

August 15, 2019

BY HAND DELIVERY AND ELECTRONIC MAIL

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

**RE: Docket 4916 – FY2020 Gas Infrastructure, Safety, and Reliability Plan
Quarterly Update – First Quarter Ending June 30, 2019**

Dear Ms. Massaro:

On behalf of National Grid,¹ I have enclosed ten copies of the Company's fiscal year (FY) 2020 Gas Infrastructure, Safety, and Reliability (ISR) Plan quarterly update for the first quarter ending June 30, 2019.

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 4916 Service List
Leo Wold, Esq.
John Bell, Division
Al Mancini, Division

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

August 15, 2019
Date

Docket No. 4916 - National Grid's FY 2020 Gas Infrastructure, Safety and Reliability (ISR) Plan - Service List 8/15/2019

| Name/Address | E-mail Distribution | Phone |
|--|---|--------------|
| Raquel J. Webster, Esq. National Grid 280 Melrose St. Providence, RI 02907 | Raquel.webster@nationalgrid.com; | 781-907-2121 |
| | jennifer.hutchinson@nationalgrid.com; | 401-784-7288 |
| | celia.obrien@nationalgrid.com; | |
| | Joanne.scanlon@nationalgrid.com; | |
| Amy Smith William Richer Melissa Little Ann Little Theresa Burns Michael Pini Nathan Kocon | amy.smith@nationalgrid.com; | |
| | William.richer@nationalgrid.com; | |
| | Melissa.Little@nationalgrid.com; | |
| | Ann.leary@nationalgrid.com; | |
| | Theresa.Burns@nationalgrid.com; | |
| | Michael.Pini@nationalgrid.com; | |
| Leo Wold, Esq. Division of Public Utilities and Carriers | Leo.Wold@dpuc.ri.gov; | 401-780-2177 |
| | dmacrae@riag.ri.gov; | |
| | MFolcarelli@riag.ri.gov; | |
| | Al.mancini@dpuc.ri.gov; | |
| | John.bell@dpuc.ri.gov; | |
| | John.spirito@dpuc.ri.gov; | |
| | Jonathan.Schrag@dpuc.ri.gov; | |
| | Ronald.gerwatowski@dpuc.ri.gov; | |
| Kevin.Lynch@dpuc.ri.gov; | | |

| | | |
|---|--|--------------|
| Rod Walter, CEO/President Rod Walker & Associates | Rwalker@RWalkerConsultancy.com ; | 706-244-0894 |
| Office of Energy Resources (OER) Andrew Marcaccio, Esq. Dept. of Administration Division of Legal Services One Capitol Hill, 4 th Floor Providence, RI 02908 | Andrew.marcaccio@doa.ri.gov ; | |
| Christopher Kearns, OER Carrie Gill Nick Ucci | Christopher.Kearns@energy.ri.gov ; Carrie.Gill@energy.ri.gov ; Nicholas.Ucci@energy.ri.gov ; | |
| File an original & nine (9) copies w/: Luly E. Massaro, Commission Clerk Margaret Hogan, Commission Counsel Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02888 | Luly.massaro@puc.ri.gov ; Margaret.hogan@puc.ri.gov ; Cynthia.WilsonFrias@puc.ri.gov ; Sharon.ColbyCamara@puc.ri.gov ; Todd.bianco@puc.ri.gov ; Alan.nault@puc.ri.gov ; | 401-780-2107 |

