

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION**

**IN RE: THE NARRAGANSETT ELECTRIC :
COMPANY d/b/a NATIONAL GRID 2017 :
GAS INFRASTRUCTURE, SAFETY, AND : DOCKET NO. 4590
RELIABILITY PLAN :**

REPORT AND ORDER

I. National Grid Filing

On November 24, 2015, The Narragansett Electric Company d/b/a National Grid (National Grid or Company) filed its proposed Gas Infrastructure, Safety, and Reliability Plan (Gas ISR Plan) for FY 2017 pursuant to R.I. Gen. Laws §39-1-27.7.1.¹ The Gas ISR Plan set forth proposals that the Company identified as necessary to enhance the safety and reliability of its natural gas delivery system. The Plan specifically provided for work in a number of areas to upgrade the aging infrastructure. The Company noted that the goal of the Plan was to provide for a safe and reliable system through coordinated and cost-effective work. In support of its Plan, the Company presented the prefiled testimony of David G. Iseler, Melissa A. Little, and Suhila Nouri Nutile.²

Mr. Iseler is the Company's Rhode Island Jurisdictional Lead for all Gas Network Strategy issues including capital investment strategy. In his testimony, he described the

¹ Enacted in May of 2010, R.I. Gen. Laws §39-1-27.7.1 requires, in part, that a gas distribution company consult with the Division of Public Utilities and Carriers (Division) regarding its infrastructure, safety, and reliability spending plan. The plan should address capital spending on utility infrastructure and all other costs related to maintaining safety and reliability that are mutually agreed upon with the Division. That plan must be submitted to the Commission for review and approval.

² The 2017 Gas ISR Plan is comprised of eight parts: Filing Letter; Testimony of Mr. Iseler; Four Sections of the Gas ISR Plan, including Section 1 – Introduction and Summary, Section 2 – Gas Capital Investment Plan, Section 3 – Revenue Requirement, Section 4 – Rate Design and Bill Impacts; Testimony of Ms. Little; and Testimony of Ms. Nutile. Collectively, this was marked as National Grid Exhibit 1 and can be found on the Public Utilities Commission's (PUC or Commission) website at: http://www.ripuc.org/eventsactions/docket/4590-NGrid-Gas-ISR-FY2017_11-24-15.pdf.

proposed Plan, noting it was designed to proactively replace aging leak-prone pipes and services; upgrade the pressure regulating systems; respond to emergency leak situations; and address conflicts related to public works projects.³ He also indicated that the Plan was prepared in consultation with the Division of Public Utilities and Carriers (Division).⁴

In the Plan, National Grid proposed \$86.05 million of capital investments to be included for recovery in the proposed Gas ISR Plan in FY 2017.⁵ The budget was broken down as follows: \$49.63 million for proactive main and service replacement; \$12.56 million for public works programs; \$15.36 million for mandated programs, which included reactive main replacement, pipeline integrity management, capital leak repairs, meter replacements, corrosion, and non-leak other; \$9.25 million for gas system reliability; and \$0.57 million for incremental operation and maintenance expenses related to personnel to support the expansion of the leak-prone pipe replacement program.⁶ Mr. Iseler provided that the Company was suspending the Gas Pilot Expansion Program for one year while it focused on the safety and reliability components of its ISR programs.⁷ Mr. Iseler averred that the Plan fulfills the safety and reliability requirements of the gas distribution system in Rhode Island.⁸

Of the \$113.35 million of total capital investments the Company plans to make, \$86.05 million was included in the FY 2017 Gas ISR recovery mechanism. The remainder, or \$27.88 million, was “for projected growth and allocated spending which is

³ Iseler Test. at 3-4 (Nov. 24, 2015).

⁴ *Id.* at 4.

⁵ *Id.* at 6.

⁶ *Id.* at 6-7.

⁷ *Id.* at 7.

