

August 22, 2014

**BY HAND DELIVERY AND ELECTRONIC MAIL**

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

**RE: Docket 4473 - Electric Infrastructure, Safety, and Reliability Plan  
Quarterly Update – First Quarter Ending June 30, 2014**

Dear Ms. Massaro:

On behalf of National Grid<sup>1</sup>, I have enclosed for filing, in the above-referenced docket, ten copies of the Company's fiscal year (FY) 2015 Electric Infrastructure, Safety, and Reliability (ISR) Plan quarterly update for the first quarter ending June 30, 2014. Pursuant to the provisions of the approved FY 2015 Electric ISR plan, the Company committed to providing quarterly updates on the progress of its Electric ISR programs to the PUC and the Division.

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

Very truly yours,



Raquel J. Webster

Enclosure

cc: Leo Wold, Esq.  
Steve Scialabba  
James Lanni  
Al Contente

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (Company).

# Certificate of Service

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

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



Joanne M. Scanlon

August 22, 2014

## **Docket No. 4473 National Grid's FY 2015 Electric Infrastructure, Safety and Reliability Plan - Service List as of 01/07/14**

<b>Name/Address</b>	<b>E-mail Distribution</b>	<b>Phone</b>
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<b>File an original &amp; 11 copies w/:</b> Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	<a href="mailto:Luly.massaro@puc.ri.gov">Luly.massaro@puc.ri.gov</a>	401-780-2107
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## **Electric Infrastructure, Safety and Reliability Plan**

### **The Narragansett Electric Company**

#### **FY 2015 Quarterly Update**

#### **First Quarter Ending June 30, 2014**

#### **Executive Summary**

For the first quarter of fiscal year 2015 (FY 2015), the Company<sup>1</sup> spent \$21.3 million for capital investment projects against a first quarter budget of \$19.1 million. Overall, spending for FY 2015 through the first quarter was \$2.2 million above budget. This \$2.2 million above-budget spending was primarily driven by the fact that non-discretionary categories of damage failure were above budget by \$1.8 million, and customer requests/public requirements were above budget by \$0.4 million. Overall, discretionary spending was relatively close to budget through the first quarter.

#### **FY 2015 Capital Spending by Key Driver Category**

##### **Non-Discretionary Spending**

##### ***Customer Request/Public Requirement - \$0.4 million over-budget year-to-date***

Spending for the first quarter of FY 2015 in the Customer Request/Public Requirement category (*previously called the Statutory/Regulatory category*) was \$0.4 million above budget because of the I-195 Relocation project. On this project, the State contractor's schedule changes resulted in additional hours for the Company and undocumented third-party existing utility locations (e.g. sewer and water) caused the Company to have to relocate planned conduit and manholes, which resulted in additional environmental soil disposal and replacement.

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

Overall, for FY 2015, the Customer Request/Public Requirement category is forecast to be \$3.2 million above budget at the end of the fiscal year primarily due to the following projects:

- The Shun Pike project will be approximately \$1.1 million over-budget in FY 2015 due to carryover from FY 2014. This project was completed in FY 2014.
- The I-195 Relocation projects for Contracts 14 and 15 will be approximately \$1.0 greater than budget due to the factors discussed above.
- The Watch Hill Underground project will be approximately \$0.7 million over-budget in FY 2015 because construction is occurring in FY 2015. However, the customer contribution was received in the prior fiscal year.
- In addition, the Customer Request/Public Requirement category contains an allowance of \$0.9 million for schedule delays, which have not materialized, and several other small projects are progressing ahead of schedule. All of these factors contributed to the overall forecast for the fiscal year end being above budget.

***Damage/Failure - \$1.8 million over-budget year-to-date***

Spending for the first quarter of FY 2015 in the Damage Failure category was higher than budgeted primarily due to recent increased trends for Distribution Line Damage/Failures in the blanket project, and carryover charges from FY 2014 for the failure of the Sockanosset #2 transformer. At this time, overall, for FY 2015 the Damage Failure category is forecast to be approximately \$1.6 million over-budget primarily due to these same two projects.

Overall, as shown in Attachment A, the total non-discretionary category had a variance of \$2.2 million above budget due to variances above budget in both the Customer Request/Public Requirement category and the Damage Failure category.

