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STATE OF MINNESOTA

BEFORE THE PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's 2021 Integrated Resource Plan	**PUC Docket No. E017/RP-21-339**

Clean Energy Organizations' Reply Comments

On Behalf Of:
Clean Grid Alliance
Fresh Energy
Minnesota Center for Environmental Advocacy
Sierra Club

October 30, 2023

TABLE OF CONTENTS

INDEX TO TABLES

INTRODUCTION

The Clean Energy Organizations ("CEOs"), comprised in this case of the nonprofit organizations Fresh Energy, Clean Grid Alliance, Sierra Club, and the Minnesota Center for Environmental Advocacy, appreciate the opportunity to provide Reply Comments regarding Otter Tail Power's Supplemental Integrated Resource Plan ("Supplemental IRP"). In these comments, CEOs respond to modeling recommendations made by the Department of Commerce Division of Energy Resources ("the Department") and discuss how the modeling presented in CEOs' Initial Comments addresses the Department's concerns. CEOs' positions are generally aligned with the Initial Comments of the Office of the Attorney General, Residential Utilities Division, and as such, CEOs do not respond to those comments here.

I. The CEOs' modeling addresses several of the concerns the Department raises with the Company's modeling

In its initial comments, the Department raises a number of concerns with modeling approaches or inputs used by Otter Tail in its Supplemental IRP. CEOs raised similar concerns in our initial comments, and our modeling addresses or proposes solutions to several of these issues. Specifically, the modeling done by our consultants Energy Futures Group ("EFG") and Applied Economics Clinic ("AEC") addresses the Department's concerns regarding the method for modeling environmental and regulatory costs, energy purchases and sales on the MISO market, pricing assumptions for new resources, and the feasibility of near-term resource additions.

A. CEOs' Initial Comments provide in-depth analysis of carbon externality costs and regulatory risks and show our preferred plan would dramatically reduce those costs and risks

The Department briefly notes that Otter Tail has failed to provide "the Commission-ordered environmental and regulatory cost contingencies using the updated EnCompass model,"[1] and it recommends that Otter Tail provide these contingencies. CEOs agree that Otter Tail did not comply with the Commission's order regarding modeling of carbon costs.[2] This failure to consider the full range of carbon externality and regulatory costs is particularly troubling given that Otter Tail is proposing to run its coal plants into the 2040s, as CEOs discussed in our initial comments.[3]

CEOs have partially filled this gap in the record by calculating the climate damage caused by Otter Tail's plans. We used the full range of EPA's social cost estimates, as required under the amendments to Minn. Stat. § 216B.2422, subd. 3 that were signed into law on February 7, 2023.[4] We showed that the central estimate of climate damage would be $4.3 billion from the Revised OTP Preferred 2040 Plan and $3.3 billion from the Revised OTP 2028 plan.[5] These enormous climate costs illustrate that Otter Tail's failure to consider these costs of its plans is not inconsequential. These climate costs represent real impacts on human society and our environment and demonstrate that Otter Tail's plans are not compatible with the public interest, especially when compared to CEOs' plan which dramatically reduces emissions.

With respect to future regulatory costs, while CEOs are not required to provide the full analysis required of utilities, the CEOs' Initial Comments provided an in-depth discussion of this issue. In addition to modeling the Commission's then-current central regulatory cost estimate[6] as

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[1] Department Initial Comments at 19.
[2] Minn. Pub. Utils. Comm'n, *In the Matter of Establishing an Updated 2020 Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation under Minn. Stat. § 216H.06,* Order Establishing 2020 and 2021 Estimate of Future Carbon Dioxide Regulation Costs, Docket Nos. E-999/CI-07-1199, E-999/DI-19-406 (Sep. 30, 2020).
[3] CEOs Initial Comments at 71-74.
[4] Laws of Minnesota 2023, chapter 7, section 18.
[5] CEOs Initial Comments at 81. The full range of carbon externality costs are $2.5-$7.7 billion for the Revised OTP Preferred 2040 Plan and $1.9-$6.0 for the Revised OTP 2028 Plan.
[6] The Commission's regulatory cost estimates were still $5-25 (central estimate $15/ton), starting in 2025, when our initial comments were filed on September 13, 2023. These costs were updated

part of our Preferred Plan, CEOs provided a qualitative discussion of the likely greater regulatory costs under the proposed EPA greenhouse gas rule, as well as regulatory risks under Minnesota's carbon-free standard and the EPA haze and mercury rules.[7] Of course, the CEOs Preferred Plan greatly reduces both the regulatory and externality costs of Otter Tail's plans by withdrawing from the Coyote and Big Stone coal plants much earlier than Otter Tail's Preferred Plan proposes.