Gas Infrastructure, Safety, and Reliability Plan

The Narragansett Electric Company

FY 2020 Quarterly Update

First Quarter - Ending June 30, 2019

Executive Summary

Fiscal year (FY) 2020 Gas Infrastructure, Safety, and Reliability (ISR) first quarter results (Attachment A) reflect that the Company¹ (without Southern Rhode Island Gas Expansion Project) has spent approximately \$30.49 million of an estimated year-to-date budget of \$30.62 million, resulting in a first quarter under-spending variance of \$0.14 million. The first quarter spend includes actual spending of \$9.55 million of an estimated year-to-date budget of \$9.35 million for Non-Discretionary work resulting in a first quarter over-spending variance of \$0.20 million. In addition, the first quarter spend includes actual spending of \$20.94 million of an estimated quarterly budget of \$21.28 million on Discretionary work, resulting in a first quarter under-spending variance of \$0.34 million. To date, the \$30.49 million of actual spend represents approximately 26 percent of the total FY 2020 annual Gas ISR budget of \$118.00 million. Total year-end spend is currently forecast to be \$0.22 million below the budgeted total, at \$117.79 million. Projected under-spend for the Mandated and Proactive Main Replacement programs are partially offset by projected over-spend in the Reliability program. A summary level 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).

FY 2020 Gas ISR first quarter results (Attachment A) reflect the Company's Southern Rhode Island Gas Expansion Project (Gas Expansion Project) is behind schedule and spending is below forecast. In total, the first quarter actual spending was \$6.39 million of an estimated year-to-date budget \$10.12 million, resulting in a first quarter under-spending variance of \$3.74 million.

YTD results (Attachment B & C) reflect the Company spent approximately \$6.34 million for Construction – Pipeline compared to a YTD budget of \$9.83 million, resulting in a fiscal YTD under-spending variance of \$3.49 million. The amount of pipe installed is behind schedule, but the \$6.34 million spend is in alignment with the amount of pipe installed. The Main Installation has encountered more ledge than was originally anticipated, which has delayed the pipe installation. The Company and its contractor have taken measures that are anticipated to increase the weekly pipe install rate, though further refinements to workplan may be necessary based on the amount of additional ledge that continues to be encountered through July, though the project is on track to meet the November 1st Project gas-in date. YTD results (Attachment B & C) reflect the Company spent approximately \$0.05 million for Existing Facilities projects compared to a YTD budget of \$0.29 million, resulting in a fiscal YTD under-spending variance of \$0.24 million. The Company anticipates the volume of existing facilities work will increase in July and August and bring the FY schedule and overall spending in closer alignment with the overall forecast.

FY 2020 Capital Spending by Category

Non-Discretionary Work²

Public Works Program – \$0.78 million under-spending variance to budget year-to-date

Through the first quarter of FY 2020, the Company has spent \$3.06 million against a projected year-to-date budget of \$3.84 million for the Public Works program, resulting in an under-spending variance of \$0.78 million. The timing of work and permitting issues in Providence, which will be discussed below, are contributing to this under-spend. To date for FY 2020, the Company has installed 3.5 miles of a plan of 5.5 miles for new gas main and has abandoned 0.63 miles of a plan of 2.6 miles of leak-prone pipe through the Public Works program. At this time, the Public Works Program category is projected to be on-budget at fiscal year-end.

Mandated Programs – \$1.02 million over-spending variance to budget year-to-date

Through the first quarter of FY 2020, the Company has spent approximately \$6.49 million of a projected year-to-date budget of \$5.47 million for Mandated Programs, resulting in an over-spending variance of \$1.02 million. The primary drivers of the over-spend include the Pipeline Integrity Verification Program (IVP), which does not have a budget for FY 2020 but has incurred closeout costs, primarily for work performed in FY 2019 with the invoices paid in FY 2020. The Reactive Leaks category is also driving the over-spend, due in part to costs associated with permanent restoration from previously repaired leaks. The over-spend is also the result of a higher than anticipated amount of concrete road restoration work in Providence, which is

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

typically more expensive than asphalt restoration. The over-spend is partially offset by under-spend in the Corrosion category.

Damage/Failure Reactive Program – \$0.04 million variance to budget year-to-date

Through the first quarter of FY 2020, the Company has spent \$0.00 million of a projected year-to-date budget of \$0.04 million for the Damage/Failure Reactive program, resulting in an under-spending variance of \$0.04 million. At this time, the Damage/Failure Reactive program category is projected to be on-budget at fiscal year-end.

