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Phone 401-784-7288

Rhode Island Energy™
a PPL company

February 9, 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
Responses to PUC Data Requests – Set 4

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy, I have enclosed the Company's responses to the Public Utilities Commission's ("PUC") Fourth Set of Data Requests 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,

Jennifer Brooks Hutchinson

Enclosure

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

PUC 4-1

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.

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.

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

PUC 4-1

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 rooms 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.

(d) Please see Attachment PUC 4-1-1 for a copy of the Exeter Control Room Schematic Design.

PUC 4-1, page 3

(e) 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
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.

PUC 4-1, page 4

(f) 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.

REVIEW LEGEND

The review legend is intended to record and share open items essential for completion of the design process. Open items can include unanswered questions, placeholders, assumptions and coordination notes and conflicts. The presence of this legend indicates that design work is not complete.

1. General
   - A. LNG Control Building ± 13,363 Gross Square Feet (L1: 7,144 GSF + L2: 6,219 GSF)
   - B. LNG Garage is ± 9,900 Gross Square Feet
   - C. Roof - showing low slope south facing roof, all buildings, for solar ready.
2. Site Related - site features are approximate in advance of engineering.
   - A. Topography - First floor elevations are approximate. The site topography under and near the building footprints are leveled for drawing clarity only.
   - B. Parking spaces are shown at 10'W x 20'L.
3. Toilet Room and Showers
   - A. Two toilet rooms (WCs), one each for M and F which supports 50 persons in the business category on the second floor.
   - B. Two toilet rooms (WCs), one each for M and F which supports. and 200 in the industrial category.
   - C. Because of the low count, all WCs are single occupant and can be non-gender or M/F designated.
4. Utilities – all Util. spaces shown are placeholders.

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WINTER STREET ARCHITECTS, INC.
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Rhode Island Energy, Exeter LNG

53 S County Trail
Exeter, RI 02822
Project Number: 4168.0001

Schematic Design Draft

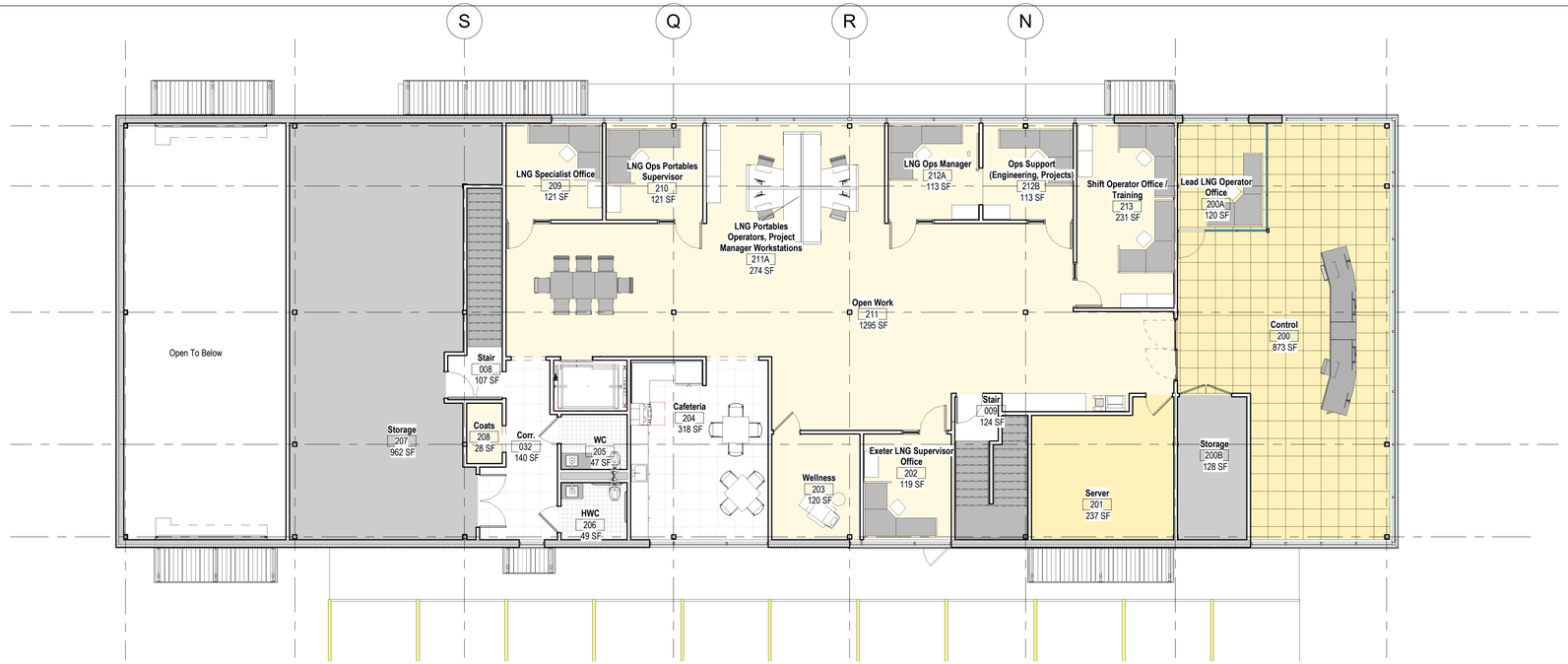
Date Issued:

