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

Direct Testimony of Eric Borden

On Behalf of Sierra Club

January 30, 2025

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I. INTRODUCTION AND QUALIFICATIONS

2 Q Please state your name, title, and employer.

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- A My name is Eric Borden. I am a Principal Associate at Synapse Energy Economics, Inc.
- 4 ("Synapse"), located at 485 Massachusetts Avenue, Suite 3, Cambridge, MA 02139.
- 5 Q Please describe Synapse Energy Economics, Inc.
- 6 A Synapse is a research and consulting firm specializing in electricity and gas industry 7 regulation, planning, and analysis. Our work covers a range of issues, including 8 regulatory issues and cost recovery, economic and technical assessments of demand-side 9 and supply-side energy resources; energy efficiency policies and programs; integrated 10 resource planning; electricity market modeling and assessment; renewable resource technologies and policies; and climate change strategies. Synapse works for a wide range 11 12 of clients, including attorneys general, offices of consumer advocates, public utility 13 commissions, environmental advocates, the U.S. Environmental Protection Agency, U.S. 14 Department of Energy, U.S. Department of Justice, the Federal Trade Commission, and 15 the National Association of Regulatory Utility Commissioners. Synapse has over 40 16 professional staff with extensive experience in the electricity industry.
 - O Please summarize your professional and educational experience.
- A I have over 10 years of experience in the energy industry and joined Synapse in 2022.

 Since joining Synapse I have testified on multiple utility regulatory topics at issue in this proceeding, including reasonableness, cost recovery, cost allocation, and rate design in several states, including Wisconsin, Maine, Maryland, New Hampshire, South Carolina,

1		Illinois, California, Alaska, and Nova Scotia (Canada). From 2015 to 2022, I was a
2		Senior Energy Expert at The Utility Reform Network ("TURN") in California, where I
3		served as an expert witness in numerous proceedings before the California Public
4		Utilities Commission. I have a Bachelor of Science in finance from Washington
5		University in St. Louis and a Master of Arts in public affairs from the University of
6		Texas at Austin. My resume is attached as ExSC-Borden-1.
7	Q O	n whose behalf are you testifying in this case?
8	A	I am testifying on behalf of the Sierra Club.
9	Q W	That is the purpose of your testimony?
10	A	The purpose of my testimony is to address Wisconsin Electric Power Company - Gas
11		Operations' ("WE-GO" or "Company") application for a Certificate of Authority to
12		construct a new liquefied natural gas ("LNG") facility. Specifically, my testimony
13		addresses the third provision of Wisconsin Statute § 196.49 (bolded below), which
14		requires consideration of the following criteria in a certification proceeding:
15		[] The commission may refuse to certify a project if it appears that the
16		completion of the project will do any of the following:
17		1. Substantially impair the efficiency of the service of the public utility.
18		2. Provide facilities unreasonably in excess of the probable future requirements.
19		3. When placed in operation, add to the cost of service without
20		proportionately increasing the value or available quantity of service unless

1			the public utility waives consideration by the commission, in the fixation of
2			rates, of such consequent increase of cost of service. (Emphasis added).
3	0	W	hat considerations by the Commission are required by the third provision?
	V		While I am not a lawyer, I understand this provision means that the Commission must
4		A	while I am not a lawyer, I understand this provision means that the Commission must
5			assess the benefits ("value or available quantity") of gas service expected from operating
6			the proposed LNG facility in comparison with the cost of service to ratepayers of its
7			construction. If the benefits expected from the proposed facility is not proportionate to
8			the cost of the facility, the Commission can refuse certification, or order that costs not be
9			included in WE-GO rates. I note that my testimony distinguishes between firm WE-GO
10			gas ratepayers (which I refer to as "ratepayers") ² , and Wisconsin Electric Power
11			Company ("Wisconsin Electric"), which is a distinct WE-GO customer.
12	Q	Do	oes your testimony address the accuracy of WE-GO's gas and electric load forecasts?
13		A	No. My testimony assumes these figures are correct, and assesses, based on the utility's
14			own data and forecasts, whether the proposed LNG facility is expected to increase the
15			value of gas service in proportion with the costs to firm WE-GO ratepayers.

Q Was your testimony prepared by you or under your direction?

17 **A** Yes. My testimony was prepared by me or under my direct supervision and control.

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¹ Wis. Stat. § 196.49.

² This appears to include, but may not be limited to, the residential class and multiple commercial and industrial classes. Additionally, it may include large industrial customers (over 99,000 therms annually) who elect firm service.