### **Discretionary Spending**

#### ***Asset Condition - \$1.0 million over-budget year-to-date***

Spending for the first quarter of FY 2015 for Asset Condition was higher than budgeted primarily due the following projects:

- The I&M program has a variance of \$0.8 million greater than budget as more work was scheduled in the first quarter than originally anticipated. It is currently forecasted that this work will be completed on budget.
- Eldred Substation has a variance through the first quarter of \$0.3 million, and the forecast for fiscal year end is approximately \$0.8 million over-budget. The original budget estimate was based on conceptual engineering, and the cost increased as a result of detailed engineering.
- The Asset Replacement blanket project has a variance in excess of the budget through the first quarter of \$0.3 million, and at this time, the forecast for fiscal year-end is approximately \$0.3 million over-budget. This is primarily driven by an increased level of asset replacement work being identified by local engineers and supervisors.

Currently, overall, spending in the Asset Condition category for FY 2015 is forecast to be \$2.5 million above budget. This variance is primarily driven by the Eldred and Asset Replacement projects discussed above, as well as the following projects:

- The Relay Replacement project forecast for fiscal year-end will be approximately \$0.4 million over-budget. This is carryover work from FY 2014.
- The Ductline Governor Street project forecast for fiscal year-end is approximately \$0.7 million over-budget. This project was originally delayed from FY 2013 into FY 2014 because of the coordination of construction schedules with a gas project. The project was started in FY 2014 but was not completed prior to the winter when construction on the project was halted. It is expected that this project will be completed in FY 2015.

These variances above budget are expected to be partially offset by moving the distribution line work necessary to retire the Daggett Avenue Metalclad Substation into FY 2016.

Another driver for the variance above budget in the Asset Condition category is attributable to work on the majority of the individual projects progressing as budgeted, and not requiring full use of the negative schedule reserve included in the fiscal year budget. The Company utilizes negative schedule reserves with the goal of eliminating churn when projects do not proceed as scheduled due to delays from things such as permitting, obtaining easements, telephone pole sets, or other issues.

The Company is currently reviewing projects in both the Asset Condition and System Capacity and Performance categories to manage the total discretionary forecast closer to budget.

***Non-Infrastructure - within budget year-to-date***

For the first quarter of FY 2015, the Non-Infrastructure category spending was within budget and is expected to be within the \$0.3 million budget at fiscal year-end.

***System Capacity and Performance - \$1.0 million under-budget year-to-date***

Overall, spending was lower in the System Capacity and Performance category for the first quarter of FY 2015. This lower spending was due primarily to the projects discussed below:

- The scope of the Chase Hill project has been reduced from installing eight distribution feeders to installing four distribution feeders. This reduction was due to greater than anticipated distribution line costs and right-of-way construction and maintenance challenges. Consequently, the Chase Hill project has a variance below budget of \$1.1 million through the end of first quarter, and at this time, is projected to have a year-end variance of \$4.8 million below budget. In the FY 2016 ISR process the Company will propose a project to rebuild Westerly substation as a result of this scope change.

- The Newport project has a variance below budget of \$1.3 million through the end of the first quarter, and at this time, is forecasted to have a variance below budget of \$1.8 million at fiscal year-end. This project is still in the permitting and engineering phases.

The System Capacity and Performance budget includes a negative schedule reserve, which will offset a significant portion of these variances below budget. At this time, the System Capacity and Performance category is projected to be \$0.4 million below budget at fiscal year end.

### **Investment Placed in Service**

For FY 2015, \$14.8 million has been placed in service through the first quarter. At this time, the Company estimates placing \$77.7 million of plant-in-service in FY 2015. The non-discretionary category estimate is \$7.4 million above the FY 2015 ISR planned amount. This is due to increased levels of spending in the Customer Request/Public Requirements and Damage/Failure categories as discussed in both FY 2014 and FY 2015. The discretionary category estimate is \$1.7 million above the FY 2015 ISR planned amount. This is primarily driven by the Highland Park project in the System Capacity and Performance category. This is because the budget for this project was based on a conceptual engineering estimate, and the costs increased once the detailed engineering was complete. Details by spending rationale are included in Attachment B.

