

August 16, 2021

VIA ELECTRONIC MAIL

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

**RE: Docket 5098 – FY2022 Electric Infrastructure, Safety, and Reliability Plan
Quarterly Update – First Quarter Ending June 30, 2021**

Dear Ms. Massaro:

On behalf of National Grid,¹ I have enclosed an electronic version of the Company's fiscal year (FY) 2022 Electric Infrastructure, Safety, and Reliability (ISR) Plan quarterly update for the first quarter ending June 30, 2021.² Pursuant to the provisions of the approved FY 2018 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 401-784-4263.

Very truly yours,



Andrew S. Marcaccio

Enclosures

cc: Docket 5098 Service List
Tiffany Parenteau, Esq.
John Bell, Division
Greg Booth, Division

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

² Per Commission counsel's update on October 2, 2020, concerning the COVID-19 emergency period, the Company is submitting an electronic version of this filing followed by five (5) hard copies filed with the Clerk within 24 hours of the electronic filing.

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.

The 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 16, 2021
Date

**Docket No. 5098 - National Grid's Electric ISR Plan FY 2022
Service List as of 2/10/2021**

Name/Address	E-mail Distribution	Phone
Andrew Marcaccio, Esq. Jennifer Hutchinson, Esq. National Grid 280 Melrose St. Providence, RI 02907	Andrew.Marcaccio@nationalgrid.com ;	401-784-7288
	jennifer.hutchinson@nationalgrid.com ;	
	celia.obrien@nationalgrid.com ;	
	Joanne.scanlon@nationalgrid.com ;	
National Grid Melissa Little Patricia Easterly Kathy Castro Susan Toronto Ryan Constable William Richer	Melissa.Little@nationalgrid.com ;	
	Patricia.easterly@nationalgrid.com ;	
	Kathy.Castro2@nationalgrid.com ;	
	Susan.Toronto@nationalgrid.com ;	
	Ryan.Constable@nationalgrid.com ;	
	William.Richer@nationalgrid.com ;	
Division of Public Utilities (Division) Christy Hetherington, Esq. Dept. of Attorney General 150 South Main St. Providence, RI 02903	christy.hetherington@dpuc.ri.gov ;	
	Dmacrae@riag.ri.gov ;	
	MFolcarelli@riag.ri.gov ;	
	John.bell@dpuc.ri.gov ;	
	Joseph.shilling@dpuc.ri.gov ;	
	Margaret.l.hogan@dpuc.ri.gov ;	
	Linda.george@dpuc.ri.gov ;	
	Robert.Bailey@dpuc.ri.gov ;	
David Efron Berkshire Consulting 12 Pond Path North Hampton, NH 03862-2243	Djeffron@aol.com ;	603-964-6526

<p>Gregory L. Booth, PLLC 14460 Falls of Neuse Rd. Suite 149-110 Raleigh, N. C. 27614</p>	<p>gboothpe@gmail.com;</p>	<p>919-441-6440</p>
<p>Linda Kushner L. Kushner Consulting, LLC 514 Daniels St. #254 Raleigh, NC 27605</p>	<p>Lkushner33@gmail.com;</p>	<p>919-810-1616</p>
<p>Office of Energy Resources (OER) Albert Vitali, Esq. Dept. of Administration Division of Legal Services One Capitol Hill, 4th Floor Providence, RI 02908</p>	<p>Albert.Vitali@doa.ri.gov;</p>	<p>401-222-3417</p>
	<p>Nancy.Russolino@doa.ri.gov;</p>	
	<p>Christopher.Kearns@energy.ri.gov;</p>	
	<p>Nicholas.Ucci@energy.ri.gov ;</p>	
	<p>Carrie.Gill@energy.ri.gov ;</p>	
<p>File an original & five (5) copies w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888</p>	<p>Luly.massaro@puc.ri.gov;</p>	<p>401-780-2107</p>
	<p>John.harrington@puc.ri.gov;</p>	
	<p>Cynthia.WilsonFrias@puc.ri.gov;</p>	
	<p>Todd.bianco@puc.ri.gov;</p>	
	<p>Emma.rodvien@puc.ri.gov;</p>	
	<p>Alan.nault@puc.ri.gov;</p>	
<p>Matthew Sullivan, Green Development</p>	<p>ms@green-ri.com;</p>	

**Electric Infrastructure, Safety, and Reliability Plan
FY 2022 Quarterly Update
For the Three months Ending June 30, 2021**

EXECUTIVE SUMMARY

As shown in Attachment A during the first quarter of the fiscal year ending March 31, 2022, the Company¹ spent \$24.1 million for capital projects against a budget of \$27.5 million. Non-Discretionary spending was \$1.5 million over the budget of \$9.5 million. Discretionary spending, including the separately tracked large projects, was \$4.9 million under the budget of \$18.0 million. Spending in each of these categories is addressed in more detail below. The Company forecasts capital spending of \$100.6 million in FY 2022, \$1.0 million under the budget of \$101.6 million.

