Raquel J. Webster
Senior Counsel

March 26, 2014

BY HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4474 - National Grid's Proposed FY 2015 Gas Infrastructure, Safety, and Reliability Plan
Responses to Record Requests

Dear Ms. Massaro:

On behalf of National Grid[1], I have enclosed the Company's responses to Record Requests issued at the Rhode Island Public Utilities Commission's Evidentiary Hearing that was held on March 20, 2014 in the above-referenced matter.

Please be advised that Company will provide its response to Record Request 14 shortly.

Thank you for your attention to this transmittal. If you have any questions, please contact me at (781) 907-2121.

Very truly yours,

Raquel J. Webster

Enclosures

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

[1] The Narragansett Electric Company d/b/a National Grid (the "Company").

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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.

_____ March 26, 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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File an original & nine (9) copies w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02888	Luly.massaro@puc.ri.gov Cynthia.wilsonfrias@puc.ri.gov Sharon.ColbyCamara@puc.ri.gov	401-780-2107

Record Request 1

Request:

At the March 20, 2014 Evidentiary Hearing in this docket, a customer provided public comment concerning the gas cost quotes the Company provided to her for the installation of gas at her residence. (This customer is referred to in this record request as the "Customer"). Please research and provide information on the gas cost quotes the Company provided to this Customer for the installation of gas at her residence.

Response:

National Grid has records of six estimates provided to the Customer:

Date	Total Price
07/16/2008	$3,500
08/19/2008	$3,950
03/26/2009	$4,250
06/25/2012	$10,206
03/18/2014	$8,450
03/21/2014	$8,401

For gas cost quotes, initial estimates are based on certain assumptions made by the National Grid Customer Service Representative when speaking with customers by telephone, including the length and size of the gas main required for service. With the exception of the quote provided to the Customer on 03/21/2014, the above estimates were based on the approximate length of the gas main required to provide service, which varied from 100 to 115 feet. The quote the Company provided to the Customer on 03/21/2014 was based on the measure length of 85 feet. However, as indicated above, the most significant difference in price occurred between the quote of $4,250.00 provided on 03/26/2009, and the quote of $10, 206.00 provided on 06/25/2012. It appears that the first three estimates listed above were based on the assumption that a two-inch gas main would be required for the service at a cost of $30.00 per foot. The remaining three estimates were based on the assumption that six-inch gas main would be required at a cost of $67.29 per foot. Six-inch gas mains are required for the low-pressure gas service in the area around and including the Customer's home.

The results of this review were discussed with the Customer on March 25, 2014.

Prepared by or under the supervision of: Cheryl Young

Record Request 2

Request:

Please provide the number of leak calls that the Company has received for the last ten (10) years.

Response:

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
# of Leak Calls	13,531	12,330	10,632	10,023	10,996	13,816	12,516	11,792	10,940	12,009

Prepared by or under the supervision of: Gary Bennett

Record Request 3

Request:

Have there been any gas explosions in Rhode Island in the last 10 years. If so, please provide the specific detail of each event, including when it occurred, the location and a summary of what caused the explosion, and the Company's response.

Response:

Please see Attachment RR-3, which is a copy of Table A-3 on Page RI-6, shown in Appendix 'A' of the Company's Gas Distribution Integrity Management Plan (dated August 29, 2013), a copy of which has been provided to the Rhode Island Division of Public Utilities and Carriers. This attachment includes information for the last ten years of gas incidents by: Year, Facility, Asset Class / Subclass, Street, Town, Leak Cause and Incident Details. Of the five incidents listed in Attachment RR-3, all except the one on Purgatory Road, Middleton in 2012 were natural gas explosions. Pursuant to the Code of Federal Regulations ("CFR") 49 CFR Part 191.3, the term "Incident" means any of the following events:

(1) An event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:

(i) A death, or personal injury necessitating in-patient hospitalization;

(ii) Estimated property damage of $50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost;

(iii) Unintentional estimated gas loss of three million cubic feet or more.

(2) An event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.

(3) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.

