

February 27, 2014

**VIA HAND DELIVERY & ELECTRONIC MAIL**

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02889

**RE: Docket 4474 - National Grid's Proposed FY 2015 Gas Infrastructure, Safety, and Reliability Plan**  
**Responses to PUC Data Requests – Set 2**

Dear Ms. Massaro:

On behalf of National Grid,<sup>1</sup> I have enclosed ten (10) copies of the Company's responses to the Public Utilities Commission's ("PUC") Second Set of Data Requests concerning the above-referenced proceeding.

Thank you for your attention to this transmittal. If you have any questions, please contact me at (401) 784-7667.

Very truly yours,



Thomas R. Teehan

Enclosures

cc: Docket 4474 Service List  
Steve Scialabba  
Leo Wold, Esq.  
James Lanni  
Don Ledversis

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (hereinafter referred to as "National Grid" or the "Company").

Certificate of Service

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

Copies of this filing will be hand delivered to the RI Public Utilities Commission and to the RI Division of Public Utilities and Carriers.

February 27, 2014

Joanne M. Scanlon

**Docket No. 4474 National Grid's FY 2015 Gas Infrastructure, Safety and Reliability Plan - Service List 01/07/14**

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<b>File an original &amp; nine (9) copies w/:</b> Luly E. Massaro, Commission Clerk 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
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PUC 2-1

Request:

Please provide a chart showing the Main Leak rates with a comparison by material. Assuming the chart resembles the one provided in Docket No. 4380, please explain the label, "counting each individual repair as a leak."

Response:

Attachment PUC 2-1 contains a chart showing the RI Main Leak Rates by Material. The statement "counting each individual repair as a leak" indicates that if on a single leak discovery, there are repairs to multiple facilities, or multiple repairs to a single facility in multiple excavations, each of those repairs is counted as a leak.