B. CEOs modeled Otter Tail's system with symmetrical limits on energy market purchases and sales

The Department notes that "OTP's EnCompass outputs show the Company does not sell into the energy spot market but is a substantial purchaser"[8] and recommends that "OTP re-configure EnCompass so that it has the ability to buy from and sell to the energy spot market."[9] CEOs note the same concern in our initial comments.[10] Like the Department, CEOs agree that the Company's modeling approach helps to demonstrate that any units added by the model are being added to serve only its own customers' load rather than the potential for market sales. However, this practice of prohibiting sales comes with a tradeoff because allowing market sales within the model provides a more complete and realistic picture. To address this, CEOs modeling allowed both MISO purchases and sales using the same limits that Otter Tail had established for market purchases in its own modeling, [Trade Secret Data Begins… …Trade Secret Data Ends] in any hour of the planning period, and added a secondary constraint that limited the annual

by the Commission the next day to $5-75 (central estimate $40/ton) starting in 2028, with utilities required to also show their costs of complying with the state Carbon-Free Standard and the EPA's GHG rule for power plants. *In the Matter of Establishing an Estimate of Future Carbon Dioxide Regulation on Electricity Generation Under Minnesota Statutes § 216H.06,* Docket Nos. E999/DI-22-236 and E999/CI-07-1199.

[7] CEOs Initial Comments at 10-14, 33-35.

[8] Department Initial Comments at 20.

[9] Department Initial Comments at 20.

[10] CEOs Initial Comments at 44-45, 75-77.

level of market purchases and sales to 25% of Otter Tail's annual energy requirements.[11] In order to ensure that the cost savings demonstrated by our plan were not being driven by an over-reliance on wholesale market sales, EFG also calculated the PVRR of the CEO Preferred Plan eliminating all revenue from market sales. This calculation showed that CEOs Preferred Plan would still cost $200-$400 million less than Otter Tail's 2028 Plan or Preferred 2040 Plan even in a scenario with no revenue from MISO sales.[12]

As noted above, CEOs and Otter Tail both assume that in any hour of the planning period Otter Tail can import (purchase) up to [Trade Secret Data Begins… …Trade Secret Data Ends] from the MISO market, and CEOs used the same hourly limit for exports (sales). In its discussion of market sales and purchases, the Department recommends Otter Tail consider using a different methodology for limiting its energy market purchases and sales, which would result in an hourly cap of 350 MW of imported or exported electricity. The Department recommends Otter Tail base its import and export limit on the winter Capacity Import Limit in MISO local resource zone 1 ("LRZ1") (4,937 MW), scaled down by Otter Tail's approximate percentage of LRZ1's winter peak demand (~7.1%).[13] CEOs can understand the logic of this method for estimating an import and export limit. However, we do not believe the Commission needs to make a decision about the best methodology for establishing a limit on market sales or purchases and believe that more investigation would be needed before a determination can be made that 350 MW is a reasonable limit.

CEOs highlight three questions about the appropriateness of applying this method to Otter Tail's energy market interactions: a) does it sufficiently reflect the reality of Otter Tail's

[11] CEOs Initial Comments Attachment 1 (EFG-AEC Report) at 13.
[12] CEOs Initial Comments at 52.
[13] Department Initial Comments at 21.

operations, b) does this method ignore the potential for sales to or purchases from other entities within LRZ1, and if so, is that appropriate, and c) more broadly, does it reflect the level of market interaction most in the public interest given the ongoing energy transition?

Otter Tail's own modeling assumptions in this IRP used an instantaneous import limit substantially higher than the Department recommends.[14] In recent years, Otter Tail has purchased a significant share of its annual energy requirements from the regional market,[15] a strategy that can result in customer savings by securing lower-cost electricity on the MISO market. It is not clear to CEOs whether hourly imports have been above the Department's proposed 350 MW limit, but it is important that the limits modeled in IRPs reasonably reflect recent actual experience and/or future expectations.

