tail could be compelled to make a large non-routine investment in the plant during the five-year notice period. This concern requires additional context.

The five-year notice provision is not the only means of withdrawal available to Otter Tail, as we noted in our Initial Filing.<sup>39</sup> Additionally, all of the Coyote Station co-owners, not just Otter Tail, would face the prospect of a material, non-routine capital investment for environmental compliance. While it's possible that one or more of our co-owners would support such an investment, depending on their individual circumstances, we anticipate each would approach the issue with abundant caution. Moreover, the type of financing necessary for each of the co-owners to proceed may be difficult to secure absent

<sup>&</sup>lt;sup>37</sup> Otter Tail acknowledges that the CEOs have served the EPA with a Notice of Intent to Sue to compel EPA to act.

<sup>&</sup>lt;sup>38</sup> As the CEOs note in footnote 80 of their comments, this is the same technology EPA assumes lignite plants will use to comply with the rule. <sup>39</sup> Our Initial Filing discussed the potential for a sale or transfer of our ownership interest at pp. 43-45.

unanimity among the co-owners, particularly when Otter Tail, the plurality owner and current operating agent, has made clear that it would seek termination of the ownership agreement and the wind down of plant operations if faced with this situation. Finally, Otter Tail strives to maintain a strong working relationship with its co-owners, which can serve as a foundation for addressing disagreements.

#### Notice of Withdrawal Issues

Clarity requires addressing the CEOs' use of the term "notice of withdrawal" as it relates to Coyote Station. The CEOs argue that prudence required Otter Tail provide such a notice years ago outside of any authorization from the Commission.<sup>40</sup> Further, the CEOs argue that the Commission should authorize Otter Tail "to give contractual notice of its intent to withdraw" from Coyote Station.<sup>41</sup> To be clear, Otter Tail has no unilateral right to withdraw from Coyote Station. Instead, each Coyote Station co-owner, including Otter Tail, has a right to terminate the Coyote Station Plant Ownership Agreement upon not less than five years advance notice, with the earliest termination date possible being December 31, 2021.42

The CEOs' claim that prudence required Otter Tail to "long ago" give notice of withdrawal without Commission authorization is uninformed. The Commission reviewed Coyote Station in Otter Tail's prior IRP filings and at no time has it been suggested, or it deemed necessary for Otter Tail to withdraw from the plant. Notably, neither the CEOs nor the OAG recommended near-term divestiture or retirement of Coyote Station in Otter Tail's prior IRP proceedings.<sup>43</sup> In that sense, the CEOs' argument is a collateral attack on prior Commission determinations.

<sup>&</sup>lt;sup>40</sup> CEO Comments at p. 37.

<sup>&</sup>lt;sup>41</sup> We urge the Commission to decline the CEOs' invitation to issue a Commission order that can be construed as directing Otter Tail to terminate the Coyote Station Plant Ownership Agreement, rather than construed as directing Otter Tail to terminate the Coyote Station Plant Ownership Agreement, rather than authorizing Otter Tail to withdraw from its ownership interest in the plant. The former raises questions concerning the Commission's authority in IRP proceedings, and, in the context of Minnesota's Carbon Free Standard, such an order may raise questions about the applicability of *North Dakota v. Heydinger*, 825 F.3d 912 (8<sup>th</sup> Cir. 2016). <sup>42</sup> "If not sooner terminated pursuant to §22.1, this Agreement shall terminate on December 31, 2021, or at any time thereafter, upon request made by any Owner to the other Owners not less than five years prior to the termination date (which the requesting Owner shall specify in its request for termination). In the event such request for termination is made, the Plant Property shall be sold in the manner and upon the terms approved by the Coordination Committee during the last year of the term of this Agreement and

event such request for termination is made, the Plant Property shall be sold in the manner and upon the terms approved by the Coordination Committee during the last year of the term of this Agreement, and the net proceeds realized from such sale shall be divided among the Owners according to their Ownership Shares." Coyote Station Plant Ownership Agreement Section 22.2. We discuss avenues for withdrawing from our ownership interest in Coyote Station in our Initial filing at pp. 41-53. <sup>43</sup> In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota, OAH 8-2500-37230/MPUC E-017/GR-20-719, ALJ Finding of Fact, Conclusions of Law and Recommendation, Finding of Fact 343.

Further, it is inconceivable that Otter Tail would have given notice to unilaterally terminate the Coyote Station Plant Ownership Agreement or otherwise divested its ownership in Coyote Station outside of an IRP proceeding authorizing such action. Coyote Station is a key capacity resource necessary to meet Otter Tail's resource adequacy and capacity requirements and has long been a part of the generation portfolio for our multi-state integrated system. Seeking authority from our regulators to irrevocably depart from this resource would be expected, regardless of the form of our withdrawal.

The CEOs' related claims about the Coyote Station lignite sale agreement (LSA) are similarly flawed. The OAG has made similar claims in its Comments, and we address the issue more fully in our reply to the OAG's Comments. That said, the CEOs' assertion that it was "obvious in 2012" that Otter Tail should not have entered into the "unusual and risky" LSA is without merit. The Coyote Station co-owners' process of evaluating Coyote Station needs and the possible replacement of the plant's mine-mouth agreement began several years before execution of the LSA in 2012, and Otter Tail and its Coyote Station co-owners acted prudently in 2012 in executing an industry standard mine-mouth LSA to replace its then-expiring lignite supply agreement. We have noted the economic incentives and features of mine mouth supply agreements in this and other dockets.<sup>44</sup> By their nature, these agreements are long-term agreements because of the unique, capital-intensive features and operational needs of mines serving mine-mouth generation facilities (including the need for draglines and major equipment such as haul trucks and dozers).

The CEOs have offered no evidence that it was obvious when Otter Tail entered the LSA that it should not have done so. Notably, the CEOs failed to make this claim in our prior resource planning dockets, reflecting the benefit of hindsight. It is well settled that prudency is determined by what utility management knew at the time decisions were made, not in hindsight.<sup>45</sup>

<sup>&</sup>lt;sup>44</sup> Otter Tail Supplemental Filing, Appendix K; See also Otter Tail Compliance Filing, pp. 9-12, *In the Matter of an Investigation into Self-Commitment and Self- Scheduling of Large Baseload Generation Facilities* Docket No. E999/CI-19-704.

<sup>&</sup>lt;sup>45</sup> The prudence of the investment must be judged by what a utility's management knew, or could have known, at the time the costs were incurred."); *New England Power Co.*, 31 F.E.R.C. P 61,047, at 61,084 (1985) ("[O]ur task is to review the prudence of the utility's actions and the costs resulting therefrom based on the particular circumstances existing either at the time the challenged costs were actually incurred, or the time the utility became committed to incur those expenses."); *In the Matter of the Petition of Xcel Northern States Power Company d/b/a Xcel Energy to Recover February 2021 Natural Gas Costs ; In the Matter of a Commission Investigation into the Impact of Severe Weather in February 2021 on Impacted Minnesota Natural Gas Utilities and Customers*, Dkt. No. G-002/CI-21-610 & Dkt. No. G-

The CEOs also err in claiming Otter Tail should have secured Commission approval of the LSA. As we note in our reply to the OAG's Comments, there was not then, and there is not now, a mechanism to secure an advance prudency determination from the Commission for a fuel supply agreement. Further, the Commission approved extending the remaining life of Coyote Station to align with the LSA in our 2013 depreciation docket.<sup>46</sup> Again, these issues are addressed in greater detail in our reply to the OAG's Comments.

#### Y-2 Study Issues

Otter Tail does not object to the CEOs' proposal that Otter Tail submit a non-binding Y-2<sup>47</sup> study request to MISO to determine the potential impacts of a Coyote Station retirement. MISO's Y-2 study is a non-binding study intended to identify potential issues if a generation unit were to shut down. While we do not oppose taking this step, all stakeholders and the Commission should recognize the limited value of a Y-2 study, in that it assesses issues at or near the time of the request, which in this instance could presumably be years in advance of a potential Coyote Station withdrawal or retirement. Moreover, Otter Tail's withdrawal from the plant does not necessarily mean that the plant will retire. Consequently, the impact of removing Coyote Station's generation, including potential cost impacts to the co-owners for system changes, would either be quickly outdated or premised on a faulty assumption. In addition, the complexity of a Y-2 request should not be underestimated when the plant is co-owned, is subject to multiple state jurisdictions, and dispatches into two ISOs. Moreover, a Y-2 study would not account for the fact that OTP lacks the authority to retire any percentage of Coyote's transmission rights through MISO's binding Attachment Y process without the consent of the co-owners, who share joint ownership and interest in Coyote Station's transmission rights. MISO has confirmed that it could perform a Y-2 study for only a portion of Coyote Station, which may be appropriate given our co-owners have not signaled a present intention to retire the plant.