January 31, 2024

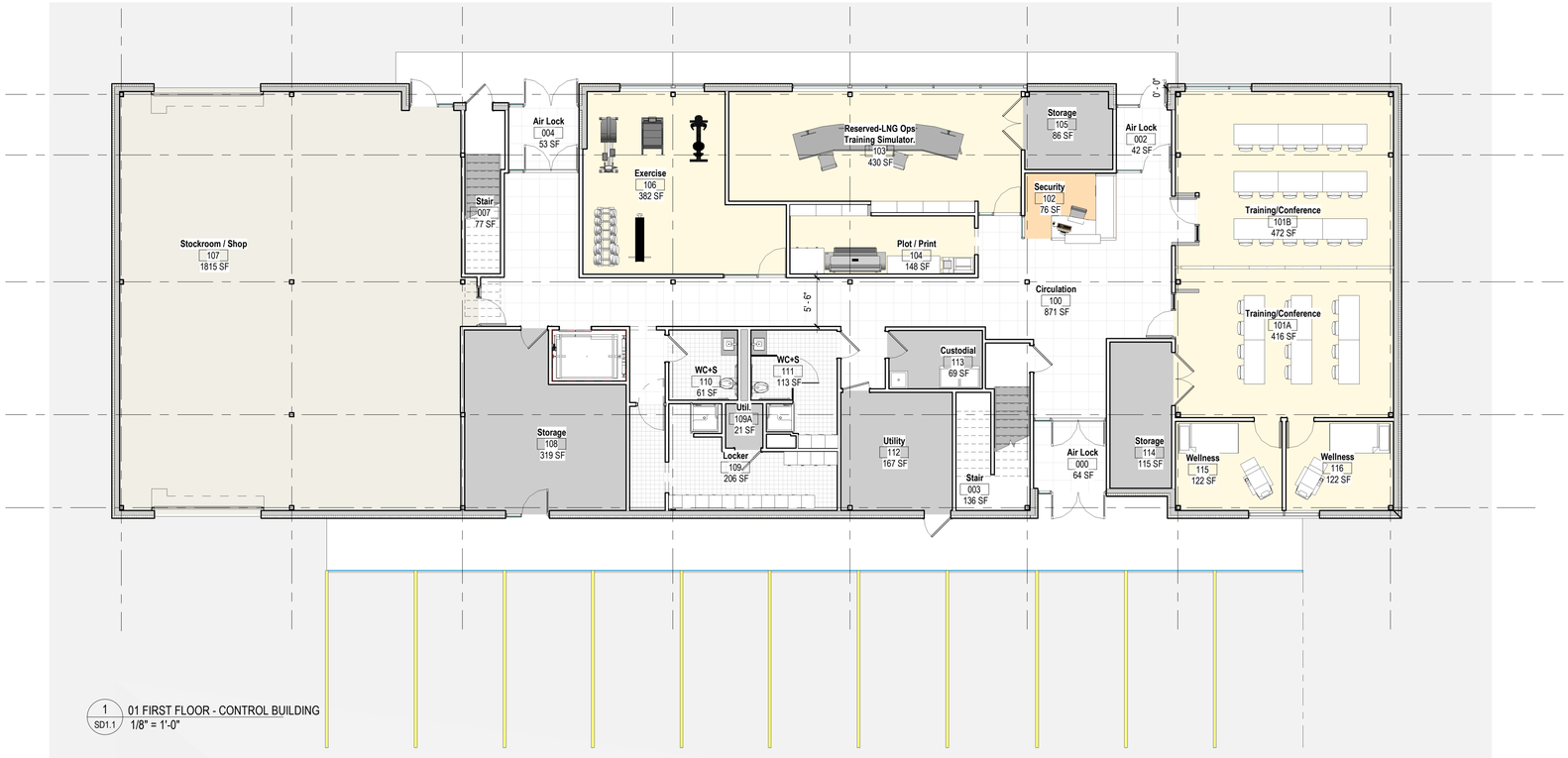
NO.	DESCRIPTION	DATE

Site Development Plan

SD0.1



2 SD1.1 02 SECOND FLOOR - CONTROL BUILDING
1/8" = 1'-0"



1 SD1.1 01 FIRST FLOOR - CONTROL BUILDING
1/8" = 1'-0"

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Control Building - Room Schedule

#	Name	Area	Unit
01 FIRST FLOOR			
000	Air Lock	64 SF	Control
002	Air Lock	42 SF	Control
003	Stair	136 SF	Control
004	Air Lock	53 SF	Control
007	Stair	77 SF	Control
100	Circulation	871 SF	Control
101A	Training/Conference	416 SF	Control
101B	Training/Conference	472 SF	Control
102	Security	76 SF	Control
103	Reserved-LNG Ops Training Simulator.	430 SF	Control
104	Plot / Print	148 SF	Control
105	Storage	86 SF	Control
106	Exercise	382 SF	Control
107	Stockroom / Shop	1,815 SF	Control
108	Storage	319 SF	Control
109	Locker	206 SF	Control
109A	Util.	21 SF	Control
110	WC+S	61 SF	Control
111	WC+S	113 SF	Control
112	Utility	167 SF	Control
113	Custodial	69 SF	Control
114	Storage	115 SF	Control
115	Wellness	122 SF	Control
116	Wellness	122 SF	Control
01 FIRST FLOOR: 24		6,384 SF	
02 SECOND FLOOR			
008	Stair	107 SF	Control
009	Stair	124 SF	Control
032	Corr.	140 SF	Control
200	Control	873 SF	Control
200A	Lead LNG Operator Office	120 SF	Control
200B	Storage	128 SF	Control
201	Server	237 SF	Control
202	Exeter LNG Supervisor Office	119 SF	Control
203	Wellness	120 SF	Control
204	Cafeteria	318 SF	Control
205	WC	47 SF	Control
206	HWC	49 SF	Control
207	Storage	962 SF	Control
208	Coats	28 SF	Control
209	LNG Specialist Office	121 SF	Control
210	LNG Ops Portables Supervisor	121 SF	Control
211	Open Work	1,295 SF	Control
211A	LNG Portables Operators, Project Manager Workstations	274 SF	Control
212A	LNG Ops Manager	113 SF	Control
212B	Ops Support (Engineering, Projects)	113 SF	Control
213	Shift Operator Office / Training	231 SF	Control
02 SECOND FLOOR: 21		5,639 SF	
Grand total: 45		12,023 SF	

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Schematic Design Draft

Date Issued:

