

January 25, 2021

BY ELECTRONIC MAIL

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

RE: Docket 5099 - Proposed FY 2022 Gas Infrastructure, Safety, and Reliability Plan Responses to PUC Data Requests – Set 1

Dear Ms. Massaro:

I have enclosed an electronic version of National Grid's¹ responses to the Public Utilities Commission's First 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 781-907-2121.

Very truly yours,



Raquel J. Webster

Enclosures

cc: Leo Wold, Esq.
Al Mancini, Division
John Bell, Division
Rod Walker, Division

¹ The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

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

January 25, 2021
Date

Docket No. 5099- National Grid’s FY 2022 Gas Infrastructure, Safety and Reliability (ISR) Plan - Service List 1/7/2021

Name/Address	E-mail Distribution	Phone
Raquel J. Webster, Esq. National Grid 40 Sylvan Road Waltham, MA 02451	raquel.webster@nationalgrid.com ;	781-907-2121
	celia.obrien@nationalgrid.com ;	
	Joanne.scanlon@nationalgrid.com ;	
	Jennifer.Hutchinson@nationalgrid.com ;	
National Grid Amy Smith Melissa Little Lee Gresham Ryan Scheib	Amy.smith@nationalgrid.com ;	
	Robert.Gresham@nationalgrid.com ;	
	Melissa.Little@nationalgrid.com ;	
	Ann.leary@nationalgrid.com ;	
	Theresa.Burns@nationalgrid.com ;	
	Michael.Pini@nationalgrid.com ;	
	Nathan.Kocon@nationalgrid.com ;	
	McKenzie.Schwartz@nationalgrid.com ;	
	Ryan.Scheib@nationalgrid.com ;	
Division of Public Utilities & Carriers Leo Wold, Esq.	Leo.Wold@dpuc.ri.gov ;	401-780-2130
	Margaret.I.hogan@dpuc.ri.gov ;	
	Al.mancini@dpuc.ri.gov ;	
	John.bell@dpuc.ri.gov ;	
	Robert.Bailey@dpuc.ri.gov ;	
	dmacrae@riag.ri.gov ;	
	MFolcarelli@riag.ri.gov ;	
Rod Walter, CEO/President Rod Walker & Associates	Rwalker@RWalkerConsultancy.com ;	706-244-0894
Office of Energy Resources (OER) Albert Vitali, Esq. Dept. of Administration Division of Legal Services One Capitol Hill, 4 th Floor	Albert.Vitali@doa.ri.gov ;	
	Nancy.Russolino@doa.ri.gov ;	
	Christopher.Kearns@energy.ri.gov ;	
	Nicholas.Ucci@energy.ri.gov ;	

Providence, RI 02908	Carrie.Gill@energy.ri.gov ;	
File an original & five (5) copies w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02888	Luly.massaro@puc.ri.gov ;	401-780-2107
	Patricia.lucarelli@puc.ri.gov ;	
	Todd.bianco@puc.ri.gov ;	
	Alan.nault@puc.ri.gov ;	
Conservation Law Foundation James Crowley, Esq. Conservation Law Foundation 235 Promenade St. Suite 560, Mailbox 28 Providence, RI 02908	jcrowley@clf.org ;	401-228-1904

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-1

Request:

Please explain the reason for the change in accounting of the \$1.52 million for PE Stamps in FY 2022. (no longer a stand-alone item but allocated amongst the applicable ISR categories)

Response:

FY 2022 is now the second year that the ISR includes funding to continue meeting statutory requirements to have natural gas infrastructure design plans and specifications approved by a Rhode Island registered Professional Engineer ("PE Stamp"). PE Stamp costs are incurred and tracked at the project level and have now become standard capital project costs. Therefore, the Company, in consultation with the Division of Public Utilities Commission, has deemed it appropriate to track PE Stamp costs within the ISR categories rather than a stand-alone line item.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-2

Request:

Please explain why the PE Stamps are represented as a stand-alone item for FY 2023 – FY 2026 but allocated amongst the applicable ISR categories in FY 2022. (Bates 77 Table 2)

Response:

The FY 2022-2025 Forecast that was included in the FY 2021 proposal was used to create the initial baseline and category layout for the FY 2022 Budget and FY 2023-2026 forecast (Bates 77 Table 2). That category layout had Professional Engineer (“PE Stamp”) costs represented as a stand-alone line item, as it was the first year they were included in the ISR. In the FY 2022 proposal presented to the Division of Public Utilities Commission (“Division”) in October 2020, PE Stamps were listed as a stand-alone line item for FY 2022 and FY 2023-2026. Before the FY 2022 budget proposal was sent to the Commission in December 2020, the Company, in consultation with the Division, deemed it appropriate to track PE Stamp costs with the applicable ISR categories for FY 2022 instead of a stand-alone item, as they are now standard capital project costs. Upon receipt of this question (PUC 1-2), the Company recognizes that for year-over-year comparison purposes it would also be appropriate to allocate the PE Stamp costs within the applicable ISR categories rather than a stand-alone item for future year forecasts, such as FY 2023-2026. The company will allocate the PE Stamp costs for all five years of the forecast in future ISR proposals.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-3

Request:

Please explain why the Company did not allocate any O&M expenses in the Gas ISR plan for FY 2022. (\$1.00 million was budgeted in FY 2021 for Heat Decarbonization Assessments)

Response:

The Company is pursuing funding for O&M expenses for efforts such as Heat Decarbonization Assessments outside of the ISR. The Company currently has a tariff advice filing pending in Docket No. 5079. In that filing, the Company seeks to amend Section 3.2, Advanced Gas Technology ("AGT") Factor of the Distribution Adjustment Clause of its gas tariff. The amendment would allow the Company to recover prudently incurred costs of studies approved by the PUC and the Division of Public Utilities and Carriers on the decarbonization of natural gas through the AGT Factor.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-4

Request:

Please explain what is contributing to the 12% increase year over year for the cost per square yard as it relates to curb to curb restoration. In FY 2021 it was \$12.50 per square yard and increased to \$14.00 in FY 2022.

Response:

The 12% increase cost per patch from \$12.50 to \$14.00 is an estimate based on consideration of increased costs the Company will have from its paving contractors. National Grid's current three- year Restoration Contract will expire on March 31, 2021. Although prospective contractors are undergoing a negotiated procurement event, it is likely that increased pricing will be submitted. Market analysis of increase in costs include but are not limited to labor rate increase, increased training requirements, new safety requirements, standard fuel and asphalt costs. The procurement event for FY 2022 commenced in November 2020, and new contract pricing will be in effect on April 4, 2021.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-5

Request:

Please explain what is contributing to the 14% increase year over year for the cost per patch as it relates to curb to curb restoration. In FY 2021 it was \$1,400 per patch and increased to \$1,600 in FY 2022.

Response:

The 14% increase cost per patch from \$1,400 to \$1,600 is an estimate based on consideration of increased costs the Company will have from its paving contractors. National Grid's current three-year Restoration Contract will expire on March 31, 2021. Although prospective contractors are undergoing a negotiated procurement event, it is likely that increased pricing will be submitted. Market analysis of increase in costs include but are not limited to labor rate increase, increased training requirements, new safety requirements, standard fuel and asphalt costs. The procurement event for FY 2022 commenced in November 2020 and new contract pricing will be in effect on April 1, 2021.

PUC 1-6

Request:

The Company is proposing to include \$4.90 million in costs associated only with pursuing three potential infrastructure solutions in FY 2022 for the Aquidneck Island Long Term Capacity project.

- a. Since any of the three potential solutions would require approval from The Energy Facility Siting Board, when does the Company anticipate a solution will be approved? When is the approved solution expected to be in service?
- b. When does the company anticipate it will begin to collect the revenue requirement associated with this \$4.9 million expenditure?
- c. Should the entire cost for all three solutions be capitalized or only the cost associated with the approved solution?
- d. Should any of the expense be classified under Operation and Maintenance Expense category?

Response:

- a. The Company is not able to estimate EFSB approval or in-service dates currently because due diligence on each alternative has not advanced to the point where the Company is able to properly evaluate and compare the alternatives or establish a target date for filing for the preferred project or solution set. Nonetheless, the Company currently anticipates that it may be able to file an application in Q4 of 2022.
- b. The Company has proposed to start collecting revenue requirement on the \$4.9m investment which on April 1, 2021 pending approval by the Commission. For illustrative purposes the revenue requirement for FY22 is \$284,000.
- c. The Company proposes to capitalize only costs associated with the solution(s) selected for implementation and will propose necessary rate adjustments as part of the ISR reconciliation filing for any solution(s) not selected for which costs have been incurred. Given the Company's commitment to find an alternative for the Old Mill Lane temporary LNG site, National Grid believes it is critical to have options at this time in the event that one or more solutions cannot be implemented due to issues such as permitting, leasing agreements or field conditions.
- d. The costs should not be classified as Operations and Maintenance Expense since all solution options included in the FY2022 ISR are capital projects. Under typical accounting rules, capital projects only become classified as Operations and Maintenance costs if they are not completed, cancelled, or not placed in service at which time the project would be reclassified to Operations and Maintenance costs.