### **Vegetation Management**

For the first quarter of FY 2015, the Company has completed 28% of its annual distribution mileage cycle-pruning goal with an associated spend of 6% of the FY 2015 budget for the cycle pruning program. As noted in previous reports, the costs for the program typically lag behind the work performed. Since pruning bids were significantly higher than previous years, the Company anticipates being over-budget by approximately \$525,000. Also, contributing to this estimated over spending is that approximately \$76,000 of sub-transmission work is being carried over from FY 2014. This work was not completed as scheduled because of safety issues with a contractor near the end of FY

2014. As such, the Company was required to put the work back out to bid and was only able to complete a portion of the work in FY 2014 at a significantly higher cost. To date, the Company's police costs are in line with what was expected for the year, and the Company anticipates being on budget at year-end.

### **Inspection and Maintenance (I&M)**

For the first quarter of FY 2015, the Company completed 36% of its annual structure inspection goal. The Company expects to complete all inspections in FY 2015.

Through the first quarter of FY 2015, 30% of the total I&M budget has been spent with an associated spend of \$828,000. Also included in the total forecasted costs are the forecasted costs for the FY 2015 mobile elevated voltage testing, which were approved by the Rhode Island Public Utilities Commission at its January 16, 2014 Open Meeting in Docket No. 4237-A. The Company expects to remain within the I&M budget at fiscal year end. Attachment D provides the spending to date for all components in this category.

The Company started performing inspections on its overhead distribution system in FY 2011, and started performing the repairs based on those inspections in FY 2012. The Company categorizes the deficiencies found as Level I, II, or III, and repairs Level I deficiencies either immediately, or within approximately one week of the inspection, and bundles Level II and III work for planned replacement. At this time, the Company has completed repairs reported for approximately 23% of the deficiencies found. Total deficiencies found and repairs made to date are shown in the table below.



Summary of Deficiencies and Repair Activities - RI Distribution				
Year Inspection Performed	Priority Level / Repair Expected	Deficiencies Found (Total)	Repaired as of 6/30/14	Not Repaired as of 6/30/14
<b>FY11</b>				
	I	19	19	0
	II	13,147	11,795	1,352
	III	38	6	32
<b>FY12</b>				
	I	20	20	0
	II	15,870	11,385	4,485
	III	667	204	463
<b>FY13</b>				
	I	17	17	0
	II	26,885	551	26,334
	III	7,919	215	7,704
<b>FY14</b>				
	I	11	11	0
	II	23,032	50	22,982
	III	8,742	73	8,669
<b>FY15</b>				
	I	1	1	0
	II	5,844	0	5,844
	III	1,061	0	1,061
<b>Total Since Program Inception</b>		<b>103,273</b>	<b>24,347</b>	<b>78,926</b>

Results of the Company's manual elevated voltage testing for FY 2015 to date has indicated no instances of elevated voltages found through overhead or manual elevated voltage inspections, as shown in the table below. Streetlight and underground manual elevated voltage testing are scheduled to be performed later in the fiscal year.

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 4473  
FY 2015 Electric Infrastructure, Safety and Reliability Plan  
FY 2015 Quarterly Update  
First Quarter Ending June 30, 2014  
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Manual Elevated Voltage Testing	Total System Units Requiring Testing	FY15 Units Completed thru 06-30-14	Percent Completed	Units with Voltage Found (>= 1.0v)	Percent of Units Tested with Voltage (>= 1.0v )
Distribution Facilities	285,315	18,961	6.65%	0	0.000%
Underground Facilities	13,870	0	0.00%	0	0.000%
Street Lights	5,888	0	0.00%	0	0.000%

\*Rhode Island Street Light Elevated Voltage Testing Program moved from a 5-year to a 3-year program. The Company achieved a 100% completion rate in FY 2014. The new 3-year cycle begins again in FY 2015.

\*Manual Elevated Voltage Testing work for Underground facilities and Street Lights will commence in the second quarter of FY 2015.

