

February 14, 2022

**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 – Third Quarter Ending December 31, 2021**

Dear Ms. Massaro:

On behalf of National Grid,<sup>1</sup> 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 third quarter ending December 31, 2021.<sup>2</sup> 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

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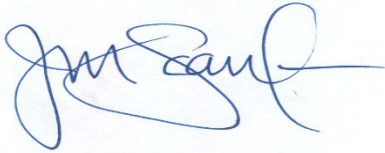
<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

<sup>2</sup> Per a communication from Commission counsel on October 4, 2021, the Company is submitting an electronic version of this filing followed by six (6) 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

February 14, 2022  
Date

**Docket No. 5098 - National Grid's Electric ISR Plan FY 2022  
Service List as of 4/1/2021**

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<b>File an original &amp; five (5) 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  
FY 2022 Quarterly Update  
For the Nine Months Ending December 31, 2021**

**EXECUTIVE SUMMARY**

As shown in Attachment A during the first nine months of the fiscal year ending March 31, 2022, the Company<sup>1</sup> spent \$75.6 million for capital projects against a budget of \$78.1 million. Non-Discretionary spending was \$43.0 million, \$13.6 million over the budget of \$29.5 million. Discretionary spending, including the separately tracked large projects, was \$32.6 million, \$16.1 million under the budget of \$48.6 million. Spending in each of these categories is addressed in more detail below. The Company forecasts capital spending of \$106.4 million in FY 2022, \$4.8 million over the budget of \$101.6 million.

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<sup>1</sup> 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 nine months ending December 31, 2021, capital spending in the Customer Request/Public Requirement category was \$28.3 million which was over budget by \$8.0 million. The major drivers are:

- Work related to Third-Party Attachments was \$0.5 million over the FYTD budget. For a portion of FY 2022's spending, customer advances were collected and recorded in FY 2021, therefore, not offset against the spending taking place in FY 2022. It is anticipated that this category will remain over budget through the year because of the customer advances collected in FY 2021.
- Activity in the Distributed Generation (DG) category was \$7.6 million over budget for the nine months ending December 31, 2021. Spending is net activity generally related to amounts that have not been offset with Contributions in Aid of Construction (CIAC) due to timing of implementing the new process or receipt of payments from a payment plan or from the reconciliation process.
- Public requirements spending is \$0.9 million under budget as of December 31, 2021 generally driven by RI Department of Transportation (RIDOT) projects, which are less the estimate in the FY 2022 Plan. The Company forecasts spending will be close to budget at the end of the year.
- Current year billings associated with a joint-owned pole agreement is under budget by \$0.9 million as of December 31, 2021. The Company forecasts that billing will be closer to budget by year end. The billings associated with the joint-owned pole agreement are included in the New Business - Residential budget classification.
- Spending for meters is under budget due to vendor manufacturing and delivery delays. The receipt of meters continues to increase since September and the Company anticipates that will continue through the remaining months of FY 2022. The Company forecasts that meter spending will be \$0.4 million under budget at year end.

At this time, the Company forecasts FY 2022 spending in the Customer Request/ Public Requirements category will be \$7.2 million over the budget of \$27.2 million.

**b. Damage/Failure**

During the nine months ending December 31, 2021, capital spending in the Damage/Failure category was \$14.7 million, which was \$5.5 million over budget. The primary drivers are:

- Year to date actual storm costs of \$6.3 million exceeded the budgeted storm costs by \$5.0 million. August's Tropical Storm Henri and the October 26, 2021 Nor'easter event are the primary drivers.
- 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 failed and was removed from service. In July, a spare transformer was installed. Through the first nine months of FY 2022, capital spending totaled \$0.4 million and is forecasted to be \$0.9 million by the end of the year.

The Company forecasts that spending in the Damage/Failure category will be \$6.1 million over the FY 2022 budget of \$12.2 million.