PUC 1-7

Request:

Please provide the Company's alternative options for Aquidneck Island Long Term Capacity if the site review work determines any of the three proposed solutions cannot move forward.

Response:

The Company identified four approaches to solving the natural gas capacity constraint and vulnerability needs on Aquidneck Island in its Aquidneck Island Long-Term Natural Gas Capacity Study: (1) an exclusively non-infrastructure solution consisting of incremental gas energy efficiency, gas demand response, and heat electrification; (2) alternative LNG facilities; (3) an AGT pipeline project; and (4) continued reliance on portable LNG at the Old Mill Lane facility. The second approach above included multiple different specific options—i.e., multiple different sites on Aquidneck Island being considered for a new LNG facility, the option of either a permanent or portable LNG facility, and the option for an LNG barge for offshore storage and vaporization.

If the Company determines that none of the LNG options can move forward as a result of the site assessments, preparation for a main extension and other project development activities for which it has requested ISR funding in FY22, then the Company's other alternatives would be approaches (1), (3) and (4) enumerated above (where incremental demand-side measures and gas infrastructure could be pursued as a "hybrid" solution) and detailed in the Aquidneck Island Long-Term Natural Gas Capacity Study.

PUC 1-8

Request:

Please provide the purchase price of the new Gas Business Enablement (GBE) software and the benefits it provides the Company.

Response:

In responding to this question, the Company has provided the cost of the new GBE software referenced on Bates page 57 of the FY 2022 Gas Infrastructure, Safety, and Reliability ("ISR") Plan in accordance with the clarification it received from the PUC. As a preliminary matter, no GBE costs are recovered through the Gas ISR factor associated with the Company's Gas ISR Plans, which support distinct goals from the GBE Program.

The Gas ISR Plan supports safety and reliability goals through the accelerated replacement of the portions of the Company's gas distribution system that contain leak-prone pipe. The GBE Program delivers capabilities and benefits to improve the delivery of the overall capital investment plan. Accordingly, there is no direct correlation with the Rhode Island Gas ISR Plan and the GBE Program in relation to the investments and the costs the Company will seek to recover through the ISR factor. For asset management, the GBE solution deploys an enterprise asset management system (Maximo) and GIS application to provide a spatial view of the assets that is integrated with an integrity risk management software tool (DNV-GL Synergi Pipeline) to score asset risk based on asset health and condition. This software utilizes industry accepted modeling techniques to evaluate likelihood and consequence of asset failure by leveraging asset information, prior maintenance history and geospatial location data contained in the Company's work management and GIS solutions. The output of this module will provide a risk value that may be compared across asset classes (Transmission, Distribution, and Pressure Regulation Assets) to measure total risk and aid in the development of maintenance and replacement programs. Additionally, the Asset Investment Planning Application (Copperleaf C55) utilizes the asset risk scores, along with project costs, resource constraints, and other Company and regulatory-based prioritizations to develop an optimized annual and multiyear investment portfolio. The Copperleaf software will also be integrated with the Company's financial systems to track completion of inflight programs and projects against targets to enable in-year adjustment to the work plan as needed. This integration of the asset investment planning and management application with the GBE solution will enable improved metrics to report the value of the projects initiated against the risk reduced.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-8, page 2

Please see the chart below for details regarding what the Service Company has paid through December 2020 for the GBE software referenced on page 57 of the FY 2022 Gas ISR Plan. Please note that the software is utilized for all jurisdictions, including Rhode Island, Massachusetts and New York.

Software	Amount (GBE Program inception-to-date, December 2020)
DNV-GL	\$676,808.54
Copperleaf C55	\$122,134.38
Total	\$798,942.92

Although the Company expects that the processes and systems that will be implemented by the GBE Program will facilitate the delivery of the capital investment plan, including the Gas ISR Plan and other gas business activities, at this time, the Company is unable to determine whether there will be a reduction in costs in the Gas ISR Plan.

PUC 1-9

Request:

Bates 47 states “To date, 14 of the 38 municipalities in Rhode Island have adopted curb to curb restoration requirements. The Company believes that adoption of the Act’s requirement will continue to increase and anticipates that additional municipalities will adopt before the start of the Company’s FY 2022 construction season, which begins in April 2021.”

- a. Please indicate whether the number of municipalities adopting the requirements has changed since the date of filing.
- b. Please update the table in Docket 4996 responding to PUC 1-3 adding columns for each municipality representing the total cost for FY 2022 roadway restoration and the incremental cost for curb to curb restoration vs traditional pavement restoration.

Response:

- a. The number of municipalities that have formally communicated the adoption of curb-to-curb paving requirements remains at 14. However, through the Company’s informal communications with municipalities, the Company now anticipates that 27 municipalities will enforce curb-to-curb paving for main replacement final restoration work completed in FY 2022.
- b. The attached table attached as Attachment PUC 1-9 includes the current Roadway Restoration Requirements (as of January 20, 2021) for Rhode Island Municipalities and Rhode Island State Roadways (marked RIDOT for Rhode Island Department of Transportation). The table includes the restoration requirements for Main Replacement Work and Patch Work:
 - Before July 11, 2019;
 - As of January 23, 2020;
 - As of October 5, 2020 (as reflected in the December 18, 2020 filing); and
 - As of January 20, 2021 (any status changes between October 5, 2020 and January 20, 2021 are presented in red font)

Columns L through Q represent the known main installation final restoration commitments for FY 2022. Column O lists the estimated total paving cost per municipality before the implementation of the curb-to-curb paving law. Column P lists the estimated total paving cost per municipality according to their current paving requirements. Column Q lists the estimated increase in paving costs per municipality as a result of the curb-to-curb paving law and changes to paving requirements. Please note

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-9, page 2

that this list does not include the final restoration paving for main installation that will be completed in FY 2022 and which are eligible to be paved in FY 2022.