New Table A-3: 10-YEAR INCIDENT HISTORY DETAILS

YEAR	Facility	Asset Class/Subclass	Street	Town	Leak Cause	Details
2003	MAIN	CI/WI - 6" - LP	Stella St	Providence	Natural Force	Main Break
2004	MAIN	CI/WI - 4" - LP	Tell St	Providence	Natural Force	Main Break
2004	MAIN	CI/WI - 6" - LP	Eldridge St	Cranston	Natural Force	Main Break
2009	SERVICE (@ METER SET)	Protected Coated Steel - LP - Outside Set	Rugby St	Providence	Other Outside Force	Vehicular Damage
2012	I&R	Valve	Purgatory Road	Middletown	Other Outside Force	Vandalism, Contractor working for St. George's School hit an underground gas main, forcefully entered into NG's District Regulator building & closed a valve which caused 483 service outage.

Record Request 4

Request:

How many additional Full Time Equivalent ("FTE") personnel would be required by the Company to increase the miles of main replaced per year to 70 miles.

Response:

The Company performed a preliminary analysis of the personnel required to increase the number of miles of gas main replaced per year from 60 miles to 70 miles. Based on this analysis, the Company has determined the following personnel needs:

Customer Meter Services

- Eight Meter Service Technicians

Construction / Field Operations

- One Construction Supervisor
- Two Field Inspectors
- Two Main Installation Crews (4 FTEs per crew)
- Two Service Installation Crews (3 FTEs per crew)
- One Main Connection Crew (4 FTEs per crew)

Support Services

- One Work Coordinator

Record Request 5

Request:

Please provide the percentage of lost and unaccounted for gas, and include a breakout of the EPA calculation used by the Company in calculating that factor.

Response:

As described in the Company's responses to the Rhode Island Public Utilities Commission's ("PUC") Data Requests Nos. 2-2 and 2-3 in the PUC's second set of data requests, filed on February 27, 2014, 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. UFG is 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. PHMSA defines UFG as follows:

> *"Unaccounted for gas" is gas lost, that is, gas that the operator cannot account for as usage or through appropriate adjustment. Adjustments are appropriately made for such factors as variations in temperature, pressure, meter-reading cycles, or heat content, calculable losses from construction, purging, line breaks, etc., where specific data are available to allow reasonable calculation or estimate; or other similar factors.*

As described above, PHMSA allows the Company to make appropriate adjustments when calculating UFG. One such adjustment the Company makes is to quantify the amount of gas lost through leakage. National Grid calculates gas leakage by applying emissions factors from the U.S. EPA 40 C.F.R. 98 Subpart W to the inventory of miles of main and number of services (by material). For 2013, the Company calculated gas leakage to be 0.95% of total gas sendout. Because leakage can be calculated utilizing these EPA factors, it is excluded from the reported UFG.

According to the Company's most recent annual PHMSA filing, the Company's Net UFG (i.e. not including leakage) for 2013 was calculated to be 3.41%. The Gross UFG (i.e. including leakage) for 2013 was calculated to be 4.36%.

Prepared by or under the supervision of: Walter F. Fromm

Record Request 6

Request:

With respect to Record Request 5, has the Company conducted any analysis on leakage separate from the EPA calculation?

Response:

No. The Company has not performed any additional leakage analysis separate from the EPA calculation provided in the Company's response to Record Request No. 5.

Prepared by or under the supervision of: Walter F. Fromm

Record Request 7

Request:

Are all of the Company's cast iron mains fully depreciated?

Response:

The Company's plant accounting records indicate that the net book value of cast iron mains is approximately $3 million of a total net utility plant balance of approximately $945 million as of December 31, 2012. Approximately fifty-one (51) percent of this amount represents small capital additions to the cast iron main category of plant since 1966 for work performed on the cast iron main network. None of this work is believed to be the installation of new cast iron main, because the gas industry discontinued the use of cast iron in the 1950s. The remaining forty-nine (49) percent of the $3 million represents the Company's pre-1966 net book value of investment in cast iron mains. Similarly, none of this cost is believed to be the installation cost of new cast iron main. The Company believes that its original costs to install cast iron mains in the Company's gas main network are fully depreciated.

