

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE: NATIONAL GRID PROPOSED FY 2015 ELECTRIC : DOCKET NO. 4473
INFRASTRUCTURE, SAFETY AND RELIABILITY :
PLAN PURSUANT TO R.I.G.L. §39-1-27.7.1 :

REPORT AND ORDER

I. National Grid's Filing

On December 31, 2012, The Narragansett Electric d/b/a National Grid (National Grid or Company) filed with the Public Utilities Commission (PUC or Commission) its proposed Electric Infrastructure, Safety, and Reliability Plan (Electric ISR Plan) for FY 2015.¹ National Grid indicated that the Division of Public Utilities and Carriers (Division) had reviewed the proposed Electric ISR Plan and had agreed to the spending portion but was continuing its review of particular provisions during the Commission's review.²

In support of the Electric ISR Plan, National Grid submitted the pre-filed direct testimony of National Grid employees, Jennifer L. Grimsley, Director, Network Strategy for

¹ On May 20, 2010, the Rhode Island General Assembly enacted R.I. Gen. Laws § 39-1-27.7.1 which states, in relevant part, that National Grid shall file proposals with the Public Utilities Commission that contain: An annual 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 as developed in accordance with subsection (d) herein....(d) Prior to the beginning of each fiscal year, gas and electric distribution companies shall consult with the division of public utilities and carriers regarding its infrastructure, safety, and reliability spending plan for the following fiscal year, addressing the following categories: (1) Capital spending on utility infrastructure; (2) For electric distribution companies, operation and maintenance expenses on vegetation management; (3) For electric distribution companies, operation and maintenance expenses on system inspection, including expenses from expected resulting repairs; and (4) Any other costs relating to maintaining safety and reliability that are mutually agreed upon by the division and the company. The distribution company shall submit a plan to the division and the division shall cooperate in good faith to reach an agreement on a proposed plan for these categories of costs for the prospective fiscal year within sixty (60) days. To the extent that the company and the division mutually agree on a plan, such plan shall be filed with the commission for review and approval within ninety (90) days. If the company and the division cannot agree on a plan, the company shall file a proposed plan with the commission and the commission shall review and, if the investments and spending are found to be reasonably needed to maintain safe and reliable distribution service over the short and long-term, approve the plan within ninety (90) days. The FY 2015 Electric ISR Plan and all of the documents referenced herein can be found on the PUC's website at: <http://www.ripuc.org/eventsactions/docket/4473page.html>

² Filing Letter, at 1 (Dec. 20, 2013).

New England, and Ryan Moe, Vegetation Strategist (collectively, the plan witnesses). In support of the development of the revenue requirement and to explain the reconciliation process, National Grid submitted the pre-filed direct testimony of its employee William R. Richer, Director of Revenue Requirements – Rhode Island. In support of the new tariffs and to explain the calculation of the factors and to provide customer bill impacts, National Grid submitted the pre-filed direct testimony of its employee, Nancy Ribot, Senior Analyst for Electric Pricing, New England.

A. ELECTRIC ISR PLAN

The plan witnesses indicated that the proposed Electric ISR Plan covers three budget categories for the fiscal year ending March 31, 2015. According to the plan witnesses, the Division had agreed to the expenses in the areas of capital spending on electric infrastructure projects, Operation and Maintenance expenses (O&M) for vegetation management, and O&M expenses for an Inspection and Maintenance (I&M) program.³ They explained that the Electric ISR Plan included a spending plan and proposed an annual reconciliation mechanism to “provide for recovery related to capital investments and other spending undertaken pursuant to the annual pre-approved budget for the Electric ISR Plan.”⁴

The proposed capital spending plan for FY 2015 is \$65.9 million.⁵ According to the plan witnesses, the Electric ISR Plan addresses the capital investment needed for five specific purposes: (1) to meet state and federal regulatory requirements applicable to the electric system (Statutory/Regulatory); (2) to repair failed or damaged equipment (Damage Failure); (3) to address load growth/migration (System Capacity and Performance); (4) to maintain reliable service (Asset Condition); and (5) to sustain asset viability through

³ Pre-Filed Test. of Jennifer Grimsley & Ryan Moe at 4.

⁴ *Id.* at 4-5.

⁵ *Id.* at 5.

targeted investments driven primarily by condition (Non-Infrastructure).⁶ Of these, the Company considers Statutory/Regulatory and Damage Failure to be non-discretionary “in terms of scope and timing” and “subject to necessary and unavoidable deviations.”⁷ These items, totaling \$24,353,000, account for 37% of the proposed capital outlays in FY 2015.⁸

The remaining - System Capacity, Asset Condition, and Non-Infrastructure projects - are meant to reduce the degradation of the service life of equipment, to allow for more flexibility in the system for purposes of meeting various contingencies such as load growth and migration, and to address poor condition of aged assets.⁹ These items comprise the other 63% of the FY 2015 budget. Specifically, the System Capacity costs of \$21,759,000 make up 33%, Asset Condition costs of \$19,511,000 make up 29%, and Non-Infrastructure spending of \$277,000 makes up the remaining 1%.¹⁰

The Electric ISR Plan also includes the proposed FY 2015 spending levels for the Company’s Vegetation Management Program of approximately \$7.7 million. Finally, the I&M spending includes capital amounts already accounted for above plus \$3 million for O&M costs related to the I&M program. The Company agreed to provide the Commission with quarterly reports on the progress of executing the ISR Plan and an annual report at the time the Company files its annual reconciliation. Additionally, the Company and Division had agreed that if circumstances require, National Grid will be allowed reasonable deviations from the plan, with explanation of significant deviations to be included in its quarterly and year-end reports.¹¹

⁶ *Id.* at 6.