As of 01/20/2021 - Information is subject to change

Municipal		Pre July 11, 2019		As of January 23, 2020		As of October 5, 2020		Current Requirements January 20, 2021		Known Outstanding Paving Commitments for FY 2022 Note: Does not include work that has not started, but will be paved in FY 2022					
		MAIN REPLACEMENT WORK	PATCH WORK	MAIN REPLACEMENT WORK	PATCH WORK	MAIN REPLACEMENT WORK	PATCH WORK	MAIN REPLACEMENT WORK	PATCH WORK	Footage	Previous Paving Requirements (Width - Feet)	New Paving Requirements (Width - Feet)	Estimated Paving Cost Before Change	Estimated Paving Cost After Change	Estimated Increase in Paving Cost
		Definitions Key ARBP = As Required by Permit C2C = Curb to Curb Paving CB = Cut back Standard CB = Applies unless otherwise specified in the permit Follow RIDOT = Gas primarily on State roads, generally follows RIDOT Guidelines N/A = No gas in town No Change - TBD = No known changes, but to be determined with municipality													
Roadway Restoration Requirements per permits issued:															
RIDOT	C2C or Full Lane Width	Standard 1' CB	C2C or Full Lane Width	Standard 1' CB	C2C or Full Lane Width	Standard 1' CB	C2C or Full Lane Width	Standard 1' CB	5,160	13	26	\$ 104,347	\$ 208,693	\$ 104,347	
Barrington	Curb to Center	ARBP/Standard CB	Curb to Center	ARBP/Standard CB	Curb to Center	ARBP/Standard CB	C2C	ARBP/Standard CB	10,953	10	26	\$ 170,380	\$ 442,988	\$ 272,608	
Bristol	Curb to Trench 7' min	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB							
Burrillville	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT							
Central Falls	Curb to Center	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	C2C	3,619	10	26	\$ 56,296	\$ 146,368	\$ 90,073	
Charlestown	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT							
Coventry	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	1,185	13	26	\$ 23,963	\$ 47,927	\$ 23,963	
Cranston	Curb to Trench 7' min	Standard 1' CB	C2C	Standard 1' CB	C2C	Standard 1' CB	C2C	Standard 1' CB	22,964	10	26	\$ 357,218	\$ 928,766	\$ 571,548	
Cumberland	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	827	26	26	\$ 33,448	\$ 33,448	\$ -	
East Greenwich	Curb to Trench 7' min	ARBP/Standard CB	ARBP	ARBP/Standard CB	ARBP	ARBP/Standard CB	C2C	ARBP/Standard CB	1,780	13	26	\$ 35,996	\$ 71,991	\$ 35,996	
East Providence	Curb to Trench 7' min	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	48,928	10	26	\$ 761,102	\$ 1,978,866	\$ 1,217,764	
Exeter	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,730	13	26	\$ 55,207	\$ 110,413	\$ 55,207	
Foster	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT							
Glocester	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A							
Hopkinton	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A							
Jamestown	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A							
Johnston	Curb to Center	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	10,885	13	26	\$ 220,119	\$ 440,238	\$ 220,119	
Lincoln	Curb to Center	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	8,751	13	26	\$ 176,965	\$ 353,929	\$ 176,965	
Little Compton	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	N/A	N/A	N/A	N/A							
Middletown	Curb to Center	ARBP/Standard CB	Curb to Center	ARBP/Standard CB	Curb to Center	ARBP/Standard CB	C2C	ARBP/Standard CB	8,395	13	26	\$ 169,766	\$ 339,531	\$ 169,766	
Narragansett	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	C2C	ARBP/Standard CB	1,170	10	26	\$ 18,200	\$ 47,320	\$ 29,120	
New Shoreham (Blo)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A							
Newport	Curb to Center	ARBP/Standard CB	Curb to Center	ARBP/Standard CB	Curb to Center	ARBP/Standard CB	C2C	ARBP/Standard CB	1,227	10	26	\$ 19,087	\$ 49,625	\$ 30,539	
North Kingstown	Curb to Trench	ARBP/Standard CB	Curb to Trench	ARBP/Standard CB	Curb to Trench	ARBP/Standard CB	C2C	ARBP/Standard CB	5,462	10	26	\$ 84,964	\$ 220,908	\$ 135,943	
North Providence	Curb to Center	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	14,440	13	26	\$ 292,009	\$ 584,018	\$ 292,009	
North Smithfield	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	C2C	ARBP/Standard CB	1,005	10	26	\$ 15,633	\$ 40,647	\$ 25,013	
Pawtucket	C2C	ARBP/ 95% Compaction, Tack Coat & Infared	C2C	ARBP/ 95% Compaction, Tack Coat & Infared	C2C	ARBP/ 95% Compaction, Tack Coat & Infared	C2C	ARBP/ 95% Compaction, Tack Coat & Infared	15,907	26	26	\$ 643,350	\$ 643,350	\$ -	
Portsmouth	Curb to Center	ARBP/Standard CB	Curb to Center	ARBP/Standard CB	Curb to Center	ARBP/Standard CB	C2C	ARBP/Standard CB	4,150	10	26	\$ 64,556	\$ 167,844	\$ 103,289	
Providence	Curb to Trench 7' min	Standard 1' CB	Curb to Trench 7' min	Standard 1' CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	67,114	10	26	\$ 1,043,996	\$ 2,714,388	\$ 1,670,393	
Richmond	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT							
Scituate	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	72	13	26	\$ 1,456	\$ 2,912	\$ 1,456	
Smithfield	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	C2C	ARBP/Standard CB	11,377	13	26	\$ 230,068	\$ 460,136	\$ 230,068	
South Kingstown	Curb to Center	Standard 1' CB	Curb to Center	Standard 1' CB	Curb to Center	Standard 1' CB	C2C	Standard 1' CB	3,442	10	26	\$ 53,542	\$ 139,210	\$ 85,668	
Tiverton	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	C2C	ARBP/Standard CB	1,090	13	26	\$ 22,042	\$ 44,084	\$ 22,042	
Warren	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	Curb to Trench 7' min	ARBP/Standard CB	C2C	ARBP/Standard CB	0	13	26	\$ -	\$ -	\$ -	
Warwick	Curb to Trench 7' min	Standard 1' CB	C2C	Standard 1' CB	C2C	Standard 1' CB	C2C	Standard 1' CB	48,697	10	26	\$ 757,509	\$ 1,969,523	\$ 1,212,014	
West Greenwich	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT	Follow RIDOT							
West Warwick	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	C2C	ARBP/Standard CB	1,770	26	26	\$ 71,587	\$ 71,587	\$ -	
Westerly	Curb to Center	Standard 1' CB	Curb to Center	Standard 1' CB	Curb to Center	Standard 1' CB	C2C	Standard 1' CB	5,655	13	26	\$ 114,357	\$ 228,713	\$ 114,357	
Woonsocket	Curb to Trench 7' min	ARBP/Standard CB	C2C	Curb to Center x 1/2 Road (generally a square)	C2C	Curb to Center x 1/2 Road (generally a square)	C2C	Curb to Center x 1/2 Road (generally a square)	9,945	13	26	\$ 201,110	\$ 402,220	\$ 201,110	
											Total	\$ 5,798,270	\$ 12,889,644	\$ 7,091,375	

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-10

Request:

Bates 53-54 indicates a new ISR program (Proactive Low-Pressure System Elimination) where the Company is proposing to replace approximately one system per year at a cost in FY 2022 of \$0.50 million. How many systems have been identified for replacement and what is the expected timetable to complete this program?

Response:

The Company's FY 2022 work plan includes a project in the area of 122-155 Purgatory Road, 1-120 Tuckerman Avenue, and 18-52 Esplanade in Middletown to replace a section of the Low Pressure system fed from the Wolcott Avenue @ St. Georges station with 99 psig. The Company's FY 2023 work plan is currently under development. To date, the Company has identified three additional locations for this program: (1) Railroad St @ Winter Street, Lincoln; (2) Market Street @ Kickemuit Rd, Warren; and (3) Wolcott Avenue @ St Georges, Middletown.

PUC 1-11

Request:

How many of the 12 identified Transmission Stations out of 24 have been re-tested or replaced to date? How many does the Company estimate to be completed at the end of FY 2022? (Bates 55).

Response:

The Transmission Station Integrity program is still in the engineering phase, which includes planning and record archiving for most of the 12 identified stations. The next phase, field engineering, will begin in FY 2021 and will include pipe material verification excavations using NDE/NDT technologies, pipe assessments and remediation. The Company estimates that it will investigate three stations per year. The final phase, construction, will respond to the need for services associated with hydrotesting, pipeline installation/replacement, fitting and valve replacements, preventative and mitigative measures, and remediation including full station replacement.

The status of the 12 identified stations is shown below:

One station has been re-built and repressure tested to date:

- 27 Dey St Take Station in East Providence.

Three of the other 12 transmission stations not identified have been replaced to date:

- Crary St Take Station in Providence
- 4 regulator stations at Allens Avenue in Providence (combined to one)
- Veterans Memorial Pkwy in East Providence

Additionally, there are four stations that are targeted for replacement by the end of FY2025 with one potentially completed by the end of FY2022. These stations are:

- 401 Main Rd Take Station in Tiverton
- 68 Scott Rd Take Station in Cumberland
- 67 Laten Knight Rd in Cranston
- 347 Putnam Pike Take Station in Smithfield.

Another transmission station, Cowesett Rd @ Quaker Ln, may be completed by the end of FY22 but it was not included in the scope of the 12 identified stations.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-12

Request:

The Proactive Service Replacement Program in its second year for FY 2022 identified 181 copper services that need to be replaced. The FY 2021 budget workplan called for replacing 90 copper and 10 isolated services but due to COVID-19 only 57 services were replaced through mid-December 2020. The FY 2022 budget plans to replace the same amount as the prior year at a total budget cost of \$0.35 million. How confident is the Company that it will be able to replace 100 services in FY 2022 during the COVID-19 pandemic?

Response:

The Company is confident based on its current workplan that it can complete 100 services in FY 2022. However, completing the work is dependent on the State or Municipalities not imposing pandemic-related work restrictions and on customers' willingness to allow entry into their premises to complete the work.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-13

Request:

The Distribution Station Over Pressure Protection was impacted in FY 2021 by the COVID-19 pandemic causing a decrease in spending for this category. Will the deferral be incorporated in FY 2022?

Response:

Although the COVID-19 pandemic caused a decrease in spending, many of the FY 2021 projects were able to progress through the engineering/planning stage and are ready for execution. The FY 2021 jobs where the execution was deferred will be added to the planned work for FY 2022. Considering that resources will limit the amount of total work that can be accomplished, the new FY 2022 list will be prioritized based on status and risk and some projects will be deferred into FY 2023 to ensure the same total work volume and spend will remain as planned.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-14

Request:

Please update Table 1 and Table 2 on Bates 76-77 to include FY 2021.

Response:

Please see Attachment PUC 1-4, which now includes Table 1 and Table 2 with the FY 2021 approved budget included in the tables.

