280 Melrose Street Providence, RI 02907 Phone 401-784-7288



March 15, 2024

VIA ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888

RE: Docket No. 23-49-NG – The Narragansett Electric Company d/b/a Rhode Island Energy's Proposed FY 2025 Gas Infrastructure, Safety, and Reliability Plan Revised Responses: PUC 4-1 and PUC 9-11

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy, I have enclosed the Company's revised responses to data requests PUC 4-1 and PUC 9-11 in the above-referenced matter.

Thank you for your attention to this matter. If you have any questions, please contact me at 401-316-7429.

Very truly yours,

Kunfu Burg Hills

Jennifer Brooks Hutchinson

Enclosure

cc: Docket No. 23-49-NG Service List

PUC 4-1 - Revised¹

Request:

Please provide:

- (a) A narrative which describes the timing of and steps that were taken by the Company after acquisition by PPL that led to the decision to invest in a new control room upgrade at the Exeter LNG facility. Please indicate whether replacement of the control room was identified by National Grid as a need.
- (b) Copies of any reports or evaluations of the Exeter LNG facility which determined that the current control room is inadequate and/or recommend the new control room.
- (c) Any internal sanctioning documents which authorized the Company advancing the investment in the control room.
- (d) Diagrams or other design documents showing the design of the new control room.
- (e) Any pictures and/or other reports associated with review of the current control room that show the current condition of the control room that make it inadequate.
- (f) Please describe the expenditures that comprise the \$500,000 referenced in column b., line 1 of Attachment 2-3-1 and the expenditures of \$1.6 million forecasted in column c.

Original Response:

(a) In the summer of 2022, after the Company was acquired by PPL Rhode Island Holdings, LLC, Company personnel discussed internally the need for upgrading the control room at the Exeter LNG facility. The current configuration of the control room places LNG operators adjacent to the motor control cabinet "MCC" room that houses the major electrical switchgear for major plant components. The current configuration and the size of the control room does not accommodate separation of the two spaces. The current control room space is 209 square feet while the proposed control room is 873 square feet with an adjacent Lead LNG Operator Office.

¹ The Company's revised response begins on page 4.

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-49-NG In Re: Proposed FY 2025 Gas Infrastructure, Safety and Reliability Plan Responses to the Commission's Fourth Set of Data Requests Issued on January 30, 2024

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In addition, when the original control room became operational in 1972, there were no security monitors, computers, security monitoring equipment, or printers in the control room. Over the years, technology has reduced the available workspace for the operator and has encroached into the small room. For example, a modern control room will typically feature two to three operator monitors and one or two large screen overview monitors that comprise the human machine interface ("HMI") system. Multiple monitors enable operators to monitor important overview information, view dynamic graphs, and pull up specific information for the operation at hand. In conjunction with the plant HMI system, operators require access to Company computers on a continuous basis. Company computers provide access to read sheets that are routinely updated, policies, procedures, and e-mails that are important to the operation. Operators follow printed procedures when performing a specific task and need desk space to write. Due to the lack of available floor space, the largest desks that can fit into the control room can barely support the use of one HMI screen, one Company computer, a telephone, and space for writing procedures or logs. The current configuration does not permit effective display of information to the plant operator and is not conducive to productivity.

The planned upgrades are intended to bring the control room in line with modern industry standards and best practices. The existing control room does not have any room to build a separation barrier between the MCC room and the control room, and there is no space in the current control building to move either the MCC room or control room. This necessitates the need to build a new building to house a new control room. See subpart e. for a list of the improvements.

Although the Company did not have plans to upgrade or replace the control room at Exeter LNG while under National Grid USA ("National Grid") ownership, it did upgrade the control room and building at Cumberland LNG in 2014 and is currently in the process of upgrading the control room and building at the Providence LNG facility. Additionally, National Grid's Massachusetts affiliate is upgrading or replacing their LNG control room and buildings, which are in similar condition to the Exeter LNG control room and building.

- (b) No formal studies or evaluations were conducted specific to the Exeter LNG control room, any inadequacies, or the need for a new control room.
- (c) The Company is in the process of sanctioning this project and intends to complete the process in the next month. The Company will provide the sanctioning document when it is complete.