**2. Discretionary Spending**

**a. Asset Condition (without Separately Tracked Large Projects)**

During the nine months ending December 31, 2021, capital spending in the Asset Condition category (excluding separately tracked large projects) was \$12.9 million, which was \$2.5 million under the budget of \$15.3 million. The major drivers of this variance are as follows:

- Capital spending on URD projects was under budget by \$1.6 million. Spending on the program is currently forecasted to be close to budget at the end of the year.
- As of December 31, 2021, I&M spending is \$1.4 million under budget and the forecast has been reduced to \$0.9 million as the focus of the streamlined program is to address priority and backlog work.
- Capital spending on the Franklin Square 11kV Substation project continued from FY 2021 and spending totaled \$1.4 million during the first nine 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 identified after the budget was set. The Company forecasts capital spending of \$1.8 million for the fiscal year. The project is complete and was placed into service.

- Capital spending on the Franklin Square Breaker Replacement project was \$0.6 million under budget as of December 31, 2021. The project is expected to be slightly under budget at year end.

At this time, the Company forecasts that capital spending in this category will be \$1.0 million under budget at the end of the year.

***b. Non-Infrastructure***

During the nine months ending December 31, 2021, capital spending in the Non-Infrastructure category was \$1.0 million under budget. The primary driver of the underspend relates to the resequencing of work required by a third party for the Copper to Fiber Conversion project. At this time, the Company forecasts that spending in this category will be under budget at the end of the year.

***c. System Capacity and Performance***

During the nine months ending December 31, 2021, capital spending for the System Capacity and Performance category was \$10.5 million, which was \$4.3 million under the budget of \$14.8 million. The major drivers of this variance are as follows:

- Capital spending on the Aquidneck Island projects was \$2.3 million under the budget of \$5.1 million. FY 2022 capital spending is forecasted to be \$2.7 million under budget. Drivers include FY 2022 work shifted into FY 2021 and actuals coming in less than estimates.
- Capital spending on the New Lafayette Substation project was \$0.5 million over the budget of \$1.1 million. The Company forecasts that spending on this project will be \$0.2 million over budget at year end.
- Capital spending on VVO projects was \$1.3 million under the budget of \$2.5 million. It is anticipated that spending will be \$0.4 million under budget at year end.

- Capital spending on 3V0 projects was \$0.3 million. The forecast for the 3V0 program has been reduced to remove projects from the FY 2022 Plan impacted by future retirements.
- Capital spending on EMS projects was \$0.1 million under budget at December 31, 2021. FY 2022 forecasted capital spending has been reduced to \$0.9 million to align with the results of area studies.
- Capital spending on projects related to COVID load shifts was \$0.2 million under the YTD budget of \$1.5 million. It is anticipated that capital spending in this category will continue to be under budget at year end.

At this time, the Company forecasts that spending in this category will be \$4.4 million under budget at the end of the year.

***d. Separately Tracked Large Projects***

During the nine months ending December 31, 2021, capital spending on the Southeast Substation, Dyer Street Substation and Providence Area projects in the Asset Condition category was \$9.0 million, \$8.3 million under the budget of \$17.3 million. Each project is discussed below and in Attachment G.

- Capital spending on the Southeast Substation projects was \$1.0 million over budget and is forecasted to be \$1.2 million over budget at year end. The substation portion of this project is substantially complete and went into service in March 2021. The majority of the distribution line portion of this project is expected to be completed in FY 2022.
- Capital spending on Dyer Street substation was \$6.1 million under the budget of \$8.3 million. The Company is forecasting that capital spending on this project will be \$2.8 million under budget for the fiscal year due to delays in material deliveries. Some work has shifted into FY 2023, which has been reflected in the proposed FY 2023 ISR Plan.
- Capital spending on the Providence Area Study projects (Admiral Street projects) was \$3.2 million under the budget of \$7.1 million. The Company is forecasting that capital spending on these projects will be \$1.2 million under budget at year end.



