National Grid

The Narragansett Electric Company

Gas Infrastructure, Safety, and Reliability Plan FY 2015 Proposal

December 20, 2013

Docket No. 4474

Submitted to:
Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

Filing Letter

Thomas R. Teehan
Senior Counsel

December 20, 2013

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: National Grid's Proposed FY 2015 Gas Infrastructure, Safety, and Reliability Plan Docket No. 4474

Dear Ms. Massaro:

On behalf of National Grid,[1] I have enclosed ten (10) copies of the Company's proposed Gas Infrastructure, Safety, and Reliability Plan ("Gas ISR Plan" or "Plan") for fiscal year 2015.[2] This proposed Gas ISR Plan is designed to enhance the safety and reliability of the Company's natural gas distribution system. The proposed Plan was submitted to the Division of Public Utilities and Carriers ("Division") for review. The Company received and responded to discovery requests from the Division and has met with the Division's representatives regarding this proposed Plan. The Division has provisionally agreed to the overall spending portion of this plan, but will continue to review and discuss particular Plan provisions as the Commission conducts its proceeding in this matter. The Gas ISR Plan is designed to protect and improve the gas delivery system through proactively replacing leak-prone gas mains and services, accelerating the Company's replacement of leak-prone facilities, upgrading the system's pressure regulating systems, and addressing conflicts that arise out of public works projects. The Plan is intended to achieve these safety and reliability goals through a cost-effective, coordinated work plan. The level of work that the Plan provides will sustain and enhance the safety and reliability of the Rhode Island gas pipeline infrastructure and directly benefit all Rhode Island gas customers.

The Plan includes a description of the categories of work the Company proposes to perform in fiscal year 2015 as well as the proposed targeted spending levels for each work category. This filing includes the pre-filed direct testimony of four witnesses: Mr. Walter F. Fromm and Mr. Jackson Lehr, whose testimony introduces the Plan document including updates to the Gas Expansion Pilot Program; Mr. William R. Richer, who sponsors the Company's revenue

[1] The Narragansett Electric Company d/b/a National Grid (hereinafter referred to as "National Grid" or the "Company").
[2] The Gas ISR Plan is submitted in compliance with the provisions of R.I.G.L. §39-1-27.7.1.

requirement calculation in Section 3 of the Plan; and Ms. Yi-An Chen, whose testimony sponsors Sections 4 and 5 of the Plan, which describe the rate design and calculation of the ISR rate factors and provides the customer bill impacts from the proposed ISR rate factors.

For the average residential heating customer using 846 therms, the cumulative impact of the FY 2015 Gas ISR Plan will represent an annual increase of $10.82, or 0.9 percent

This ISR Plan presents an opportunity to facilitate and encourage investment in the Company's gas utility infrastructure and enhance its ability to provide safe, reliable, and efficient gas service to customers.

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: Steve Scialabba
Leo Wold, Esq.
James Lanni
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Testimony of
Walter F. Fromm &
Jackson M. Lehr

PRE-FILED DIRECT TESTIMONY

OF

WALTER F. FROMM

AND

JACKSON M. LEHR

December 2013

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I. INTRODUCTION AND QUALIFICATIONS

Q. Mr. Fromm, please state your name, business address, job title, and areas of responsibility.

A. My name is Walter F. Fromm. My business address is 40 Sylvan Road, Waltham, MA 02451. I am employed by National Grid USA Service Company, Inc. ("Service Company") as Director, Network Strategy - Gas. I am the Rhode Island state jurisdictional lead for all gas Network Strategy issues, including those related to the capital investment strategy for The Narragansett Electric Company d/b/a National Grid (the "Company"). In my role, I work closely with the Rhode Island Jurisdictional President and staff on all local issues related to the Company's Rhode Island gas system. My responsibilities also include working with Regulators on issues related to the gas system, development of strategies to support Company objectives regarding investment in the gas system, and providing testimony regarding capital investments in the Company's gas system during state regulatory proceedings.

Q. Please describe your educational background and professional experience.

A. I am a Professional Engineer in Massachusetts (#40443) and New Hampshire (#11271). I received a Bachelor of Science degree in Civil Engineering from the University of Massachusetts at Lowell. My experience includes working for approximately two and a half years as a Design Engineer at the Boston Water and Sewer Commission, performing

engineering, design and environmental permitting associated with the construction of new and replacement water, sewer, and drainage facilities. I spent almost five years working as a Project Engineer at Fay, Spofford & Thorndike, Inc., continuing my career in the utility engineering and environmental permitting field. I have been employed at National Grid for approximately 14 years in a variety of roles. I joined the Company as the Supervisor of Short-Term Planning. I later became a Senior Gas Engineer, then Principal Gas Engineer, Manager of Project Engineering & Design, and Manager of Main & Service Replacement. In March 2012, I assumed my current responsibilities and in March 2013 was promoted to the level of Director.

Q. Have you previously testified before the Rhode Island Public Utilities Commission ("Commission")?

A. Yes. I previously testified before this Commission at hearings and technical conferences on the Company's Accelerated Replacement Program and the subsequent fiscal year ("FY") 2012 Gas Infrastructure, Safety and Reliability ("ISR") Plan and reconciliation filing in Docket No. 4219. I also testified and represented the Company at hearings and technical conferences for the FY 2013 Gas ISR in Docket No. 4306 and in the FY 2014 Gas ISR Plan filing in Docket No. 4380.

Q. Mr. Lehr, please state your name, business address, job title, and areas of responsibility

A. My name is Jackson M. Lehr. My business address is One Metrotech Center, 13th Floor, Brooklyn, NY 11201. I am employed by National Grid USA Service Company, Inc. as Director of Market Strategy in the Customer & Business Strategy department. I am the lead for the development of strategy and associated new or improved solutions for customers in areas such as gas conversions, energy efficiency, alternative fuel vehicles, distributed generation and storage, and smart grid, including those related to The Narragansett Electric Company d/b/a National Grid (the "Company"). In my role, I work closely with the Rhode Island Jurisdictional team and Sales and Program Operations department to support the Company's efforts to expand access to natural gas for Rhode Island customers.

Q. Please describe your educational background and professional experience.

A. I received Bachelor of Arts and Bachelor of Engineering degrees, with a concentration in Mechanical Engineering, from Dartmouth College, as well as a Masters in Business Administration degree from Harvard Business School. I began my career with Bechtel Group, Inc., first as a field engineer and later as a contract administrator, working on large civil infrastructure projects in New Jersey and Colorado. Additional roles included approximately one and a half years as a senior associate at GreenOrder, a management

consulting firm. For three and a half years I was a director at GO Ventures, LLC, where two of the holding company's portfolio companies worked with investor-owned utilities on energy efficiency and renewable energy projects. I have been employed at National Grid for approximately two years, substantially in my current capacity.

Q. Have you previously testified before the Commission or any other regulatory bodies?

A. No, I have not. I did participate in discussions with the Division on the Gas Expansion Pilot Program and the proposed modifications for this filing.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to describe the Company's proposed Gas Infrastructure, Safety and Reliability ("ISR") Plan for Fiscal Year ("FY") 2015 ("ISR Plan" or "Plan").[1] Through this testimony, we provide the Commission with Exhibit 1, the Company's proposed FY 2015 Gas ISR Plan, which details the work to be done under the proposed ISR Plan and the anticipated capital investments and expenses associated with that work.

[1] Pursuant to Rhode Island statutory provisions, the Company is required to annually file an infrastructure, safety and reliability spending plan with the Commission for review and approval. (R.I. G. L. §39-1-27.7.1) In addition to budgeted spending, the annual ISR Plan is to contain a reconcilable allowance for the anticipated capital investments and other spending for the upcoming fiscal year. The Company's FY 2015 runs from April 1, 2014 through March 31, 2015, and thus, the proposed FY 2015 ISR Plan would be effective April 1, 2014.

Mr. William R. Richer is providing testimony on the calculation of the revenue requirement impact associated with the Company's proposed FY 2015 ISR Plan, and Ms. Yi-An Chen is providing testimony relative to: (1) how the rate design was established for the ISR mechanism; (2) the calculation of the ISR rate factors; and (3) the customer bill impacts of the proposed ISR factor rates.

III. PLAN OVERVIEW

Q. How was the ISR Plan prepared?

A. The Company's FY 2015 ISR Plan was prepared by the Company and submitted to the Division of Public Utilities and Carriers ("Division") for review. The Company met with the Division and responded to questions from the Division about each of the components of the Plan, including proposed revisions to the gas expansion pilot program. The Division has provisionally agreed to the spending portion of the Plan and will continue to review particular Plan provisions as the Commission conducts its proceeding in this matter. The proposed ISR Plan will allow the Company to meet state and federal safety and reliability requirements and to maintain its gas distribution system in a safe and reliable condition. The FY 2015 ISR Plan will improve the safety and reliability of the Company's gas system for the immediate and long-term benefit of Rhode Island's natural gas customers.

Q. What is the Gas ISR Plan designed to accomplish?

A. The Gas ISR Plan is designed to maintain and upgrade the Company's gas delivery system by proactively replacing leak-prone gas mains and services, upgrading the system's pressure regulating systems, responding to emergency leak situations, and addressing conflicts that arise out of public works projects. The Plan attempts to attain these safety and reliability goals through a cost-effective, coordinated work plan. The level of work that the Plan provides will sustain and enhance the safety and reliability of the Rhode Island gas pipeline infrastructure and directly benefit Rhode Island gas customers. The Company now submits this Plan to the Commission for final review and approval.[2]

Q. Are you sponsoring any exhibits through your testimony?

A. The proposed FY 2015 Gas ISR Plan document is attached as Exhibit 1 to our testimony. It is organized as follows:

Section 1 – Introduction and Summary

Section 2 – Gas Capital Investment Plan
(including associated Operation and Maintenance ("O&M") expense)

[2] Pursuant to R.I. G. L. §39-1-27.7.1 (d), the Company and the Division are to work together over the course of 60 days in an attempts to reach an agreement on a proposed plan, which would then be submitted to the Commission for review and approval.

Section 3 – Revenue Requirement Calculation

Section 4 – Rate Design

Section 5 – Bill Impacts

In addition, Exhibit 2 [3] to this testimony sponsored by Mr. Lehr includes a number of modifications to the FY 2014 ISR Gas Expansion Pilot Program for implementation in FY 2015 that were developed based upon the lessons learned from the Company's marketing and community relations efforts with that plan. These modifications are designed to simplify the Pilot Program process and to expand the benefits of the pilot program to a larger segment of Rhode Island customers. The modifications were reviewed and negotiated with the Division, and reflect a more market-focused and flexible approach to gas expansion in Rhode Island.

Finally, as noted above, Mr. Richer is testifying to and sponsoring the revenue requirement calculation included in Section 3, while Ms. Chen is testifying to and sponsoring rate design and bill impacts outline in Sections 4 and 5.

Q. What types of infrastructure, safety, and reliability work does the proposed ISR Plan include?

A. The Plan seeks not only to maintain the gas distribution system, but also to proactively

[3] Exhibit 2 includes both a red line version of the FY 2014 Gas Expansion Pilot Program and a clean version with the proposed modifications.

upgrade its condition to prevent problems before they arise. A safe and reliable gas delivery system in Rhode Island is essential to the health, safety, and well-being of its citizens and is fundamental to maintaining a healthy economy and continuing to attract new residents and businesses. The Commission embarked on a course of addressing Rhode Island's aging gas infrastructure in 2008, with the establishment of the Accelerate Replacement Plan ("ARP"). In addition to the type of infrastructure, safety and reliability work performed under the ARP, the ISR Plan contains spending related to safety and reliability for public works, mandated programs, special projects, and reliability programs. Included in the ISR Plan document is a description of the Company's proposed capital investment and associated O&M expense budget for FY 2015 and a capital investment forecast for FY 2015 through FY 2019.

IV. CAPITAL INVESTMENT PLAN

Q. What levels of spending are proposed in the ISR Plan?

A. For FY 2015, the Company proposes ISR spending totaling $71.7 million. The ISR Plan is broken down into categories of programs designed to maintain the safety and reliability of the Company's gas delivery infrastructure. For each program category in the Plan, the Company proposes the following levels of spending:

- $38.0 million combined for proactive Main and Service Replacement Programs
- $0.2 million for Reactive Main Replacement

- $3.9 million for Public Works Programs, plus an additional $1.3 million in reimbursable work.

- $14.1 million for Mandated Programs (capital leak repairs, meter replacements, corrosion and non-leak other).

- $10.4 million for Gas System Reliability, including work relative to System Automation and Gas Control, Pressure Regulating Facilities, System Reliability Enhancement, Water Intrusion Program, and Valve installation/replacement.

- $4.7 million for Special Projects, which includes: the carryover of new main installation work related to the relocation of I-195 in order to aid in the economic development of Downtown Providence; the replacement of a boil-off compressor at the Exeter LNG Facility; and the continuation of the gas expansion pilot program designed to provide commercial and residential customers with incentives in providing main extensions.

- $0.4 million for incremental O&M expense for the hiring, training and supervision of additional personnel to support the increase in leak-prone pipe replacement.

Q. Does the proposed FY 2015 Gas ISR Plan include any new costs?

A. Yes. As noted above, the Company is proposing to include $400,000 of Operation & Maintenance ("O&M") expense to support the proposed increase in miles of leak prone pipe abandoned. For FY 2015, the Company is proposing to increase the number of miles of leak-prone pipe abandoned by seven miles (three miles of Proactive Main Replacement and four miles of Public Works) over the target from last year. As part of this effort, the Company anticipates that 25 miles of cast iron pipe (out of the planned 53 miles of Proactive Main Replacement) will be abandoned during FY2015. The Company

also projects increasing the percentage of cast iron main to be abandoned in FY 2016. However, in order to achieve this aggressive replacement schedule, the Company will need to hire additional resources and incur associated incremental O&M expenses. To support this effort, the Company is proposing to include $400,000 of O&M expense related to this need for increased resources. This amount has been negotiated with the Division and will be reconciled to actual O&M costs associated with the new hires for FY 2015.

Q. Mr. Lehr, please describe the modifications to the FY 2015 Gas Expansion Pilot Program.

A. Despite intensive marketing campaign and outreach efforts for the FY 2014 ISR Gas Expansion Pilot Program, only two small, partial projects were able to move forward, serving six and seven new customers, respectively. An extensive Company review of these efforts and feedback from customers identified several major lessons, which form the basis of the proposed changes and modifications in the FY 2015 pilot program designed to simplify the program process and better address the barriers to customer participation in the program. These include the following: (1) the need to provide a more simple, fixed pilot offer, addressing customer comments that the current program was too complicated and uncertain for participation; (2) the need to provide a significantly reduced offer as customer conversion costs remain a barrier to participation; and (3) the

need to provide more flexibility for customers and the Company to respond to customer interest.

To simplify the project eligibility criteria of the pilot program, the current project categories in the FY 2014 Gas Expansion Pilot Program are replaced with a "Density Test" and "Customer Commitment" requirement, as described in the Plan. These simplified criteria will also increase the Company's flexibility to consider smaller gas expansion projects. In addition, to provide customers a simpler experience and more affordable offer, the current customer Contribution In Aid of Construction ("CIAC") charge, which varies based on the number of committed customers, will be replaced by a fixed charge of $150 to be included as part of the standard service charge. This incremental fixed charge will be reconciled and credited back to customers in the annual reconciliation filing. As noted above, Exhibit 2 outlines the lessons learned and the proposed modifications to the FY 2015 Gas Expansion Pilot Program in more detail.

