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Sent via Email & E-Services Portal

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Re: Request to Reopen Docket 9698-CE-100

Dear Secretary Stuble,

On behalf of Clean Wisconsin and Sierra Club, we write to request that the Public Service Commission of Wisconsin ("Commission") act on its own motion to rescind the Final Decision granting the Certificate of Public Convenience and Necessity ("CPCN") issued for the Nemadji Trail Energy Center Combined-Cycle Project ("NTEC") and reopen the above-captioned docket to consider next steps.¹

Since the Commission issued the CPCN in this proceeding, significant developments have transpired that undermine the Commission’s factual findings in the proceeding and dramatically alter the benefits of the proposed combined-cycle facility relative to other, higher priority alternatives identified during the CPCN proceeding. These developments call into question whether the proposed NTEC facility complies with Wisconsin Energy Priorities Law, Wis. Stat. § 1.12, is in the public interest pursuant to Wis. Stat. § 196.491(3)(d)3. and 4. (the “Plant Siting Law”), and whether its construction is economically defensible.

Specifically: Since the Commission’s decision on January 31, 2020, a rapid increase in the number of utility-scale battery facilities on the grid, including the planned installation of more than 480 MW of storage capacity in Wisconsin, strongly suggest that, contrary to the Commission’s prior finding, battery storage is a feasible and cost-effective alternative to combined-cycle gas generation to meet the stated needs of South Shore Energy and Dairyland

¹ See Wis. Stat. § 196.39(1) (“The commission at any time, upon notice to the public utility and after opportunity to be heard, may rescind, alter or amend any order fixing rates, tolls, charges or schedules, or any other order made by the commission, and may reopen any case following the issuance of an order in the case, for any reason.”)
Power ("Applicants"). Moreover, the enactment of direct-pay tax credits and the appropriation of $9.7 billion in funding as part of the Inflation Reduction Act to enable rural electric cooperatives (including Dairyland Power and Basin Electric Power Cooperative, who combined will own a majority share of NTEC) to transition from fossil fuel to renewable generation dramatically alters the relative cost of combined-cycle gas generation as compared to wind, solar, and/or battery storage. Finally, other recent policy and scientific developments further undermine the Commission’s reasoning for granting NTEC’s CPCN. The Commission should rescind the CPCN and reopen the proceeding to consider whether, in light of these developments, the construction of NTEC is in the public interest and conforms with Wisconsin’s Energy Priorities Law.

1. **The rapid growth of battery storage capacity in Wisconsin and the United States undermines the PSC’s key factual finding in concluding no higher priority resource could meet the need to be served by NTEC.**

First, in concluding that the proposed NTEC facility complies with the Energy Priorities Law, the PSC rejected evidence from intervenors that combined battery and wind or solar generation projects could meet the needs identified by Applicants that the proposed combined-cycle gas facility would fulfill. The Final Decision states that this evidence was “rebutted by testimony from [intervenor’s] own witness admitting that there are no utility scale battery resources available.” This testimony, in turn, was a concession by the Sierra Club witness that, as of the date of the hearing (October 29, 2019) there were no “utility scale batteries in operation in Wisconsin” and only a small storage installation in Minnesota; and that there were only 420 MW of batteries in the MISO queue expected to be online before 2023. The PSC thus rejected batteries as an alternative, higher-priority resource (when combined with solar and/or wind generation) primarily on the grounds that batteries were “not yet capable of replacing a plant of this size” in Wisconsin.

Assuming arguendo that this finding was correct at the time, it is no longer accurate: Wisconsin utilities have announced plans to construct battery projects totaling 489 megawatts by 2025, two years before NTEC is currently planned to begin operation. These projects include:

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2 PSC REF#: 383195 at 21-22.
3 Id.
4 PSC REF#: 380350 at 331:14-332:4, 334:4-8.
5 PSC REF#: 383195 at 22.
6 See [https://www.nemadjitrailenergycenter.com/](https://www.nemadjitrailenergycenter.com/) (describing a “Construction and Commissioning” timeline of 2022-2026 and the plant to be operational by 2027) [last accessed March 27, 2023].
• Alliant’s Edgewater Battery Project, with a capacity of 99 megawatts to be operational by June 2025.7
• Alliant’s Grant County battery project, which has already begun construction and will include 200 megawatts of solar generation and 100 megawatts of battery storage, to be completed by Fall 2025.8
• Alliant’s Wood County Solar site, which will include 150 megawatts of solar generation and another 75 megawatts of battery storage and is anticipated to be completed by Fall 2024.9
• Paris Solar Farm, which will include solar panels with 200-megawatt capacity and 50 megawatts of battery storage and is proposed to be completed and in-service by this year.10
• High Noon Solar, which will include 300 megawatts of solar generation and 165 megawatts of battery storage and is proposed be in service by December 2025.11

WEC Energy Group has also announced a long-duration energy storage test program at the Valley Power Plant in Milwaukee.12