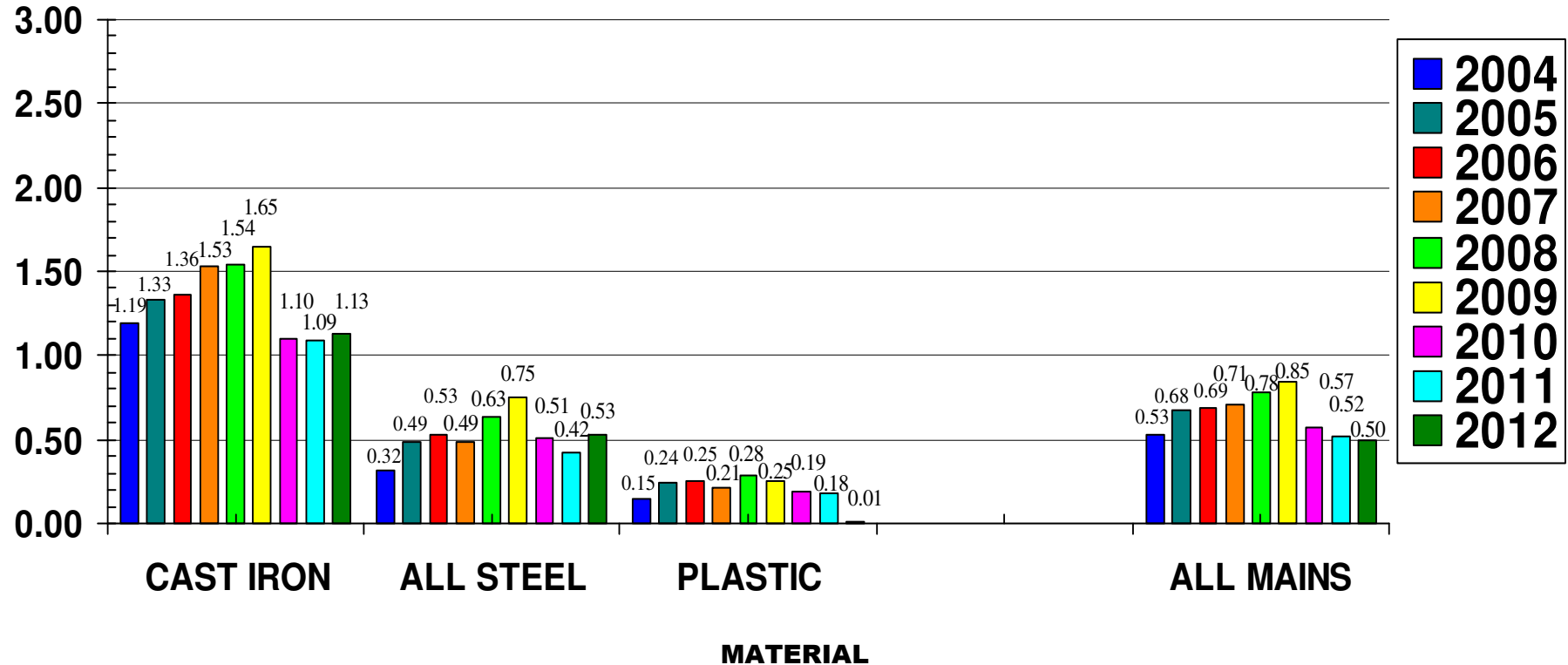
# 2012 SYSTEM INTEGRITY REPORT

# RI

## MAIN LEAK "RATES" COMPARISON BY MATERIAL

### EXCLUDING Damages

**LEAK REPAIRS  
PER MILE OF MAIN**



**COUNTING EACH INDIVIDUAL REPAIR AS A LEAK**

PUC 2-2

Request:

Please provide the lost and unaccounted for gas for the National Grid gas distribution system for the year 2005-2013. Please explain any amounts that may appear as anomalies.

Response:

National Grid reports "Unaccounted For Gas" ("UFG") annually, as required in U.S. Department of Transportation Pipeline and Hazardous Material Safety Administration's ("PHMSA") Annual Report for the Gas Distribution System. Although the report is for the Calendar Year, PHMSA requires that UFG be reported as a percent of total input for the 12 months ending June 30 of the reporting year. Below is the data reported to PHMSA for each year from 2005 to 2012:

2005 – 1.84%  
2006 – 2.83%  
2007 – 2.63%  
2008 – 2.26%  
2009 – 2.5%\*  
2010 – 1.8%  
2011 – 2.7%  
2012 – 2.4%

\* 2009 UFG percentage reported to PHMSA originally was 5.72%, which was incorrect. A supplemental report was filed to PHMSA with the corrected percentage of 2.5%.

PUC 2-3

Request:

Is there an industry standard for lost and unaccounted for gas? If so, what is it?

Response:

As stated in the Company's response to PUC 2-2, the industry standard calculates the total lost and unaccounted for gas for the Pipeline and Hazardous Materials Safety Administration ("PHMSA") Gas Distribution Annual Report form. The form requests that unaccounted for gas be calculated as a percent of total input for the 12 months ending June 30 of the reporting year. The calculation takes total system gas input, less combined customer and Company use, less any appropriate adjustments as allowed by PHMSA, divided by the total gas system input each year.

PUC 2-4

Request:

The Company proposes to increase the number of miles of leak-prone pipe abandoned by seven miles. What does it mean to abandon the pipe and what is the process?

Response:

Abandoned pipe is existing natural gas pipe that is physically disconnected from all sources and supplies of gas, purged of gas, and sealed at the ends, except that the pipe need not be purged when the volume of gas is so small that there is no potential hazard. Once separated from all sources and supplies of gas, the pipe is abandoned in place.

The process is as follows:

Gas Control is notified prior to shutting down any gas pipe. An approved stopping method is used to stop the flow of gas into the gas pipe to be abandoned. A section of pipe between the source gas pipe and the gas pipe to be abandoned is cut out and removed. All open ends are capped, plugged, or otherwise effectively sealed. The retired pipes are purged of gas according to Company procedures. All historical information (i.e., Company records) is updated to indicate that the retired gas pipe has been abandoned.

PUC 2-5

Request:

The 2015 ISR budget includes \$400,000 to hire, train and supervise additional FTEs to support an increase in Main Replacement work for FY 2015.