Discretionary Work³

Proactive Main Replacement Program – \$0.73 million over-spending variance to budget year-to-date

Through the first quarter of FY 2020, the Company has spent approximately \$18.78 million of a projected year-to-date budget of \$18.07 million for the Proactive Main Replacement program, resulting in an over-spending variance of approximately \$0.73 million. To date for FY 2020, the Company has installed 16.8 miles of new main against a plan of 17.4 miles and has abandoned 6.6 miles of leak-prone pipe of a plan of 8.7 miles. The Company has accumulated an inventory of main ready for abandonment and is forecasting the completion of the 61 miles of abandonment in FY 2020 (Main Replacement Program 45 miles; System Reinforcement 1 mile; Public Works 14 miles; System Reliability 1 mile).

The Company has been actively working with the City of Providence to resolve a backlog of permanent restoration of temporary patches. The City of Providence is withholding permits, except for Emergency work and for some Mandated and Customer work. Please note that as of

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

the date of this report the Company has eliminated the backlog, except for a small number of patches that have not been completed mostly due to access issues. However, the City of Providence is still not issuing permits for main replacement work. In response, the Company has modified the project sequencing of the FY 2020 Proactive Main Replacement workplan to complete work outside of Providence. The Proactive Main Replacement program is forecasted to be on target for miles of new main installed. The Company will continue to assess the FY 2020 workplan and forecast based on the planned work that receives permits and is able to proceed.

Reliability Programs – \$1.07 million under-spending variance to budget year-to-date

Through the first quarter of FY 2020, the Company has spent \$2.14 million of a projected year-to-date budget of \$3.21 million for Reliability programs, resulting in an under-spending variance of \$1.07 million for this category. There are several drivers of this under-spending variance. The first driver is the Allens Avenue Multi Station Rebuild project, which started construction later than anticipated. The second driver is the Pressure Regulating Facilities projects located in Providence, which are delayed due to the permitting issues. The Company continues to work through and monitor the status of the Providence permitting issue to assess whether a portion of the FY 2020 Pressure Regulating Facilities will need to be delayed until FY 2021. The third driver is in the Gas System Control category, which has an under-spending variance associated with the Metrotek Upgrade program due in part to longer than anticipated installation training times which has impacted timing of work being completed. The purpose of the program is to upgrade 3G equipment on meters before Verizon discontinues 3G service at the end of 2021. The fourth driver is the LNG program spending due to delays associated with vendor contract negotiations and timing of project start dates. At this time, the Reliability programs are expected to over-spend by \$0.27 million at fiscal year-end. There are several drivers of the projected over-spend, including the Gas System Reliability – Gas Planning program and walking in the Wood @ Woodlawn regulator station relation project to the FY 2020 workplan and projected

over-spend associated with Replace Pipe on Bridges program which now includes work on the Goat Island Bridge in Newport. The projected over-spend in those categories is partially offset by the projected under-spend associated with the deferral of a portion of the Heater Program at the Laten Knight Take Station for timing and favorable contractor pricing, along with forecast reductions for several Exeter LNG projects which are experiencing lower engineering costs due to reduced scope and other efficiencies.

FY 2020 Southern Rhode Island Gas Expansion Project Spending by Category

Construction

Pipeline – \$3.49 million under-spending variance to budget year-to-date

The Company issued a Lump Sum contract to Bond Brothers, Inc. (Bond) for constructing all three phases of the Southern Rhode Island Gas Expansion Project (the Project). Phase 1 (12,600-feet) of construction commenced on April 22, 2019. In the first three months, the Company has installed 2,450-feet of 20-inch pipe at a cost of \$6.338 million versus a year-to-date budget of \$9.83 million. At the beginning of the fiscal year, the forecast anticipated having 4,160-feet installed by June 30, 2019 at an approximate cost of \$11.45 million. On June 22, 2019, the Company and Bond implemented a Recovery Plan which expected to have 2,446-feet installed by June 30, 2019; the Recovery Plan will be discussed below.