⁸ *Id.* at 7.

not included for recovery in the FY 2017 Gas ISR Plan.”⁹ The value of and need to replace leak-prone mains and services has been well-documented. National Grid forecasts spending \$49.63 million in FY 2017 to replace approximately fifty-four miles of leak-prone pipe and approximately 3,300 service relay, inserts, or tie-ins, 64% of which are expected to be leak-prone.¹⁰

The Public Works category contemplates coordination with municipalities to improve the safety and reliability of the distribution system in conjunction with otherwise unconnected public works projects. The Company noted that, although the chief purpose of such spending is addressing direct conflicts between planned projects and existing gas infrastructure, it fosters coordination with “system improvement work, such as replacement of leak-prone pipe, system reliability upgrades, elimination of redundant main, and regulator station upgrades.”¹¹ Such coordination allows National Grid to save money on repaving costs as well as minimizing disruptions caused by repeated roadwork projects.¹² In FY 2017, the budgeted amount in this category will provide for the replacement of approximately ten miles of leak prone pipe. The proposed budget totals \$12.56 million of spending in this category, \$1.33 million of which is reimbursable.¹³

The Company’s Mandated Programs category comprises seven subcategories. The first of the subcategories is the Reactive Main Replacement Program which consists of emergency main replacements. Because of increased activity in the Company’s Proactive Main Replacement Program, this category has received minimal requests.¹⁴

⁹ National Grid Ex. 1 (Section 2: Gas Capital Investment Plan) at 2.

¹⁰ *Id.* at 3-6.

¹¹ *Id.* at 4.

¹² *Id.* at 4.

¹³ *Id.* at 4-5.

¹⁴ *Id.* at 5.

The second subcategory is the Corrosion Program. It entails cathodically protecting steel-coated underground mains, which extends the service life of the pipe.¹⁵ The third subcategory, the CI Joint Encapsulation Program, provides funding for the leak sealing of cast iron bell joints.¹⁶ The fourth program, the Pipeline Integrity - IMP Program, is a program to develop a plan for testing and replacement of the Company's higher pressure facilities and pipelines.¹⁷ The fifth program, Meter Replacement Program, addresses the capital costs required for the procurement of replacement meters, approximately 8,100 of which the Company plans to replace in FY 2017.¹⁸ The sixth program, the Service Leak Repairs Program, targets leaking gas services.¹⁹ Finally, the Non-leak Other Program encompasses the capital costs for service relocations, meter protection, service abandonments, and installation of curb valves.²⁰ The proposed budget for the entire Mandated Programs category is \$15.36 million.²¹

Gas System Reliability comprises eight programs and has a total budget of \$9.25 million.²² First is the System Automation and Control Program, the purpose of which is to meet federal code requirements aimed at increasing system automation and control. The \$1 million allocated to this program will "provide AC power, telemetry, and/or remote control to approximately 40 sites, including the upgrade of eight regulator stations."²³ The Pressure Regulating Facilities Program, involving facilities designed to control system pressures and maintain continuity of supply, is the second program in the

¹⁵ *Id.* at 5-6.

¹⁶ *Id.* at 6.

¹⁷ *Id.*

¹⁸ *Id.* at 7.

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

²² *Id.* at 8

²³ *Id.* at 8-9.

Reliability category. Its \$1.5 million budget addresses condition-based assessments and work to be performed at certain facilities in FY 2017.²⁴ The third program, the Instrumentation & Regulation Reactive Program, addresses capital project requirements not addressed by the Pressure Regulation Capital budget and has a proposed budget of \$1 million.²⁵ The fourth program, the Gas Planning Program, budgeted at \$1.5 million in FY 2017, identifies projects that support system reliability through standardization, simplification, integration, and new supply sources.²⁶ The fifth program, LNG Facilities -- or liquefied natural gas -- budgeted at \$1.7 million in FY 2017, is intended to upgrade existing LNG facilities in Rhode Island, not including the Providence facility.²⁷ The sixth program, the Valve Installation/Replacement Program, for installing or replacing new valves used to control the flow of gas, will be funded at \$0.2 million²⁸ The Allens Avenue Project is the seventh program. Budgeted at \$1.75 million, it is a multi-year project designed to replace or retire eight existing pressure regulating facilities.²⁹ Finally, the Capital Tools & Equipment Program supports tools and equipment required to support the work contained in the overall ISR Plan.³⁰ Recognizing the need to prioritize limited capital resources, the Company has proposed suspending its one special project, the Gas Expansion Pilot Program.³¹

The Company also proposed \$0.57 million of O&M expense to continue to pay for the sixteen additional employees it hired in FY 2015 and FY 2016 to support its

²⁴ *Id.* at 9.

