PUBLIC-REDACTED VERSION

BEFORE THE

WISCONSIN PUBLIC SERVICES COMMISSION

Application of Wisconsin Electric Power Company for a Certificate of Authority under Wis. Stat. § 196.49 and Wis. Admin. Code § PSC 133.03 to Construct a New Liquefied Natural Gas Facility and Associated Natural Gas Pipelines in the City of Oak Creek, Milwaukee County, Wisconsin	Docket No. 6630-CG-140

Surrebuttal Testimony of

Eric Borden

On Behalf of

Sierra Club

March 25, 2025

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I. INTRODUCTION AND OVERVIEW

Q Are you the same Eric Borden from Synapse Energy Economics who submitted direct testimony in this docket?

A Yes. Information about Synapse Energy Economics and my professional experience and qualifications is provided in my direct testimony.

Q What is the purpose of your Surrebuttal testimony?

A The purpose of this testimony is to address Wisconsin Electric Power Company - Gas Operations' ("WE-GO" or "Company") rebuttal testimony on issues pertaining to the facts and recommendations provided in my direct testimony.

Q Please provide a summary of your direct testimony.

A My direct testimony addressed the third provision of Wisconsin Statute § 196.49 (bolded below), which requires consideration of the following criteria in a certification proceeding:

> […] The commission may refuse to certify a project if it appears that the completion of the project will do any of the following:
>
> 1.Substantially impair the efficiency of the service of the public utility.
>
> 2. Provide facilities unreasonably in excess of the probable future requirements.
>
> 3. **When placed in operation, add to the cost of service without proportionately increasing the value or available quantity of service unless**

the public utility waives consideration by the commission, in the fixation of rates, of such consequent increase of cost of service.[1] (Emphasis added).

The analysis presented in my direct testimony demonstrated that in order to ensure that benefits of the facility are proportionate with incurred costs, the Commission should condition approval of WE-GO's application on a waiver, consistent with § 196.49, that WE-GO recoups the cost of the proposed LNG facility from its affiliate customer, Wisconsin Electric. I did not recommend any specific cost allocation or rate design for Wisconsin Electric beyond this high-level recommendation.

Q Please provide an overview of your responses to WE-GO's rebuttal testimony.

A My Surrebuttal testimony responds to various witness arguments regarding the proportionality requirement and discusses significant flaws in the Company's price hedging and reliability benefit calculations.

II. RESPONSE TO VARIOUS WITNESSES

Q Please provide an overall summary of WE-GO's response to your direct testimony.

A The Company did not directly refute any of the analysis or evidence presented in my direct testimony. Further, there seems to be broad agreement about the primary beneficiaries of the OC LNG facility. Consistent with my testimony, witness Thapa states: "The OC LNG Project's primary purpose is to meet WE-GO's increased peak day

[1] Wisconsin State Legislature, § 196.49, Available at: https://docs.legis.wisconsin.gov/statutes/statutes/196/49#:~:text=196.49%20Authorization%20from%20commission%20before,enforcement%20of%20orders%3B%20natural%20gas.

demand,"[2] a statement echoed by witness Laursen.[3] Nevertheless, the Company's witnesses insist that the LNG storage facility should be approved without the waiver I recommended, arguing that the question of appropriate cost allocation should be postponed to the Company's next rate case, and that the LNG storage facility will provide benefits to its non-affiliate customers, even if WEPCO is solely responsible for the increased firm demand prompting its construction.[4]

Q What is the Company's position regarding the proportionality requirement addressed in your testimony?