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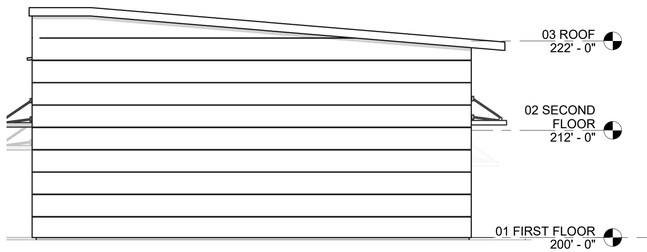
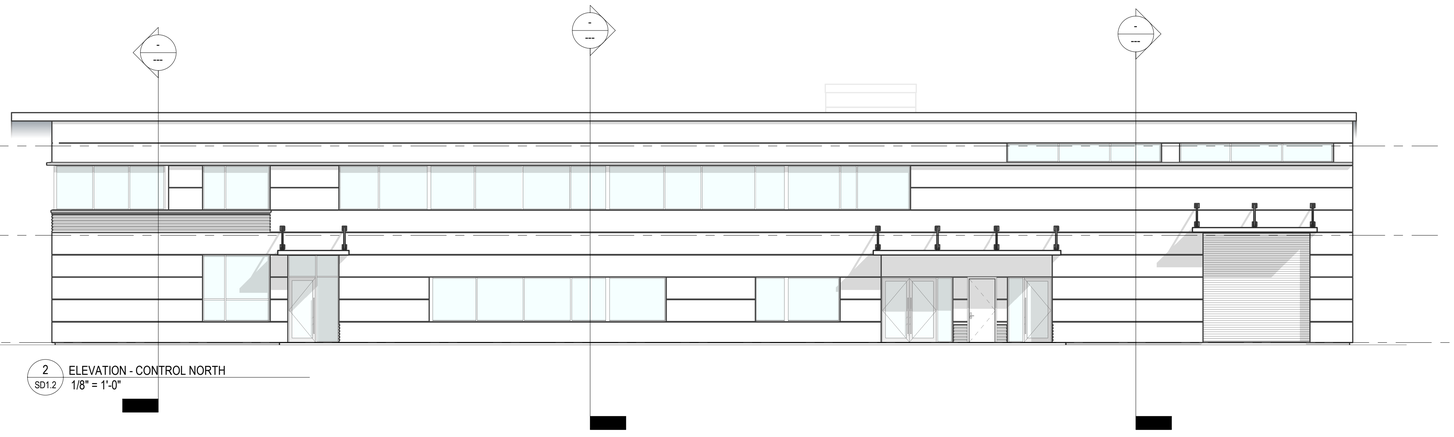
NO.	DESCRIPTION	DATE

Control Building Plans

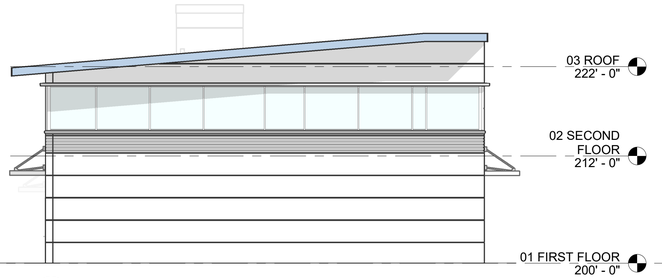
SD1.1



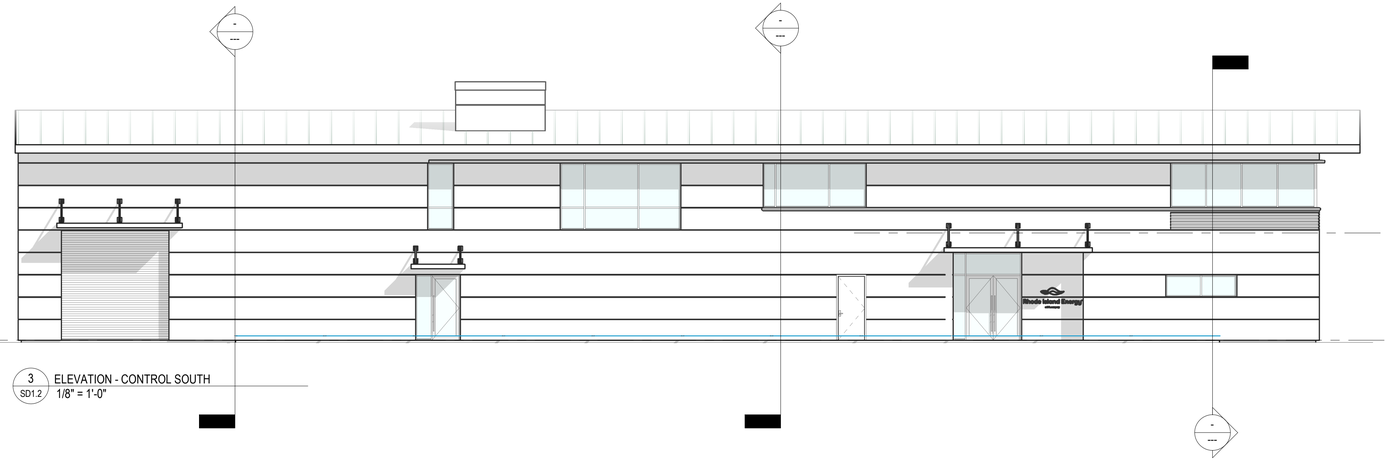
4 SD1.2 ELEVATION - CONTROL WEST
1/8" = 1'-0"



