

August 19, 2021

BY ELECTRONIC MAIL

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

RE: Docket 5099 – FY2022 Gas Infrastructure, Safety, and Reliability Plan Quarterly Update – First Quarter Ending June 30, 2021

Dear Ms. Massaro:

On behalf of National Grid,¹ I have enclosed an electronic version of the Company's fiscal year (FY) 2022 Gas Infrastructure, Safety, and Reliability (ISR) Plan quarterly update for the first quarter ending June 30, 2021.²

Pursuant to the provisions of the approved FY 2018 Gas ISR Plan, the Company committed to providing quarterly updates on the progress of its Gas ISR program to the Rhode Island Public Utilities Commission and the Rhode Island Division of Public Utilities and Carriers.

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: Docket 5099 Service List Leo Wold, Esq. John Bell, Division Al Mancini, Division

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

² Per Commission counsel's update on October 2, 2020, concerning the COVID-19 emergency period, the Company is submitting an electronic version of this filing followed by five (5) hard copies filed with the Clerk within 24 hours of the electronic filing.

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

August 19, 2021
Date

Docket No. 5099- National Grid's FY 2022 Gas Infrastructure, Safety and Reliability (ISR) Plan - Service List 4/1/2021

Name/Address	E-mail Distribution	Phone
Raquel J. Webster, Esq.	raquel.webster@nationalgrid.com;	781-907-2121
National Grid	celia.obrien@nationalgrid.com;	
40 Sylvan Road	Joanne.scanlon@nationalgrid.com;	
Waltham, MA 02451	Jennifer.Hutchinson@nationalgrid.com;	
N. (1. 1.0.1)		
National Grid	Amy.smith@nationalgrid.com;	
Amy Smith	Robert.Gresham@nationalgrid.com;	
Melissa Little	Melissa.Little@nationalgrid.com;	
Lee Gresham	Ann.leary@nationalgrid.com;	
Ryan Scheib	Theresa.Burns@nationalgrid.com;	
	Michael.Pini@nationalgrid.com;	
	Nathan.Kocon@nationalgrid.com;	
	Ryan.Scheib@nationalgrid.com;	
	William.richer@nationalgrid.com;	
Division of Public Utilities & Carriers	Leo.Wold@dpuc.ri.gov;	401-780-2130
Leo Wold, Esq.	Margaret.l.hogan@dpuc.ri.gov;	
	Al.mancini@dpuc.ri.gov;	
	John.bell@dpuc.ri.gov;	
	Linda.george@dpuc.ri.gov;	
	Robert.Bailey@dpuc.ri.gov;	
	dmacrae@riag.ri.gov;	
	MFolcarelli@riag.ri.gov;	
Rod Walter, CEO/President	Rwalker@RWalkerConsultancy.com;	706-244-0894
Rod Walker & Associates	,	
Office of Energy Resources (OER)	Albert.Vitali@doa.ri.gov;	
Albert Vitali, Esq.	Albert, vitania duba.n.gov,	
Dept. of Administration	Nanay Puggalina@dag ri gayı	-
Division of Legal Services	Nancy.Russolino@doa.ri.gov;	-
One Capitol Hill, 4 th Floor	Christopher.Kearns@energy.ri.gov;	-
One Capitol IIII, 4 Floor	Nicholas.Ucci@energy.ri.gov;	

Providence, RI 02908	Carrie.Gill@energy.ri.gov;	
		401 700 2107
File an original & five (5) copies w/:	Luly.massaro@puc.ri.gov;	401-780-2107
Luly E. Massaro, Commission Clerk	Patricia.lucarelli@puc.ri.gov;	
Public Utilities Commission		
89 Jefferson Blvd.	Todd.bianco@puc.ri.gov;	
Warwick RI 02888	Emma.rodvien@puc.ri.gov;	
	Rudolph.S.Falcone@puc.ri.gov;	
	Alan.nault@puc.ri.gov;	
PPL Electric Utilities	rjreybitz@pplweb.com;	
Ronald Reybitz		
Stephen Breininger	skbreininger@pplweb.com;	
Conservation Law Foundation	jcrowley@clf.org;	401-228-1904
James Crowley, Esq.		
Conservation Law Foundation		
235 Promenade St.		
Suite 560, Mailbox 28		
Providence, RI 02908		