Q. In your opinion does the proposed Gas ISR Plan fulfill the objective of promoting the safety and reliability of the Company's gas distribution system in Rhode Island?

A. Yes. The Gas ISR Plan for FY 2015 is designed to establish the capital investments and associated O&M expenses in Rhode Island that are necessary to meet the needs of its

customers and maintain the overall safety and reliability of the Company's Rhode Island gas distribution system.

Q. Does this conclude your testimony?

A. Yes, it does.

Exhibit 1 – WFF & JML
Gas ISR Plan FY2015

FY 2015
Gas Infrastructure, Safety, and Reliability Plan

Exhibit 1 – WFF & JML
Section 1
Intro. & Summary

Section 1

Introduction and Summary
FY 2015 Proposal

Introduction and Summary
FY 2015 Proposal

National Grid[1] in consultation with the Division of Public Utilities and Carriers ("Division") has developed the following proposed fiscal year ("FY") 2015 gas infrastructure, safety, and reliability ("Gas ISR") plan (the "Gas ISR Plan" or "Plan") in compliance with R.I.G.L.§39-1-27.7.1, *An Act Relating to Public Utilities and Carriers – Revenue Decoupling (the "Revenue Decoupling Act")*, which provides for an annual gas "infrastructure, safety and reliability spending plan for each fiscal year and an annual rate reconciliation mechanism that includes a reconcilable allowance for the anticipated capital investments and other spending pursuant to the annual pre-approved budget."[2] The proposed Gas ISR Plan addresses capital spending on gas infrastructure and other costs related to maintaining the safety and reliability of the gas distribution system. The proposed Plan that the Company is submitting for its gas distribution operations is the product of a collaborative effort with the Division. The Gas ISR Plan is designed to maintain and upgrade the Company's gas delivery system through proactively replacing leak-prone gas mains and services, accelerating the Company's replacement of leak-prone facilities, upgrading the system's pressure regulating systems, responding to emergency leak situations, and addressing conflicts that arise out of public works projects. The Plan attempts to attain these safety and reliability goals through a cost-effective, coordinated work plan. The level of work that the plan provides will sustain and enhance the

[1] The Narragansett Electric Company d/b/a National Grid (hereinafter referred to as "National Grid" or the "Company")

safety and reliability of the Rhode Island gas pipeline infrastructure and directly benefit Rhode Island gas customers. The Company now submits this Plan to the Rhode Island Public Utilities Commission (the "Commission") for final review and approval.[3]

This Introduction and Summary presents an overview of the proposed FY 2015 Plan for the statutory categories of costs, the resulting FY 2015 revenue requirement associated with the proposed Gas ISR Plan, an illustrative rate design, and the estimated typical bill impacts resulting from the illustrative rate design.

The proposed Gas ISR Plan describes the Company's multi-year plan upon which its FY 2015 Plan is based, and it describes the system safety and reliability activities and addresses capital investment in utility infrastructure for the upcoming fiscal year. The proposed Plan itemizes the recommended work activities by general category and provides budgets for capital investment and associated Operations and Maintenance expenses ("O&M").

As envisioned in the Revenue Decoupling Act, after the end of the fiscal year, the Company will true up the Gas ISR Plan's budgeted levels to actual investment and expenditures and reconcile the revenue requirement associated with the actual investment and expenditures to the revenue billed from the rate adjustments implemented at the beginning of each fiscal year. The Company will continue to file quarterly reports with the Division and Commission

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2 R.I.G.L. §39-1-27.7.1, *An Act Relating to Public Utilities and Carriers – Revenue Decoupling.*

3 Pursuant to R.I.G.L. §39-1-27.7.1(d), the Company and the Division are to work together over the course of 60 days in an attempt to reach an agreement on a proposed plan, which would then be submitted for Commission review and approval.

concerning the progress of its Gas ISR programs. In addition, at the time it makes its reconciliation and rate adjustment filing described below, the Company will file an annual report on the prior fiscal year's activities. In implementing the Gas ISR Plan in any fiscal year, the circumstances encountered during the year may require reasonable deviations from the original Gas ISR Plan. In such cases, the Company would include an explanation of any significant deviations in its quarterly reports.

The FY 2015 level of capital and related investment provided in the Company's proposed Gas ISR Plan to maintain the safety and reliability of its gas delivery infrastructure is $71.3 million. In addition, as described below, the Company is also proposing $0.40 million of incremental O&M expense dollars to hire, train, and supervise additional full time equivalent ("FTE") personnel to support an increase in Main Replacement work for FY 2015. A description of the Company's proposed capital investment plan for FY 2015 is provided in Section 2. The revenue requirement description and calculations are contained in Section 3.

Gas Capital Investment Plan

The Company's proposed gas capital investment plan contained in Section 2 summarizes capital investments in terms of the following key categories:

A. Main Replacements and Service Replacements
B. Reactive Main Replacements
C. Public Works
D. Mandated Programs

E. Gas System Reliability
F. Special Projects

Section 2 itemizes the proposed activities by sub-categories and provides budgets for capital investment. The Company has included its capital budget, identified the relevant projects that would be part of the FY 2015 Gas ISR Plan, and provided its rationale for the need for and benefit of performing that work to provide safe and reliable service to its customers. The Company has also provided a five-year capital plan to provide a longer-term approach to infrastructure, safety, and reliability and to demonstrate how the FY 2015 Plan would be incorporated into that longer-term planning approach.

Operations and Maintenance Expense

As discussed in greater detail in Section 2 below, the Company is requesting $0.40 million of incremental O&M expense dollars to hire, train, and supervise additional full time equivalent ("FTE") personnel to support an increase in Main Replacement work for FY 2015. The Company's FY 2015 Gas ISR Plan calls for the replacement of approximately 60 miles of leak-prone pipe (53 miles of Proactive Main Replacement and 7 miles of Public Works projects), an increase from the 53 miles of leak-prone pipe replacement authorized in the FY 2014 Gas ISR Plan (50 miles of Proactive Main Replacement and 3 miles of Public Works projects).

Revenue Requirement

Based upon the estimated amounts for the proposed Plan, the Company has provided a calculation of the proposed cumulative revenue requirement resulting from the proposed FY 2015 capital investment plan. Section 3 contains a description of the revenue requirement model and an illustrative calculation for FY 2015. This calculation would form the basis for the Gas ISR rate adjustment, which would become effective April 1, 2014, upon Commission approval. As provided in Section 3, Schedule A, Sheet 6 of the Company's gas tariff, the Company will reconcile this rate adjustment as part of its annual Distribution Adjustment Charge ("DAC") filing. The pre-tax rate of return on rate base would be that rate of return approved by the Commission in the Company's last general rate case and, going forward, it would change as the Commission may approve changes to the rate of return in future rate case proceedings. Any change in the rate of return would be applicable on a prospective basis effective on the date on which the change is effective.

Rate Design

For purposes of rate design, the revenue requirement associated with the capital investment is allocated to rate classes based upon the latest rate base allocator approved in the Company's Settlement agreement in Docket No. 4323. For each rate class, the allocated revenue requirement is divided by the applicable fiscal year forecasted therm deliveries to arrive at a per-therm factor unique to each rate class. The Company is allocating other related costs associated

with incremental O&M costs to all rate classes on a per-unit basis. The proposed rate design is contained in Section 4.

Bill Impacts

The estimated typical bill impacts associated with the rate design contained in Section 4 are provided in Section 5. The bill impact of the proposed Gas ISR Plan for the average residential heating customer for the period April 1, 2014 through March 31, 2015 would be an annual increase of $10.82, or 0.9%.

Exhibit 1 – WFF & JML
Section 2
Gas Capital Plan

Section 2

Gas Capital Investment Plan
FY 2015 Proposal

Gas Capital Investment Plan
FY 2015 Proposal

The Company and the Division have worked diligently to arrive at a Gas ISR Plan that meets the goals of the new legislation to provide a safe and reliable gas distribution system for Rhode Island.

Background

The Company developed its proposed capital investment and associated O&M expense plan to meet its obligation to provide safe, reliable, and efficient gas distribution service for customers at reasonable costs.[4] The Gas ISR Plan includes capital investment spending needed to meet state and federal regulatory requirements applicable to the Company's gas system and to maintain its distribution infrastructure in a safe and reliable condition. It includes infrastructure safety and reliability work for cast-iron and non-cathodically protected steel mains and non-cathodically protected steel inside services, to address the replacement of leak-prone gas main and at-risk services. The plan also contains capital spending related to safety and reliability for public works, mandated programs, gas reliability, and special projects.

As the Revenue Decoupling Act recognizes, it is critical that the Company remain vigilant with respect to investing in its infrastructure and have the appropriate and timely cost

[4] The Company delivers natural gas to about 257,000 Rhode Island residential and commercial and industrial customers in 33 cities and towns in Rhode Island. To provide this service, the Company owns and maintains approximately 3,200 miles of mains and approximately 192,000 services.

recovery to do so, in order to continue to provide safe and reliable gas delivery service to customers. To that end, the Company is outlining the proposed FY 2015 Plan[5] which identifies the capital spending it expects to place into service during FY 2015. Table 1 contains a description of the proposed budget for the FY 2015 Plan. Table 2 contains a five year Spending Forecast for FY 2015 through FY 2019. The Company proposes to invest a total of $71.7 million of Gas ISR investments ($71.3 million in capital expenditures and $0.4 million in operating expenditures), which would be included in the FY 2015 Gas ISR recovery mechanism.[6] The FY 2015 Gas ISR Plan is designed to maintain the safety and reliability of its gas delivery infrastructure.

As set forth on Table 1, of the $71.7 million that the Company proposes for its FY 2015 Gas ISR Plan spending, the Company proposes the following levels of spending for each category of programs:

- $38.0 million combined for proactive Main and Service Replacement Programs
- $0.2 million for Reactive Main Replacement
- $3.9 million for Public Works Programs, plus $1.3 million in reimbursable work.
- $14.1 million for Mandated Programs (capital leak repairs, meter replacements, corrosion and non-leak other)

5 FY 2015 is defined as the twelve months ending March 31, 2015.

6 For FY 2015, the Company plans to make $93.0 million of total capital investment. Of that total amount, $21.7 million will be for projected growth and allocated spending which is not included for recovery in the FY 2015 Gas ISR plan.

- $10.4 million for Gas System Reliability, including work relative to System Automation and Gas Control, Pressure Regulating Facilities, System Reliability Enhancement, Water Intrusion Program and Valve installation/replacements

- $4.7 million for Special Projects, which includes: the carryover of new main installation work related to the relocation of I-195 in order to aid in the economic development of Downtown Providence; the replacement of a boil-off compressor at the Exeter LNG Facility; and the continuation of the gas expansion pilot program designed to provide commercial and residential customers with incentives in providing main extensions.

- $0.4 million incremental O&M expense for the hiring, training and supervision of additional personnel to support the increase in leak-prone pipe replacement.

As noted above, the Company will continue to file quarterly reports with the Division detailing the progress of its Gas ISR programs.

Description of Large Programs and Projects

The proposed FY 2015 Gas ISR Plan is comprised of several programs that account for the total amount of Plan spending. Those programs are described in detail below.

A. Main Replacement Program and Service Replacement Program

The value of and need for targeted spending on the replacement of leak-prone gas main and services is well-documented and has been accepted by both the Division and the Commission. For FY 2015, the Company forecasts spending $36.5 million on its main replacement program (approximately 53 miles of leak prone pipe) and $1.5 million on the service replacement program (500 services) for a total spend of $38.0 million on these two programs.

To support the increase in the Proactive Main Replacement Program this year, the Company will need to hire, train and supervise additional personnel. In Record Request No.1 in Docket No. 4380 (the FY 2014 Gas ISR proceeding), the Commission requested that the Company provide detailed information on the estimated cost of accelerating the number of miles of proactive replacement of leak-prone pipe, including cast iron pipe, beginning in FY 2015. In response to this request the Company indicated that incremental O&M expense associated with the resources needed to achieve an aggressive replacement program would be incurred. In that response, the Company provided a very high level estimate of incremental O&M expense:

> The proactive main replacement program has been implemented to replace high risk facilities each year. In general, the cost to replace cast iron is greater than the cost to replace unprotected steel. The Company anticipates increasing the percentage of cast iron replaced in future years. Therefore, starting in FY 2015, the annual cost of the proactive main replacement program has been updated to reflect this strategy, including an annual adjustment for inflation of two percent per year after FY 2015.
>
> *In addition, the Company will incur incremental Operations and Maintenance ("O&M") costs associated with the hiring and training of Company personnel as well as costs associated with work performed by such incremental personnel outside of construction season. The Company estimates that for each incremental mile of main above 50 miles included in the current plan, it will incur incremental O&M costs of approximately $20,000 per mile. Please note that these incremental O&M costs are associated only with the personnel who would complete physical field work, an additional O&M costs may be incurred for additional supervision and for other office-based workers that provide support services.*[7] (Emphasis added.)

As compared to FY 2014 where the Company was targeted to replace 53 miles of leak-prone pipe (50 miles Proactive Main Replacement and 3 miles of Public Works), in the FY 2015 Gas ISR Plan, the Company is proposing to replace 60 miles of leak-prone pipe (53 Miles of Proactive Main Replacement and 7 miles of Public Works) which would result in an increase in the number of miles of leak-prone pipe replacement by seven miles (three miles of Proactive Main Replacement and four miles of Public Works). Of particular note, as described above, the Company will be increasing the percentage of cast iron main to be replaced next year. It is anticipated that 25 miles of cast iron (out of the planned 53 miles of Proactive Main Replacement) will be abandoned during FY 2015. In order to achieve this aggressive replacement schedule, the Company will need to hire additional resources and incur associated incremental O&M expenses. The Company is

proposing to include $400,000 of O&M expense related to this need for increased resources. This amount will be reconciled to actual O&M associated with the new hires for FY 2015.

B. Reactive Main Replacement

The Company proposes to reduce the budget for Reactive Main Replacement from $0.5 million in FY 2014 to $0.2 million for FY 2015. This category of work consists of emergency main replacements due to leaks or other unplanned work where main conditions dictate immediate replacement. Over the past few years, the Company has received minimal requests in this category primarily due to the fact that the Company's increased Proactive Main Replacement Program has made the need for this work unnecessary in many areas.

C. Public Works

The purpose of the Public Works program is to address existing gas infrastructure conflicts, as appropriate, and to improve the safety and reliability of the Company's natural gas distribution system in conjunction with public works projects, providing significant incremental benefits to customers and communities. Municipal work affords the Company an opportunity to replace additional leak-prone pipe and reduce paving costs by coordinating the Company's main replacement work with these planned public works construction projects, while also benefitting customers and communities by improving service delivery and minimizing construction impacts

[7] FY 2014 Gas ISR, Record Request 1, pages 2-3 (filed April 26, 2013)

and inconvenience. National Grid has an ongoing plan to replace targeted (integrity-based selections) mains on a risk-based approach. Coordinating the Company's Integrity programs with planned public works projects has yielded increased system reliability, system integrity, and optimized capital spending. While the primary purpose of Public Works spending is to address direct conflicts between planned public works projects and existing gas infrastructure, Public Works spending provides the opportunity to coordinate other system improvement work, such as replacement of leak-prone pipe, system reliability upgrades, elimination of redundant main, and regulator station upgrades.