The Department notes that this market transaction limit methodology is the one used by Xcel in its 2019 IRP. While CEOs generally agree that consistency in input methodologies is beneficial, there may be enough differences between Xcel and Otter Tail to warrant using a different approach for arriving at this input. Xcel comprises a share of winter peak load in LRZ1 that is several times larger than Otter Tail's ~7.1% in 2023-24. This means that Xcel's market purchases are significantly more likely to bump up against the zonal Capacity Import Limit. Otter Tail's size compared to the zone also makes it feasible for a larger share of the Company's imports to come from within the zone. Additionally, Otter Tail's resource mix is quite different from Xcel's, and is a relevant data point to consider when modeling market exchange limits.

The Commission does not need to make a recommendation in this case on which methodology Otter Tail should use as a basis for import and export limits. The Department's recommended method has logic to it but Otter Tail's modeling limit, which CEOs also use, is a

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[14] CEOs Initial Comments Attachment 1 (EFG-AEC Report) at 13.
[15] CEOs Initial Comments at 76.

reasonable modeling assumption as well. CEOs recommend that, if the Commission would like to provide more specific direction to Otter Tail on this issue, a more fulsome record should be developed to evaluate whether utility size or characteristics impact the relevance of *zonal* import limits for *company-specific* import limits in IRP modeling.

C. CEOs' renewable energy price forecast accounts for potentially higher pricing in the near-term, with gradual rebalancing over the decade

The Department also highlights a concern that Otter Tail's pricing assumptions for new wind and solar resources do not reflect recent "substantial increases in new unit prices in most markets." CEOs agree that recent price increases have become visible since Otter Tail developed its plan and CEOs raised the same issue in our initial comments.[16] However, CEOs also point out that Otter Tail's forecast overstates clean energy costs in the long term, in large part due to insufficiently accounting for the impact of recent tax credit changes made through the Inflation Reduction Act ("IRA").[17] To address these cost forecast issues in CEOs' modeling, AEC and EFG developed alternative cost forecasts using Otter Tail's *high* wind, solar, and battery storage pricing assumptions in the near-term (2023-2026) and gradually rebalancing these prices starting in 2027 to a forecast based on the National Renewable Energy Laboratory ("NREL") Annual Technology Baseline ("ATB") in the long-term (2029 and beyond).[18]

CEOs chose this approach because Otter Tail's high price forecast reasonably reflects the higher resource pricing we have seen in recent months, which the Department highlights. However, as discussed in CEOs' Initial Comments and the EFG-AEC Report, it is not reasonable to assume that this high-price environment will persist long-term. EFG and AEC's forecast assumes that prices begin to fall in 2027 and rebalance toward long-term expectations based on

[16] CEOs Initial Comments at 43.
[17] CEOs Initial Comments at 43.
[18] *Id.*; CEOs Initial Comments Attachment 1 (EFG / AEC Report) at Section 1.1.1.

the NREL ATB by 2029.[19] The factors we believe will contribute to this rebalancing include regional transmission investments with in-service dates between 2028-2030, forthcoming improvements to the interconnection process, an easing of supply chain disruptions related to COVID-19, the passage of major new energy and infrastructure legislation in the U.S., and an acceleration of domestic clean energy manufacturing.[20]

D. CEOs Preferred Plan accounts for the potential challenges of acquiring new resources in the near-term

In its discussion of potential modeling improvements, the Department "recommends OTP consider reducing the amount of new capacity available in the early years of the planning period"[21] due to a concern that new resources may be challenging to acquire and/or interconnect cost-effectively in the near-term, and points to Xcel Energy's recent solar and solar-storage hybrid procurement as an example of this challenge. CEOs agree that there may be limitations on how many new resources can be cost-effectively added in the very near-term due to interconnection barriers and higher than typical prices, but we note that both Otter Tail's and CEOs' plans only include new resources in the five-year action plan timeframe that *do not* require new interconnection rights.