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5099 FY 2022 Gas Infrastructure, Safety, and Reliability Plan FY 2022 Quarterly Update First Quarter Ending June 30, 2021 Page 1 of 9

Gas Infrastructure, Safety, and Reliability Plan The Narragansett Electric Company FY 2022 Quarterly Update First Quarter - Ending June 30, 2021

Executive Summary

Fiscal year (FY) 2022 Gas Infrastructure, Safety and Reliability (ISR) first quarter results (Attachment A) reflect that the Company¹ has spent approximately \$34.24 million of an estimated year-to-date (YTD) budget of \$47.93 million, resulting in a first quarter underspending variance of \$14.53 million. This spending does not include the Southern Rhode Island Gas Expansion Project. The first quarter spend includes actual spending of \$11.48 million out of an estimated YTD budget of \$12.49 million for Non-Discretionary work, resulting in a first quarter underspending variance of \$1.01 million. In addition, the first quarter spend includes actual spending of \$22.76 million of an estimated YTD budget of \$35.44 million on Discretionary work, resulting in a first quarter underspending variance of \$12.68 million.

To date, the \$34.24 million of actual spend represents approximately 22 percent of the total FY 2022 annual Gas ISR budget of \$153.81 million (including incremental costs). As of June 30, 2021, the forecasted total year-end spend was \$157.74 million, which was \$3.94 million above the total budget of \$153.81 million (including incremental costs). Forecast increases in the Maintenance category and several Reliability categories are the primary drivers of the projected overspend. The Company anticipates that the overall forecast will decrease in the second quarter of FY 2022. A summary forecast is provided in Attachment A. Additional details supporting this forecast are provided in Attachment B. In the sections below, the Company explains in more detail the primary drivers for spending to-date and the forecast for each category.

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

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5099 FY 2022 Gas Infrastructure, Safety, and Reliability Plan FY 2022 Quarterly Update First Quarter Ending June 30, 2021 Page 2 of 9

FY 2022 Gas ISR first quarter results (Attachment A) reflect that the Company has spent \$4.56 million of an estimated YTD budget of \$5.39 million for the Southern Rhode Island Gas Expansion Project (Gas Expansion Project). This results in a first quarter underspending variance of \$0.83 million. YTD results (Attachment B) reflect that the Company spent approximately \$4.28 million for Construction – Pipeline compared to a YTD budget of \$5.07 million, resulting in a fiscal YTD underspending variance of \$0.79 million. For the Other Upgrades/Investments category, the Company is completing the final leak repairs in preparation for the Maximum Operating Pressure ("MOP") increase from 150 pounds per square inch gauge (psig) to 200 psig of the existing main in Cranston and West Warwick. The pressure increase is scheduled to begin in the second quarter of FY 2022. The Company is also continuing preparation for updates at the existing Cowesett Regulator Station along with planning, engineering, and site planning, for a new regulator station near the existing Cowesett regulator station. The Company forecasts that the Gas Expansion Project category will be underbudget by \$0.06 million at fiscal year-end.

FY 2022 Capital Spending by Category

Non-Discretionary Work²

Public Works Program - \$0.80 million variance over year-to-date budget

Through the first quarter of FY 2022, the Company spent a net of \$7.56 million, net reimbursements, against a projected year-to-date budget of \$6.75 million for the Public Works program, resulting in an overspending variance of \$0.80 million. To date, for FY 2022, the Company has installed 3.3 miles of a plan of 5.0 miles for new gas main and has abandoned

² Non-Discretionary programs include projects that are required by legal, regulatory code, and/or agreement, or are the result of damage or failure, with limited exceptions.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5099 FY 2022 Gas Infrastructure, Safety, and Reliability Plan FY 2022 Quarterly Update First Quarter Ending June 30, 2021 Page 3 of 9

2.3 miles of a plan of 5.0 miles of leak-prone pipe through the Public Works program. The Company forecasts that FY 2022 Reimbursements (credits) will come in \$0.50 million higher than budget. As a result, the Public Works Program category is projected to be underbudget by \$0.50 million at fiscal year-end.