<sup>999/</sup>CI-21-135, 2022 MINN. PUC LEXIS 266, \*8 (Oct. 19, 2022) ("Generally, prudence is reasonable action taken in good faith based on knowledge available at the time of the action or decision. Actions taken in good faith are those taken without malicious intent, exercising the care that a reasonable person would exercise under the same circumstances at the time the decision was made. Prudence is not evaluated using the benefit of hindsight.").

<sup>the benefit of hindsight.").
<sup>46</sup> In the Matter of Otter Tail Power Company's Request for Approval of its Five-Year Depreciation Study, Docket No. E017/D-13-795, Order (Apr. 7, 2014).
<sup>47</sup> To be clear, Otter Tail understands that a MISO Y-2 study is non-binding and informational in nature,</sup> 

<sup>&</sup>lt;sup>47</sup> To be clear, Otter Tail understands that a MISO Y-2 study is non-binding and informational in nature, whereas a MISO Y study is binding and would be requested only if the plant were retiring. As noted, Otter Tail is not opposed to a Y-2 study, but we add a note of caution about the value of the study. Otter Tail does not support a MISO Y-study.

We also note the Comments of the Department of Commerce, Division of Energy Resources (DOC or Department) requesting that Otter Tail address the potential magnitude of transmission costs associated with Coyote Station's retirement.<sup>48</sup> We understand the Department's comments to refer to potential cost impacts that might be identified in a Y-2 study, specifically the costs related to transmission system alterations that could be triggered by a MISO Attachment Y study.<sup>49</sup> While a Y-2 study might provide some insight into the magnitude of transmissions system alteration costs, the results would have limited value given they would be obsolete in short order or premised upon faulty assumptions. In addition, the various scenarios noted above would likely produce different costs impacts, all of which underscores the complexity of making a Y-2 study request. To the DOC's point, in these Reply Comments we are not in a position to assess the magnitude of potential MISO system alteration costs. As noted above, we do not oppose requesting a Y-2 study to help assess the magnitude of those costs, but all stakeholders should recognize the study's very limited value and the varying assumptions that will presumably produce different and perhaps faulty results.

#### Coyote Station Co-owner Transmission Rights

An analysis of withdrawal from or early retirement of Coyote Station should acknowledge the complexity of negotiating changes to transmission rights among and between the Covote Station co-owners. The Covote Station co-owners are parties to a 1978 transmission facilities agreement (TFA) that predates the formation of Regional Transmission Organizations (RTO's). FERC has deemed the TFA as a grandfathered agreement (GFA). The TFA as supplemented, was identified as a grandfathered agreement under the MISO Tariff.<sup>50</sup> The TFA was also the subject of FERC proceedings regarding the treatment of grandfathered agreements in MISO's energy market, resulting in a 2005 settlement that was approved by the FERC.<sup>51</sup>

Generally speaking, the transmission facilities subject to the TFA are subject to a license and right to use the same by and for all the Covote Station co-owners. The primary purpose of the TFA was to facilitate the coordinated and efficient construction of

<sup>&</sup>lt;sup>48</sup> Department Comments at 23, 36.

 <sup>&</sup>lt;sup>49</sup> An Attachment Y study is binding is not appliable at this time.
 <sup>50</sup> The Coyote Transmission Agreement is designated twice on MISO's Tariff Attachment P, as GFA No.

<sup>311</sup> and GFA No. 273. <sup>51</sup> See Testimony and Exhibits of Timothy Rogelstad on Behalf of Otter Tail Power Company, Docket Nos. ER04-691-000, EL04-104-000, at 48-50 & Exh. 33 (June 25, 2004) (describing Coyote Transmission Agreement); Offer of Settlement, Docket Nos. ER04-691-000 and EL04-104-000 (April 1, 2005) (submission of settlement proposing to resolve all issues set for hearing concerning four sets of grandfathered agreements ("GFAs"), including Coyote Transmission Agreement); Midwest Indep. Transmission Sys. Operator, Inc., 111 FERC ¶ 61,491 (2005) (order accepting settlement).

transmission facilities needed to deliver the Coyote Station's electricity. The co-owners share in maintenance costs for commonly owned assets and do not do so for discretely owned assets.

Otter Tail's withdrawal from Coyote Station or the plant's early retirement would likely require the co-owners to negotiate ownership and transmission service rights currently addressed by the TFA and any such arrangements would require FERC review and approval, while considering MISO tariff provisions. The nature of those negotiated changes could affect the TFA's status as a FERC grandfathered agreement. If FERC were to remove the TFA's grandfathered designation, there could be significant financial and operational implications for Otter Tail, including changes in Otter Tail's transmission service rights and FTR rights and revenues, the nature and scope of which cannot be estimated or predicted at this time.

# E. The Record Supports Adding Fuel Storage To Astoria Station Now.

The CEOs (and OAG) contend that it is not in the public interest for Otter Tail to add fuel storage at Astoria Station at this time. The CEOs would have the Commission defer action on fuel assurance at Astoria Station until our next resource plan filing, while the OAG would apparently not support the project now or later. We disagree. The record before the Commission supports adding on-site LNG fuel storage at Astoria Station as in the 2026 timeframe as part of Otter Tail's short term action plan. We have detailed the rationale for adding fuel assurance to our existing gas turbine at Astoria Station in several filings before the Commission.<sup>52</sup> The record demonstrates that the Astoria On-site Fuel Inventory Project:

- Ensures fuel is available for the plant even during transient events, thus providing significant reliability benefits;
- Provides rate stability for customers; and,
- Protects against price spikes.

Astoria Station provides significant price protection for our customers and provides significant reliability for our customers and the MISO system. The project promotes the key MISO reliability attribute of fuel assurance, an attribute that is central to the other reliability

<sup>&</sup>lt;sup>52</sup> See Otter Tail Initial Filing September 1, 202, pp. 53-58; Supplemental Filing and Request for Changes in Procedural Schedule October 14, 2022, pp. 3-5; Supplemental Comments, November 4, 2022; Reply Comments, February 1, 2023; Otter Tail Supplemental Filing, March 31, 2023; Supplemental Comments Concerning Astoria Station On-Site LNG Fuel Storage, June 23, 2023.

attributes identified by MISO. The record we have developed explains in detail how other options do not adequately address the risk of interruptions to Astoria Station's fuel supply.<sup>53</sup>

We do not agree that the benefits of deferring a decision outweigh the risks of delay. Our view is informed by the risks posed by extreme weather events such as Winter Storm Uri and Winter Storm Elliott, which we have detailed in our filings. Our experience with Winter Storm Elliott is particularly noteworthy, as we were unable to procure fuel for Astoria Station, at any price, for a period of time. Our customers avoided significant price impacts in part because of coincident strong wind generation, but the next extreme event may well be different. The time between winter storms Uri and Elliott was approximately 22 months. This is consistent with the North American Electric Reliability Corporation's (NERC) 2022-2023 Winter Reliability Assessment, which highlights the increased risks of extreme events.<sup>54</sup> If the past is a prelude to the future, additional extreme events are likely. Given that future, on-site fuel storage will benefit Otter Tail customers, especially as dispatchable resources continue to be retired across MISO, additional natural gas generation is integrated as a bridge to decarbonization, and pipeline construction continues to be lag in the face of landowner and environmental NGO opposition. Deferring action on Astoria Station until our next IRP increases the risk of another extreme event testing reliability and markets, a risk that can be avoided through reasonable and prudent action now.

There is little risk of buyer's remorse in moving ahead with the project. Astoria Station is a key capacity resource in our portfolio and enables the clean energy transition envisioned by Minnesota energy policy at a pace that contributes to local and regional grid reliability, reduces utility and customer impacts from exposure to fuel price volatility or supply disruption, and serves the public interest without exposing customers to rate shock. Providing fuel assurance for Astoria Station reduces the risk of a severe reliability event or price spike that would undermine public support for renewable energy. Put another way, the value of adding fuel assurance to Astoria Station is not likely to diminish with time. Therefore, it is reasonable and prudent to act now.