²⁵ *Id.* at 10,

²⁶ *Id.* at 10-11.

²⁷ *Id.* at 11.

²⁸ *Id.*

²⁹ *Id.* at 11-12.

³⁰ *Id.* at 12.

³¹ *Id.*

increase in the replacement of leak-prone pipe.³² Finally, the Company represented that at its current pace, it is on track to replace all cast iron, wrought iron, and unprotected steel mains, and services within the next twenty years. This replacement will comprise 1,305 miles or 41% of the gas distribution system in Rhode Island.³³

Ms. Little, Lead Specialist for New England Revenue Requirements in the Regulation and Pricing department of National Grid USA Service Company, Inc. (Service Company), described the Company's revenue requirement calculation for FY 2017 based on the Gas ISR Plan. She explained that included in the \$23,656,294 FY 2017 Gas ISR revenue requirement are \$3,234,197 of National Grid's return, taxes, and depreciation expense, \$4,760,871 of FY 2017 property tax expense, and \$571,000 of the operation and maintenance (personnel) expense related to the expansion of the proactive main replacement program.³⁴ The total incremental fiscal year rate adjustment is \$7,486,532.³⁵

Ms. Nutile, Senior Analyst in the New England Pricing group of the Regulation and Pricing department of the Service Company, provided testimony regarding how the rate design was established, how ISR rate factors were calculated, and the resulting customer bill impacts.³⁶ Ms. Nutile noted that the starting point for developing the rate design was the rate base that was approved by the Public Utilities Commission (PUC or Commission) in the Company's last rate case, Docket No. 4323, using the updated rate base allocator from the Amended Settlement Agreement. She described how the Company then compiled forecasted throughput data by rate class and allocated the

³² *Id.* at 13.

³³ *Id.* at 13.

³⁴ Little Test. at 2-3.

³⁵ Section 3: Revenue Requirement at Attachment 1, 1.

³⁶ Nutile Test. at 1-2.

incremental revenue requirement to each rate class based on the rate percentage allocations and the forecasted throughput to develop separate rate class ISR factors on a per therm basis.³⁷ Finally, Ms. Nutile explained that the incremental operation and maintenance expense was allocated to all rate classes based on the total forecasted throughput on a per therm basis.³⁸ Ms. Nutile identified each class's ISR rate factor, which ranged from \$0.0155 to \$0.1321 per therm. She indicated that the ISR factors would become effective April 1, 2016. Ms. Nutile noted that the bill impact for an average residential heating customer using 846 therms would result in an annual rate increase of \$23.59 or 2.1 %.³⁹

II. The Division of Public Utilities and Carriers' Letter

On January 27, 2016, the Division of Public Utilities and Carriers (Division) filed comments in the form of a letter from Leo Wold, Assistant Attorney General.⁴⁰ Mr. Wold explained that the Division had reviewed the proposed \$86.05 million budget and summarized the Division's positions on each of the six Gas ISR Plan categories. The Division supported the Company's proposed \$49.63 million budget for its main replacement program to replace approximately fifty-four miles of leak-prone gas main in FY 2017.⁴¹ Citing its consistent advocacy of the Company taking advantage of coordination with public works projects to reduce gas main installation costs, the Division supported the \$12.56 million proposed spending in this category.⁴² With regard to the Mandated Programs category, the Division expressed concern with possible

³⁷ *Id.* at 2-3.

³⁸ *Id.* at 3.

³⁹ *Id.* at 4.

⁴⁰ Division Letter from Leo Wold, Assistant Attorney General to Luly Massaro (Jan. 25, 2016), [http://www.ripuc.org/eventsactions/docket/4590-DPU-Comments\(1-25-16\).pdf](http://www.ripuc.org/eventsactions/docket/4590-DPU-Comments(1-25-16).pdf).

⁴¹ *Id.* at 2.