1 II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

2 Q Please summarize your testimony findings and recommendations.

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- A Based on statements in the Company's Application and testimony, as well as data
 regarding the drivers of increased load for which the LNG facility is needed, the primary
 beneficiary of the proposed LNG facility is Wisconsin Electric, not firm WE-GO gas
 ratepayers. If the Application is approved, to ensure that benefits of the facility are
 proportionate with incurred costs, the Commission should condition approval on a
 waiver, consistent with § 196.49, that WE-GO will recoup the cost from its affiliate
 customer, Wisconsin Electric.
- Q Do you have an opinion on what cost allocation is appropriate if the Commission orders that costs be assigned to Wisconsin Electric, as you've recommended?
 - A That is outside the scope of my testimony. If the Company's application is approved, the Commission will address cost recovery in the appropriate venue. It can then determine the degree to which Wisconsin Electric ratepayers, shareholders, or individual customers driving the need for additional electric generation should bear the costs.³ I believe a similar analysis to the one I have conducted in this testimony will help guide the Commission towards the appropriate cost allocation for these customers.

³ Notably, it appears that Wisconsin Electric's need for additional electric generation resources—which, in turn, is the need basis for the proposed LNG facility—may be similarly attributable to a single WEPCO customer. *See* Direct-WEPCO-Hagerty-11 ("The increase in electricity demand from data centers and manufacturing has largely overtaken transportation electrification as the primary driver of load growth. For example, Microsoft announced earlier this year its plans to invest \$3.3 billion to build out data centers in southeastern Wisconsin.")

III. ASSESSMENT OF WHETHER THE PROPOSED LNG FACILITY WILL PROVIDE PROPORTIONAL BENEFITS AND COSTS TO RATEPAYERS

Q Does WE-GO's application address the proportional benefits requirement?

A WE-GO states simply in its application that "[t]he proposed Project will not add to the cost of service without proportionately increasing the value or available quantity of service." The Company admits it did not perform any analysis in support of this statement. WE-GO states instead that its contention "is supported by the fact that this project is part of the least[-] cost solution to provide the necessary firm natural gas deliverability to meet all of WE-GO's customer needs on the coldest winter days of the year. Therefore, the costs of these facilities are commensurate with the value they will provide to all of WE-GO's natural gas customers." Similarly, the Company's response to a staff data request appears to indicate the Company's belief that all LNG facilities, regardless of the circumstances under which they are built, benefit all customers:

"LNG is a system improvement which benefits all firm, full-sales customers. Natural gas utility storage assets such as LNG storage are not assignable to specific customers. Accordingly, contributions for LNG facility construction are not supported in tariff and are not assessed in this project."

Consistent with this statement, it appears the Company will seek to allocate the costs of

the LNG facility as a traditional gas asset based on a future class cost of service study.

The Company states "[f]ollowing past practice, LNG costs are assigned to the peak day

backup cost category because they are system peak day backup related costs that provide

⁴ Ex.-WEPCO-Application-Application: 2-13.

⁵ *Id*.

⁶ Ex.-SC-Borden-2 (Response-Data Request-SC-2.12).

⁷ *Id.* (Response-Data Request-PSC-RG-8.03).

system-wide reliability on a firm system peak day."8 In particular, the Company has confirmed that, consistent with past practice, it intends to assign the capital costs associated with this facility in the same manner as all LNG costs paid for by firm sales customers. 9 This will, according to Company projections, increase the volumetric rate for peak day backup services by 37-57 percent relative to the rates approved for 2025 and 2026 in Docket 5-UR-111.¹⁰

7 O Do you agree with the Company's proposed LNG cost treatment?

A No. WE-GO appears to rely on the overly simplistic assumption that all storage facilities provide benefits to all firm customers, regardless of the circumstances for which the facility is built or the specific entities expected to primarily benefit. In this case, the Company appears to ignore key drivers of its application in its assessment of whether benefits and costs of the proposed LNG facility are expected to be proportional to firm gas ratepayers.

O How do you assess whether benefits of the proposed LNG plant are proportionate to costs?

A The question of whether the costs of utility expenditures are fairly and appropriately allocated across different customer rate classes is typically answered as part of a utility's cost allocation process. While this is not a rate case, and cost allocation methodology is

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⁸ Ex.-SC-Borden-2 (Response-Data Request-PSC-RG-8.01).

⁹ See id.