Mandated Programs – \$1.75 million underspending variance to budget year-to-date

Through the first quarter of FY 2022, the Company has spent approximately \$3.92 million of a projected YTD budget of \$5.67 million for Mandated Programs, resulting in an underspending variance of \$1.75 million. Please note that a total of \$0.82 million for Incremental Paving — Patches was allocated to the annual budgets of three Mandated programs. Please see Attachment C for a breakdown of the budget allocations. The primary driver of the underspend in the Mandated category is lower than anticipated costs accumulating in the Reactive Leaks categories (CI Joint Encapsulation/Service Replacement). However, as the Company continues to review FY 2022 work orders, the Company anticipates that charges are likely to increase in these categories. Therefore, the Company is forecasting to be on budget at year end. As of June 30, 2021, the Mandated programs forecasted total year-end spend was \$26.90 million or \$4.70 million more than the budget. The primary driver of the projected overspend is the Maintenance category, which is forecasting to add two main replacement jobs. The first is Reservoir Avenue in Cranston, which is being replaced due to recent leak activity. The second is Oxbow Farms in Middletown, which is continuing development as a main replacement job, but the Company will discuss optionality with the housing development owner prior to construction.

In June 2021, the Company, in collaboration with the Rhode Island Division of Public Utilities and Carriers ("Division"), developed and implemented a plan to continuously improve the Company's tracking of its meter inventory and its purchasing strategies. This was implemented in compliance with Rhode Island Public Utilities Commission ("RIPUC") Order in Docket 5099, National Grid's FY 2022 Gas ISR Plan. The first component is an enhanced process to track

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5099
FY 2022 Gas Infrastructure, Safety, and Reliability Plan
FY 2022 Quarterly Update
First Quarter Ending June 30, 2021
Page 4 of 9

meter inventory. The Company is conducting a manual count of the meter lab inventory each month until the Company has validated that the Maximo system ("system") is accurately capturing inventory data. The Company conducted a physical inventory count on June 10, 2021 to establish the baseline count. The chart below provides a summary of the beginning and ending meter lab inventory counts for the month of June 2021. The Company is currently reviewing any variances between the physical counts and the meter inventory tracked in Maximo and anticipates the variance between the physical count and Maximo will continue to be reduced to a minimal amount. The Company is reviewing and addressing factors that contribute to the variance, including the timing of when inventory is counted and reports are run, and the timing of data cleanup in the Maximo system.

Meter Lab Inventory						
Measure	Physical Count	Maximo	Variance	Variance %		
Beginning Inventory as of 6/10/2021	9,943	10,926	983	9%		
Ending Inventory as of 6/30/2021	9,165	9,988	823	8%		

Damage/Failure Reactive Program - \$0.06 million variance to budget year-to-date

Through the first quarter of FY 2022, the Company spent \$0 of a projected year-to-date budget of \$0.06 million for the Damage/Failure Reactive program, resulting in an underspending variance of \$0.06 million. At this time, the Damage/Failure Reactive program category is forecasted to be on budget at fiscal year-end.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5099 FY 2022 Gas Infrastructure, Safety, and Reliability Plan FY 2022 Quarterly Update First Quarter Ending June 30, 2021 Page 5 of 9

Discretionary Work³

Proactive Main Replacement Program – \$6.97 million underspending variance to budget year-to-date

Through the first quarter of FY 2022, the Company spent approximately \$19.24 million of a projected YTD budget of \$26.21 million for the Proactive Main Replacement programs, resulting in an underspending variance of approximately \$6.97 million. Please note that approximately \$2.84 million for Incremental Paving – Main Installation was allocated to the Leak Prone Pipe annual budget, refer to Attachment C for a breakdown of the budget allocations. To date, for FY 2022 in the Proactive Main Replacement ("MRP") Program, the Company has installed 14.6 miles of new main against a plan of 16.1 miles. Across all ISR programs, the Company has installed a total of 20.1 miles of new main against a plan of 24.9 miles. In Q1 FY 2022, the Company abandoned 14.5 miles in the MRP Program against a plan of 18.0 miles. Across all ISR programs, the Company has abandoned 16.8 miles against an overall plan of 23.0 miles. Of the 16.8 miles abandoned, 15.8 miles were associated with prior year carryover work, meaning the associated new main was installed prior to the beginning of FY 2022. The Company started FY 2022 with 34.4 miles of carryover main to be abandoned in the current fiscal year.

