

August 18, 2015

BY HAND DELIVERY AND ELECTRONIC MAIL

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

**RE: Docket 4539 - Electric Infrastructure, Safety, and Reliability Plan
Quarterly Update – First Quarter Ending June 30, 2015**

Dear Ms. Massaro:

On behalf of National Grid, I have enclosed for filing in the above-referenced docket, ten copies of the Company's fiscal year (FY) 2016 Electric Infrastructure, Safety, and Reliability (ISR) Plan quarterly update for the first quarter ending June 30, 2015. Pursuant to the provisions of the approved FY 2016 Electric ISR Plan, the Company committed to providing quarterly updates on the progress of its Electric ISR program to the Rhode Island Public Utilities Commission and the Rhode Island Division of Public Utilities and Carriers.

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

Enclosures

cc: Docket 4539 Service List
Leo Wold, Esq.
Steve Scialabba
James Lanni
Al Contente

Certificate of Service

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

Paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

Joanne M. Scanlon

August 18, 2015
Date

Docket No. 4539 National Grid's FY 2016 Electric Infrastructure, Safety and Reliability Plan - Service List as of 2/27/15

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Electric Infrastructure, Safety, and Reliability Plan

FY 2016 Quarterly Update

First Quarter Ending June 30, 2015

EXECUTIVE SUMMARY

For the first quarter of fiscal year 2016 (FY 2016), the Company¹ spent \$18.1 million for capital investment projects against a first quarter budget of \$17.9 million. Overall, spending for FY 2016 through the first quarter was \$0.2 million over-budget. This \$0.2 million over-budget variance was primarily driven by a \$1.6 million over-budget variance in the Non-Discretionary Sub-category and a \$1.4 million under-budget variance in the Discretionary Sub-Category. Although year-to-date spend is approximate to budget, the Company currently anticipates that the overall capital spend for the fiscal year will be approximately \$9.0 million over-budget. Increased costs to deliver the South Street project, an increased identification of work by local Operations under the Damage/Failure blanket, and two large new business projects contribute to this year-end variance. Each of these categories is addressed in more detail below.

I. FY 2016 Capital Spending by Key Driver Category

1. Non-Discretionary Spending

a. Customer Request/Public Requirement - \$0.6 million over-budget variance year-to-date

Capital spending through the first quarter of FY 2016 in the Customer Request/Public Requirement category (*previously called the Statutory/Regulatory category*) was \$0.6 million over-budget. However, this variance was driven primarily by a \$1.0 million accounting adjustment applied in April 2015 that credited a Non-Discretionary project and debited the Discretionary portfolio. Absent this adjustment, this category would be under-budget. The adjustment and other variances are described as follows:

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

- In March 2015, an accounting adjustment for under cleared labor burden pools was processed, but incorrectly applied to the Non-Discretionary Meter Purchasing blanket. This issue was identified in April 2015 and the charges were transferred to the appropriate capital overheads project, which is located in the Non-Infrastructure category.
- The New Business Commercial blanket was \$0.4 million over the first quarter budget of \$0.5 million. This variance was primarily due to construction on projects for which customer reimbursements were received in FY 2015. In addition, there were fewer than expected customer reimbursements on projects initiated in FY 2016.

Among the major projects in this category, offsetting these over-spending projects were the following under-budget projects.

- The Nasonville 127W41 New Customer Load project was \$0.4 million under the first quarter budget of \$0.4 million. This variance was primarily due to schedule delays arising from environmental permitting issues.
- Several Rhode Island Department of Transportation (RI DOT) projects were \$0.6 million under their combined first quarter budget of \$0.9 million. This under budget-variance was primarily driven by changes to the overall RI DOT construction schedule, which resulted in Company construction being deferred into future quarters.
- The Transformer Purchase blanket was \$0.5 million under the first quarter budget of \$0.7 million. Inventory purchases from FY 2015 were sufficient to meet the FY 2016 first quarter demand.