A I do not address the legal and regulatory/procedural arguments made by the Company, as these issues are more appropriate for briefing. None of these arguments alter my conclusion that, if approved, the costs for the OC LNG project will be disproportionate to the benefits received by all classes of customers. I note that my position is consistent with witness Stasik's framing of the proportionately issue in this Application: "Unless the Commission finds the costs of the OC LNG Project are disproportionate to the value it will provide to *all* customers, the Commission must approve the project."[5]

[2] Rebuttal-WEPCO-Thapa-15.
[3] Rebuttal-WEPCO-Laursen-c-6 (stating that "[t]he primary driver of the need for the OC LNG Project is requests for firm service related to the Paris RICE and OCCT Projects, as well as ERGS using natural gas").
[4] *See*, *e.g.*, Rebuttal-WEPCO-Stasik-c-22 (stating that "WE-GO cannot charge new customers more for the same firm service it is already providing to hundreds of thousands of existing customers." *See also* Rebuttal-WEPCO-Laursen-c-15.
[5] Rebuttal-WEPCO-Stasik-c-23 (emphasis added). To be clear, I agree with witness Stasik's statement in terms of proportionately, not, for example, that the Commission "must" approve the project if it finds the benefits and costs are proportional.

Q What is WE-GO's position regarding how the costs of the OC LNG facility should be allocated to customers.

A In general, WE-GO believes that any discussion about cost allocation is "beyond the scope" of this proceeding and will be addressed in the next rate case.[6] But this ignores the express contemplation of a "waiver" or other condition, imposed by the Commission in issuing a Certificate of Authority, to protect ratepayers from costs disproportionate to the value of service a facility provides. My testimony here is a limited high-level recommendation to the Commission as to the proportionality requirement, which is within the scope of this proceeding.

To further elaborate, Wisconsin Electric has various types of electric ratepayers, including [redacted] whose facilities will cause the increased load requirements driving the Company's proposal for the new natural gas units.[7] WE-GO recognizes that its proposal for new natural gas units is driven by increased load from [redacted] data centers. [redacted] has publicly stated, and witness Stasik seems convinced, that it intends to "pay [its] own way to add more electricity to the grid" to account for the new data center load.[8] Yet, the Company sees no contradiction in treating the proposed LNG facility as a traditional gas asset that benefits all ratepayers.[9] This is logically unsound because in the one case, WEPCO is insistent that cost causer pay the costs, and in the

[6] Rebuttal-WEPCO-Stasik-c-21.
[7] *See* Rebuttal-WEPCO-Stasik-c-6.
[8] Rebuttal-WEPCO-Stasik-c-6; Ex-WEPCO-Stasik-8.
[9] Rebuttal-WEPCO-Stasik-c-22-23.

other, it appears it is not. The Commission has the opportunity here to correct that disparity and comply with the proportionality consideration in Wisconsin Statute § 196.49.

Q What is the most likely cost allocation the Company will propose for the OC LNG facility?

A The Company continues to insist that the OC LNG plant provides benefits to all gas ratepayers, contrary to the data presented in this case and its own statements that expected peak load increases from new natural gas generation are the primary driver of the need for the OC LNG facility. Therefore, the Company is likely to propose allocating the costs of the facility as it would for any other LNG facility. In its test year 2023 rate case, the Company stated that LNG facilities should be "allocated to customer classes based on each class's contribution to the peak day demand responsibility, including only firm sales customers."[10] Based on the Company's base case cost of service study in the same proceeding, this would entail assigning the majority of costs, around 64 percent, to residential gas customers.[11] While this allocation may change over time depending on changes to each rate class's contribution to peak day demand,[12] residential and other customer classes are likely to bear the brunt of these costs in the initial years without receiving proportionate benefits.

[10] Ex.-SC-Borden-4 (Direct Testimony of Richard Stasik in Docket No. 5-UR-110, PSC REF # 438798). *See also* Ex.-SC-Borden-7 (Response-Data Request-SC-4.01) (defining classes of "firm sales service customers").
[11] Ex.-SC-Borden-5 (Schedule 3 of Exhibit 10 to Direct Testimony of Richard Stasik in Docket No. 5-UR-110, PSC REF # 443797).
[12] This assumes the forecast electric load forecasted materializes at a later date. In that case, the new natural gas units would change this allocation and would be incorporated by WEPCO in a later rate case.

