STATE OF RHODE ISLAND ENERGY FACILITY SITING BOARD

The Narragansett Electric Company d/b/a National Grid Application for a License to Mobilize and Operate a Liquified Natural Gas (LNG) Vaporization Facility at Old Mill Lane (Portsmouth, RI)

Docket SB-2021-04

PRE-PRELIMINARY HEARING MEMORANDUM OF CONSERVATION LAW FOUNDATION

I. Introduction

At a procedural conference held on June 6, 2022, the Energy Facility Siting Board ("EFSB" or the "Board") invited the parties to submit memoranda on advisory opinions and other topics to be considered at the Preliminary Hearing. Conservation Law Foundation ("CLF") respectfully submits this memorandum to the Board and seeks to call the Board's attention to several important topics for consideration at the Preliminary Hearing. CLF requests that where appropriate the Board require that the Narragansett Electric Company ("Narragansett" or the "Company") provide more detail and analysis, and that it consider the following issues as it directs state agencies to render advisory opinions.

II. The Board Must Continue to Apply the Act on Climate in its Evaluation of the Application

Rhode Island's Act on Climate statute mandates statewide greenhouse gas ("GHG") emissions reductions of 45% below 1990 levels by 2030, 80% by 2040, and net-zero emissions by 2050. R.I. Gen. Laws § 42-6.2-2(a)(2). It also grants all state agencies the authority to promulgate rules and regulations necessary to achieve the emissions reductions it requires. R.I. Gen. Laws § 42-6.2-8. Under the Act on Climate, addressing climate impacts falls within the "powers, duties,

and obligations" of all state agencies, and each agency is required to "exercise among its purposes in the exercise of its existing authority" the purposes of the Act on Climate "pertaining to climate change mitigation, adaptation, and resilience in so far as climate change affects its mission, duties, responsibilities, projects, or programs." *Id.* This provision requires the EFSB to consider climate impacts and to further the purposes of the Act on Climate in the exercise of its authority.

In the year since the Act on Climate was signed into law, the Board has applied the statute in several cases that have come before it. *See, e.g.*, Order 150, Docket No. SB-2021-04; Order 153, Docket No. SB-2021-03. We commend the Board for its thoughtful application of the Act on Climate, which may serve as a model for other state agencies applying the law for the first time in other contexts. CLF asks that the Board continue to evaluate the instant application in light of the statute's emissions reduction mandates and the responsibilities it imposes upon state agencies. The Board can do so by ensuring that the application's potential climate impacts are thoroughly vetted, and by ensuring that if a license is granted its terms and conditions are consistent with the Act on Climate's mandates.

Also relevant to the Board's evaluation of Narragansett's application are several recent actions of the General Assembly, and concurrent processes before other state agencies. A new law requiring that the state's electricity use be completely offset by renewables by 2033, as well as the inclusion of funding for a heat pump grant program in the FY 2023 budget, will directly affect the emissions impacts of the proposed project and its alternatives. The Public Utilities Commission's ("PUC") recently opened Docket No. 22-01-NG will explore the future of gas supply and distribution in Rhode Island in light of the Act on Climate, and we expect that it will affect all gas utility regulation moving forward. To the extent possible based on the timing of the two proceedings, the Board should aim to render a decision that is consistent with the broader gas

policy decisions reached by the PUC in the Future of Gas docket, or that at least provides the flexibility necessary to allow for future consistency.

III. The Effects of Climate Change and the Unique Climate of Aquidneck Island Must Be Incorporated into the Forecasting of Natural Gas Demand

In Order 150, the Board required that the Company include gas demand forecasting in its application and provide a full explanation of its gas demand forecasting methodology. Order 150 at 36. The accuracy of these gas demand forecasts is critical to the Board's evaluation of the application, as the forecasts weigh directly upon the question of need, and upon the cost and viability of alternatives to the proposed action. Unfortunately, the gas demand forecasting detailed in the Siting Report falls short in at least two important ways.

Firstly, in modeling heating degree days ("HDD"), the design hour, day, and year, and the cold snap weather scenario, the Company has not attempted to account for the effects of climate change. As the Company acknowledges elsewhere in the Siting Report, "Climate change has had a measurable effect in the state," and "Rhode Island will continue to experience warmer temperatures." Siting Report at 50. One of the effects of climate change is milder winters, which means that a particularly harsh winter is less likely to occur in 2025 than it was to occur in 1995 or 1985. The Company bases its forecasts on historical data, without accounting for this change. For instance, in developing its cold snap scenario, the Company "uses a 14-day cold snap occurring in the coldest 14-day period of the Company's normal year by evaluating weather data over a long-term horizon (for the Company's Long-Range Resource and Requirements Plan submitted in June 2020, this period was 1977/78 to 2016/17)." Siting Report at 6 n.4. Because of climate change, temperature data can change meaningfully over years and decades, more than enough to impede the Company's attempts to calculate the risks of cold weather scenarios with a high degree of precision. Between 1976 and 1995, the continental United States experienced an average of

4,593.05 HDD per year. Between 1996 and 2015, it experienced an average of 4,321.35 HDD per year—roughly a 6% decrease. *Climate Change Indicators: Heating and Cooling Degree Days*, Envtl. Prot. Agency, https://www.epa.gov/climate-indicators/climate-change-indicators-heating-and-cooling-degree-days (last updated May 2, 2022).