Overall, for FY 2016, the Customer Request/Public Requirement category is forecasted to be approximately \$2.7 million over-budget at the end of the fiscal year. In addition to the aforementioned burden adjustments to the Non-Infrastructure category, this variance is primarily driven by over-budget year-end forecasts for:

- Increase in capital spending on the Nasonville 127W41 New Customer Load project after detailed design and scope refinements were completed.
- Costs expected to deliver engineering, design, and required procurement activities for the LNG Terminal Road Providence project were based on the latest project schedule and conceptual costs. A customer reimbursement is expected in FY 2017 for this project.

b. Damage/Failure - \$1.0 million over-budget variance year-to-date

Capital spending through the first quarter of FY 2016 in the Damage/Failure category was \$1.0 million over-budget. This variance was primarily driven by the Damage Failure blanket, which was \$1.2 million over the first quarter budget of \$2.1 million. An increased identification of work by the local Operations department resulted in additional funding needed for FY 2016.

Overall, for FY 2016, the Damage/Failure category is forecasted to be approximately \$4.3 million over-budget at the end of the fiscal year. The increased identification of work by the local Operations department is expected to continue throughout FY 2016.

Finally, as noted above and shown in Attachment A, the total Non-Discretionary Sub-category had a year-to-date capital spending variance of \$1.6 million over-budget, and, at this time, is projected to be approximately \$7.0 million over-budget at the end of the fiscal year.

2. Discretionary Spending

a. Asset Condition - \$0.8 million under-budget variance year-to-date

Capital spending through the first quarter of FY 2016 in the Asset Condition category was \$0.8 million under-budget. This variance was driven primarily by the following under-budget projects.

- The ARP Breaker and Recloser program was \$0.5 million under the first quarter budget of \$0.6 million. This was primarily due to delays in processing approximately \$0.5 million in material invoices.
- The IRURD Maplewood project was \$0.3 million under the first quarter budget of \$0.4 million. This under-budget variance was primarily driven by design delays, which in turn, delayed the start of civil construction. Construction is still anticipated in FY 2016.
- Four Metal Clad Substation Retirement distribution line projects (Hyde Ave., Daggett Ave., Southeast, and Front St.) were \$0.8 million under their combined first quarter budget of \$0.8 million. Construction on the Hyde Ave. and Southeast projects are expected in the second quarter of FY 2016. Construction was delayed to accommodate additional design requirements that were needed to address the poor asset condition of pole plant in the conversion area that were identified by Operations.

The Daggett Ave. project, which has also had additional pole plant scope added to the project, is expected to start later in FY 2016. Engineering and design for Front Street was deferred until FY 2017 to achieve an overall year-end Discretionary portfolio forecast that is approximate to the FY 2016 ISR budget.

- The South Street Indoor Substation Replacement project was \$0.3 million under the first quarter budget of \$0.4 million due to a delay in awarding the contract to the vendor performing the engineering and design activities in FY 2016.

Overall, for FY 2016, the Asset Condition category is forecasted to be approximately \$5.9 million over-budget at the end of the fiscal year. Distribution project costs to deliver the South Street substation have increased since the FY 2016 ISR was submitted and, combined with an aggressive schedule, require additional funding to deliver key preliminary engineering and procurement activities in FY 2016. Also, higher than budgeted forecasts on the Hyde Ave., Daggett Ave., and Southeast Metal Clad Substation Retirement projects, due to the aforementioned scope increases, also contribute to this over-budget year-end forecast even though those projects are currently under-budget year-to-date. These over-budget year-end forecasts will be partially offset by the deferral of the Arc Flash program, which has been delayed until FY 2017 due to issues with the new network protectors, and two Flood Mitigation projects (Westerly and Hope Substation) that have been deferred to achieve an overall year-end Discretionary portfolio forecast that is approximate to the FY 2016 ISR budget.

b. Non-Infrastructure – \$0.04 million over-budget variance year-to-date

Through the first quarter of FY 2016, the Non-Infrastructure category capital spending was \$0.04 million over-budget. Overall, for FY 2016, the Non-Infrastructure category is forecasted to be approximately \$0.01 million over-budget at the end of the fiscal year.

c. System Capacity and Performance - \$0.6 million under-budget variance year-to-date

Capital spending through the first quarter of FY 2016 for the System Capacity and Performance category was \$0.6 million under-budget. This variance was primarily driven by the following under-budget projects.

- The Chase Hill Substation, New Highland Drive Substation, and Kent County projects were \$2.4 million under their combined first quarter budget of \$2.2 million. These projects were delayed to offset over-budget spending in the Asset Condition and System Capacity and Performance category. This was done to achieve an overall year-end Discretionary portfolio forecast that is approximate to the FY 2016 ISR budget.

Among the major projects in this category, offsetting these under-spending projects was the following over-budget projects.