***e. Large Project Variances***

The Company provides explanations for large projects<sup>2</sup> with variances that exceed +/- 10% of the annual fiscal year budget in quarterly reports. These projects represented \$29.8 million of the FY 2022 budget of \$101.6 million. This project information is provided in Attachment E.

***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 nine months ending December 31, 2021, \$58.8 million of plant additions were placed in service which is 60% of the FY 2022 target and 68% of the FY 2022 forecast of \$86.0 million. Details by spending rationale are included in Attachment B.

**4. Vegetation Management (VM)**

During the nine months ending December 31, 2021, the Company completed 644 miles or 45% of its annual distribution mileage cycle pruning goal of 1,432 miles. VM O&M spending was \$4.8 million. The Company is forecasting to spend \$10.8 million during FY 2022.

Attachment C provides the spending for the first nine months of FY 2022 and the Enhanced Hazard Tree Mitigation (EHTM) removal counts by circuit. The Company has completed removals of trees which were impacted by the Gypsy Moth infestation. No additional Gypsy Moth trees have been removed this fiscal year.

**5. Inspection and Maintenance (I&M)**

During the nine months ending December 31, 2021, the Company completed 78% of its annual structure inspection goal of 52,832 with an associated Opex spend of \$0.3 million.

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

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. During FY 2022, one Level I deficiency was found in November and repaired within five days. The Company has completed repairs for 34 percent of the total deficiencies found. This information is summarized in the tables below.

<b>Summary of Deficiencies and Repair Activities</b>				
<b>RI Distribution</b>				
<b>Year Inspection Performed</b>	<b>Priority Level/Repair Expected</b>	<b>Deficiencies Found (Total)</b>	<b>Repaired as of 12/31/21</b>	<b>Not Repaired as of 12/31/21</b>
<b>FY 2011</b>	I	18	18	0
	II	13,146	13,128	18
	III	28	28	0
<b>FY 2012</b>	I	17	17	0
	II	15,847	15,544	303
	III	626	624	2
<b>FY 2013</b>	I	15	15	0
	II	25,883	16,496	9,387
	III	8,780	4,637	4,143
<b>FY 2014</b>	I	11	11	0
	II	22,096	4,375	17,721
	III	8,414	3,027	5,387
<b>FY 2015</b>	I	5	5	0
	II	20,805	2	20,803
	III	4,351	0	4,351
<b>FY 2016</b>	I	2	2	0
	II	11,018	1,236	9,782
	III	6,441	198	6,243
<b>FY 2017</b>	I	2	2	0
	II	8,567	4	8,563
	III	7,272	1	7,271
<b>FY 2018</b>	I	11	11	0
	II	8,639	11	8,628
	III	7,196	14	7,182
<b>FY 2019</b>	I	28	28	0
	II	3,699	0	3,699
	III	2,464	0	2,464
<b>FY 2020</b>	I	19	19	0
	II	186	28	158
	III	26	0	26
<b>FY 2021</b>	I	0	0	0
	II	53	0	53
	III	37	0	37
<b>FY 2022</b>	I	1	1	0
	II	71	1	70
	III	49	3	46
<b>Total Since Program Inception</b>	<b>I, II, III</b>	<b>175,823</b>	<b>59,486</b>	<b>116,337</b>

<b>Manual Elevated Voltage Testing</b>				
<b>Manual Elevated Voltage Testing</b>	<b>Total System Units Requiring Testing</b>	<b>FY 2022 Units Completed thru 12/31/21</b>	<b>Units with Voltage Found (&gt;1.0v)</b>	<b>Percent of Units Tested with Voltage (&gt;1.0v)</b>
Distribution Facilities	264,920	41,867	0	0%
Underground Facilities	12,438	2,600	0	0%
Street Lights	4,929	1,900	1	0%

During FY 2022, the Company's manual elevated voltage testing identified one instance of elevated voltage which was communicated and addressed by the respective town.