2 SD1.2 ELEVATION - CONTROL NORTH
1/8" = 1'-0"



1 SD1.2 ELEVATION - CONTROL EAST
1/8" = 1'-0"



3 SD1.2 ELEVATION - CONTROL SOUTH
1/8" = 1'-0"

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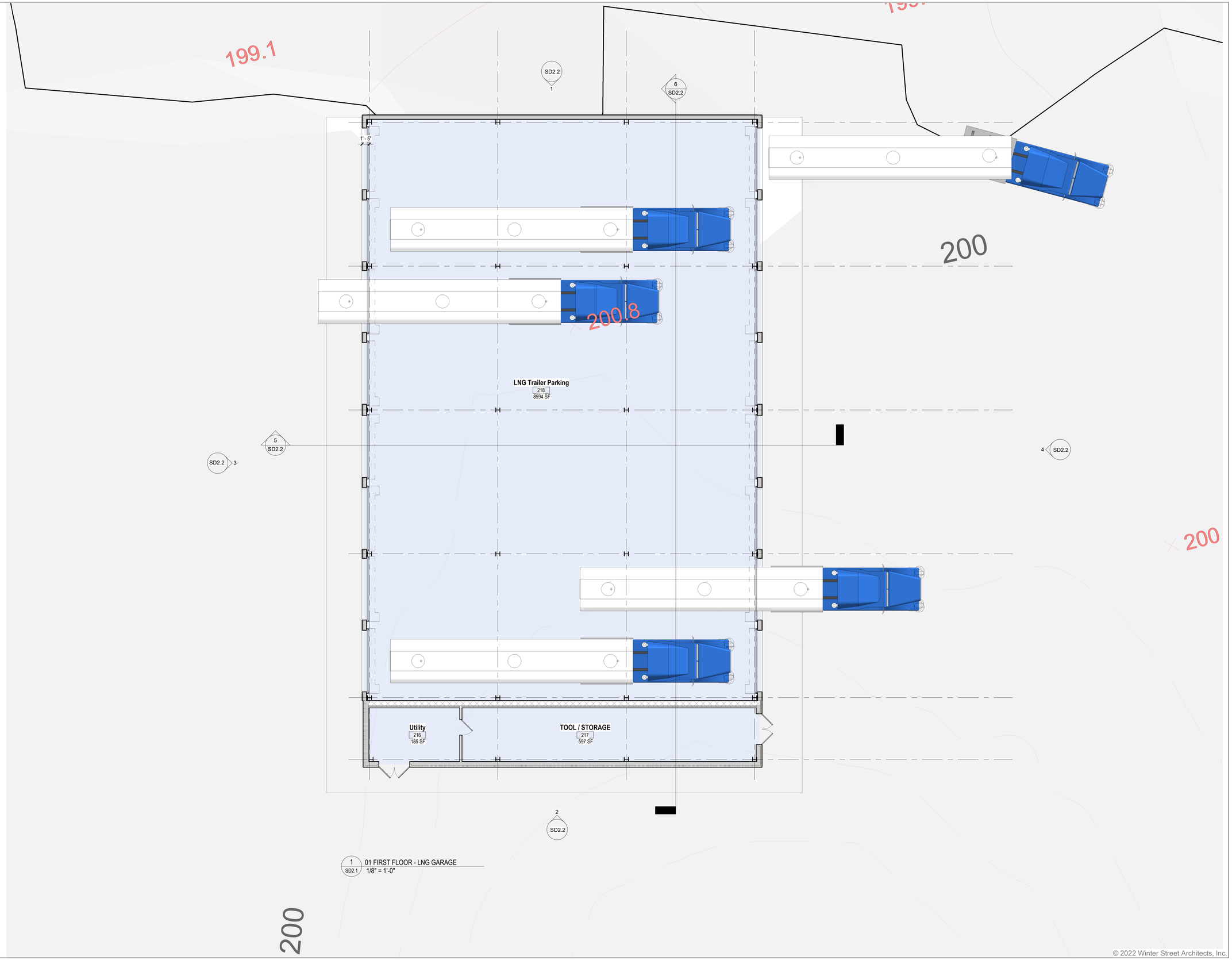
Control Building Elevations

SD1.2



1 SD2.1 01 FIRST FLOOR - LNG GARAGE
1/8" = 1'-0"

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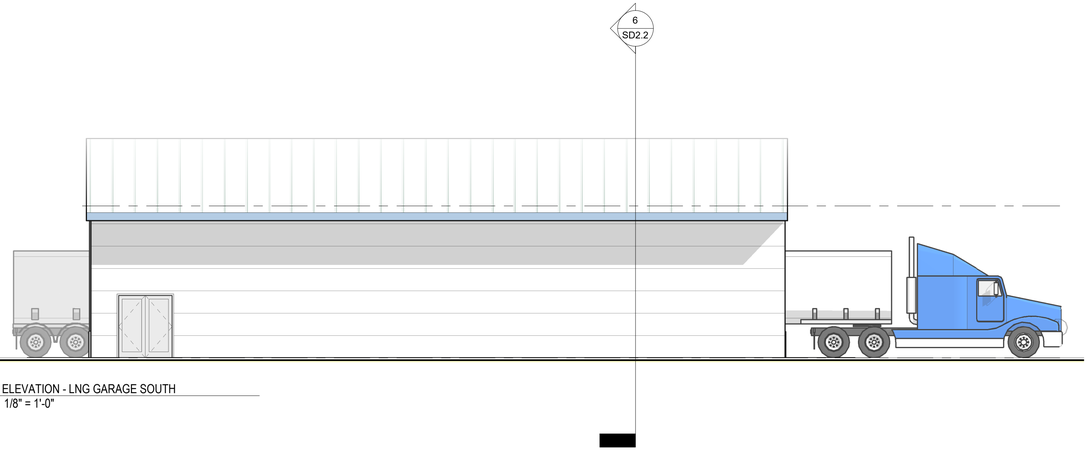
NO.	DESCRIPTION	DATE

LNG GARAGE PLAN

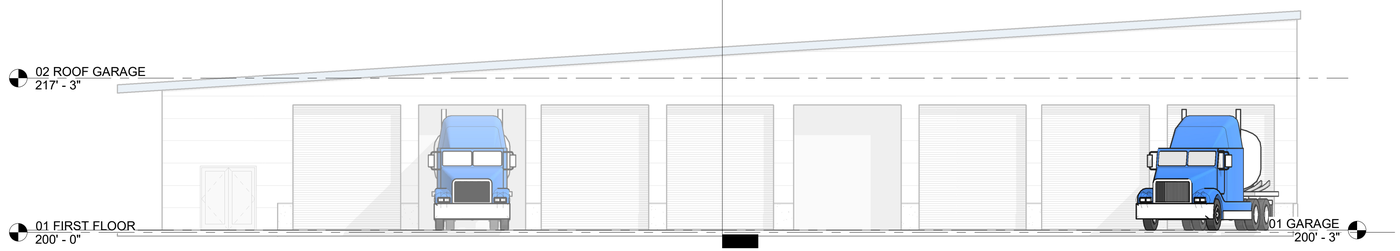
SD2.1

1 SD2.2 ELEVATION - LNG GARAGE NORTH
1/8" = 1'-0"



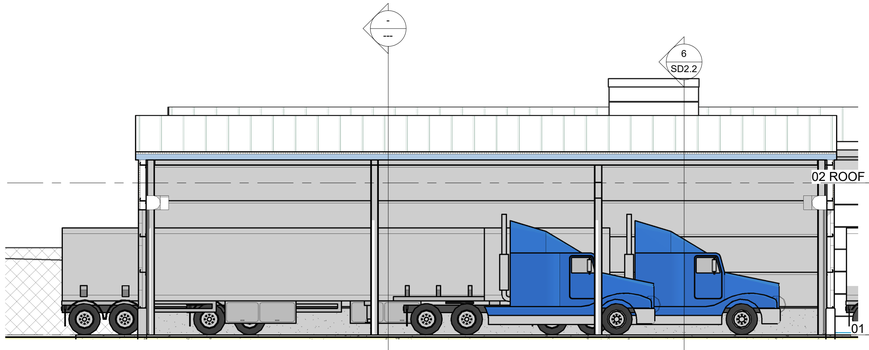
2 SD2.2 ELEVATION - LNG GARAGE SOUTH
1/8" = 1'-0"