- The Kilvert Street New Feeder, Clarke Street Feeder Upgrade, and the Johnston Substation Expansion projects were \$1.0 million over their combined first quarter budget of \$0.4 million. The project costs in the FY 2016 ISR budget assumed these projects would be completed and only requiring closeout charges. However, these projects were partially delayed in the second half of FY 2015 to achieve an overall year-end Discretionary portfolio spend that was approximate to the FY 2015 ISR budget.
- The EMS Expansion Project at Elmwood and Lincoln Ave were a combined \$0.3 million over their first quarter budget of \$0.01 million.

Overall, for FY 2016, the System Capacity and Performance category is forecasted to be approximately \$3.9 million under-budget at fiscal year-end. This variance is primarily driven by the Chase Hill Substation, New Highland Drive Substation, Kent County, and New London Avenue projects. These projects were partially delayed into future fiscal years to achieve an overall year-end Discretionary portfolio forecast that is approximate to the FY 2016 ISR budget.

Finally, as noted above and as shown in Attachment A, the total Discretionary Sub-category had a year-to-date capital spending variance of \$1.4 million under-budget, and, at this time, the Company expects this category to be approximately \$2.0 million over-budget at the end of the fiscal year. This variance is primarily driven by the acceleration of engineering, design, and procurement activities on the South Street project.

In Docket No. 4473, the Rhode Island Public Utilities Commission (PUC) ordered the Company to include in the FY 2016 Electric ISR Plan filing a proposal to identify and report in quarterly and annual reconciliation filings the projects that exceeded or were under the fiscal year-to-date and fiscal year-end budgets by ten percent (10%).² For the

² Docket No. 4473 Order at 25.

identified projects, the Company would note whether variances were due to the project being accelerated or delayed or whether the variances were due to an increase or decrease in total project cost. The Company agreed to provide in the quarterly reports explanations for the portfolio of large projects³ with variances exceeding \$0.1 million. These projects represent approximately \$25.2 million of the FY 2016 budget. The information is shown in Attachment E.

3. Investment Placed in Service

Overall, \$13.4 million was placed in service through the first quarter of FY 2016. At this time, the Company estimates that it will place \$78.8 million of plant-in-service in FY 2016. The Non-Discretionary Sub-category year-end forecast of \$31.6 million is approximately \$3.7 million above the original FY 2016 Electric ISR Plan planned amount of \$27.9 million. The Discretionary Sub-category year-end forecast of \$47.2 million is approximately \$2.4 million under the original FY 2016 Electric ISR Plan planned amount of \$49.6 million. Overall, the current plant-in-service forecast of \$78.8 million is approximately \$1.3 million above the original FY 2016 Electric ISR Plan planned amount of \$77.5 million. This represents a 1.7% forecasted increase from the original budget. Details by spending rationale are included in Attachment B.

4. Vegetation Management

Through the first quarter of FY 2015, the Company completed 17% of its annual distribution mileage cycle pruning goal of 1,232 miles. This represented an associated spending of 7% of the FY 2016 budget for the cycle pruning program. As previously noted in the FY 2015 Quarterly Reports, the costs for this program typically lag behind the work performed. The variance is driven by cycle pruning bids, which were significantly higher than previous years. The Company's police detail costs are in line with what is expected for the fiscal year.

The Company forecasts to be on budget at fiscal year end. Attachment C provides the FY 2016 spending for all components in the Vegetation Management category.

³ Large projects are defined as exceeding \$1 million in total project cost.

5. Inspection and Maintenance (I&M)

Through the first quarter of FY 2016, the Company completed 32% of its annual structure inspection goal of 49,670 overhead structures. Approximately 11% of the total I&M budget was spent. The company expects that the I&M forecast at fiscal year-end will be \$2.2 million, which is \$1.1 million below the FY 2016 Annual ISR budget of \$3.3 million. The year-to-date and year-end under budget variances are driven by the Opex Related to Capex subcategory, which will not be fully required to achieve the capital component of the I&M program. The Repairs and Inspection Related Costs subcategory forecast includes the FY 2016 mobile elevated voltage testing and repairs, which the PUC approved in Docket No. 4237. Attachment D provides the FY 2016 spending for all components in the Inspection and Maintenance category.

