

February 13, 2019

**VIA HAND DELIVERY & ELECTRONIC MAIL**

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

**RE: Docket 4916 – FY 2020 Gas Infrastructure, Safety and Reliability Plan  
National Grid’s Reply Comments**

Dear Ms. Massaro:

In connection with the above-referenced docket, enclosed please find National Grid’s<sup>1</sup> reply comments to the recommendations of the Division of Public Utilities and Carriers (the Division) set forth in the pre-filed direct testimony of Rod Walker dated February 4, 2019 regarding National Grid’s Fiscal Year (FY) 2020 Gas Infrastructure, Safety, and Reliability (ISR) Plan filing. In these reply comments, National Grid addresses the four recommendations made by the Division in Mr. Walker’s testimony.

**1. Timing of New Software for Asset Risk Management**

The Division recommends that “[t]he Company should accelerate its efforts to install new software that will provide more robust tools to risk rank its natural gas infrastructure especially its leak-prone infrastructure.” Walker Testimony at 12-13. The Division also states that the Company should ensure it is removing the “worst offenders” of its leak-prone pipe. *Id.* at 13.

The Company agrees with the need to identify the “worst offenders” under its leak-prone pipe replacement prioritization program. Consistent with its Distribution Integrity Management Program (DIMP), National Grid prioritizes leak-prone main segments for replacement based upon consideration of, among other things, leak repair history, types of leak, pipe material, surrounding geography, segment length, nearby construction activity, field conditions, customer issues, open leaks, and engineering judgment. On an annual basis, the Company will review a population of leak-prone main segments and generate a DIMP prioritization factor. The population of main segments included in this review will encompass segments with a history of cast iron main breaks, bare steel and coated steel leaks, asset condition field requests, city and state paving projects that will result in a guaranteed street status, and other segments required to balance the portfolio. Any segments of leak-prone pipe excluded from the annual review would not have the necessary leak history to result in a “worst offender” prioritization score.

---

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

As noted by the Division, the Company is planning the implementation of new asset risk management software later in 2019 as part of its Gas Business Enablement Program approved by the Public Utilities Commission in Docket No. 4770. Once implemented, this software will support the generation of prioritization scores of all segments of leak-prone pipe. This system is expected to support the ability to run more frequent prioritization scores, as needed. The Company is not changing prioritization factors and, for the reasons described above, does not expect that the new software will produce a list of high-priority segments that would not be captured under the Company’s current methodology. Gas Business Enablement is a comprehensive business transformational program focused on strengthening and improving the performance of National Grid’s U.S. gas business with regard to managing assets, delivering work, and serving customers. The complexities of the Gas Business Enablement Program are not conducive to accelerating the implementation of the asset risk management software.

## **2. Replacement of Isolated Services**

The Division recommends that the Company include a plan to replace all isolated services within the shortest timeframe possible, beginning with the riskiest services. *See Walker Testimony at 13.* Two years ago, the Company completed a program designed to address proactive high pressure unprotected steel services with inside meter sets. Remaining leak-prone services attached to non-leak prone main are replaced when they develop a leak. Presently, the Company has a list of approximately 700 of these services on its distribution system. At the request of the Division, the Company agrees to re-establish a dedicated Proactive Service Replacement program targeted at replacement of this category of leak-prone services. This program, expected to begin in FY 2021, will prioritize approximately 70 leak-prone services for annual replacement based on an asset risk prioritization algorithm.

## **3. Coordinated Development of Capital Programs to Address Infrastructure**

The Division recommends that the Company coordinate among its different business groups to address the elimination of leak-prone and deteriorating infrastructure together with other areas of the distribution system needing hardening and pressure improvement. *See Walker Testimony at 13.* The Company agrees that it is critical to coordinate internally to ensure the abandonment of leak-prone pipe and system hardening and pressure improvement are aligned. To achieve that result, the Company’s Long-Term Planning and Operations Engineering group reviews all capital projects involving the replacement of existing gas mains to make replacement main sizing recommendations. This requires coordination with groups such as Mains and Service Replacement, Public Works, Gas Distribution Engineering, and Field Operations/Construction. Long-Term Planning and Operations Engineering uses these main sizing opportunities to increase the capacity and reliability of the distribution system, where appropriate. Typical examples include increasing the diameter of mains and upgrading existing low-pressure mains to high pressure. In addition, Long-Term Planning and Operations Engineering reviews opportunities to help facilitate the upgrading of areas identified for main replacement to elevated pressure by generating reliability projects that address mains in the area not targeted for replacement, but that are necessary hydraulically for the upgrade. Furthermore, capital projects specifically designed to improve the capacity and/or reliability of the distribution system as part of the Company’s Reinforcement and Reliability program give priority to the replacement of leak-prone pipe when

determining project scope. Additionally, the Company’s Analytics team provides an annual 10-year retail demand forecast and wholesale customer requirements forecast to a number of different groups within the Company, including Long-Term Planning and Operations Engineering.

**4. Tracking of Unit Costs by Project**

The Division recommends that the Company should “track unit costs by project and produce an annual set of standard unit cost tables showing typical costs by size and material type with sensitivity for projects in congested areas, rural areas, replacement versus new construction, etc.” Walker at 14. The Company estimates its main replacement projects through use of a customized Excel template. The calculation generated by this template is based on project specific attributes, such as region, length (in feet), number of services, and number of main connections per work order. The unit cost factors assigned to each of these attributes are based on historical costs and are adjusted annually, as needed. Each main replacement project is assigned a unique order number, which allows for tracking of actual costs by project. Actual cost variances will occur because the estimates are based on averages, and there is typically variability from job to job. The Company manages the overall Main Replacement program performance to maintain focus on total costs and units. For future Gas ISR Plan filings, the Company agrees to include average unit costs for the Proactive Main Replacement program. The costs will distinguish between urban and rural locations. In addition, the Company will report actual program costs in a similar format as part of the annual reconciliation filings.