⁷ *Id.* at 8.

⁸ *Id.* at 7.

⁹ *Id.* at 9.

¹⁰ *Id.* at 7.

¹¹ *Id.* at 11-12.

B. SUMMARY OF THE PROPOSED FY 2015 ELECTRIC ISR PLAN

The Capital Plan budget is proposed at \$65,9000,000.¹² The budget for capital improvements is 10.6% higher than the Company's FY 2014 budget for the same category.¹³ Brief summaries of the capital and non-capital categories follow.

1. Statutory/Regulatory (\$14,537,000)

This category is considered "non-discretionary" in that the spending is required to meet regulatory obligations or to comply with various statutes, regulatory requirements, or mandates. The scope and timing is primarily defined by situations external to the Company. Almost half of the budget (46%) is expected to be used to establish electric delivery service to customers. The remainder is related to new transformer and meter purchases and installations, outdoor lighting requests, and relocations due to public works projects and Department of Transportation (DOT) projects. FY 2015 includes \$255,000 for manhole and duct infrastructure installation in coordination with DOT's construction of new roads in the vicinity of the I-195 relocation. National Grid is reimbursed for portions of the work and the budget is net of the expected reimbursement.¹⁴

2. Damage/Failure (\$9,816,000)

The category addresses "the need to immediately repair failed and damaged equipment."¹⁵ This category is considered non-discretionary and includes small failures, specific failures in excess of \$100,000 based on recent trends, and major storms. The latter

¹² *Id.* at 5. According to National Grid, its Calendar Year 2012 performance represents an improving trend over the past several years with major event days excluded. According to the Company, continued investment in capital spending, vegetation management, and inspection and maintenance will contribute to continued reliability. Electric ISR Plan, § 2 at 1-5.

¹³ Electric ISR Plan, § 2 at 5.

¹⁴ Electric ISR Plan, § 2 at 7-8, 14-16.

¹⁵ Electric ISR Plan, § 2 at 7.

two items allow the Company to continue with its planned work in the capital program while addressing the unexpected failures.¹⁶

3. Asset Condition (\$19,511,000)

This category includes capital expenses in the inspection and maintenance program which is the replacement of assets to maintain reliability performance. It includes the underground residential development/underground commercial development cable strategies which either fix or replace cable that has had at least three failures in the last three years. The underground cable strategy replaces primary underground cable that has experienced poor performance. This category also includes replacement of substation batteries over 20 years old or that do not meet current operating requirements, replacement of metalclad switchgear that has operating issues or is of the same type as others with operating issues, replacement of obsolete circuit breakers, replacement of relays with operational issues as part of a six-year plan, and replacement of substation transformers that have a high likelihood of failure. This includes the continuation of the Eldred Substation rebuild (Jamestown), continuation of the network arc flash program over five years, and ongoing flood mitigation work.¹⁷

4. Non-Infrastructure (\$277,000)

This category is for capital expenditures that do not fit into one of the other categories, such as general and telecommunications equipment which are necessary to run the electric system.¹⁸

¹⁶ Electric ISR Plan, Section 2 at 7-8, 16-17.

¹⁷ Electric ISR Plan, Section 2 at 10, 17-26.

¹⁸ Electric ISR Plan, Section 2 at 10.

5. System Capacity & Performance (\$21,759,000)

Planning criteria (load relief) is 88% of this line item related to eight substation projects. The Distribution Line Transformer Strategy is designed to mitigate unplanned outage/failure risks due to overloads and asset condition of distribution line transformers. The Distribution Load Relief Blanket and Distribution Reliability Blanket is a category encompassing work under \$100,000. Minor Storm Hardening projects are designed to target specific areas with poor performance in minor storm events. The substation EMS/RTU SCADA additions program is intended to improve reliability performance, increase operational effectiveness, and to provide data for asset expansion or operational studies. The Company has also included a new Volt/Var management project.¹⁹

6. Vegetation Management (\$7,726,000 – Non-Capital)

This category includes cycle pruning (\$4,475,000) which is the continuation of four year cycle; enhanced hazard tree mitigation work (\$1,000,000) to identify and remove dying or structurally weakened trees along the three phase sections of distribution circuits; sub-transmission (off & on road) (\$316,000); and police/flagger detail (\$650,000) related to cycle pruning and hazard tree work. The police/flagger detail costs for the most recent three fiscal years were: \$461,000 in 2012, 766,000 in 2013, and \$625,000 (estimated) in 2014. This category also has a catch-all line item called all other activities which includes trimming associated with interim/spot areas, customer requests, emergency response, and worst performing feeders (\$1,285,000).²⁰

¹⁹ Electric ISR Plan, § 2 at 9, 27-37.