Narragansett Gas - (FY 2021 Approved Budget and FY 2022 Proposed Budget)
(\$000)

Categories	FY 2021 - As Approved 3/17/20			FY 2022 Proposed		
	Budget	Leak-Prone Pipe Abandonment Miles	Main Replacement Installation Miles	Budget	Leak-Prone Pipe Abandonment Miles	Main Replacement Installation Miles
NON-DISCRETIONARY						
Public Works						
<i>CSC/Public Works - Non-Reimbursable</i>	\$17,368			\$19,152		
<i>CSC/Public Works - Reimbursable</i>	\$1,403			\$1,455		
<i>CSC/Public Works - Reimbursements</i>	(\$1,403)			(\$1,405)		
Public Works Total	\$17,368	13.0	13.0	\$19,202	14.00	14.00
Mandated Programs						
<i>Corrosion</i>	\$1,166			\$1,250		
<i>Purchase Meter (Replacement)</i>	\$4,852			\$2,880		
<i>Reactive Leaks (CI Joint Encapsulation/Service Replacement)</i>	\$12,280			\$11,973		
<i>Service Replacement (Reactive) - Non-Leaks/Other</i>	\$2,096			\$1,911		
<i>Main Replacement (Reactive) - Maintenance (incl Water Intrusion)</i>	\$680			\$1,126		
<i>Low Pressure System Elimination (Proactive)</i>				\$500		
<i>Transmission Station Integrity</i>	\$610			\$1,740		
Mandated Total	\$21,684			\$21,380		
Damage / Failure (Reactive)						
<i>Damage / Failure (Reactive)</i>	\$249			\$250		
NON-DISCRETIONARY TOTAL	\$39,301			\$40,832		
DISCRETIONARY						
Proactive Main Replacement						
<i>Main Replacement (Proactive) - Leak Prone Pipe</i>	\$59,250	47.4	42.3	\$67,176	55.04	48.45
<i>Main Replacement (Proactive) - Large Diameter LPCI Program</i>	\$3,398			\$3,852		
<i>Atwells Avenue</i>	\$5,081	6.0	6.0	\$4,000	0.26	0.26
Proactive Main Replacement Total	\$67,729	48.0	42.9	\$75,028	55.30	48.71
Proactive Service Replacement						
<i>Proactive Service Replacement Total</i>	\$350			\$350		
Reliability						
<i>Gas System Control</i>	\$118					
<i>System Automation</i>	\$1,252			\$1,321		
<i>Heater Installation Program</i>	\$2,961			\$3,557		
<i>Pressure Regulating Facilities</i>	\$7,849			\$7,462		
<i>Allens Ave Multi Station Rebuild</i>	\$6,200			\$2,500		
<i>Take Station Refurbishment</i>	\$995			\$1,300		
<i>Valve Installation/Replacement (incl Storm Hardening & Middletown/Newport)</i>	\$676			\$1,233		
<i>Gas System Reliability</i>	\$2,371			\$3,068		
<i>I&R - Reactive</i>	\$1,392			\$1,348		
<i>Distribution Station Over Pressure Protection</i>	\$3,636			\$3,301		
<i>LNG</i>	\$6,433			\$7,738		
<i>Aquidneck Island Long Term Capacity Options</i>				\$4,900		
<i>Replace Pipe on Bridges</i>	\$1,500			\$2,006		
<i>Access Protection Remediation</i>	\$260			\$310		
<i>Tools & Equipment</i>	\$603			\$612		
Reliability Total	\$36,246			\$40,656		
SUBTOTAL DISCRETIONARY (Without Gas Expansion)	\$104,325			\$116,034		
<i>Southern RI Gas Expansion Project</i>	\$40,460			\$19,438		
DISCRETIONARY TOTAL (With Gas Expansion)	\$144,785			\$135,472		
CAPITAL ISR TOTAL (Base Capital - Without Gas Expansion)	\$143,626			\$156,866		
CAPITAL ISR TOTAL (With Gas Expansion)						
Amount does not include incremental costs associated with the RI Paving Law	\$184,086	61.0	55.9	\$176,304		
Incremental Costs						
<i>PE Stamps</i>	\$1,515					
<i>Incremental Paving - Main Installation</i>	\$5,596			\$3,019		
<i>Incremental Paving - Patches</i>	\$4,801			\$823		
<i>Incremental Paving - Southern RI Gas Expansion</i>	\$2,614					
Incremental Costs Total	\$14,526			\$3,842		
CAPITAL ISR TOTAL (with Gas Expansion and Incremental Paving)	\$198,612	61.0*	55.9	\$180,146	69.30**	62.71

*FY21 Total miles of abandonment approved as 62 miles. 1 mile from Reinforcement work.

**FY22 Total miles of abandonment will be 70.30 miles. 1 mile will come from Reinforcement work.

PUC 1-14						
Table 2						
RI Gas ISR - FY 2021 Approved Budget & FY 2022-2026 Spending Forecast						
(\$000)						
Investment Categories	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
	Approved					
NON-DISCRETIONARY						
Public Works	\$17,368	\$19,202	\$19,180	\$19,564	\$19,954	\$20,354
Mandated Programs	\$21,684	\$21,381	\$48,091	\$50,095	\$49,471	\$46,022
Damage / Failure (Reactive)	\$249	\$250	\$255	\$260	\$287	\$293
Special Projects	\$0	\$0	\$0	\$0	\$0	\$0
NON-DISCRETIONARY TOTAL	\$39,301	\$40,833	\$67,526	\$69,919	\$69,712	\$66,669
DISCRETIONARY						
Proactive Main Replacement	\$67,729	\$75,028	\$76,280	\$97,580	\$105,507	\$108,506
Proactive Service Replacement	\$350	\$350	\$357	\$364	\$371	\$379
Reliability	\$36,246	\$40,655	\$52,033	\$114,388	\$85,898	\$81,419
SUBTOTAL DISCRETIONARY (Without Gas Expansion)	\$104,325	\$116,033	\$128,671	\$212,332	\$191,776	\$190,304
Southern RI Gas Expansion Project	\$40,460	\$19,438	\$7,349	\$15,972	\$450	\$0
DISCRETIONARY TOTAL (With Gas Expansion)	\$144,785	\$135,471	\$136,020	\$228,304	\$192,226	\$190,304
CAPITAL ISR TOTAL (Base Capital - Without Gas Expansion)	\$143,626	\$156,866	\$196,197	\$282,251	\$261,488	\$256,973
CAPITAL ISR TOTAL (With Gas Expansion)						
Amount does not include incremental paving costs associated with RI Paving Law, PE Stamps (FY23-26), or Smart Gas Meter - IS Integration (FY24)	\$184,086	\$176,304	\$203,546	\$298,223	\$261,938	\$256,973
INCREMENTAL COSTS						
Smart Gas Meter - IS Integration	\$1,515	\$0	\$0	\$3,000	\$0	\$0
PE Stamps	\$5,596	\$0	\$1,515	\$1,515	\$1,515	\$1,515
Incremental Paving - Main Installation	\$4,801	\$3,019	\$5,764	\$5,937	\$6,115	\$6,298
Incremental Paving - Patches	\$2,614	\$823	\$4,945	\$5,093	\$5,246	\$5,404
Incremental Paving - Southern RI Gas Expansion	\$14,526	\$0	\$0	\$0	\$0	\$0
INCREMENTAL COSTS TOTAL	\$198,612	\$3,842	\$12,224	\$12,545	\$12,876	\$13,217
CAPITAL ISR TOTAL						
(with Gas Expansion and Incremental Costs)	\$198,612	\$180,145	\$215,769	\$313,768	\$274,815	\$270,190

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-15

Request:

Bates 77 Table 2 indicates an increase for Mandated Programs from \$21,381 million in FY 2022 to \$48,091 in FY 2023. Please explain and provide details for the increase.

Response:

Please see the table below for an explanation of the increases for each Mandated Program.

Program	FY2022	FY2023	
Corrosion	\$1,250	\$1,238	Reason for Increase
Purchase Meter (Replacement)**	\$2,880	\$7,018	Increase due to higher anticipated future meter pricing and increased volume based on work plan estimates. In addition, the FY 2022 reflects that \$2M in spending pulled forward from FY22 to FY21 to purchase meters at lower agreed negotiated cost.
Reactive Leaks (CI Joint Encapsulation/Service Replacement)	\$11,973	\$13,863	Estimated increase due to inflation **
Service Replacement (Reactive) - Non-Leaks/Other	\$1,911	\$1,943	Estimated increase due to inflation **
Main Replacement (Reactive) - Maintenance (incl Water Intrusion)	\$1,126	\$1,134	Estimated increase due to inflation **
Low Pressure System Elimination (Proactive)	\$500	\$2,000	Increase due to ramp up of Low-Pressure Elimination Program
Transmission Station Integrity	\$1,740	\$20,395	Increase due to ramp up of Transmission Station Integrity Program and construction of Scott Rd (Cumberland) Take Station
Pipeline Integrity - IVP - 200 psig System Replacement	\$0	\$500	Increase due to first year of project development for Wampanoag Trail Pipeline Replacement Project
Total	\$21,381	\$48,090	
**Inflation factor = potential annual increase in labor, contractor and/or material costs			

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-16

Request:

Bates 77 Table 2 indicates an increase for Reliability from \$40,665 million in FY 2022 to \$114,388 in FY 2024. Please explain and provide details for the increase over that time period.