The number of YTD leak prone pipe miles abandoned has been impacted by the availability of internal main connection crews. Along with leak prone pipe abandonments, the Company also prioritized Regulator Station work that was in progress to ensure that work is completed prior to cold weather to minimize risk on the gas system. Additionally, the Company's crew counts continue to be impacted by longer term absences, which have increased since the start of the COVID-19 Pandemic ("Pandemic").

³ Discretionary programs are not required by legal, regulatory code, or agreement, or a result of damage or failure, with limited exceptions.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5099 FY 2022 Gas Infrastructure, Safety, and Reliability Plan FY 2022 Quarterly Update First Quarter Ending June 30, 2021 Page 6 of 9

For the Atwells Avenue Project, the Company is continuing to work in conjunction with the City of Providence on the final restoration of Segments 1A and 1B. The Company is following a construction schedule that includes paving in segments as the City of Providence completes its sidewalk restoration. The Company anticipates that the first segment of paving will begin in August 2021. The Company is assessing the feasibility of completing the main installation for Segment 3 in FY 2022, which may require working into the winter, or whether it should be deferred until FY 2023 and completed in closer alignment with the high volume of associated service and meter work. In terms of the prioritization of overall work in the City of Providence, the Company has been working in close conjunction with Providence Water (replacing pipe) and the City of Providence's Paving Plan (replacing leak prone main ahead of municipal paving) and other projects have been scheduled ahead of Atwells Avenue Segment 3.

Proactive Service Replacement Program – \$0.02 million underspending variance to budget year-to-date

Through the first quarter of FY 2022, the Company spent \$0.15 million of a projected YTD budget of \$0.17 million for the Proactive Service Replacement Program, resulting in an underspending variance of \$0.02 million. The Company is continuing to focus on replacing the copper services located in Cumberland. At this time, the Proactive Service Replacement Program category is forecasted to be overbudget by \$0.21 million at fiscal year-end, due to costs associated with final restoration patching for work completed in FY 2021 and some FY 2022 work.

Reliability Programs – \$5.69 million underspending variance to budget year-to-date

Through the first quarter of FY 2022, the Company spent \$3.38 million of a projected YTD budget of \$9.07 million for Reliability programs, resulting in an underspending variance of \$5.69 million for this category. As of June 30, 2021, the Reliability programs were projected to be overbudget by \$1.92 million at fiscal year-end. There are several drivers of this current

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5099 FY 2022 Gas Infrastructure, Safety, and Reliability Plan FY 2022 Quarterly Update First Quarter Ending June 30, 2021 Page 7 of 9

underspending variance, most of which are due to timing delays for some of the planned work. At a category level, the first driver is project development delays with the Dey Street project within the Heater Installation Program. The Company's FY 2022 budget assumed the project would be constructed during the current fiscal year. However, construction is likely be deferred until FY 2023. The second driver is the availability of crews to complete live gas connections for the projects within the Pressure Regulating Facilities category (along with other Reliability categories). The category is underbudget through Q1 but has four sites in progress and is forecasted to be overbudget at year end, as contractors will be performing work at two stations and the Company will be purchasing long lead time materials needed for FY 2023 construction. The third driver is timing delays associated with the East Providence De-rating (downrating) Project within the Gas System Reliability category. The fourth driver is the I&R Reactive category, which is underbudget through Q1, but is forecast to be overbudget at fiscal year-end. Additional funds will be used to increase the rate of regulator replacements, increase the rate of pilot replacements and replace older style odorant systems. The fifth driver is the LNG category, which is experiencing delays with the Exeter Boiloff Compressor and Emergency Shutdown System ("ESD") System Installation. However, the forecasted underspend on those two elements is offset by higher forecasted costs for the Exeter High Expansion Foam System along with costs related to the existing Old Mill Lane site, which include site enhancements to reduce the noise impact to residential neighbors. Additionally, the Company forecasts that the Tools & Equipment category will be overbudget by \$1.10 million at fiscal year-end as the Company needs to replace certain tools and equipment that are experiencing greater wear and tear due to the type and volume of work being performed by Company crews. The Company is also purchasing certain specialty equipment that will no longer be available to borrow from the Boston Gas Company once the sale of the assets to PPL is complete, such as Kleiss systems, Williamson equipment, and hole hogs.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5099 FY 2022 Gas Infrastructure, Safety, and Reliability Plan FY 2022 Quarterly Update First Quarter Ending June 30, 2021 Page 8 of 9