The primary barrier that projects, particularly wind and solar, face in the very near-term is interconnection—both cost and timeline. Interconnection cost and uncertainty was a major driver of withdrawn bids or failed negotiations in the Xcel procurement,[22] and remains an issue. However, there are a number of factors pushing toward significant improvements by the end of

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[19] *Id.*
[20] *Id.*
[21] Department Initial Comments at 25-26.
[22] *See* Minn. Pub. Utils. Comm'n, *In the Matter of the Petition of Northern States Power Company, d/b/a Xcel Energy, for Approval of Sherco Solar 3 and the Apple River Solar Power Purchase Agreement*, Docket No. E-002/M-22-403.

the decade, and importantly, none of the near-term resource acquisitions proposed in the CEOs Preferred Plan (nor in Otter Tail's) require new interconnection rights until 2029. The additions between 2023 and 2028 are either surplus solar resources or wind repowering projects, both of which are typically designed to avoid needing to go through the full MISO interconnection study process and to avoid the need for network upgrades. The near-term additions in Otter Tail's two primary plans and the CEOs Preferred Plan are shown in Table 1 below. This replicates Table 4 from CEOs' Initial Comments, with the addition of Otter Tail's proposed wind repowers and Astoria on-site fuel projects.

Table 1. Near Term Resource Additions Timeline (2025-2032)

Year	OTP Preferred 2040 Plan	Additional Resources in OTP 2028 Plan	Additional Resources in CEOs Preferred Plan
2025	Wind Repowers		
2026	Astoria Onsite Fuel		-Astoria Onsite Fuel *(defer to next IRP)*
2027	100 MW Surplus+Capacity Solar		
2028	50 MW Surplus+Capacity Solar 50 MW Surplus Solar	-150 MW at Coyote	
2029	200 MW Generic Wind		300 MW Generic Wind 150 MW Replacement Wind (Coyote)
2030		100 MW Surplus Solar	-250 MW at Big Stone
2031		150 MW Generic Wind	100 MW Replacement Wind (Big Stone) 150 MW Replacement Battery (Big Stone)
2032	100 MW Surplus Solar 25 MW Surplus Battery		

These additions are further summarized in Table 2 below into the five-year action plan timeframe (defined here as 2024-2028), and the following four years (2029-2032). In the five-year action plan timeframe, no resources require new interconnection rights. In the second phase, 200-350 MW of wind additions would require new interconnection rights under Otter Tail's Preferred

2040 or 2028 Plans, respectively. Under CEOs Preferred Plan, 650 MW of wind additions requiring new interconnection rights would be added during in this period.

Table 2. Near Term Resource Additions Summary
(CEOs Preferred Plan includes resources in all three columns)

	OTP Preferred 2040 Plan	**Additional Resources in OTP 2028 Plan**	**Additional Resources in CEOs Preferred Plan**
Five-Year Action Plan: 2024-2028	Wind Repowers Astoria Onsite Fuel 200 MW Sur. Solar	-150 MW at Coyote	
Resources requiring new interconnection rights	*0 MW*	*0 MW*	*0 MW*
2029-2032	200 MW Generic Wind 100 MW Sur. Solar 25 MW Sur. Battery	100 MW Sur. Solar 150 MW Generic Wind	-250 MW at Big Stone 300 MW Generic Wind 250 MW Repl. Wind 150 MW Repl. Battery
Resources requiring new interconnection rights:	*200 MW Wind*	*150 MW Wind*	*300 MW Wind*

As discussed in CEOs' Initial Comments[23] and in the EFG-AEC report,[24] there are at least two significant processes underway that will meaningfully reduce the interconnection challenges generators are currently encountering. First, the first tranche of projects under MISO's Long Range Transmission Planning ("LRTP") initiative includes 18 transmission lines with expected commercial operation dates between 2028-2030. Three lines are located wholly or partially within Minnesota and improve connections between Minnesota and neighboring states. MISO modeling indicates that these lines will help bring on 14.4 GW[25] of new renewable energy capacity in Local Resource Zone 1[26] and a total of 25 GW of new electricity generation capacity in Local Resource

[23] CEOs Initial Comments at 58-59, 62-65.
[24] CEOs Initial Comments Attachment 1 (EFG/AEC Report) at 5.
[25] MISO, *MISO Futures Report*, page 56, April 2021, updated December 2021, *available at* https://cdn.misoenergy.org/MISO%20Futures%20Report538224.pdf, showing cumulative resource additions for each LRZ as a result of Tranche 1, and based on MISO's projections using Future 1. Note that LRZ 1 does not include extreme southwestern Minnesota.
[26] CEOs Initial Comments Attachment 1 (EFG/AEC Report) at 5.