Response:

Please see the chart below for details and explanations regarding the increase for Reliability from \$40,665 million in FY 2022 to \$114,388 in FY 2024.

Program	FY22	FY23	FY24	
System Automation	\$1,321	\$1,387	\$1,457	Annual anticipated increase in labor and materials costs
Heater Installation Program	\$3,557	\$2,225	\$4,075	Engineering/Development and construction of Diamond Hill Heater
Pressure Regulating Facilities	\$7,462	\$7,750	\$7,650	Carryover from FY21; risk factor if not complete
Allens Ave Multi Station Rebuild	\$2,500	\$0	\$0	Project complete in FY 2022
Take Station Refurbishment	\$1,300	\$1,700	\$3,000	Material purchase for increase in station retrofits in FY 2024
Valve Installation/Replacement (including Storm Hardening & Middletown/Newport)	\$1,233	\$1,183	\$186	FY 2022 Budget based on three-year average costs inflated (FY18-20) and Budget Sponsor estimate
Gas System Reliability	\$3,068	\$3,278	\$3,360	Annual anticipated increase in labor, contractor and/or material costs. Projects planned include East Providence downrate and Newport 10-to-35# upgrade
Gas System Control	\$0	\$0	\$560	Forecasted work starting in FY2024
I&R - Reactive	\$1,348	\$1,375	\$1,402	Annual anticipated increase in costs for labor and materials
Distribution Station Over Pressure Protection	\$3,301	\$3,383	\$3,468	Annual anticipated increase in costs for labor and materials
LNG	\$7,738	\$11,829	\$52,260	See the table below regarding LNG Projects
Aquidneck Island Long Term Capacity Options	\$4,900	\$15,028	\$34,633	Engineering/Development and ramp up to construction for selected option
Replace Pipe on Bridges	\$2,006	\$2,000	\$1,423	\$57k increase in FY 2022 for PE Stamp allocation. Engineering, Development and prep for Glenbridge Ave project. Goat Island project on hold while the Rhode Island Department of Transportation replaces the bridge

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099

In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-16, page 2

Program	FY22	FY23	FY24	
Access Protection Remediation	\$310	\$272	\$277	\$43k increase in FY 2022 due to PE Stamp allocation to individual program/projects
Smart Residential Methane Detector Program	\$0	\$0	\$0	N/A
Storm Hardening - Install Remote Service Shutoff Valves	\$0	\$0	\$0	N/A
Tools & Equipment	\$612	\$624	\$636	Increase in materials and cost of meter testing equipment; anticipated increase in cost of tools and other equipment
Total	\$40,655	\$52,033	\$114,388	

LNG Projects	FY22	FY23	FY24	
LNG - Blanket	\$586	\$599	\$610	Annual anticipated increase in costs for labor and materials costs
LNG - Cumberland Tank Replacement	\$2,000	\$6,000	\$50,150	Engineering/ Development and first phase construction
LNG - Exeter LNG Capital Upgrade Project	\$5,052	\$4,230	\$1,500	Engineering/ Development construction and closeout for first phase construction
LNG - Newport Site Demo	\$100	\$1,000	\$0	Project Development and completion of demolition
Total	\$7,738	\$11,829	\$52,260	

PUC 1-17

Request:

For each project in the Reliability category totaling \$40,656 million please

- a. Provide a risk score
- b. Identify the amount that will be placed in service in FY2022
- c. Provide the associated FY2022 revenue requirement.

Response:

a & b. Please see the chart below.

- c. The revenue requirement calculation on any vintage year's ISR capital investment is calculated on the incremental ISR-related rate base, which is incremental to the level of ISR rate base assumed in the Company's last distribution rate case. The level of ISR rate base assumed in current distribution rates was based on a forecast of capital investment, set at a level equal to the approved FY 2018 ISR Plan capital investment as a proxy. Then using that proxy level of investment, the Company established the rate years' forecasted levels of plant retirements, cost of removal and NOL/NOL utilization in totality. As the forecasted rate base included in distribution rates was not determined on a per project basis, determining the level of incremental ISR rate base on a per-project basis is nearly impossible. For that reason, the Company is employing a more simplistic approach, using a ratio of the total incremental FY 2022 revenue requirement associated with incremental FY 2022 ISR capital investment (\$10.4 million) over the total FY 2022 capital investment plan amount of \$180 million, to arrive at the FY 2022 revenue requirement impact on a per-project basis, as shown in Column (d) in the chart below.

The FY 2022 revenue requirement of \$10.4 million includes \$6.5 million in depreciation expense, return on investment and associated income taxes on the incremental FY 2022 investment plus \$3.9 million in incremental property tax expense associated with the FY 2022 ISR plan investment. Please refer to the calculation of the revenue requirement ratio of 5.8% in the chart below on lines 22-26.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-17, page 2

	Reliability category by project	Risk Score	FY22 Plan Spend	Placed In-Service FY22	FY22 Revenue Requirement
		(a)	(b)	(c)	(d) = Line 26 × (b)
1	System Auto	35	\$1,321,000	\$1,320,000	\$76,665
2	Heater Program	44	\$3,556,518	\$3,560,000	\$206,404
3	Pressure Regulating Facilities	40	\$7,462,281	\$7,460,000	\$433,076
4	Allens Avenue Multi Station Rebuild	35	\$2,500,000	\$2,500,000	\$145,088
5	Take Station Refurbishment	28	\$1,300,000	\$1,300,000	\$75,446
6	Valve Installation Replacement	49	\$1,232,999	\$1,230,000	\$71,558
7	Gas System Reliability Enhancement	28	\$3,067,721	\$3,070,000	\$178,036
8	Instrumentation and Regulation – Reactive	40	\$1,347,883	\$1,350,000	\$78,225
9	Distribution Station Over Pressure Protection	43	\$3,301,000	\$330,000	\$191,575
10	LNG-Blanket	34	\$586,000	\$934,000	\$34,009
11	LNG - Cumberland Tank Replacement	49	\$2,000,000	\$0	\$116,071
12	LNG - Exeter AESD System	48	\$1,150,000	\$0	\$66,741
13	LNG - Exeter Boiloff Compressor 2 Upgrade	28	\$2,560,000	\$0	\$148,570
14	LNG - Exeter Critical Spares	43	\$300,000	\$0	\$17,411
15	LNG - Exeter Hi Ex Foam System	48	\$1,042,000	\$0	\$60,473
16	LNG - Newport Site Demo	16	\$100,000	\$0	\$5,804
17	Aquidneck Island Long Term Capacity Options	35	\$4,900,000	\$0	\$284,373
18	Replace Pipe on Bridges	49	\$2,005,744	\$2,010,000	\$116,404
19	Access Protection Remediation	40	\$309,618	\$310,000	\$17,969
20	Tools and Equipment	36	\$611,821	\$610,000	\$35,507
21	Total FY22 Reliability category		\$40,654,585	\$25,984,000	\$2,359,402

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-17, page 3

22	FY22 Depreciation, Return and Taxes associated with FY22 investment	\$6,464,832
23	FY22 Property tax associated with FY22 investment	<u>\$3,990,000</u>
24	Total FY22 revenue requirement associated with FY22 investment	\$10,454,832
25	Total FY22 Investment Plan Spend	\$180,146,000
26	Ratio of Revenue Requirement to Capital Spending	5.80%

Line notes:

- 22 Section 3 Attachment 1, Page 15, Line 29, Col (a) (Bates page 183)
- 23 Section 3 Attachment 1, Page 24, Line 54, Col (k) (Bates page 192)
- 24 Line 22 + Line 23
- 25 Section 2, Table 1 (Bates page 76)
- 26 Line 24 ÷ Line 25

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission’s First Set of Data Requests
Issued on January 13, 2021

PUC 1-18

Request:

Bates 77 Table 2 indicates an increase for Proactive Main Replacement from \$75,028 million in FY 2022 to \$97,580 in FY 2024. Please explain and provide details for the increase over that time period.