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

I. FY 2022 Capital Spending by Key Driver Category

1. Non-Discretionary Spending

a. Customer Request/Public Requirement

During the three months ending June 30, 2021, capital spending in the Customer Request/Public Requirement category was \$8.3 million which was over budget by \$1.8 million. The major drivers are:

- Work related to Third-Party Attachments is \$0.8 million over the FYTD budget of \$70,000. Customer advances were collected for a portion of this work in FY 2021 resulting in FY 2022's first quarter activity appearing over budget. It is anticipated that this category of non-discretionary spending will remain over budget through the year because of the customer advances collected in FY 2021.
- Activity in the Distributed Generation category was \$2.1 million over budget for the three months ending June 30, 2021 due to the transition to the new process for recording customer Contribution in Aid of Construction (CIAC). Substantial progress was made on the transition during FY 2021. Implementation continues in FY 2022 and, once the process has been fully implemented, the Company expects that the net capital activity for any fiscal year will be minimal.
- Lower YTD spending in other projects and programs, such as meter purchases have partially offset these increases.

At this time, the Company forecasts FY 2022 spending in the Customer Request/Public Requirements category will be \$2.1 million over budget.

b. Damage/Failure

During the three months ending June 30, 2021, capital spending in the Damage/Failure category was \$2.7 million, which was \$0.2 million under the budget of \$2.9 million. The Company continues to review Damage/Failure work each month as it transitions to categorizing only work related to failed assets in the Damage/Failure category of the Non-Discretionary portfolio and all other work in the Asset Replacement category of the Discretionary portfolio.

In May 2021 the Westerly #2 Transformer was removed from service and a mobile transformer was installed. During the first quarter of FY 2022, capital spending totaled \$138,000. Forecasted FY 2022 spending to replace this transformer is \$1.3 million.

The Company forecasts that spending in the Damage/Failure category will be \$0.5 million over the FY 2022 budget of \$12.2 million.

2. Discretionary Spending

a. Asset Condition (without Separately Tracked Large Projects)

During the three months ending June 30, 2021, capital spending in the Asset Condition category (excluding separately tracked large projects) was \$4.3 million, which was \$0.8 million under the budget of \$5.2 million. The major drivers of this variance are as follows:

- Capital spending on URD projects was under budget by \$1.0 million due to delays in issuing vendor work. Spending on the program is currently forecasted to be close to budget at the end of the year.
- Capital spending on the Franklin Square 11kV Substation project continued from FY 21 and totaled \$0.7 million during the first three months of FY 2022. This project is associated with the Transmission project taking place at the Franklin Square Substation. The distribution scope includes a new outdoor 11 kV riser structure, removal of existing 11kV cable during coordinated outages and installation of new 11kV cable. Minimal budget for this project was included in the FY 2022 Plan because requirements were not identified until after the budget was set. The Company forecast capital spending of \$1.1 million for the fiscal year.
- Capital spending on the Franklin Square Breaker Replacement project was \$0.5 million under budget as of June 30, 2021. Orders for breakers were placed in July and the project is expected to be on budget by year end.

At this time, the Company forecasts that capital spending in this category will be \$1.7 million over budget at the end of the year.

b. Non-Infrastructure

During the three months ending June 30, 2021, capital spending in the Non-Infrastructure category was \$1.3 million, which was \$1.2 over the budget of \$0.2 million. This variance is attributed to capital overheads. At this time, the Company forecasts that spending in this category will be on budget at the end of the year.

c. System Capacity and Performance

During the three months ending June 30, 2021, capital spending for the System Capacity and Performance category was \$4.1 million, which was \$1.3 million under the budget of \$5.4 million. The major drivers of this variance are as follows:

- Capital spending on the Aquidneck Island projects was \$0.9 million under the budget of \$2.0 million. FY 2022 capital spending is forecasted to be \$2.0 million under budget. Drivers include FY 2022 work was shifted into FY 2021, and actuals coming in less than estimates.
- Capital spending on projects related to COVID load shifts was \$0.4 million under the budget of \$0.5 million. It is anticipated that capital spending in this category will be on budget by year end.