²⁰ Electric ISR Plan, § 3 at 1-11.

7. Inspection and Maintenance Plan (\$2,995,000 – Non-Capital)

This category includes operation and maintenance expenses for overhead inspection and maintenance repairs, sub-transmission overhead inspection and maintenance, underground inspection and maintenance with repairs commencing in FY 2016, contact voltage inspections. The costs included in I&M are related to operating expenses related to the capital expenditures, repair related costs, and inspections related costs. The overhead inspection and maintenance includes distribution and sub-transmission repairs that will be ramped up to a five-year repair cycle in FY 2015, with the possible exception of certain grounding items. The underground inspection and maintenance is comprised of inspection that continues to be performed in the normal course of work, with repairs commencing in FY 2016. Tracking of inspection results will occur in FY 2015. The contact voltage testing includes overhead manual, underground manual, street lighting manual, and mobile contact voltage.²¹

8. REVENUE REQUIREMENT

Mr. Richer explained that the revenue requirement of the FY 2015 Electric ISR Plan includes (1) an O&M expense related to vegetation management and the Company's I&M Program as well as (2) the Company's capital investment in electric utility infrastructure.²² The forecasted FY 2015 revenue requirement of \$12,250,308 is an incremental increase of \$116,814 from the FY 2014 Electric ISR Plan revenue requirement of \$12,133,495. The amount related to O&M expenses was \$10,557,251. Of that amount, \$7,726,000 was for

²¹ Electric ISR Plan, Section 4 at 1-5.

²² Pre-Filed Testimony of William R. Richer, 3.

Vegetation Management and \$2,831,251 related to Inspection and Maintenance O&M expenses.²³

In April of 2012, the Company filed a base rate case for both its electric and gas operations. That case, Docket No. 4323, ultimately ended in a settlement agreement approved by the Commission on December 20, 2012. Items included in base rates relative to FY 2012, 2013, and 2014 investments are excluded from the FY 2014 ISR revenue requirement.²⁴ To calculate the capital-related revenue requirement, electric infrastructure investments were divided into two categories, non-discretionary and discretionary capital investments. The amount of capital additions ultimately allowable in the ISR plan is limited to amounts no greater than the cumulative amount of discretionary project spending.²⁵ Average rate base for purposes of the ISR revenue requirement is typically calculated as the average year end cumulative change in rate base. Since one portion of FY 2014 non-growth capital investment is reflected in the rate case and the other portion is not, a separate calculation was performed to determine the appropriate level of weighted average rate base for FY 2014 investment. The calculated FY 2014 weighted average rate base associated with FY 2014 plant additions is \$1,716,751.²⁶

9. DEVELOPMENT OF ISR FACTOR

Ms. Ribot explained that the ISR Factor contains two mechanisms: (1) an Infrastructure Investment Mechanism to recover costs associated with incremental capital investment and (2) an O&M Mechanism to recover O&M expenses related to inspection and maintenance and vegetation management activities. To design the CapEx factors to

²³ Electric ISR Plan, Section 5: Attachment 1, at 1.

²⁴ National Grid Ex. 1 (Pre-Filed Testimony of William R. Richer), at 4-5.

²⁵ National Grid Ex. 1 (Pre-Filed Testimony of William R. Richer), at 6.

²⁶ National Grid Ex. 1 (Pre-Filed Testimony of William R. Richer), at 5-6. Section 5, Attachment 1, Page 10.

develop the incremental capital investment, following Commission review of a cumulative revenue requirement, National Grid will apply a rate base allocator based on the most recently approved cost of service study. Similarly, the design of the O&M Mechanism is to allocate the inspection and maintenance and vegetation management expenses to the rate classes based on the percentage of total distribution O&M expense allocated to each rate class per the most recent cost of service study. Within each rate class, National Grid calculates a per unit charge based on kWh usage for non-demand classes and on a kW basis for demand classes.²⁷

Each year, by August 1, the Company proposes CapEx Reconciling Factors and an O&M reconciling factor to become effective on October 1 for the following twelve-month period. The reconciliation will compare the actual cumulative revenue requirement to actual billed revenue generated from the CapEx Factors and any over- or under-recovery will be refunded to or collected from customers through the CapEx Reconciling Factors. The O&M reconciling factor will compare the actual I&M and vegetation management O&M expense to actual billed revenue generated from the O&M factors and any over- or under-collection of actual expense will be refunded to or collected from customers through a uniform per kWh charge applicable to all rate classes.²⁸

Ms. Ribot explained that the CapEx Factors are designed to collect the cumulative revenue requirement of \$1,693,058 attributable to incremental capital investments through the end of FY 2015. The cumulative revenue requirement is allocated to the various rate

²⁷ Pre-Filed Testimony of Nancy Ribot, 2-6. G-02 and G-32/B-32 customers whose charges include both demand and usage, the CapEx factors and O&M factors are designed “to not significantly change the relationship between the existing charges and will ensure that customers within the class that have differing usage characteristics will not experience significantly different bill impacts.” Pre-Filed Testimony of Nancy Ribot, 7. Furthermore, as a result of two tariffs approved by the PUC for effect February 1, 2013, the Back-Up retail delivery rates were recalculated to reflect a discounted distribution kW charge. Pre-Filed Testimony of Nancy Ribot at 10-11.