The Company will manage multiple projects to address the dynamic nature of the public works process through effective liaison activity. While municipal schedules and plans change due largely to funding, it must be recognized that other factors also contribute to the scheduling of these projects (e.g. political, demand maintenance, etc.). Changes in municipal projects can and do create additional work in developing and coordinating the Company's planning and budgeting processes. Using the Company's five-year work planning process, the Company can provide some flexibility in scheduling, coordinating, and engineering projects in concert with municipal public works initiatives. For FY 2015, the proposed plan incorporates $3.9 million in spending under the Public Works category and an additional $1.3 million in reimbursable projects. This budget would include funding for the relocation and replacement of cast iron main and steel gas main as part of a major project in the city of Newport. Specifically, as part of a street improvement project, the city of Newport has requested that the Company relocate and

replace its gas mains and facilities on Broadway Street from Washington Square to Malbone Road starting in the spring of 2014. Overall, the Public Works budget provides for the replacement of approximately seven miles of leak prone gas main, an increase of four miles over the FY 2014 budget.

D. Mandated Programs

Spending for Mandated Programs falls into four categories: Corrosion, Meter Replacement, Capital Leak Repairs, and Non-leak Other.

- **Corrosion Program** - Cathodic protection effectively extends the service life of buried steel facilities (as compared to unprotected buried steel facilities) and can prolong replacement by twenty years or more. In 1971, the Code of Federal Regulations, Part 192, was amended to require the cathodic protection of all new buried steel gas facilities. The Corrosion Program adds cathodic protection to existing coated steel main installed prior to the U.S Department of Transportation's ("DOT") 1971 cathodic-protection requirements. National Grid has standardized a process used to determine the cost effectiveness of cathodically protecting steel pipe installed prior to 1971. In addition, the Corrosion Program includes control line work at existing regulator stations and cathodic protection upgrades.

- **Meter Replacement Program** - Capital costs for the Meter Replacement Program are required for the procurement of replacement meters.

- **Capital Leak Repairs Program** - The Capital Leak Repair Program addresses leaking gas services, as well as extending the useful life of cast iron mains through the encapsulation of leaking cast iron joints.

- **Non-leak Other Program** - The Non-leak Other program contains the capital costs for service relocations, meter protection, service abandonments and the installation of curb valves.

For FY 2015, the proposed Plan contains $14.1 million for all categories of mandated work.

E. Gas System Reliability

Reliability spending includes programs to address system automation and control, system pressure regulating facilities, water intrusion projects, LNG facilities, and valve installation and/or replacements. The proposed FY 2015 Gas ISR Plan contains $10.4 million in spending for Reliability. A summary of each program is provided below:

1. System Automation and Control:

The primary purpose of this program is to meet the Department of Transportation ("DOT") code requirements under 49 CFR Part 192, Docket ID 2007-27954, which were

issued on December 3, 2009. These code provisions contain the following pipeline safety requirements: (a) Control Room Management/Human Factors, (b) modernization of the Company's system data and telemetry recording, and (c) increasing the level of system automation and control. The overall program will increase the safety, reliability, and efficiency of the gas system and, by extension, the level of service the Company provides to its customers.

National Grid's ability to provide safe and reliable service is governed to a large extent by the Company's ability to maintain adequate pressure in its gas mains. To accomplish this task, National Grid has approximately 200 gas pressure regulator stations disbursed throughout its Rhode Island gas service territory. While a limited number of these regulator stations have full system telemetry and control capability, most do not. In addition to monitoring and controlling the regulator stations, National Grid must also monitor system end points to ensure that adequate system pressures are being maintained in remote areas under a variety of operating conditions. Increased monitoring of these system low-pressure points is exacerbated by the need and desire to minimize the amount of system reinforcement necessary to support system load, thereby reducing the Company's capital requirement and maximizing the operational efficiency of the gas distribution system. For FY 2015, the Company is proposing to spend approximately $1.0 million for its system automation and control program. National Grid's proposal

would provide AC power to 25 regulator stations and telemetry to 20 sites, and it would install remote controls at 20 locations.

2. Pressure Regulating Facilities:

The pressure regulating facilities have been designed to reliably control gas distribution system pressures and maintain continuity of supply during normal and critical gas demand periods. Each station has specific requirements for flows and pressures based on the anticipated needs of the station. A facility includes both pressure-regulating piping and equipment as well as control lines, but it may also include a heater or a scrubber. A program has been initiated to address condition-based assessments. Accepted engineering guidelines provide for design, planning, and operation of these gas distribution facilities. Applicable state and federal codes are followed to help ensure safe and continuous supply of natural gas to our customers and the communities we serve. As shown in the table below, National Grid's proposed plan would address condition-based assessments and perform work at the following facilities in FY 2015:

Type of Work	City	Location	Projected Cost
Regulator Replacement	Providence	Brook and George (LP)	$350,000
Regulator Replacement	Providence	Brook and George (35 PSIG)	$350,000
Regulator Replacement	Warwick	Pettaconsett	$350,000
Regulator Replacement	East Providence	Bentley Street	$350,000

Regulator Replacement	Middletown	Old Mill Lane	$350,000
Regulator Replacement and Abandonment	Providence	Allens Avenue	$1,000,000
Relief Valve and Building	Tiverton	Take Station	$650,000
Regulator Abandonments	East Providence	Wampanoag Trail	$300,000
Regulator Abandonments	Pawtucket	Lawn Av @ Lonsdale	$60,000
Engineering & Design	All	All	$140,000
Construction of Pre-Fabs	All	All	$700,000
Total			**$4,600,000**

3. Gas Planning Program:

The Gas Planning Program identifies projects that support system reliability through standardization and simplification of system operations (e.g. system up-ratings and de-ratings and regulator elimination), integration of systems (e.g. tie-ins), and new supply sources (e.g. take stations). For FY 2015, the Company is proposing to spend approximately $1.0 million for its Gas Planning program.

4. Water Intrusion Program:

The Water Intrusion Program identifies projects that address recurring customer outages resulting from water intrusion into low-pressure distribution systems through the replacement of existing leak-prone pipe. Similar to the Reactive Main Replacement Program, over the past few years, the Company has received a minimal number of

requests in this category primarily due to the fact that the Company's increased Proactive Main Replacement Program has made the need for this work unnecessary in many areas. As a result, the FY 2015 budget has been reduced from the FY 2014 level of $0.4 million to $0.2 million for FY 2015.

5. LNG Facilities:

LNG facility upgrades include replacement of aging equipment and infrastructure at the Rhode Island stations, excluding the Providence facility. The Company has budgeted $0.6 million for FY 2015 for this work.

6. Valve Installation / Replacement:

Valves are used to sectionalize portions of the gas network when required to support both planned and unplanned field activities. Replacement of inoperable valves is necessary to ensure continued ability to effectively isolate portions of the distribution system. New valve installations are also occasionally needed to provide the capability to reduce the size of an isolation area where existing valves would result in broader shutdown than desired.

The Company has agreed with the Division that ramping up curb valve installations will provide additional public safety benefits and assist in improving collection and meter reading opportunities in those situations where Company personnel

have encountered difficulty gaining access to meters. For FY 2015, the Company has budgeted $0.8 million for this work, an increase from $0.5 million budgeted in FY 2014.

F. Special Projects:

Three special projects have been identified for FY 2015. The first project is the carryover of work associated with the Rhode Island Department of Transportation ("RIDOT") project to relocate sections of interstate Route I-195 through the City of Providence. This work is required to safely and reliably serve the new parcels of land and aid in the economic development of this area. At this time, contracts have been awarded to relocate 1,900 feet of gas main and proactively replace 3,900 feet of cast iron main and install 3,400 feet of new gas main. Construction work is currently scheduled to begin in the fall of this year, however, it is anticipated that work will continue into FY 2015. As a result, the Company has budgeted $175,000 to complete this project.

The second project is the replacement of the boil-off compressor located at the Exeter LNG facility. The Company has had difficulty procuring parts to maintain the aging equipment, and believes that a replacement is a more prudent, proactive approach to maintaining plant reliability and safety. The engineering and design activities along with the procurement of certain materials for this project will commence during the fall

of 2013. The Company has budgeted $1.5 million in FY 2015 for the construction of this project.

Finally, in Docket 4380, the Commission approved a gas expansion pilot program, which was funded at a level of $3.0 million for the FY 2014 Gas ISR. Despite intensive marketing campaign and outreach efforts for the FY 2014 ISR Gas Expansion Pilot Program, only two small, partial projects were able to move forward, serving six and seven new customers, respectively. An extensive Company review of these efforts and feedback from customers identified several major lessons, which form the basis of the proposed changes and modifications in the FY 2015 pilot program designed to simplify the program process and better address the barriers to customer participation in the program. These include the following: (1) the need to provide a more simple, fixed pilot offer, addressing customer comments that the current program was too complicated and uncertain for participation; (2) the need to provide a significantly reduced offer as customer conversion costs remain a barrier to participation; and (3) the need to provide more flexibility for customers and the Company to respond to customer interest.

To simplify the project eligibility criteria of the pilot program, the current project categories in the FY 2014 Gas Expansion Pilot Program are replaced with a "Density Test" and "Customer Commitment" requirement, described in the Plan. These simplified criteria will also increase the Company's flexibility to consider smaller gas expansion projects. In addition, to provide customers a simpler experience and more affordable

offer, the current customer Contribution In Aid of Construction ("CIAC") charge, which varies based on the number of committed customers, will be replaced by a fixed charge of $150 to be included as part of the standard service charge. This incremental fixed charge will be reconciled and credited back to customers in the annual reconciliation filing. As noted above, Exhibit 2 to the testimony in this proceeding outlines the lessons learned and the proposed modifications to the FY 2015 Gas Expansion Pilot Program in more detail.

Table 1

Capital Investment Plan	FY 2015 ($000's)	Description
Replacement Program • Main Replacement • Service Replacements	$ 38,000	• Includes the replacement of approximately 53 miles of leak prone gas main and approximately 500 leak prone services (i.e. high pressure, unprotected steel gas services with inside meter sets).
Public Works	$ 3,857	• Includes all municipal public works projects • In addition, $1.3 million of reimbursable work is expected in FY 2015
Reactive Main Replacement	$ 200	• Emergency work resulting in the immediate replacement of main resulting from leaks or other unplanned work
Mandated Programs	$ 14,140	• All emergency service replacements resulting from leaks • All cast iron joint leak repairs • Purchase of gas meters due to retirement • Install and upgrade cathodic protection systems and replace control lines • Non-leak other related work load
Reliability	$ 10,424	• System Automation and Control • Install new regulator station • Regulator station abandonments • Gas Planning • Water Intrusion projects • Valve Installations/Replacements
Special Projects	$ 4,675	• Carryover of the RIDOT I-195 relocation project originally indentified in the FY 2013 filing • Replacement of boiler-off compressor at Exeter LNG facility • Gas Expansion Pilot program
TOTAL	**$71,296**	

Table 2

Gas ISR Spending Forecast (000's)								
Investment Categories	**FY13 Actual**	**FY14 Budget**	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY15 to FY19 TOTAL**
Main Replacement Program (1)	$32,120	$33,362	$36,500	$39,991	$43,705	$44,579	$45,471	$210,246
Service Replacement Program (2)	$3,740	$3,100	$1,500	$0	$0	$0	$0	$1,500
Sub-total	$35,860	$36,462	$38,000	$39,991	$43,705	$44,579	$45,471	$211,746
Public Works	$3,730	$1,821	$3,857	$3,857	$3,857	$3,857	$3,857	$19,285
Reactive Main Replacement	$250	$500	$200	$200	$200	$200	$200	$1,000
Mandated Program	$11,800	$13,522	$14,140	$14,413	$14,623	$14,838	$15,056	$73,070
Reliability	$7,960	$8,987	$10,424	$9,680	$9,424	$10,816	$10,824	$51,168
Special Projects	$0	$4,000	$4,675	$0	$0	$0	$0	$4,675
Sub-total	$23,740	$28,830	$33,296	$33,296	$28,150	$29,711	$29,937	$149,198
Capital Total (excluding Growth)			$71,296	$68,141	$71,809	$74,290	$75,408	$360,944
O&M Total	N/A	N/A	$400	$400	$400	$400	$400	$2,000
GAS ISR TOTAL	**$59,600**	**$65,292**	**$71,696**	**$68,541**	**$72,209**	**$74,690**	**$75,808**	**$362,944**
	(1) Main Replacement mileage increases annually (from 53 miles in FY15 to 60 miles in FY17 and beyond) **(2) Service Replacement Program is projected to conclude in FY15**							

Exhibit 1 – WFF & JML
Section 3
Revenue Requirement

Section 3

Revenue Requirement

FY 2015 Proposal

Revenue Requirement
FY 2015 Proposal

The attached proposed revenue requirement calculation reflects the revenue requirement related to the Company's proposed investment in its Gas Infrastructure, Safety, and Reliability ("ISR") Plan ("ISR Plan") for the fiscal year ("FY") ended March 31, 2015. It is important to note that the revenue requirement for the FY 2015 ISR recovery mechanism excludes amounts embedded in base rates in Docket No. 4323 for FY years 2012, 2013, and 2014 investments.

As shown on Page 1, Column (b) of Attachment 1, the Company's FY 2015 Gas ISR Plan revenue requirement amounts to $4,392,480 and consists of the following elements: (1) operation and maintenance ("O&M") expenses of $400,000 associated with hiring, training and supervision of additional personnel to support the increase in leak prone pipe replacement for FY 2015 as described in Section 2 of this Gas ISR Plan, and (2) the revenue requirement of $2,473,722 on FY 2015 proposed incremental non-growth ISR capital investment of $71,296,000 as calculated on Attachment 1, Page 2, plus the FY 2015 revenue requirement on incremental non-growth ISR capital investment of $1,342,074, $(334,730), and $511,415 for FY 2014, FY 2013 and FY 2012 incremental investments, from Pages 4, 6 and 8, respectively. Incremental non-growth capital investment for this purpose is intended to represent the net change in net plant for non-growth infrastructure investments during the relevant FY and is defined as capital additions plus cost of removal, less annual depreciation expense ultimately

embedded in the Company's base rates (excluding depreciation expense attributable to general plant).

For illustration purposes only, Column (c) of Page 1 of Attachment 1 provides the FY 2016 revenue requirement for the respective vintage year capital investments as calculated on Attachment 1, Pages 2, 4, 6 and 8. It is important to note that these amounts will be trued up to actual investment activity after the conclusion of the FY, with rate adjustments for the revenue requirement differences incorporated in future ISR filings.

Gas Infrastructure Investment

Incremental Capital Investment

As noted above, Page 2 of Attachment 1 calculates the revenue requirement of incremental capital investment associated with the Company's FY 2015 ISR Plan, that is, gas infrastructure investment (net of general plant) incremental to the amounts embedded in the Company's base distribution rates. The proposed capital investment, including cost of removal, was obtained from Table 2 of Section 2 of this Gas ISR Plan. The FY 2015 revenue requirement also includes the incremental capital investment associated with the Company's 2014, 2013, and 2012 ISR Plans, excluding investments reflected in rate base in Docket No. 4323 for each of those fiscal years, as shown on pages 4, 6 and 8, respectively.

Page 10 of Attachment 1 calculates the incremental FY 2012 through FY 2014 ISR capital investment and the related incremental cost of removal and incremental retirements for

the FY 2015 gas ISR revenue requirement. The calculations on Page 10 compare ISR-eligible capital investment, cost of removal and retirements for FY 2012 through FY 2014, to the corresponding amounts reflected in rate base in Docket No. 4323.