<sup>&</sup>lt;sup>53</sup> Supplemental Comments Concerning Astoria Station On-Site LNG Fuel Storage 6/23/2023 Docket No. E017/RP-21-339.

<sup>&</sup>lt;sup>54</sup> https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC\_WRA\_2022.pdf.

F. The Record as it Relates to Big Stone Plant is Not Sufficiently Developed and the Commission Should Take No Action on the CEOs' Assertions Regarding That Resource.

The Commission should take no action on Big Stone Plant in this docket; the record is not sufficiently developed and it is premature to consider such a significant change to Otter Tail's generation portfolio. Big Stone Plant, like Coyote Station, is a co-owned<sup>55</sup> facility with many of the same co-ownership features and operating complexities. Like Coyote Station, Big Stone Plant is also a system resource located outside Minnesota. Big Stone Plant is significantly different from Coyote Station in that it is a subbituminous coal, rail-delivered fuel plant (i.e., not mine-mouth), is larger at 475 MW, and in 2015 was retrofitted with a Commission-approved \$364 million Air Quality Control System (AQCS) comprised of state-of-the-art controls for SO<sub>2</sub>, NOx, and mercury. These factors present a very different set of circumstances for consideration.

The CEOs correctly note that Otter Tail has not examined early retirement dates for Big Stone Plant. Big Stone Plant has been, and remains, a key capacity and energy resource in our generation fleet. Early retirement of Big Stone Plant would present many of the same complexities we face with Coyote Station. Any analysis of an early retirement or withdrawal date would need the support of state commissions in our three-state footprint, an analysis of alternatives and options with our co-owners, and consideration of the impact on the host communities of Big Stone City, South Dakota (and adjacent Ortonville, Minnesota), and a thorough analysis of how we would replace the reliability attributes of the plant in a cost-effective manner. The rate impacts from necessary changes to the plant's depreciation schedule would also be a significant issue – especially in view of the comparatively recent and significant capital investment in air quality controls. None of these issues has been examined, and we are surprised to see the CEOs advocating for an early withdrawal date in this proceeding, given our prior discussions with these entities.

We recognize that continued decarbonization may require the future assessment of these issues and that Big Stone Plant may not operate until 2046. That said, there is no basis to act now as urged by the CEOs. To the extent the Commission believes these issues should be examined, this can occur in a future IRP filing.

<sup>&</sup>lt;sup>55</sup> Big Stone Plant is co-owned by Otter Tail (53.9 percent), Montana-Dakota Utilities Co. (22.7 percent), and NorthWestern Energy (23.4 percent).

# G. Points of Agreement with CEOs

Although we have fundamental disagreements with the CEOs' comments and priorities, there are areas of overlap that should inform the Commission. Specifically, the nature and amount of renewable generation to be added within approximately five years of the Commission's anticipated order in this docket is an area of general alignment with the CEOs, as shown in Otter Tail Table 6.

Column 1	Column2	Column3			
Voar	Components of Otter Tail's and the CEOs' Proferred Plans that are identical	CEOs Preferred Plan's Additional Posourcos			
		Resources			
2027					
2028	100 MW Solar				
2029	200 MW Wind	450 MW Wind			
2030		100 MW Solar			
2031		250 MW Wind 150 MW Battery			
2032	100 MW Solar 25 MW Battery				

#### **OTTER TAIL TABLE 6**

As shown in Table 6 there is significant overlap on solar and wind resource additions through 2029, except that the CEOs seek much more wind in 2029 than what Otter Tail recommends and prudence dictates.

For the Commission's consideration, we have also modeled a short-term action plan on a Minnesota-only basis, and the results indicate it would be prudent to proceed with a short-term plan on renewables as noted in Table 7 on a multi-jurisdictional basis or a Minnesota-only basis similar to our Hoot Lake Solar Project.

	Α	В	С	
Exit Coyote in 2028	Minnesota Only No Externalities	Minnesota with Old Externalities	Minnesota with New Externalities	
NPVRR (\$000)	\$1,248,958	\$1,458,627	\$1,638,570	
Year				
2023	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	
2024				
2025	Wind Repowers	Wind Repowers 200 MW Sur Solar	Wind Repowers 175 MW Sur Solar 50 MW Gen Wind	
2026 Astoria Onsite Fue		Astoria Onsite Fuel 100 MW Gen Wind	Astoria Onsite Fuel	
2027			25 MW Sur Solar	
2028			50 MW Sur Solar 100 MW Gen Wind	
2029	75 MW Sur Solar 50 MW Gen Wind		100 MW Gen Wind 75 MW Battery	
2030				
2031	50 MW Gen Wind			
2032	100 MW Sur Solar	50 MW Gen Wind	25 MW Gen Solar	
Wind	100	150	250	
Solar	175	200	275	
Battery	0	0	75	
Total	275	350	600	

# **OTTER TAIL TABLE 7**

Modeling on a Minnesota-only basis is less expensive overall when considering retirement of Coyote Station in 2028 for evaluation purposes. However, our Supplemental Preferred Plan (modeled as an integrated, multi-jurisdictional system) builds more renewables than the Minnesota-only model (columns A & B above). It should be noted that while the modeling identifies additional solar and wind in 2025, it is infeasible to install these resources in such a short timeframe.

When comparing the same scenarios with new externalities under Column C, the results are the same with the Minnesota-only scenario being cheaper but yielding less renewables overall than our Supplemental Preferred Plan with externalities. Please note that we have included results of externalities with the *new* regulatory cost of carbon and social cost of carbon costs that the Commission recently noted in Dockets E999/DI-22-

236 and E999/CI-07-1199<sup>56</sup>. This should provide even more clarity to the Minnesotaonly modeling.

# **IV. RESPONSE TO OAG COMMENTS**

The OAG has made a series of incorrect and unsupported statements concerning the performance of Coyote Station, the LSA executed by the co-owners in 2012, Otter Tail's compliance with prior Commission orders, and the need for Astoria Station fuel storage. Otter Tail has addressed many of these claims in other dockets, including our last rate case.<sup>57</sup>

Beyond these points the OAG has misconstrued Otter Tail's position on Coyote Station. Otter Tail is not proposing to run Coyote Station until 2041, as asserted by the OAG. Otter Tail is proposing to retain a cost-effective hedge against uncertainty and essential MISO reliability attributes provided by Coyote Station until such time as a material, nonroutine capital investment is needed at Coyote Station. Moreover, this decision need not be made precipitously and can be the subject of a future IRP.

Absent unforeseen developments Otter Tail's withdrawal from Coyote Station is a question of when (and how), not if. In that sense we have not withdrawn our position on Coyote Station stated in our Initial Filing; we have adjusted it to account for the many uncertainties we have noted in these Reply Comments; uncertainties to which the OAG gives little attention or weight.

# A. Coyote Station Has Served Otter Tail's Customers Well

The OAG (and CEOs) Comments assert that that Otter Tail customers have and will continue to suffer production cost losses at Coyote Station, inferring that the plant is not a cost-effective resource for our customers. This is not correct. Coyote Station has performed very well in the manner it was designed to perform - as a mine mouth, baseload generation plant. The OAG's production cost loss analysis rests on a flawed methodology that, if adopted, would also render many non-dispatchable renewable generation plants not cost effective.

<sup>56</sup> The Commission issued a Notice for Comment on March 29, 2023, in Dockets 999/CI-07-1199; E999/DI-22-236 on how to implement recently enacted changes to Minn. Stat. § 216.B 2422 subd. 3 and related energy legislation. The Commission held a hearing on the same on September 14, 2023.

<sup>&</sup>lt;sup>57</sup> In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota, Docket No. E017/GR-20-719 (hereinafter "Otter Tail 2020 Rate Case").