- a. Please indicate the number of FTEs to be hired and the breakdown of the \$400,000.
- b. Please provide job descriptions.
- c. Please explain when these individuals will be fully trained to begin work.
- d. Are these people being hired for a single year or on a permanent basis?
- e. Are any similar positions paid for through base distribution rates?

Response:

- a. The Company would hire an additional 11 Meter Service Technicians ("MST") to support the increased workload summarized in the FY2015 Gas ISR proposal. The addition of these 11 MSTs will bring the average daily total number of MSTs working on main replacement in Rhode Island to 28. The incremental \$400,000 needed for these 11 hires was based upon the following data and factors:
  - Increasing the Proactive Main Replacement Program to 53 miles (an increase of 3 miles as compared to FY2014)
  - Increasing the Public Works Main Replacement Program to 7 miles (an increase of 4 miles as compared to FY2014)
  - 50% cast iron main replacement as compared to 40% in FY2014
  - 20% Overtime estimate per FTE
  - Cost per FTE = \$100,000
  - Total FTE Cost = \$1,100,000 (11 x \$100,000)
  - CapEx/OpExSplit Factors = 65%/35%
  - CapEx = \$715,000; OpEx = \$385,000
- b. The MSTs hired would perform the work described above. The requirements of the job are as follows:
  - Perform Emergency Response (i.e., Gas leaks, CO, No Gas)
  - Perform Leak Investigation



PUC 2-5, page 2

- Perform Turn On & Off
- Perform Change/Remove/Set Meter
- Perform Residential and Commercial Fitting work & associated regulator work
- Investigate metering conditions
- Wires down
- Perform field training as directed by the Company
- Perform all duties of lower classifications

The incremental hires for main replacement projects will be assigned daily to pipe fitting work such as building headers, setting meters, and lighting appliances.

- c. In general, a new MST completes nine months of training before performing work independently.
- d. The 11 MSTs will be hired on a permanent basis.
- e. These positions are incremental and are not included in distribution rates. As the Company stated in Record Request No. 1 in Docket No. 4380, to accelerate its Leak Prone Pipe replacement plan to 20 years, which the Company proposes in the FY 2015 Gas ISR Plan, “the Company will incur incremental Operations and Maintenance (“O&M”) costs associated with the hiring and training of Company personnel outside of construction season.” (Record Request No. 1 at 2). Moreover, this \$400,000 of O&M expense will be tracked and reconciled to the actual O&M expense associated with these new hires. (FY 2015 Gas IRS Plan at 10).

PUC 2-6

Request:

Please indicate who owns the gas services - Company or customer.

Response:

The Company owns the gas service line, and associated appurtenances (e.g. meter, gas regulator, fittings, and valves), up to the outlet of the meter.

The customer's ownership and responsibility for gas piping and equipment is set forth in the Company's tariff. RIPUC NG-Gas No. 101, Schedule A, Sheet 7 states that:

All piping, equipment and apparatus on the premises of the customer, excepting meters, underground service pipe, and governors, shall be furnished and put in place by the customer, and shall conform to the requirements and regulations of the Company, and the Company shall not be required to supply gas unless such piping, equipment and apparatus at all times conform to the requirements and regulations of the State, City, and Town ordinances and laws and policies of the Company. The Company shall be under no obligation to make any inspection to ascertain whether the foregoing condition has been conformed with and shall be under no liability for any damages occasioned by any defect in such piping, equipment or apparatus or other property on the premises.

PUC 2-7

Request:

For each category of mandated programs, please explain how much will be completed in FY 2015 (i.e, number or length).

Response:

For each category of mandated programs, the Company will complete the following quantities of work during FY2015:

**Corrosion Program**

As part of this program, the Company plans to:

- install cathodic protection to ten (10) miles of existing coated, steel main
- install main-line insulators at ten (10) locations
- install one hundred fifty seven (157) new test stations throughout the distribution system
- install five (5) new test stations with anodes at control lines at two existing gas regulator stations

**Meter Replacement Program**

The Company plans to procure 7,461 new meters for this program.