Prepared by or under the supervision of: William Richer

Record Request 8

Request:

What is the age of the oldest main in the Company's system?

Response:

According to the Company's geographic information system, the oldest gas main in the Rhode Island gas system dates back to 1848.

Prepared by or under the supervision of: Walter F. Fromm

Record Request 9

Request:

For a leak caused by a third-party, does the Company pursue reimbursement from that third-party?

Response:

The Company's Damage Prevention Group conducts an investigation on every reported damage and assigns a root cause to each incident. Any damage assigned with a root cause attributed to some form of negligence on behalf of a third-party, such as an excavator, will result in billing to that third-party. To ensure fair and consistent billing practices, the Company bills all entities (e.g. homeowner, professional excavator, municipalities, etc.) that the Company finds is responsible for damaging the Company's system.

Record Request 10

Request:

How many gas odor calls have led to main replacements in the past three years?

Response:

National Grid prioritizes leak prone pipe for replacement based upon a number of factors, one of which is the number of leak repairs. In many circumstances, these repairs are the result of an odor call from the public, which results in a response by National Grid field crews and, depending upon the severity of the leak, a repair. The number of repairs made to a pipe segment is considered as part of National Grid's prioritization process (along with factors such as the type of leak repair, type and number of buildings in the area, and pipe material and operating pressure), and the highest priority segments are then scheduled for replacement via National Grid's Proactive Main Replacement Program. It is difficult to attribute the replacement of a segment to any one particular odor call.

In addition to the Proactive Main Replacement Program, National Grid also has a Reactive Main Replacement Program, which funds the replacement of short segments of leak prone pipe under emergency conditions where repair of the existing leak prone pipe is impractical due to its condition and replacement is required.

Prepared by or under the supervision of: Walter F. Fromm

Record Request 11

Request:

Does the Company receive any reimbursement when a customer requests a service relocation?

Response:

When customers request to have their service relocated, the Company charges a fixed fee of $1,000, as set forth in Section 4.1 of the July 22, 2005 letter (and attached procedure) to the Rhode Island Division of Public Utilities and Carriers on Contribution in Aide of Construction ("CIAC") and in accordance with the procedure that was followed with the Rhode Island Public Utilities Commission's executive counsel for updating Policies and Procedures. A copy of that letter is attached as Attachment RR-11. Costs above $1,000 are included in the Gas ISR.

Prepared by or under the supervision of: Walter F. Fromm

July 22, 2005

New England Gas Company

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

RE: Contributions in Aid of Construction Adjustments

Dear Ms. Massaro:

New England Gas Company ("Company") has recently engaged in discussions with the Division of Public Utilities and Carriers ("Division") regarding several modifications and updates to the Company's Policies and Procedures ("Policy") regarding Contributions in Aid of Construction ("CIAC"). Based on those discussions, the Company and the Division have agreed to a number of revisions which have been incorporated into the enclosed Policies and Procedures document. The Division has requested that the Company submit a copy of the revised document in accordance with the procedure that was followed with the Commission's executive counsel when the Policies and Procedures were previously updated on January 7, 2004.

This Policy applies to all new customers requesting an interconnection with the Company's system to receive natural gas service. These policy modifications more accurately assign main extension capital costs to those customers that impose these costs on the system. As demonstrated, fixed costs are assigned to typical residential applications, whereas the CIAC is used to determine customer contributions for commercial and industrial customers and residential customers with extenuating circumstances. The CIAC calculates the customer contribution using a cash flow and an internal rate of return calculation.

Thank you for your attention to this matter. If you have any questions, please do not hesitate to contact me at 401-574-2212.

Sincerely,

Kevin F. Penders, Esq.
Manager, Regulatory Relations

Enclosure

cc: Thomas Ahern, Administrator, Division
Steve Frias, Commission
Stephen Scialabba, Division
James Lanni, Division
Don Ledversis, Division

NEW ENGLAND GAS COMPANY
APPLICATION FOR NATURAL GAS POLICIES AND PROCEDURES
[Revised July 22, 2005]

1. GENERAL

1.1 Request for Service

A request for new Firm Service, Transportation Service, or Non-Firm Service ("Request") will be received and reviewed by a duly authorized representative or agent of the Company.