²⁸ *Id.* at 5, 7-8.

classes based on the total rate base allocator that was included in the Commission-approved Amended Settlement Agreement filed in Docket No. 4323.²⁹ The O&M Factors are designed to collect the \$10,557,251 in forecasted FY 2014 I&M and vegetation management O&M activities. The monthly rate decrease on the bill of a typical residential customer using 500 kWh per month would be \$0.03 per month.³⁰

II. Division's Filing

On February 27, 2014, the Division submitted the pre-filed testimony of its consultants, Gregory L. Booth, P.E. and David J. Effron.³¹ In his testimony, Mr. Booth described the process by which the FY 2015 ISR Plan was developed and provided recommendations to the PUC for future ISR filings. The Division supported the majority of the FY 2015 Electric ISR Plan as filed, but recommended a downward adjustment to the vegetation management budget “to account for Verizon’s responsibility under the Joint Ownership Agreement [for poles].”³² Mr. Booth indicated that the filed plan represented a \$4,100,000 reduction from that which had originally been presented to the Division in the Fall of 2013.³³ Mr. Booth stated that the FY 2015 Electric ISR Plan balances the need for safety and reliability against an attempt to achieve the most efficient benefit/cost considerations.³⁴ He clarified that the recommended downward adjustment to the budget “applies to the level of cost recovery from the electric ratepayer and not to the ultimate

²⁹ *Id.* at 8. See Order Nos. 20943 (issued January 31, 2013), 21011 (issued April 1, 2013), and 21054 (issued May 29, 2013).

³⁰ Pre-Filed Testimony of Nancy Ribot, 9, 11.

³¹ Mr. Effron’s testimony detailed his recommended adjustment to the revenue requirement to properly reflect property tax expense. Mr. Effron confirmed that National Grid had made the agreed change in response to his recommendation. Pre-Filed Testimony of David Effron, 3-4.

³² Pre-Filed Testimony of Gregory L. Booth, P.E., 7.

³³ *Id.* at 6.

³⁴ *Id.* at 7.

amount of vegetation management activity necessary.”³⁵ With regard to the vegetation management program, Mr. Booth indicated that it is robust and contributes to meeting or exceeding reliability metrics.³⁶

After summarizing the proposed FY 2014 Electric ISR Plan, Mr. Booth proposed six recommendations for future ISR filings. First, he recommended that National Grid should be required to initiate a System Capacity Load Study and develop a 10-year Long Range Plan and submit such at least 120 days prior to filing its FY 2016 ISR Plan Proposal, but no later than August 31, 2014. Second, he recommended that National Grid should be required to complete a detailed budget for System Capacity & Performance and Asset Condition and submit it no later than August 31, 2014. Third, he recommended that National Grid should be required to submit an evaluation of future proposed Asset Condition projects as compared to the Long Range Plan no later than August 31, 2014. Fourth, he recommended that National Grid should be required to continue to submit its detailed substation capacity expansion plans and load projections, and include an evaluation of proposed projects against the Company’s Long Range Plan no later than August 31, 2014. Fifth, he recommended that National Grid should be required to submit a cost-benefit analysis on Vegetation Management cycle pruning and EHTM no later than August 31, 2014. Finally, he recommended that National Grid should be required to continue submitting its Metal-Clad Switchgear replacement program cost-benefit analysis to the Division no later than August 31, 2014.

Specific to the 2015 Electric ISR Plan, Mr. Booth stated that National Grid should more aggressively pursue payment from Verizon for vegetation management.³⁷ Also,

³⁵ *Id.*

³⁶ Pre-Filed Testimony of Gregory Booth, Exhibit GLB-1, 21-22.

noting that National Grid had agreed to a \$100,000 downward adjustment in FY 2015 related to the Block Island transmission line, Mr. Booth proposed that the cost of the system work should be borne by Deepwater Wind and further, that inclusion of the \$100,000 was premature. National Grid had agreed to remove the expense from the FY 2015 Electric ISR budget.³⁸

Turning to System Capacity and Performance, Mr. Booth explained that the focus on this area results from the fact that the engineering rationale and load relief alternatives are not apparent. Additionally, he noted that it is difficult to distinguish between capacity needs and flood mitigation programs. He remarked that the Company had provided more information prior to the review of the FY 2015 Electric ISR, as requested in the previous docket. However, he stated that he “continue[s] to observe the need for a long term strategy addressing the sequence, timing, and budgeting of asset replacements and major substation capacity projects.”³⁹ Therefore, he recommended that National Grid adopt a ten-year long range plan to use “as a guide for developing the system capacity level beyond the customary 5-year planning horizon.”⁴⁰ He recommended this be developed in the Company’s Distribution Analysis software that it uses to model the distribution system to perform loading, voltage, and fault analysis.⁴¹ According to Mr. Booth, a long range plan “will align asset replacements identified in the [infrastructure and maintenance] program with the [long range plan] process to avoid duplication and potential early obsolescence of system improvement expenditures.”⁴²

³⁷ Pre-Filed Testimony of Gregory Booth, 10.