Gas Infrastructure Revenue Requirement

The revenue requirement calculation on incremental gas infrastructure investment for vintage year FY 2015 is shown on Page 2 of Attachment 1. The revenue requirement calculation incorporates the incremental ISR Plan capital investment, cost of removal, and retirements, which are the basis for determining the three components of the revenue requirement: (1) the return on investment (i.e. average ISR Plan rate base at the weighted average cost of capital); (2) depreciation expense; and (3) property taxes. The calculation on Page 2 begins with the determination of the depreciable net incremental capital that will be included in the ISR Plan rate base. Because depreciation expense is affected by plant retirements, retirements have been deducted from the total allowed capital included in ISR Plan rate base in determining depreciation expense. Retirements, however, do not affect rate base as both "plant in service" and the "depreciation reserve" are reduced by the installed value of the plant being retired and therefore have no impact on net plant. For purposes of calculating the revenue requirement, plant retirements have been estimated based on the percentage of actual retirements to additions during FY 2013 of 10.23%, and have been deducted from the total depreciable capital amount as shown on Lines 1 through 3. Incremental book depreciation expense on Line 12 is computed

based on the net depreciable additions from Line 3 at the 3.38 percent composite depreciation rate as approved in R.I.P.U.C. Docket No. 3943,[8] and as shown on Line 9. The Company has assumed a half year convention for the year of installation. Unlike retirements, cost of removal affects rate base but not depreciation expense. Consequently, the cost of removal, as shown on Line 7, is combined with the incremental depreciable amount from Line 6 (vintage year ISR Plan allowable capital additions less non-general plant depreciation expense included in base distribution rates) to arrive at the incremental investment on Line 8 to be included in the rate base upon which the return component of the annual revenue requirement is calculated.

The rate base calculation incorporates net plant from Line 8 and accumulated depreciation and accumulated deferred tax reserves as shown on Lines 18 and 19, respectively. The deferred tax amount arising from the capital investment, as calculated on Lines 14 through 16, equals the difference between book depreciation and tax depreciation on the capital investment, times the effective tax rate. The calculation of tax depreciation is described below. The average change in rate base is shown on Line 21. This amount is multiplied by the pre-tax rate of return approved by the Commission in Docket No. 4323, as shown on Line 22, to compute the return and tax portion of the incremental revenue requirement, as shown on Line 23. To this, incremental depreciation expense is added on Line 24, as are property taxes on Line 25, which are computed at the 3.06 percent effective property tax rate, as agreed to in the Settlement

[8] The Company did not change depreciation rates in its base rate filing in Docket No. 4323.

Agreement approved by the Commission in Docket No. 4323, on net capital investment in the year following the investment to coincide with the timing in which property taxes are assessed. The sum of these three amounts reflects the annual revenue requirement associated with the capital investment portion of the Company's Gas ISR Plan on Line 26, which is carried forward to Page 1 as part of the total Gas ISR Plan revenue requirement. Similar revenue requirement calculations for the vintage FY 2014, FY 2013, and FY 2012 incremental ISR Plan capital investment are shown on Pages 4, 6, and 8, respectively. These capital investment revenue requirement amounts are added to the total O&M expense on Line 1, Page 1, to derive the total FY 2015 Gas ISR Plan revenue requirement of $4,392,480 as shown on Line 7, and represents an incremental $3,727,972 increase from the FY 2014 Gas ISR Plan revenue requirement, as shown on Line 8.

Tax Depreciation Calculation

The tax depreciation calculations for FY 2015, FY 2014, FY 2013 and FY 2012 are provided on Pages 3, 5, 7, and 9 of Attachment 1, respectively. The tax depreciation amount assumes that a portion of the capital investment, as shown on Line 1 of those pages, will be eligible for immediate deduction on the Company's corresponding FY federal income tax return. This

immediate deductibility is referred to as the capital repairs deduction.[9] In addition, plant additions not subject to the capital repairs deduction may be subject to bonus depreciation as shown on Lines 4 through 12 on Pages 7 and 9 for FY 2013 and FY 2012, and on Lines 4 through 10 on Page 5 for FY 2014. The Company assumes no bonus depreciation for FY 2015. During 2010, Congress passed the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 ("Act") which provided for an extension of bonus depreciation. Specifically, the Act provided for the application of 100 percent bonus depreciation for investment constructed and placed into service after September 8, 2010 through December 31, 2011, and then 50 percent bonus depreciation for similar capital investment placed into service after December 31, 2011 through December 2012. The 50% bonus depreciation rate was later extended through December 31, 2013. In accordance with the Act, capital investments made from January 2012 through December 2013 are eligible for 50 percent bonus depreciation, as shown on Page 5, Line 10 for FY 2014, and Page 7, Line 12 for FY 2013, and on Page 9, Line 12

[9] During 2009, the Internal Revenue Service ("IRS") issued additional guidance, under Internal Revenue Code Section 162, related to certain work considered to be repair and maintenance expense, and eligible for immediate tax deduction for income tax purposes, but capitalized by the Company for book purposes. As a result of this additional guidance, the Company recorded a one-time tax expense for repair and maintenance costs in its FY 2009 federal income tax return filed on December 11, 2009 by National Grid Holdings, Inc. Since that time, the Company has taken a capital repairs deduction on all subsequent FY tax returns. This has formed the basis for the capital repairs deduction assumed in the Company's revenue requirement. This tax deduction has the effect of increasing deferred taxes and lowering the revenue requirement that customers will pay under the capital investment reconciliation mechanism. The Company's federal income tax returns are subject to audit by the IRS. If it is determined in the future that the Company's position on its tax returns on this matter was incorrect, the Company will reflect any related IRS disallowances, plus any associated interest assessed by the IRS, in a subsequent reconciliation filing under the ISR Plan.

for FY 2012.[10] The Company has assumed no bonus depreciation for its vintage year FY 2015 capital investments. Finally, the remaining plant additions not deducted as bonus depreciation are then subject to the IRS Modified Accelerated Cost-Recovery System, or MACRS tax depreciation rate. The amount of depreciation deducted for MACRS is added to the amount of capital repairs deduction plus the bonus depreciation deduction and cost of removal to arrive at total tax depreciation. These annual total tax depreciation amounts are carried forward to Line 10 of pages 2 and 4 and Line 8 of pages 6 and 8 of Attachment 1, for the respective years and incorporated in the deferred tax calculation.

[10] The Company anticipates that the IRS will issue further guidance on this issue and, to the extent such guidance differs from the Company's interpretation of the 2010 Act, will reflect any resulting differences in a subsequent reconciliation filing under the ISR Plan.

The Narragansett Electric Company
d/b/a National Grid
Gas Infrastructure, Safety, and Reliability (ISR) Plan
Annual Revenue Requirement Summary

Line No.		As Approved Fiscal Year 2014 (a)	Fiscal Year 2015 (b)	Fiscal Year 2016 (c)
	Operation and Maintenance Expenses			
1	Forecasted Gas Infrastructure, Safety, and Reliability O&M Expenses		$400,000	
	Capital Investment:			
2	Actual Revenue Requirement on Incremental FY 2012 Capital included in ISR Rate Base	$459,728	$511,415	$494,142
3	Actual Revenue Requirement on Incremental FY 2013 Capital included in ISR Rate Base	$0	($334,730)	($321,352)
4	Forecasted Annual Revenue Requirement on FY 2014 Capital included in ISR Rate Base	$204,781	$1,342,074	$1,289,605
5	Base	$0	$2,473,722	$6,257,087
6	Total Capital Investment Revenue Requirement	$664,509	$3,992,480	$7,719,480
7	Total Fiscal Year Revenue Requirement	**$664,509**	**$4,392,480**	**$7,719,480**
8	**Total Incremental Fiscal Year Rate Adjustment**		**$3,727,972**	

Column Notes
(a) As approved in Docket No. R.I.P.U.C 4380

Line Notes
1 O&M Expense for FY2015
2(b)-(c) From Page 8, Line 24(d)-(e)
3(b) -(c) From Page 6, Line 24(c)-(d)
4(b)-(c) From Page 4, Line 24(b)-(c)
5(b)-(c) From Page 2, Line 26(a)-(b)
6 Sum of Lines 2 through 5
7 Line 1 plus Line 6
8(b) 7(b) minus 7(a)

The Narragansett Electric Company
d/b/a National Grid
Computation of Gas Capital Investment Revenue Requirment
FY 2015 Investment

Line No.				Fiscal Year 2015 (a)	Fiscal Year 2016 (b)
	Depreciable Net Capital Included in ISR Rate Base				
1	Total Allowed Capital Included in ISR Rate Base in Current Year			$67,807,000	$0
2	Retirements		1/	$6,936,656	$0
3	Net Depreciable Capital Included in ISR Rate Base	Column (a) = Line 1 - Line 2; Column (b) = Prior Year Line 3		$60,870,344	$60,870,344
	Change in Net Capital Included in ISR Rate Base				
4	Capital Included in ISR Rate Base	Line 1		$67,807,000	$0
5	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant		$24,356,183	$0
6	Incremental Depreciable Amount	Column (a) = Line 4 - Line 5; Column (b) = Prior Year Line 6		$43,450,817	$43,450,817
7	Cost of Removal			$3,489,000	$3,489,000
8	**Net Plant Amount**	**Line 6 + Line 7**		**$46,939,817**	**$46,939,817**
	Deferred Tax Calculation:				
9	Composite Book Depreciation Rate	As Approved in R.I.P.U.C. Docket No. 3943 & 4323		3.38%	3.38%
10	Tax Depreciation	Page 3, Line 10		$50,041,934	$1,594,110
11	Cumulative Tax Depreciation	Prior Year Line 11 + Current Year Line 10		$50,041,934	$51,636,044
12	Book Depreciation	Column (a) = Line 3 * Line 9 * 50% ; Column (b) = Line 3 * Line 9		$1,028,709	$2,057,418
13	Cumulative Book Depreciation	Prior Year Line 13 + Current Year Line 12		$1,028,709	$3,086,127
14	Cumulative Book / Tax Timer	Line 11 - Line 13		$49,013,225	$48,549,917
15	Effective Tax Rate			35.00%	35.00%
16	Deferred Tax Reserve	Line 14 * Line 15		$17,154,629	$16,992,471
	ISR Rate Base Calculation:				
17	Cumulative Incremental Capital Included in ISR Rate Base	Line 8		$46,939,817	$46,939,817
18	Accumulated Depreciation	- Line 13		($1,028,709)	($3,086,127)
19	Deferred Tax Reserve	- Line 16		($17,154,629)	($16,992,471)
20	Year End Rate Base	Sum of Lines 17 through 19		$28,756,479	$26,861,220
	Revenue Requirement Calculation:				
21	Average ISR Rate Base	Column (a) = Current Year Line 20/2; Column (b) = (Prior Year Line 20 + Current Year Line 20) ÷ 2		$14,378,240	$27,808,849
22	Pre-Tax ROR		2/	10.05%	10.05%
23	Return and Taxes	Line 21 * Line 22		$1,445,013	$2,794,789
24	Book Depreciation	Line 12		$1,028,709	$2,057,418
25	Property Taxes	$0 in Year 1, then Prior Year (Line 8 - Line 13) * Property Tax Rate	3/	$0	$1,404,880
26	**Annual Revenue Requirement**	**Sum of Lines 23 through 25**		**$2,473,722**	**$6,257,087**

1/ Assumes 10.23% retirement rate based on FY13 actual retirements

2/ Weighted Average Cost of Capital per Settlement Agreement R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	5.70%	2.85%		2.85%
Short Term Debt	0.76%	0.80%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.54%	2.51%	10.05%

3/ Assumes an Effective Property Tax Rate of 3.06% subject to true up per Settlement Agreement R.I.P.U.C. Docket No. 4323

The Narragansett Electric Company
d/b/a National Grid
Calculation of Tax Depreciation
On FY 2015 Capital Investment

Line No.				Fiscal Year 2015 (a)	Fiscal Year 2016 (b)
	Capital Repairs Deduction				
1	Plant Additions	Page 2 Line 1		$67,807,000	
2	Capital Repairs Deduction Rate	Per Tax Department	1/	67.43%	
3	Capital Repairs Deduction	Line 2 * Line 3		$45,724,854	
	Remaining Tax Depreciation				
4	Plant Additions	Line 1		$67,807,000	
5	Less Capital Repairs Deduction	Line 3		$45,724,854	
6	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 4 - 5		$22,082,146	$22,082,146
7	20 YR MACRS Tax Depreciation Rates			3.750%	7.219%
8	Remaining Tax Depreciation	Line 6 * Line 7		$828,080	$1,594,110
9	Cost of Removal	Page 2 Line 7		$3,489,000	
10	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 8, 9		$50,041,934	$1,594,110

1/ Capital Repairs percentage is based on a three year average, 2010, 2011, and 2012 of electric property qualifying for the repairs deduction as a percentage of total annual plant additions.

The Narragansett Electric Company
d/b/a National Grid
Computation of Gas Capital Investment Revenue Requirment
FY 2014 Investment

Line No.				Fiscal Year 2014 (a)	Fiscal Year 2015 (b)	Fiscal Year 2016 (c)
	Depreciable Net Capital Included in ISR Rate Base:					
1	Total Allowed Capital Included in ISR Rate Base in Current Year	Page 10 Line 3, Column (c)		$14,503,237	$0	$0
2	Retirements	Page 10 Line 9, Column (c)		$1,422,767	$0	$0
3	Net Depreciable Capital Included in ISR Rate Base	Column (a) = Line 1 - Line 2; Column (b) through (c)= Prior Year Line 3		$13,080,470	$13,080,470	$13,080,470
	Change in Net Capital Included in ISR Rate Base					
4	Capital Included in ISR Rate Base	Line 1		$14,503,237	$0	$0
5	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant	1/	$4,060,176	$0	$0
6	Incremental Depreciable Amount	Column (a) = Line 4 - Line 5; Column (b) through (c) = Prior Year Line 6		$10,443,061	$10,443,061	$10,443,061
7	Cost of Removal	Page 10 Line 6, Column (c)		($783,176)	($783,176)	($783,176)
8	**Net Plant Amount**	**Line 6 + Line 7**		**$9,659,885**	**$9,659,885**	**$9,659,885**
	Deferred Tax Calculation:					
9	Composite Book Depreciation Rate	As Approved in R.I.P.U.C. Docket No. 3943 & 4323		3.38%	3.38%	3.38%
10	Tax Depreciation	Page 5, Line 18		$9,758,520	$297,126	$274,818
11	Cumulative Tax Depreciation	Prior Year Line 11 + Current Year Line 10		$9,758,520	$10,055,646	$10,330,464
12	Book Depreciation	Column (a) = Line 3 * Line 9 * 50% * 2/12; Column (b) = Line 3 * Line 9; Column (c) = Line 3* Line 9		$36,843	$442,120	$442,120
13	Cumulative Book Depreciation	Prior Year Line 13 + Current Year Line 12		$36,843	$478,963	$921,083
14	Cumulative Book / Tax Timer	Line 11 - Line 13		$9,721,677	$9,576,683	$9,409,381
15	Effective Tax Rate			35.00%	35.00%	35.000%
16	Deferred Tax Reserve	Line 14 * Line 15		$3,402,587	$3,351,839	$3,293,283
	ISR Rate Base Calculation:					
17	Cumulative Incremental Capital Included in ISR Rate Base	Line 8		$9,659,885	$9,659,885	$9,659,885
18	Accumulated Depreciation	- Line 13		($36,843)	($478,963)	($921,083)
19	Deferred Tax Reserve	- Line 16		($3,402,587)	($3,351,839)	($3,293,283)
20	Year End Rate Base	Sum of Lines 17 through 19		$6,220,455	$5,829,083	$5,445,519
	Revenue Requirement Calculation:					
21	Average ISR Rate Base	Column (a) Page 11 Line 15 * Line 20; Column (b) = (Prior Year Line 20 + Current Year Line 20) ÷ 2		$1,407,008	$6,024,769	$5,637,301
22	Pre-Tax ROR		2/	10.05%	10.05%	10.05%
23	Return and Taxes	Line 21 * Line 22		$141,404	$605,489	$566,549
24	Book Depreciation	Line 12		$36,843	$442,120	$442,120
25	Property Taxes	$0 in Year 1, then Prior Year (Line 8 - Line 13) * Property Tax Rate	3/	$0	$294,465	$280,936
26	**Annual Revenue Requirement**	**Sum of Lines 23 through 25**		**$178,247**	**$1,342,074**	**$1,289,605**