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 Nine Months Ending December 31, 2021 (\$000)

	FYTD December 31, 2021			FY 2022		
	Budget	Actuals	Over Spend / (Under Spend)	Budget	Forecast	Over Spend / (Under Spend)
<b>Customer Request/Public Requirement</b>	\$20,238	\$28,281	\$8,044	\$27,237	\$34,427	\$7,190
<b>Damage Failure</b>	\$9,234	\$14,741	\$5,506	\$12,198	\$18,308	\$6,110
<i>Total Non-Discretionary Spending</i>	\$29,472	\$43,022	\$13,550	\$39,435	\$52,735	\$13,300
<b>Asset Condition</b>	\$15,338	\$12,884	(\$2,453)	\$20,330	\$19,411	(\$919)
<b>Non-Infrastructure</b>	\$1,182	\$181	(\$1,001)	\$1,310	\$861	(\$448)
<b>System Capacity &amp; Performance</b>	\$14,804	\$10,469	(\$4,335)	\$20,373	\$15,990	(\$4,384)
	\$31,324	\$23,535	(\$7,789)	\$42,013	\$36,262	(\$5,751)
<b>Large Projects Separately Tracked</b>	\$17,326	\$9,048	(\$8,277)	\$20,153	\$17,363	(\$2,790)
<i>Total Discretionary Spending</i>	\$48,650	\$32,583	(\$16,067)	\$62,165	\$53,625	(\$8,541)
<b>Total Capital Spending</b>	<b>\$78,122</b>	<b>\$75,606</b>	<b>(\$2,516)</b>	<b>\$101,600</b>	<b>\$106,360</b>	<b>\$4,760</b>

## Attachment B

### US Electricity Distribution - Rhode Island Plant Additions by Spending Rationale For the Nine Months Ending December 31, 2021 (\$000)

	Target	Actuals	Forecast	% of Target Placed In Service	% of Forecast Placed In Service
<b>Customer Request/Public Requirement</b>	\$25,830	\$19,651	\$24,899	76%	79%
<b>Damage Failure</b>	14,838	13,108	18,508	88%	71%
<i>Subtotal Non-Discretionary</i>	40,668	32,758	43,407	81%	75%
<b>Asset Condition (w/Sep Tracked Large Projects)</b>	39,097	17,920	29,882	46%	60%
<b>Non- Infrastructure</b>	1,102	519	709	47%	73%
<b>System Capacity &amp; Performance</b>	17,620	7,558	12,036	43%	63%
<i>Subtotal Discretionary</i>	57,819	25,997	42,628	45%	61%
<b>Total Plant Additions</b>	<b>\$98,487</b>	<b>\$58,755</b>	<b>\$86,034</b>	60%	68%

### Attachment C

#### US Electricity Distribution - Rhode Island Vegetation Management O&M Spending For the Nine Months Ending December 31, 2021 (\$000)

	Budget	Actual	FY Forecast	% Spend
Cycle Pruning (Base)	\$6,600	\$1,640	\$6,600	25%
Hazard Tree	1,500	1,247	1,500	83%
Sub-T (on & off road)	500	404	500	81%
Police/Flagman Details	775	431	775	56%
Pockets of Poor Performance	200	134	200	67%
Core Crew (all other activities)	1,225	983	1,225	80%
<b>Total VM O&amp;M Spending</b>	<b>\$10,800</b>	<b>\$4,839</b>	<b>\$10,800</b>	<b>45%</b>

#### Enhanced Hazard Tree Mitigation Update

District	Circuit	Substation	Hazard Tree Removals
Coastal	49_56_16F1	Coventry	27
Coastal	49_56_85T1	Wood River	145
Capital	49_56_155F2	Chase Hill Substation	56
Coastal	49_56_155F4	Chase Hill Substation	54
Coastal	49_56_155F6	Chase Hill Substation	18
Capital	49_53_34F2	Chopmist	74
Capital	49_53_34F3	Chopmist	86
<b>Totals</b>			<b>460</b>