### Attachment A

**US Electricity Distribution - Rhode Island**  
**Capital Spend by Spending Rationale**  
**FY 2015 through June 30, 2014**  
**(\$000)**

	FYTD				FY 2015 Total		
	Budget	Actual	Variance		Budget	Forecast	Variance
<b>Customer Request/Public Requirement</b>	\$3,821	\$4,198	\$377		\$14,537	\$17,775	\$3,238
<b>Damage Failure</b>	\$2,404	\$4,197	\$1,793		\$9,816	\$11,421	\$1,605
<i>Subtotal Non-Discretionary</i>	\$6,225	\$8,395	\$2,170		\$24,353	\$29,196	\$4,843
<b>Asset Condition</b>	\$5,139	\$6,177	\$1,038		\$19,591	\$22,110	\$2,519
<b>Non-Infrastructure</b>	\$69	\$5	(\$64)		\$277	\$277	\$0
<b>System Capacity &amp; Performance</b>	\$7,642	\$6,680	(\$962)		\$21,679	\$21,280	(\$399)
<i>Subtotal Discretionary</i>	\$12,850	\$12,862	\$12		\$41,547	\$43,667	\$2,120
<b>Total Capital Spend</b>	<b>\$19,075</b>	<b>\$21,257</b>	<b>\$2,182</b>		<b>\$65,900</b>	<b>\$72,863</b>	<b>\$6,963</b>

Variances below budget are shown in parentheses.

## Attachment B

### US Electricity Distribution - Rhode Island Plant Additions By Spending Rationale FY 2015 through June 30, 2014 (\$000)

	FY 2015 Annual ISR Forecast	FYTD Actual in Service	Current FY 2015 Year End Forecast	% of Current Forecast Placed in Service
<b>Customer Request/Public Requirement</b>	\$14,574	\$4,059	\$17,977	23%
<b>Damage Failure</b>	\$10,921	\$5,181	\$14,562	36%
<i>Subtotal Non-Discretionary</i>	\$25,495	\$9,240	\$32,539	28%
<b>Asset Condition</b>	\$20,153	\$3,820	\$19,993	19%
<b>Non- Infrastructure</b>	\$277	\$0	\$277	0%
<b>System Capacity &amp; Performance</b>	\$23,013	\$1,777	\$24,871	7%
<i>Subtotal Discretionary</i>	\$43,443	\$5,597	\$45,141	12%
<b>Total Capital Investment</b>	<b>\$68,938</b>	<b>\$14,837</b>	<b>\$77,680</b>	<b>19%</b>

### Attachment C

**US Electricity Distribution - Rhode Island  
O&M Vegetation Management Expenditures  
FY 2015 through June 30, 2014  
(\$000)**

	<b>FY 2015 Total</b>	<b>FYTD</b>	<b>FY 2015 Total</b>	
	<b>Budget</b>	<b>Actual</b>	<b>Forecast</b>	<b>Variance</b>
<b>Vegetation Management</b>				
Cycle Pruning (Base)	\$4,475	\$289	\$5,000	\$525
Hazard Tree	\$1,000	\$157	\$1,000	\$0
Sub-T (on & off road)	\$316	\$5	\$392	\$76
Police/Flagman Details	\$650	\$121	\$650	\$0
Core Crew (all other actives)	\$1,285	\$138	\$1,285	\$0
<b>Total Vegetation Management</b>	<b>\$7,726</b>	<b>\$710</b>	<b>\$8,327</b>	<b>\$601</b>

	<b>FY 2015 Goal</b>	<b>FYTD Goal</b>	<b>FYTD Complete</b>	<b>% Complete vs. Scheduled FYTD</b>	<b>Annual % Complete vs. FY 2015 Goal</b>
<b>Distribution Mileage Trimming</b>	1,157	289	321	111%	28%

### Attachment D

#### US Electricity Distribution - Rhode Island Inspection and Maintenance Program Progress Update FY 2015 through June 30, 2014 (\$000)

	<b>FY 2015 Annual ISR Budget</b>	<b>FYTD Actual Spend</b>	<b>Current FY 2015 Year End Forecast</b>	<b>% Completed</b>
Opex Related to Capex	\$1,811	\$483	\$1,811	27%
Repair & Inspections Related Costs	\$934	\$341	\$934	37%
Long Range Plan	\$250	\$4	\$250	2%
<b>Total Operation &amp; Maintenance Expense</b>	<b>\$2,745</b>	<b>\$824</b>	<b>\$2,745</b>	<b>30%</b>

	<b>FY 2015 Goal</b>	<b>FYTD Goal</b>	<b>FYTD Complete</b>	<b>% Complete vs Scheduled FYTD</b>	<b>Annual % Complete vs FY 2015</b>
<b>RI Distribution Overhead Structures Inspected</b>	56,542	14,135	19,302	136.55%	34.14%