FY 2022 Southern Rhode Island Gas Expansion Project Spending by Category

Construction

Pipeline – \$0.79 million underspending variance to budget year-to-date

Through the first quarter of FY 2022, the Company spent \$4.28 million of a projected YTD budget of \$5.07 million for the Gas Expansion Project – Main Installation, resulting in an underspending variance of \$0.79 million for this category. Through the first quarter of FY 2022, the Company has now gassed in all the Phase 2 and Phase 3 gas main through South Road and final restoration is well underway in that area. The Company and its Contractor have begun fitting replacements at 15 locations along the project's main installation route and the work is expected to be completed by November 1, 2021. At this time, the Gas Expansion Project – Main Installation category is forecasted to be on budget at fiscal year-end.

Other Upgrades/Investments

Maximum Operating Pressure (MOP) Project, Launcher/Receiver, Installation of Remote Operating Valve (ROV) – \$0.03 million underspending variance to budget year-to-date

Through the first quarter of FY 2022, the Company spent \$0.21 million of a projected YTD budget of \$0.24 million for the Other Upgrades/Investments category, resulting in an underspending variance of \$0.03 million for this category. In preparation for the Maximum Operating Pressure increase, leak repairs are being performed, which are followed by leak surveys. The Company anticipates that the multi-step pressure increase will begin in Q2, and if any additional leaks are found during the pressure increase steps, they will be repaired. Once the line pressure has been increased to 200 pounds per square inch gauge (psig), the spending for this asset category will be placed in-service. At this time, the Other Upgrades/Investments category is projected to be underbudget at fiscal year-end by \$0.06 million, as the forecast was adjusted to align with the current cost estimate for work to be completed in FY 2022.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 5099 FY 2022 Gas Infrastructure, Safety, and Reliability Plan FY 2022 Quarterly Update First Quarter Ending June 30, 2021 Page 9 of 9

Regulator Station Investment

Updates to Cranston Take Station, Cowesett Regulator Station, and New Regulator Station – \$0.06 million underspending variance to budget year-to-date

Through the first quarter of FY 2022, the Company spent \$0.06 million of a projected YTD budget of \$0.08 million for the Regulator Station Investment category, resulting in an underspending variance of \$0.06 million for this category. The Company is continuing preparation for updates at the existing Cowesett Regulator Station along with planning, engineering, and site planning, for a new regulator station near the existing Cowesett regulator station. The FY 2022 forecast also includes costs for procurement of materials in preparation for FY 2023 construction related to the updates at the existing Cowesett Regulator Station. At this time, the Regulator Station Investment category is forecasted to be on budget at fiscal year-end.

Attachment A - Summary

The Narragansett Electric Company d/b/a National Grid - RI Gas Capital Spending by Investment Categories - Summary FY 2022 through June 30, 2021 (\$000)