Comparisons of production costs to MISO revenues are inadequate for evaluating a plant's cost-effectiveness for reasons that include the following:

- Unavoidable fixed costs are not considered in the production cost losses analysis. These are costs that Otter Tail would pay even if it relied entirely on the spot market.
- A generation plant's capacity function necessary to meet resource adequacy requirements is not considered in the production cost losses analysis; any assessment of the cost effectiveness must necessarily consider replacement energy and capacity costs. By only comparing the energy production costs and MISO energy market revenues, the production cost analysis ignores a generation plant's capacity function within a resource portfolio.
- A production cost analysis is based on an incorrect premise that a utility would simply rely upon the spot market to serve its customers in the absence of the generation plant in question. In reality, a utility would secure a replacement resource or resources to provide capacity and energy benefits to provide certainty to its resource mix rather than relying on day ahead energy markets and exposing customer to fluctuating prices. 58

Production cost/revenue comparisons are useful in assessing the flexibility of a plant, but there are many cost-effective plants that have limited operational flexibility and would show "production cost losses" as that term has been used in other dockets, including most non-dispatchable renewable resources and many baseload generators. In reality, the OAG's production cost loss analysis results in many resources having "production-cost losses" (not just Coyote Station and other coal generation plants).

Otter Tail recently illustrated this point in response to the OAG's production cost-loss analysis in the self-commit docket<sup>59</sup>. OTP performed the same production-costcomparison-to-market-price for its most recent major wind PPA, Ashtabula III.<sup>60</sup> The results are proportionally greater production cost losses for the Ashtabula III PPA than for Coyote Station:

<sup>&</sup>lt;sup>58</sup> We noted these points in our response to IR MN-CEO-030. For a full discussion of these points see Otter Tail 2020 Rate Case, Gerhardsen Rebuttal, pp. 16-21.
<sup>59</sup> Otter Tail Response Comments June 15, 2021, *In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large Baseload Generation Facilities*, Docket No. E999/CI-19-704.
<sup>60</sup> The Ashtabula III PPA price is comparable to or lower in price than other OTP wind PPAs, and it is therefore intended to serve as a reasonable proof for the point made by this illustration. 2021 revenue for this illustration was calculated through May 18, 2021, with cost through April 30, 2021.

#### **PROTECTED DATA BEGINS...**

#### ....PROTECTED DATA ENDS

OTP expects that all of its wind PPAs (and other utilities' wind PPAs) would show similar if not larger negative results under this analysis. The results do not mean that Otter Tail's wind PPA, other PPA's or other generators are not cost-effective contributors to Otter Tail's resource portfolio. It means that they are not able to flexibly respond to market prices - something they were not designed to do. Wind generators frequently operate at times when market prices are low (or even negative), and they are frequently unavailable when market prices are high, but they produce energy at consistent prices over time and contribute cost-effectively to Otter Tail's resource portfolio, which is also the case for Covote Station. Like the wind generators, they have been able to produce energy at consistent prices over time and they contribute cost effectively to Otter Tail's resource portfolio. In sum, a production-cost loss analysis simply illustrates the phenomenon that the MISO market fluctuates, and when MISO market prices are low Otter Tail customers benefit.61 This demonstrates the limited value of simple production-costs-to-market price analyses in assessing the cost-effectiveness of a plant.<sup>62</sup>

Were a production-cost loss analysis a valid measure of cost-effectiveness, all Otter Tail generation (and much of that of other utilities) would need to be retired in favor of spot market purchases. Yet, the Commission has been clear that over-reliance on the market is not favored:

<sup>&</sup>lt;sup>61</sup> See Otter Tail 2020 Rate Case, Gerhardson Rebuttal at 20-21.

<sup>&</sup>lt;sup>61</sup> See Otter Tail 2020 Rate Case, Gerhardson Rebuttal at 20-21. <sup>62</sup> Another way to evaluate the validity of a production-cost-comparison-to market- price in terms of whether a plant is cost effective is to consider how it would be applied to non-dispatchable renewables, natural gas peaking generators, and baseload generators—which might be considered as representative of the spectrum of flexibility in generation resources. The non-dispatchable renewables would fare most poorly, with no ability to respond to the market and, for wind generators, likely with a high degree of inverse correlation to market price. On the opposite end of the spectrum are natural gas peaking generators, which would fare most favorably, as they are the most able to dispatch flexibly in response to changes in market prices. Baseload generators fall somewhere in the middle, as they were not designed to be flexible, but they are somewhat dispatchable depending on their specific design characteristics and other considerations. other considerations.

Further, reliance on short-term contracts can subject the long-term planning process to shorter-term market volatility as contracts expire and market prices and resource availability change. And long-term contracts also carry price risks. Contract prices that are not competitive due to subsequent changes in market prices could result in higher long-term prices for Otter Tail's customers.<sup>63</sup>

It is certainly a reasonable endeavor to consider whether it may be possible to increase the flexibility of plants such as Coyote Station, but the lack of flexibility is not a fair indictment, when taken in isolation, of either renewable or baseload generation units.

Finally, if the OAG and CEOs assertion that Otter Tail's customers have suffered, and will consider suffering, from production cost losses - - one would expect that to be borne out by the cost of energy paid by Otter Tail's customers. The facts show otherwise. Table 8 below reflects the actual cost of energy paid for by Otter Tail's customers since 2010. It shows our customer have benefited from our cost-effective portfolio over time:

	Net System Cost of Energy
Calendar Year	(\$/MWh)
2010	23.04
2011	22.43
2012	23.11
2013	23.48
2014	25.15
2015	24.73
2016	23.06
2017	23.78
2018	24.14
2019	23.93
2020	20.30
2021	21.68
2022	25.89

#### **OTTER TAIL TABLE 8**

#### Net Cost of Energy Paid By OTP Customers Since 2010

<sup>&</sup>lt;sup>63</sup> Order Approving Plan With Modifications And Setting Requirements For Next Resource Plan at 7-8, April 26, 2017, *In the Matter of Otter Tail Power Company's 2017–2031 Integrated Resource Plan* Docket No. E-017/RP-16-386.

#### **B**. The OAG Misconstrues Coyote Station's Coal Supply Agreement.

The OAG's Comments argue that the LSA serving Coyote Station is unusual, that it contributes to production cost losses, and that Otter Tail should have sought Commission approval before entering into the LSA. This leads the OAG to recommend that the Commission direct Otter Tail to withdraw from Coyote Station, and to deny Otter Tail recovery of LSA termination costs and a return on the plant's undepreciated net book value. The OAG's assertions are unreasonable and are not supported by the record.

Otter Tail followed reasonable procedures in evaluating the LSA, which was fully disclosed to the Commission. Otter Tail and its Covote Station co-owners entered into the LSA in 2012, following the issuance of a request for proposals (RFP).<sup>64</sup> The LSA is structured similarly to contracts for other mine-mouth plants and is generally consistent with industry practices.<sup>65</sup> The LSA incorporates the concepts common to mine-mouth fuel supply agreements as we have described in this proceeding.<sup>66</sup> The LSA replaced a similar expiring agreement with Dakota Westmoreland Corporation. Otter Tail and the other Coyote Station owners considered "several factors, including expected life durations of plants similar to Covote, the condition of the major components of Covote, and the operational performance of the facility."67 These actions are consistent with "the care that a reasonable person would exercise under the same circumstances at the time the decision was made."68

The OAG is correct that Otter Tail did not seek approval from the Commission before entering the LSA; there was no mechanism then, and there is no mechanism today. for seeking such a determination. Neither the OAG nor the CEOs has identified any instances where Minnesota utilities have pursued such a determination. Nevertheless, the Commission did consider the LSA in our 2013 depreciation docket; the agreement was directly related to the extension of Coyote Station's remaining life to the current 2041 retirement date.<sup>69</sup> As explained by the Department in Otter Tail's 2013 Five Year **Depreciation Study:** 

<sup>&</sup>lt;sup>64</sup> In the Matter of Otter Tail Power Company's Request for Approval of its Five Year Depreciation Study, Docket No. E017/D-13-795, Department Comments, Attachment 2 at 1 (Jan. 17, 2014). The Commission agreed with and adopted Otter Tail's 2013 Depreciation Study in the Commission's April 7, 2014, Order. (eDocket No. <u>20144-98032-01</u>). <sup>65</sup> Otter Tail Rate Case, Gerhardson Rebuttal at 28.

<sup>&</sup>lt;sup>65</sup> Otter Tail Rate Case, Gerhardson Rebuttal at 28.
<sup>66</sup> Otter Tail Supplemental Filing, March 31, 2023, Appendix K.
<sup>67</sup> In the Matter of Otter Tail Power Company's Request for Approval of its Five-Year Depreciation Study, No. E017/D-13-795, Department Comments at 5, 12.
<sup>68</sup> See In the Matter of the Application of Interstate Power Company for Authority to Increase Its Rates for Electric Service in the State of Minnesota, Docket No. E001/GR-91-605, Findings of Fact, Conclusions of Law, and Order, at 19 (June 12, 1992). See also supra n. 44.
<sup>69</sup> Otter Tail Rate Case, Gerhardson Rebuttal at 33-34.