During the Project design process, which was completed prior to FY 2020, the Company compiled historical documents and performed extensive subsurface investigations to minimize route confrontations. Despite these efforts, and as is typical when working in congested underground roadways, the Company encountered unknown obstructions that required additional work be performed. Specifically, the Project has experienced schedule delays necessary to remove excess bedrock, which exceeded the original project assumptions and is expected to result in a change order for June work, to be billed in July 2019, for approximately \$0.31 million. The Project also encountered unknown water utilities during excavation, resulting in a pipe

alignment shift, though the installation location is still within the Rhode Island Department of Transportation-approved right of way. Because of these delays, the Project is behind schedule and under-spent, as invoiced Project costs are generally in line with phase milestones and footage installed. To bring the Phase 1 schedule back into alignment with the November 1, 2019 gas-in date, Bond has added an additional excavation crew, additional welders, a day crew for test pitting, and a fourth crew for pipe installation. These additional resources will not impact invoiced costs to the Project. However, further revisions to the Recovery Plan in the second quarter of FY 2020 could result in additional change orders which the Company anticipates would be funded by the existing FY 2020 budget.

The \$6.338 million spend is in alignment with the amount of pipe installed, but behind projected year-to-date spending. The Company anticipates the above measures will increase the weekly pipe install rate, bringing the schedule and spending back to plan, and on track to meet the Project gas-in date.

Existing Facilities

Maximum Operating Pressure (MOP) Project - Material Testing of Cranston and West Warwick Line (Cranston Line) to increase MOP from 150 psig to 200 psig – \$0.19 million under-spending variance to budget YTD

Year-to-date, this Project has incurred costs of \$0.05 million, of a YTD budget of \$0.240 million, on project scoping and preparation. Details of the adjustment to Project timing, cost allocation between fiscal years, and pricing agreements with contractors is detailed below.

To maximize the benefit of the Project, which will have an MOP of 200 psig, the pressure of the existing 5.2 miles (27,578 feet) of main making up the Cranston Line must be increased from 150 psig to 200 psig. The purpose of this Project is to perform material verification on the

existing Cranston Line to confirm the line can operate at 200 psig, prior to increasing the MOP to 200 psig. The Project calls for material verification at 43 locations consisting of 26 excavation sites.

The Company's FY 2020 Gas ISR plan in Docket No. 4916 included \$4.537 million of material testing work to be completed in FY 2020. Upon further review of the existing facilities portfolio, the Company has decided to complete the material verification work in FY 2020 as planned and shift the actual pressure increase to FY 2021. This shift does not change the total anticipated cost of \$4.537 million but will likely cause a budget under-spend for this project in FY 2020, pending a FY 2020 reforecast to be performed in Q2 for this project, now that the Company reached final excavation and material verification pricing agreements in July 2019 with two contractors for the volume of work specific to this project.

The remaining FY 2020 budgeted funds, or under-spend, can be used to fund necessary preparation work in two associated categories, Regulator Station Investment projects and a Proposed New Regulator Station, all of which are beneficial to complete in FY 2020 and are part of the same overall "Existing Facilities" portfolio. These two categories are set to begin field work in FY 2021 and FY 2022 and do not have budgeted funding in FY 2020 for the preparation work. Completing this preparation work in FY 2020 will offset their required project budgets in FY 2021 and FY 2022 and those funds can be allocated back to the FY 2021 Cranston Line MOP project budget for the execution of the pressure increase to 200 psig by October 2020 (FY 2021).

To complete the FY 2020 Material Verification MOP Project work, the Company will utilize two contractors, M.S.R. Utility Maintenance Corporation (MSR) for excavation and Massachusetts Material Technologies (MMT) for materials verification testing. The excavation work generally consists of creating 5-foot x 8-foot holes around and 2-feet below the section of pipe being tested. Once a section of pipe is exposed, any protective coating will be removed prior to material verification testing. The material verification work generally consists of strapping test

equipment onto the live pipeline and collecting mechanical and chemical data to confirm the pipe can handle the 200 psig.