At this time, the Company forecasts that spending in this category will be \$2.4 million under budget at the end of the year.

d. Separately Tracked Large Projects

During the three months ending June 30, 2021, capital spending on the Southeast Substation, Dyer Street Substation and Providence Area projects in the Asset Condition category was \$3.9 million under the budget of \$7.3 million. Each project is discussed below and in Attachment G.

- Capital spending on the Southeast Substation projects was essentially on budget at \$1.3 million. The substation portion of this project is substantially complete and went into service in March 2021. The remaining substation work planned for FY 2022 is site civil work. The distribution line portion of this project is expected to be completed in FY 2022.
- Capital spending on Dyer Street substation was \$2.4 million under the budget of \$3.0 million. The Company is forecasting that capital spending on this project will be \$2.6 million under budget for the fiscal year due to some work expected to be delayed to FY 2023.
- Capital spending on the Providence Area Study projects (Admiral Street projects) was \$1.6 million under the budget of \$3.1 million primarily due to shifts in spending and delays in material orders and real estate easements. The Company is forecasting that capital spending on these projects will be close to budget at year end.

e. Large Project Variances

The Company provides explanations for large projects² with variances that exceed +/- 10% of the annual fiscal year budget in quarterly reports. These projects represented \$27.7 million of the FY 2022 budget of \$101.6 million. This project information is provided in Attachment E.

² Large projects are defined as exceeding \$1.0 million in total project cost.

f. New Distribution System Technology Update

The Quarterly Updates include an explanation of all new technologies the Company is exploring to assist in distribution system planning, particularly as they relate to the integration of distributed energy resources or to providing additional visibility on the distribution grid. Most recently, the Company has increased its use of Python Scripting to improve automation in CYME as well as other computer programs. For example, the COVID-19 scenario analysis performed during FY 2021 utilized Python scripts to run the initial CYME analysis.

3. Investment Placed-in-Service

During the three months ending June 30, 2021, \$19.7 million of plant additions were placed in service which is 20% of the FY 2022 target and forecast of \$98.5 million. Details by spending rationale are included in Attachment B.

4. Vegetation Management (VM)

During the three months ending June 30, 2021, the Company completed 211 miles or 15% of its annual distribution mileage cycle pruning goal of 1,432 miles. VM O&M spending was \$1.4. The Company expects to complete 100% of the FY 2022 work plan within its budget of \$10.8 million.

Attachment C provides the spending for the first quarter of FY 2022 and the Hazard Tree and Gypsy Moth Summary. During the first quarter of FY 2022, the Company removed 291 hazard trees on five circuits and identified no trees as having been impacted by gypsy moths.

5. Inspection and Maintenance (I&M)

During the three months ending June 30, 2021, the Company completed 29% of its annual structure inspection goal of 52,832 with an associated Opex spend of \$0.2 million. This spending includes mobile elevated voltage testing and repairs which the PUC approved in Docket No. 4237.

The Company began performing inspections on its overhead distribution system in FY 2011 and began performing the repairs based on those inspections in FY 2012. Deficiencies found are categorized as Level I, II, or III. Level I deficiencies are repaired immediately or within 30 days of the inspection. As of June 30, 2021, no Level I deficiencies were found, and the Company has completed repairs for 34 percent of the total deficiencies found. This information is summarized in the tables below.

Summary of Deficiencies and Repair Activities RI Distribution				
Year Inspection Performed	Priority Level/Repair Expected	Deficiencies Found (Total)	Repaired as of 6/30/21	Not Repaired as of 6/30/21
FY 2011	I	18	18	0
	II	13,146	13,128	18
	III	28	28	0
FY 2012	I	17	17	0
	II	15,847	15,544	303
	III	626	624	2
FY 2013	I	15	15	0
	II	25,883	16,496	9,387
	III	8,780	4,637	4,143
FY 2014	I	11	11	0
	II	22,096	4,375	17,721
	III	8,414	3,027	5,387
FY 2015	I	5	5	0
	II	20,805	1	20,804
	III	4,351	0	4,351
FY 2016	I	2	2	0
	II	11,018	1,072	9,946
	III	6,441	192	6,249
FY 2017	I	2	2	0
	II	8,567	0	8,567
	III	7,272	1	7,271
FY 2018	I	11	11	0
	II	8,639	11	8,628
	III	7,196	14	7,182
FY 2019	I	28	28	0
	II	3,699	0	3,699
	III	2,464	0	2,464
FY 2020	I	19	19	0
	II	186	1	185
	III	26	0	26
FY 2021	I	0	0	0
	II	53	0	53
	III	37	0	37
FY 2022	I	0	0	0
	II	30	0	30
	III	20	0	20
Total Since Program Inception	I, II, III	175,752	59,279	116,473