1.2 Classification

Upon receipt of each Request for natural gas service from a customer, developer, or contractor ("Applicant"), the Company will classify the Request into one of the following six categories:

a. Normal gas-service installation for residential customers on an existing gas main;
b. Gas-service installation for residential customers on an existing main with extenuating circumstances;
c. Main extension for existing residential customers;
d. Gas main and service installation for new residential developments;
e. Residential customers with gas service stubs on their property;
f. Gas service and main installation for commercial and industrial customers.

1.3 Threshold for Customer Contribution

Whenever the estimated expenditures necessary to supply gas to the Applicant, or for relocation of Company equipment for reasons other than the needs of the Company, shall be such an amount that the income derived from gas service at the applicable rates will be insufficient to warrant such expenditures, the Company will require the requestor to pay the whole or part of such expenditures. The Company will use a cash flow and an internal rate of return calculation ("IRR analysis") to determine the appropriate customer contribution, referred to as the Contribution In Aid of Construction ("CIAC"). The resulting CIAC represents the amount that is owed to the Company from the Customer(s) prior to project implementation.

1.4 Gas Service Installation with Extenuating Service Circumstances

The CIAC for customers on an existing gas main with extenuating circumstances is project specific. The actual cost of the gas service and estimated customer usage is included in the IRR analysis to calculate a customer-specific CIAC.

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[Revised July 22, 2005]

Examples of extenuating circumstances include but are not limited to excessive ledge, services over 100 feet, bridge and railroad crossings, DEM permits and permit restrictions, state roads, restoration requirements, concrete base roadways, new roadways or newly paved roadways and unusual landscaping, or upgrading of an existing service for added load. Additionally, the Company reserves the right to recover costs for those system enhancements that are designed solely for the customer's benefit.

1.5 Changes in Policy and Procedures

The policies, procedures and charges set forth herein are subject to periodic review and may be expanded, updated, revised, or modified from time to time at the Company's discretion.

1.6 The Company will annually calculate the typical CIAC for residential, commercial, and residential development customers, and place a copy of its updated policies and procedures on file with the Division of Public Utilities and Carriers.

2. RESIDENTIAL CUSTOMERS

2.1 Normal Gas Service Installation for Residential Customers on an Existing Gas Main

The CIAC for new gas service on an existing main is a fixed charge. The fixed charge is calculated using the IRR analysis. The IRR analysis is based on the historical cost of installations and the expected margins from the corresponding applications. The fixed rates are as follows:

Heat only - $800
Heat and Hot Water - $800
Hot water and/or pool heater, gas fireplace, space heating - $2,575
Range and/or dryer, grill, fireplace logs, gas generator - $3,250

2.2 Main Extension for Existing Residential Customers.

The charge for new service to residential customer(s) who require a main extension is project specific. The IRR analysis is based on the estimated cost of construction for the main, and service(s), as well as the estimated gas usage per customer. If the main extension is for more than one customer application, each customer is required to pay the CIAC.

NEW ENGLAND GAS COMPANY
APPLICATION FOR NATURAL GAS
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[Revised July 22, 2005]

2.3 Gas Main and Service Installations for New Residential Developments.

The charge for a gas main and service installation for new residential development is project specific. To determine the CIAC, the Company will review the site plans with the developer and discuss various construction issues along with the projected gas usage for the project. The total construction costs, forecasted gas usage, and number of years to complete the project are input to the IRR analysis to calculate the CIAC. Every residential development is priced on an individual basis and therefore the CIAC varies depending on the various inputs. The developer is required to pay the CIAC before construction begins.

2.4 Residential Customers with Gas Service Stubs on Their Property.

The CIAC for residential customers who have an existing gas service stub on their property are fixed based on customer-specific circumstances. These circumstances and the related fees are:

Customer performs excavation –
- $200 for heat or heat and hot water;
- $800 for hot water and / or pool heater and/or gas fireplace;
- $1,255 for range and/or dryer, grill, fireplace logs, and/or gas generator.