³⁸ Pre-Filed Test. of Gregory Booth, Exhibit GLB-1, 10-11.

³⁹ *Id.* at 8.

⁴⁰ *Id.*

⁴¹ *Id.* at 8-9.

⁴² *Id.* at 9.

Discussing the new substation metalclad switchgear replacement program, still in its first year, Mr. Booth discussed the results of the cost-benefit analysis, ordered by the PUC after its review of the FY 2014 Electric ISR Plan. He noted that the cost-benefit analysis addressed condition issues and equipment obsolescence as support for metalclad switchgear work where thirty-six of the forty-six units were installed prior to 1979. Using an analysis whereby each location is assigned a criticality ranking and a determination is made whether to maintain, rebuild, refurbish, retire, or replace, Mr. Booth related that National Grid identified four metalclad substation projects for retirement as part of the FY 2015 Electric ISR Plan.⁴³ Retirement was determined to be the most economical solution, costing three times less than direct replacement. Mr. Booth agreed that the Company's proposal was reasonable, but recommended that National Grid "continue to provide a cost-benefit analysis for future scheduled metalclad switchgear projects at least 120 days in advance of future proposed ISR Plan filings."⁴⁴

Furthermore, Mr. Booth discussed the need to "harmonize asset replacement with a comprehensive, long range system strategy."⁴⁵ Recognizing that National Grid has moved successfully from "a series of isolated and often reactive maintenance activities to segmented programs or strategies," Mr. Booth stated that there should be an alignment of asset condition category work with an overall system capacity plan, or long range plan.⁴⁶ Therefore, "asset replacements within the Asset Condition category should be evaluated

⁴³ *Id.* at 12-13.

⁴⁴ *Id.* at 13-14.

⁴⁵ *Id.*

⁴⁶ *Id.* at 14-15.

against the results of a System Capacity Study and resulting Long Range Plan before inclusion in the ISR Plan.”⁴⁷ This should commence with the FY 2016 Electric ISR Plan.⁴⁸

Also related to asset condition, Mr. Booth recommended that National Grid be required to complete a detailed budget for asset condition and system capacity and performance as part of each future proposed ISR Plan filing in order “to create transparency and improve the tracking of individual projects.”⁴⁹ In further support of a detailed budget for system capacity and performance and asset condition to be filed in advance of the FY 2015 Electric ISR Plan, Mr. Booth noted budget variances that occurred in FY 2014, and stated that while they are likely to continue as capital spending is increased, he expected National Grid to improve its budget process to address uncertainties and mitigate mistakes. He claimed that his “recommendation for a detailed Substation Capacity and Load Relief Budget, coupled with a Long Range Plan...and the Division’s increased oversight of this budget category is expected to improve the Company’s budgeting process and ultimately minimize variances.”⁵⁰ He pointed out that load relief comprises over 25% of the total FY 2015 Electric ISR Budget and is growing despite a lack of sufficient project details provided by National Grid. He stated that this makes tracking progress and budgets difficult.⁵¹ Thus, “any newly identified load relief project should be evaluated against a comprehensive long range plan.”⁵² As a first step in developing the long range plan over multiple planning periods, National Grid agreed to initiate a System Capacity Load Study in FY 2015 with the

⁴⁷ *Id.* at 15.

⁴⁸ *Id.* at 15-16.

⁴⁹ *Id.* at 14.

⁵⁰ *Id.* at 16-17.

⁵¹ *Id.* at 18-19.

⁵² *Id.* at 19.

use of internal resources and an outside consultant. The parties agreed to include \$250,000 in the infrastructure and maintenance budget to support this process.⁵³

III. National Grid's Response to the Division's Testimony

On March 11, 2014, National Grid filed a reply to Mr. Booth's testimony and recommendations. Having agreed to Mr. Booth's recommendations for future electric ISR filings, National Grid opposed the recommendation affecting the FY 2015 Electric ISR Plan regarding reduction of funding through rates of the vegetation management budget. National Grid argued that because it had been in negotiations with Verizon regarding disputed cost sharing responsibilities, it would not be appropriate to reduce the budget. National Grid compared its actions in Rhode Island with those in Massachusetts where National Grid Massachusetts had not shown the Massachusetts Department of Public Utilities that it had sought cost recovery from Verizon. In Rhode Island, according to National Grid, "Verizon has taken the position that it is not responsible for [National Grid's] vegetation management work because such work did not benefit Verizon." Furthermore, National Grid committed to submitting the vegetation management program to Verizon to request appropriate reimbursement and would explore legal remedies if reimbursement was denied. Finally, National Grid questioned the PUC's authority over the two companies under the Joint Ownership Agreement and the Intercompany Operation Procedures. Therefore, National Grid argued the PUC should approve the entire budget which reflects the level of work that needs to be completed in FY 2015.⁵⁴

Discussing National Grid's willingness to remove \$100,000 from the FY 2015 ISR budget and Mr. Booth's concerns regarding future cost responsibility related to the

⁵³ *Id.* at 20.

⁵⁴ National Grid's Reply Comments at 3-7.

