

July 1, 2019

BY HAND DELIVERY AND ELECTRONIC MAIL

Luly E. Massaro, Division Clerk
Rhode Island Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

**RE: Docket 4916 - FY 2020 Gas Infrastructure, Safety, and Reliability Plan
Southern Rhode Island Gas Expansion Project Costs
90-Day Update to Division**

Dear Ms. Massaro:

Pursuant to the Rhode Island Public Utilities Commission (PUC) Report and Order No. 23521 dated April 11, 2019, I have enclosed five copies of National Grid's first 90-day update of the Southern RI Gas Expansion Project costs in the above-referenced matter. Going forward, the Company will combine the Southern RI Gas Expansion Project update as part of its FY2020 Gas ISR quarterly reports, beginning with the first quarter report that the Company will file on August 15, 2019.

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 the Company).

FY 2020 Gas Infrastructure, Safety, and Reliability Plan

Southern Rhode Island Gas Expansion Project

The Narragansett Electric Company d/b/a National Grid

90-Day Update

Submitted to the Rhode Island Division of Public Utilities and Carriers

July 1, 2019

Executive Summary

In the Narragansett Electric Company d/b/a National Grid's (the Company) Fiscal Year (FY) 2020 Infrastructure, Safety, and Reliability (ISR) Plan filing in Docket No. 4916, the Rhode Island Public Utilities Commission (PUC) Report and Order No. 23521 dated April 11, 2019 ordered that the Company "shall provide the Division of Public Utilities and Carriers (Division) with cost information and data of such sufficient detail to satisfy the Division as to the reasonableness of the cost estimates of the various components of the Southern RI Gas Expansion Project and to update the Division on these costs on a regular basis throughout the project, at no less than ninety-day intervals." This report provides the first 90-day update of the Southern Rhode Island Project costs. Hereafter, the Company will submit the 90-day reports of the Southern Rhode Island Project costs as part of the Company's quarterly reports, beginning with the Company's first quarter report to be submitted by August 15, 2019.

FY 2020 year-to-date (YTD¹) through May, the Southern Rhode Island Gas Expansion Project is behind schedule and spending is below forecast. In total, FY 2020 YTD actual spending was

¹ The year-to-date numbers are from April 1, 2019 through May 31, 2019.

\$4.144 million as compared to the YTD forecast of \$5.622 million and the annual budget of \$44.459 million (*see* Attachment A). This represents a YTD under-spend of \$1.478 million. YTD results (*see* Attachment B) reflect the Company spent approximately \$4.126 million for Construction – Main Installation compared to a YTD forecast of \$5.563 million, resulting in a fiscal YTD under-spending variance of \$1.437 million. The amount of pipe installed is behind schedule, but the \$4.126 million spend is in alignment with the amount of pipe installed. The Company and its contractor have taken measures that are anticipated to increase the weekly pipe install rate, bring the schedule and spending back to plan, and on track to meet the Project gas-in date. YTD results (*see* Attachment B) reflect the Company spent approximately \$0.018 million for Existing Facilities projects compared to a YTD forecast of \$0.059 million, resulting in a fiscal YTD under-spending variance of \$0.041 million. The Company anticipates that the volume of existing facilities work will increase in late June and July and bring the FY schedule and overall spending in closer alignment with the overall forecast.

FY 2020 Southern Rhode Island Gas Expansion Project Spending by Category

Construction

Main Installation – \$1.437 million under-spending variance to fiscal YTD forecast of \$5.563 million

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 two months, the Company has installed 1,000-feet of 20-inch pipe at a cost of \$4.126 million. The project had expected 1,760-feet to be installed by May 31, 2019 at an anticipated cost of approximately \$5.563 million.

During the Project design process, which was completed prior to FY20, 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. 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. The gas-in date is the responsibility of the contractor, and therefore these additional resources do not impact invoiced costs to the Project.

The \$4.126 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 – \$0.041 million under-spending variance to fiscal YTD forecast of \$0.059 million

Year-to-date, this Project has incurred costs of \$0.018 million, of a YTD forecast of \$0.059 million, on project scoping and preparation. Details of the adjustment to Project timing, cost

allocation between fiscal years, and ongoing pricing agreement negotiations 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 underspend for this project in FY20, pending final excavation and material verification pricing agreements with contractors.

The remaining FY 2020 budgeted funds, or underspend, 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 anticipates two contractors will be utilized, one for excavation and one for materials verification testing. The

Company has existing pricing agreements with contractors who can perform this type of work but is actively negotiating pricing agreements specific to this project and its volume of work. 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 underspend

To date, the Company has completed the needs analysis and started the options 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 underspend

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.

Attachment A

**The Narragansett Electric Company
 d/b/a National Grid
 Southern Rhode Island Gas Expansion Project**

Southern Rhode Island Gas Expansion Project – Total Spend

YTD Actuals	YTD Forecast	Variance to Forecast	Total FY20 Budget
\$4,144,090	\$5,622,161	(\$1,478,071)	\$44,459,433

Attachment B

**The Narragansett Electric Company
d/b/a National Grid
Southern Rhode Island Gas Expansion Project**

Southern Rhode Island Gas Expansion Project – Spend by Category

Main Installation

Cost Element	YTD Actuals	YTD Forecast	Variance to Forecast	Total FY20 Budget
Internal Labor	\$92,795			
Contractors	\$2,654,352			
Materials	\$393,414			
Other/Overhead	\$985,149			
Grand Total	<u>\$4,125,710</u>	<u>\$5,563,161</u>	<u>(\$1,437,451)</u>	<u>\$39,922,433</u>

Existing Facilities

Cost Element	YTD Actuals	YTD Forecast	Variance to Forecast	Total FY20 Budget
Internal Labor	\$8,355			
Contractors	-			
Materials	-			
Other/Overhead	\$10,025			
Grand Total	<u>\$18,380</u>	<u>\$59,000</u>	<u>(\$40,620)</u>	<u>\$4,537,000</u>