

February 14, 2018

VIA HAND DELIVERY & ELECTRONIC MAIL

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

**RE: Docket 4678 – FY 2018 Gas Infrastructure, Safety, and Reliability Plan
Quarterly Update – Third Quarter Ending December 31, 2017**

Dear Ms. Massaro:

On behalf of National Grid,¹ I have enclosed 10 copies of National Grid's fiscal year (FY) 2018 Gas Infrastructure, Safety, and Reliability (ISR) Plan quarterly update for the third quarter ending December 31, 2017 in the above-referenced docket.

Pursuant to the provisions of the approved FY 2018 Gas ISR Plan, National Grid committed to providing quarterly updates on the progress of its Gas ISR programs to the Public Utilities Commission and the Division of Public Utilities and Carriers.

Thank you for your attention to this matter. If you have any questions regarding this filing, please contact me at 401-784-7415.

Very truly yours,



Robert J. Humm

Enclosures

cc: Docket 4678 Service List
Leo Wold, Esq.
John Bell, Division
Al Mancini, Division

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

Gas Infrastructure, Safety, and Reliability Plan
The Narragansett Electric Company
FY 2018 Quarterly Update
Third Quarter - Ending December 31, 2017

Executive Summary

Fiscal year (FY) 2018 year-to-date results through the third quarter (*Attachment A*) reflect that the Company¹ spent approximately \$93.06 million of an estimated year to date budget of \$92.45 million, resulting in a third quarter over-spending variance of \$0.61 million. The third quarter year- to-date spend includes actual spending of \$32.51 million for Non-Discretionary work compared to an estimated year-to-date budget of \$29.98 million, resulting in an over-spending variance of \$2.54 million. In addition, the third quarter year-to-date spend includes actual spending of \$60.14 million for Discretionary work compared to an estimated quarterly budget of \$62.04 million, resulting in a third quarter under-spending variance of \$1.90 million. Gas Infrastructure, Safety, and Reliability (ISR) operation and maintenance (O&M) expenses total \$0.40 million compared to a budget of \$0.43 million. To date, the \$93.06 million of actual spend represents approximately 91% of the total FY 2018 annual Gas ISR budget of \$101.76 million. Total year-end spend is currently forecast at \$105.18 million, which results in forecasted over-spend of \$3.42 million. This includes \$1.70 million for Damage/Failure as a result of the unplanned replacement of the Admiral Street at Charles Street Regulator Station in Providence. Excluding Damage/Failure, the remaining over-spend of \$1.72 million represents 1.7% of the approved ISR budget. The primary drivers for the remaining over-spend include forecasted

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

over-spend for the Allens Avenue Regulator Station in Providence and for Pipeline Integrity projects. These projects are partially offset by forecasted under-spend for the Cumberland liquefied natural gas (LNG) tank decommissioning and for the Proactive Main Replacement program (includes the Large Diameter Pipeline Replacement program). In the sections below, the Company explains in more detail the primary drivers for spending to-date and the forecast for each category.

FY 2018 Capital Spending by Category

Non-Discretionary Work²

Public Works Program – \$1.16 million over-spending variance to budget year-to-date

Through the third quarter of FY 2018, the Company spent \$13.07 million of a projected year-to-date budget of \$11.91 million for the Public Works program, resulting in an over-spending variance of \$1.16 million. The key driver for this over-spending is related to timing of reimbursements on billable jobs. To date for FY 2018, the Company has installed 10.8 miles of a planned 11.0 miles for new gas main and has abandoned 7.2 miles of a planned 7.6 miles of leak-prone pipe through the Public Works program. Forecasted abandonments could reach 11.8 miles as compared to the FY 2018 plan of 10 miles of abandonment. With the increase in abandonment miles and the current project mix in the plan, the Company anticipates that the Public Works program will be over-budget by \$0.98 million at fiscal year-end. This over-spend is offset by under-spend in the Proactive Main Replacement program.

² Non-Discretionary programs include those required by legal, regulatory code, and/or agreement, or as a result of damage or failure with limited exceptions.

Mandated Programs – \$2.03 million over-spending variance to budget year-to-date

Through the third quarter of FY 2018, the Company spent approximately \$16.33 million of a projected year-to-date budget of \$14.29 million for Mandated Programs, resulting in an over-spending variance of \$2.03 million. The primary drivers for the over-spend include higher spending on Purchase Meter Replacements and Pipeline Integrity. Purchase Meter Replacement over-spending is due to increased customer meter changes. The primary drivers for higher spending within Pipeline Integrity projects is largely due to cost increases associated with the Laten Knight Road Take Station in Cranston due to large diameter heavy wall pipe welding and hydrostatic testing that was not included in the original budget. Carryover of the Providence River Crossing signage project is also contributing to the spending increase. Weather issues, gas safety coordination, and the need to coordinate with the FY 2018 riser replacements contributed to the carryover of the signage project. In addition, project costs are increasing to address severe corrosion issues identified in the signage structural members along with modifications to the existing foundations to carry additional load from heavier structural members. Leak related capital is tracking slightly ahead of budget, with over-spend in Reactive Cast Iron Joint Encapsulation that is largely offset by under-spend in Reactive Service Replacement Leaks. At this time, the Company projects the Mandated Programs category will be over-budget by \$2.84 million at fiscal year-end, with the primary drivers being Pipeline Integrity and Purchase Meter Replacements.