¹⁰ Id. Note that this would come on top of a 522 percent increase from 2024 to 2025 for the peak day rate. In 2024 peak day rate was \$.0082 in 2024, which increased to \$.0510 in 2025. See Final Decision at Appendix D, Schedule 2, PSC REF: #52540 (Joint Application of Wisconsin Electric Power Company and Wisconsin Gas LLC for Authority to Adjust Electric, Natural Gas, and Steam Rates, Docket No. 5-UR-111, Dec. 19, 2024).

1	not at issue, Wisconsin law requires the Commission to assess the relationship between
2	benefits and costs when approving utility infrastructure applications. It is therefore
3	appropriate to utilize principles of cost allocation as a guide for how the Commission
4	should assess whether an investment provides proportional benefits to the costs incurred.
5	As stated in the Regulatory Assistance Project's (RAP) cost allocation manual:
6 7 8	There is general agreement that the overarching goal of cost allocation is equitable division of costs among customers []. Two primary conceptual principles help guide the way to the right answers:
9	1. Cost causation: Why were the costs incurred?
10	2. Costs follow benefits: Who benefits? ¹¹
11	Analysis of the Company's application to answer these questions will allow the
12	Commission to determine the appropriate entity(ies) to allocate costs to ensure
13	proportionality between costs and benefits. I assess the answers to these questions based
14	on WE-GO's application and testimony below.
15 16	1. The Proposed LNG Facility will Predominately Benefit Electric Generation Owned by Wisconsin Electric, not Gas Ratepayers
17	Q What is driving WE-GO's request for additional supply of natural gas?
18	A Recent requests for gas from electric generators owned or expected to be built by
19	Wisconsin Electric are the predominant driver of forecasted need for additional gas
20	supply, particularly during peak conditions.

¹¹ Regulatory Assistance Project, *Electric Cost Allocation for a New Era: A Manual*, at 18, *available at* https://www.raponline.org/knowledge-center/electric-cost-allocation-new-era/.
Any information contained in this citation, based solely on this citation, is not record evidence (NRE).

1 2 3 4		Section 2.1 of WE-GO's Application, addressing the "Purpose and Necessity" of the proposed LNG facility, states "WE-GO has received a request from its customer, Wisconsin Electric for firm natural gas service at existing and planned electric generation facilities in southeastern Wisconsin."
5 6 7 8 9 10		Section 2.1.1 of WE-GO's application, "Incremental Natural Gas Demand," shows customer requests for firm natural gas from electric generation facilities (Oak Creek and Paris). WE-GO states "The customer [WEPCO] requests for additional firm gas service are at three electric generation facilities that are expected to be dispatched at various times throughout the year, including during extended periods of cold weather, thus the need for firm services." 13
11		The electric generators with requests for incremental gas service are the Oak Creek
12		Combustion Turbine ("CT"), Paris Reciprocating Internal Combustion Engine ("RICE"),
13		and Elm Road Generating Station ("ERGS"), which "is being converted to burn natural
14		gas [instead of coal] in order to comply with the United States Environmental Protection
15		Agency's ("USEPA") Clean Air rules."14
16	Q W	hat entity will primarily benefit from the proposed LNG facility?
17	A	Wisconsin Electric, as opposed to all of WE-GO's firm gas ratepayers. This fact has
18		bearing on the Company's Certificate of Authority application since, if WE-GO
19		ratepayers were to bear LNG facility costs, the costs would not be proportionate to the
20		benefits ("value or available quantity of service"), since these accrue to Wisconsin

 $^{\rm 12}$ Ex.-WEPCO-Application-Application: 2-1 (emphasis added).

Electric.

 ¹³ *Id.* (emphasis added).
 14 Direct-WEPCO-Thapa-cr-11-12.

Q	Would the proposed LNG facility be necessary without demand from electric
	generation?

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A No. The Companies' data on peak load drivers, contracted gas amounts, and

contributions from existing LNG facilities during peak periods support the conclusion

that the predominant beneficiary of the LNG facility will be Wisconsin Electric. I note

that the Company has submitted conflicting load forecasts in its application and

testimony. 15 However, regardless of which data is used, it is clear that the proposed LNG

facility is needed primarily to benefit expected increased load from Wisconsin Electric

generators, particularly during peak load hours.

Figure 2-3 of the Company's Application shows a load duration curve which seeks to demonstrate why the LNG facility is needed during peak hours, based on forecasted load for 2027-2028.