3 SD2.2 ELEVATION - LNG GARAGE EAST
1/8" = 1'-0"

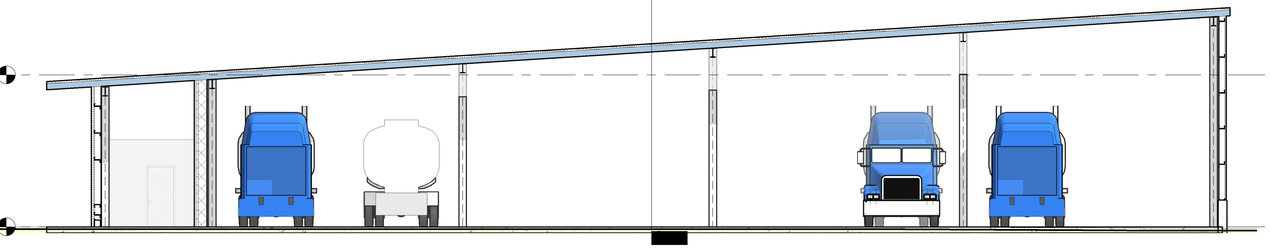


4 SD2.2 ELEVATION - LNG GARAGE WEST
1/8" = 1'-0"

5
SD2.2



5 SD2.2 Section 4
1/8" = 1'-0"



6 SD2.2 Section 5
1/8" = 1'-0"

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Schematic Design Draft

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NO.	DESCRIPTION	DATE

LNG GARAGE

SD2.2

Attachment PUC 4-1-2

Attachment PUC 4-1-2

PUC 4-2

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 Truck Station Upgrade at the Exeter LNG facility. Please indicate whether upgrading the truck station 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 configuration for trucking activity is inadequate and/or recommend the upgrade.

(c) Any internal sanctioning documents which authorized the Company advancing the investment in the Truck Station Upgrade.

(d) Diagrams or other design documents showing the design of the Truck Station Upgrade.

(e) Any pictures and/or other reports associated with review of the current configuration for trucking activity that make it inadequate.

(f) Please describe the expenditures that comprise the $150,000 referenced in column b., line 2 of Attachment 2-3-1 and the expenditures of $500,000 forecasted in column c.

Response:

(a) In the summer of 2022, after the Company was acquired by PPL Rhode Island Holdings, LLC ("PPL Rhode Island"), Company personnel discussed internally upgrades to the existing truck station at Exeter LNG that would modernize the 50-year-old station. The current station has no automated shut off valves, remote pressure monitoring, flow monitoring, or canopy to protect operators from the elements. The Company, while under National Grid USA ("National Grid") ownership, identified installing new automated valves during the initial scoping of the automated emergency shutdown upgrade and had plans for conducting work on the LNG tank and upgrading the existing vaporizers. See Attachment PUC 4-2-1, Business Plan 21 ISR Plan for reference and additional details.

The Company, under PPL Rhode Island ownership, continues to agree that the improvements planned under National Grid ownership will increase safety and reliability. However, the Company proposes to modernize the truck station first because LNG

trucking transfers are one of the most frequent LNG specific activities at Exeter during normal seasonal operations. This frequency of LNG trucking operations leads to compounding of the risks attendant to it. Rhode Island Energy is evaluating the future needs of Exeter LNG facility, including the 50-year-old LNG storage tank, in light of the Act on Climate and the role that portable LNG operations might have in the adaptation of the gas distribution system to achieve the Act's mandates. The proposed upgrades would enhance the safety of LNG trucking at the Exeter facility and would thereby facilitate the potential usage of LNG stored at Exeter as a source of trucked supply to support portable LNG operations elsewhere on the Company's distribution system. Exeter LNG can presently load LNG trucks onsite, but there are no automated valves that can be used for emergency isolation, or flow metering to monitor the loading operation. Presently this is solely monitored and controlled manually by the transferring operator at the truck station. A modern station would provide valuable transferring data, including flow rate and total LNG transferred to the truck station operator and the inside control room operator.

Independent of this potential use of Exeter as a source of supply, the nature of the proposed upgrades and enhancements to the tank will require that the tank be de-inventoried of LNG through trucking or vaporization. If the tank is de-inventoried by LNG trucking, there will be increased trucking activity that is greater than seasonal averages. After tank work is completed, the tank would need to be refilled. That would require extensive trucking and unloading in a short period of time to return the tank to operating conditions for the winter heating season. There is risk when conducting LNG trucking operations and increasing the frequency of trucking will increase the total risk; hence the need to modernize the truck station.

The Company's proposed upgrades of the existing LNG truck station represents its effort to proactively address the risks attendant to LNG trucking operations. During National Grid's ownership of the Company, some measures were taken to address the risks associated with LNG trucking including the upgrade of a containment area to contain a potential LNG spill and a Hi-Ex Foam System to reduce the risk of combustion of any spilled LNG. In the Company's view, these reactive measures, while useful, do not proactively mitigate the risk of an LNG spill occurring; they only seek to mitigate the consequences of such a spill. Upgrading the existing LNG truck station will proactively isolate plant LNG piping by using advanced detection and automated isolation valves, in addition to other improvements that increase operator safety.

To achieve the safety goals explained above, some key components that will be included in the Request for Proposal ("RFP") and preliminary design include the following:

i. Automated shutoff valves for LNG and vapor;
ii. Flame detection;
iii. Supervisory control and data acquisition ("SCADA") pressure points;
iv. SCADA flow meter;
v. Local human-machine interface for the operator to see plant information such as tank pressure and tank level;
vi. Canopy roof to offer protection from the elements;
vii. Integrated dry-chemical fire extinguishing system that can feature automatic discharge;
viii. Safer layout of valves, hoses, and process gauges that provide more maneuverability for the plant operator during an emergency; and
ix. Davit arms to move the LNG hoses from the stored position to a trailer.