Response:

Program	FY22	FY23	FY24	
Main Replacement (Proactive) - Leak Prone Pipe (“LPP”)	\$67,176	\$71,682	\$88,417	Mileage increase per LPP Plan. Cost increases to correspond with anticipated contractor/internal increases.
Main Replacement (Proactive) - Large Diameter LPCI Program	\$3,852	\$4,598	\$9,163	Increase in Large diameter projects (>16") in place of main replacement. Various phases of development and construction, along with increased blanket program for TBD projects
Atwells Avenue	\$4,000	\$0	\$0	Project scheduled to be complete FY22
Total	\$75,028	\$76,280	\$97,580	

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-19

Request:

Please provide a table itemizing the Proactive Main Replacement cost of \$75,028 million in FY 2022 to include the following: identify every segment, its location, the number of miles associated with each segment, risk assessment score, identify the capital outlay for each segment, identify the revenue requirement in FY2022 associated with the capital outlay of each segment.

Response:

Please see Attachment PUC 1-19 for a table itemizing the total FY 2022 Proactive Main Replacement Plan costs of \$75.028 million by location, work order, project title, risk score, number of miles, number of services, FY 2022 capital spending, and FY 2022 revenue requirement. The Company has employed the same methodology described in response to Data Request PUC 1-17 to calculate the FY 2022 the revenue requirement by line item as shown in Column (f) of the Attachment.

FY22 Proactive Main Replacement Plan

Please Note: This FY 2022 project workplan list as of 1/22/2021 varies slightly from the workplan as of December 2020 and is subject to change throughout FY 2022. The workplan is primarily built on work planned well in advance, but work may be advanced or delayed based on field conditions, such as leak activity, and the availability of permits by town.

Town	PP wo#	Project Title	Risk Score	Install Mileage	ISR Abandonment Mileage	Services	FY22 Plan Spend	FY22 Revenue Requirement	
			(a)	(b)	(c)	(d)	(e)	(f) = Line 122 × (e)	
1	Barrington	90000196730	Legion Wy, BRG	0.00	0.08	0.08	1	\$67,445	\$3,914
2	Bristol	90000194262	573-744 Hope St, BST	28.42	0.43	0.43	48	\$702,540	\$40,772
3	Central Falls	90000210484	Shawmut Av, CFL	26.06	0.13	0.45	47	\$243,458	\$14,129
4	Cranston	90000142840	Haven Av, CRA	32.44	1.13	1.25	85	\$1,313,036	\$76,202
5	Cranston	90000204606	Hazelton St, CRA	10.58	0.52	0.50	43	\$1,053,783	\$61,157
6	Cranston	90000204664	Smith St, CRA	30.00	0.19	0.23	26	\$217,455	\$12,620
7	Cranston	90000210496	Wellington Av, CRA	15.90	0.16	0.16	2	\$333,385	\$19,348
8	Cranston	90000212603	Homestead Av, CRA	23.64	0.06	0.05	4	\$81,642	\$4,738
9	Cranston	90000212629	Holland St, CRA	18.30	0.39	0.39	35	\$684,081	\$39,701
10	Cranston	90000212647	Garden St, CRA	16.05	0.12	0.16	18	\$160,596	\$9,320
11	Cumberland	90000210490	Pleasant St, CLD	20.69	0.34	0.34	45	\$588,737	\$34,168
12	East Providence	90000155080	208-321 Warren Av, EPV	18.08	0.99	1.01	99	\$1,519,791	\$88,202
13	East Providence	90000184051	Island Av, EPV (RR Crossing)	2.37	0.12	0.09	3	\$222,801	\$12,930
14	East Providence	90000194304	Vineyard Av, EPV	25.79	0.65	0.73	61	\$705,232	\$40,928
15	East Providence	90000194305	Wannamoisset Rd, EPV	31.85	0.82	0.72	72	\$839,363	\$48,713
16	East Providence	90000210583	N Broadway, EPV	2.06	0.11	0.11	3	\$173,144	\$10,048
17	East Providence	90000210913	Waterman Av, EPV	22.15	0.76	0.74	44	\$1,349,965	\$78,346
18	East Providence	90000211006	Commercial Wy, EPV	10.67	0.17	0.18	1	\$182,358	\$10,583
19	East Providence	90000211681	Harding Av, EPV	14.32	0.17	0.19	20	\$226,569	\$13,149
20	East Providence	90000211687	Nathaniel St, EPV	26.27	0.02	0.02	3	\$33,094	\$1,921
21	East Providence	90000211716	Tripps Ln, EPV	14.03	0.04	0.10	7	\$72,804	\$4,225
22	East Providence	90000211720	Winthrop St, EPV	12.34	0.09	0.09	5	\$106,450	\$6,178
23	Johnston	90000142764	1294 Atwood Av, JOH	35.70	0.02	0.02	0	\$53,631	\$3,112
24	Johnston	90000211786	1423-1741 Atwood Av, JOH	17.46	0.86	0.87	30	\$991,936	\$57,567
25	Lincoln	90000212041	Old Main St, LNC	20.04	1.25	1.36	75	\$1,002,188	\$58,162
26	Newport	90000118037	William St, NPR	15.31	0.41	0.41	39	\$651,690	\$37,821
27	Newport	90000183013	Third St, NPR	3.92	0.16	0.53	21	\$154,333	\$8,957
28	Newport	90000185659	Broadway, NPR	26.00	0.31	0.32	18	\$602,825	\$34,985
29	Newport	90000185662	Memorial Blvd, NPR	13.00	0.46	0.46	9	\$704,114	\$40,864
30	Newport	90000210702	Connell Hwy, NPR	13.67	0.66	0.66	13	\$403,960	\$23,444
31	North Kingstown	90000204618	Sedgefield Rd, NKS	0.00	0.18	0.18	6	\$157,023	\$9,113
32	North Kingstown	90000210592	Camp Av, NKS	6.41	0.61	0.61	11	\$850,093	\$49,335
33	North Kingstown	90000211980	Shore Acres Av, NKS	15.85	0.77	0.72	55	\$557,195	\$32,337
34	North Providence	90000172062	Benjamin Dr, NPV	16.37	0.02	0.22	4	\$35,867	\$2,082
35	North Providence	90000185663	Belvedere Blvd, NPV	15.65	0.30	0.30	38	\$501,489	\$29,104
36	North Providence	90000185666	Smith St, NPV	15.67	0.46	0.46	25	\$736,706	\$42,755
37	North Providence	90000187217	Greystone Av, NPV	21.97	0.30	0.30	32	\$269,074	\$15,616
38	North Providence	90000210558	Lyman Av, NPV	16.01	0.80	0.75	81	\$768,237	\$44,585
39	North Providence	90000211562	Obed Av, NPV	17.47	0.20	0.20	22	\$301,852	\$17,518
40	North Providence	90000211854	Waterman Av, NPV	13.32	0.32	0.50	67	\$451,764	\$26,218
41	North Providence	90000212523	Elizabeth Dr, NPV	28.83	0.25	0.22	25	\$223,710	\$12,983
42	North Providence	90000212618	Brown Av, NPV	15.68	0.25	0.23	28	\$388,894	\$22,570
43	North Providence	90000212820	2-68 Homewood Av, NPV	14.04	0.50	0.48	56	\$484,745	\$28,132
44	North Providence	90000214933	211-670 Woonasquatucket Av, NPV	16.75	2.12	2.11	106	\$3,329,847	\$193,249
45	North Smithfield	90000211548	Summit Av, NSF	8.56	0.12	0.12	17	\$123,038	\$7,141
46	North Smithfield	90000212438	Smithfield Rd, NSF	4.25	0.84	1.22	56	\$728,823	\$42,297
47	Pawtucket	90000204642	Slade St, PAW	25.83	0.28	0.28	30	\$447,324	\$25,961
48	Pawtucket	90000211112	Beverage Hill Av, PAW	17.82	0.56	0.55	54	\$765,428	\$44,422
49	Pawtucket	90000211129	Taft St, PAW	17.29	0.09	0.10	8	\$112,289	\$6,517
50	Pawtucket	90000211137	94-132 Mendon Av, PAW	20.67	0.37	0.36	11	\$531,074	\$30,821
51	Pawtucket	90000211182	Carver St, PAW	16.64	0.41	0.44	40	\$404,570	\$23,479
52	Pawtucket	90000211188	Cherry St, PAW	20.19	0.50	0.51	54	\$805,481	\$46,746
53	Pawtucket	90000211435	1-34 Central Av, PAW	21.03	0.46	0.47	16	\$627,054	\$36,391
54	Pawtucket	90000211518	Broadway, PAW	18.89	0.43	0.53	48	\$693,445	\$40,244
55	Pawtucket	90000211538	Fenner St, PAW	25.50	0.47	0.68	58	\$759,670	\$44,088
56	Pawtucket	90000211546	1-75 East Av, PAW	20.51	0.17	0.52	8	\$318,218	\$18,468
57	Pawtucket	90000212444	380-433 Lonsdale Av, PAW	15.84	0.59	0.64	73	\$709,147	\$41,156
58	Pawtucket	90000212483	Oakdale Av, PAW	16.30	0.27	0.44	28	\$457,059	\$26,526
59	Providence	90000142541	Whitehall St, PVD	31.33	0.37	0.37	41	\$791,671	\$45,945
60	Providence	90000142618	Charles St, PVD	23.82	0.42	0.42	46	\$953,163	\$55,317
61	Providence	90000142626	392-498 Douglas Av, PVD	25.00	0.57	0.57	50	\$1,162,578	\$67,471
62	Providence	90000155245	Herbert St, PVD	20.08	0.24	0.20	16	\$456,797	\$26,510

FY22 Proactive Main Replacement Plan

Please Note: This FY 2022 project workplan list as of 1/22/2021 varies slightly from the workplan as of December 2020 and is subject to change throughout FY 2022. The workplan is primarily built on work planned well in advance, but work may be advanced or delayed based on field conditions, such as leak activity, and the availability of permits by town.