Zone 1. Transmission capacity added by the Tranche 1 lines will not resolve all constraints but is a meaningful expansion in the MISO North region and will ease the pathway for a significant volume of clean energy resource additions before the end of this decade. And of course, MISO is in the process of developing Tranche 2 of the LRTP initiative, which is based on higher forecasts of clean energy additions and electrification of various economic sectors and will be in service by 2035. MISO intends to pursue a total of four Tranches of LRTP portfolios—significantly accelerating the rate of regional transmission expansion.[27]

Second, both FERC and MISO are undertaking efforts to reform the generator interconnection process to reduce wait time, improve the efficiency of study processes, and ensure that projects approved to interconnect are viable projects. As stated in the EFG-AEC report, "the Federal Energy Regulatory Commission ("FERC") recently ruled under Order 2023 unanimously to improve the interconnection process nationwide.[28] Mere months prior to FERC's issuance of Order 2023, MISO initiated its own interconnection reform effort in an attempt to remove the logjam of interconnection requests, primarily by ensuring that such requests are closer to being commercially ready at the time generators join the interconnection queue."[29] MISO intends to file its proposal for implementation of Order 2023 to FERC before the next interconnection queue cycle, and to implement changes as soon as 2024. These steps, especially when combined with the LRTP initiative, should create a meaningfully better picture for generators seeking to interconnect by the end of the decade if not sooner.

The other issues that Xcel encountered in its procurement process also appear to be market conditions that are abating, or factors that could be ameliorated through procurement process

[27] CEOs Initial Comments at 62-65.
[28] CEOs Initial Comments Attachment 1 (EFG/AEC Report) at 5.
[29] CEOs Initial Comments Attachment 1 (EFG/AEC Report) at 5.

design. These include: the current high price environment and supply chain constraints, insufficient site control, and bids unable to provide firm pricing. As discussed earlier, supply chain constraints are easing and are likely to continue to do so as domestic clean energy manufacturing ramps up between now and 2032 to take advantage of federal incentives. Site control challenges can likely be addressed through Otter Tail's procurement process and requirements for bidders. And regarding firm pricing, CEOs understand that interconnection costs, interconnection timelines, and the high-price and supply-constrained environment were also the primary drivers for projects not being able to provide firm pricing, so we expect that issue to ease as the underlying factors ease.

Importantly, the risk of potential delays or barriers to acquiring the necessary resources is all the more reason to plan ahead, get started now, and allow more lead time for procurement processes. With additional time and flexibility, many procurement challenges can be managed.

In sum, we agree with the Department that in early years of the planning period, additions of *generic* resources could encounter obstacles. However, we believe that both Otter Tail's and CEOs' Preferred Plans prudently address these potential challenges with very near-term additions by using surplus interconnection and other avenues to add generation while avoiding or minimizing the need to seek new interconnection rights. Otter Tail's Plans and the CEOs Preferred Plan both add new generic wind resources beginning in 2029. Given the significant improvements in transmission capacity and interconnection processes on the horizon, it is reasonable to plan for new additions in this timeframe—and there is ample runway between now and 2029 to plan for and mitigate against potential procurement challenges. Regardless of what market conditions may exist in 2029, planning ahead proactively for the resource additions that will be necessary to serve Otter Tail's Minnesota customers and comply with Minnesota policy is the prudent approach.

II. The Department's recommendation regarding potential transmission costs related to a hypothetical Coyote retirement is not a reason to delay a decision on withdrawal from Coyote

In the Department's initial comments, it points out that Otter Tail's early Coyote withdrawal scenarios include a number of costs related to decommissioning and early termination, but "[n]ot included are costs related to transmission system upgrades which would be triggered by results of a MISO Attachment Y (unit retirement) study."[30] The Department therefore recommends that Otter Tail "discuss in reply comments the potential magnitude of transmission costs associated with Coyote retirement" and notes that "without such information the risk of a cost increase should be considered qualitatively in any decision regarding Coyote."[31] CEOs agree that analysis of potential transmission impacts of a Coyote retirement is a good idea, and in fact recommended in our initial comments that Otter Tail request a Y-2 Study from MISO and file it with the Company's next IRP, or in this docket, no later than March 1, 2026. (A Y-2 Study would provide an indicative, non-binding assessment of transmission reliability in the absence of Coyote Station and the nature of potential issues that could arise.) However, we do not have any evidence to indicate that transmission upgrades are likely, nor would any be needed if the plant does not retire as a result of an Otter Tail withdrawal. Thus, the Commission does not need to have specific cost estimates to make a decision in this case.