1/ Depreciation Expense has been prorated for 2 months (February - March 2014)

2/ Weighted Average Cost of Capital per Settlement Agreement R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	5.70%	2.85%		2.85%
Short Term Debt	0.76%	0.80%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.54%	2.51%	10.05%

3/ Assumes an Effective Property Tax Rate of 3.06% subject to true up per Settlement Agreement R.I.P.U.C. Docket No. 4323

The Narragansett Electric Company
d/b/a National Grid
Calculation of Tax Depreciation
On FY 2014 Capital Investment

Line No.				Fiscal Year 2014 (a)	Fiscal Year 2015 (b)	Fiscal Year 2016 (c)
	Capital Repairs Deduction					
1	Plant Additions	Page 4 Line 1		$14,503,237		
2	Capital Repairs Deduction Rate	Per Tax Department	1/	67.43%		
3	Capital Repairs Deduction	Line 2 * Line 3		$9,780,088		
	Remaining Tax Depreciation					
4	Plant Additions	Line 1		$14,503,237		
5	Less Capital Repairs Deduction	Line 3		$9,780,088		
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - 5		$4,723,149		
7	Percent of Incremental Plant Investment incurred in CY2013		2/	25.71%		
8	CY 2013 Incremental Plant Investment			$1,214,524		
9	Bonus Depreciation Rate			50.00%		
10	Bonus Depreciation			$607,262		
	Remaining Tax Depreciation					
11	Plant Additions	Line 1		$14,503,237		
12	Less Capital Repairs Deduction	Line 3		$9,780,088		
13	Less Bonus Depreciation	Line 12		$607,262		
14	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - Line 14 - Line 15		$4,115,887	$4,115,887	$4,115,887
15	20 YR MACRS Tax Depreciation Rates			3.750%	7.219%	6.677%
16	Remaining Tax Depreciation	Line 16 * Line 17		$154,346	$297,126	$274,818
17	Cost of Removal	Page 4 Line 7		($783,176)		
18	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 10, 16, and 17		$9,758,520	$297,126	$274,818

1/ Capital Repairs percentage is based on a three year average, 2010, 2011, and 2012 of electric property qualifying for the repairs deduction as a percentage of total annual plant additions.

2/ From Page 11, Line 16

The Narragansett Electric Company
d/b/a National Grid
Computation of Gas Capital Investment Revenue Requirment
FY 2013 Investment

Line No.				Fiscal Year 2013 (a)	Fiscal Year 2014 (b)	Fiscal Year 2015 (c)	Fiscal Year 2016 (d)
	Depreciable Net Capital Included in Rate Base						
1	Total Allowed Capital Included in Rate Base in Current Year	Page 10, Line 3, Column (b)		($723,236)	$0	$0	$0
2	Retirements	Page 10, Line 9, Column (b)	1/	3,276,842	$0	$0	$0
3	Net Depreciable Capital Included in Rate Base	Line 1 - Line 2		($4,000,078)	($4,000,078)	($4,000,078)	($4,000,078)
	Change in Net Capital Included in Rate Base						
4	Capital Included in Rate Base	Line 1		($723,236)	($723,236)	($723,236)	($723,236)
5	Cost of Removal	Page 10, Line 6, Column (b)	2/	($1,548,831)	($1,548,831)	($1,548,831)	($1,548,831)
6	**Net Plant Amount**	**Line 4 + Line 5**		**($2,272,067)**	**($2,272,067)**	**($2,272,067)**	**($2,272,067)**
	Deferred Tax Calculation:						
7	Composite Book Depreciation Rate	As Approved in R.I.P.U.C. Docket No. 4323 and 3943		3.38%	3.38%	3.38%	3.38%
8	Tax Depreciation	Page 7, Line 20		($2,098,038)	($13,053)	($12,073)	($11,169)
9	Cumulative Tax Depreciation	Prior Year Line 9 + Current Year Line 8		($2,098,038)	($2,111,091)	($2,123,164)	($2,134,332)
10	Book Depreciation	Column (a) = Line 3 * Line 7 * 50%; Column (b) through (d) = Line 3 * Line 7		($67,601)	($135,203)	($135,203)	($135,203)
11	Cumulative Book Depreciation	Prior Year Line 11 + Current Year Line 10		($67,601)	($202,804)	($338,007)	($473,209)
12	Cumulative Book / Tax Timer	Line 9 - Line 11		($2,030,437)	($1,908,287)	($1,785,157)	($1,661,123)
13	Effective Tax Rate			35.00%	35.00%	35.000%	35.000%
14	Deferred Tax Reserve	Line 12 * Line 13		($710,653)	($667,900)	($624,805)	($581,393)
	Rate Base Calculation:						
15	Cumulative Incremental Capital Included in Rate Base	Line 6		($2,272,067)	($2,272,067)	($2,272,067)	($2,272,067)
16	Accumulated Depreciation	- Line 11		$67,601	$202,804	$338,007	$473,209
17	Deferred Tax Reserve	- Line 14		$710,653	$667,900	$624,805	$581,393
18	Year End Rate Base	Sum of Lines 15 through 17		($1,493,812)	($1,401,362)	($1,309,255)	($1,217,464)
	Revenue Requirement Calculation:						
19	Average Rate Base	Current Year Line 18 ÷ 2; Column (b) through (d) = (Prior Year Line 18 + Current Year Line 18) ÷ 2			($1,447,587)	($1,355,309)	($1,263,360)
20	Pre-Tax ROR		3/		10.05%	10.05%	10.05%
21	Return and Taxes	Line 19 * Line 20			($145,483)	($136,209)	($126,968)
22	Book Depreciation	Line 10			($135,203)	($135,203)	($135,203)
23	Property Taxes	$0 in Year 1, then Prior Year (Line 6 - Line 11) * Property Tax Rate	4/		($67,457)	($63,319)	($59,182)
24	**Annual Revenue Requirement**	**Sum of Lines 21 through 23**		**N/A**	**($348,142)**	**($334,730)**	**($321,352)**

1/ Actual Incremental Retirements
2/ Actual Incremental Cost of Removal
3/ Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	5.70%	2.85%		2.85%
Short Term Debt	0.76%	0.80%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.54%	2.51%	10.05%

4/ Assumes an Effective Property Tax Rate of 3.06% subject to true up per Settlement Agreement R.I.P.U.C. Docket No. 4323

The Narragansett Electric Company
d/b/a National Grid
Calculation of Tax Depreciation
On FY 2013 Capital Investment

Line No.			Fiscal Year 2013 (a)	Fiscal Year 2014 (b)	Fiscal Year 2015 (c)	Fiscal Year 2016 (d)
	Capital Repairs Deduction					
1	Plant Additions	Page 6, Line 1	($723,236)			
2	Capital Repairs Deduction Rate	Per Tax Department	50.00%			
3	Capital Repairs Deduction	Line 1 x Line 2	($361,618)			
	Bonus Depreciation					
4	Plant Additions	Line 1	($723,236)			
5	Less Capital Repairs Deduction	Line 3	($361,618)			
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5	($361,618)			
7	Percent of Plant Eligible for Bonus Depreciation	Per Tax Department	100.00%			
8	Plant Eligible for Bonus Depreciation	Line 6 x Line 7	($361,618)			
9	Bonus Depreciation Rate (April 2012 - December 2012)	1 * 75% * 50%	37.50%			
10	Bonus Depreciation Rate (January 2013 - March 2013)	1 * 25% * 50%	12.50%			
11	Total Bonus Depreciation Rate	Line 9 + Line 10	50.00%			
12	Bonus Depreciation	Line 8 x Line 11	($180,809)			
	Remaining Tax Depreciation					
13	Plant Additions	Line 1	($723,236)			
14	Less Capital Repairs Deduction	Line 3	($361,618)			
15	Less Bonus Depreciation	Line 12	($180,809)			
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - 14 - 15	($180,809)	($180,809)	($180,809)	($180,809)
17	20 YR MACRS Tax Depreciation Rates		3.750%	7.219%	6.677%	6.177%
18	Remaining Tax Depreciation	Line 16 x Line 17	($6,780)	($13,053)	($12,073)	($11,169)
19	Cost of Removal	Page 6, Line 5	($1,548,831)			
20	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18, 19	($2,098,038)	($13,053)	($12,073)	($11,169)

The Narragansett Electric Company
d/b/a National Grid
Computation of Gas Capital Investment Revenue Requirment
FY 2012 Investment

Line No.				Fiscal Year 2012 (a)	Fiscal Year 2013 (b)	Fiscal Year 2014 (c)	Fiscal Year 2015 (d)	Fiscal Year 2016 (e)
	Depreciable Net Capital included in ISR Rate Base							
1	Incremental Capital Investment	Page 10 Line 3, Column (a)		$7,020,631	$0	$0	$0	$0
2	Retirements	Page 10 Line 9, Column (a)		$2,292,446	$0	$0	$0	$0
3	Net Depreciable Capital Included in ISR Rate Base	Column (a) = Line 1 - Line 2; Columns (b) through (e) = Prior Year Line 3		$4,728,185	$4,728,185	$4,728,185	$4,728,185	$4,728,185
	Change in Incremental Capital Investment Included in ISR Rate Base							
4	Incremental Depreciable Amount	Line 1		$7,020,631	$7,020,631	$7,020,631	$7,020,631	$7,020,631
5	Incremental Cost of Removal	Page 10 Line 6, Column (a)		($3,171,476)	($3,171,476)	($3,171,476)	($3,171,476)	($3,171,476)
6	**Incremental Plant Amount**	**Line 4 + Line 5**		**$3,849,155**	**$3,849,155**	**$3,849,155**	**$3,849,155**	**$3,849,155**
	Deferred Tax Calculation:							
7	Composite Book Depreciation Rate	As Approved in R.I.P.U.C. Docket No. 3943 & 4323		3.38%	3.38%	3.38%	3.38%	3.38%
8	Tax Depreciation	Page 9 Line 20		$2,954,452	$67,105	$62,067	$57,419	$53,106
9	Cumulative Tax Depreciation	Prior Year Line 9 + Current Year Line 8		$2,954,452	$3,021,557	$3,083,624	$3,141,043	$3,194,149
10	Book Depreciation	Column (a) = Line 3 * Line 7 * 50%; Columns (b) through (e) = Line 3 * Line 7		$79,906	$159,813	$159,813	$159,813	$159,813
11	Cumulative Book Depreciation	Prior Year Line 11 + Current Year Line 10		$79,906	$239,719	$399,532	$559,344	$719,157
12	Cumulative Book / Tax Timer	Line 9 - Line 11		$2,874,546	$2,781,838	$2,684,092	$2,581,699	$2,474,992
13	Effective Tax Rate			35.00%	35.00%	35.000%	35.000%	35.000%
14	Deferred Tax Reserve	Line 12 * Line 13		$1,006,091	$973,643	$939,432	$903,595	$866,247
	ISR Rate Base Calculation:							
15	Cumulative Incremental Capital Included in ISR Rate Base	Line 6		$3,849,155	$3,849,155	$3,849,155	$3,849,155	$3,849,155
16	Accumulated Depreciation	- Line 11		($79,906)	($239,719)	($399,532)	($559,344)	($719,157)
17	Deferred Tax Reserve	- Line 14		($1,006,091)	($973,643)	($939,432)	($903,595)	($866,247)
18	Year End Rate Base	Sum of Lines 15 through 17		$2,763,158	$2,635,793	$2,510,191	$2,386,216	$2,263,751
	Revenue Requirement Calculation:							
19	Average ISR Rate Base	(Prior Year Line 18 + Current Year Line 18) ÷ 2		$1,381,579	$2,699,475	$2,572,992	$2,448,204	$2,324,984
20	Pre-Tax ROR		1/			10.05%	10.05%	10.05%
21	Return and Taxes	Line 19 * Line 20				$258,586	$246,044	$233,661
22	Book Depreciation	Line 10				$159,813	$159,813	$159,813
23	Property Taxes	$0 in Year 1, then Prior Year (Line 6 - Line 11) * Property Tax Rate	2/			$110,449	$105,558	$100,668
24	**Annual Revenue Requirement**	**Sum of Lines 21 through 23**	3/	**N/A**	**N/A**	**$528,848**	**$511,415**	**$494,142**

1/ Weighted Average Cost of Capital per Settlement Agreement R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	5.70%	2.85%		2.85%
Short Term Debt	0.76%	0.80%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.54%	2.51%	10.05%

2/ Assumes an Effective Property Tax Rate of 3.06% subject to the true up per Settlement Agreement R.I.P.U.C. Docket No. 4323

3/ Column (a) The FY 2012 Revenue Requirement on the FY 2012 Capital investment was reconciled in the FY 2012 Gas ISR Reconciliation Filing R.I.P.U.C Docket No. 4219.
Column (b) The FY 2013 Revenue Requirement on the FY 2012 Capital Investment will be reconciled in the FY 2013 Gas ISR Reconciliation Filing due August 1, 2013.

The Narragansett Electric Company
d/b/a National Grid
Calculation of Tax Depreciation
On FY 2012 Capital Investment

Line No.				Fiscal Year 2012 (a)	Fiscal Year 2013 (b)	Fiscal Year 2014 (c)	Fiscal Year 2015 (d)	Fiscal Year 2016 (e)
	Capital Repairs Deduction							
1	Plant Additions	Page 8 Line 1		$7,020,631				
2	Capital Repairs Deduction Rate	Per Tax Department	1/	48.33%				
3	Capital Repairs Deduction	Line 2 * Line 3		$3,393,071				
	Bonus Depreciation							
4	Plant Additions	Line 1		$7,020,631				
5	Less Capital Repairs Deduction	Line 3		$3,393,071				
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5		$3,627,560				
7	Percent of Plant Eligible for Bonus Depreciation		2/	85.00%				
8	Plant Eligible for Bonus Depreciation	Line 6 * Line 7		$3,083,426				
9	Bonus Depreciation Rate (April 2011 - December 2011)	1 * 75%		75.00%				
10	Bonus Depreciation Rate (January 2012 - March 2012)	1 * 25% * 50%		12.50%				
11	Total Bonus Depreciation Rate	Line 9 + Line 10		87.50%				
12	Bonus Depreciation	Line 8 * Line 11		$2,697,998				
	Remaining Tax Depreciation							
13	Plant Additions	Line 1		$7,020,631				
14	Less Capital Repairs Deduction	Line 3		$3,393,071				
15	Less Bonus Depreciation	Line 12		$2,697,998				
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 1 - 14 - 15		$929,562	$929,562	$929,562	$929,562	$929,562
17	20 YR MACRS Tax Depreciation Rates			3.750%	7.219%	6.677%	6.177%	5.713%
18	Remaining Tax Depreciation	Line 16 * Line 17		$34,859	$67,105	$62,067	$57,419	$53,106
19	Cost of Removal	Page 3 Line 5		($3,171,476)				
20	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18, 19		$2,954,452	$67,105	$62,067	$57,419	$53,106

1/ Capital Repairs percentage is based on the actual results of the FY 2011 tax return. Since growth is not included in the ISR, the percentage was derived by taking property qualifying for the repairs deduction as a percentage of the total annual plant addtions in those categories that are considered as potentially qualifying for Capital Repairs deduction.