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**Attachment D**

**US Electricity Distribution - Rhode Island  
Inspection and Maintenance Program and Other O&M Spending  
For the Nine Months Ending December 31, 2021  
(\$000)**

	<b>Budget</b>	<b>Actual</b>	<b>FY Forecast</b>	<b>% Spend</b>
Opex Related to Capex	\$421	\$65	\$139	15%
Inspections & Repair Related Costs	\$475	\$338	\$475	71%
System Planning & Protection Coordination Study	\$25	\$0	\$25	0%
VVO/CRV Program	\$262	\$75	\$219	29%
<b>Total I&amp;M Program and Other O&amp;M Spending</b>	<b>\$1,183</b>	<b>\$478</b>	<b>\$857</b>	



**Attachment E**

**US Electricity Distribution - Rhode Island  
Project Variance Report  
For the Nine Months Ending December 31, 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	\$5,091	\$2,736	(\$2,355)	\$6,434	\$3,723	(\$2,711)	Jepson Sub - CAPEX pulled into FY21. Newport D Line Conv - Actuals coming in less than estimates.
New Lafayette Substation	\$1,142	\$1,646	\$504	\$1,857	\$2,050	\$193	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	\$8,325	\$2,179	(\$6,146)	\$9,717	\$6,938	(\$2,779)	See Attachment G for additional details.
Providence Study - Phase 1A	\$4,423	\$2,970	(\$1,452)	\$4,966	\$4,663	(\$303)	See Attachment G for additional details.
Providence Study - Phase 1B	\$2,283	\$828	(\$1,455)	\$2,895	\$2,233	(\$662)	See Attachment G for additional details.
Franklin Sq Breaker Replacement	\$1,412	\$767	(\$645)	\$1,804	\$1,655	(\$149)	On track and all breakers are expected to be installed by the end of the fiscal year.
Westerly Transformer #2 Failure	\$0	\$431	\$431	\$0	\$903	\$903	Failed transformer, a spare transformer was installed and placed in service.
Franklin Square Replacement of 11kV Equipment	\$47	\$1,399	\$1,352	\$49	\$1,564	\$1,515	Requirements identified after FY 22 budget was set therefore minimal budget was included in the FY 2022 Plan. Project completed and placed in service in Q3.
Southeast Substation	\$1,920	\$2,947	\$1,027	\$2,082	\$3,273	\$1,191	See Attachment G for additional details.
	<b>\$24,643</b>	<b>\$15,904</b>	<b>(\$8,739)</b>	<b>\$29,805</b>	<b>\$27,002</b>	<b>(\$2,802)</b>	

## Attachment F

### US Electricity Distribution - Rhode Island Damage/Failure Detail by Work Type For the Nine Months Ending December 31, 2021 (\$000)

Operations Description	D-Line Blanket	Property Damage	D-Sub Blanket	Storms	Specifics	Grand Total
Engineering/Design/Supervision	\$814	\$19	\$16	\$550	\$43	\$1,442
OH Elec Distribution	3,028	(610)		5,028		7,446
OH Transformers/Capacitors/Regulators/Meters	544	(21)		320		843
Other	514	(68)	(93)	174	357	884
Outdoor Lighting	56	(0)		1		56
Substation			567		603	1,170
Switching and Restoration	138	113	24	31	2	308
Traffic Control	270	(6)		111		375
UG Elec Distribution	2,367	4		70		2,440
UG Transformers/Capacitors/Regulators/Meters	241	(2)		11		251
<b>Total before reclassification</b>	<b>7,972</b>	<b>(570)</b>	<b>514</b>	<b>6,296</b>	<b>1,004</b>	<b>15,216</b>
Reclassification adjustment between D/F and A/R	(475)					(475)
<b>Total after reclassification</b>	<b>\$7,497</b>	<b>(\$570)</b>	<b>\$514</b>	<b>\$6,296</b>	<b>\$1,004</b>	<b>\$14,741</b>