New England Gas Company performs excavation –
- $600 for heat or heat and hot water;
- $940 for hot water and / or pool heater and/or gas fireplace;
- $1,375 for range and/or dryer and/ or grill and/or fireplace logs and/or gas generator.

If any of the above situations also include extenuating circumstances, the CIAC will be determined using the IRR analysis.

2.5 Residential Developments

The CIAC for new residential developments is based on a fixed and a per individual service rate. The fixed portion is based on the number of constructed units. These fees are as follows:

- A minimum fee of $1,200 for up to 20 units in a development
- A minimum fee of $2,400 for up to 40 units in a development
- A minimum fee of $3,600 for up to 60 units in a development
- A minimum fee of $4,800 for up to 80 units in a development

NEW ENGLAND GAS COMPANY
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[Revised July 22, 2005]

In addition, the price for each individual gas service in the residential development will be $200 where the customer excavates the trench to extend the stub, and $600 where the Company provides the excavation for the stub extension. Consistent with Company policy, extenuating circumstances may result in a higher CIAC cost, and will be specifically priced through the Company's IRR analysis.

3.0 COMMERCIAL AND INDUSTRIAL CUSTOMERS

3.1 Gas Service and Main Installation for Commercial and Industrial Customers

All commercial and industrial applications are priced on an individual basis. The Company's representative will meet with the prospective customer to review the natural gas load requirements and estimated time frame for project completion. Estimated construction costs, gas usage, and number of years to complete the project are incorporated into the IRR analysis to calculate the CIAC. Commercial and industrial customers are charged a minimum fixed fee of $600.

Additionally, if the commercial customer requires more than one riser to a building, the customer will be charged $200 for each additional riser. Where multiple installation visits are required, the commercial customer will be charged $200 where the customer excavates the trench to extend the stub, and $600 where the Company provides the excavation for the stub extension. Consistent with Company policy, extenuating circumstances may result in a higher CIAC cost, and will be specifically priced through the Company's IRR analysis.

All commercial and industrial customers are required to sign a contract with New England Gas Company. If the customer does not abide by the signed contract, the Company has the authority to bill the customer for the applicable cost.

4.0 OTHER

4.1 In the instance where a customer has requested that the Company relocate the meter for the customer's convenience, that customer, residential or commercial, will be billed a flat rate of $1,000 for such service absent extenuating service circumstances.

4.2 In the event that a customer is required to pay for the costs associated with a main extension in order to obtain new gas service, any other customers, who subsequently connect to this main extension within five (5) years of its installation, shall be charged a proportionate share of the costs associated with the installation of the main extension. The Company will then refund this proportionate share to the customer who initially paid for the main extension.

NEW ENGLAND GAS COMPANY
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[Revised July 22, 2005]

This proportionate share shall be in addition to any costs that a subsequent customer will incur for obtaining new service.

4.3 Upon request by the customer, the Company, at the completion of the main extension project, will provide the customer a detailed breakdown where applicable of those costs actually incurred to complete the installation.

Record Request 12

Request:

Please explain if the equipment from the Old Mill Lane facility can be reused by the Company.

Response:

The existing equipment (e.g. gas regulators, pilots, and ball valves) located at the Old Mill Lane, Middletown gas regulator station will be inspected and tested and, if acceptable, can re-used by the Company.

Record Request 13

Request:

Did the Company receive any contributions or reimbursements from customers for the 3,400 feet of work related to the Route I-195 special project? Please explain why this project is cost effective?

Response:

The Company did not receive any customer contributions or reimbursements to install approximately 3,400 feet of new gas mains to serve the new parcels as part of economic development associated with the Rhode Island Department of Transportation's ("RIDOT") relocation of sections of Route I-195 through the City of Providence.