**Capital Leak Repairs Program**

The Company plans to replace 1,200 existing gas services and encapsulate 600 existing cast iron joints due to leaks as part of this program.

**Non-Leak Other Program**

The units of work that the Company plans to perform in this category include:

- Service Relocations: 68 existing gas services
- Meter Protection: 375 existing locations
- Service Abandonments: 158 gas services
- Curb Valve Installations: 51 new gas service valves

PUC 2-8

Request:

Of the 200 gas pressure regulator stations, how many have full system telemetry and control capability?

Response:

In Rhode Island, there are 54 regulator/take stations with full telemetry and remote control capability.

PUC 2-9

Request:

There are a number of Regulator Replacements scheduled at a cost of \$350,000 each. How was the cost determined? What is included in this cost?

Response:

The \$350,000 cost estimate is used for budgetary purposes for proposed gas regulator station replacements. Once a specific gas regulator station is sited and designed, a more detailed engineering cost estimate is developed based upon actual location and conditions. As shown in the chart below, the \$350,000 cost estimate is based on historical costs for typical gas regulator station replacements and includes costs associated with materials, contractor labor, internal labor, traffic control, and restoration. The Company then assigns a 25% overhead factor to reach a final estimated cost.

Materials	\$150,000
Contractor labor	\$100,000
Internal labor	\$10,000
Traffic control	\$10,000
<u>Restoration</u>	<u>\$10,000</u>
Subtotal	\$280,000
<u>25% Overheads</u>	<u>\$70,000</u>
Total	\$350,000

PUC 2-10

Request:

What does it mean that Allens Ave is scheduled for a Regulator Replacement and Abandonment?  
What is being abandoned?

Response:

To improve the safety and reliability of the Allens Avenue, Providence gas regulator station, the Company has proposed to:

- Consolidate the existing seven pressure regulating facilities into two new stations.
  - As part of the consolidation work, the existing stations (as well as a significant amount of existing gas piping) will be abandoned once the new stations, and associated new gas piping, are installed and operational.
- Eliminate the existing gas piping that feeds Compressor Building No. 2.

This project will occur in multiple phases. Phase one, scheduled for FY 2015, includes engineering, design, permitting, and material procurement. The existing gas piping, which feeds Compressor Building No. 2, will also be eliminated. Phase two, which is currently scheduled for FY 2016, will include construction associated with consolidating the existing seven gas regulating facilities to two. The total cost of the project is estimated to be \$5 million, with \$1 million estimated for FY 2014.

PUC 2-11

Request:

How many more curb valve installations will the Company do in FY 2015 than in FY 2014?  
What is the total number of curb valve installations the Company is planning for FY 2015?  
What is the criteria for determining the geographic location of the installations (i.e., is there a cycle, is it related to other work, etc.)?

Response:

Please see the Company's response to PUC 2-7, which states that the Company is planning to install 51 curb valves on existing gas services during FY2015. The 51 curb valves scheduled for FY2015 are 25 more than the Company is expected to install during FY2014.

The criteria used to determine whether the Company installs a curb valve at a particular location includes:

- Identified safety issue at the property
- Collections activity due to payment history and amount due to Company
- Regulatory Request

PUC 2-12

Request:

Please provide the citation to R.I.G.L. § 39-1-27.7.1 that uses economic development as a criteria for ISR Plans.

Response:

While the revenue Decoupling statute R.I.G.L. § 39-1-27.7.1 does not specifically cite economic development as a criteria for an ISR Plan, nothing in the statute limits the authority of the Rhode Island Public Utilities Commission's ("PUC") to consider and include economic development or other public policy goals as part of its review of an ISR Plan. Accordingly, the PUC specifically considered and recognized additional public policy benefits in its Report and Order in Docket No. 4380 approving the Company's FY 2014 Gas ISR Plan. In approving the Gas Expansion program, which was part of the FY 2014 Gas ISR Plan, the PUC found that "[T]he Company's Gas Expansion Program is a timely, progressive and appropriate policy that will allow more Rhode Islanders access to the environmental and economic benefits of natural gas service." Order No. 21030 at 15 (April 1, 2013).