Deepwater Wind - Block Island project, National Grid stated that the distribution upgrades to the Wakefield substation are related to the interconnection of Block Island to the mainland and not the interconnection of the Deepwater Wind Block Island project. Additionally, National Grid stated that while it is usually the responsibility of the generator to pay for interconnecting to the electric system, R. I. Gen. Laws § 39-26.1-7(f) creates an exception by socializing throughout Rhode Island the cost related to the transmission cable between Block Island and the mainland in addition to related facilities.⁵⁵ Therefore, according to National Grid, “[b]ecause the upgrades to the Wakefield substation are to existing distribution assets, this portion of the work will be characterized as ‘distribution’ and recovered through the ISR as a component of retail delivery service rates.”⁵⁶

IV. Settlement

On March 17, 2014, National Grid filed a letter summarizing an agreement reached between itself and the Division resolving the outstanding dispute over the Division’s recommendation to reduce the recovery through rates of \$2,000,000 of the vegetation management budget. The Division agreed to withdraw its recommendation without prejudice in light of National Grid agreeing to an action plan going forward. Under the agreement, National Grid will seek appropriate reimbursement from Verizon within 15 days, or April 1, 2014. Fifteen days following the 60-day response period, National Grid is required to update the Division and PUC regarding Verizon’s response.⁵⁷ National Grid will then have an additional 15 days to consult with the Division to “explore its legal options up

⁵⁵ *Id.* at 7-8.

⁵⁶ *Id.* at 8-9.

⁵⁷ Settlement at 1-2.

to and including a civil lawsuit should Verizon refuse to contribute to the Company's proposed tree-trimming work."⁵⁸

V. Hearing

On March 18, 2014, the Commission conducted a Hearing at its Offices at 89 Jefferson Boulevard, Warwick, Rhode Island for the purpose of discussing and considering the Electric ISR Plan for FY 2014.⁵⁹

National Grid presented Ms. Grimsley, Mr. Richer, Ms Ribot, and Mr. Moe in support of the Electric ISR Plan. Using a Power Point presentation, Ms. Grimsley provided a high level overview of the Electric ISR Plan. Addressing reliability, Ms. Grimsley stated that she believed the reliability targets were set around 2005. She noted that they are lower than those set in Massachusetts, making it more difficult to meet Rhode Island's. She indicated that each jurisdiction is responsible for the targets and stated that she believed that Rhode Island's are fair. She indicated that, typically, targets are revisited five or ten years after being set.

Ms. Grimsley stated that National Grid has been in the first quartile for performance for all but two years since 2005 based on a benchmarking study by the Institute of Electric and Electronics Engineers (IEEE). Under the IEEE model, major storm days are excluded from the reliability measures. Major storm days are those with a duration of customer interruptions in excess of a certain threshold for all customers. Noting that Massachusetts and New York do not use the IEEE model, she acknowledged that the major storm events are those that tend to affect customers on a large scale. However, she asserted that the purpose of the measures is to judge the underlying reliability problems that may exist in the

⁵⁸ *Id.* at 2.

⁵⁹ Raquel Webster, Esq. and Thomas Teehan, Esq. appeared on behalf of National Grid. Leo Wold, Esq., Assistant Attorney General, represented the Division and Cynthia Wilson-Frias, Esq., represented the PUC.

system, such as those affected by factors less severe than a major storm. According to Ms. Grimsley, while the target is based on customers experiencing an outage an average of one time per year, the results show that National Grid is doing better than that in Rhode Island.⁶⁰

As to correlations between spending and increased reliability, Ms. Grimsley and Mr. Moe both contended that the overall spending on the programs leads to increased reliability. However, because reliability is also affected by other factors, such as weather, there is not always a direct relationship between increased spending and increased reliability over the short term. However, the combined effect of the spending in the categories is a long-term benefit.⁶¹ For example, the focus on deteriorated equipment generally increases reliability. But, as Ms. Grimsley explained, some of the reduction of outages due to deteriorated equipment in 2012 and 2013 may be simply fortuitous, the Company having unknowingly targeted the correct assets. She also pointed out that many of the categories showed improvement in 2013, suggesting a milder year, with fewer environmental factors.⁶²

Ms. Grimsley stated that the Company is working with the Division to review the correlation of spending with benefits in the inspection and maintenance program and vegetation management program. However, she agreed that National Grid could “certainly have more discussions with the Division on looking at the benefits within certain programs to see how those programs translate into what the outage statistics are.”⁶³ Ms. Grimsley noted that customer expectations of reliability are growing over time. The Company needs to balance the cost of programs with the expectations, particularly where the system is

⁶⁰ Tr. 3/18/14 at 17-29, 33-36. Ms. Grimsley agreed to provide updated customer outages by cause to include FY 2014 when National Grid makes its FY 2014 Electric ISR reconciliation filing. Tr. 3/18/14 at 42.

⁶¹ Tr. 3/18/14 at 42-46.

⁶² *Id.* at 44-46.

