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May 15, 2023

VIA ELECTRONIC MAIL

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

RE: Docket No. 5209 - FY2023 Electric Infrastructure, Safety, and Reliability Plan Quarterly Update – Fourth Quarter Ending March 31, 2023

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the “Company”), enclosed, please find the Company’s fiscal year (“FY”) 2023 Electric Infrastructure, Safety, and Reliability (“ISR”) Plan quarterly update for the fourth quarter ending March 31, 2023. 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 filing. If you have any questions, please contact me at 401-784-4263.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrew S. Marcaccio".

Andrew S. Marcaccio

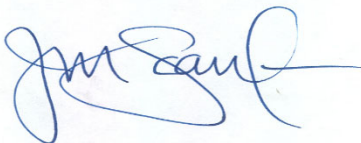
Enclosures

cc: Docket No. 5209 Service List

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

May 15, 2023

Date

**Docket No. 5209 – The Narragansett Electric Company d/b/a Rhode Island Energy
Electric ISR Plan FY 2023
Service List as of 10/13/2022**

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**Electric Infrastructure, Safety, and Reliability Plan
Plan Year 2023 Fourth Quarter Update
For the Year Ending March 31, 2023**

EXECUTIVE SUMMARY

As shown in Attachment A, The Narragansett Electric Company d/b/a Rhode Island Energy (the “Company”) spent \$108.5 million for capital projects against a budget of \$104.8 million during the Plan Year 2023 (i.e., April 1, 2022 through March 31, 2023) for its electric infrastructure, safety, and reliability (“ISR”) plan. Non-Discretionary spending was \$49.3 million, \$7.8 million over budget. Discretionary spending, including the separately tracked large projects, was \$59.2 million, \$4.1 million under budget. Spending in each of these categories is addressed in more detail below.

I. Plan Year 2023 Capital Spending by Key Driver Category

1. Non-Discretionary Spending

a. Customer Request/Public Requirement

During the year ending March 31, 2023, capital spending in the Customer Request/Public Requirement category was \$31.8 million, which was \$4.6 million over the budget of \$27.2 million. The major drivers were:

- As forecasted, net spending on Third-Party Attachment projects exceeded the budget by \$0.4 million. For several projects, customer advances were collected at the end of the previous year and the work was completed this year.
- Net spending activity in the Distributed Generation (“DG”) category was \$3.7 million for the year ending March 31, 2023. The Company will report on its review of DG Projects to the Commission in the Annual Reconciliation that will be filed by August 1, 2023.
- Capital spending on New Business work was \$2.1 million over budget at year end primarily due to spending on emerging customer work that exceeded the reserves established in the budget.
- Public Requirements capital spending was \$0.6 million, \$0.7 million under budget. The Blanket project’s capital spending was essentially on budget. Net spending for specific projects and billing under the joint-owned pole agreement were less than the budgeted reserves.
- Meter purchases came in essentially on budget. Detail meter and instruments are shown in Attachment H to this report. The Landline Meter Replacement project was deferred and the Company will start the program in the 2024 ISR Year.
- In the previous year, Strategic Distributed Energy Resources (“DER”) projects were under budget because construction on some Hopkins Hill feeder monitors was deferred. Construction of these feeders has been completed and the assets have been placed into service. Actual capital spending was \$122,000.
- Capital spending for transformers was \$5.7 million, \$0.9 million over budget. Supply chain challenges continue to impact price and quantity of purchases. These include extended lead times, demand exceeding capacity, raw material

shortages, and logistical constraints. During 2023, the Company sought alternate sources of supply, continued to place proactive orders to mitigate future supply gaps, and increased inventory levels to support work plans and respond to emergencies.

b. Damage/Failure

During the 2023 ISR Plan Year, capital spending in the Damage/Failure category was \$17.5 million, which was \$3.2 million over budget.

- Spending in the Overhead Line and Substation Damage/Failure Blanket Projects was \$13.2 million, \$2.6 million over budget. The Company continues to review the work under these blanket projects each month to make sure only work related to failed assets is categorized in the Non-Discretionary portfolio.
- Actual capital spending related to storms and weather-related events was \$3.1 million, \$1.2 million over budget. Larger storms took place in December 2022 and February 2023. Capital spending for these storms totaled \$0.8 million.
- In August 2022, the metal clad switchgear at the Nasonville Substation was damaged beyond repair due to a bus fault. The failed switchgear will be replaced with an open-air straight bus that will include a main breaker, capacitor breaker, and four feeder breakers. Removal of the failed equipment has been completed, design and engineering, and procurement of materials is on-going. Once materials and environmental permits are received, it is estimated that the work will take six to nine months to complete. Capital spending on this project has been \$0.7 million to date.
- During ISR Plan Year 2022, the Westerly #2 Transformer failed and a spare transformer was installed. Capital spending of \$0.4 million took place during 2023, \$0.3 million under budget. Delivery of the spare transformer is scheduled for June 2024.