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- (d) Please see Attachment PUC 4-1-1 for a copy of the Exeter Control Room Schematic Design. Please see Attachment PUC 4-1-2 for photographs of the current control room that show (i) the proximity of the LNG operators to the electrical switchgear in the MCC room as discussed in subpart a., above; and (ii) the current workstations, which do not have appropriate space for multiple HMI monitors to control and operate the plant, as described in subpart a., above. In addition, as shown in Attachment PUC 4-1-2, there is no available space in the control building for a conference room, or even a table to view engineered drawings and construction drawings. The following items listed below are in the preliminary design that the Company believes is essential for the safety of its employees and spaces that are needed to support customer demand for a safe and reliable LNG plant.
 - i. Provide a separation barrier between operators and the MCC room;
 - ii. Remove control room and building from the thermal radiation zones at the truck station impoundment;
 - iii. Provide operators with ergonomic workstations that will feature standing positions to mitigate fatigue and permit multiple human machine interface "HMI" monitors to control and operate the plant;
 - iv. Provide a dedicated Working Leader Office to oversee the day-to-day operation of LNG operations;
 - v. Provide ADA accessibility to support staff and visitors;
 - vi. Provide additional offices for LNG management staff and LNG project support teams;
 - vii. Male and Female dedicated restrooms and showers;
 - viii. Dedicated LNG training room for operators;
 - ix. Multipurpose LNG Conference/Training Room;
 - x. Wellness locations that support sequestering sleeping quarters during pandemics, storms, and other emergencies;
 - xi. Future space for a training simulator;
 - xii. Attached facility workshop and utility space;
 - xiii. South facing roof to accommodate rooftop solar;
 - xiv. Configurable open floor cubical space for future potential LNG staff, project managers, project engineers, consultants, or internships;
 - xv. Extension of the 99 PSIG gas main to an area southwest of the proposed control building that would permit auxiliary portable LNG operations for training, or alternative LNG operations during a future potential LNG tank improvement project; and

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- xvi. Optional dedicated garage space for storage of portable LNG equipment from Old Mill Lane if Energy Facility Siting Board approval is granted for the continued operation.
- (e) In column b, \$0.500 million was estimated for FY2024 spending on siting, preliminary design, environmental assessment, and permit preparation. In column c, \$1.600 million was estimated for completed construction drawings, including environmental site work plans, and permits. After permits are approved civil site work will begin to prepare the site for construction in FY2026.

Revised Response:

Within part (a) of the Company's original response to this data request, the Company indicated that the current control room footprint is 209 square feet. This number is incorrect; the current control room area is 216 square feet.

<u>PUC 9-11 – Revised</u>¹ Exeter LNG Control House

Request:

Please provide a diagram of the existing control house at the Exeter LNG site that the Company proposes to replace. Please indicate the number of rooms and square footage in the diagram.

Original Response:

Please see the diagrams of the existing control house at the Exeter LNG site below. The current Exeter LNG control house is comprised of ten (10) rooms including a restroom for a total square footage of 2,150ft².

Adjacent to the control room is the motor control cabinet ("MCC") room, original compressor room, and locker room.

Rooms and spacing dimensions are rounded to the nearest foot and do not include wall footprint area.

- 1. Control Room: 240ft²
- 2. Office Space: 120ft²
- 3. Conference Room: 120ft²
- 4. Bathroom: 80ft²
- 5. Kitchen/Breakroom Space: 144ft²
- 6. Security Space: 96ft²
- 7. Miscellaneous Space (adjacent to restroom): 160ft²
- 8. Electrical Service Room (Motor Control Cabinet "MCC"): 480ft²
- 9. Compressor Room: 480ft²
- 10. Locker Room: 230ft²

Total square footage: 2,150ft²

¹ The Company's revised response begins on page 4.

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-49-NG In Re: Proposed FY 2025 Gas Infrastructure, Safety and Reliability Plan Responses to the Commission's Ninth Set of Data Requests Issued on February 15, 2024

<u>PUC 9-11 – Revised, page 2</u> Exeter LNG Control House

ON @ WEST PANEL ELEC. EXISTING ROOM TO REMAIN (EXISTING) 92" 0 1-65 4) 2'-81 3 () IO3 ROOM 104 9'-84 11'-7" 20'-0" : NEW ADDITION 7'-31" U 32 N LRA 102 3'-0' q'-43" SECURIT 7'-6" 11-23 10 (-)31-81 COUNTER 3'-71" (-)50 0 N) 3'-8³/₄" 4'-43" CONC. L

Control Room and Ancillary Spaces Diagram

Prepared by or under the supervision of: Brian Kirkwood

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-49-NG In Re: Proposed FY 2025 Gas Infrastructure, Safety and Reliability Plan Responses to the Commission's Ninth Set of Data Requests Issued on February 15, 2024

<u>PUC 9-11 – Revised, page 3</u> Exeter LNG Control House

COMPRESSO ROOM ELECT. SERVICE ROOM EXIST. ELEC. SERV. PANEL EXIST. ROOM TO REMAIN • EXIST. C. TOILET ROOM EXISTING CONCRETE WALK

MCC Room and Ancillary Spaces Diagram

Prepared by or under the supervision of: Brian Kirkwood

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-49-NG In Re: Proposed FY 2025 Gas Infrastructure, Safety and Reliability Plan Responses to the Commission's Ninth Set of Data Requests Issued on February 15, 2024

<u>PUC 9-11 – Revised, page 4</u> Exeter LNG Control House

Revised Response:

In the original response, item 1, lists the current control room as having 240 square feet. This figure is incorrect, and the correct figure is 216 square feet for the current control room footprint.

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

Joanne M. Scanlon

<u>March 15, 2024</u> Date

Docket No. 23-49-NG- RI Energy's Gas Infrastructure, Safety and Reliability (ISR) Plan 2025 - Service List 1/23/2024

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