The Company began performing inspections on its overhead distribution system in FY 2011, and, in FY 2012 began performing the repairs based on those inspections. 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. The Company bundles Level II and III work for planned replacement. At this time, the Company has completed repairs reported for approximately 30% 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 06/30/15	Not Repaired as of 06/30/15
FY 2011	I	19	19	0
	II	13,147	12,589	558
	III	38	9	29
FY 2012	I	20	20	0
	II	15,870	14,925	945
	III	668	509	159
FY 2013	I	17	17	0
	II	26,885	8,016	18,869
	III	8,285	1,662	6,623
FY 2014	I	11	11	0
	II	23,196	980	22,216
	III	8,776	316	8,460
FY 2015	I	5	5	0
	II	21,554	4	21,550
	III	4,396	2	4,394
FY 2016	I	1	1	0
	II	4,486	0	4,486
	III	2,146	0	2,146
Total Since Program Inception	I, II, III	129,520	39,085	90,435

As shown in the table below, results of the Company’s manual elevated voltage testing for FY 2016 have not indicated any instances of elevated voltages found through either overhead or manual elevated voltage inspections.

Manual Elevated Voltage Testing				
	Total System Units Requiring Testing	FY 2016 Units Completed thru 06-30-15	Units with Voltage Found (>1.0v)	Percent of Units Tested with Voltage (>1.0v)
Distribution Facilities	285,315	18,089	0	0.00%
Underground Facilities	13,870	1,334	0	0.00%
Street Lights	5,884	0	0	0.00%

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

Attachment A
US Electricity Distribution - Rhode Island
Capital Spend by Spending Rationale
FY 2016 through June 30, 2015
(\$000)

	FYTD			FY 2016 Total		
	Budget	Actual	Variance	Budget	Forecast	Variance
Customer Request/Public Requirement	\$4,394	\$4,964	\$570	\$15,647	\$18,299	\$2,652
Damage Failure	\$2,770	\$3,758	\$988	\$11,177	\$15,481	\$4,304
<i>Subtotal Non-Discretionary</i>	<i>\$7,164</i>	<i>\$8,722</i>	<i>\$1,558</i>	<i>\$26,824</i>	<i>\$33,780</i>	<i>\$6,956</i>
Asset Condition	\$6,062	\$5,277	(\$785)	\$24,053	\$29,928	\$5,875
Non-Infrastructure	\$66	\$102	\$36	\$275	\$285	\$10
System Capacity & Performance	\$4,651	\$4,046	(\$605)	\$22,148	\$18,264	(\$3,884)
<i>Subtotal Discretionary</i>	<i>\$10,779</i>	<i>\$9,425</i>	<i>(\$1,354)</i>	<i>\$46,476</i>	<i>\$48,477</i>	<i>\$2,001</i>
Total Capital Investment in Systems	\$17,943	\$18,147	\$204	\$73,300	\$82,257	\$8,957

* () denotes an underspend for the period

Attachment B
US Electricity Distribution - Rhode Island
Plant Additions by Spending Rationale
FY 2016 through June 30, 2015
(\$000)

	FY 2016 Annual ISR Forecast	FYTD Actual in Service	Current FY 2016 Year End Forecast	% of Current Forecast Placed in Service
Customer Request/Public Requirement	\$16,611	\$4,066	\$17,955	23%
Damage Failure	\$11,299	\$4,385	\$13,688	32%
<i>Subtotal Non-Discretionary</i>	<i>\$27,910</i>	<i>\$8,451</i>	<i>\$31,643</i>	<i>27%</i>
Asset Condition	\$25,354	\$3,145	\$23,795	13%
Non-Infrastructure	\$277	\$0	\$181	0%
System Capacity & Performance	\$23,934	\$1,825	\$23,196	8%
<i>Subtotal Discretionary</i>	<i>\$49,565</i>	<i>\$4,970</i>	<i>\$47,172</i>	<i>11%</i>
Total Capital Investment in Systems	\$77,475	\$13,421	\$78,815	17%

* () denotes an underspend for the period

Attachment C
US Electricity Distribution - Rhode Island
O&M Vegetation Management
Expenditures
FY 2016 through June 30, 2015
(\$000)

	FY 2016 Annual ISR Budget	FYTD Actual Spend	FY 2016 Total Forecast	FYTD % Spend
Cycle Pruning (Base)	\$5,414	\$390	\$5,414	7%
Hazard Tree	\$1,000	\$45	\$1,000	5%
Sub-T (on & off road)	\$220	\$31	\$220	14%
Police/Flagman Details	\$750	\$87	\$750	12%
Core Crew (all other activities)	\$1,500	\$401	\$1,500	27%
Total Vegetation Management	\$8,884	\$954	\$8,884	11%