(b) Currently there are no formal reports or evaluations of the Exeter LNG facility concluding that the current configuration for trucking activity is inadequate and/or that recommend the upgrades proposed. However, it is the LNG Operations team's conclusion that the safety and functionality of the existing truck station will be enhanced in significant ways by the added safety features that a modern truck station would provide.

To summarize LNG Operations team's assessment of the existing truck station, there is risk to the safety of the plant and personnel with the truck station having no automated shutoff valves. It is not a best practice to rely on an operator to close a manual valve during a release event. While the existing spill containment area and Hi-Ex Foam system would help mitigate potential consequences of an LNG spill from a trailer and plant piping, the overall risk is reduced by having a modern truck station with advance detection and automated valves for isolation to limit the amount of LNG spilled.

(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.

(d) There are no design documents for the Truck Station Upgrade currently. The Company is developing a RFP to hire an engineering firm to conduct a preliminary design and complete drawings for construction. See subpart a., above for details of the RFP.

(e) Please see Attachment PUC 4-2-2 for photographs depicting the layout of the manual valves, hoses, and available process pressure points. The existing trucking station is not functionally inadequate in terms of the ability to unload or load LNG trailers but is

entirely manually controlled and only has minimal process monitoring through manual pressure points (gauges). This makes the truck station operator integral in any shutdowns and isolation of the plant from the transferring trailer. The existing truck station features pull-through design, spill impoundment, Hi-Ex Foam mitigation, two bays for redundancy, and is maintained in good condition. Notwithstanding, opportunities for process improvements include the following:

i. During an emergency the truck station operator must manually close valves that places the operator in close proximity to the transferring trailer and connected hose. There is little space between the valves, hoses, and parked trailer to move, especially if there is an LNG leak or spill.

ii. There is no monitoring of the LNG tank parameters available to the truck station operator and important data is only available to the inside control room operator. This information must be verbally relayed via radio communications between the two.

iii. There is only local pressure monitoring of the truck station available to the truck station operator. With only manual pressure monitoring points, the inside control room operator has no visibility to the status of the LNG transfer and is completely reliant on radio communication with the outside truck station operator.

iv. Valves and hoses are very close to each other such that movement of personnel is extremely limited when a trailer is positioned for transfer.

v. Hoses are manually moved by the truck operator and is a repetitive task that requires moving a heavy hose during each transfer.

A new truck station would feature the following enhancements to address the opportunities for process and safety improvements described above:

i. A new truck station would feature automated valves that would close upon advanced spill detection, fire scanning detection, or a combination of both. In addition, operators could remotely close these valves from the control room, trucking shed, or a remote stanchion that would distance personnel from the hazard. As discussed in subparts a. and b., above the Hi-Ex Foam system will mitigate a LNG spill event at the truck station; however, proactively stopping a release is preferrable to minimize the overall release and risk with larger

quantities of released LNG. Operators are trained to isolate any releases by closing adjacent isolation valves, but it is not realistic, or safe, to expect an operator to enter a vapor cloud to manually operate a valve.

ii. A local human machine interface ("HMI") display would be installed in the truck station shed for the operator to have a remote view of the plant SCADA system. This would allow the truck station operator to view information such as tank pressure, tank LNG level, and boil-off gas compressor status.

iii. Pressure transmitters, flow meters and transmitters would be featured on a new truck station that would provide valuable information to both the truck station operator and control room operator. These points would be incorporated into the SCADA system and be integrated into the HMI computer system for the operators to monitor. Without SCADA pressure points or flow points, the control room cannot monitor the progress of the trucking unloading or loading operation. Automated shutdowns can be incorporated into closing the automated valves, but they require SCADA points to monitor the process. SCADA points would allow for additional pressure monitoring displays for the operator to stand away from the LNG transfer hose and monitor pressure.

iv. Valves, hoses, and manual gauges would be arranged in a layout that would enable operators to move around with the least amount of restriction.

v. Davit arms would support the weight of the hose thus reducing the current force required to lift and move the hose.

(f) In column b, $0.150 million was estimated for FY2024 spending on a RFP, preliminary design, and permit assessment. In column c, $0.500 million was estimated for completed construction drawings, including environmental site work plans, and permits (if required).