Secondly, it is not clear from the Siting Report whether the Company has tailored its forecast to the unique climate of Aquidneck Island. As the Siting Report says, "Aquidneck Island in particular enjoys a moderate climate due to its close proximity to Narragansett Bay and influence from the Gulf Stream, which helps to minimize extreme temperatures." Siting Report at 49-50. This more moderate climate in comparison to the rest of Rhode Island directly impacts gas demand on Aquidneck Island, and therefore should be considered in any gas demand forecast specific to Aquidneck Island. While the Company says that it has "downscaled" its Rhode Island-wide forecast in order to develop a forecast specific to Aquidneck Island, the Siting Report makes no mention of having incorporated temperature data specific to Aquidneck Island. See id. at 4.

Both of these factors have a substantial impact on gas demand on Aquidneck Island, and must be accounted for in order to ensure the most accurate possible forecasting.

IV. The Board Should Require More Rigorous Accounting of GHG Emissions Impacts

The Board directed the Company "to include a comparison of the greenhouse gas emissions impacts of the final proposed solution against the greenhouse gas emissions impacts of all the alternatives considered." Order 150 at 30. An accurate comparison of GHG emissions impacts is particularly important in light of the Company's abandonment of the "hybrid approach" that it said it had decided upon after careful consideration and a robust stakeholder process. While the required comparison is provided in the Siting Report, it includes several faulty assumptions that limit its usefulness.

For example, in the modeled scenarios that include a moratorium on new gas hookups, "all of the otherwise projected growth in customer demand relative to 2023 levels on Aquidneck Island is assumed to be met with fuel oil-powered equipment." Siting Report at 42. The Company says that it makes this assumption "because absent substantial subsidies or mandates, electrification is not a cost-effective heating option[.]" Id. But neither the Company's assumption nor its explanation accurately reflects the state of the home heating market. Of course, some Rhode Islanders are choosing to heat their homes with electric heat pumps, so an assumption that no customers whatsoever will purchase electric heat pumps if gas is unavailable is not sensible. It's also not correct to say that electrification is "not a cost-effective heating option." Id. While heat pumps may have higher up-front costs than oil heating systems, they are substantially cheaper to operate, and can therefore be the less expensive option in the long term. Further, it's unreasonable to assume that there will be no "substantial subsidies or mandates" for electric heat pumps in the future. Id. This year's state budget includes significant funding for a heat pump grant program, and it's entirely possible that additional subsidies and regulations will tilt the market towards electrification, particularly as the state works to reduce emissions under the Act on Climate. Rather than assuming that a gas hookup moratorium will lead exclusively to additional oil heat consumption, the Company should provide alternate emissions impact calculations for different levels of heat pump adoption.

It's also unclear why the Company is only estimating cumulative GHG emissions reductions through the winter of 2034-35. *See* Siting Report at 42. The mandates of the Act on Climate do not end in 2035. They run through 2050, and require that Rhode Island's heating sector be decarbonized completely. If different approaches have different emissions impacts beyond 2035, that is a relevant factor for the Board to consider. Relatedly, the Board should consider

whether costs incurred under one or another approach are costs that will need to be borne eventually, regardless of the outcome of this licensing proceeding. An approach may appear less expensive in the short term only because it delays a necessary action to a time when it will be more

expensive to implement.

The Company should also provide additional details regarding its modeling of methane leakage from the gas distribution system. It is appropriate that the Company is using a 20-year Global Warming Potential factor in comparing the impacts of different GHGs, but it could still be undercounting emissions from gas leaks, which some experts believe are massively undercounted in Rhode Island's GHG inventories. *See* Stockholm Envtl. Inst. & Brown Univ. Climate and Dev. Lab, *Deeper Decarbonization in the Ocean State: The 2019 Rhode Island Greenhouse Gas Reduction Study* 20–23 (2019), *available at* https://www.sei.org/wp-content/uploads/2019/09/deeper-decarbonization-in-the-ocean-state.pdf.

V. Conclusion

CLF respectfully asks that the Board consider the aforementioned topics at the Preliminary Hearing, and requests that where appropriate the Board require that the Company provide more detailed explanations and analyses, and direct state agencies to address these topics in advisory opinions.

CONSERVATION LAW FOUNDATION

By its attorneys,

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CERTIFICATE OF SERVICE

I certify that the original and four copies of this brief were hand-delivered to the Energy Facility Siting Board, with an additional copy for the Public Utilities Commission. Additional copies were mailed to Board Members Meredith Brady and Terrence Gray. In addition, a PDF version of this brief was served electronically on the service list of this Docket, as that list was provided by the EFSB on July 11, 2022. I certify that all of the foregoing was done on July 11, 2022.

/s/ James Crowley