The accelerated build-out of utility-scale battery storage in Wisconsin is consistent with national trends. The U.S. Energy Information Administration (“EIA”) estimates developers will add 8.6 gigawatts of battery storage power capacity to the grid, “doubling the total U.S. battery power

8 See [last accessed March 27, 2023].
capacity.”13 By 2025, EIA estimates there will be 30 gigawatts of battery storage capacity on the U.S. grid.14

In short, the rapid growth of battery storage in Wisconsin and throughout the United States give the lie to the claim that batteries are “not yet capable of replacing a plant of this size.” The Commission should rescind the NTEC CPCN and reopen the docket to consider up-to-date evidence about battery storage capacity and its ability, combined with wind and/or solar generation, to meet the needs identified by NTEC’s proponents.

2. The enactment of the Inflation Reduction Act dramatically changes the economic value of combined-cycle gas relative to renewable and storage resources.

The PSC’s determination that NTEC is in the public interest and that higher-priority resources such as solar and wind generation are “not cost-effective, technically feasible, or environmentally sound alternatives,”15 was made prior to the enactment of the Inflation Reduction Act last year. The Inflation Reduction Act (“IRA”) includes billions of dollars in funding that could reduce the cost of solar, wind, and storage construction by as much as 50%.

Specifically, under sections 46 and 48 of the U.S. Tax Code (26 U.S.C. §§ 46, 48), non-profit utilities such as rural electric cooperatives (of which Dairyland Power is one) can now receive direct payments from the IRS of up to $26/MWh for all generation over the next ten years of wind-based energy produced by projects that begin construction before 2025 (up to $31/MWh if built on a brownfield with U.S.-made components). Prior to the enactment of the IRA, Dairyland Power and other rural electric cooperatives could not take advantage of these tax credits because they had no (or very little) tax liability. Similarly, the IRA enabled direct pay of investment tax credits for solar and batteries, which would cover up to 30% of the cost of installation (up to 50% for domestically-sourced materials installed in communities that once had significant fossil fuel infrastructure).

In addition to these direct pay tax credits, which Dairyland Power is eligible for, there is the possibility of outright grant funding to support the construction of new renewable resources. Under Section 22004 of the Inflation Reduction Act, the USDA has been provided with $9.7 billion to extend grants, loans, and/or other forms of financial assistance to rural electric cooperatives for the purpose of purchasing clean energy systems. Grants must be matched with 3:1 financing, but the matching funds can come from direct-pay credits or other low-cost loans.

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15 PSC REF#: 383195 (Final Decision) at 8.
meaning cooperative members could pay as little as 25% of the cost of new renewable buildout. Although the grantmaking process has not been announced yet, according to a presentation at the most recent conference of the National Rural Electric Cooperative Association, the initial funding opportunities will be announced this spring.\textsuperscript{16}

Quite simply, what is “cost-effective” and in the public interest with respect to electrical generation is different now with the IRA than it was at the time the Commission issued a CPCN for NTEC. Moreover, the rapid development of battery sites throughout Wisconsin undermines one of the primary grounds on which the Commission relied in finding the proposed NTEC project met Wisconsin’s Energy Priorities Law. The Commission should, accordingly, rescind the CPCN and reopen the proceeding to examine evidence as to whether Applicants’ choice to build a combined-cycle plant remains “in the public interest” and in line with “other environmental values” under the Plant Siting Law, consistent with Wisconsin’s Energy Priorities Law, or is prudent and reasonable in light of the changed circumstances since their original application.

3. Other policy and scientific developments since the approval of NTEC’s CPCN merit reconsideration of the Commission’s public interest determination and EPL analysis.

Since the record was created in the Commission’s CPCN proceeding for NTEC, Wisconsin has adopted new policy goals to mitigate climate change, the scientific understanding of climate change’s impacts on society has advanced, and concerns about the climate impacts of NTEC have called federal funding for the project into question. Any policy justifications for approval of the 625 MW, fossil-fueled NTEC facility the Commission may have had are no longer defensible and the Commission’s reconsideration of its public interest and environmental determinations under the applicable provisions of Wis. Stat. § 196.491(3)(d)3. and 4., and analysis of the project’s compliance with the EPL are warranted.

First, in December 2020, after testimony and briefing in NTEC’s CPCN proceeding concluded, the State of Wisconsin issued the Governor’s Task Force on Climate Change Report ("Task Force Report").\textsuperscript{17} The Task Force Report acknowledged that “[f]ailing to act swiftly and leaving the climate crisis to manifest unchecked will continue to wreak havoc across the nation and in the great state of Wisconsin.”\textsuperscript{18} It went on to identify 55 policy recommendations to mitigate Wisconsin’s contribution to climate change and help the state respond to its impacts.