	FY 2016 Goal	FYTD Goal	FYTD Complete	% Complete vs. Scheduled FYTD	Annual % Complete vs. FY 2016 Goal
Distribution Mileage Trimming	1,232	308	207	67%	17%

* () denotes an underspend for the period

Attachment D
US Electricity Distribution - Rhode Island
Inspection and Maintenance Program Progress Update
FY 2016 through June 30, 2015
(\$000)

	FY 2016 Annual ISR Budget	FYTD Actual Spend	Current FY 2016 Year End Forecast	FYTD % Spend	
Opex Related to Capex	\$1,885	\$297	\$758	16%	
Repair & Inspections Related Costs	\$1,423	\$54	\$1,423	4%	
System Planning & Protection Coordination Study	\$25	\$8	\$25	32%	
Total Operation & Maintenance Expense	\$3,333	\$359	\$2,206	11%	
	FY 2016 Goal	FYTD Goal	FYTD Complete	% Complete vs. Scheduled FYTD	Annual % Complete vs. FY 2016
RI Distribution Overhead Structures Inspected	49,670	12,417	15,819	127%	32%

* () denotes an underspend for the period

Attachment E
US Electricity Distribution - Rhode Island
Project Variance Report
FY 2016 through June 30, 2015
(\$000)

Project Description	Project Funding Numbers	FYTD			FY 2016 Total			Variance Cause
		Budget	Actuals	Variance	Budget	Forecast	Variance	
Nasonville 127W41 New Customer Load	C049981	\$445	\$53	(\$392)	\$553	\$1,602	\$1,049	In-year schedules, but overall project costs have increased.
Chase Hill Substation	C024175, C024176	\$1,022	(\$208)	(\$1,230)	\$4,900	\$2,946	(\$1,954)	Project partially delayed into FY 2017 and FY 2018.
Johnston Substation Expansion	C028884, C033535, C034002, C036072	\$0	\$346	\$346	\$0	\$360	\$360	Increased costs.
Kilvert Street #87 Upgrades	C036516, C036522	\$242	\$466	\$224	\$1,100	\$2,858	\$1,758	Project delayed from FY 2015 into FY 2016.
Clarke Street Upgrades	C046831, C046832	\$121	\$531	\$410	\$250	\$1,248	\$998	Project delayed from FY 2015 into FY 2016.
Quonset Substation Expansion	C053646, C053647	\$103	\$137	\$34	\$480	\$1,423	\$943	Project accelerated.
New Highland Drive Substation	CD00972, CD00978	\$900	(\$1)	(\$901)	\$1,200	\$47	(\$1,153)	Substation is complete, but final d-line project delayed into FY 2018.
Kent County 2nd Transformer	CD01101, CD01104	\$326	\$26	(\$300)	\$1,200	\$173	(\$1,027)	Project delayed into FY 2017.
South Street Substation Replacement	C051212, C051213	\$403	\$63	(\$339)	\$4,540	\$6,916	\$2,376	Project accelerated. Overall project costs increased.
Volt/Var Pilot Program	C046352, C052708, C053111	\$598	\$823	\$225	\$1,464	\$1,523	\$59	In year project acceleration.

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New London Avenue Substation	C028920, C028921	\$407	\$458	\$51	\$6,800	\$813	(\$5,987)	Project partially delayed into FY 2017 and FY 2018.
Westerly Flood Restoration	C055215, C036527	\$163	\$0	(\$163)	\$650	\$0	(\$650)	Project delayed to FY 2018.
Hope Substation Flood Restoration	C046697	\$120	\$78	(\$42)	\$612	\$124	(\$488)	Project partially delayed into FY 2017 and FY 2018.
Metal Clad Substation Retirements (Hyde Ave., Daggett Ave., Southeast, and Front St.)	C049910, C050006, C050017, C050778	\$797	\$54	(\$743)	\$1,348	\$3,625	\$2,277	In-year project delays and overall increase in costs, except Front St which was delayed until FY 2017.
LNG Plant Terminal Road Providence	C051203, C051204	\$33	\$0	(\$33)	\$60	\$648	\$588	Project accelerated.
		\$5,680	\$2,826	(\$2,854)	\$25,157	\$24,306	(\$851)	

* () denotes an underspend for the period