In its petition, OTP proposed to extend the remaining life of Covote Station by 8.4 years, from 19.0 years to 27.4 years, with an AYFR of 2041. The proposed extension would lower OTP's depreciation expense by approximately \$0.7 million per year. In its response to IR No. 4, OTP stated that the proposed remaining life extension was prompted by the execution of a new, 25-year coal contract, signed in 2012, which commences in 2016 and expires in 2041.70

This lower depreciation expense has been part of Otter Tail's rates since that time.<sup>71</sup> In none of Otter Tail's subsequent depreciation filings, our 2015 rate case, and our 2016 IRP did any party assert that entering into the LSA was unreasonable based on the information known at the time. More to the point, the OAG declined to participate in our 2016 IRP. To now contend that entering into the LSA was imprudent is the sort of hindsight-based assessments that the Commission should decline to consider.

Finally, we disagree with the OAG's recommendation that the Commission should deny Otter Tail a return on any undepreciated net book value, in the event Otter Tail withdraws from Coyote Station. The OAG cites the Commission's actions concerning Minnesota Power's Taconite Harbor as a template. The circumstances around Taconite Harbor were unique, and the Commission's order concerning that plant is now undergoing judicial review.<sup>72</sup> Moreover, the Commission is scheduled to consider rate making issues related to the early retirement of coal plants in Docket No. E017/CI-23- $375.^{73}$ 

C. Otter Tail Has Added Wind Resources Authorized by the Commission. The OAG contends that Otter Tail has failed to secure the amount of wind generation contemplated by the Commission's last IRP Order,<sup>74</sup> to the detriment of our customers. This is not the case. The Commission's Order in our last IRP approved our five-year action plan that included "the addition of 200 MW of wind in the 2018-to-2020-time frame."75 We completed this resource acquisition through our Merricourt Wind Project,

 <sup>&</sup>lt;sup>70</sup> In the Matter of Otter Tail Power Company's Request for Approval of its Five-Year Depreciation Study, No. E017/D-13-795, Department Comments at 4.
 <sup>71</sup> Otter Tail Rate Case, Gerhardson Rebuttal at 34-35.

 <sup>&</sup>lt;sup>72</sup> Otter Fail Rate Case, Gernardson Rebuttar at 34-35.
 <sup>72</sup> In the Matter of the Application of Minnesota Power for Authority to Increase Rates for Electric Service in Minnesota, Docket No. E-015/GR-21-335, Minnesota Court of Appeals A23-0871.
 <sup>73</sup> In The Matter Of A Commission Inquiry Into The Ratemaking Treatment For Early Retiring Generating Facilities Owned By Regulated Electric Utilities.

<sup>&</sup>lt;sup>74</sup> Order Approving Plan With Modifications And Setting Requirements For Next Resource Plan, April 26, 2017, *In the Matter of Otter Tail Power Company's 2017–2031 Integrated Resource Plan*, Docket No. E-017/RP-16-386.

<sup>&</sup>lt;sup>75</sup> Id. at p. 10, Order Point 4.

our largest ever wind project (with a nameplate capacity of 150 MW) which went into service in 2020. The OAG's premise is that the 150 MW Merricourt Wind Project is less than the 200 MW of wind authorized by the Commission. What the OAG omits is that Merricourt's exceptional net capacity factor of approximately fifty percent (50%) allowed Otter Tail to acquire as much wind generation as a 200 MW wind facility with a net capacity factor of forty percent (40%) - the capacity factor upon which our IRP modeling was based. The net result is that we were able to provide a wind resource at an exceptional value for our customers by acquiring the energy output of a 200 MW name plate plant at the cost of the 150 MW name plate plant.

In that same IRP Order, the Commission modified Otter Tail's plan "to include 100 MW to 200 MW of wind in the 2022 to 2023 timeframe. This does not preclude additional wind during the five-year action plan period."<sup>76</sup> Again, the OAG's premise is that Otter Tail failed to add the 100 to 200 MW of wind in the 2022 to 2023 timeframe. The OAG's premise is incorrect. The Commission's Order also provided the following qualification concerning additional wind during the 2022-2023 time frame: "[t]he Commission concurs with the parties' analyses on this issue and will modify Otter Tail's plan to include an additional 100 MW to 200 MW of wind in the 2022 to 2023 timeframe, if needed and cost-effective."77 (emphasis added).

As we noted in responses to information requests<sup>78</sup> the production tax credit (PTC) for wind was scheduled to be ratcheted down and ultimately phased out altogether in the 2019-2020 time frame; the time frame Otter Tail would be required to enter into acquisition contracts for wind projects for in-service dates for the 2022-2023 timeframe. Otter Tail acted prudently in not securing additional wind when PTCs were not assured. Had we done otherwise, the OAG and others would presumably have questioned those resource additions.

More recently, the Commission evaluated the OAG's position that Otter Tail should add more wind generation in the proceeding that approved our Hoot Lake Solar Project.<sup>79</sup> The Commission did not agree that Otter Tail needed to add more wind at that time:

<sup>&</sup>lt;sup>76</sup> Id. at p. 10.

<sup>&</sup>lt;sup>77</sup> Id. at p. 5.

<sup>78</sup> MN-OAG-032.

<sup>&</sup>lt;sup>79</sup> Order Approving Petition, Authorizing Allocation of Output & Costs, Authorizing Cost Recovery, and Requiring Compliance Filings, April 29, 2021, *In the Matter of Otter Tail Power Company's Petition for Approval of the Hoot Lake Solar Project* Docket No. E-017/M-20-844.

Finally, although the Commission appreciates the OAG's recommendation that Otter Tail take advantage of the low-cost of wind energy and issue a request for proposals for additional wind at the Company's Astoria Station plant, the Commission declines to direct that the Company pursue wind acquisition at this time. The Commission will have the opportunity to more fully examine this and related issues in the Company's next IRP.<sup>80</sup>

It should also be noted that Otter Tail is currently moving forward with repowering its GE fleet of wind turbines, which will enable the equivalent energy output of 40 MW of additional wind generation in the 2024-2025 timeframe. The foregoing demonstrates that Otter Tail has followed through on its last IRP Order and secured the equivalent energy output of the amount of wind generation nameplate that was authorized at the time.

# D. The OAG's Analysis of Astoria Station Is Flawed and Unsupported by the Record.

The OAG argues that fuel storage is not necessary at Astoria Station, and that Otter Tail's customers would be better protected from fuel supply disruptions by home weatherization. The OAG's analysis is misplaced and to the extent it suggests our customers should rely on weatherization versus addressing grid stability and reliability and the avoidance of severe rate impacts, the OAG badly misses the mark.

The OAG Comments give little consideration to the price protection and hedge value against intra-day pricing risk afforded by fuel storage, which we have detailed in our prior filings. With respect to reliability, the OAG appears to assign far less value to fuel assurance as a key MISO reliability attribute than does the regional transmission organization responsible for operation of the regional grid. The OAG Comments also suggest there is a significant distinction between fuel assurance and resilience. There is not. They go hand in hand. Moreover, if one examines the six key MISO reliability attributes, they all depend on the ability of generation plants to have fuel-assured resources.

The OAG's Comments also overlook the fact that fuel-assured dispatchable resources are essential to the transition to carbon free resources. As many have noted, a future Winter Storm Uri or Winter Storm Elliott event that disrupts electric service or causes rates to spike may quickly erode public support for the transition to renewable resources. Our

<sup>&</sup>lt;sup>80</sup> Id. at p. 7.

customers were able to avoid many of the impacts of Winter Storm Uri, and Winter Storm Elliott's impacts were muted by strong wind generation during that event. That said, we were unable to procure natural gas at any price during Winter Storm Elliott, and future events may be more severe.

The OAG's analysis of Winter Storm Elliott's impact on fuel supply reflects a misunderstanding of how gas pipelines function. The OAG suggest that because other natural gas plants in the region were able to secure fuel, the Commission should discount Otter Tail's claims that it could not.