¹⁵ Several assumptions and data points differ between Response-Data Request-SC-2.09 CONFIDENTIAL Attach, Data Request-PSC-Guagliardo-8.04-Attach CONFIDENTIAL, and Direct-WEPCO-Thapa-cr-12 (Figure 4). *See* Ex.-SC-Borden-3c. Data discrepancies include 2027-2028 peak day load values, methodology to determine this value, and forecast peak day load from the three natural gas power plants requiring additional supply (Oak Creek, Paris RICE, and ERGS). WE-GO should clarify which of these data is correct in its rebuttal testimony and potentially correct its application or testimony if there are errors. It is also not clear why peak supply contributions from the Ixonia LNG facility were not included in any of the utility load forecasts.

Figure 1 (CONFIDENTIAL): WE-GO Load Duration Curve, Including Increased Demand from Electric Generation



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Source: Ex.-WEPCO-Application-Application: Figure 2-3.

- 5 When this figure is modified to remove incremental demand expected from electric
- 6 generation in 2027–2028, it results in the following (blue line in the figure below),
- 7 focusing on just the 2027–2028 forecasted load.

Figure 2 (CONFIDENTIAL): WE-GO Load Duration Curve, Removing Increased Demand from Electric Generation (blue line)



Source: Response-Data Request-SC-2.09 CONFIDENTIAL Attach. 16

Q What does the figure above demonstrate?

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A Without expected load from electric generation in 2027–2028, the proposed LNG facility is not needed. The reserve margin with existing contracted and LNG facility peak supply is 19 percent; with the proposed pipeline expansion project (""") it is 43 percent (see table below). This is compared with historical reserve margins of percent to percent and a company planning target of 5 percent. 17

Ex.-SC-Borden-3c. The data provided in this data request response subtracted the 100,000 Dth/day contribution from the "contracted" amount, which I believe is the contribution provided by the Bluff LNG facility on the peak day. See Direct-WEPCO-Thapa-cr-9 (Figure 2). However, this subtraction was not reflected in the Company's application (see figure above, where the "contracted" line is above Dth/day). I have added this back in the figure here and it is also reflected in my version of the figure.

¹⁷ Ex.-SC-Borden-3c (Response-Data Request-SC-2.04 CONFIDENTIAL).

Table 1 (CONFIDENTIAL): WE-GO Application Reserve Margins without Electric Generator Load

	Peak Day Supply (Dth/day)	Peak Day Load Without Electric Generators (Dth/day)	Reserve Margin
Peak Supply - Contracted + Current LNG			19%
Peak Supply - Contracted + Current LNG +			48%

- 3 Source: Response-Data Request-SC-2.09 CONFIDENTIAL Attach. 18
- 4 Q If other Company peak load and supply forecasts are utilized, would the LNG facility
- 5 be required due to load growth not related to WEPCO generators?
- 6 A No. One different load and supply forecast is presented in Witness Thapa's testimony.
- 7 The table below shows the expected reserve margin based on this load forecast, removing
- 8 expected demand from WEPCO electric generators.

Table 2 (CONFIDENTIAL): Reserve Margins without Electric Generator Load (Witness Thapa's Load Forecast)

	Peak Day Supply (Dth/day)	Peak Day Load Without Incremental Electric Generators (Dth/day)	Reserve Margin
Peak Supply - Contracted + Current LNG			27.3%

12 Sources: Direct-WEPCO-Thapa-cr-15 (Figure 6); Response-Data Request-PSC-Lindquist-4-13 AGL-4.18 CONFIDENTIAL Attach 01.¹⁹

Another load and supply forecast was provided in response to a Commission staff data request.

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¹⁸ Ex.-SC-Borden-3c.

¹⁹ Ex.-SC-Borden-3c

Table 3 (CONFIDENTIAL): Reserve Margins without Electric Generator Load (Data Request Response)

	Peak Day Supply (Dth/day)	Peak Day Load Without Incremental Electric Generators (Dth/day)	Reserve Margin
Peak Supply - Contracted + Current LNG +			20.4%

Source: Data Request-PSC-Guagliardo-8.04-Attach CONFIDENTIAL. 20

The tables show that it is the incremental load from electric generators driving the need for the proposed LNG facility. Therefore, based on all utility data that I am aware of, under no circumstances is the proposed LNG facility necessary without the expected demand from electric generators. In other words, it is these generators who will receive the primary benefits from the proposed facility.

Q What other benefits to ratepayers, if any, does WE-GO identify to justify the cost associated with constructing the proposed facility?

A Witness Thapa also discusses benefits to ratepayers related to increased "utilization of WE-GO's existing and incremental pipeline capacity," improving resilience (or "reliability) by "reducing WE-GO's dependence on interstate pipelines;" and "act[ing] as a hedge against natural gas price volatility."²¹

Q What is your overall assessment of these other benefits?