Town	PP wo#	Project Title	Risk Score	Install Mileage	ISR Abandonment Mileage	Services	FY22 Plan Spend	FY22 Revenue Requirement	
			(a)	(b)	(c)	(d)	(e)	(f) = Line 122 × (e)	
63	Providence	90000155376	Delaine St, PVD	22.62	0.27	0.42	16	\$577,787	\$33,532
64	Providence	90000175676	Gloucester St, PVD	19.67	0.22	0.20	30	\$320,726	\$18,613
65	Providence	90000185696	392-550 Valley St, PVD	35.50	0.65	0.63	19	\$1,170,962	\$67,957
66	Providence	90000187222	Reservoir Av, PVD	40.00	0.54	0.65	13	\$1,002,237	\$58,165
67	Providence	90000188537	Harris Av, PVD (incl. 2 RR crossings)	15.83	0.59	0.68	15	\$806,083	\$46,781
68	Providence	90000194371	Sharon St, PVD	29.34	0.31	0.32	39	\$708,674	\$41,128
69	Providence	90000194359	Gallup St, PVD	29.67	0.48	0.68	50	\$708,054	\$41,092
70	Providence	90000194364	Linden Dr, PVD	24.54	0.06	0.06	8	\$138,540	\$8,040
71	Providence	90000194369	Ocean St, PVD	29.81	0.35	0.37	50	\$772,678	\$44,843
72	Providence	90000194347	330-505 Silver Spring St, PVD	17.69	0.44	0.45	7	\$832,649	\$48,323
73	Providence	90000210246	Ernest St, PVD	3.00	0.12	0.67	5	\$169,752	\$9,852
74	Providence	90000210631	Woodbine St, PVD	33.67	0.11	0.11	23	\$286,359	\$16,619
75	Providence	90000210644	Burnside St, PVD	30.71	0.26	0.26	38	\$368,825	\$21,405
76	Providence	90000210746	Abbott St, PVD	31.33	0.46	0.45	58	\$995,184	\$57,756
77	Providence	90000210771	Winrooth Av, PVD	25.56	0.47	0.59	72	\$721,217	\$41,856
78	Providence	90000211636	Ledge St, PVD	38.17	1.06	1.07	141	\$1,509,008	\$87,576
79	Providence	90000212117	Sackett St, PVD	26.67	0.51	0.50	54	\$693,790	\$40,264
80	Providence	90000212129	Penn St, PVD	23.86	0.40	0.39	40	\$877,022	\$50,898
81	Providence	90000212419	531-690 Manton Av, PVD	24.76	0.23	0.59	45	\$595,792	\$34,577
82	Providence	90000212422	707-902 Douglas Av, PVD	17.53	0.56	0.56	58	\$1,088,194	\$63,154
83	Providence	90000212517	Washington St, PVD	30.86	0.91	1.10	12	\$1,794,089	\$104,121
84	Providence	90000212518	307-349 Hope St, PVD	19.21	0.05	0.31	11	\$175,438	\$10,182
85	Providence	90000212520	632-734 Hope St, PVD	22.04	0.42	0.44	49	\$1,099,857	\$63,831
86	Smithfield	90000210825	Farnum Pike, SMF	17.88	0.10	0.10	5	\$96,327	\$5,590
87	Smithfield	90000211875	Waterman Av, SMF	21.50	0.34	1.15	62	\$437,954	\$25,417
88	South Kingston	90000210821	Fraternity Cir, SKS	16.15	0.25	0.25	6	\$392,623	\$22,786
89	Warwick	90000155600	Kirby Av, WWK	15.24	0.31	0.31	13	\$212,011	\$12,304
90	Warwick	90000204619	125-318 Warwick Neck Av, WWK	14.30	0.72	0.66	46	\$858,809	\$49,841
91	Warwick	90000204620	2790-3055 W Shore Rd, WWK	13.70	0.97	0.97	48	\$1,163,348	\$67,515
92	Warwick	90000204634	Warwick Av, WWK	20.53	0.98	1.15	59	\$1,216,916	\$70,624
93	Warwick	90000207070	Tidewater Dr, WWK	5.16	0.58	0.54	45	\$632,938	\$36,733
94	Warwick	90000211723	Center Ct, WWK	13.85	0.06	0.06	6	\$55,759	\$3,236
95	Warwick	90000211817	Overton St, WWK	12.34	0.25	0.22	21	\$201,217	\$11,678
96	Warwick	90000211833	Benefit St, WWK	16.96	0.09	0.08	4	\$109,634	\$6,363
97	Warwick	90000211988	10-67 Jefferson Blvd, WWK	21.21	0.65	0.66	14	\$649,366	\$37,686
98	Warwick	90000212008	956-1251 Narragansett Pkwy, WWK	26.63	1.13	1.37	91	\$1,281,952	\$74,399
99	Warwick	90000212537	Grove Av, WWK	13.50	0.20	0.20	20	\$173,443	\$10,066
100	Warwick	90000212539	Junction St, WWK	33.68	0.07	0.04	5	\$58,603	\$3,401
101	Warwick	90000212599	George St, WWK	15.36	0.51	0.48	36	\$370,489	\$21,501
102	West Warwick	90000210836	Quaker Ln, WWW	14.00	0.07	0.10	4	\$80,797	\$4,689
103	Westerly	90000118525	Spruce St, WLY	23.64	0.54	0.69	60	\$707,456	\$41,057
104	Westerly	90000204638	Ward Av, WLY	10.16	0.78	1.12	50	\$993,878	\$57,680
105	Westerly	90000211237	88 Old Post Rd, WLY	13.67	0.09	0.09	2	\$73,940	\$4,291
106	Woonsocket	90000118510	383-575 Mason St, WSO	8.31	0.80	0.75	53	\$656,974	\$38,128
107	Woonsocket	90000175904	Halsey Rd, WSO	18.56	1.17	1.17	115	\$1,069,980	\$62,097
108	Woonsocket	90000175911	S Main St, WSO	16.17	0.32	0.65	28	\$697,257	\$40,466
109	Woonsocket	90000210929	Ballou St, WSO	27.17	0.54	0.56	51	\$697,137	\$40,459
110	Woonsocket	90000210947	Willow Av, WSO	19.70	0.77	0.93	89	\$834,670	\$48,440
111	Woonsocket	90000211793	Lemay Rd, WSO	15.57	0.19	0.19	21	\$212,431	\$12,328
112	Woonsocket	90000212441	Dana St, WSO	12.06	0.55	0.48	38	\$445,131	\$25,833
113	Variance							\$36,315	\$2,108
114	Total Main Replacement- Leak Prone Pipe							\$67,176,000	\$3,898,581
115	Main Replacement - Large Diameter LPCI Program							\$3,852,000	\$223,552
116	Atwells Avenue						\$4,000,000	\$232,141	
117	Proactive Main Replacement Total							\$75,028,000	\$4,354,275

118	FY22 Depreciation, Return and Taxes associated with FY22 investment	\$6,464,832
119	FY22 Property tax associated with FY22 investment	\$3,990,000
120	Total FY22 revenue requirement associated with FY22 investment	\$10,454,832
121	Total FY22 Investment Plan Spend	\$180,146,000
122	Revenue Requirement Ratio of FY22 Capital Investment	5.80%

Line notes:

113	See note above.	119	Section 3 Attachment 1, Page 24, Line 54, Col (k) (Bates page 192)
114	Sum of Lines 1 through 113	120	Line 118 + Line 119
117	Sum of Lines 114 through 116	121	Section 2, Table 1 (Bates page 76)
118	Section 3 Attachment 1, Page 15, Line 29, Col (a) (Bates page 183)	122	Line 120 ÷ Line 121

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission’s First Set of Data Requests
Issued on January 13, 2021

PUC 1-20

Request:

Was the \$75,028 million for the Proactive Main Replacement the original amount budgeted for the plan as it was submitted to the Division. If not, please identify and itemize the differences between the first and final drafts.