2/ Since not all property additions qualify for bonus depreciation and because a project must be started after the beginning of the bonus period, January 1, 2008, an estimate of 85% is used rather than 100%.

The Narragansett Electric Company
d/b/a National Grid
FY 2012 - FY 2014 Incremental Capital Investment Summary

Line No.			Actual Fiscal Year 2012 (a)	Actual Fiscal Year 2013 (b)	Estimated Fiscal Year 2014 (c)
	Capital Investment				
1	ISR-eligible Capital Investment	Col (a) FY 2012 ISR Reconciliation Filing Docket No. 4219; Col (b) FY 2013 ISR Filing Docket No. 4306; Col (c) Proposed FY 2014 Capital Investment	$54,681,347	$56,460,955	$62,156,730
2	ISR-eligible Capital Additions included in Rate Base per R.I.P.U.C. Docket No. 4323	Schedule MDL-3-GAS Page 51, Docket No. 4323: Col (a)= Line Note 1(a); Col (b)= Line Note 2(b); Col (c)= Line Note 3(e)	$47,660,716	$57,184,191	$47,653,493
3	Incremental ISR Capital Investment	Line 3 - Line 4	$7,020,631	($723,236)	$14,503,237
	Cost of Removal				
4	ISR-eligible Cost of Removal	Col (a) FY 2012 ISR Reconciliation Filing Docket No. 4219; Col (b) FY 2013 ISR Filing Docket No. 4306; Col (c) Proposed FY 2014 Capital Investment	$2,583,612	$3,152,565	$3,134,654
5	ISR-eligible Cost of Removal in Rate Base per R.I.P.U.C. Docket No. 4323	Workpaper MDL-19-GAS Page 3, Docket No. 4323: Col (a)= Line Note 1(a); Col (b)= Line Note 2(b); Col (c)= Line Note 3(e)	$5,755,088	$4,701,396	$3,917,830
6	Incremental Cost of Removal	Line 4 - Line 5	($3,171,476)	($1,548,831)	($783,176)
	Retirements				
7	ISR-eligible Retirements	Col (a) FY 2012 ISR Reconciliation Filing Docket No. 4219; Col (b) FY 2013 ISR Filing Docket No. 4306; Col (c) Line 1 * 9.81%	$5,366,562	$5,775,791	$6,097,575 1/
8	ISR-eligible Retirements per Docket 4323	Col (a) Supplemental Testimony 2-17-2011 Docket No. 4219; Col (b) FY 2013 ISR Filing Docket No. 4306; Col (c) Line 2 * 9.81%	$3,074,116	$2,498,949	$4,674,808 1/
9	Incremental Retirements	Line 7- Line 8	$2,292,446	$3,276,842	$1,422,767

1/ Assumes 9.81% based on FY 2012 retirements as a percentage of capital investment

The Narragansett Electric Company
d/b/a National Grid
Calculation of FY 2014 Weighted Average Rate Base Ratio

Line No.	Month No.	Month	FY 2014 Plant Additions (a)	In Rates (b)	Not In Rates (c) = (a) - (b)	Weight (d)	Weighted Average (f) = (d) * (c)
1				57,184,191			
2	1	Apr-13	5,179,728	4,765,349	414,378	0.958	397,113
3	2	May-13	5,179,728	4,765,349	414,378	0.875	362,581
4	3	Jun-13	5,179,728	4,765,349	414,378	0.792	328,049
5	4	Jul-13	5,179,728	4,765,349	414,378	0.708	293,518
6	5	Aug-13	5,179,728	4,765,349	414,378	0.625	258,986
7	6	Sep-13	5,179,728	4,765,349	414,378	0.542	224,455
8	7	Oct-13	5,179,728	4,765,349	414,378	0.458	189,923
9	8	Nov-13	5,179,728	4,765,349	414,378	0.375	155,392
10	9	Dec-13	5,179,728	4,765,349	414,378	0.292	120,860
11	10	Jan-14	5,179,728	4,765,349	414,378	0.208	86,329
12	11	Feb-14	5,179,728	-	5,179,728	0.125	647,466
13	12	Mar-14	5,179,728	-	5,179,728	0.042	215,822
14		Total	$62,156,730	$47,653,493	$14,503,238		$3,280,495
15	Ratio = Line 14, Column (f) / Line 14, Column (c)						**22.62%**
16	Portion of additions subject to CY2013 Bonus Depreciation						**25.71%**

Column Notes
Column (a) Page 10 Line 1(c)
Column (b) Page 10 Line 2(c)
Column (d)= (12.5- Month No.) / 12

Line Notes
16 Sum of Lines 2(c) through 10(c)/ Line 14(c)

Exhibit 1 – WFF & JML
Section 4
Rate Design

Section 4

Rate Design
FY 2015 Proposal

Rate Design
FY 2015 Proposal

Like the revenue requirement, the proposed ISR rate design for FY 2015 is based on incremental capital investment in excess of capital investment that has been reflected in rate base in the Company's latest base rate case, Docket No. 4323, as well as incremental O&M as described in Section 2. For purposes of rate design, the revenue requirement associated with the capital investment is allocated to rate classes based upon the rate base allocator from the Company's Settlement agreement in Docket No. 4323. The incremental O&M expense associated with hiring, training, and supervising additional personnel to support an increase in Main Replacement work for FY 2015 has been allocated to all rate classes on a per-unit basis. The throughput has been updated for the April 2014 through March 2015 period based upon the most recent forecast filed in the Company's Gas Cost Recovery filing in Docket No. 4436. Attachment 1 of this section provides the proposed ISR factors by rate class.

Line No.

	FY 2015 Revenue Requirement	Rate Class	Rate Base Allocator (%)	Allocation to Rate Class ($)	Throughput (dth)	CapEx Factor (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)	(k)
1	$3,992,480										
2	$400,000										
3		Res-NH	3.73%	$148,960	726,511	$0.2050	0.0205	0.0010	0.0215	3.18%	$0.0222
4		Res-H	61.56%	$2,457,697	18,284,592	$0.1344	0.0134	0.0010	0.0144	3.18%	$0.0148
5		Small	8.19%	$326,865	2,341,305	$0.1396	0.0139	0.0010	0.0149	3.18%	$0.0153
6		Medium	13.58%	$542,312	5,313,311	$0.1020	0.0102	0.0010	0.0112	3.18%	$0.0115
7		Large LL	6.04%	$241,025	2,977,818	$0.0809	0.0080	0.0010	0.0090	3.18%	$0.0092
8		Large HL	2.35%	$93,996	1,179,666	$0.0796	0.0079	0.0010	0.0089	3.18%	$0.0091
9		XL-LL	0.77%	$30,699	1,619,443	$0.0189	0.0018	0.0010	0.0028	3.18%	$0.0028
10		XL-HL	3.78%	$150,926	6,102,671	$0.0247	0.0024	0.0010	0.0034	3.18%	$0.0035
11		Total	100.00%	$3,992,480	38,545,318						

(a) Line 1 - Proposed Capital Revenue Requirement (Section 3, attachment 1, page 1, line 7)
(a) Line 2 - Proposed O&M (Section 3, attachment 1, page 1, line 1)
(c) Docket 4323, RI 2012 Rate Case
(d) Col (a) line 1 * Col (c)
(e) Page 2, column (m), line 9
(f) Column (d) / Column (e), truncated to 4 decimal places
(g) Column (d) / (Column (e)*10), truncated to 4 decimal places
(h) Col (a) line 2 / (Col (e) line 11 * 10)
(i) Col (g) + Col (h)
(j) Docket 4323, RI 2012 Rate Case
(k) Col (i) / (1- Col (j)), truncated to 4 decimal places

Forecasted Throughput April 2014 - March 2015

		Apr-14 (a)	May-14 (b)	Jun-14 (c)	Jul-14 (d)	Aug-14 (e)	Sep-14 (f)	Oct-14 (g)	Nov-14 (h)	Dec-14 (i)	Jan-15 (j)	Feb-15 (k)	Mar-15 (l)	Total (m)
1	Res-NH	64,567	56,216	40,932	31,123	28,396	28,939	35,495	52,456	79,710	112,894	117,170	78,612	726,511
2	Res-H	2,054,509	1,275,453	688,829	437,527	393,560	433,919	517,838	1,087,839	2,078,881	3,241,398	3,224,307	2,850,532	18,284,592
3	Small	270,238	159,950	84,920	60,020	57,753	67,751	67,154	128,391	232,694	441,267	400,551	370,617	2,341,305
4	Medium	529,439	377,672	198,292	153,309	146,809	165,423	212,386	369,796	647,936	907,955	871,582	732,713	5,313,311
5	Large LL	303,505	185,732	73,578	38,435	33,853	47,110	106,920	237,197	407,968	568,766	514,175	460,580	2,977,818
6	Large HL	104,717	93,374	82,589	64,726	67,975	81,772	75,653	95,691	116,201	138,650	128,022	130,295	1,179,666
7	X-Large LL	132,298	72,001	19,075	13,411	13,105	21,219	80,389	169,367	251,392	287,141	275,888	284,159	1,619,443
8	X-Large HL	490,774	446,243	423,981	419,902	423,083	412,107	458,867	524,814	622,743	662,127	583,730	634,302	6,102,671
9		3,950,046	2,666,640	1,612,196	1,218,453	1,164,534	1,258,241	1,554,701	2,665,550	4,437,525	6,360,199	6,115,426	5,541,808	38,545,318

Source: Company forecast

Exhibit 1 – WFF & JML
Section 5
Bill Impact

Section 5

Bill Impacts
FY 2015 Proposal

Bill Impacts
FY 2015 Proposal

The estimated bill impact associated with the rate design contained in Section 4 is provided in Section 5. Attachment 1 of this section provides the FY 2015 ISR bill impact by rate class. For the average residential heating customer utilizing 846 therms, the cumulative impact of the FY 2015 ISR will represent an annual increase of 10.82 ($10.50 for ISR and $0.32 for associated GET), or 0.9%.

National Grid - RI Gas
Infrastructure, Safety, and Reliability (ISR) Filing
Bill Impact Analysis with Various Levels of Consumption:

Residential Heating:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC		GET	EE
								Base DAC	ISR		
(1)		550	$865.89	$858.87	$7.02	0.8%	$0.00	$0.00	$6.81	$0.21	$0.00
(2)		608	$939.81	$932.02	$7.78	0.8%	$0.00	$0.00	$7.55	$0.23	$0.00
(3)		667	$1,014.82	$1,006.30	$8.52	0.8%	$0.00	$0.00	$8.26	$0.26	$0.00
(4)		727	$1,090.09	$1,080.81	$9.28	0.9%	$0.00	$0.00	$9.00	$0.28	$0.00
(5)		788	$1,163.58	$1,153.47	$10.10	0.9%	$0.00	$0.00	$9.80	$0.30	$0.00
(6)	Average Customer	**846**	**$1,232.09**	**$1,221.27**	**$10.82**	**0.9%**	$0.00	$0.00	$10.50	$0.32	$0.00
(7)		904	$1,300.79	$1,289.23	$11.56	0.9%	$0.00	$0.00	$11.21	$0.35	$0.00
(8)		966	$1,374.03	$1,361.66	$12.37	0.9%	$0.00	$0.00	$12.00	$0.37	$0.00
(9)		1,023	$1,441.14	$1,428.06	$13.08	0.9%	$0.00	$0.00	$12.69	$0.39	$0.00
(10)		1,081	$1,508.71	$1,494.89	$13.82	0.9%	$0.00	$0.00	$13.41	$0.41	$0.00
(11)		1,145.000	$1,582.24	$1,567.64	$14.60	0.9%	$0.00	$0.00	$14.16	$0.44	$0.00

Residential Heating Low Income:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC		GET	EE
								Base DAC	ISR		
(12)		550	$823.40	$816.38	$7.02	0.9%	$0.00	$0.00	$6.81	$0.21	$0.00
(13)		608	$894.57	$886.79	$7.78	0.9%	$0.00	$0.00	$7.55	$0.23	$0.00
(14)		667	$966.81	$958.30	$8.52	0.9%	$0.00	$0.00	$8.26	$0.26	$0.00
(15)		727	$1,039.36	$1,030.08	$9.28	0.9%	$0.00	$0.00	$9.00	$0.28	$0.00
(16)		788	$1,110.40	$1,100.29	$10.10	0.9%	$0.00	$0.00	$9.80	$0.30	$0.00
(17)	Average Customer	**846**	**$1,176.69**	**$1,165.87**	**$10.82**	**0.9%**	$0.00	$0.00	$10.50	$0.32	$0.00
(18)		904	$1,243.18	$1,231.63	$11.56	0.9%	$0.00	$0.00	$11.21	$0.35	$0.00
(19)		966	$1,314.08	$1,301.71	$12.37	1.0%	$0.00	$0.00	$12.00	$0.37	$0.00
(20)		1,023	$1,379.04	$1,365.96	$13.08	1.0%	$0.00	$0.00	$12.69	$0.39	$0.00
(21)		1,081	$1,444.51	$1,430.68	$13.82	1.0%	$0.00	$0.00	$13.41	$0.41	$0.00
(22)		1,145	$1,515.81	$1,501.21	$14.60	1.0%	$0.00	$0.00	$14.16	$0.44	$0.00

National Grid - RI Gas
Infrastructure, Safety, and Reliability (ISR) Filing
Bill Impact Analysis with Various Levels of Consumption:

Residential Non-Heating:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	GET	EE
(35)		140	$330.27	$327.76	$2.52	0.8%	$0.00	$0.00	$2.44	$0.08	$0.00
(36)		155	$348.45	$345.59	$2.86	0.8%	$0.00	$0.00	$2.77	$0.09	$0.00
(37)		171	$367.83	$364.69	$3.13	0.9%	$0.00	$0.00	$3.04	$0.09	$0.00
(38)		184	$383.52	$380.17	$3.35	0.9%	$0.00	$0.00	$3.25	$0.10	$0.00
(39)		198	$400.48	$396.86	$3.62	0.9%	$0.00	$0.00	$3.51	$0.11	$0.00
(40)	Average Customer	**214**	**$419.48**	**$415.56**	**$3.92**	**0.9%**	$0.00	$0.00	$3.80	$0.12	$0.00
(41)		228	$436.77	$432.63	$4.14	1.0%	$0.00	$0.00	$4.02	$0.12	$0.00
(42)		244	$456.18	$451.74	$4.44	1.0%	$0.00	$0.00	$4.31	$0.13	$0.00
(43)		258	$473.12	$468.42	$4.70	1.0%	$0.00	$0.00	$4.56	$0.14	$0.00
(44)		275	$493.65	$488.62	$5.03	1.0%	$0.00	$0.00	$4.88	$0.15	$0.00
(45)		288	$509.44	$504.19	$5.25	1.0%	$0.00	$0.00	$5.09	$0.16	$0.00