\textsuperscript{18} \textit{Id.} at 5.
Recommendations particularly relevant to the Commission include setting utility carbon-reduction goals and avoiding all new fossil infrastructure. The Task Force Report identified strategies of reducing net carbon emissions from the utility sector to 60% of 2005 levels by 2030, and to 100% below 2005 levels by 2050.\textsuperscript{19} For utilities to meet these targets, the Commission must intensely scrutinize all proposed new fossil generation and implement the state’s policy recommendations through its application of the Plant Siting Law. The Task Force Report’s policy recommendation to “avoid all new fossil fuel infrastructure” includes the strategy to specifically, “[a]void any new natural gas plants.”\textsuperscript{20} Impacts of climate change are “environmental factors” the Commission must consider when making a public interest determination, and the “goal of ensuring all electricity consumed within the State of Wisconsin is 100 percent carbon-free by 2050” should inform the Commission’s consideration.\textsuperscript{21} These impacts also implicate other “environmental values” under Wis. Stat. § 196.491(3)(d); for example, climate change is and will cause more severe storms, reduce surface water quality, and harm infrastructure in Wisconsin and elsewhere.\textsuperscript{22}

Second, in March 2023, the United Nation’s Intergovernmental Panel on Climate Change released its Sixth Assessment Report (“IPCC AR6”), presenting the latest scientific evaluation of the risks climate change poses to the global community.\textsuperscript{23} IPCC AR6 laid out the dire state of efforts to mitigate climate change to the extent necessary to meet the Paris Climate Accord’s target of limiting global warming to 1.5°C or 2°C. It concluded, with high scientific confidence, that greenhouse gas emissions reductions achieved \textit{this decade} will “largely determine whether warming can be limited” to meet that target, and that projected emissions from \textit{existing} fossil fuel infrastructure would exceed the remaining carbon budget to meet the 1.5°C target.\textsuperscript{24} The implication is clear: new fossil infrastructure is \textit{not compatible} with the Paris Climate Accord.\textsuperscript{25} The Commission should reconsider NTEC’s CPCN in light of new scientific advances concerning the state of climate change, including IPCC AR6, and recommendations from leading researchers for policymakers.

\textsuperscript{19} \textit{Id.} at 40.
\textsuperscript{20} \textit{Id.} at 93. This policy recommendation is a Tier II recommendation, meaning it was “raised and, to some extent, discussed during the task force process or brought up during the public hearing and public comment period[.]” and “drew both support and concern from task force members.” Nonetheless, it was identified in the Task Force Report as a potential policy to meet the state’s climate goals. \textit{Id.} at 9.
\textsuperscript{22} \textit{E.g.}, Wisconsin Initiative on Climate Change Impacts, Wisconsin’s Changing Climate: Impacts and solutions for a Warmer Climate at 78, 87-88 (2021), \textit{available at} \url{https://www.wpr.org/sites/default/files/wicci_2021_assessment_report-compressed.pdf}.
\textsuperscript{24} \textit{Id.} at 20.
\textsuperscript{25} The U.S. has committed to the Paris Climate Accord, and Exec. Order No. 38 charges Wisconsin’s Office of Sustainability and Clean Energy with ensuring Wisconsin is fulfilling its goals.
Third, the U.S. EPA has raised serious concerns specifically about the climate impacts of NTEC in comments on the USDA Rural Utility Service’s (“RUS’s”) Supplemental Environmental Assessment (“EA”) of the project.\(^\text{26}\) EPA noted that “[t]he Supplemental EA does not fully quantify or adequately disclose the impacts of the GHG emissions[,]” and argued that, in addition to the direct GHG emissions already estimated in the Supplemental EA, “[c]alculations of upstream, construction-related and indirect GHG emissions…would provide essential information to the public and RUS decisionmakers.”\(^\text{27}\) To quantify the impacts of these emissions, EPA recommended that RUS include social cost of GHG estimates in the Final EA.\(^\text{28}\) EPA urged RUS to consider how regulatory, policy, and energy transition trends will affect new fossil-fired plants in light of decreasing costs of renewable alternatives. EPA contends building new, large fossil-fired plants presents “financial risks to owners and ratepayers.”\(^\text{29}\) EPA also raised concerns about Tribal and environmental justice, and the Supplemental EA’s lack of discussion about remediating or mitigating impacts on these communities. The issues addressed in EPA’s comments directly relate to the Commission’s findings in its approval of NTEC’s CPCN, specifically its public interest determination and EPL analysis, as well as its WEPA analysis.

In sum, the circumstances surrounding the efficacy and prudence of constructing and operating a new, gas-fired power plant of the scale and cost of NTEC have changed dramatically since the Commission considered and approved the project. Clean Wisconsin and Sierra Club respectfully request the Commission act on its own motion to rescind the CPCN and reopen the proceeding to consider the aforementioned developments.

Respectfully,

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\(^{27}\) Id. (Cover Letter) at 2.

\(^{28}\) Id. (Detailed Technical Comments and Recommendations) at 7.

\(^{29}\) Id. (Detailed Technical Comments and Recommendations) at 1.