**Attachment G**

**US Electricity Distribution - Rhode Island  
Separately Tracked Large Projects  
For the Nine Months Ending December 31, 2021**

**Southeast Substation**

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

	<b>FY22 Forecast</b>		<b>FY22 ISR Budget</b>
	<u>Total Project FY22 Forecast</u>	<u>Cost Forecast</u>	<u>Total Project FY22 Budget</u>
			<u>Cost Forecast</u>
<b>Southeast Substation Project</b>	<b>\$3,273</b>	<b>\$23,390</b>	<b>\$2,082</b>
			<b>\$21,886</b>

For FY 2022, the Company forecasts capital spending of \$3.3 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. Capital spending on the substation has been site civil work. The distribution line portion of this project is expected to be significantly complete in FY 2022. The FY 2022 forecast is \$1.2 million over budget due to the Dunnell Park and Pawtucket reconfiguration and the retirement of the 71 transformer and switchgear at Pawtucket. Additional feeder reconfiguration and three reclosers are required to maintain adequate, reliable service to the Pawtucket network. Pawtucket #1 construction has begun, and completion is scheduled for Q3 of FY 2023.

In total, the Company currently expects capital spending to be \$23.4 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, construction site congestion requiring additional resources, minor site civil work, and reconfiguration and equipment to avoid reliability issues noted above.

**Dyer Street Substation**

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

	<b>FY22 Forecast</b>		<b>FY22 ISR Budget</b>	
	<b><u>Total</u> <u>Project</u></b>		<b><u>Total</u> <u>Project</u></b>	
	<b><u>FY22</u></b>	<b><u>Cost</u></b>	<b><u>FY22</u></b>	<b><u>Cost</u></b>
<b>Dyer Street Substation Project</b>	<b><u>Forecast</u></b>	<b><u>Forecast</u></b>	<b><u>Budget</u></b>	<b><u>Forecast</u></b>
	<b>\$6,938</b>	<b>\$15,582</b>	<b>\$9,717</b>	<b>\$14,628</b>

The Company forecasts capital spending of \$6.9 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. Delayed delivery of the metal clad switchgear, delays in permits, and weather have resulted in shifting forecasted capital spend from the fourth quarter of FY 2022 to the first quarter of FY 2023. Construction is being phased to minimize impacts and switchgear delivery is currently anticipated during the first quarter of FY 2023.

In total, the Company currently expects capital spending to be \$15.6 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 switchgear, 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 the second quarter of FY 2023.

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

	<b>FY22 Forecast</b>		<b>FY22 ISR Budget</b>	
	<u>Total Project</u>		<u>Total Project</u>	
	<u>FY22 Forecast</u>	<u>Cost Forecast</u>	<u>FY22 Budget</u>	<u>Cost Forecast</u>
<b>Providence Study Projects - Phase 1A</b>	<b>\$4,663</b>	<b>\$8,715</b>	<b>\$4,966</b>	<b>\$10,492</b>

For FY 2022, capital spending is forecasted at \$4.7 million which is \$0.2 million under budget for the year. The decrease in forecasted spending is the result of reduction of risk and delay in start of work which will push labor and contractor charges into FY 2023. In total, the Company currently expects capital spending of \$8.7 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. The work is currently on schedule to be completed in the first quarter FY 2023.

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

	<b>FY22 Forecast</b>		<b>FY22 ISR Budget</b>	
	<u>Total Project</u>		<u>Total Project</u>	
	<u>FY22 Forecast</u>	<u>Cost Forecast</u>	<u>FY22 Budget</u>	<u>Cost Forecast</u>
<b>Providence Study Projects - Phase 1B</b>	<b>\$2,233</b>	<b>\$46,171</b>	<b>\$2,895</b>	<b>\$24,443</b>

For FY 2022, the Company forecasts capital spending of \$2.2 million against the \$2.9 million budget included in the FY 2022 ISR Plan. Engineering and design including ground penetrating radar along with new duct bank route, permitting, and distribution line material procurement are being conducted this year. No construction is scheduled in FY 2022.