Response:

No. The original amount budgeted for the plan as it was submitted to the Division was \$75,425 million. A description of the changes, by category is listed in the chart below.

Proactive Main Replacement

Category (\$000)	10/2/20 To Division	12/18/20 To Commission	Change
Main Replacement (Proactive) – Leak Prone Pipe	\$66,277	\$67,176	Increase – Allocated PE Stamp costs
Main Replacement (Proactive) – Large Diameter LPCI Program	\$5,148	\$3,852	Decrease – Change in project mix for CI Lining jobs and deferred construction of one job into FY 2023. Increase – Allocated \$2K PE Stamp costs
Atwells Avenue	\$4,000	\$4,000	No Change
Total	\$75,425	\$75,028	

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-21

Request:

Please provide an updated summary table for the Southern RI Gas Expansion Spending Forecast like the table provided in FY 2021 Bates 129.

Response:

Please see Attachment PUC 1-21 for an updated summary table for the Southern RI Gas Expansion project, which now includes the FY 2020 Actuals, FY 2021 Approved Budget, and the FY 2022 – 2025 Forecasts.

PUC 1-20

Southern RI Gas Expansion Spending Forecast

Description	Units	FY 2020 Actual	FY 2021 Approved	FY 2022	FY 2023	FY 2024	FY 2025	Total in FY22 ISR
Main Installation:								
Phase 1	12,625	\$ 40,178,981						\$ 40,178,981
Phase 2	11,050		\$ 38,798,000					\$ 38,798,000
Phase 3	2,950			\$ 14,908,000				\$ 14,908,000
Project Closeout					\$ 600,000	\$ -		\$ 600,000
Subtotal Main Installation	26,625	\$ 40,178,981	\$ 38,798,000	\$ 14,908,000	\$ 600,000	\$ -		\$ 94,484,981
Incremental curb to curb paving*		\$ -	\$ 2,565,000		\$ -	\$ -		\$ 2,565,000
Total Main Installation	26,625	\$ 40,178,981	\$ 41,363,000	\$ 14,908,000	\$ 600,000	\$ -		\$ 97,049,981
*Cost also includes impact of new RIDOT concrete restoration guidelines								
Regulator Station Investment:								
Cranston Take Station Upgrades		\$ 104,902	\$ 175,000	\$ 2,000,000	\$ 3,849,000	\$ 3,849,000	\$ 100,000	\$ 10,077,902
Cowesett Regulator Station Upgrades		\$ 25,553	\$ 175,000	\$ 700,000	\$ 1,500,000	\$ 100,000		\$ 2,500,553
New Regulator Station			\$ 380,000	\$ 250,000	\$ 500,000	\$ 1,500,000	\$ 100,000	\$ 2,730,000
Total - Regulator Station Investment		\$ 130,455	\$ 730,000	\$ 2,950,000	\$ 5,849,000	\$ 5,449,000	\$ 200,000	\$ 15,308,455
Other Upgrades/Investment:								
Reg Station/Launcher -Receiver/Install ROV		\$ 21,975	\$ -	\$ 650,000	\$ 800,000	\$ 10,523,000	\$ 250,000	\$ 12,244,975
MOP Increase from 150 to 200 psi		\$ 2,397,354	\$ 932,000	\$ 930,000	\$ 100,000	\$ -		\$ 4,359,354
				\$ -	\$ -	\$ -		\$ -
Subtotal - Other Investment		\$ 2,419,329	\$ 932,000	\$ 1,580,000	\$ 900,000	\$ 10,523,000	\$ 250,000	\$ 16,604,329
Incremental curb to curb paving		\$ -	\$ 49,000	\$ -	\$ -	\$ -		\$ 49,000
Total - Other Investment		\$ 2,419,329	\$ 981,000	\$ 1,580,000	\$ 900,000	\$ 10,523,000	\$ 250,000	\$ 16,653,329
Subtotal Southern RI Gas Expansion Project								
(Excluding Incremental Curb to Curb Paving)		\$ 42,728,765	\$ 40,460,000	\$ 19,438,000	\$ 7,349,000	\$ 15,972,000	\$ 450,000	\$ 126,397,765
Total Incremental curb to curb paving		\$ -	\$ 2,614,000	\$ -	\$ -	\$ -		\$ 2,614,000
Total Southern RI Gas Expansion Project		\$ 42,728,765	\$ 43,074,000	\$ 19,438,000	\$ 7,349,000	\$ 15,972,000	\$ 450,000	\$ 129,011,765

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
In Re: Gas Infrastructure, Safety, and Reliability Plan FY2022
Responses to the Commission's First Set of Data Requests
Issued on January 13, 2021

PUC 1-22

Request:

On Bates page 165, the Company indicates it will file its FY 2020 tax return in December 2020 and determine if it would be necessary to supplement its filings with a revised revenue requirement. Please provide a status update.

Response:

National Grid USA filed its consolidated Fiscal Year ("FY") 2020 federal income tax return in December 2020. The Company has confirmed that the FY 2020 tax estimates included in the revenue requirement as filed in its FY 2022 Gas Infrastructure, Safety, and Reliability Plan on December 18, 2020 are consistent with the information reported to the IRS in National Grid USA's FY 2020 federal tax return. Therefore, no revision to the FY 2022 revenue requirement is required.

PUC 1-23, page 1

Request:

The Company proposes using one ISR factor applicable to all residential customers in FY 2022.

- a. Up to this point have Residential Non-Heating rate payers been subsidizing Residential Heating ratepayers.
- b. Will this proposal eliminate any subsidization? Please explain.

Response:

- a. The Company does not believe Residential Non-Heating customers have been subsidizing Residential Heating customers through the ISR Factors.

The rate base allocator by which the ISR Plan revenue requirement is allocated to rate classes is determined in a base distribution rate case based on the final approved Allocated Cost of Service Study "ACOSS"). Pursuant to Section 3 of the Company's tariff, RIPUC NG-GAS No. 101, this allocator is then used to allocate each year's ISR revenue requirement in all subsequent ISR filings until the allocator is re-set in the next rate case.¹ The purpose of the ACOSS is to allocate a representative share of the revenue requirement to the Company's rate classes using a reasonable basis to reflect cost causation. Once any allocator that is used for such purposes is determined, small changes can occur within all rate classes. However, the allocator remains a reasonable means by which to allocate costs to rate classes for the purposes of equitable cost recovery. At times, however, a change may be more notable for a specific rate class such that the allocation of costs for recovery no longer aligns with the forecast of sales for that rate class. This is what has occurred for the Residential Non-Heating rate class in the proposed FY 2022 ISR Factors that has not existed in the prior ISR Factors implemented by the Company with the exception of the Residential Non-Heating ISR Factor proposed and approved for FY 2019.² Through the Company's process of evaluating the allocation of the ISR revenue requirement and resulting bill impacts, it reviews whether there is any unexpected results, such as what it has identified with the Residential Non-Heating rate class, and has requested approval for an alternative rate design for the residential ISR Factors to avoid any unintended consequences of inter-class changes that would result in subsidization.

¹ This is because producing an ACOSS is an extremely time and resource-intensive undertaking, making the creation of a new ACOSS for each rate filing non-feasible.

² The PUC approved an identical approach that was proposed by the Company in its FY2019 ISR Plan filed in Docket No. 4781.

PUC 1-23, page 2

- b. The intent of the Company's proposal to combine the Residential Non-Heating and Residential Heating rate classes is not to eliminate a perceived subsidization between the two rate classes, but to mitigate higher bill impacts the Residential Non-Heating customers would experience compared to those of the other rate classes as discussed in the pre-filed direct testimony of Tomi Uyehara. Because the Residential Non-Heating rate class consists of relatively few customers and receives a very small allocation of the ISR revenue requirement (2.55%), its share of ISR Plan revenue requirement is equally relatively small. However, the forecasted sales for the Residential Non-Heating rate class has decreased to reflect the migration of customers to the Residential Heating rate classes (a reduction of approximately 6% of customers and 12% in forecasted sales)³ in one year, which resulting in a disproportionately higher ISR Factor and bill impacts. Therefore, the Company has put forth its proposal for a single residential ISR Factor similar to the proposal in R.I.P.U.C. Docket No. 4781 and will continue to propose a single residential ISR Factor as necessary until the PUC has approved the use of a new rate base allocator.

³ The reduction in customer count is measured from March 2019 to March 2020 and the difference is forecasted sales is determined by comparing Section 4, Attachment 1, page 1, line (2), column (e) of the FY 2021 ISR Plan Filing in R.I.P.U.C. Docket No. 4996 and Section 4, Attachment 1, page 3, line (2), column (e) of the FY 2022 ISR Plan filing in this proceeding.