As noted at the hearing, the Company is proposing this work to coordinate efforts with the RIDOT and avoid more expensive future costs for the project. At the request of the RIDOT, the Company is installing the new gas mains prior to the final paving activities of the new roads leading to the new parcels. If the Company were to install the new gas mains after the RIDOT's final paving activities, the Company would be required to again excavate and subsequently install full-depth permanent roadway patch, as well as a full road width cold plane and overlay, which would be much more costly.

Record Request 15

Request:

What is the depreciable life of a new gas Main?

Response:

The depreciable life of the Company's plastic mains is 49.98 years.

Record Request 16

Request:

Please explain why in the revenue requirement calculation the Company grosses-up the equity component of the return factor for taxes but does not reflect the debt component of the return factor net of tax.

Response:

Under traditional cost of service rate making principles, a utility includes in its revenue requirement the income taxes that it will be required to pay on the shareholder equity return on rate base in order for the utility to be given an opportunity to earn its allowed rate of return on rate base before income taxes. This is commonly referred to as the "gross up (of the equity return) for income taxes." A utility's return on rate base is calculated by multiplying the weighted average cost of debt and equity capital (referred to as the weighted average cost of capital or WACC) times rate base. Only the equity return component of this calculation is grossed up for income taxes and not the debt component. The equity component is grossed up for taxes because there is no underlying expense recorded on the utility's books. The equity return represents the after-tax net income, or profit, the company requires to adequately compensate its shareholders. Simply put, a dollar of billed revenue to recover equity return, for which there is no associated "expense", results in a dollar of taxable income upon which the company must pay income tax. Consequently, in order for the company to realize a dollar of allowed equity return it must bill one dollar and fifty four cents, generating one dollar and fifty four cents of taxable income upon which the company will pay fifty four cents of income taxes at the federal income tax rate of thirty five percent ($1.54 X 35% = $0.54). Conversely, the debt component, or interest, is not grossed up for income taxes because one dollar of billed revenue to recover interest does have an associated interest expense which is tax deductible and offsets the taxable revenue recovery resulting in zero taxable income and no income tax liability for the company. In this regard, the recovery of interest expense is no different than the recovery of any of the utility's other costs of service which are projected in a revenue requirement calculation and to generate which are similarly recovered dollar for dollar with no required gross-up for income tax obligations. Only the recovery of the equity return component of a utility's revenue requirement generates taxable income, and is therefore the only component of the revenue requirement that is adjusted for income taxes or grossed up for income taxes. The table below portrays the tax treatment of one dollar of revenue recovered for equity, debt and other costs on a utility's revenue requirement.

Record Request 16, page 2

	(A)	(B)	(C)=(A) - (B)	(D)	(E)=(C) x (D)	(A) + (G)
	$1 of Revenue	Cost Being Recovered	Taxable Income	Income Tax Gross Up Factor (35%/1-35%)	Income Tax Gross UP	Revenue Requirement
Equity Return	$1.00	$0.00	$1.00	53.85%	$0.54	$1.54
Debt Return	$1.00	$1.00	$0.00	53.85%	$0.00	$1.00
Other Costs	$1.00	$1.00	$0.00	53.85%	$0.00	$1.00

Prepared by or under the supervision of: William Richer

Record Request 17

Request:

Please provide the commercial customer count by rate class for the past two years. Please describe the typical customer.

Response:

Please see the table below for the Residential and Commercial and Industrial ("C&I") customer count by rate class for the past two years and each rate class' definition and typical customer.

Customer counts	Feb-13	Feb-14	Typical customer
Residential Non-Heating	25,856	25,669	All domestic non-heating purposes in individual private residential dwellings with six (6) or less units or in connection with condominium associations with gas supplied through one meter.
Residential Non-Heating Low-Income	378	454	All domestic non-heating purposes in individual private residential dwellings with six (6) or less units or in connection with condominium associations with gas supplied through one meter. Eligibility upon verification of the customer's participation in the low income home energy assistance program or its successor program.
Residential Heating	188,346	191,238	All domestic purposes in individual private residential dwellings with six (6) or less units or in connection with condominium associations with gas supplied through one meter where natural gas is the primary fuel used for space and/or central heating equipment.
Residential Heating Low-Income	18,178	18,119	All domestic purposes in individual private residential dwellings with six (6) or less units or in connection with condominium associations with gas supplied through one meter where natural gas is the primary fuel used for space and/or central heating equipment. Eligibility upon verification of the customer's participation in the low income home energy assistance program or its successor program.
Total Residential	**232,758**	**235,480**	