PUC 2-13

Request:

Please provide costs related to police details required as part of completing work under the ISR Plans for the last three fiscal years. Please break these costs down by category of work.

Response:

Please see Attachment PUC 2-13 that includes the available police detail costs by category for the last three fiscal years.

**Fiscal Year 11**

Category	Expense Type	Expense Type Descr	Total
System Reinforcement	112	Police - Sheriffs-Summons	\$5,172
City State Construction Non Reimbursable	112	Police - Sheriffs-Summons	\$25,782
City State Construction Reimbursable	112	Police - Sheriffs-Summons	\$31,335
Main Replacement Proactive	112	Police - Sheriffs-Summons	\$142,437
Main Relay Reactive Maintenance	112	Police - Sheriffs-Summons	\$13,645
Main Relay Reactive Joint Leaks	112	Police - Sheriffs-Summons	\$14,686
Srvce Replace Reactive Non Leak	112	Police - Sheriffs-Summons	\$15,696
Service Replacements Proactive	112	Police - Sheriffs-Summons	\$17,553
Service Replacements Leaks	112	Police - Sheriffs-Summons	\$88,803
I&R Reactive Programs	112	Police - Sheriffs-Summons	\$1,945
Gas Planning	112	Police - Sheriffs-Summons	<u>\$5,812</u>
<b>Total</b>			<b>\$362,865</b>

Note: Total does not include police detail costs that were included in Contractor bills for FY11.

**Fiscal Year 12**

Category	Expense Type	Expense Type Descr	Total
System Reinforcement	112	Police - Sheriffs-Summons	\$9,271
City State Construction Non Reimbursable	112	Police - Sheriffs-Summons	\$53,880
City State Construction Reimbursable	112	Police - Sheriffs-Summons	\$271,201
Main Replacement Proactive	112	Police - Sheriffs-Summons	\$1,237,844
Main Relay Reactive Maintenance	112	Police - Sheriffs-Summons	\$18,663
Main Relay Reactive Joint Leaks	112	Police - Sheriffs-Summons	\$241,086
Srvce Replace Reactive Non Leak	112	Police - Sheriffs-Summons	\$137,114
Service Replacements Proactive	112	Police - Sheriffs-Summons	\$168,167
Service Replacements Leaks	112	Police - Sheriffs-Summons	\$777,102
Meter Changes	112	Police - Sheriffs-Summons	\$356
I&R Reactive Programs	112	Police - Sheriffs-Summons	\$7,421
Water Intrusion	112	Police - Sheriffs-Summons	\$37,612
Pressure Regulating Facility	112	Police - Sheriffs-Summons	\$13,638
Valve Install Repair	112	Police - Sheriffs-Summons	\$7,316
Gas Planning	112	Police - Sheriffs-Summons	\$35,052
System Automation	112	Police - Sheriffs-Summons	<u>\$2,244</u>
<b>Total</b>			<b>\$3,017,965</b>

**Fiscal Year 13**

Category	Expense Type / Cost Elem	Expense Type Descr	Total
City State Construction Non Reimbursable	112 / C6305320	Police - Sheriffs-Summons	\$61,665
City State Construction Reimbursable	112 / C6305320	Police - Sheriffs-Summons	\$28,209
Main Replacement Proactive	112 / C6305320	Police - Sheriffs-Summons	\$347,999
Main Relay Reactive Maintenance	112 / C6305320	Police - Sheriffs-Summons	\$14,040
Main Relay Reactive Joint Leaks	112 / C6305320	Police - Sheriffs-Summons	\$106,104
Srvce Replace Reactive Non Leak	112 / C6305320	Police - Sheriffs-Summons	\$125,112
Service Replacements Proactive	112 / C6305320	Police - Sheriffs-Summons	\$206,107
Service Replacements Leaks	112 / C6305320	Police - Sheriffs-Summons	\$287,604
I&R Reactive Programs	112 / C6305320	Police - Sheriffs-Summons	\$4,110
Pressure Regulating Facility	112 / C6305320	Police - Sheriffs-Summons	\$1,086
Gas Planning	112 / C6305320	Police - Sheriffs-Summons	\$1,322
System Automation	112 / C6305320	Police - Sheriffs-Summons	\$298
Purchase Capital Equipment and Tools	112 / C6305320	Police - Sheriffs-Summons	\$1,504
<b>Total</b>			<b>\$1,185,160</b>