Manual Elevated Voltage Testing				
Manual Elevated Voltage Testing	Total System Units Requiring Testing	FY 2021 Units Completed thru 6/30/21	Units with Voltage Found (>1.0v)	Percent of Units Tested with Voltage (>1.0v)
Distribution Facilities	253,069	16,843	0	0%
Underground Facilities	12,438	2,600	0	0%
Street Lights	4,929	1,900	0	0%

During the three months ending June 30, 2021, the Company's manual elevated voltage testing has not indicated any instances of elevated voltage.

FY 2022 I&M program costs and other O&M spending are shown in Attachment D.

Attachment A

US Electricity Distribution - Rhode Island Capital Spending by Spending Rationale For the Three Months Ending June 30, 2021 (\$000)

	FYTD June 30, 2021			FY 2022		
	Budget	Actuals	Over Spend / (Under Spend)	Budget	Forecast	Over Spend / (Under Spend)
Customer Request/Public Requirement	\$6,590	\$8,340	\$1,750	\$27,237	\$29,355	\$2,118
Damage Failure	\$2,918	\$2,696	(\$222)	\$12,198	\$12,709	\$511
<i>Total Non-Discretionary Spending</i>	<i>\$9,508</i>	<i>\$11,036</i>	<i>\$1,528</i>	<i>\$39,435</i>	<i>\$42,065</i>	<i>\$2,630</i>
Asset Condition	\$5,174	\$4,341	(\$832)	\$20,330	\$22,018	\$1,688
Non-Infrastructure	\$152	\$1,344	\$1,192	\$1,310	\$1,302	(\$7)
System Capacity & Performance	\$5,394	\$4,076	(\$1,319)	\$20,373	\$17,956	(\$2,418)
	\$10,719	\$9,761	(\$959)	\$42,013	\$41,276	(\$736)
Large Projects Separately Tracked	\$7,283	\$3,338	(\$3,945)	\$20,153	\$17,303	(\$2,849)
<i>Total Discretionary Spending</i>	<i>\$18,002</i>	<i>\$13,099</i>	<i>(\$4,903)</i>	<i>\$62,165</i>	<i>\$58,579</i>	<i>(\$3,586)</i>
Total Capital Spending	\$27,510	\$24,135	(\$3,375)	\$101,600	\$100,644	(\$956)

Attachment B

US Electricity Distribution - Rhode Island Plant Additions by Spending Rationale For the Three Months Ending June 30, 2021 (\$000)

	Target	Actuals	Forecast	% of Target Placed In Service	% of Forecast Placed In Service
Customer Request/Public Requirement	\$25,830	\$7,312	\$25,830	28%	28%
Damage Failure	\$14,838	\$2,835	\$14,838	19%	19%
<i>Subtotal Non-Discretionary</i>	\$40,668	\$10,147	\$40,668	25%	25%
Asset Condition (w/Sep Tracked Large Projects)	\$39,097	\$5,465	\$39,097	14%	14%
Non- Infrastructure	\$1,102	\$255	\$1,102	23%	23%
System Capacity & Performance	\$17,620	\$3,811	\$17,620	22%	22%
<i>Subtotal Discretionary</i>	\$57,819	\$9,531	\$57,819	16%	16%
Total Plant Additions	\$98,487	\$19,678	\$98,487	20%	20%

Attachment C

US Electricity Distribution - Rhode Island Vegetation Management O&M Spending For the Three Months Ending June 30, 2021 (\$000)

	Budget	Actual	FY Forecast	% Spend
Cycle Pruning (Base)	\$6,600	\$341	\$6,600	5%
Hazard Tree	\$1,500	\$447	\$1,500	30%
Sub-T (on & off road)	\$500	\$164	\$500	33%
Police/Flagman Details	\$775	\$57	\$775	7%
Pockets of Poor Performance	\$200	\$13	\$200	7%
Core Crew (all other activities)	\$1,225	\$341	\$1,225	28%
Total VM O&M Spending	\$10,800	\$1,363	\$10,800	13%