Prepared by or under the supervision of: Yi-An Chen

Record Request 17, page 2

Customer counts	Feb-13	Feb-14	Typical customer
Medium	4,696	4,780	Annual gas usage is greater than 5,000 therms, but less than or equal to 35,000 therms. For example, a pizza store.
Large Low Load	454	466	Annual gas usage is greater than 35,000 therms, but less than 150,000 therms and whose off-peak (May through October) gas usage is equal to or less than 30% of the annual gas usage for the most recent September through August period. For example, a high school.
Large High Load	185	180	Annual gas usage is greater than 35,000 therms, but less than 150,000 therms and whose off-peak (May through October) gas usage is equal to or greater than 31% of the annual gas usage for the most recent September through August period. For example, a chain hotel.
Extra Large Low Load	37	36	Annual gas usage is equal to or greater than 150,000 therms and whose off-peak (May through October) gas usage is equal to or less than 30% of the annual gas usage for the most recent September through August period. For example, a university.
Extra Large High Load	76	81	Annual gas usage is equal to or greater than 150,000 therms and whose off-peak (May through October) gas usage is equal to or greater than 31% of the annual gas usage for the most recent September through August period. For example, a large industrial company.
Total C&I	**24,248**	**24,563**	

Record Request 18

Request:

Please provide the Company's procedures for the classification of leaks.

Response:

Please refer to the following attachments for the Company's response.

- Attachment RR-18a – Section 6201 Classification of Gas Leaks, from the Rhode Island Gas Operations and Maintenance Manual.

- Attachment RR-18b – Construction and Maintenance Document 4 - The Gas Leak Classification Chart, which is applicable to the State of Rhode Island.

- Attachment RR-18c - Construction and Maintenance Document 6 – Distribution Systems: Leakage Classification.

Prepared by or under the supervision of: Alfred Amaral

RHODE ISLAND OPERATIONS - STANDARDS MANUAL

Section 6200 Leakage - Classification

6201 Classification of Leaks

Based on an evaluation of the location and/or magnitude of a leak, one of the following leak grades shall be assigned, thereby establishing the leak repair priority.

6201.1 Grade 1 Leak

See Specification and Standard CM-6.

6201.15 Grade 2A Leak

See Specification and Standard CM-6.

6201.2 Grade 2 Leak

See Specification and Standard CM-6.

6201.3 Grade 3 Leak

See Specification and Standard CM-6.

6202 Handling of Classified Leaks

Leaks discovered and classified as Grade 1 shall be dispatched immediately to properly trained and equipped First Responder, Customer Meter Services, Construction and Maintenance, or other qualified personnel. First Responder and Customer Meter Services personnel may continue the investigation of other premises and underground structures for the presence of combustible gas mixtures based on the site conditions. First Responders may or may not await the arrival of the Construction and Maintenance crew depending on the conditions found which may require immediate “make safe” actions. Grade 1 leaks may or may not be documented on a Leakage Report form based upon the discovery location.

Leaks classified as Grade 2A or 2 should be noted on a Leakage Report form showing the location of readings. The Leakage Report form should be returned to the Construction and Maintenance Department. Leaks should be monitored and scheduled for repair based on the surveillance, re-check and repair schedules.

Leaks classified as Grade 3 should be noted on a Leakage Report in the same manner as a Grade 2A or 2 leaks. These leaks should be monitored based on the surveillance and re-check schedules.