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

Very truly yours,



Robert J. Humm

Enclosures

cc: Docket 4916 Service List  
Leo Wold, Esq.  
Al Mancini, Division  
John Bell, Division  
Rod Walker, Division

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 13, 2019

Date

**Docket No. 4916 - National Grid's FY 2020 Gas Infrastructure, Safety and Reliability (ISR) Plan - Service List 2/5/2019**

<b>Name/Address</b>	<b>E-mail Distribution</b>	<b>Phone</b>
Robert Humm, Esq. National Grid 280 Melrose St. Providence, RI 02907	<a href="mailto:robert.humm@nationalgrid.com">robert.humm@nationalgrid.com</a> ;	401-784-7415
	<a href="mailto:celia.obrien@nationalgrid.com">celia.obrien@nationalgrid.com</a> ;	
	<a href="mailto:Joanne.scanlon@nationalgrid.com">Joanne.scanlon@nationalgrid.com</a> ;	
John Currie William Richer Melissa Little Ann Little Theresa Burns Michael Pini	<a href="mailto:John.currie@nationalgrid.com">John.currie@nationalgrid.com</a> ;	
	<a href="mailto:William.richer@nationalgrid.com">William.richer@nationalgrid.com</a> ;	
	<a href="mailto:Melissa.Little@nationalgrid.com">Melissa.Little@nationalgrid.com</a> ;	
	<a href="mailto:Ann.leary@nationalgrid.com">Ann.leary@nationalgrid.com</a> ;	
	<a href="mailto:Theresa.Burns@nationalgrid.com">Theresa.Burns@nationalgrid.com</a> ;	
	<a href="mailto:Michael.Pini@nationalgrid.com">Michael.Pini@nationalgrid.com</a> ;	
Leo Wold, Esq. Division of Public Utilities and Carriers	<a href="mailto:Leo.Wold@dpuc.ri.gov">Leo.Wold@dpuc.ri.gov</a> ;	401-780-2177
	<a href="mailto:dmacrae@riag.ri.gov">dmacrae@riag.ri.gov</a> ;	
	<a href="mailto:MFolcarelli@riag.ri.gov">MFolcarelli@riag.ri.gov</a> ;	
	<a href="mailto:Al.mancini@dpuc.ri.gov">Al.mancini@dpuc.ri.gov</a> ;	
	<a href="mailto:John.bell@dpuc.ri.gov">John.bell@dpuc.ri.gov</a> ;	
	<a href="mailto:John.spirito@dpuc.ri.gov">John.spirito@dpuc.ri.gov</a> ;	
	<a href="mailto:Jonathan.Schrag@dpuc.ri.gov">Jonathan.Schrag@dpuc.ri.gov</a> ;	
	<a href="mailto:Ronald.gerwatowski@dpuc.ri.gov">Ronald.gerwatowski@dpuc.ri.gov</a> ;	
<a href="mailto:Kevin.Lynch@dpuc.ri.gov">Kevin.Lynch@dpuc.ri.gov</a> ;		
Rod Walter, CEO/President Rod Walker & Associates	<a href="mailto:Rwalker@RWalkerConsultancy.com">Rwalker@RWalkerConsultancy.com</a> ;	706-244-0894

<b>Office of Energy Resources (OER)</b> Andrew Marcaccio, Esq. Dept. of Administration Division of Legal Services One Capitol Hill, 4 <sup>th</sup> Floor Providence, RI 02908	<a href="mailto:Andrew.marcaccio@doa.ri.gov">Andrew.marcaccio@doa.ri.gov</a> ;	
Christopher Kearns, OER Carrie Gill Nick Ucci	<a href="mailto:Christopher.Kearns@energy.ri.gov">Christopher.Kearns@energy.ri.gov</a> ;	401-780-2107
	<a href="mailto:Carrie.Gill@energy.ri.gov">Carrie.Gill@energy.ri.gov</a> ;	
	<a href="mailto:Nicholas.Ucci@energy.ri.gov">Nicholas.Ucci@energy.ri.gov</a> ;	
<b>File an original &amp; nine (9) copies w/:</b> Luly E. Massaro, Commission Clerk Margaret Hogan, Commission Counsel Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02888	<a href="mailto:Luly.massaro@puc.ri.gov">Luly.massaro@puc.ri.gov</a> ;	401-780-2107
	<a href="mailto:Margaret.hogan@puc.ri.gov">Margaret.hogan@puc.ri.gov</a> ;	
	<a href="mailto:Cynthia.WilsonFrias@puc.ri.gov">Cynthia.WilsonFrias@puc.ri.gov</a> ;	
	<a href="mailto:Sharon.ColbyCamara@puc.ri.gov">Sharon.ColbyCamara@puc.ri.gov</a> ;	
	<a href="mailto:Todd.bianco@puc.ri.gov">Todd.bianco@puc.ri.gov</a> ;	
	<a href="mailto:Alan.nault@puc.ri.gov">Alan.nault@puc.ri.gov</a> ;	