Hazard Tree and Gypsy Moth Update

District	Circuit	Substation	Hazard Tree Removals
Coastal	49_56_16F1	Coventry	27
Coastal	49_56_85T1	Wood River	141
Capital	49_56_155F2	Chase Hill Substation	56
Coastal	49_56_155F4	Chase Hill Substation	54
Coastal	49_56_155F6	Chase Hill Substation	13
Totals			291

Attachment D

**US Electricity Distribution - Rhode Island
Inspection and Maintenance Program and Other O&M Spending
For the Three Months Ending June 30, 2021
(\$000)**

	Budget	Actual	FY Forecast	% Spend
Opex Related to Capex	\$421	\$31	\$421	7%
Inspections & Repair Related Costs	\$475	\$149	\$475	31%
System Planning & Protection Coordination Study	\$25	\$0	\$25	0%
VVO/CRV Program	\$262	\$13	\$262	5%
Total I&M Program and Other O&M Spending	\$1,183	\$193	\$1,183	

Attachment E

US Electricity Distribution - Rhode Island Project Variance Report For the Three Months Ending June 30, 2021 (\$000)

Project Description	FYTD 2022			FY 2022			Variance Cause
	FYTD Budget	FYTD Actual	Over / (Under)	FY Budget	FY Forecast	Over / (Under)	
Aquidneck Island Projects	\$2,042	\$1,141	(\$901)	\$6,434	\$4,483	(\$1,952)	Jepson Sub - CAPEX pulled into FY21. Newport Dline Conv - Actuals coming in less than estimates.
New Lafayette Substation	\$478	\$608	\$130	\$1,857	\$2,618	\$761	Carryover from FY 2021 of civil work costs to enable efficiencies by coordinating with a DG project taking place on the same site.
Dyer Street Indoor Sub	\$2,952	\$581	(\$2,370)	\$9,717	\$7,106	(\$2,611)	See Attachment G for additional details.
Providence Study - Phase 1A	\$1,989	\$1,330	(\$659)	\$4,966	\$5,284	\$318	See Attachment G for additional details.
Providence Study - Phase 1B	\$946	\$149	(\$797)	\$2,895	\$2,281	(\$614)	See Attachment G for additional details.
Franklin Sq Breaker Replacement	\$508	\$30	(\$478)	\$1,804	\$1,867	\$63	Installation of the 4 FY21 breakers and ordering the FY22 breakers will start in Q2. Expected to be on budget by year end.
Westerly Transformer #2 Failure	\$0	\$138	\$138	\$0	\$1,274	\$1,274	Failed transformer, mobile transformer is in service. A spare transformer has been delivered and is expected to be in place by the end of Q2. A new spare transformer will be purchased.
	\$8,915	\$3,978	(\$4,937)	\$27,674	\$24,913	(\$2,761)	

Attachment F

US Electricity Distribution - Rhode Island Damage/Failure Detail by Work Type For the Three Months Ending June 30, 2021 (\$000)