BP21									
Planning Portfolio	New Investment Name	Manager	Budget Sponsor	Investment Owner	FY 23 Proposed	FY 24 Proposed	FY 25 Proposed	FY 26 Proposed	FY 27 Proposed
Mandated - Rhode Island	Access Protection Remediation	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 272,000	$ 277,000	$ 283,925	$ 291,023	$ 305,756
	Corrosion	Harmon, Michael	Tropp, Tiffany	Harmon, Michael	$ 1,304,506	$ 1,425,836	$ 1,455,193	$ 1,483,577	$ 1,513,988
	CSC/Public Works - Non Reimbursable	Owens, Melissa	Coombs, Matthew	Owens, Melissa	$ 20,595,758	$ 21,007,674	$ 21,427,827	$ 21,856,384	$ 22,293,511
	CSC/Public Works - Reimbursable	Owens, Melissa	Coombs, Matthew	Tribble, Melanie	$ 1,436,792	$ 1,465,528	$ 1,494,839	$ 1,524,736	$ 1,555,230
	CSC/Public Works - Reimbursements	Owens, Melissa	Coombs, Matthew	Tribble, Melanie	$ (1,432,631)	$ (1,461,283)	$ (1,490,509)	$ (1,520,319)	$ (1,550,726)
	Damage / Failure - Reactive	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 255,000	$ 260,100	$ 287,000	$ 293,000	$ 299,000
	Large Diameter Pipe Rehabilitation - CI Main Lining - 5156 - Bucklin St. Lining	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ -				
	Large Diameter Pipe Rehabilitation - CI Main Lining - 5211 - Moore St. Lining	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 100,000				
	Large Diameter Pipe Rehabilitation - CI Main Lining - 5212- Blackstone St. Lining	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 250,000	$ 250,000	$ 2,500,000	$ 2,500,000	
	Large Diameter Pipe Rehabilitation - CI Main Lining - 5213- Petteys St. Lining	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 250,000	$ 250,000	$ 2,500,000		
	Large Diameter Pipe Rehabilitation - CI Main Lining - 5214- Russell St. Lining	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 250,000	$ 1,548,000			
	Large Diameter Pipe Rehabilitation - CI Main Lining - Lining	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ -	$ 3,812,000	$ 6,438,240	$ 6,567,005	$ 6,698,345
	Large Diameter Pipe Rehabilitation - CISBOT	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 2,000,000	$ 2,601,000	$ 2,653,020	$ 2,706,080	$ 2,760,202
	Low Pressure System Elimination - Proactive	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 2,000,000	$ 2,040,000	$ 2,080,800	$ 2,122,416	$ 2,164,864
	Main Replacement - Proactive - Leak Prone Pipe	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 80,234,211	$ 93,373,646	$ 97,325,744	$ 97,187,634	$ 99,131,386
	Main Replacement - Proactive - Leak Prone Pipe - Atwells Avenue	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 1,637,131	$ -	$ -	$ -	$ -
	Main-Service Replacement - Reactive - CI Joint Encapsulation - Non-Leaks - Other	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 12,629,000	$ 8,145,720	$ 8,308,634	$ 8,474,807	$ 8,644,303
	Main Replacement - Reactive - Maintenance	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 3,000,000	$ 1,156,389	$ 1,179,517	$ 1,203,107	$ 1,227,169
	Pipeline Integrity - IVP - 200 psig system replacement	Parro, Brian	Coombs, Matthew	Parro, Brian	$ -	$ 1,000,000	$ 2,500,000	$ 5,000,000	$ 25,000,000
	Pipeline Integrity - IVP - Wampanoag Trail Pipeline Replacement	Parro, Brian	Coombs, Matthew	Parro, Brian	$ 500,000	$ 500,000	$ 5,000,000	$ 5,000,000	$ 250,000
	Purchase Meters (Replacements)	Sullivan, Peter	Tupper, Michael	Sullivan, Peter	$ 5,248,000	$ 5,352,960	$ 5,460,019	$ 5,569,220	$ 5,680,604
	Replace Pipe on Bridges	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 2,000,000	$ 1,423,000	$ 1,451,000	$ 1,481,000	$ 1,510,000
	Service Replacement - Proactive	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 600,000	$ 612,000	$ 624,240	$ 636,725	$ 649,459
	Service Replacement - Reactive - Non-Leaks - Other	Bader, Leomary	Tupper, Michael	Fleury, Adrian	$ 2,067,171	$ 2,108,514	$ 2,150,684	$ 2,193,698	$ 2,237,572
	Transmission Station Integrity	Bleiken, Joshua	Coombs, Matthew	Bleiken, Joshua	$ 2,750,000	$ 4,684,500	$ 11,759,329	$ 5,205,416	$ 12,234,406
	Transmission Station Integrity - Allens Ave Multi Station Rebuild	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ -	$ -	$ -	$ -	$ -
	Transmission Station Integrity - Scott Road Take Station (Cumberland)	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 3,500,000	$ 9,000,000	$ 2,100,000		$ -
	Valve Installation/Replacement	Caliri, Stephen A.	Coombs, Matthew	Elkin, Kasey	$ 137,716	$ 141,159	$ 144,688	$ 148,305	$ 152,013
	Valve Installation/Replacement - Aquidneck Island Low Pressure Valves	Caliri, Stephen A.	Coombs, Matthew	Elkin, Kasey	$ 850,000	$ -	$ -	$ -	$ -
Mandated - Rhode Island Total					**$ 142,434,655**	**$ 160,973,742**	**$ 177,634,190**	**$ 169,923,812**	**$ 192,757,084**
Reliability - Rhode Island	Distribution Station - Over Pressure Protection	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 3,383,000	$ 3,468,000	$ 3,583,000	$ 3,690,000	$ 297,000
	Gas Planning	Caliri, Stephen A.	Coombs, Matthew	DeWolff, Christie	$ 3,259,780	$ 3,359,980	$ 3,443,979	$ 3,530,079	$ 3,455,356
1 - Finishing	Gas Planning - LTRI13056 - Growthpoint - Main Installation	Brown, Faye	Coombs, Matthew	Brown, Faye	$ 600,000	$ -	$ -	$ -	$ -
1 - Finishing	Gas Planning - LTRI13060 - Growthpoint - MOP Increase	Brown, Faye	Coombs, Matthew	Brown, Faye	$ 46,000	$ -	$ -		
2 - Active work in FY23	Gas Planning - LTRI13062 - Growthpoint - Regulator Station Upgrades - Cowesett	Brown, Faye	Coombs, Matthew	Brown, Faye	$ 3,093,000	$ 100,000	$ -		
4 - Planning and Engineering	Gas Planning - LTRI13064 - Growthpoint - new Regulator Station near Cowesett	Brown, Faye	Coombs, Matthew	Brown, Faye	$ 700,000	$ 3,500,000	$ 100,000		
3 -	Gas Planning - LTRIxxxxx - Growthpoint - Regulator Station Upgrades - Cranston	Brown, Faye	Coombs, Matthew	Brown, Faye	$ 2,000,000	$ 3,500,000	$ 3,500,000	$ 100,000	
4 - Planning and Engineering	Gas Planning - LTRIxxxxx - Reg Station/Launcher -Receiver/Install ROV	Brown, Faye	Coombs, Matthew	Brown, Faye	$ 350,000	$ 800,000	$ 10,523,000	$ 250,000	
	Gas System Control - Facilities Upgrades	Loiacono, Paul	Delaney, Richard	Porcaro, Julie	$ -	$ -	$ -	$ 167,000	$ -
	Gas System Control - MapBoard Replacement	Loiacono, Paul	Delaney, Richard	Porcaro, Julie	$ -	$ 560,000	$ -	$ -	$ -
	Gas System Control - SCADA - Upgrade/Replacement	Loiacono, Paul	Delaney, Richard	Porcaro, Julie	$ -	$ -	$ 1,449,000	$ 1,449,000	$ 1,449,000
	Heater Installation Program	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 275,000	$ 275,000	$ 650,000	$ 1,800,000	$ 750,000
	Heater Installation Program - Dey St GS	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 67,000	$ 2,600,000	$ 50,000	$ -	$ -
	Heater Installation Program - Diamond Hill GS Cumberland	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 450,000	$ 400,000	$ 1,400,000	$ -	$ -
	Heater Installation Program - Laten Knight Rd GS, Cranston	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ -				
	Heater Installation Program - Smithfield GS	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 450,000	$ 400,000	$ 1,400,000	$ 10,000	$ -