The OAG analysis focuses on whether plants were operating during Winter Storm Elliott without any information on when gas was procured, which renders the OAG's analysis superficial and speculative. It is highly probable the plants noted in the OAG's analysis procured gas in advance of the intraday nomination cycles. Despite reductions in supply caused by production freeze-offs, supply that was available was likely utilized to meet previously scheduled nominations. As we have noted in our prior filings, during the evening of December 23, 2022, Otter Tail did not know if or when MISO would choose to dispatch Astoria Station. When MISO chose to commit and dispatch Astoria Station in real time, Otter Tail sought to acquire additional intraday (or spot market) gas supply. Per our gas supplier, Tenaska Marketing Ventures (Tenaska), incremental intraday gas was not available at any price. If additional supply would have been available, utilization of such gas would not have been dependent on availability or priority of transport.

In sum, the OAG has missed the mark on Astoria Station, downplaying the considerable benefits afforded by adding fuel assurance, and the significant risks associated with not doing so. That Otter Tail could address these issues through additional weatherization programs for our customers is not a reasonable position.

# V. REPLY TO DOC COMMENTS

Otter Tail appreciates the Department's Comments. We concur in the Department's assessments that our energy and demand forecasting process has very little systemic bias.<sup>81</sup> We note and agree with the Department's specific findings concerning our forecasting:

<sup>&</sup>lt;sup>81</sup> DOC Comments at 14.

- That no adjustments were necessary for OTPs base energy forecast was warranted.82
- That our demand forecast process did not display any clear signs of systemic bias.83
- That any errors in our demand forecast are too small to be meaningful.<sup>84</sup>
- That that our energy forecasts required no adjustments.<sup>85</sup>
- That Otter Tail treatment of Heat Degree Days did not produce any changes of • significance that could impact the IRP in a meaningful way.<sup>86</sup>
- That "OTP has consistently and clearly described the Company's forecasting method for pipelines sales in recent filings."87

We also concur with the Department that Otter Tail provided the Department the correct Encompass modeling files for the Department's analysis.<sup>88</sup> We also acknowledge the Department's recommendation for modeling adjustments and refinements to consider in our next IRP filing. We look forward to addressing these issues in our next IRP filing.

Our reply to the Department's Comments focuses on the Department's recommendations that (1) Otter Tail provide the Commission-ordered environmental and regulatory cost contingencies using the updated EnCompass model; and (2) that the Commission approve a bidding process for Otter Tail's future resource acquisitions. The Department also recommended that Otter Tail address in its Reply Comments the transmission cost implications of early retirement for Coyote Station, which we have addressed in reference to the CEOs' request for a Y-2 study for Coyote Station referenced above.

#### Α. **Otter Tail Response to Modeling Environmental and Regulatory Cost** Contingencies

The Department recommends that "OTP provide the Commission-ordered environmental and cost contingencies using the updated EnCompass model" because of changes to Otter Tail's load and reliability construct in our Supplemental Filing.<sup>89</sup>

<sup>87</sup> DOC Comments at 13. <sup>88</sup> DOC Comments at 19.

<sup>&</sup>lt;sup>82</sup> DOC Comments at 8.

<sup>&</sup>lt;sup>83</sup> DOC Comments at 8.

<sup>&</sup>lt;sup>84</sup> DOC Comment at 10.
<sup>85</sup> DOC Comments at 12.

<sup>&</sup>lt;sup>86</sup> DOC Comments at 12.

<sup>&</sup>lt;sup>89</sup> DOC Comments at 19. The CEOs have also noted this issue.

By way of background, Otter Tail provided the full range of Commission ordered environmental and cost contingencies in our Initial Filing<sup>90</sup>. In our Supplemental Filing, we modeled only the mid-range for Environmental and Cost Contingencies. This was done to reduce the number of modeling runs because we were under a compressed timeline. The additional sensitivities that were included in our Initial Filing provided insights, but nothing that ultimately resulted in adjustments to our Preferred Plan. Although our Supplemental Filing model had some significant changes, the outcome that was to be expected from this full range was already understood from our Initial Filing's modeling runs that considered various ranges of carbon costs. However, Otter Tail provides A.RC.1-4 (Attachment 3) at the request of the Department. These modeling results were as expected and do not change our Supplemental Preferred Plan.

#### **B**. Otter Tail's Customers Are Better Served by Otter Tail's Flexible **Competitive Acquisition Process than by the Process Recommended** by the Department.

Otter Tail appreciates the Department's Comments urging the Commission to adopt a detailed and highly structured bidding process for future resource acquisitions. We share the Department's goal of securing the most cost-effective projects for our customers. However, we do not believe it is necessary to adopt the detailed bidding process outlined by the Department in order to achieve this goal. We believe our customers are better served by the flexible and cost-effective approach we have successfully used in prior projects, the most recent of which are the 150 MW Merricourt Wind Project and our 49.9 MW Hoot Lake Solar Project. As was the case with these renewable resource additions, we anticipate using a competitive, less formal process that evaluates projects in various stages of development, as well as varying project structures (PPA, build-transfer, and self-built) while collaborating with developers to explore potential opportunities. Using this competitive, less formal approach to resource acquisition, we would also evaluate greenfield sites and surplus interconnection facilities to ensure our customers are getting the best value. We have described our flexible competitive acquisition process in compliance filings in our last resource planning docket.<sup>91</sup> The process weighs multiple factors in evaluating projects:

- cost of wind energy to Otter Tail customers; (i)
- indication of site commitment; (ii)
- status of generation interconnection request; (iii)

 <sup>&</sup>lt;sup>90</sup> Initial Filing, Appendix I.
 <sup>91</sup> Compliance Filing, April 7, 2020, and July 1, 2020, In the Matter of Otter Tail Power Company's 2017-2031 Resource Plan Docket No. E017/RP-16-386.

- (iv) location of interconnection and impact of delivery to Otter Tail customer including potential project curtailment;
- project permitting status; (v)
- anticipated commercial operation date to ensure utilization of (vi) the tax incentives;
- evidence of wind turbine supply: (vii)
- (viii) anticipated reliability of proposed equipment;
- evidence of wind resource: (ix)
- developer's experience in developing wind farms; and (x)
- other public interest benefits.92 (xi)

In our July 1, 2020, Compliance Filing, we described the application of this flexible process to secure the Hoot Lake Solar Project, which the Commission approved on April 29, 2021.93 In approving the project, the Commission declined to adopt the Department's recommendation to deny Otter Tail's petition. The Department's recommendation was based in large part on the Department's perceived deficiencies in Otter Tail's resource acquisition process. As noted by the Commission:

The Department recommended that the Commission reject Otter Tail's petition based on the Company's resource acquisition process. The Department argued that Otter Tail's resource acquisition process was critically flawed because the Company did not employ an independent auditor and did not publish any advertisements, requests for proposals, or press releases indicating the Company was looking for proposals for new facilities. Apart from these alleged deficiencies, the Department acknowledged that the Hoot Lake Solar Project is consistent with Otter Tail's 2016 IRP and that the Company performed a reasonable evaluation of the proposals it received.94

In approving Otter Tail's petition, the Commission spoke to Otter Tail's flexible acquisition process:

While the Commission appreciates the Department's close scrutiny of Otter Tail's acquisition process, the Commission concurs with Otter Tail that its competitive bidding process and the evaluation of the proposals it received

<sup>&</sup>lt;sup>92</sup> Compliance Filing, July 1, 2020, at p.4, *In the Matter of Otter Tail Power Company's 2017-2031 Resource Plan* Docket No. E017/RP-16-386.
<sup>93</sup> Order Approving Petition, Authorizing Allocation of Output & Costs, Authorizing Cost Recovery, and Requiring Compliance Filings, April 29, 2021, *In the Matter of Otter Tail Power Company's Petition for Approval of the Hoot Lake Solar Project* Docket No. E-017/M-20-844.
<sup>94</sup> Id. at 4.

were reasonable and prudent, consistent with the Commission's directives, and resulted in the least-cost solar resource available.95

The Commission also noted the OAG comment that the Hoot Lake Solar Project "would be the lowest-cost solar project the Commission has approved to date by a large margin.<sup>96</sup> The Hoot Lake Solar project demonstrated the benefits of a flexible and nimble resource acquisition process. The ability to move quickly with flexibility will be increasingly important as we face the challenge of limited lowcost interconnections in the future.