	Project Type					Grand Total
	D-Line Blanket	D-Line Property Damage	D-Line Storm	D-Sub Blanket	D-Sub & D- Line Specific	
AFUDC	\$13	\$0	\$7	\$2	\$2	\$25
Default Accounting	\$281	(\$88)	\$15	(\$28)	\$62	\$242
Engineering/Design/Supervision	\$312	\$7	\$47	\$5	\$5	\$376
Outdoor Lighting - Cable/Wire	\$0	\$0	(\$0)	\$0	\$0	\$0
Outdoor Lighting - Framing	\$4	\$1	\$1	\$0	\$0	\$5
Outdoor Lighting - Poles/Foundation	\$6	(\$0)	\$0	\$0	\$0	\$6
Overhead Bonding/Grounding	\$2	\$1	\$1	\$0	\$0	\$4
Overhead Services	\$79	(\$5)	\$19	\$0	\$0	\$94
Overhead Switches/Reclosers/Fuses	\$138	\$19	\$37	\$0	\$0	\$194
Overhead Transformers/Capacitors/Regulators/Meters	\$164	(\$19)	\$28	\$0	\$0	\$174
Overhead Wire & Conductor	\$138	(\$387)	(\$28)	\$0	\$0	(\$276)
Pole Framing	\$73	(\$27)	\$4	\$0	\$0	\$50
Poles/Anchors/Guying	\$642	(\$168)	\$389	\$0	\$0	\$863
Substation Equipment Installations	\$0	\$0	\$0	\$236	\$101	\$337
Substations Civil/Structural	\$0	\$0	\$0	\$0	\$3	\$3
Switching and Restoration	\$42	\$31	(\$0)	\$10	\$2	\$85
Traffic Control	\$79	(\$32)	\$32	\$0	\$0	\$79
Underground Cable	\$347	\$2	\$0	\$0	\$0	\$349
Underground Cable Splicing	\$1	(\$1)	\$0	\$0	\$0	\$1
Underground Civil Infrastructure	\$97	\$4	\$7	\$0	\$0	\$108
Underground Direct-Buried Cable	\$12	(\$3)	\$0	\$0	\$0	\$8
Underground Services	\$7	\$5	\$1	\$0	\$0	\$13
Underground Switches/Reclosers/Fuses	\$0	(\$1)	\$0	\$0	\$0	(\$0)
Underground Transformers/Capacitors/Regulators/Meters	\$71	(\$2)	\$0	\$0	\$0	\$69
Grand Total	\$2,510	(\$664)	\$561	\$225	\$174	\$2,806
Reclassification adjustment between D/F and A/R	(\$110)	\$0	\$0	\$0	\$0	(\$110)
Adjusted Total	\$2,400	(\$664)	\$561	\$225	\$174	\$2,696

Attachment G

US Electricity Distribution - Rhode Island Separately Tracked Large Projects For the Three Months Ending June 30, 2021

Southeast Substation

Predates existing Area Study Process
Current Status – Step 4.4 – Design and Execute

	<u>FY22</u> <u>Forecast</u>		<u>FY22 ISR</u> <u>Budget</u>	
	<u>Total</u> <u>Project</u>		<u>Total</u> <u>Project</u>	
	<u>FY22</u> <u>Forecast</u>	<u>Cost</u> <u>Forecast</u>	<u>FY22</u> <u>Budget</u>	<u>Cost</u> <u>Forecast</u>
Southeast Substation Project	\$2,151	\$22,313	\$2,082	\$21,886

For FY 2022, the Company forecasts capital spending of \$2.2 million against the \$2.1 million budget included in the FY 2022 ISR Plan. The substation portion of this project is substantially complete and went into service in March 2021. The remaining substation work planned for FY 2022 is site civil work. The distribution line portion of this project is expected to be completed in FY 2022. The Pawtucket #1 Substation work has been pushed out to FY 2023 because of required changes to transmission outages from Fall 2021 to Spring 2022.

In total, the Company currently expects capital spending to be \$22.3 million for this project as compared with the estimate when sanctioned of \$21.1 million. Additional spending was necessary due to field conditions, requiring environmental management of an additional volume of soil, and additional resources, such as crane and other equipment rentals, to manage construction site congestion.

Dyer Street Substation

Predates existing Area Study Process
Current Status – Step 4.4 – Design and Execute

	FY22		FY22 ISR	
	<u>Total</u>		<u>Total</u>	
	<u>Project</u>		<u>Project</u>	
	<u>FY22</u>	<u>Cost</u>	<u>FY22</u>	<u>Cost</u>
	<u>Forecast</u>	<u>Forecast</u>	<u>Budget</u>	<u>Forecast</u>
Dyer Street Substation Project	\$7,105	\$15,983	\$9,717	\$14,628

For FY 2022, the Company forecasts capital spending of \$7.1 million against the \$9.7 million budget included in the FY 2022 ISR Plan. Necessary environmental permits have been obtained for the build at the South Street location for the Dyer Street project. Delays around the procurement of the metal clad switchgear exist, however, construction for the project is being phased to minimize impact of this delay but some work has shifted into FY 2023 thereby causing the reduction to the FY 2022 forecast.

In total, the Company currently expects capital spending to be \$16.0 million for this project as compared to the \$14.6 million budget presented in the FY 2022 ISR Plan and the estimate of \$16.7 million when sanctioned. The re-scoped Dyer Street Substation project at the South Street Substation location consists of building an external substation in the vicinity of the South Street Substation. The work will involve the installation of 2 new 11 kV to 4.16 kV transformers and the corresponding risers and switches, the installation of a Metal Clad Switch Gear, and the needed distribution feeder getaways. Benefits of building within the South Street substation vicinity are that the Company does not have to install numerous components including the ground grid, the substation fence, lighting, and trenching. The project is expected to go into service in May 2022.