A Overall, I do not dispute that there may be some additional benefits beyond increased peak supply to customers from the proposed LNG facility. However, the Company has

²¹ Direct-WEPCO-Thapa-cr-23.

²⁰ Ex.-SC-Borden-3c.

1	not quantified these benefits in any rigorous fashion such that it is necessary to alter my
2	assessment of proportionality between costs and benefits of the proposed LNG facility. ²²
3	Furthermore, several of the purported benefits may accrue, again, to the electric
4	generators driving incremental need for capacity, further supporting my conclusions.
5	Q What is your specific assessment of the other benefits discussed in Witness Thapa's testimony?
7	A I will address each here.
8	First, increased utilization of pipeline capacity is only valuable to the extent increased use
9	during periods of low demand results in useful and necessary additions to supply during
10	peak hours. As demonstrated above, this benefit accrues primarily to Wisconsin Electric.
11	Additionally, as with all the benefits cited by Witness Thapa, the value of this benefit is
12	unclear.
13	Second, I do not dispute that LNG can provide resilience through availability of non-
14	pipeline capacity during extreme events. However, the Company does not quantify the
15	value of this benefit to ratepayers, particularly in comparison with the cost of the
16	proposed facility. Further, in an extreme cold event the LNG facility would likely
17	continue to serve nearby electric generators which require incremental firm supply. ²³ .
18	Indeed, the utility peak load data shown above assumes electric generators require

²² Indeed, when asked in discovery to quantify the benefits to electric reliability from the LNG facility, the Company declined to do so, stating, "Just as a rising tide lifts all ships an LNG facility restores reliability to all active customers on the distribution system." *See* Ex.-SC-Borden-2 (Response-Data Request-SC-2.07).

²³ Direct-WEPCO-Thapa-cr-25.

1	additional supply of gas from LNG during peak conditions, which would only be
2	exacerbated during an extreme cold event.

Third, while I do not dispute that all storage "acts as a hedge against natural gas price volatility," again this potential value must be compared with the cost of the storage facility as well as with alternatives that can achieve the same or similar benefits. Witness Thapa's hypothetical example is illuminating in this regard. He notes that during the extreme cold event of Winter Storm Elliott, the Company could have saved \$4.5 million with additional LNG supply from the proposed facility. ²⁴ This savings, under extreme, relatively rare conditions, pales in comparison to the \$456 million price tag estimated for WE-GO to build the LNG facility. ²⁵ At minimum, it is not clear this potential benefit warrants different considerations to ensure proportional costs and benefits than what I recommend in this testimony.

In sum, while I do not dispute there may be additional benefits from the proposed LNG facility, these are likely to accrue primarily to electric generators, consistent with my analysis above, or have not been quantified such that WE-GO has shown proportionality between benefits and costs of the facility to ratepayers, *other than* its affiliate electric generation customer.

²⁴ *Id*.

²⁵ Direct-WEPCO-Thapa-cr-35.

IV. CONCLUSION

2	Q How does the fact that electric generators will benefit from the proposed LNG facility
3	affect this Certificate of Authority Application?

A As stated previously, the purpose of my testimony is to address the proportionality of benefits and costs of this proposed LNG facility. Based on my analysis, it is clear that electric generation owned by Wisconsin Electric is the primary beneficiary of the proposed LNG facility, not all WE-GO ratepayers. Therefore, if the Commission does approve the Company's application, it must also order that costs for the project are borne by Wisconsin Electric. Cost allocation to all firm WE-GO ratepayers would not comply with the proportionately consideration of Wisconsin Statute § 196.49.

11 Q What do you conclude?

- A If the Commission approves WE-GO's Application for a Certificate of Authority to build an LNG facility, it should also order that all costs for the facility are allocated to Wisconsin Electric, not all firm WE-GO ratepayers.
- Q Do you have an opinion on what cost allocation is appropriate once the Commission orders that costs be assigned to WEPCO?
- A That is outside the scope of this testimony. If the Company's application is approved, the Commission will address LNG facility cost recovery in the appropriate proceeding. It can then determine the degree to which Wisconsin Electric ratepayers, shareholders, or individual customers driving the need for additional electric generation should bear the costs. I believe a similar analysis as the one I have conducted in this testimony will help guide the Commission towards the appropriate cost allocation for these customers.

- 1 Q Does this conclude your testimony?
- 2 **A** Yes, it does.