Residential Non-Heating Low Income:

(50)		140	$307.85	$305.34	$2.52	0.8%	$0.00	$0.00	$2.44	$0.08	$0.00
(51)		155	$325.35	$322.49	$2.86	0.9%	$0.00	$0.00	$2.77	$0.09	$0.00
(52)		171	$344.00	$340.87	$3.13	0.9%	$0.00	$0.00	$3.04	$0.09	$0.00
(53)		184	$359.11	$355.76	$3.35	0.9%	$0.00	$0.00	$3.25	$0.10	$0.00
(54)		198	$375.43	$371.82	$3.62	1.0%	$0.00	$0.00	$3.51	$0.11	$0.00
(55)	Average Customer	**214**	**$393.73**	**$389.81**	**$3.92**	**1.0%**	$0.00	$0.00	$3.80	$0.12	$0.00
(56)		228	$410.37	$406.23	$4.14	1.0%	$0.00	$0.00	$4.02	$0.12	$0.00
(57)		244	$429.06	$424.62	$4.44	1.0%	$0.00	$0.00	$4.31	$0.13	$0.00
(58)		258	$445.36	$440.66	$4.70	1.1%	$0.00	$0.00	$4.56	$0.14	$0.00
(59)		275	$465.13	$460.10	$5.03	1.1%	$0.00	$0.00	$4.88	$0.15	$0.00
(60)		288	$480.32	$475.08	$5.25	1.1%	$0.00	$0.00	$5.09	$0.16	$0.00

National Grid - RI Gas
Infrastructure, Safety, and Reliability (ISR) Filing
Bill Impact Analysis with Various Levels of Consumption:

C & I Small:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	GET	EE
(61)											
(62)											
(63)											
(64)			---	---	---	---	---	---	---	---	---
(65)		880	$1,418.71	$1,407.00	$11.70	0.8%	$0.00	$0.00	$11.35	$0.35	$0.00
(66)		973	$1,526.11	$1,513.14	$12.97	0.9%	$0.00	$0.00	$12.58	$0.39	$0.00
(67)		1,067	$1,633.86	$1,619.66	$14.20	0.9%	$0.00	$0.00	$13.77	$0.43	$0.00
(68)		1,162	$1,740.32	$1,724.87	$15.44	0.9%	$0.00	$0.00	$14.98	$0.46	$0.00
(69)		1,258	$1,842.19	$1,825.46	$16.72	0.9%	$0.00	$0.00	$16.22	$0.50	$0.00
(70)	Average Customer	**1,352**	**$1,940.85**	**$1,922.85**	**$18.00**	**0.9%**	$0.00	$0.00	$17.46	$0.54	$0.00
(71)		1,446	$2,040.30	$2,021.06	$19.24	1.0%	$0.00	$0.00	$18.66	$0.58	$0.00
(72)		1,542	$2,141.21	$2,120.69	$20.53	1.0%	$0.00	$0.00	$19.91	$0.62	$0.00
(73)		1,635	$2,239.04	$2,217.30	$21.74	1.0%	$0.00	$0.00	$21.09	$0.65	$0.00
(74)		1,730	$2,337.91	$2,314.90	$23.01	1.0%	$0.00	$0.00	$22.32	$0.69	$0.00
(75)		1,825	$2,436.82	$2,412.54	$24.28	1.0%	$0.00	$0.00	$23.55	$0.73	$0.00

C & I Medium:

		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	GET	EE
(76)											
(77)											
(78)											
(79)			---	---	---	---	---	---	---	---	---
(80)		7,941	$9,388.72	$9,309.28	$79.43	0.9%	$0.00	$0.00	$77.05	$2.38	$0.00
(81)		8,796	$10,306.69	$10,218.71	$87.98	0.9%	$0.00	$0.00	$85.34	$2.64	$0.00
(82)		9,650	$11,223.15	$11,126.64	$96.51	0.9%	$0.00	$0.00	$93.61	$2.90	$0.00
(83)		10,505	$12,141.13	$12,036.07	$105.05	0.9%	$0.00	$0.00	$101.90	$3.15	$0.00
(84)		11,361	$13,059.53	$12,945.90	$113.63	0.9%	$0.00	$0.00	$110.22	$3.41	$0.00
(85)	Average Customer	**12,217**	**$13,978.21**	**$13,856.04**	**$122.18**	**0.9%**	$0.00	$0.00	$118.51	$3.67	$0.00
(86)		13,073	$14,896.93	$14,766.20	$130.72	0.9%	$0.00	$0.00	$126.80	$3.92	$0.00
(87)		13,928	$15,814.38	$15,675.08	$139.30	0.9%	$0.00	$0.00	$135.12	$4.18	$0.00
(88)		14,782	$16,731.39	$16,583.57	$147.81	0.9%	$0.00	$0.00	$143.38	$4.43	$0.00
(89)		15,637	$17,648.83	$17,492.45	$156.38	0.9%	$0.00	$0.00	$151.69	$4.69	$0.00
(90)		16,492	$18,566.83	$18,401.92	$164.92	0.9%	$0.00	$0.00	$159.97	$4.95	$0.00

National Grid - RI Gas
Infrastructure, Safety, and Reliability (ISR) Filing
Bill Impact Analysis with Various Levels of Consumption:

C & I LLF Large:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	GET	EE
(91)											
(92)											
(93)											
(94)			---	---	---	---	---	---	---	---	---
(95)		41,066	$44,565.58	$44,235.34	$330.24	0.7%	$0.00	$0.00	$320.33	$9.91	$0.00
(96)		45,488	$49,131.24	$48,765.48	$365.76	0.8%	$0.00	$0.00	$354.79	$10.97	$0.00
(97)		49,910	$53,697.07	$53,295.69	$401.38	0.8%	$0.00	$0.00	$389.34	$12.04	$0.00
(98)		54,334	$58,264.57	$57,827.65	$436.92	0.8%	$0.00	$0.00	$423.81	$13.11	$0.00
(99)		58,757	$62,831.20	$62,358.73	$472.47	0.8%	$0.00	$0.00	$458.30	$14.17	$0.00
(100)	Average Customer	**63,179**	**$67,397.11**	**$66,889.06**	**$508.05**	**0.8%**	$0.00	$0.00	$492.81	$15.24	$0.00
(101)		67,600	$71,961.76	$71,418.16	$543.60	0.8%	$0.00	$0.00	$527.29	$16.31	$0.00
(102)		72,023	$76,528.39	$75,949.23	$579.15	0.8%	$0.00	$0.00	$561.78	$17.37	$0.00
(103)		76,447	$81,096.55	$80,481.83	$614.72	0.8%	$0.00	$0.00	$596.28	$18.44	$0.00
(104)		80,870	$85,663.22	$85,012.94	$650.28	0.8%	$0.00	$0.00	$630.77	$19.51	$0.00
(105)		85,292	$90,228.95	$89,543.10	$685.86	0.8%	$0.00	$0.00	$665.28	$20.58	$0.00

C & I HLF Large:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	GET	EE
(106)											
(107)											
(108)											
(109)			---	---	---	---	---	---	---	---	---
(110)		50,411	$48,674.16	$48,294.78	$379.38	0.8%	$0.00	$0.00	$368.00	$11.38	$0.00
(111)		55,841	$53,683.82	$53,263.57	$420.25	0.8%	$0.00	$0.00	$407.64	$12.61	$0.00
(112)		61,273	$58,695.21	$58,234.07	$461.14	0.8%	$0.00	$0.00	$447.31	$13.83	$0.00
(113)		66,699	$63,701.63	$63,199.66	$501.97	0.8%	$0.00	$0.00	$486.91	$15.06	$0.00
(114)		72,129	$68,711.31	$68,168.48	$542.82	0.8%	$0.00	$0.00	$526.54	$16.28	$0.00
(115)	Average Customer	**77,558**	**$73,720.10**	**$73,136.43**	**$583.67**	**0.8%**	$0.00	$0.00	$566.16	$17.51	$0.00
(116)		82,989	$78,729.88	$78,105.33	$624.56	0.8%	$0.00	$0.00	$605.82	$18.74	$0.00
(117)		88,416	$83,737.11	$83,071.71	$665.40	0.8%	$0.00	$0.00	$645.44	$19.96	$0.00
(118)		93,847	$88,747.61	$88,041.34	$706.27	0.8%	$0.00	$0.00	$685.08	$21.19	$0.00
(119)		99,275	$93,755.65	$93,008.53	$747.11	0.8%	$0.00	$0.00	$724.70	$22.41	$0.00
(120)		104,705	$98,765.40	$97,977.42	$787.98	0.8%	$0.00	$0.00	$764.34	$23.64	$0.00

National Grid - RI Gas
Infrastructure, Safety, and Reliability (ISR) Filing
Bill Impact Analysis with Various Levels of Consumption:

C & I LLF Extra-Large:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	GET	EE
(121)											
(122)											
(123)											
(124)			---	---	---	---	---	---	---	---	---
(125)		174,357	$157,609.14	$157,195.72	$413.41	0.3%	$0.00	$0.00	$401.01	$12.40	$0.00
(126)		193,136	$174,017.69	$173,559.73	$457.96	0.3%	$0.00	$0.00	$444.22	$13.74	$0.00
(127)		211,912	$190,423.88	$189,921.42	$502.46	0.3%	$0.00	$0.00	$487.39	$15.07	$0.00
(128)		230,688	$206,830.67	$206,283.67	$547.00	0.3%	$0.00	$0.00	$530.59	$16.41	$0.00
(129)		249,466	$223,238.36	$222,646.84	$591.52	0.3%	$0.00	$0.00	$573.77	$17.75	$0.00
(130)	Average Customer	**268,243**	**$239,645.21**	**$239,009.19**	**$636.02**	**0.3%**	$0.00	$0.00	$616.94	$19.08	$0.00
(131)		287,018	$256,050.84	$255,370.29	$680.55	0.3%	$0.00	$0.00	$660.13	$20.42	$0.00
(132)		305,796	$272,459.18	$271,734.11	$725.07	0.3%	$0.00	$0.00	$703.32	$21.75	$0.00
(133)		324,573	$288,866.18	$288,096.57	$769.61	0.3%	$0.00	$0.00	$746.52	$23.09	$0.00
(134)		343,350	$305,273.15	$304,459.00	$814.15	0.3%	$0.00	$0.00	$789.73	$24.42	$0.00
(135)		362,127	$321,680.12	$320,821.48	$858.64	0.3%	$0.00	$0.00	$832.88	$25.76	$0.00

C & I HLF Extra-Large:

Line No.		Annual Consumption (Therms)	Proposed Rates	Current Rates	Difference	% Chg	Difference due to: GCR	DAC Base DAC	DAC ISR	GET	EE
(136)											
(137)											
(138)											
(139)			---	---	---	---	---	---	---	---	---
(140)		447,421	$374,787.84	$373,404.07	$1,383.77	0.4%	$0.00	$0.00	$1,342.26	$41.51	$0.00
(141)		495,605	$414,583.25	$413,050.44	$1,532.81	0.4%	$0.00	$0.00	$1,486.83	$45.98	$0.00
(142)		543,789	$454,379.42	$452,697.59	$1,681.82	0.4%	$0.00	$0.00	$1,631.37	$50.45	$0.00
(143)		591,972	$494,174.08	$492,343.23	$1,830.85	0.4%	$0.00	$0.00	$1,775.92	$54.93	$0.00
(144)		640,155	$533,968.68	$531,988.82	$1,979.86	0.4%	$0.00	$0.00	$1,920.46	$59.40	$0.00
(145)	Average Customer	**688,340**	**$573,765.30**	**$571,636.42**	**$2,128.88**	**0.4%**	$0.00	$0.00	$2,065.01	$63.87	$0.00
(146)		736,523	$613,560.30	$611,282.40	$2,277.91	0.4%	$0.00	$0.00	$2,209.57	$68.34	$0.00
(147)		784,708	$653,356.44	$650,929.52	$2,426.92	0.4%	$0.00	$0.00	$2,354.11	$72.81	$0.00
(148)		832,891	$693,151.87	$690,575.92	$2,575.95	0.4%	$0.00	$0.00	$2,498.67	$77.28	$0.00
(149)		881,074	$732,946.49	$730,221.53	$2,724.96	0.4%	$0.00	$0.00	$2,643.21	$81.75	$0.00
(150)		929,259	$772,743.41	$769,869.41	$2,874.00	0.4%	$0.00	$0.00	$2,787.78	$86.22	$0.00

Exhibit 2 – WFF & JML
Redlined
Gas Expansion Plan

FY 2015 Gas Expansion Pilot Program

Introduction

The Gas Expansion Pilot Program provides for the prudent expansion of the Company's gas infrastructure in order to remove the capital-cost barriers preventing customers from taking advantage of historically low gas commodity prices. The pilot program is designed to support projects that provide the opportunity to bring gas service to more customers where the costs would otherwise have acted as a barrier. In spite of an intensive marketing campaign and outreach efforts for the FY2014 ISR Gas Expansion Pilot Program, only two small, partial projects were able to move forward, serving six and seven new customers, respectively. An extensive Company review of these efforts and feedback from customers identified several major lessons which form the basis of the proposed changes and modifications to the FY2015 pilot program designed to simplify the process and program for customers. These included: 1) the need to provide a more simple fixed pilot offer, as customers commented that the current program was too complicated and uncertain for participation; 2) the need to provide a special, significantly reduced offer as customer conversion costs remain a barrier to participation; and 3) the need to provide more flexibility for customers and the Company under the pilot to respond to customer interest.

Deleted: Once projects have been identified for participation, the program would off-set up to 75 percent of the traditionally required customer contribution in aid of construction, as necessary for the target customer(s) to commit and proceed with the project.

I. Pilot Scope

a. The Gas Expansion Pilot Program would specifically target expansion activity that would not otherwise occur in the normal course of business. As such, this activity would be incremental to the Company's existing gas growth plans for Rhode Island.

b. The pilot would continue to have three basic components:

i. Program Budget & Guidelines

ii. Pilot Project Selection Process

iii. Progress Reporting and Evaluation Protocols

II. Program Budget & Guidelines – The modified FY 2015 Gas Expansion Pilot Program would administer a $3 million budget for pilot projects that meet the following criteria:

a. Density Test

i. The project categories are replaced with a "Density Test" to address the customer feedback to simplify the pilot program process and to increase the pool of eligible customers. Under the Density Test, projects with a minimum density of seventy (70) feet of the main per prospective customer will be considered under the pilot program. (Previously targeted projects in FY 2014 will also be eligible for FY 2015.) This will simplify

Deleted: specific "Expansion Pilot Criteria." In order to advance projects that meet these

Deleted: , the program would off-set up to 75 percent of the traditionally required customer contribution, as necessary for the target customer(s) to commit and proceed with the project. This off-set could be used for as few as five customers, or could be used to reduce the contribution from many more customers when the opportunity arises to serve a larger group. Given expected timing for project screening, engineering, customer engagement, permitting and construction, the pilot budget may be used in the fiscal year 2014 and, where necessary, may be carried over into fiscal year 2015.