⁴² *Id.*

duplicative spending on warning signage for high-pressure pipeline crossings. If replacement pipelines were subsequently installed in a different location, the Division wanted the Company to assure it had avoided unnecessary duplication.⁴³ The Division supported the \$9.25 million budget for the Reliability category subprograms and agreed with the suspension of the gas expansion program.⁴⁴ Finally, the Division noted that natural gas leak trends have accelerated more aggressively than gas main replacements and committed to focusing on a more aggressive unprotected steel gas service replacement program.⁴⁵

In addition to Mr. Wold's comments, the Division filed a memorandum of David Effron, its consultant, on the Company's proposed revenue requirement associated with the 2017 Gas ISR programs. Mr. Effron noted that the Company's December tax filing did not reflect Congress's extension of 50% bonus depreciation through 2017. He provided that treatment of a Net Operating Loss (NOL) was resolved in Dockets 4474 and 4540 and that he had agreed with the Company that at the time of reconciliation, any effects of bonus depreciation and NOLs will be reflected.⁴⁶

III. National Grid's Revised Attachments and Supplemental Testimony

In a letter from Jennifer Brooks Hutchinson dated February 1, 2016, National Grid responded to the Division's concerns about possible duplicative signage expense and the Division's commitment to focus on a more aggressive unprotected steel gas

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.* at 2-3.

⁴⁶ Memorandum of David Effron (January 25, 2016); [http://www.ripuc.org/eventsactions/docket/4590-DPU-Effron\(1-25-16\).pdf](http://www.ripuc.org/eventsactions/docket/4590-DPU-Effron(1-25-16).pdf). Mr. Effron's statement regarding the Commission's decision is inaccurate. The Commission's decision in Docket No. 4573 related only to the Company's failure to recognize NOLs for FY 2012-2014 and FY 2015 and allowed for reconciliation for those years only. The Commission's decision did not provide that a known and measurable expense should not be provided to the Commission until a reconciliation is filed if such expense is available at the time of a hearing.

service replacement program. She represented that the Company has not proposed to replace any of the pipeline crossings noted by the Division in its five-year spending plan. If that changed, she provided, the Company would first consult with the Division. Regarding the natural gas leak trends, she stated that that National Grid is committed to developing a mutually acceptable plan for service replacements in the future.⁴⁷

Hearing

On February 11, 2016, the Commission conducted an Evidentiary Hearing at its offices. National Grid presented Mr. Iseler, Ms. Little, and Ms. Nutile for cross examination. All of the witnesses adopted their prefiled testimony.⁴⁸ Mr. Iseler was questioned about the Company's plans to replace the pipeline crossing under the Providence River. He reiterated Ms. Hutchinson's February 1, 2016 representation that the Company had not proposed such replacement as part of its five-year gas ISR spending forecast. He noted that the magnitude of such a project would take a considerable amount of time for planning, designing, and constructing. He was unable to say whether any new crossing would be in the same location or what technique would be used to lay new pipes.⁴⁹

Ms. Little testified that although the Company knew of the \$1.9 million⁵⁰ deficit in its revenue requirement caused by the Company again being in a NOL position in December 2015, it did not update the revenue requirement. This has always been done as part of a reconciliation filing, she explained.⁵¹ Ms. Little recognized that the Company

⁴⁷ National Grid Letter from Jennifer Brooks Hutchinson to Luly Massaro (Feb. 1 2016); http://www.ripuc.org/eventsactions/docket/4590-NGrid-ReplyComments-DPU_%202-1-16.pdf.

⁴⁸ Hr'g Tr. at 9-17.

⁴⁹ *Id.* at 17-20.

⁵⁰ In response to a post-hearing data request, the Company provided that the additional revenue requirement associated with the NOL position is \$1,930,157.

⁵¹ Hr'g Tr. at 23-24.

has now been in a NOL position for five consecutive years and that this can no longer be considered unusual. She agreed that it would be beneficial to the Commission for the Company to update its financial information when it has actual figures rather than waiting until it files a reconciliation.⁵² She noted that the Company did not intend to seek interest on the \$1.9 million revenue requirement deficit once it filed its reconciliation filing.⁵³

Mr. Iseler answered numerous questions about the different categories of the Plan and associated budgets.⁵⁴ He described the signs on the banks of the Providence River as being approximately twenty by fifty feet in size, with letters about five feet high, warning boaters of the pipeline crossing and not to anchor.⁵⁵ He explained that the pipes are part of the Company's main feeder system and supply gas at a higher pressure between a source and stations to be spread into the Providence area and fed to other parts of the Company's system.⁵⁶

Fred Amaral, Director of Gas Operations - New England, also testified for National Grid about the pipes crossing the Providence River. He noted that the pipes were installed in 1953. When inspected in 1995, the depths measured beneath the surface varied from four to fourteen feet deep.⁵⁷ He stressed that the pipes are a significant part of the feed into the Company's system and the signage is necessary to protect and prevent the pipes from being punctured, which would require shutting down the entire system.⁵⁸

⁵² *Id.* at 25-28.