⁶³ *Id.* at 46.

getting older and facing increased demands in a time of challenging economic conditions in Rhode Island.⁶⁴

Next, Ms. Grimsley responded to questions about when projects within the asset condition category become proactive discretionary spending projects which arise from reactive mandatory “fix on failure” projects. Ms. Grimsley indicated that National Grid will always repair an asset upon failure. However, using the underground residential development program as an example, she explained that if National Grid identifies a cable that has had several outages which have required “fix on failure” repairs over a three-year period, the cable would then be included on a list of proactive replacements. According to Ms. Grimsley, a similar process is followed for other types of assets as well.⁶⁵

To provide additional information on this topic, National Grid presented its Manager of substations, Richard St. Andrade. Mr. St Andrade acknowledged that with regard to the metal switchgear and related assets, there may have been degradation over time. In response to an inquiry why the Company is now proposing a targeted program to retire or replace the assets, Mr. St. Andrade explained that the equipment had been replaced and repaired over time, but at some point there has been so much maintenance that it becomes more cost effective to replace the asset than to continue repairs. He likened it to the analysis one would conduct when decided whether to replace a vehicle rather than continuing to maintain it where the vehicle may be worth less than the cost of maintaining it.⁶⁶

Turning to a discussion of the Volt/Var, or energy management system expansion program, Ms. Grimsley reminded the PUC that the FY 2014 Electric ISR Plan included a study to compare the traditional methods of optimizing circuits with advanced control

⁶⁴ *Id.* at 49-50.

⁶⁵ *Id.* at 81-83.

⁶⁶ *Id.* at 93-97.

methods. Following completion of the study, National Grid met with the Division and they concluded that it would be more efficient to proceed with a combined approach. She stated that National Grid did not utilize the \$500,000 budgeted to start on a plan using just traditional methods.⁶⁷ The parties determined that “it would be more efficient to integrate the centralized controls while [National Grid was] doing the traditional methods so that [National Grid] got the right placement of all the equipment that would work with the centralized controls.”⁶⁸

To provide more detail on the Volt/Var management and chosen vendor, Utilidata’s role with National Grid, National Grid presented its employee, James Perkinson, Manager of Advanced Grid Engineering. He confirmed that as part of the bidding process for this program, other potential bidders received the same information as Utilidata.⁶⁹ Mr. Perkinson explained that the purpose of Volt/Var optimization is to control the voltage to customers in a way that results in energy usage savings. The percentage of savings is not yet known, with an expected range between a half percent and seven percent. However, he stated that “[t]he assumption underneath all this is if you control the voltage at the load, that somewhere within the allowable band that we can deliver it,” the amount of energy used in the house is going to be adjusted.⁷⁰ Other benefits include peak shaving, extending the life of infrastructure, and lessened energy procurement.⁷¹ Mr. Perkinson indicated that construction is planned to commence in July 2014 and reach completion in April 2015 so

⁶⁷ *Id.* at 102-03.

⁶⁸ *Id.* at 103-04.

⁶⁹ *Id.* at 108.

⁷⁰ *Id.* at 111-12.

⁷¹ *Id.* at 119-21.

that Utilidata is able to complete an analysis of the effectiveness during the summer months by September 2015.⁷²

Discussing whether this program could be considered an energy efficiency measure, Mr. Perkinson stated that after the pilot, when considering a larger rollout, it may be appropriate to look at it as energy efficiency.⁷³ Ms. Grimsley added that it may be appropriate, following the pilot:

to have some type of hybrid model where a certain part of it is still the traditional capital infrastructure so we don't have to track which capacitor is in the energy efficiency program versus which capacitor is in ISR. But certainly some of the new components on the centralized control, some of those new components we could look at a model where that would be an energy efficiency [measure].⁷⁴

Discussing the vegetation management budget, Mr. Moe indicated that National Grid conducts pruning on approximately the same number of miles each year. He agreed that police detail costs have been growing since fiscal year 2012.⁷⁵ Recently, police detail has made up approximately 8.5% of the vegetation management budget, whereas in fiscal year 2011, it was 4.66% and in fiscal year 2012, 5.63%.⁷⁶ In fiscal year 2014, National Grid anticipates being over budget on police details alone by approximately \$175,000; from a projection in the prior docket of \$625,000 to an anticipated actual spend of approximately \$800,000, or approximately 10% of the budget.⁷⁷

According to Mr. Moe, over the past few years, more towns in Rhode Island require police details in areas where they were not previously required. He claimed that it is not easy to predict ahead of time where police details will be needed, leading to potential cost

⁷² *Id.* at 109-11.

⁷³ *Id.* at 117.

⁷⁴ *Id.* at 118.

⁷⁵ *Id.* at 161.

⁷⁶ *Id.* at 166, 170-71.

⁷⁷ *Id.* at 161-62, 171.

overruns. In response, the operations group has been meeting with police departments prior to starting work in order to avoid surprises during the work. Some communities have been more receptive to discussing when and where police details should be required than others.⁷⁸ For example, Exeter recently presented National Grid with a list of roads that would require police detail. National Grid's community relations department met with Exeter officials and "weren't able to accomplish anything with the town."⁷⁹

Mr. Moe was not sure what level of negotiations has been attempted by National Grid with the towns, but testified that the police details and costs are mandated by the towns. He conceded that in an attempt to control overall costs, National Grid spends less on the actual vegetation management work to account for the higher police detail costs.⁸⁰ However, he maintained that the Company is not "cutting corners," but rather, is being aggressive in bidding to get the lowest cost from contractors.⁸¹ The rationale for the police details has been safety. However, Mr. Moe observed that no data had been provided by any police departments demonstrating why any particular locations require police presence.⁸² National Grid agreed to include in the FY 2015 Electric ISR case information regarding any accident history on construction or vegetation management sites, including the presence or absence of a flagger or police detail.⁸³

Regarding the relationship between Verizon and National Grid over cost responsibility related to joint poles and intercompany operating procedures, Ms. Grimsley explained that rather than engaging in individual negotiations regarding individual

⁷⁸ *Id.* at 163.