Q Does WE-GO dispute the fact that the primary driver of the need for the OC LNG facility is the Wisconsin Electric generation fleet?

A In general, no. However, the Company attempts to de-emphasize this or highlight other benefits of the LNG project in order to claim that it will benefit all ratepayers proportionately. For example, witness Laursen attempts to diminish the primary reason for the project, additional peak day capacity to serve electric generators, in order to emphasize benefits to existing or other classes of customers:

> […] although WE-GO's new load is significant, focusing only on this incremental demand overstates the benefits of the OC LNG Project that would accrue to Wisconsin Electric's electric customers as compared to existing natural gas customers of WE-GO.[13]

Mr. Laursen supports this conclusion with the assertion that "WE-GO's existing customers are forecast to contribute approximately 55% of overall peak system demand, and the new firm demand from the electric generating facilities would be 45%."[14]

Q Is Mr. Laursen correct that gas ratepayers will benefit equally or more from the peak day capacity provided by the proposed OC LNG facility compared with electric customers?

A No. Data presented by Mr. Laursen demonstrates the opposite: without the peak day demand from electric generators, the OC LNG project is not needed. Existing customers

[13] Rebuttal-WEPCO-Laursen-c-7.
[14] Rebuttal-WEPCO-Laursen-c-7.

are, overall, *worse off* because they will incur substantial cost increases (under the Company's likely proposed cost allocation) for a facility these customers do not need. This point is demonstrated in the table below, based on the data presented in Mr. Laursen's testimony. The table shows a 35 percent reserve margin for existing customers *without* the OC LNG facility (due to increased capacity from other projects). Given that the Company's planning reserve margin target is 5 percent, the facility is clearly not needed to serve peak day demand of existing gas ratepayers.

Table 1. Existing customer demand and WE-GO peak day capacity without the OC LNG facility (2027-2028)

Existing Customer Peak Day Demand (Dth)	Firm Capacity Absent the OC LNG Facility (Dth)	Reserve Margin
[redacted]	[redacted]	35%

Source: Rebuttal-WEPCO-Laursen-c-7 n.11 (existing customer demand); Rebuttal-WEPCO-Laursen-c-5 (firm capacity absent the OC LNG facility)

Witness Laursen's argument above conflicts directly with his prior discussion in testimony discussing increased peak demand due primarily to "requests for additional firm capacity for the proposed Paris Reciprocating Internal Combustion Engine ("RICE") and Oak Creek Combustion Turbine ("OCCT") Projects, as well as the planned use of natural gas at the existing Elm Road Generating Station ("ERGS")."[15]

[15] Rebuttal-WEPCO-Laursen-c-3.

Further, Mr. Laursen agrees with much of the data and analysis provided in PSC staff witness Guagliardo's testimony.[16] In her testimony, Ms. Guagliardo similarly finds that the "[t]he applicant's peak demand needs for 65 percent more natural gas in 2027-2028 are primarily due to three electric generation customers requesting firm natural gas resources to fuel electric power generation facilities to serve the applicant's electric system needs."[17] Accordingly, witness Guagliardo finds that special consideration of the proportionality requirement is necessary in this case:

> Under Wis. Stat. § 196.49(3)(b)3., the Commission must determine if when placed in operation the proposed project will add to the cost of service without proportionately increasing the value or available quantity. Existing natural gas customers make up approximately 6 percent of the total expected demand growth compared to 94 percent for electric generation customers requesting the substantial additional firm capacity**.** Although the project will benefit all of the applicant's customers, the primary driver of the need for the proposed project is due to electric generation customers requesting additional firm capacity. The Commission may find it is likely the project will require unique Commission staff analysis of appropriate cost allocation in a future rate case.[18]

I do not agree with Ms. Guagliardo's conclusion that an order condition directing future cost allocation analysis is sufficient to comply with the proportionality requirement

[16] Rebuttal-WEPCO-Laursen-c-3, 5, 6.
[17] Direct-PSC-Guagliardo-c-10.
[18] Direct-PSC-Guagliardo-c-11 (footnote omitted) (emphasis added).

for a Certificate of Authority and to protect non-affiliate ratepayers.[19] However, Ms. Guagliardo apparently agrees with my fundamental conclusion that affiliate customer demand is "the primary driver of the need for the proposed project," and that this should determine cost allocation.[20] By insisting, nevertheless, that non-affiliate customers will benefit in proportion to the costs of the proposed project, Mr. Laursen contradicts not only his own testimony, but also that of staff.