We believe the flexible, cost-effective approach to resource acquisition we have used successfully for the Merricourt Wind Project and the Hoot Lake Solar Project should remain our approach. It has proven effective for our customers in the past and it will be effective going forward.

#### VI. **CONCLUSION**

For the reasons stated in our Initial Filing, Supplemental Filing and these Reply Comments, Otter Tail respectfully request that the Commission adopt our Supplemental Preferred Plan.

<sup>&</sup>lt;sup>95</sup> Id. at 6. 96 Id. at 4.

Dated: October 30, 2023

Respectfully submitted,

#### **OTTER TAIL POWER COMPANY**

By: <u>/s/ NATHAN JENSEN</u> Nathan Jensen Manager, Resource Planning Otter Tail Power Company 215 S. Cascade Street Fergus Falls, MN 56537 (218) 739-8989 njensen@otpco.com

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# January 18, 2023 House Climate and Energy

Hearing on HF7

#### House Research summary – HF7

- [216B.1691] Renewable energy standards. Subd. 3. Utility plans filed with commission. Requires utilities to report the number of Minnesota employees hired to construct new energy facilities; efforts to retain and retrain workers employed at electric generating facilities that have been retired or are scheduled to be retired; impacts of new facilities on environmental justice areas; utility efforts to diversify its workforce and vendors; and information about renewable energy credits utilized to comply with the renewable energy standard.
- [216B.1691] Renewable energy standards. Subd. 4. Renewable energy credits. Specifies that credits may be used to satisfy both the renewable energy and carbon-free standard if they qualify for both.

#### <u>1:22:17</u> – 1:28:47

**Rep. Garofalo:** so assuming that plant were to go forward, how would it operate with 100% requirement for carbon free.

**Rep. Long:** so the 100% clean energy bill has a couple of options if you are a carbon producing facility. One is that you could have RECs, so renewable energy credits, so you would have to offset any fossil fuel generation you have. Second option is that you could run a facility on carbon free power, so you could for example you could run a gas plant on green hydrogen. A third option is you could go to the PUC and seek an off ramp, and say that you need to run the plant for affordability/reliability reasons.

Rep. Garofalo: do you have concerns that the RECs will be used for green washing?

Rep. Long: no.

**Rep. Garofalo:** how is coal or natural gas plant that's operating considered carbon free then? If it's not green washing?

Rep. Long: it is not carbon free.

Rep. Garofalo: so operating that plant would not be carbon free?

**Rep. Long:** no, under the bill, carbon free generation means you're not producing carbon. If you are attempting to meet one of the standards under the bill and you are generating more carbon than that standard would allow, which is the current option under the RES which is being maintained in that bill is that you could have purchased RECs which is a widely used and very respected way to measure generation of renewable energy and so you would have to purchase

kilowatt hour per kilowatt hour renewable energy credits for any additional generation that is over the standard.

**Rep. Garofalo:** maybe I asked my question the wrong way. When a natural gas or coal plant is operating, it's emitting CO2 and methane emissions, RECs are sort of a legislative alchemy. They just say that those carbon emissions don't exist, and that renewable or clean generation somewhere else is substituted for that generation. That is, by definition, green washing. That is taking a carbon emitting source and now claiming it's carbon free.

**Rep. Long:** that's incorrect. It is using it as an offset for that particular emission for that particular standard. We need a mechanism like that, because when you are going to 100% clean energy for example, we don't want to prohibit purchasing on our regional market, like MISO, MISO's regional market is not 100% carbon free so you need to have a mechanism to account for the carbon content of the energy production. A REC for example is one way to do that and to assure that we are producing 100% carbon free energy that is equivalent to the total sales to the retail customers.

**Rep. Garofalo**: that generation has already taken place. There's no requirement that it be new. We could use what's being used now are RECs down in NV, that are already generating electricity, there is no offset, that generation already exists.

**Rep. Long:** I don't think you understand how RECs work. You retire a single REC for a single usage. The REC is going to one specific outcome, in this case it would be retired to be credited towards the 100% requirement. If a utility wanted to use a REC for themselves, it would retire for themselves. If that energy is going toward being used for this particular purchase, it would retired for that purpose.

**Rep. Garofalo:** I do understand how a REC works, and I do understand how they're retired. What I'm saying to you is that when that generation takes place, it's still emitting carbon. You're emitting carbon from that source, and when you purchase a REC, it green washes over that. There is no reduction in pollution. The generation already exists. This has been studied by such well respected scholars as John Oliver on Last Week Tonight on HBO. The common practice of carbon washing and green washing, it's well known and mocked in the environmental community. When we have a REC being purchased, there is no requirement that that renewable generation be new. It can be existing. The example with NV, they have lots of solar being sold as RECs. That generation is existing today. The only new generation coming online is the natural gas which is being offset by an existing energy source. This is the criticism of what green washing is. If it's not green washing, tell me what green washing is.

**Rep. Long:** John Oliver's bit was not talking about RECs. RECs are highly robust, very well regulated, very well understood national markets. There is no green washing involved in using RECs. If you'd like to strengthen the bill and remove the ability to use RECs you're free to offer an amendment.

**Rep. Acomb:** I think what we're doing is discussing the bill at this point, we have an amendment rule and amendments were supposed to be in yesterday.

**Rep. Long:** the majority leader just offered me an opportunity to offer an amendment.

**Rep. Acomb:** there will be another opportunity on the floor.

**Rep. Garofalo:** I'm aware of carbon offsets vs. RECs. It doesn't change the fact that renewable energy sources that are existing today, on an annual basis, will retire those RECs for a new carbon emitting source. That isn't cleaning up the environment. That's green washing. That's taking an existing source of energy that is being supplied, and now including hydro. So existing hydro electricity will be able to have RECs purchased from it, will allow for the creation of new CO2 emissions. Am I wrong?

Rep. Long: yes.





February 1, 2023

Senator Nick Frentz Minnesota Senate Energy, Utilities, Environment, and Climate Committee 95 University Avenue W. Minnesota Senate Bldg. St. Paul, MN 55155

Dear Chair Frentz,

I have reviewed Senate File 4 (SF 4) and find that it seeks to achieve legitimate energy policy goals in a manner that is consistent with the U.S. Constitution. SF 4 follows a wellestablished regulatory model that has withstood legal challenges in federal courts.

For the past decade, I have been tracking Constitutional challenges to state energy laws, with a focus on preemption and dormant Commerce Clause claims. SF 4 respects the Constitutional limits of state authority. The bill's carbon-free standard places legal obligations only on Minnesota utilities that deliver energy to consumers in Minnesota. It does not regulate entities outside of Minnesota or impose terms and conditions on interstate transactions that might be preempted by the Federal Energy Regulatory Commission (FERC).

The Eighth Circuit's 2016 decision in *Heydinger* striking down provisions of the 2007 Next Generation Energy Act is not applicable. The provisions at issue in *Heydinger* banned "imports" of coal-fired power. Each member of the three-judge panel found a different reason for finding the import ban unconstitutional. One judge concluded that the provision sought to police interstate power flows and violated the dormant Commerce Clause's prohibition against regulating out-of-state transactions. Another judge found this reading "not reasonable" but concluded that the import ban was preempted by FERC's regulation of interstate power sales. The third judge held that related provisions about carbon offsets were preempted by the federal Clean Air Act. This split decision has little precedential value.

Nonetheless, SF 4 avoids each of those legal infirmities. It does not regulate energy imports, ban interstate purchases, or mandate carbon offsets. Instead, it provides



Minnesota utilities with the flexibility to meet the carbon-free standard by generating or procuring power or by buying renewable energy credits. This model is on solid legal ground. More than half of states enforce similar laws. In 2015, the U.S. Court of Appeals for the Tenth Circuit dismissed a dormant Commerce Clause challenge filed against Colorado's similar renewable energy standard. In 2017, the Second Circuit dismissed a challenge to Connecticut's standard. In 2018, the Second and Seventh Circuits each rejected preemption and dormant Commerce Clause claims against Illinois and New York programs requiring utilities to purchase energy credits priced at the social cost of carbon from certain carbon-free power plants. Detailed information about these cases is available on my website, statepowerproject.org.

Should any party challenge SF 4 as unconstitutional, the balance of legal authority will weigh heavily in favor of Minnesota. I'd be happy to provide additional information that might assist you and your colleagues as you deliberate over a carbon-free standard.