⁷⁹ *Id.* at 164.

⁸⁰ *Id.* at 172-75.

⁸¹ *Id.* at 178.

⁸² *Id.* at 177.

⁸³ *Id.* at 189-90.

procedures, the two companies are engaged in broader executive level discussions regarding larger business issues.⁸⁴ Specifically related to the requirement that National Grid consult with the Division to explore its legal options in the event Verizon refuses to contribute to the vegetation management costs, counsel for the Division referenced R.I. Gen. Laws § 39-3-24 which relates to transactions between utilities for which approval is required. He asserted that this section gives the Division jurisdiction over the approval of the intercompany operating procedures as well as the performance thereunder.⁸⁵

Mr. Richer testified that capital investment recovery is included in base rates. He explained that the most recent base rate case included the FY 2012 and 2013 capital investments and a FY 2014 proxy investment based on 2013 actual investment. He clarified that what is included in the ISR reconciliation are those amounts that are not reflected in base rates.⁸⁶

VI. Commission Findings

At an open meeting held on March 27, 2014, the Commission approved the FY 2015 Electric ISR Plan finding that it complies with the statutory mandates. The Commission approved a revenue requirement of \$12,250,308 which results in an incremental fiscal year rate adjustment of \$116,814. It also approved the proposed rates for each rate class. This approval includes the settlement entered into between National Grid and the Division relating to the Division's proposed vegetation management budget adjustment. The impact on a standard residential customer using 500 kWh per month is an increase of \$0.03 per month.

⁸⁴ *Id.* at 180.

⁸⁵ *Id.* at 183-84.

⁸⁶ *Id.* at 135-36.

The PUC is particularly concerned with the increasing costs of police details, resulting in less funds being available for the Company's actual work. The FY 2014 budget for vegetation management included 6.2% for police details. However, the third quarter report shows that the actual FY 2014 spending on police details is approaching 10%. Ratepayers likely would benefit from more negotiations between utilities and police departments. There are wide disparities in pricing among different cities and towns. For the most part, the prices may be set out in labor contracts. Moreover, and for no readily apparent reason, police detail costs are much lower on the as side of National Grid's business. The PUC will be gathering data and hopes to provide a forum where the utilities and the towns could discuss the matter, perhaps through the Police Chiefs Association. The PUC will also seek input from the Rhode Island League of Cities and Towns. It is important to balance safety and cost. A further exploration of these issues is important to Rhode Island's ratepayers, many of whom are small businesses.

Accordingly, it is hereby

(21559) ORDERED:

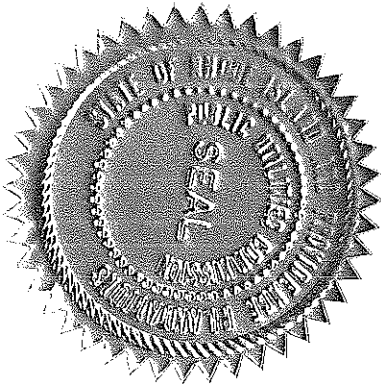
1. The Narragansett Electric Company d/b/a National Grid's Revised Electric ISR Plan filed on December 20, 2013 and associated compliance tariffs are hereby approved for usage on and after April 1, 2014.
2. The Narragansett Electric Company d/b/a National Grid shall provide an updated "customers interrupted by cause" chart to include FY 2011 to FY 2014 when it makes its FY 2014 Electric ISR Reconciliation filing.
3. The Narragansett Electric Company d/b/a National Grid shall provide, as part of its FY 2015 filing, more detail to support the purported need for the investment,

particularly for multi-year projects or those classified as “major programs” within a category.

4. The Narragansett Electric Company d/b/a National Grid shall provide, as part of its FY 2015 filing, a proposal to report in quarterly and annual reconciliations, detail on individual projects where the costs differed from budget by more than 10%, whether the difference resulted from over- or under-spending or timing.
5. Narragansett Electric Company d/b/a National Grid shall comply with all other instructions contained in this Order.

EFFECTIVE AT WARWICK, RHODE ISLAND ON APRIL 1, 2013
PURSUANT TO AN OPEN MEETING DECISION ON MARCH 27, 2014. WRITTEN
ORDER ISSUED AUGUST 12, 2014.

PUBLIC UTILITIES COMMISSION



Margaret E. Curran, Chairperson

Paul J. Roberti, Commissioner

Herbert F. DeSimone, Jr., Commissioner

Notice of Right of Appeal: Pursuant to R.I. Gen. Laws § 39-5-1, any person aggrieved by a decision or order of the PUC may, within 7 days from the date of the Order, petition the Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision or Order.