The Narragansett Electric Company  
d/b/a National Grid  
R.I.P.U.C. Docket No. 4474  
FY2015 Proposed Gas ISR Plan  
Responses to the Public Utilities Commission's Second Set of Data Requests  
Issued February 6, 2014

PUC 2-14

Request:

Please provide a chart that details the targeted amount that the Company was to replace and the actual amount replaced for each for each category for FY 2010 through FY 2014.

Response:

The table below summarizes the proposed and actual amounts (and associated spend) for the Proactive Main and Proactive Service Replacement Programs from FY10 through FY14:

Description	FY10	FY11	FY12	FY13	FY14 <sup>1</sup>
Proactive Main Replacement (Proposed Miles)	26	40	45	50	50
Proactive Main Replacement (Actual Miles)	31	38.6	45.9	45.9	n/a
Proposed Spend (\$M)	\$19.7	\$22.8	\$25.8	\$33.4	\$33.4
Actual Spend (\$M)	\$18.7	\$23.8	\$26.0	\$32.1	n/a
Proactive Service Replacement (Proposed units)	2,100	2,125	2,125	2,125	1,100
Proactive Service Replacement (Actual units)	1,967	2,182	1,179	1,095	n/a
Proposed Spend (\$M)	\$6.9	\$3.9	\$3.9	\$3.9	\$3.1
Actual Spend (\$M)	\$3.4	\$4.4	\$3.3	\$3.7	n/a

<sup>1</sup>As shown in the Company's FY 2014 Gas ISR proposal dated December 27, 2012.

PUC 2-15

Request:

With regard to LNG facility upgrades, please identify each facility, which facilities will be upgraded, a description of the upgrade and cost associated thereto.

Response:

Attachment PUC 2-15-1 provides the list of proposed upgrades and associated costs at the Exeter LNG facility for FY 2015.

Attachment PUC 2-15-2 provides the list of proposed upgrades and associated costs at the Cumberland LNG facility for FY 2015.

Exeter-LNG	Project Name	2014-2015
	Old Mill Lane propane tank removal	\$310,000
	Truck station remodel	\$100,000
	Misc. Plant Tools & Equipment	\$3,750
	Automated ESD designed - evaluate installation	
	Requested study for plant relief valves in Car Seal program - Car seal program not needed, RV design is being performed and they will be installed	
	Update Fire Study	

<b>Cumberland -LNG</b>	<b>Project Name</b>	<b>2014-2015</b>
	Tank Top Insulation & Weld Repairs	\$40,000
	Truck Station Relief Valves	\$15,000
	Relief Valve Vent Header	\$25,000
	Retainer Wall	\$30,000
	SCADA	\$75,000
	Paving	
	Trucking Building	
	New Mangate	
	Prefab Building w/Concrete Slab (Storage)	
	Paving New Parking Lot	
	New 8" Water Main	
	Update Fire Study	\$10,000

PUC 2-16

Request:

How much of the Gas Expansion Pilot Program was expended last year. Please list each project, the number of customers served, miles of extension, and the associated cost of each project.

Response:

Two partial gas expansion pilot projects were completed during FY2014. Only a small fraction of the FY2014 pilot program budget will be expended for these projects, and final numbers will be provided at the conclusion of FY2014. Descriptions of the two projects are as follows:

**Phillips Street, North Kingstown**

- 300-foot main extension with 6 new gas services.
- \*Total Project Cost = \$6,420

*\*Additional costs are anticipated for this project*

**70 Advice Street, Narragansett**

- 975-foot gas main extension with 7 new gas services.
- Total Project Cost = \$96,661