The Company forecasts that material verification field work will begin in late July or August 2019, once contractor procurement, permitting, and outreach are completed, and the FY 2020 field work will be completed by the end of October 2019.

Existing Facilities - Project Development

Regulator Station Investment - Upgrades to Existing Pressure Regulating Facilities and Remote Operating Valve Installation– \$0.000 million spending versus TBD fiscal year re-allocation from anticipated MOP Project under-spend

To date, the Company has completed the needs analysis, started the options analysis, and started the conceptual designs to support the opinions analysis. For the remainder of FY 2020, the Company will be performing the following activities: completing the options analysis, project development and starting the design for the Regulator Station Investment – Upgrades to Existing Pressure Regulating Facilities at Cranston Take Station and Cowesett Regulator Station, and Remote Operating Valve Installation. Completion of these activities in FY 2020 has been identified as a requirement to begin construction on existing regulator and take stations in FY 2021. The costs to complete these FY 2020 activities will be funded by the anticipated budget under-spend of the Cranston line MOP Project.

New Regulator Station Installation – \$0.000 million spending versus TBD fiscal year re-allocation from anticipated MOP Project under-spend

For FY 2020, the Company will be performing the following activities for the New Regulator Installation project: the needs analysis, the options analysis, project development, and starting the design process. The Company anticipates starting the FY 2020 portion of this project in late

June or July 2019. The Company will perform these activities in FY 2020 to complete the required work on existing regulator and take stations in FY 2022. The costs to complete these FY 2020 activities will be funded by the anticipated budget under-spend of the Cranston line MOP Project.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety, and Reliability Plan
FY 2020 Quarterly Update
First Quarter Ending June 30, 2019
Page 11 of 13

Attachment A - Summary

The Narragansett Electric Company
d/b/a National Grid - RI Gas
Capital Spending by Investment Categories - Summary
FY 2020 through June 30, 2019
(\$000)

| Investment Categories | FYTD | | | FY20 - Total | | |
|---|-----------------|-----------------|------------------|------------------|------------------|----------------|
| | Budget | Actual | Variance | Budget | Forecast | Variance |
| NON-DISCRETIONARY | | | | | | |
| Public Works* | \$3,839 | \$3,061 | (\$777) | \$16,940 | \$16,940 | \$0 |
| Mandated Programs | \$5,467 | \$6,486 | \$1,018 | \$19,403 | \$19,298 | (\$105) |
| Damage / Failure (Reactive) | \$42 | \$0 | (\$42) | \$250 | \$250 | (\$0) |
| NON-DISCRETIONARY SUB-TOTAL | \$9,348 | \$9,547 | \$200 | \$36,593 | \$36,488 | (\$105) |
| DISCRETIONARY | | | | | | |
| Proactive Main Replacement | \$18,065 | \$18,799 | \$734 | \$62,882 | \$62,498 | (\$384) |
| Reliability Programs | \$3,212 | \$2,139 | (\$1,073) | \$18,528 | \$18,802 | \$274 |
| SUBTOTAL DISCRETIONARY (Without Gas Expansion) | \$21,277 | \$20,938 | (\$339) | \$81,410 | \$81,300 | (\$110) |
| Southern RI Gas Expansion Project | \$10,123 | \$6,385 | (\$3,738) | \$44,459 | \$44,459 | (\$0) |
| DISCRETIONARY TOTAL (With Gas Expansion) | \$31,400 | \$27,324 | (\$4,076) | \$125,870 | \$125,759 | (\$110) |
| GAS ISR TOTAL (Without Gas Expansion) | \$30,625 | \$30,485 | (\$139) | \$118,003 | \$117,788 | (\$215) |
| GAS ISR TOTAL (With Gas Expansion) | \$40,748 | \$36,871 | (\$3,877) | \$162,462 | \$162,247 | (\$215) |