Q Are there any other arguments presented in Mr. Laursen's testimony that you wish to address?

A Yes. Mr. Laursen presents two additional arguments regarding the proportionality requirement that I would like to address. First, he states that it is "semantics"[21] to treat Wisconsin Electric as a distinct ratepayer. Second, he states that my recommendation suggests that "any customer with stable natural gas demand would have an argument to avoid costs associated with meeting peak day demand, because each such customer would not be directly causing additional costs."[22]

Q What is your response to these two additional arguments?

A As to the first argument, it is certainly not "semantics," for example, to burden WE-GO's residential gas ratepayers with costs for which they would not receive proportional benefits, inconsistent with the statutory language cited above. Indeed, as described above,

[19] Direct-PSC-Guagliardo-c-12.
[20] Direct-PSC-Guagliardo-c-11.
[21] Rebuttal-WEPCO-Laursen-c-15 (arguing that "Mr. Borden's entire argument therefore hinges on Wisconsin Electric being semantically different from other ratepayers").
[22] Rebuttal-WEPCO-Laursen-c-15.

WE-GO will likely propose to initially allocate around 64 percent of the costs of the LNG project to the residential class.

As to the second argument, Mr. Laursen's position that my recommendation creates a slippery slope – whereby stable demand customers will no longer be required to pay for facilities built to serve increased demand – is a red herring. My recommendation is uniquely tailored to this specific proposed investment and application, i.e., the construction of storage facilities with capacity and location closely tailored to the specific needs of a single affiliate customer. As Ms. Guagliardo notes, 94 percent of the demand for this project is due to electric generators.[23] Thus, while there may not always be an argument for grossly disproportionate costs and benefits, the factual basis and concerns about the proportionality of costs and benefits must be addressed in this proceeding.

III. OTHER CLAIMED BENEFITS FROM THE OC LNG FACILITY DO NOT ALTER THE CONCLUSION THAT THE FACILITY WILL PRIMARILY BENEFIT WISCONSIN ELECTRIC

Q What additional benefits to peak day capacity does WE-GO assert are significant to ratepayers?

A The Company claims the OC LNG facility could provide a $150 million physical hedging benefit to customers due to avoided price spikes if the events and price spikes of February 13 to 16, 2021 during winter storm Uri occur again.[24]

[23] Direct-PSC-Guagliardo-c-10.
[24] Rebuttal-WEPCO-Laursen-c-11-12; Rebuttal-WEPCO-Laursen-e-1.

The Company also claims a $124 million "reliability benefit"[25] to WE-GO's residential customers due to the OC LNG facility, which is based on the value of lost load (VOLL) from preventing a 5-day gas outage to residential customers.[26]

Q How does witness Laursen calculate the $150 million benefit due to avoided price spikes?

A The Company's testimony assumes that the same level of natural gas commodity price spikes that occurred during the period of February 13-16, 2021 will occur again after the OC LNG facility is built. In its hypothetical, the Company utilizes the facility's maximum output (300,000 Dth/day) over four days, which avoids the daily price premium over this period ($126.84/Dth), resulting in a $150 million benefit in avoided spot market purchases.[27]

Q What is your assessment of the claim that $150 million in spot market purchases could be avoided with the OC LNG facility?