Damage/Failure Reactive Program – \$1.26 million over-spending variance to budget year-to-date

Through the third quarter of FY 2018, the Company spent \$1.45 million of a projected year-to-date budget of \$0.19 million for the Damage/Failure Reactive program, resulting in an over-spending variance of \$1.26 million. At this time, the Company projects the Damage/Failure Reactive program category will be \$1.70 million over-budget at fiscal year-end. The primary

driver for the projected over-spend is the replacement of the Admiral Street at Charles Street Regulator Station in Providence. This project relates to a cinder block regulator station vault that the Company found had been significantly damaged by a City contractor following a sewer main replacement job. Prior to the initiation of the sewer project, the Company worked closely with the City and the contractor to agree on a Damage Prevention plan. While the Damage Prevention plan was followed, settlement occurred around the vault, which unexpectedly affected the Company's facilities. The replacement of the Admiral at Charles Regulator Station was required for the current heating season. Construction was completed and the new station was operational in November of 2017. The remaining Damage/Failure forecast of \$0.25 million includes funding for two remote operated valves at the Manchester Street Take Station in Providence. The Manchester Street project will install new actuated valves that will provide the Gas Control center with remote shutdown capability. This capability will enable the Company to take action immediately in the event of abnormal operating conditions, which will significantly decrease response time. Additionally, in the event that abnormal operating conditions make the site unsafe for personnel access, the remote shutdown option can still be exercised safely.

Cumberland LNG Decommissioning Project – \$1.92 million under-spending variance to budget year-to-date

Through the third quarter of FY 2018, the Company spent \$1.67 million of a projected year-to-date budget of \$3.59 million for the Cumberland LNG decommissioning project, resulting in an under-spending variance of \$1.92 million. At this time, the Company projects the Cumberland LNG decommissioning project will spend \$2.15 million for FY 2018. The forecasted spending includes all demolition activity and remaining vaporization piping. No additional work will be required, as the Company has determined the site restoration work that was planned for FY 2019 is no longer needed. This forecast results in an under-budget total of \$1.44 million. The spending reduction is due to the contractor bid process, resulting in lower pricing than the amounts that were assumed in the budget. On August 9 and 10, 2017, the Company engaged a

third party to conduct a camera inspection of the tank, which included a mapping of the entire interior surface area of the LNG tank using a high resolution camera. The Company provided forensic analysis procedures to the Division of Public Utilities and Carriers (the Division) in advance of the camera inspection. On September 8, 2017, the Company provided the results of the camera inspection analysis to the Division. Preliminary assessments of the camera inspection did not reveal any definitive surface discontinuities. Demolition commenced on October 10, 2017 and was completed in November 2017. On November 8, 2017, an external forensic inspection was completed. On January 3, 2018, CHI Engineering issued the final forensic analysis report, which the Company subsequently provided to the Division. In addition, the Company met with the Division in May 2017 to review disposition plans associated with a listing of major Cumberland LNG plant components. Disposition methods typically include internal use, scrap, or third party sale. To date, proceeds have been limited to a \$13,000 salvage credit from the demolition contractor, Costello Dismantling Company, Inc. This credit covered items that were not identified to be retained for internal use or for potential sale to a third party. Any proceeds from third party sales will be credited back to customers in future reconciliation filings. The Company will continue to update the Division as additional information becomes available.

Discretionary Work³

Proactive Main Replacement Program – \$3.52 million under-spending variance to budget year-to-date

Through the third quarter of FY 2018, the Company has spent approximately \$47.53 million of a projected year-to-date budget of \$51.04 million for the Proactive Main Replacement program,

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

resulting in an under-spending variance of \$3.52 million. There are a number of factors contributing to the year-to-date under-spend, including the pace of crew ramp-up in the first quarter, concentration of larger diameter work in Providence at the beginning of the construction season, and budget phasing. To date for FY 2018, the Company has installed 43.9 miles of new main against a plan of 42.5 miles and has abandoned 33.4 miles of leak-prone pipe against a plan of 41.1 miles. Forecasted abandonments could reach 49.2 miles as compared to the FY 2018 plan of 50 miles of abandonment. Across all programs, the Company needs to abandon 20 miles in the fourth quarter to achieve the fiscal year 2018 target of 61 miles. The year-to-date under-spend will continue to decline in the fourth quarter as the Company continues to focus on completing abandonments. Weather will be a contributing factor that will influence the Company's ability to meet the abandonment target. The Proactive Main Replacement program is forecast to end the fiscal year at \$2.70 million under budget. In an effort to manage the overall capital portfolio, the Company made the decision to reduce the scope of work in the Large Diameter program. As a result, this program is contributing \$1.18 million to the total under-spend noted above and is expected to end the year with 0.4 of the 1.0 planned abandonment miles. The remaining \$1.52 million is partially offset by increased spending in the Public Works program. Risk around achieving abandonment targets is contributing to the forecasted under-spend.