Sincerely,

/s
Ari Peskoe
Director
Electricity Law Initiative
Harvard Law School

Att	orney-Client Privileged: Internal Wor	rk Product					1		1	1
	NPVRR Comparison		Α	Α	A.1	A.1	A.RC.1	A.RC.2	A.RC.3	A.RC.4
							Low Externalities	High Externalities	Low Externalities	High Externalities
	IRP Refresh		2023 Base Case	2023 Base Case	Preferred Plan	Preferred Plan	2023-2024,	2023-2024,	2023-2024,	2023-2024,
	intracticon		No Ext	w/Ext	No Ext	w/Ext	Low Cost of Carbon	High Cost of Carbon	Median Cost of	Median Cost of
							2025-2050	2025-2050	Carbon 2025-2050	Carbon 2025-2050
1	Withdraw from Coyote 12/31/2040	NPVRR (\$000)	\$2,742,670	\$3,257,885	\$2,764,110	\$3,312,474	\$2,957,356	\$3,494,009	\$3,243,620	\$3,267,422
2	Withdraw from Coyote 12/31/2028	NPVRR (\$000)	\$2,714,497	\$3,152,731	\$2,724,103	\$3,199,210	\$2,899,878	\$3,324,876	\$3,139,852	\$3,161,141
2	2028 Difference from 2040 Exit NPVRR	(\$000)	-\$28,173	-\$105,154	-\$40,007	-\$113,264	-\$57,478	-\$169,133	-\$103,768	-\$106,281
Annu	al Resource Additions - Exit Coyote	12/31/2040	A	A	A.1	A.1	A.RC.1	A.RC.2	A.RC.3	A.RC.4
							Low Externalities	High Externalities	Low Externalities	High Externalities
			2023 Base Case	2023 Base Case	Preferred Plan	Preferred Plan	2023-2024,	2023-2024,	2023-2024,	2023-2024,
			No Ext	w/Ext	No Ext	w/Ext	Low Cost of Carbon	High Cost of Carbon	Median Cost of	Median Cost of
							2025-2050	2025-2050	Carbon 2025-2050	Carbon 2025-2050
		2023	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar
		2024								
		2025	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers
				400 MW Sur Solar			175 MW Sur Solar	400 MW Sur Solar	400 MW Sur Solar	400 MW Sur Solar
				100 MW Gen Wind				250 MW Gen Wind	100 MW Gen Wind	100 MW Gen Wind
		2026	Astoria Onsite Fuel	Astoria Onsite Fuel	Astoria Onsite Fuel	Astoria Onsite Fuel	100 MW Sur Solar		50 MW Gen Wind	50 MW Gen Wind
		2027		50 IVIW Gen Wind	100 MW Sur Solar	100 MW/ Sur Solar	100 MW/ Sur Solar			
		2027			100 MW Sur Solar	100 MW Sur Solar	25 MW Sur Solar			
		2029			200 MW Gen Wind	200 MW Gen Wind	25 10100 501 50181			
		2030					1		50 MW Gen Wind	
		2031		50 MW Gen Wind				25 MW Gen Solar		
		2032	325 MW Sur Solar	150 MW Gen Wind	100 MW Sur Solar	100 MW Sur Solar	250 MW Gen Wind	25 MW Gen Solar	150 MW Gen Wind	150 MW Gen Wind
			200 MW Gen Wind		25 MW Sur Battery	25 MW Sur Battery		100 MW Gen Wind		
		2033								
		2034								
		2035								
		2036								
		2037								
	2025-2032	Wind	200	350	200	200				
		Battery	0	0	25	25				
		Solar	350	400	300	200				
	5-year action	Wind	0		0	0				
		Solar	0		200	200				
_		вашегу								
				-						

Annual Resource Additions - Exit Coyote 12/31/2028	Α	Α	A.1	A.1	A.RC.1	A.RC.2	A.RC.3	A.RC.4
					Low Externalities	High Externalities	Low Externalities	High Externalities
	2023 Base Case	2023 Base Case	Preferred Plan	Preferred Plan	2023-2024,	2023-2024,	2023-2024,	2023-2024,
	No Ext	w/Ext	No Ext	w/Ext	Low Cost of Carbon	High Cost of Carbon	Median Cost of	Median Cost of
					2025-2050	2025-2050	Carbon 2025-2050	Carbon 2025-2050
2023	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar	Hoot Lake Solar
2024								
2025	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers	Wind Repowers
		400 MW Sur Solar			175 MW Sur Solar	400 MW Sur Solar	400 MW Sur Solar	400 MW Sur Solar
		100 MW Gen Wind				250 MW Gen Wind	100 MW Wind	100 MW Gen Wind
2026	Astoria Onsite Fuel	Astoria Onsite Fuel	Astoria Onsite Fuel	Astoria Onsite Fuel	100 MW Sur Solar		50 MW Gen Wind	50 MW Gen Wind
		50 MW Gen Wind						
2027			100 MW Sur Solar	100 MW Sur Solar	25 MW Sur Solar	50 MW Gen Wind		
2028			100 MW Sur Solar	100 MW Sur Solar			50 MW Gen Wind	50 MW Gen Wind
2029	50 MW Sur Solar	150 MW Gen Wind	200 MW Gen Wind	200 MW Gen Wind	300 MW Gen Wind	50 MW Gen Wind	100 MW Gen Wind	50 MW Gen Wind
	300 MW Gen Wind							
2030			100 MW Sur Solar	100 MW Sur Solar				
2031	25 MW Sur Battery	25 MW Sur Battery	150 MW Gen Wind	150 MW Gen Wind	25 MW Sur Batt	50 MW Gen Wind	25 MW Sur Batt	100 MW Gen Wind
2022	25 1414 6	25 MM/ C D-M	100 Mill Con Color	100 MIN Con Color	50 MW Gen Wind	75 MM/ Con Color	25 101/ 6	CO MAN Com Date
2032	25 WW Sur Battery	25 IVIVI SUF Battery	25 MW Sur Solar	25 MW Sur Solar	25 MW Sur Solar	25 MW Gen Solar	25 IVIV SUF Batt	50 NW Sur Batt
	100 MW Gen Wind	150 IVIV Gen Wind	25 WW Sur Battery	25 WIW SUI Battery	50 MW Gen Wind	100 MW Gen Wind	150 WW Gen Wind	100 MW Gen Willu
2033	100 MW Och Mild				So inter dell'Unite	100 mill den mild		
2033					50 MW Rep Wind			
2035					So him hep thind			
2036								
2037								
2025-2032 Wind	400	500	350	200				
Battery	25	25	25	25				
Solar	300	400	400	200				
5 Year Action Plan Wind	0		0					
Battery	0		200					
Solar	0							

### **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 Reply Comments

Dated this **30<sup>th</sup>** day of **October**, **2023**.

<u>/s/ KIM WARD</u> Kim Ward Lead Regulatory Filing Coordinator Otter Tail Power Company 215 South Cascade Street Fergus Falls MN 56537 (218) 739-8268

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Laura	Bishop	Laura.Bishop@state.mn.us	MN Pollution Control Agency	520 Lafayette Rd Saint Paul, MN 55155	Electronic Service	No	OFF_SL_21-339_21-339
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_21-339_21-339
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_21-339_21-339
Brooke	Cunningham	Health.Review@state.mn.u s	Minnesota Department of Health	PO Box 64975 St. Paul, MN 55164-0975	Electronic Service	No	OFF_SL_21-339_21-339
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Kristin W	Duncanson	kw.duncanson@gmail.com		57746 Highway 30 Mapleton, MN 56065	Electronic Service	No	OFF_SL_21-339_21-339
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Generic Notice	Residential Utilities Division	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_21-339_21-339
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Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_21-339_21-339
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Cary	Stephenson	cStephenson@otpco.com	Otter Tail Power Company	215 South Cascade Street Fergus Falls, MN 56537	Electronic Service	Yes	OFF_SL_21-339_21-339
Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	Yes	OFF_SL_21-339_21-339
Amelia	Vohs	avohs@mncenter.org	Minnesota Center for Environmental Advocacy	1919 University Avenue West Suite 515 St. Paul, MN 55104	Electronic Service	Yes	OFF_SL_21-339_21-339

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Patrick	Zomer	Pat.Zomer@lawmoss.com	Moss & Barnett PA	150 S 5th St #1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_21-339_21-339