⁵³ *Id.* at 75.

⁵⁴ *Id.* at 28-75.

⁵⁵ *Id.* at 76-77.

⁵⁶ *Id.* at 80-81.

⁵⁷ *Id.* at 123-124.

⁵⁸ *Id.* at 125-127, 129.

He testified that the \$400,000 requested by the Company was for refurbishment of the existing signs which would entail much more than just maintenance work.⁵⁹

The Division presented Stephen Scialabba, Chief Accountant, and Donald Ledversis, Pipeline Safety Inspector, as a panel. Mr. Scialabba testified that the Division retained David Effron to review the Company's revenue requirement calculation. Mr. Effron was unable to attend the hearing. On his behalf, Mr. Scialabba adopted Mr. Effron's memorandum with one change.⁶⁰

Mr. Ledversis, the gas pipeline inspector for the Division, testified at length about the Division's concern with the sign refurbishment. He said that the pipelines may have to be replaced in the future and if the replacement occurs in a different location, and new signage would be "null and void".⁶¹ He proffered that if the Company were sold, a new owner might require a much deeper pipeline installation, again making the signage "null and void".⁶² He questioned whether the existing signs were in fact insufficient, suggesting that they could continue to serve their purpose even though in disrepair.⁶³ Mr. Ledversis also discussed the leak trends noted in the Division's memorandum. The Company responded to that noting that it had met with the Division and was committed to working toward a mutually agreeable plan, should one be warranted.⁶⁴

⁵⁹ *Id.* at 127-128, 161-162.

⁶⁰ Hr'g at 143-144. Mr. Scialabba testified that "the second sentence that begins, 'Calculations supporting the revenue requirements associated with vegetation management, inspection and maintenance and qualifying capital investment' should be corrected to eliminate "vegetation management" and "inspection and maintenance" should be replaced with "operations and maintenance."

⁶¹ Hr'g at 147.

⁶² *Id.* at 148.

⁶³ *Id.* at 149-150.

⁶⁴ *Id.* at 153-155, 180-181.

Findings

At an Open Meeting held on February 25, 2016, the Commission deliberated on the 2017 Gas ISR Plan and associated budget. The Commission found the expense for the refurbishment of the signs on the bank of the Providence River a necessary expense. Although the Division had questioned the Company's sign replacement expense, the Commission was convinced by the Company that the signs are in disrepair, missing letters and not properly lit. Noting it is critical to address safety matters, the Commission found the expense prudent and necessary.

The Commission also considered whether National Grid should be required to update its ISR filing to reflect known, measurable, and current expenses that impact the Company's revenue requirement. Once again, as in the last four years, the Company is in a NOL position which it now expects to reoccur. In Docket Nos. 4474 and 4573, the Commission addressed the Company's NOL position for the prior four-year period. Recognizing that the Company had been unaware of this position and therefore had not properly reflected its effect on the Company's revenue requirement, the Commission allowed immediate recovery of a \$3.1 million FY2015 revenue requirement deficit and a three-year recovery period for a FY2012-2014 \$3.5 million revenue requirement deficit to spread out the rate impact of these large increases. Although not known at the time the initial filing was made in the current docket on November 24, 2015, as Ms. Little's testimony provided, the Company became aware of the approximate \$1.9 million revenue requirement deficiency when it filed its 2015 tax return in December of 2015. At that time, National Grid should have updated its filing with the Commission to reflect this

known and measurable expense so that the rates set by the Commission would include that current expense.