Otter Tail's early withdrawal from Coyote *could* set in motion a series of events that lead to the plant's retirement, but it also may not. If Otter Tail finds a buyer for its share of Coyote, the actual cost of early withdrawal could be lower than Otter Tail and CEOs modeled, and thus the customer savings from early withdrawal could be greater. And, as discussed at length in our initial comments, there are a number of regulatory risk factors that could dramatically increase

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[30] Department Initial Comments at 23.
[31] Department Initial Comments at 23.

customer costs under a delayed Coyote exit scenario.[32] CEOs concur with the Department that the risk of Coyote exit costs being higher than modeled could be considered qualitatively, but we would argue that there is an opposing possibility that actual *savings* could end up being greater, which should be considered as well.

Second, it is important to note that the Department's concern about transmission reliability upgrades is a concern about potential *costs*, not about system reliability. Indeed, Otter Tail withdrawing from Coyote does not necessarily change the basic operating characteristics of the plant or cause it to retire. When Otter Tail originally filed this IRP in 2021, it proposed to withdraw from Coyote by the end of 2028 and did not discuss any transmission reliability concerns. Additionally, the plant is located in west-central North Dakota in an area with a significant amount of other energy generation and transmission infrastructure, which may reduce any reliability concerns. If a Y-2 study, or a later Attachment Y study, does reveal there could be a reliability issue if the plant were to retire, there is also time to address this by building the required replacement resources. And in the worst-case scenario, MISO could designate the plant as a system support resource and require continuing operations until necessary reliability mitigations are in place. That would not be a preferred outcome, but the backstop is there to preserve system reliability.

In short, the results of a Y-2 or Attachment Y study are not needed for the Commission to make a decision in this record about early withdrawal from Coyote Station. However, it is prudent to gather more information about potential transmission impacts from a Coyote retirement and potential upgrades so that that information can be factored into future planning and resource decisions.

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[32] CEOs Initial Comments at 28-36.

III. The Department's suggestion that many of its concerns can be addressed in Otter Tail's next IRP does not recognize the urgency of reducing Otter Tail's dependence on coal power

The Department rightly notes several modeling shortcomings in Otter Tail's IRP and recommends Otter Tail correct them, but it says these recommendations can be addressed in Otter Tail's *next* IRP.[33] CEOs note that the lag time between Otter Tail's last IRP filing[34] and its Supplemental IRP in this docket was nearly seven years. We strongly urge the Commission not to allow anything like such a delay between this docket and Otter Tail's next IRP. Moreover, it is critical that the Commission in *this* IRP order steps to advance Otter Tail's transition away from coal. This is not just a question of public interest or ratepayer savings but a matter of real urgency, given:

- **The climate crisis:** the pace of planetary warming appears to be accelerating over the last several years, with 2023 seeing the hottest June, July, August, and September yet recorded. Indeed, September shattered previous records for the month by 0.5 degrees C, as shown in the chart below:[35]