	Heater Installation Program - Wampanoag Trail Heaters Replacement and Ownership Transfer	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 4,526,000				
	I&R - Reactive	Talbot, John	Coombs, Matthew	Daly, Maureen	$ 1,374,841	$ 1,402,337	$ 1,430,384	$ 1,458,992	$ 1,488,172
	LNG - Blanket	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 599,000	$ 610,000	$ 622,000	$ 635,000	$ 647,000
	LNG - Cumberland Vaporizer Upgrade	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ -	$ -	$ -	$ -	$ -
	LNG - Exeter AESD System	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 350,000	$ 4,019,000	$ 100,000	$ -	$ -
	LNG - Exeter Boiler Refractory Modernization	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ -	$ -	$ 500,000	$ -	$ -
	LNG - Exeter Boiloff Compressor 2 Upgrade	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 2,000,000	$ 12,000,000	$ 4,110,000	$ -	$ -
	LNG - Exeter Controls Modernization	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ -	$ -	$ -	$ -	$ -
	LNG - Exeter Critical Spares	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 300,000	$ -	$ -	$ -	$ -
	LNG - Exeter Hi Ex Foam System	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 6,340,000	$ 100,000			
	LNG - Exeter LNG Pumps	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ -	$ -	$ -	$ 100,000	$ 20,000,000
	LNG - Exeter LNG Septic Upgrade	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 200,000	$ 1,500,000			
	LNG - Exeter LNG Tank Upgrade	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ -				$ 741,000
	LNG - Exeter Vaporizer Upgrade	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ -	$ -	$ -	$ -	$ 500,000
	LNG - Newport Site Demo	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 100,000	$ 1,000,000	$ -	$ -	$ -
	LNG - Old Mill Lane Permanent Portable Site	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000
	Pressure Regulation Engineering - Proactive	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 7,585,000	$ 8,430,000	$ 8,445,000	$ 8,900,000	$ 8,125,000
	Smart Residential Methane Detector Program	Bader, Leomary	Tupper, Michael	Sullivan, Peter	$ -	$ -	$ 5,975,000	$ 6,095,000	$ 5,217,000
	Storm Hardening - Install Remote Service Shutoff Valves	Bader, Leomary	Tupper, Michael	Sullivan, Peter	$ -	$ -	$ -	$ -	$ -
	System Automation	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 1,387,000	$ 1,457,000	$ 1,529,000	$ 1,606,000	$ 1,685,000
	Take Station Enhancement Program	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 1,700,000	$ 3,000,000	$ 50,000	$ -	$ -
	Take Station Enhancement Program-Smithfield GS Rebuild	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 150,000	$ 450,000	$ 1,800,000	$ 3,000,000	$ 50,000
	Take Station Enhancement Program-Tiverton GS ownership transfer	Bleiken, Joshua	Coombs, Matthew	Zaccari, Justin	$ 4,715,000	$ 50,000	$ -	$ -	$ -
Reliability - Rhode Island Total					**$ 46,200,621**	**$ 53,181,317**	**$ 50,860,363**	**$ 32,991,071**	**$ 44,604,527**
non Infrastructure - Rhode Island	Incremental Paving - Main Installation - Rhode Island				$ -	$ -	$ -	$ -	$ -
	Incremental Paving - Patches - Rhode Island				$ -	$ -	$ -	$ -	$ -
	PE Stamps Cost - Rhode Island				$ -	$ -	$ -	$ -	$ -
	Smart Gas Meter - IS Integration	Bader, Leomary	Tupper, Michael	Sullivan, Peter	$ -	$ 3,000,000	$ -	$ -	$ -
	Tools & Equipment - All	Leone, Michelle	Leone, Michelle	Leone, Michelle	$ 715,937	$ 526,256	$ 536,781	$ 547,517	$ 558,467
	Tools & Equipment - Meter Testing	Bader, Leomary	Tupper, Michael	Sullivan, Peter	$ 108,000	$ 110,000	$ 112,000	$ 114,000	$ 116,000
non Infrastructure - Rhode Island Total					**$ 823,937**	**$ 3,636,256**	**$ 648,781**	**$ 661,517**	**$ 674,467**
Other Reliability - Rhode Island	Aquidneck Island Long Term Capacity Options	Brown, Faye	Coombs, Matthew	Brown, Faye	$ 1,000,000	$ 1,000,000	$ 21,000,000	$ 16,000,000	$ 100,000
Other Reliability - Rhode Island	LNG - Cumberland Tank Replacement	Bleiken, Joshua	Coombs, Matthew	Cardoso,Steven	$ 2,500,000	$ 2,500,000	$ 500,000	$ 1,500,000	$ 9,000,000
Other Reliability - Rhode Island Total					$ 3,500,000	$ 3,500,000	$ 21,500,000	$ 17,500,000	$ 9,100,000
Grand Total					**$ 192,959,213**	**$ 221,291,316**	**$ 250,643,335**	**$ 221,076,400**	**$ 247,136,079**

Attachment PUC 4-2-2

Attachment PUC 4-2-2

PUC 4-3

Request:

Please indicate whether the location of the Exeter LNG facility is shared with any other companies or is exclusive to the Company and, if shared, explain the nature of the shared use and any such use is compatible with the Company's LNG operations.

Response:

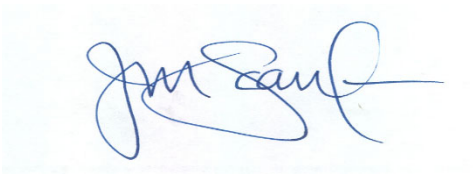
The location of the Exeter LNG facility, referring to the building and grounds of the facility, is only used by Company personnel and contractors conducting work on behalf of the Company.

The Company does lease part of the property to a propane facility, but the lessee does not conduct any contracting work for the Company and, therefore, does not use the Company's assets within the Exeter LNG facility. The propane facility's use of Company land does not interfere with the Company's LNG operation and is separated by fencing. There is no interaction between the two operations.

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

February 9, 2023
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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