FYTD FY 2022 - Total

·				112022 10441		
Categories	Budget	Actual	Variance	Budget	Forecast	Variance
NON-DISCRETIONARY						
Public Works ¹	\$6,754	\$7,558	\$804	\$19,202	\$18,703	(\$499)
Mandated Programs	\$5,672	\$3,919	(\$1,753)	\$22,203	\$26,904	\$4,701
		**		****	****	**
Damage / Failure (Reactive)	\$62	\$0	(\$62)	\$250	\$250	\$0
NON-DISCRETIONARY TOTAL	\$12,489	\$11,477	(\$1,011)	\$41,655	\$45,857	\$4,202
DISCRETIONARY						
Proactive Main Replacement	\$26,206	\$19,238	(\$6,967)	\$77,871	\$75,473	(\$2,398)
Proactive Service Replacement	\$168	\$146	(\$22)	\$350	\$559	\$209
Reliability	\$9,066	\$3,376	(\$5,690)	\$33,932	\$35,856	\$1,924
SUBTOTAL DISCRETIONARY (Without Gas Expansion)	\$35,439	\$22,760	(\$12,679)	\$112,153	\$111,888	(\$265)
Southern RI Gas Expansion Project	\$5,390	\$4,556	(\$834)	\$19,438	\$19,378	(\$60)
DISCRETIONARY TOTAL (With Gas Expansion)	\$40,830	\$27,316	(\$13,514)	\$131,591	\$131,266	(\$325)
CAPITAL ISR TOTAL (Base Capital - Without Gas Expansion)	\$47,928	\$34,238	(\$13,691)	\$153,808	\$157,745	\$3,937
CAPITAL ISR TOTAL (With Gas Expansion) Includes incremental paying associated with new RI Paying Law ² and						
PE Stamps	\$53,319	\$38,793	(\$14,525)	\$173,246	\$177,123	\$3,877
Additional Capital Investments (Not currently included in the ISR)	\$880	\$120	(\$760)	\$6,900	\$5,976	(\$924)

^() in Variance column denotes an underspend

 $^{1. \} Public \ Works \ Program \ includes \ reimbursements \ which \ will \ be \ credited \ as \ received \ throughout \ the \ year.$

^{2.} Budgets for Incremental Paving (Main Installation - \$3.019M; Patches - \$0.823M) were allocated to ISR categories that are forecasted to incur the incremental paving costs. See Attachment C - Incremental Paving Budget Allocations.

Attachment B - Breakout

The Narragansett Electric Company d/b/a National Grid - RI Gas Capital Spending by Investment Categories - Detail FY 2022 through June 30, 2021 (\$000)

FYTD FY 2022 - Total Categories Budget Actual Variance Budget Forecast Variance NON-DISCRETIONARY Public Works CSC/Public Works - Non-Reimbursable \$6,742 \$7.507 \$766 \$19,152 \$19,152 \$0 \$1,455 CSC/Public Works - Reimbursable \$364 \$187 (\$177 \$1,455 \$0 CSC/Public Works - Reimbursements \$215 (\$35: (\$136 (\$1,405 (\$1,904 (\$499 Public Works Total \$6,754 \$7,558 \$804 \$19,202 \$18,703 Mandated Programs \$243 \$548 \$304 Corrosion \$1.250 \$1.250 Purchase Meter (Replacement) \$885 \$697 (\$188 \$2,880 \$2,880 \$0 $\textit{Reactiv} \underline{e \ Leaks \ (CI \ Joint \ Encapsulation/Service \ Replacement)}$ \$3,434 \$2,157 (\$1,277 \$12,629 \$12,629 \$0 Service Replacement (Reactive) - Non-Leaks/Other \$524 \$0 \$295 \$2,016 \$2,016 Main Replacement (Reactive) - Maintenance (incl Water Intrusion) \$297 \$4,800 \$172 \$1,188 \$5,988 Low Pressure System Elimination (Proactive) \$125 \$0 \$500 \$500 \$0 Transmission Station Integrity \$164 \$51 (\$113 \$1.740 \$1.641 Mandated Total \$5,672 \$3,919 (\$1,753 \$22,203 \$26,904 \$4,701 Damage / Failure (Reactive) Damage / Failure (Reactive) \$62 \$0 \$250 \$250 \$0 (\$1,011 NON-DISCRETIONARY TOTAL \$12,489 \$11,477 \$45,857 \$4,202 \$41,655 DISCRETIONARY Proactive Main Replacement Main Replacement (Proactive) - Leak Prone Pipe \$23.925 \$18,126 (\$5,799 \$70,019 \$67,572 (\$2,44 Main Replacement (Proactive) - Large Diameter LPCI Program \$1,031 \$3,902 \$1.080 \$50 \$3.852 Atwells Avenue \$1,200 \$81 \$4,000 \$4,000 \$0 Proactive Main Replacement Total (\$6,96 \$26,206 \$19,238 \$77,871 \$75,473 Proactive Service Replacement Proactive Service Replacement Total \$168 \$146 (\$22 \$350 \$559 \$209 Reliability System Automation \$330 \$1,321 \$1,321 \$0 Heater Installation Program \$644 \$77 \$3,557 \$1,313 Pressure Regulating Facilities \$2,985 \$1,060 (\$1,925 \$1,397 \$7,462 \$8.859 Allens Ave Multi Station Rebuild \$240 \$463 \$223 \$2,500 \$2,500 \$0 Take Station Refurbishment \$325 \$70 (\$25! \$1,300 \$2,154 \$854 Valve Installation/Replacement (incl Storm Hardening & Middletown/Newport) \$39 \$0 \$62 \$1.233 \$1.233 Gas System Reliability \$1,006 \$0 \$81 \$3,244 \$3,244 I&R - Reactive \$270 \$1,348 \$1,848 \$500 Distribution Station Over Pressure Protection \$775 \$313 \$462 \$3,301 \$3,752 \$451 LNG\$2,027 \$731 (\$1,29 \$5,738 \$6,110 \$372 Replace Pipe on Bridges \$426 (\$428 \$2,006 \$1,500 (\$50 Access Protection Remediation \$81 \$45 \$310 \$310 \$0 Tools & Equipment \$207 \$191 \$612 \$1,712 \$1,100 Reliability Total \$1,924 \$9.066 \$3,376 \$33,932 \$35.856 SUBTOTAL DISCRETIONARY (Without Gas Expansion) \$35,439 \$22,760 (\$12,679 \$112,153 \$111,888 (\$265 Southern RI Gas Expansion Project Pipeline \$5,069 \$4,284 \$14,908 \$0 (\$78 \$14,908 Other Upgrades/Investments \$240 \$214 \$2,930 \$2,870 Regulator Station Investment \$81 \$57 \$1,600 \$1,600 Southern RI Gas Expansion Project Total (\$834 \$5,390 \$4,556 \$19,438 \$19.378 DISCRETIONARY TOTAL (With Gas Expansion) \$40,830 \$27,316 (\$13,514 \$131,591 \$131,266 (\$32 CAPITAL ISR TOTAL (Base Capital - Without Gas Expansion) \$47,928 \$34,238 (\$13,69) \$153,808 \$157,745 \$3,937 CAPITAL ISR TOTAL (With Gas Expansion) Includes incremental paving associated with new RI Paving Law¹ and PE Stamp \$53,319 \$38,793 \$173,246 \$177,123 \$3,877