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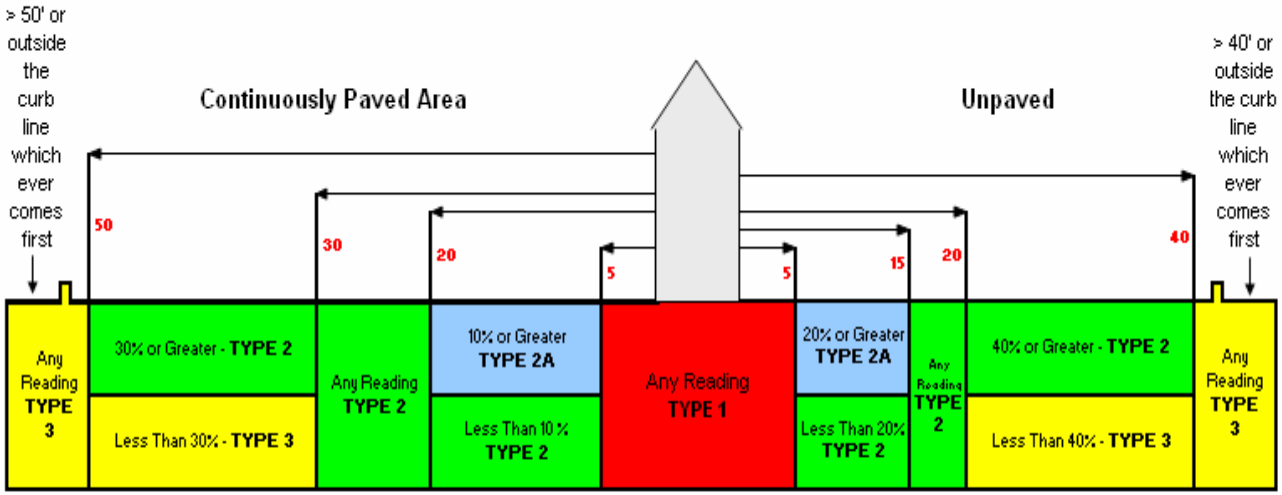
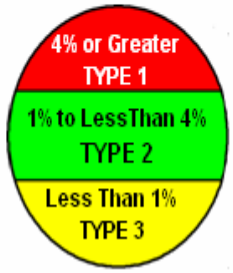


Manholes, Vaults and Catch Basins



Distribution Systems: Leakage Classification Revision Date: April 28, 2008

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References:

49 CFR, Part 192
Operating and Maintenance Plan Operator Qualification

1	**Scope** This standard prescribes the Company criteria for assigning priority designations (classification) to known gas leaks in the Company's gas system.
2	**General** Known leaks in the Company's gas system shall be classified only by qualified persons using appropriate and calibrated leak detection equipment. Guidelines for leak classification are provided in the classification guide. The judgment of the operator personnel at the scene is of primary importance in determining the grade assigned to the leak.
3	**Leak Classification Requirements:** **Grade 1** A leak that represents an existing or probable hazard to persons or property, and requires immediate repair or continuous action until the conditions are no longer hazardous. Action Criteria: Requires prompt action to protect life and property, and continuous action until the conditions are no longer hazardous. Prompt action in some instances may require one or more of the following: - Implementation of emergency plan. - Evacuating premises. - Blocking off an area. - Rerouting traffic. - Eliminating sources of ignition. - - - - -

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	- Venting the area by removing manhole covers, bar holing, installing vent holes, or other means identified by the company as acceptable. - Stopping the flow of gas by closing valves or other means. - Notifying police and fire department personnel if forced entry is necessary. **Grade 2A & 2** – Leaks that are recognized as being non-hazardous at the time of detection, but justify repair based upon probable future hazard. Action Criteria: The leak repair schedule should be based considerations of the severity and history of the leak. In determining the repair priority, criteria such as the following should be considered: - Amount of migration of gas. - Proximity of gas to buildings and subsurface structures. - Extent of pavement. - Soil type and soil conditions (such as frost cap, moisture and natural venting). Grade 2 leaks may vary greatly in the degree of potential hazard. Grade 2A leaks generally require more immediate action than Grade 2 leaks based upon the above referenced criteria. **Grade 3** –A leak that is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous.
4	**Records** The Company shall maintain documentation of the leak in the form of electronic, paper, or other storage media accepted by the company.