A There is a fundamental logical flaw in this claimed benefit. As described above, WE-GO would not seek to build the OC LNG plant if not for peak capacity needs from electric generators. In the hypothetical world of a future price spike, the facility would be in place

[25] While witness Thapa refers to this as a "reliability" benefit it is likely more accurate to describe it as a "resiliency" benefit, because it refers to system recovery rather than localized outages. I use these terms interchangeably for purposes of this testimony.
[26] Rebuttal-WEPCO-Thapa-9-10.
[27] Rebuttal-WEPCO-Laursen-c-12; Rebuttal-WEPCO-Laursen-e-1.

to serve peak demand, not to avoid price spikes. WE-GO is improperly seeking to double count these benefits.[28]

Putting this issue aside and taking Mr. Laursen's calculation at face value, the benefit calculation also ignores the potential contribution of WE-GO's other LNG facilities that were not online in 2021, Bluff Creek and Ixonia, as well as any available underground storage facilities.[29] In Mr. Laursen's hypothetical scenario, all LNG facilities could be used to mitigate spot market purchases.

WE-GO itself has acknowledged as much. In his testimony in support of the Company's application for a Certificate of Authority to build two other LNG storage facilities (the Ixonia and Bluff Creek facilities), Docket No. 5-CG-106, Mr. Gerlikowski used precisely the same past price spike as the basis for an identical hypothetical.[30] There, Mr. Gerlikowski claimed that "the availability of less than half of the proposed [Ixonia and Bluff Creek LNG facilities] would have provided customers a real-time commodity cost hedge benefit approaching $100,000,000."[31]

In later judicial proceedings regarding the issuance of the Certificate of Authority for these facilities, another WEC representative reaffirmed that, "If the [Ixonia and Bluff Creek facilities] had been in service, [they] could have provided a firm natural gas supply" during the February 13-16, 2021 period, "and avoided the high natural gas

[28] In other words, the counterfactual scenario in which 1,200,000 Dth of peak demand is served by spot market purchases does not exist.
[29] Ex.-SC-Borden-10 (Rebuttal Testimony of Brandon Gerlikowski in Docket No. 5-CG-106, PSC REF # 417591 at 24).
[30] *Id.*
[31] *Id*.

prices."[32] Past Company testimony therefore establishes two things: 1) It has claimed the same or similar benefit for various LNG facilities, thereby double counting, and 2) the already-approved facilities are sufficient to provide the same or a similar degree of physical hedging benefits to existing ratepayers (further discussed below).

Lastly, taking Mr. Laursen's scenario at face value again, any hedging benefits from the OC LNG facility are due to additional demand from electric generators. This can be seen by examining the *actual* amount of spot market transactions that occurred over this February 13-16, 2021 event to serve existing customers. During the event, the Company purchased 332,407 Dth, compared with the 1.2 million Dth's of spot market purchases avoided in Mr. Laursen's hypothetical.[33] Therefore, the additional 867,593 Dth of avoided spot market purchases (1.2 million Dth minus 332,407 Dth) – 72 percent of the total – would have been made to serve Wisconsin Electric. Witness Thapa conducts a comparable analysis and comes to similar conclusions as to the total benefits accruing to existing customers from avoided spot market purchases (~$41 million) compared with the $150 million calculated by Laursen.[34] This once again demonstrates the importance of assigning the costs of this facility to Wisconsin Electric to meet the proportionality requirement for Certificates of Authority.

[32] Ex.-SC-Borden-11 (Affidavit of Sarah Mead in Opposition to Stay, *Sierra Club v. Pub. Serv. Comm'n of Wisconsin*, Case No. 2022-CV-525, Dkt. 114 at ¶ 5).

[33] Ex.-SC-Borden-8 (Response-Data Request-SC-5.03, part (b)); Ex.-SC-Borden-9 (Attachment 01 to Response-Data Request-SC-5.03, part (b)).

[34] Rebuttal-WEPCO-Thapa-13. Witness Thapa finds there was around $41 million of actual spot market purchases during this February 2021 event, which is around $42 million if we use the amounts purchased during the event from discovery responses. *See* Ex.-SC-Borden-9 (Attachment 01 to Response-Data Request-SC-5.03, part (b)) and the price premium assumed by Laursen.