LNG - Cumberland Tank Replacement

\$825

\$55

\$114

(\$711

\$4,900

\$3,976

(\$924

Aquidneck Island Long Term Capacity Options

Additional Capital Investments (Not currently included in the ISR)

¹⁾ Budgets for Incremental Paving (Main Installation - \$3.019M; Patches - \$0.823M) were allocated to ISR categories that are forecasted to incur the incremental paving costs. See Attachment C - Incremental Paving Budget Allocations.

Attachment C - Incremental Paving Budget Allocations

The Narragansett Electric Company d/b/a National Grid - RI Gas Incremental Paving Budget Allocations - Detail (\$000)

Incremental Paving Budget	ISR Category	Subcategory	Category Budget	Incremental Paving	1
Incremental Paving -	Main Replacement (Proactive) - Leak	Main Replacement (Proactive) - Leak	isk Approved	Buuget Anocation	Allocation
Main Installation	Prone Pipe	Prone Pipe	\$ 67,176	\$ 2,843	\$ 70,019
Incremental Paving -					
Main Installation	Gas System Reliability	Gas Planning	\$ 3,068	\$ 176	\$ 3,244
		Incremental Paving - Main Installa	\$ 3,019		
Incremental Paving -	Reactive Leaks (CI Joint Encapsulation/				
Patches	Service Replacement)		\$ 11,973	\$ 656	\$ 12,629
Incremental Paving -	Service Replacements (Reactive) -	Service Replacements (Reactive) - Non-			
Patches	Non-Leaks/Other	Leaks/Other	\$ 1,911	\$ 105	\$ 2,016
Incremental Paving -	Main Replacement (Reactive) -				
Patches	Maintenance (incl Water Intrusion)		\$ 1,126	\$ 62	\$ 1,188
		Incremental Paving - Pat	\$ 823		