Proactive Service Replacement Program – \$0.88 million under-spending variance to budget year-to-date

Through the third quarter of FY 2018, the Company spent \$(0.03) million of a projected year-to-date budget of \$0.85 million for the Proactive Service Replacement program, resulting in an under-spending variance of \$0.88 million. The Company and the Division have consulted regarding the risk mitigation benefits of the Proactive Service Replacement program, and have determined that the Proactive Service Replacement program overlapped with other programs in the Gas ISR Plan and should be discontinued. Information that contributed to this decision

included the fact that service leak clusters are considered in the algorithm used to prioritize leak-prone pipe for replacement combined with the Service Replacement (Reactive) – Leaks program that is designed to address any service requiring immediate replacement. The Company had previously completed a program designed to address high pressure bare steel services with inside meter sets. As a result, the Company expects this category will be under spent by \$0.94 million at fiscal year-end.

Reliability Programs – \$2.50 million over-spending variance to budget year-to-date

Through the third quarter of FY 2018, the Company spent \$12.65 million of a projected year-to-date budget of \$10.15 million for Reliability programs, resulting in an over-spending variance of \$2.50 million for this category. The primary drivers of this over-spending variance are related to the Allens Avenue Multi Station Rebuild project, with partial offsets due to under-spending in Pressure Regulation Facilities. Prior year carryover, design changes, and environmental mitigation factors are contributing to higher costs for the Allens Avenue Multi Station Rebuild project that are partially offset by cost reductions associated with the deferral of elements of the FY 2018 work plan along with the deferral of long lead materials purchased for future year construction. Pressure Regulation under-spend is due to deferral of work associated with two regulator stations on Roger Williams Avenue in East Providence, with partial offsets resulting from scope changes at the Dey Street Regulator Station that are contributing to increased spending. The Company has completed one mile of leak-prone pipe abandonment through the Reliability program. At this time, the Company expects that spending for this category will be over-budget by \$2.99 million at the end of the fiscal year, driven by increased costs in the Allens Avenue Multi Station Rebuild project.

FY 2018 O&M Spending

O&M – on budget

In the FY 2018 Gas ISR Plan, the Company agreed to track the incremental O&M expenses associated with the 16 additional personnel required for the acceleration of replacement of leak-prone pipe relating to the Proactive Main and Public Works programs in FY 2018. Through the third quarter of FY 2018, the Company is on budget, having incurred O&M expenses totaling approximately \$0.40 million for the 16 individuals against a year-to-date budget of \$0.43 million. At this time, the Company expects the O&M category will remain on budget at fiscal year-end.

The Narragansett Electric Company
d/b/a National Grid
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FY 2018 Gas Infrastructure, Safety, and Reliability Plan
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Attachment A						
US Gas-Distribution The Narragansett Electric Company d/b/a National Grid - RI Gas Capital Spending by Investment Categories FY 2108 through December 31, 2017 (\$000)						
INVESTMENT CATEGORIES	Budget	FYTD Actual	Variance	Budget	FY18 - Total Forecast	Variance
NON-DISCRETIONARY						
Public Works Program*	\$11,906	\$13,069	\$1,163	\$12,218	\$13,203	\$ 985
Mandated Program	\$14,294	\$16,326	\$2,032	\$18,672	\$21,508	\$2,836
Damage / Failure Reactive	\$187	\$1,446	\$1,259	\$250	\$1,948	\$1,698
Cumberland LNG Decommissioning	\$3,589	\$1,671	(\$1,918)	\$3,589	\$2,146	(\$1,443)
NON-DISCRETIONARY SUB-TOTAL	\$29,977	\$32,513	\$2,536	\$34,729	\$38,805	\$4,076
DISCRETIONARY						
Proactive Main Replacement	\$51,045	\$47,527	(\$3,517)	\$54,106	\$51,410	(\$2,696)
Proactive Service Replacement	\$846	(\$34)	(\$880)	\$900	(\$38)	(\$938)
Reliability Programs	\$10,151	\$12,652	\$2,501	\$11,450	\$14,437	\$2,987
DISCRETIONARY SUB-TOTAL	\$62,042	\$60,145	(\$1,897)	\$66,456	\$65,809	(\$647)
TOTAL CAPITAL INVESTMENT	\$92,019	\$92,658	\$639	\$101,185	\$104,614	\$3,429
O&M	\$429	\$400	(\$29.00)	\$571	\$571	\$0
TOTAL CAPITAL and O&M **	\$92,448	\$93,058	\$610	\$101,756	\$105,185	\$3,429
() denotes under-spend						
* Public Works Program includes reimbursements which will be credited as received throughout the year.						
** FY 2018 impact of change in capital overhead distribution method is under review. No impact to total capital clearing costs, but is expected to result in shifts between program categories.						

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.



Joanne M. Scanlon

February 14, 2018

Date

Docket No. 4678 - National Grid's FY 2018 Gas Infrastructure, Safety and Reliability (ISR) Plan - Service List 1/11/17

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