Allowing for immediate recovery, however, is consistent with the Commission's prior rulings in Docket Nos. 4474 and 4573. Although ratepayers would not be subject to an interest expense associated with the \$1,930,157 million if it was deferred, the Commission determined that what would amount to a zero interest loan should not guide its ratemaking decisions. Further, to allow for recovery now, rather than defer it until the Company files its reconciliation filing, would better match costs with cost causers and ensure intergenerational equity. It would not be prudent to delay recovery, especially when it is unknown what other costs may have to be recovered at that later time. For all of the above reasons, the Commission unanimously approved the motion allowing for immediate recovery of the additional \$1,930,157 million revenue requirement, total revenue requirement of \$25,586,451, and the ISR factors based on customer class set forth in Appendix A.

Accordingly, it is

(22417) ORDERED:


1. The Narragansett Electric Company d/b/a National Grid's proposed FY 2017 Gas Infrastructure, Safety, and Reliability Plan and associated compliance tariffs are hereby approved for usage on and after April 1, 2016.
2. National Grid shall comply with the reporting requirements and all other findings and directives contained in this Report and Order.


EFFECTIVE APRIL 1, 2016 IN WARWICK, RHODE ISLAND PURSUANT
TO AN OPEN MEETING DECISION ON FEBRUARY 25, 2016. WRITTEN ORDER
ISSUED MAY 24, 2016.

PUBLIC UTILITIES COMMISSION




Margaret E. Curran, Chairperson


Paul J. Roberti, Commissioner*


Herbert F. DeSimone, Jr., Commissioner

*Commissioner Roberti concurs with the decision but is unavailable for signature.

NOTICE OF RIGHT OF APPEAL: Pursuant to R.I. Gen. Laws § 39-5-1, any person aggrieved by a decision or order of the PUC may, within seven days from the date of the order, petition the Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision or order.

APPENDIX A

Line No.

FY 2017 Revenue Requirement	Rate Class	Rate Base Allocator (%)	Allocation to Rate Class (\$)	Throughput (dth)	CapEx Factor (therm)	O&M Allocation (therm)	Total ISR Factor (therm)	Uncollectible %	ISR Factor (therm)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
\$23,085,294									
\$1,930,157									
\$25,015,451									
\$571,000									
	Res-NH	3.73%	\$933,329	680,857	\$0.1370	\$0.0014	\$0.1384	3.18%	\$0.1429
	Res-H	61.56%	\$15,399,048	18,618,817	\$0.0827	\$0.0014	\$0.0841	3.18%	\$0.0868
	Small	8.19%	\$2,048,021	2,744,538	\$0.0746	\$0.0014	\$0.0760	3.18%	\$0.0784
	Medium	13.58%	\$3,397,931	6,208,427	\$0.0547	\$0.0014	\$0.0561	3.18%	\$0.0579
	Large LL	6.04%	\$1,510,178	2,976,064	\$0.0507	\$0.0014	\$0.0521	3.18%	\$0.0538
	Large HL	2.35%	\$588,946	1,217,231	\$0.0483	\$0.0014	\$0.0497	3.18%	\$0.0513
	XL-LL	0.77%	\$192,351	1,289,288	\$0.0149	\$0.0014	\$0.0163	3.18%	\$0.0168
	XL-HL	3.78%	\$945,647	6,070,062	\$0.0155	\$0.0014	\$0.0169	3.18%	\$0.0174
	Total	100.00%	\$25,015,451	39,805,284					

- (a) Line 1: Approved Capital Revenue Requirement & Forecasted Annual Property Tax Recovery Mechanism (Section 3, Attachment 1, Page 1, Line 8 + Line 9 filed November 24, 2015)
- (a) Line 2: Revenue requirement due to NOL (Attachment COMM-1-1, Page 1, Line 7, Column (f))
- (a) Line 3: Line 1 + Line 2
- (a) Line 4: Approved O&M (Section 3, Attachment 1, Page 1, Line 1 filed November 24, 2015)
- (c) Docket 4323, RI 2012 Rate Case
- (d) Column (a) Line 3 * Column (c)
- (e) Page 2, Column (m), Line 9
- (f) Column (d) / (Column (e)*10), truncated to 4 decimal places
- (g) Column (a) Line 4 / (Column (e) Line 13 * 10)
- (h) Column (f) + Column (g)
- (i) Docket 4323, RI 2012 Rate Case
- (j) Column (h) / (1- Column (i)), truncated to 4 decimal places