Q Please describe how witness Thapa calculates the $124 million in potential reliability benefits.

A Company witness Thapa cites a storm event in New York that could have, but did not, result in outages, because ConEdison, the local gas utility, was able to use LNG to maintain adequate system pressure. He calculates a $124 million reliability benefit[35] to customers based on 1) an estimated value of lost load (VOLL) from a Brattle study conducted for New Jersey customers ($53 per customer per day), and 2) assuming a 5-day gas outage could be avoided for all WE-GO residential customers.[36]

Q What is your assessment of this calculation?

A As witness Thapa admits, the VOLL estimate is based on a New Jersey residential gas consumer. While I am certainly willing to stipulate that avoiding a prolonged gas outage is valuable to customers, Mr. Thapa's calculation and analysis has limited relevance to the present application due to several shortcomings. While WE-GO has identified *a* scenario in which the availability of LNG storage avoided a prolonged and costly outage, Mr. Thapa's testimony does not provide any basis for conducting a cost-benefit analysis specific to the OC LNG's ability to mitigate that risk. All Mr. Thapa's testimony establishes is that LNG facilities can, in general, offer reliability benefits. His testimony does not provide a basis for concluding the addition of the OC LNG, specifically, would avoid or is likely to avoid a five-day outage.

[35] The benefit described by witness Thapa could also be described as system "resilience." For purposes of this testimony, I use these terms interchangeably.
[36] Rebuttal-WEPCO-Thapa-9-10.

Furthermore, Mr. Thapa does not provide any critical examination of the likelihood of a 5-day outage (or indeed, an outage of any length) occurring over the lifetime of the LNG storage facility at issue (~50 years). The calculation *assumes* this event will take place absent the OC LNG facility, which also indicates a situation in which the Company has engaged in poor planning such that a natural disaster compromises the entire system. A more rigorous analysis of the resiliency benefit would consider the likelihood of this type of outage occurring to determine the expected value of the benefit to customers (this could be done on a present value basis over the lifetime of the facility). This would likely significantly diminish the purported benefit.

Here, the Company has not presented any data which can be used to assess the likelihood of a 5-day outage event. However, I am not aware of any such event in the utility's service territory. Indeed, a study by the Gas Transportation Institute (GTI) found that "on average, only 1 in 112 customers are expected to experience an outage (planned or unplanned) in any given year" compared with electric service where which has an average of "one outage per year per customer."[37] I would expect that a multi-day prolonged outage for all residential customers is even less likely to occur.

Finally, similar to the flaws discussed with the price hedging benefit calculation of LNG facilities, witness Thapa's analysis fails to consider the value that other WE-GO storage facilities would provide during an extreme event, including the Bluff Creek LNG

[37] Ex.-SC-Borden-6 (Gas Technology Institute (GTI), *Assessment of Natural Gas and Electric Distribution Service Reliability* at 2 (July 19, 2018), https://www.gti.energy/wp-content/uploads/2018/11/Assessment-of-Natural-Gas-Electric-Distribution-Service-Reliability-TopicalReport-Jul2018.pdf.

and Ixonia LNG facilities. Based on witness Thapa's framework, any of WE-GO's LNG facilities could theoretically provide the same reliability benefits, resulting in counting the same duplicative benefits across resources. Mr. Thapa does not explain whether WE-GO's currently approved LNG infrastructure is sufficient to provide the reliability benefits he describes for existing customers, or what *incremental* contribution the OC LNG facility provides to reliability over and above other measures. At minimum, the alleged reliability benefits would accrue to *all* physical measures (including but not limited to other LNG plants), not just the OC LNG plant. Once the likelihood of occurrence of a 5-day outage is incorporated into witness Thapa's analysis and the benefits are spread across other LNG facilities, I expect that there would be a *de minimis* reliability benefit from the OC LNG facility.

Q Does this conclude your testimony?

A Yes, it does.