() in Variance column denotes an under-spend

*Public Works Program includes reimbursements which will be credited as received throughout the year.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety, and Reliability Plan
FY 2020 Quarterly Update
First Quarter Ending June 30, 2019
Page 12 of 13

Attachment B - Breakout

The Narragansett Electric Company
d/b/a National Grid - RI Gas
Capital Spending by Investment Categories - Detail
FY 2020 through June 30, 2019
(\$000)

| Investment Categories | FYTD | | | FY20 - Total | | |
|--|-----------------|-----------------|------------------|------------------|------------------|----------------|
| | Budget | Actual | Variance | Budget | Forecast | Variance |
| NON-DISCRETIONARY | | | | | | |
| Public Works | | | | | | |
| CSC/Public Works - Non-Reimbursable | \$3,930 | \$2,762 | (\$1,168) | \$16,940 | \$16,940 | \$0 |
| CSC/Public Works - Reimbursable | \$193 | \$294 | \$101 | \$1,381 | \$1,381 | (\$0) |
| CSC/Public Works - Reimbursements | (\$284) | \$5 | \$290 | (\$1,381) | (\$1,381) | \$1 |
| Public Works Total | \$3,839 | \$3,061 | (\$777) | \$16,940 | \$16,940 | \$0 |
| Mandated Programs | | | | | | |
| Corrosion | \$204 | \$39 | (\$166) | \$1,166 | \$1,166 | (\$0) |
| Purchase Meters (Replacements) | \$1,335 | \$1,425 | \$90 | \$3,400 | \$2,901 | (\$499) |
| Pipeline Integrity IVP (Integrity Verification Program) | \$0 | \$349 | \$349 | \$0 | \$379 | \$379 |
| Reactive Leaks (CI Joint and Service Replacement) | \$3,143 | \$3,638 | \$495 | \$12,104 | \$12,104 | \$0 |
| Service Replacements (Reactive) - Non-Leaks/Other | \$501 | \$585 | \$84 | \$2,063 | \$2,063 | \$0 |
| Main Replacement (Reactive) - Maintenance (incl Water Intrusion) | \$284 | \$433 | \$149 | \$670 | \$670 | (\$0) |
| Other Mandated | \$0 | \$17 | \$17 | \$0 | \$16 | \$16 |
| Mandated Total | \$5,467 | \$6,486 | \$1,018 | \$19,403 | \$19,298 | (\$105) |
| Damage / Failure (Reactive) | | | | | | |
| Damage / Failure Total | \$42 | \$0 | (\$42) | \$250 | \$250 | (\$0) |
| NON-DISCRETIONARY TOTAL | \$9,348 | \$9,547 | \$200 | \$36,593 | \$36,488 | (\$105) |
| DISCRETIONARY | | | | | | |
| Proactive Main Replacement | | | | | | |
| Main Replacement (Proactive) - Leak Prone Pipe | \$17,446 | \$17,763 | \$318 | \$57,184 | \$57,184 | \$0 |
| Main Replacement (Proactive) - Large Diameter LPCI Program | \$420 | \$943 | \$523 | \$4,418 | \$4,034 | (\$384) |
| Atwells Avenue | \$200 | \$93 | (\$107) | \$1,280 | \$1,280 | \$0 |
| Proactive Main Replacement Total | \$18,065 | \$18,799 | \$734 | \$62,882 | \$62,498 | (\$384) |
| Reliability | | | | | | |
| Gas System Control | \$226 | \$69 | (\$157) | \$571 | \$511 | (\$60) |
| System Automation | \$290 | \$269 | (\$21) | \$1,198 | \$1,198 | \$0 |
| Heater Program | \$431 | \$439 | \$7 | \$1,250 | \$453 | (\$796) |
| Pressure Regulating Facilities | \$693 | \$391 | (\$303) | \$4,695 | \$4,830 | \$135 |
| Allens Ave Multi Station Rebuild | \$445 | \$210 | (\$235) | \$4,437 | \$4,437 | (\$0) |
| Take Stations | \$100 | \$5 | (\$95) | \$1,050 | \$1,074 | \$24 |
| Valve Installation/Replacement | \$0 | \$0 | \$0 | \$159 | \$159 | \$0 |
| Gas System Reliability - Gas Planning | \$68 | \$80 | \$12 | \$1,303 | \$1,905 | \$602 |
| I&R - Reactive | \$414 | \$349 | (\$65) | \$1,372 | \$1,372 | (\$1) |
| LNG | \$150 | \$25 | (\$126) | \$1,434 | \$1,360 | (\$74) |
| Replace Pipe on Bridges | \$33 | \$0 | (\$33) | \$200 | \$583 | \$383 |
| Access Protection Remediation | \$47 | \$12 | (\$35) | \$256 | \$256 | \$0 |
| Tools & Equipment | \$313 | \$291 | (\$22) | \$603 | \$663 | \$60 |
| Reliability Total | \$3,212 | \$2,139 | (\$1,073) | \$18,528 | \$18,802 | \$274 |
| SUBTOTAL DISCRETIONARY (Without Gas Expansion) | \$21,277 | \$20,938 | (\$339) | \$81,410 | \$81,300 | (\$110) |
| Southern RI Gas Expansion Project | | | | | | |
| Pipeline | \$9,832 | \$6,338 | (\$3,494) | \$39,922 | \$39,922 | (\$0) |
| Existing Facilities | \$291 | \$47 | (\$244) | \$4,537 | \$4,537 | \$0 |
| Southern RI Gas Expansion Project Total | \$10,123 | \$6,385 | (\$3,738) | \$44,459 | \$44,459 | (\$0) |
| DISCRETIONARY TOTAL (With Gas Expansion) | \$31,400 | \$27,324 | (\$4,076) | \$125,870 | \$125,759 | (\$110) |
| GAS ISR TOTAL (Without Gas Expansion) | \$30,625 | \$30,485 | (\$139) | \$118,003 | \$117,788 | (\$215) |
| GAS ISR TOTAL (With Gas Expansion) | \$40,748 | \$36,871 | (\$3,877) | \$162,462 | \$162,247 | (\$215) |