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for customers their understanding if they qualify for gas expansion, as well as increase the potential number of projects under the pilot program from the previous twelve (12) to approximately thirty-three (33), and the potential number of customers from 1,460 to 5,106. The actual number of customers who receive access to natural gas mains will be limited by the program budget and will depend on the exact projects executed.

ii. The FY 2015 Gas Expansion Program will reserve $750,000 of the $3 million budget for those customer-initiated projects that meet the Density Test and the eligibility criteria set forth below. This will provide the Company with the necessary flexibility to address both proactive and reactive identified projects.

b. Expansion Pilot Criteria – The Customer Commitment requirements are modified to require that a minimum of ten percent (10%) of prospective customers commit to the project, with a minimum of at least three customers. These criteria will increase the flexibility for the Company to consider small gas expansion projects based on customer inquiries subject to the Density Test, as well as larger gas expansion projects previously identified in FY 2014 or discovered through customer inquiries. Two recent examples of such small projects were identified by the Company based on customer inquiries associated with nearby main replacement projects. Each project would have required an additional approximately

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Deleted: **Project Categories** - Projects will be selected based on the type of customers served:¶
<#>**Residential Only.** This category will be limited to only those projects that serve existing residential premises. Qualifying projects must have five committed customers before construction may begin. The Program will provide greater support (75 percent of project cost) for projects that score highest on prioritization. The Company, at its discretion, may offer a lower level of support (50 percent of project cost) for projects that score lower if such differentiation is deemed appropriate after initial project analysis and screening. $500,000 will be allocated for the Residential Only category with the intent of supporting in excess of 10 residential projects and more than 100 residential customers. ¶
<#>**All Other.** All projects that do not qualify under the Residential Only category will be considered in the All Other category. Qualifying projects must have five committed customers and the potential to serve at least 20 residential customers. Additionally, the final scope for projects in the All Other category must provide access to gas service to potential customers which are a minimum of 80% residential by count. The Program will provide greater support (75 percent of project cost) for projects that score highest on prioritization. The Company, at its discretion, may offer a lower level of support (50 percent of project cost) for projects that score lower if such differentiation is deemed appropriate after initial project analysis and screening. $2.5 million will be allocated to the All Other category.¶

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250 feet of main to reach eight additional customers, at least three of which were prepared to commit to connect to the main up front. Both of these projects would have been eligible for the pilot program by meeting the requirements of both the Density Test (250 feet / 8 customers = 31.25 feet per customer, which is less than the 70 feet-per-customer requirement) and Customer Commitment (3/8 customers = 37.5%, which is greater than 10%, and there were also a minimum of three customers).

c. **Program Guidelines** – In addition to the above, the following program guidelines will apply:

i. In lieu of the current variable customer Contribution In Aide of Construction ('CIAC"), the CIAC requirements for the FY 2015 Gas Expansion Pilot Program are modified to introduce a modest incremental fixed charge, in addition to the $800 standard service fee. Specifically, customers committing to a pilot program project will be charged a fixed service charge of $950 (an incremental charge of $150). This flat rate charge addresses customer concerns about the complexity of variable CIACs which could change based upon the number of customers that commit or subsequently are added to a project. This removes a major financial obstacle for customers who are reluctant to financially commit upfront rather than at a later time once a project is built.

Deleted: Within each category, individual projects will be prioritized based on the following criteria:¶
<#>Project "Efficiency Ratio" will be measured as Potential Added Load / Project Cost (MMBtu/$). This factor will be weighted at 70 percent.¶
<#>Reliability Benefits will be determined qualitatively by Engineering based on the ability to materially improve system reliability (e.g. through the completion of a system loop). This factor will be weighted at 30 percent. ¶
<#>Beyond the two criteria above, the Program will take into consideration the timing of paving and other public works projects in order to sequence and prioritize projects. This will minimize costs and disruptions in the communities that are served.¶
<#>Projects which are expected to encounter permitting or other construction related obstacles which could lead to unanticipated costs or protracted timelines may be removed from the Program at the Company's discretion.¶

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ii. The complete cost of the main expansions under the Gas Expansion Pilot Program will be funded from the $3 million budget with the incremental service fees collected and any unspent FY2015 funds to be returned to customers in the annual reconciliation filing.

III. Pilot Project Selection Process –

a. In addition to the Density Test and criteria set forth above in Section II, the Company will continue to consider the reliability benefits for each project as part of its selection process. Reliability Benefits will be determined qualitatively by Engineering based on the ability to improve system reliability (e.g. through the completion of a system loop).

b. The Company will also continue to take into consideration the timing of paving and other public works projects in order to sequence and prioritize projects. This will minimize costs and disruptions in the communities that are served.

c. Finally, projects which are expected to encounter permitting or other construction related obstacles which could lead to unanticipated costs or protracted timelines may be removed from the Program at the Company's discretion.

Deleted: Customer(s) remain responsible for the remaining CIAC amounts not supported under the program. In cases where multiple customers will bear the remaining cost, that cost will be allocated among the customers proportionally based on projected load.¶
<#>Sufficient customer commitments to cover the balance of project costs must be obtained prior to construction. The form of commitment will be established by National Grid and made available to all customers in advance.¶
<#>Customers benefiting from the Gas Expansion Pilot Program would not be entitled to refunds as other subsequent customers take service on pilot segments. For up to two years beyond a project completion date, those subsequent customers would be required to pay the same CIAC amount as the original participants, and the amounts paid by those subsequent customers would be retained for assignment into future ISR budgets.¶
<#>If within the initial term of the Gas Expansion Pilot Program, customer commitments have been obtained for a project that has met all other requirements, that project will be funded and constructed even if it cannot be completed within the same initial term. Recovery of funds for such projects will be the same as for those completed within the initial term.¶

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IV. Progress Reporting and Evaluation Protocols – In order to maximize transparency and provide for continuing review and assessment of the Gas Expansion Pilot Program, results and activity from the program will be reported regularly and specific analysis for program evaluation will be conducted.

a. Program activity will be reported quarterly in the ISR Gas Quarterly reports and will include the following:

i. Number of projects evaluated including for each project the estimated cost, estimated potential load served, and potential number of customers served (residential and commercial).

ii. Status of projects (e.g. evaluating, seeking customer commitment, constructing, complete).

iii. Program budget committed and spent by category.

b. Overall impact of the program will be evaluated semi-annually and will consider the following:

i. Total Capital investment

ii. Number of customers served

iii. Customers/Mile of extension

iv. Cost/foot of extension

Deleted: The Company proposes to conduct a number of joint customer/engineering analyses to cost effectively evaluate targeted capital investments to expand the gas system where aggregate demand for gas service would economically justify expansion. The two primary analytical methods will be Anchor Point Analysis and Wide Area Analysis.¶
<#>**Anchor Point Analysis.** This strategy is based on identifying a large commercial/industrial prospect that is projected to have a high load potential and having it serve as an anchor to bring gas to an area along the proposed expansion route from existing distribution infrastructure to the anchor.¶
<#>Anchor Point Analysis involves leveraging spatial analysis to size the expansion opportunity in terms of added load and cost to expand. Anchor point analysis allows for scenario planning across multiple potential routes, and the ultimate selection of the route that maximizes potential load served, while minimizing the high level estimated cost to expand.¶
<#>Once the Anchor customer has been identified, it is plotted on a map in relation to the existing distribution network and the overall view of the market. Several routes are then plotted from the existing distribution network to the Anchor customer. Analysis is then performed to select the best route. The process is depicted in the following graphic:¶
¶
<sp>¶
¶
<#>**Wide Area Analysis.** This strategy is based on identifying and ranking potential expansion areas with sufficient market demand for gas service to support investment in gas distribution infrastructure. This would also entail integrating engineering data and analyses into a market-based potential- growth opportunities analysis in an effort to support the exploration and evaluation of various project opportunities.¶
<#>Evaluation of the territory as a whole involves leveraging spatial analysis to size the expansion opportunity in terms of new load and the cost to expand. Like Anchor Point Analysis, Wide Area Analysis allows for ranking potential areas of expansion based on maximizing load potential while minimizing the high level estimated cost to expand.¶
<#>Wide Area Analysis would produce information to enable the ranking … [1]

Exhibit 2 – WFF & JML
Clean
Gas Expansion Plan

FY 2015 Gas Expansion Pilot Program

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iv. Cost/foot of extension

Testimony of
William R. Richer

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4474
FY 2015 GAS INFRASTRUCTURE,
SAFETY, AND RELIABILITY PLAN
WITNESS: WILLIAM R. RICHER

PRE-FILED DIRECT TESTIMONY

OF

WILLIAM R. RICHER

December 2013

Table of Contents

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your full name and business address.

A. My name is William R. Richer, and my business address is 40 Sylvan Road, Waltham, Massachusetts 02451.

Q. Please state your position.

A. I am the Director of Revenue Requirements - Rhode Island for National Grid USA Service Company, Inc. ("Service Company"). Service Company provides engineering, financial, administrative, and other technical support to subsidiary companies of National Grid USA. My current duties include revenue requirements oversight for National Grid's electric and gas distribution activities in the US, including the gas division of The Narragansett Electric Company, d/b/a National Grid ("Narragansett" or the "Company").

Q. Please describe your education and professional experience.

A. In 1985, I earned a Bachelor of Science degree in Accounting from Northeastern University. During my schooling I interned at the public accounting firm Pannell Kerr Forster in Boston, Massachusetts as a staff auditor and continued with this firm after my graduation. In February 1986, I joined Price Waterhouse in Providence, Rhode Island where I worked as a staff auditor and senior auditor. During this time, I earned my certified public accountants license in the State of Rhode Island. In June 1990, I joined

National Grid in the Service Company (then known as New England Power Service Company) as a supervisor of Plant Accounting. Since that time I have held various positions within the Service Company including Manager of Financial Reporting, Principal Rate Department Analyst, Manager of General Accounting, Director of Accounting Services, and Assistant Controller.

Q. Have you previously filed testimony or testified before the Rhode Island Public Utilities Commission (the "Commission")?

A. Yes. I have testified before the Commission on numerous occasions, including previous Electric and Gas ISR proceedings.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to sponsor Section 3 of the Fiscal Year ("FY") 2015 Gas Infrastructure, Safety, and Reliability Plan ("ISR Plan") which describes the calculation of the Company's revenue requirement for FY 2015 in Attachment 1 of that section. This revenue requirement is based on the Gas ISR Plan capital investment and associated operation and maintenance ("O&M") expenses described in the testimony of Walter F. Fromm and Jackson M. Lehr.

III. ISR PLAN REVENUE REQUIREMENT

Q. Please summarize the revenue requirement for the Company's FY 2015 Gas ISR Plan.

A. As shown on Page 1, Column (c) of the attachment, the Company's FY 2015 Gas ISR Plan revenue requirement amounts to $4,392,480 and consists of the following elements: (1) the Company's return, depreciation expense and property tax expense associated with capital investment in gas utility infrastructure of $3,992,480, and (2) $400,000 of incremental O&M expense for the hiring, training and supervision of additional personnel to support the increase in leak-prone pipe replacement. Importantly, these amounts will be trued up to actual O&M and capital investment activity after the conclusion of the FY, with rate adjustments for the revenue requirement differences incorporated in future ISR filings.

For illustration purposes only, Column (d) of Page 1 provides the FY 2016 revenue requirement. A detailed description of the calculation of the Company's revenue requirement for FY 2015 can be found in Section 3 of the 2015 Gas ISR Plan.

Q. Does this conclude your testimony?

A. Yes, it does.

Testimony of
Yi-An Chen

PRE-FILED DIRECT TESTIMONY

OF

YI-AN CHEN

December 2013

Table of Contents

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your names and business address.

A. My name is Yi-An Chen, and my business address is 40 Sylvan Road, Waltham, Massachusetts 02451.

Q. By whom are you employed and in what capacity?

A. I am a Senior Analyst in the New England Pricing group of the Regulation and Pricing organization of National Grid USA Service Company, Inc. ("Service Company"). Service Company provides engineering, financial, administrative, and other technical support to subsidiary companies of National Grid USA. My responsibilities include the design, implementation, and administration of rates and tariffs for the gas division of The Narragansett Electric Company d/b/a National Grid ("Narragansett" or the "Company").

Q. Please provide your educational background.

A. I received a Bachelor of Business Administration in International Business from Soochow University in Taiwan and a Master of Business Administration from Clark University.

Q. Please provide your professional background.

A. I joined National Grid in 2008 as an analyst in Regulatory and Pricing and became a senior analyst in 2011 – my current position at National Grid.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to sponsor Section 4 and Section 5 of the Fiscal Year ("FY") 2015 Gas Infrastructure, Safety, and Reliability ("ISR") Plan, which describe the rate design calculations of the FY 2015 ISR factors and the customer bill impacts of the proposed ISR factor.

II. RATE DESIGN

Q. Please summarize the rate design used to develop the ISR factors presented as part of this filing.

A. Like the revenue requirement, the proposed ISR Plan rate design for FY 2015 is based on the revenue requirement of incremental capital investment in excess of capital investment that has been reflected in rate base in the Company's latest base rate case in Docket No. 4323, as well as incremental O&M as described in Section 2 of this ISR Plan. The Company allocated the revenue requirement associated with the capital investment to each rate class based on the rate base allocator from the Company's Settlement agreement in Docket No. 4323. The Company allocated the proposed incremental O&M expense described by Company Witness Mr. Walter Fromm to all rate classes

volumetrically, such that the Company proposed to assess all rate classes the same per-unit factor. The Company also utilized the most recently available forecasted throughput for the period April 2014 through March 2015 that had been developed for the Company's 2013-2014 Gas Cost Recovery ("GCR") filing (Docket No. 4436). That data was compiled by rate class and summarized as set forth in Section 4, Attachment 1, Page 2, of the Gas ISR Plan. As shown in Section 4, Attachment 1, Page 1, of the Gas ISR Plan, the Company divided the allocated rate class revenue requirement, as multiplied by the rate base allocation, by the forecasted throughput for each rate class to develop separate ISR capital factors per rate class on a per therm basis. Finally, the Company divided the total incremental O&M expense of $400,000 by the total forecasted throughput to derive the O&M factor for all rate classes on a per therm basis. The Company then adjusted each rate class's total ISR factor (capital and O&M factors) to reflect the 3.18 percent uncollectible factor from the Amended Settlement Agreement approved by the Commission in Docket No. 4323.

III. ISR FACTORS

Q. Please provide the ISR rate factors proposed by the Company.

A. The ISR factors proposed by the Company are shown in the table below and in Section 4, Attachment 1.

Table 3-1 FY 2015 ISR factors per rate class

Rate Class	ISR Rate ($/therm)
Res- NH	$0.0222
Res-H	$0.0148
Small C&I	$0.0153
Medium C&I	$0.0115
Large LL	$0.0092
Large HL	$0.0091
XL-LL	$0.0028
XL-HL	$0.0035

*Rates include uncollectible allowance.

The same factors noted above for Residence Heating and Residence Non-Heating customers would also apply to each of the Low-Income customer rate classes.

IV. BILL IMPACTS

Q. Please describe the impact of the proposed ISR factors on customers' bills.

A. For the average residential heating customer using 846 therms annually, the ISR factor will result in an annual bill increase of $10.82, or 0.9 percent[1]. The annual impact of the proposed ISR factors for the period April 1, 2014 to March 31, 2015 for all rate classes are shown in Section 5, Bill Impacts, of the Gas ISR Plan.

Q. Does this conclude your testimony?

A. Yes, it does.

[1] Please note that the bill impact includes the Rhode Island Gross Earnings Tax of three percent.