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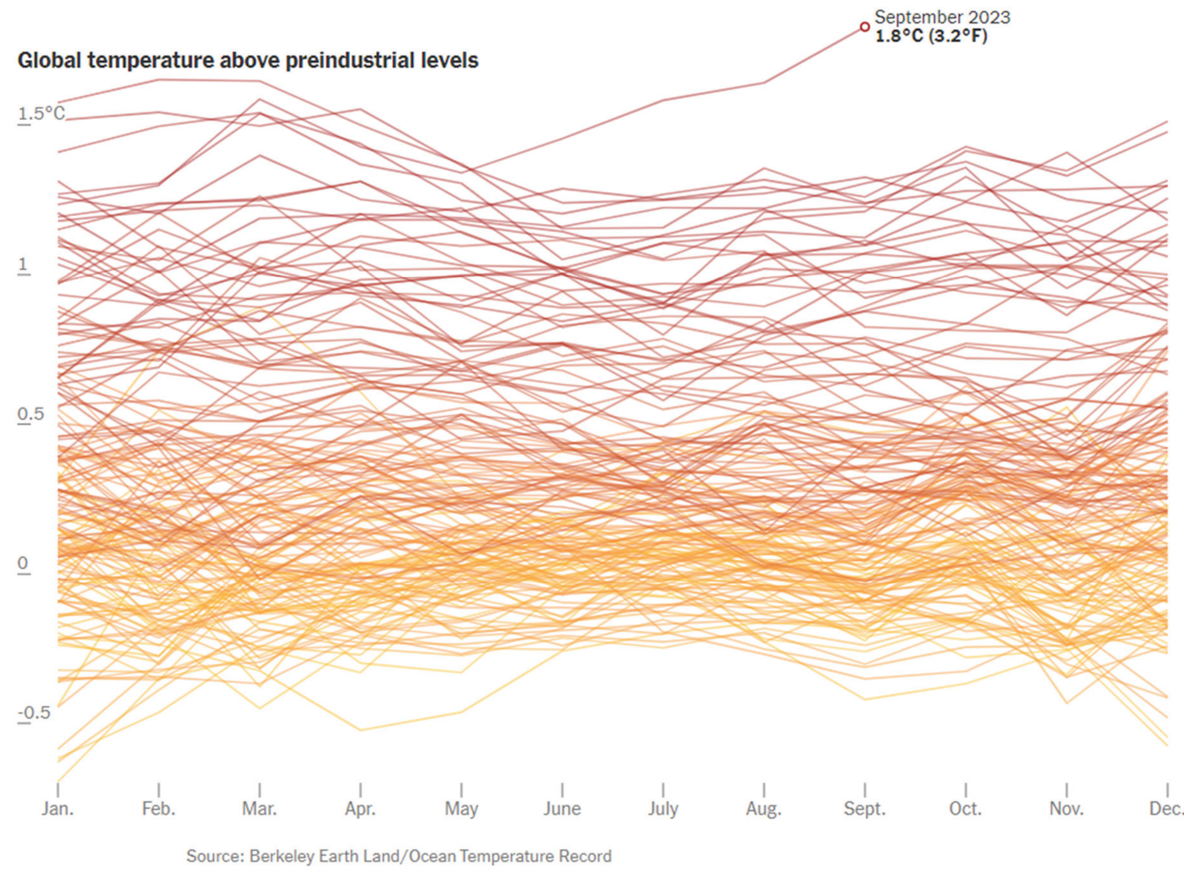
[33] Department Initial Comments at 37.
[34] Docket No. E017/RP-16-386.
[35] Recent data released by Berkeley Earth not only show the extreme relative heat of the past summer but suggest that the rate of warming in the past 15 years has been 40% higher than warming since the 1970s. Zeke Hausfather, "I Study Climate Change. The Data is Telling Us Something New," *New York Times,* Oct. 13, 2013. Available at: https://www.nytimes.com/2023/10/13/opinion/climate-change-excessive-heat-2023.html?searchResultPosition=4.



- **The clear need to retire unabated coal plants by 2030:** studies firmly establish that elimination of unabated coal power plants like Coyote and Big Stone (that is, plants that do not capture their CO_2 emissions) by **2030** is a key means of achieving the GHG-reduction goals adopted at the state, national, and global levels;[36]
- **The coal plants' enormous climate impacts**: the Revised OTP Preferred 2040 Plan would cause climate costs of $4.3 billion, and the Revised OTP 2028 Plan would cause climate costs of $3.3 billion (using EPA's central social cost estimates), due almost entirely to the emissions from Coyote and Big Stone and reflecting only Minnesota's share of Otter Tail's share of the plants;[37]
- **The coal plants' enormous health impacts, especially Coyote's:** withdrawing from Coyote in 2028 rather than 2040 would avoid $2.6 billion in health costs and 230 premature deaths otherwise attributable to Minnesota's share of Otter Tail's share of Coyote;[38]

[36] CEOs Initial Comments at 8-10.
[37] CEOs Initial Comments at 81.
[38] CEOs Initial Comments at 36, 87-88.

- **The EPA's proposed rule**: Otter Tail's plan to rely on unabated coal power well beyond 2030 fails to comply with the EPA's proposed Greenhouse Gas Rule for power plants;[39]
- **The Carbon-Free Standard**: withdrawing from Coyote and Big Stone and replacing that energy with carbon-free sources as proposed under the CEOs Preferred Plan would dramatically improve Otter Tail's ability to comply with the letter and the spirit of Minnesota's Carbon-Free Standard;[40]
- **Unique contractual risks due to co-owners:** both the Coyote and Big Stone plants are subject to a heightened and unusual level of market risk due to contracts under which co-owners can force the plants to operate uneconomically in MISO, as both plants have been forced to do in the past; [41]
- **Coyote's especially uneconomic status:** As both CEOs and the Office of the Attorney General ("OAG") have noted, Otter Tail's own modeling shows that it is far more economic to withdraw from Coyote by 2028 rather than 2040 under all but the most extreme scenarios.[42]
- **The availability of a reliable, cleaner, cheaper pathway:** the CEOs Preferred Plan would reliably meet customer needs while greatly reducing emissions and saving customers more than $816 million (27%) over the planning period compared with the Revised OTP 2040 Preferred Plan.[43]