In total, the Company currently expects capital spending of \$46.2 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. Changes between the original estimate and the current estimate were highlighted in the FY 2022 ISR First Quarter report. During the second quarter additional spending of was added to the forecast related to a required upgrade of the existing small main line conductor to standard mainline conductor on the Olneyville distribution line.

**Providence Study – Admiral Street Substation - Phases 2-4**

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

	<b>FY22 Forecast</b>		<b>FY22 ISR Budget</b>	
	<b><u>Total</u> <u>Project</u></b>		<b><u>Total</u> <u>Project</u></b>	
	<b><u>FY22</u> <u>Forecast</u></b>	<b><u>Cost</u> <u>Forecast</u></b>	<b><u>FY22</u> <u>Budget</u></b>	<b><u>Cost</u> <u>Forecast</u></b>
<b>Providence Study Projects - Phases 2 and 4</b>	<b>\$255</b>	<b>\$45,264</b>	<b>\$495</b>	<b>\$33,945</b>

For FY 2022, the Company forecasts capital spending on Phases 2-4 of \$0.3 million. No construction is scheduled in FY 2022.

In total, the Company currently expects capital spending of \$45.3 million for this project as compared to the \$33.9 million budget presented in the FY 2022 ISR Plan. Estimates for the Knightsville substation and distribution line projects have been revised as the projects progress through the project development phase. The earlier estimates were based on higher level engineering information. Primary drivers with associated increased costs are as follows:

- Duct bank and earthwork increases - \$0.5 million
- Resourcing, labor, and team costs - \$3.3 million
- Contingency, risk, AFUDC, and A&G costs - \$7.1 million

## Attachment H

### US Electricity Distribution - Rhode Island Meter Purchases For the Nine Months Ending December 31, 2021

Quantity of Meters Purchased		
Type	Description	Quantity
METER	KV2C - 9S	192
METER	KV2C - 16S CL320	60
METER	KV2C - 16S CL200	16
METER	KV2C - 2S CL320	8
METER	KV2C - 2S CL200	20
SWITCHES	"B" SWITCHES	4
SWITCHES	"K" SWITCHES	3
METER	CENTRON - 2S ERT CL200	7,800
METER	CENTRON - 12S ERT CL200	3,360
METER	CENTRON - C1SR, CL320 240V	240
METER	CENTRON 3-ERT 16S CL320	120
METER	CENTRON 3-ERT 16S CL200	360
METER	2S AMR 240V CL200	1,200
INSTRUMENT TRANSFORMER	CUR OUTDOOR 120/1 14.4KV	18
INSTRUMENT TRANSFORMER	CUR OUTDOOR 175/1 34.5KV	6
INSTRUMENT TRANSFORMER	CUR OUTDOOR 75/5 15KV	3
INSTRUMENT TRANSFORMER	CUR OUTDOOR 200/5 15KV	9
INSTRUMENT TRANSFORMER	CUR OUTDOOR 300/5 15KV	12
INSTRUMENT TRANSFORMER	CUR OUTDOOR 800/5 600V	36
INSTRUMENT TRANSFORMER	CUR OUTDOOR 60/1 7.2KV	18
INSTRUMENT TRANSFORMER	400:5 BASE BUSHINGS	120
INSTRUMENT TRANSFORMER	600:5 BASE BUSHINGS	360
INSTRUMENT TRANSFORMER	200:5 CAP	120
INSTRUMENT TRANSFORMER	400:5 CAP	288
INSTRUMENT TRANSFORMER	1500:5 CAP	60
	<b>TOTAL</b>	<b>14,433</b>