() in Variance column denotes an under-spend

Attachment C - Gas Expansion Cost Detail

**The Narragansett Electric Company
d/b/a National Grid - RI Gas
Southern Rhode Island Gas Expansion Project - Cost Detail by Category
FY 2020 through June 30, 2019**

Pipeline

| Cost Element | YTD Actuals | YTD Budget | Variance to Budget | Total FY20 Budget |
|---------------------|---------------------------|---------------------------|-----------------------------|----------------------------|
| Internal Labor | \$165,554 | | | |
| Contractors | \$4,292,429 | | | |
| Materials | \$688,771 | | | |
| Other/Overhead | \$1,191,214 | | | |
| Grand Total | <u>\$6,337,968</u> | <u>\$9,832,109</u> | <u>(\$3,494,141)</u> | <u>\$39,922,433</u> |

Existing Facilities

| Cost Element | YTD Actuals | YTD Budget* | Variance to Budget | Total FY20 Budget |
|---------------------|------------------------|-------------------------|---------------------------|---------------------------|
| Internal Labor | \$11,849 | | | |
| Contractors | \$16,482 | | | |
| Materials | - | | | |
| Other/Overhead | \$19,030 | | | |
| Grand Total | <u>\$47,361</u> | <u>\$291,000</u> | <u>(\$243,639)</u> | <u>\$4,537,000</u> |

() in Variance column denotes an under-spend

*Existing Facilities YTD Budget includes anticipated \$51,000 allocation to Regulator Station Investment and New Regulator Station Installation