Providence Study – Admiral Street Substation - Phase 1A
Providence Area Study Implementation Plan 2016 – 2030 (May 2017)
Current Status – Step 4.4B – Construction

	FY22		FY22 ISR	
	<u>Total</u>		<u>Total</u>	
	<u>Project</u>		<u>Project</u>	
	<u>FY22</u>	<u>Cost</u>	<u>FY22</u>	<u>Cost</u>
	<u>Forecast</u>	<u>Forecast</u>	<u>Budget</u>	<u>Forecast</u>
Providence Study Projects - Phase 1A	\$5,284	\$9,242	\$4,966	\$10,492

For FY 2022, the Company forecasts capital spending of \$5.3 million against the \$5.0 million budget included in the FY 2022 ISR Plan due to small shifts in the timing of work.

In total, the Company currently expects capital spending of \$9.2 million for this project as compared to the \$10.4 million budget presented in the FY 2022 ISR Plan and the estimate of \$10.0 million when sanctioned.

Providence Study – Admiral Street Substation - Phase 1B
Providence Area Study Implementation Plan 2016 – 2030 (May 2017)
Current Status – Step 4.4 – Final Engineering

	FY22		FY22 ISR	
	<u>Total</u>		<u>Total</u>	
	<u>Project</u>		<u>Project</u>	
	<u>FY22</u>	<u>Cost</u>	<u>FY22</u>	<u>Cost</u>
	<u>Forecast</u>	<u>Forecast</u>	<u>Budget</u>	<u>Forecast</u>
Providence Study Projects - Phase 1B	\$2,281	\$45,620	\$2,895	\$24,443

For FY 2022, the Company forecasts capital spending of \$2.3 million against the \$2.9 million budget included in the FY 2022 ISR Plan. Engineering and design, including ground penetrating radar and test pit work along the new duct bank route, will be conducted this year. No construction is scheduled in FY 2022.

In total, the Company currently expects capital spending of \$45.6 million for this project as compared to the \$24.4 million budget presented in the FY 2022 ISR Plan. Estimates have changed as the projects have progressed through the project development phase. The earlier estimate of this project was based on higher level engineering information. Primary drivers with associated increased costs are as follows:

- Duct bank costs due to increased costs in recent projects – \$4.2m
- Police detail, soil disposal - \$2.2m
- Paving restoration due to curb to curb paving requirements - \$2.1m
- Craft labor and team costs - \$0.7m
- Transportation costs - \$0.6m
- Contingency, Risk, AFUDC, and associated A&G costs. - \$8.3m

Providence Study – Admiral Street Substation - Phases 2-4

Providence Area Study Implementation Plan 2016 – 2030 (May 2017)
Current Status – Step 4.3 - Develop & Sanction

	FY22		FY22 ISR	
	<u>Total</u> <u>Project</u>		<u>Total</u> <u>Project</u>	
	<u>FY22</u>	<u>Cost</u>	<u>FY22</u>	<u>Cost</u>
	<u>Forecast</u>	<u>Forecast</u>	<u>Budget</u>	<u>Forecast</u>
Providence Study Projects - Phases 2 and 4	\$482	\$33,789	\$495	\$33,945

For FY 2022, the Company forecasts that capital spending on Phases 2-4 will be essentially on budget. No construction is scheduled in FY 2022.

Attachment H

US Electricity Distribution - Rhode Island Meter Purchases For the Three Months Ending June 30, 2021

Quantity of Meters Purchased		
Type	Description	Quantity
SWITCHES	"B" & "K" SWITCHES	7
METER	CENTRON - 12S ERT CL200	960
METER	CENTRON - C1SR, CL320 240V	240
INSTRUMENT TRANSFORMER	CUR OUTDOOR 300/5 15KV	4
INSTRUMENT TRANSFORMER	CUR OUTDOOR 60/1 7.2KV	18
INSTRUMENT TRANSFORMER	600:5 BASE BUSHINGS	120
INSTRUMENT TRANSFORMER	400:5 CAP	120
INSTRUMENT TRANSFORMER	1500:5 CAP	60
	TOTAL	1,529