Given these facts, the Commission needs to address Otter Tail's heavy ongoing dependence on coal power in this IRP rather than waiting until the next. Delaying progress on the necessary transition to carbon-free power imposes additional costs and risks on the public, the environment, and Otter Tail's customers.

IV. CEOs appreciate the Department's recommendations regarding the bidding process for Otter Tail's future resource acquisitions

Finally, the Department makes a number of recommendations regarding the bidding process for Otter Tail's future resource acquisitions, listed below. CEOs appreciate the Department's evaluation of this issue and find the recommendations to be logical and helpful. CEOs offer a modification to the first item in this list, which we have added in brackets below, to

[39] CEOs Initial Comments at 10-11, 33-34.
[40] CEOs Initial Comments at 11-14.
[41] CEOs Initial Comments at 68-71.
[42] CEOs Initial Comments at 16-28; OAG Initial Comments at 14-15.
[43] CEOs Initial Comments at 50-53.

reduce the minimum size of storage acquisitions that would trigger a competitive bidding process. Storage tends to be procured in smaller quantities than wind, solar, or other generating resources, and as shown in Table 1 above, Otter Tail requests approval of 25 MW of storage resources. CEOs suggest that the minimum size of storage procurement that would trigger an RFP be set at 25 MW to accommodate this difference. Doing so would be consistent with the Commission's decisions in Xcel Energy's[44] and Minnesota Power's[45] most recent IRPs, which both included a requirement that the utility use a competitive bidding process to acquire the resources identified by the approved plan or consistent with the approved plan.

1. OTP should use a bidding process for supply-side acquisitions of 100 MW or more [*or for energy storage resources, acquisitions of 25 MW or more*] lasting longer than five years;
2. ensure that the RFP is consistent with the Commission's then-most-recent IRP order and direction regarding size, type, and timing unless changed circumstances dictate otherwise;
3. ensure that the RFP includes the option for both PPA and BT proposals unless the Company can demonstrate why either a PPA or BT proposal is not feasible;
4. provide the Department and other stakeholders with notice of RFP issuances;
5. notify the Department and other stakeholders of material deviations from initial timelines;
6. update the Commission, the Department, and other stakeholders regarding changes in the timing or need that occur between IRP proceedings;
7. where OTP or an affiliate proposes a project:
    a. require OTP to create separate teams for the Company's project and for evaluation of the bids received;
    b. engage an independent auditor to oversee the bid process and provide a report for the Commission;
8. include in the RFP a plan to address the impact of material delays or changes of circumstances on the bid process;

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[44] Minn. Pub. Utils. Comm'n, *In the Matter of the 2020-2034 Upper Midwest Integrated Resource Plan of Northern States Power Company d/b/a Xcel Energy*, Order Approving Plan with Modifications and Establishing Requirements for Future Filings at Order Point 6, Docket No. E002/RP-19-368 (April 15, 2022).
[45] Minn. Pub. Utils. Comm'n, *In the Matter of Minnesota Power's 2021-2035 Integrated Resource Plan*, Order Approving Plan and Setting Additional Requirements at Order Point 4, Docket No. E015/RP-21-33 (January 9, 2023).

9. cap any ROFO offer made by OTP at net book value; and
10. ensure that any RFP documents for peaking resources issued are technology neutral.

These guidelines will help to ensure that Otter Tail is able to acquire the most cost-effective resources for its customers, to evaluate proposals on an even playing field, to adjust to changing circumstances as appropriate, and to provide opportunities for new technologies to compete which may provide additional but unanticipated benefits—all of which advances the public interest.

CONCLUSION

For the reasons described above and in our Initial Comments, CEOs respectfully request that the Commission take the actions laid out in the concluding section of our Initial Comments. We appreciate the Commission's consideration of our recommendations in this proceeding.

Respectfully submitted,

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