2. Discretionary Spending

a. Asset Condition (Without Separately Tracked Large Projects)

During the 2023 ISR Plan Year, capital spending in the Asset Condition category (excluding separately tracked large projects) was \$23.4 million, which was \$1.6 million under budget. The major drivers of this variance were as follows:

- Net capital spending on inspection and maintenance work (“I&M”) was \$0.9 million for the year, under budget because of the focus on addressing priority work and the write off of old work. The write off was recorded in May 2022 and totaled \$1.2 million.
- Capital spending for the Franklin Square Breaker project totaled \$2.1 million, \$0.3 million over budget. Last year, the Franklin Square Breaker Replacement project was under budget due to vendor unavailability. The breakers purchased last year were installed in the first quarter of this year and additional breakers for Franklin Square were purchased. Installation will take place next year. The replacement of the breakers at Drumrock station was deferred.
- Capital spending on the Underground Cable Replacement program was \$4.0 million, under budget by \$1.7 million primarily due to limited cable supply. Efforts were shifted to the URD program as materials and crews were available. Capital spending on the URD program totaled \$8.0 million.
- Minimal spending occurred on the 3763 Pole Replacement project due to material availability and delivery dates. Payments for materials were made in March 2023 and construction will be completed next year.
- Capital spending for fencing for the South Street Substation project totaled \$1.1 million. This project had been deferred from previous years due to site requirements including completing a seawall, weatherproofing of the building, and testing of the ground grid, as well as contractor availability. The Company anticipates additional spending of \$0.5 million which was not included in the 2024 ISR Plan Year budget.

b. Non-Infrastructure

Capital spending in the Non-infrastructure spending rationale was \$1.6 million as of March 31, 2023, including \$1.2 million in the Capital Overheads project. These overheads will be applied to projects in the next year. Minimal spending took place on the Copper to Fiber Conversion project due to the amount of work requested by the third party. The remaining spend relates to purchases of general equipment under the Blanket project.

c. System Capacity and Performance (Without Separately Tracked Large Projects)

During the year ending March 31, 2023, capital spending for the System Capacity and Performance category was \$12.6 million, which was \$3.4 million over budget. The major drivers of this variance were as follows:

- Capital spending on the New Lafayette Substation project was \$1.0 million, \$1.9 million under budget. Transmission outage coordination issues required deferring work on this project.
- Capital spending on Volt/VAR Optimization (“VVO”) projects totaled \$0.6 million. This spending was deferred from previous years.
- In the previous year, certain projects related to load shifts because of the COVID-19 pandemic, including work on the 59F3 and 72F5 Lines and some smaller blanket level work, were deferred. Work has progressed on these projects and capital spending totaled \$0.9 million during the 2023 ISR Plan Year. The Company continues to monitor load and takes immediate action to manage the system safely and reliably.
- Capital spending for reclosers totaled \$1.7 million during 2023. Spending was for planning, engineering, design, and material purchases.
- During 2023, capital spending on the System Capacity & Performance Blanket projects was \$3.4 million, \$1.4 million over budget. The primary reason for the overspend was the installation of line reclosers to improve reliability. Frequent circuit interruptions (approximately one interruption every third day during blue sky conditions) and low numbers of reclosers per circuit were identified during the Summer of 2022. The installation of these pole-top reclosers allows for sectionalizing of feeders in fault and overload conditions and minimizes the number of customers without service.

d. Separately Tracked Large Projects

During Plan Year 2023, capital spending on the following Large Projects is separately tracked: Southeast Substation, Dyer Street Substation, Providence Study projects, East Providence Substation, and Warren Substation. Each project is discussed in Attachment G.

e. Large Project Variances

The Company provides explanations for large projects¹ with variances that exceed +/- 10% of the Plan Year budget in quarterly reports. These projects represent \$33.4 million of the Plan Year 2023 budget of \$104.8 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 DERs or to provide additional visibility on the distribution system. The Company continues to increase its use of Python Scripting to improve automation in CYME as well as other computer programs. For example, the grid modernization analysis utilized Python scrips for electric vehicle, electric heat pump, and DG placement within the CYME models.

3. Investment Placed-in-Service

During the year ending March 31, 2023, \$96.7 million of plant additions were placed in service, which was 92% of target. Details by spending rationale are included in Attachment B.

4. Vegetation Management

During the year ending March 31, 2023, the Company completed 1,367 miles or 100% of its annual distribution mileage cycle pruning goal. The Company spent \$12.7 million. The Company made the decision to focus some additional spend on cycle trimming and the removal of hazardous trees and limbs. Using the Company's risk reduction tool and data analytics, cycle trimming clearance distances were expanded for some of the current year's feeders to improve reliability. In addition, cycle trimming along the 85T1 feeder in Westerly and Hopkinton was moved forward to reduce tree-related outages. The overspend on the police and flagger category can be attributed to the additional work performed and increased costs of police and flagging details. Attachment C provides the O&M spending and the Enhanced Hazard Tree Mitigation ("EHTM") removal counts by circuit. Of the 750 hazardous trees removed, 537 trees were removed due to Eastern Ash Borer infestation.

¹ Large projects are defined as projects exceeding \$1.0 million in total project cost.

5. Inspection and Maintenance

I&M program costs for the ISR Plan Year 2023 are shown in Attachment D. This spending includes mobile elevated voltage testing and repairs, which the Rhode Island Public Utilities Commission approved in Docket No. 4237.

The Company identified one Level I deficiency during the Plan Year 2023. When Level I deficiencies are identified, they are repaired immediately or within 30 days of the inspection.

The Company began its annual inspection of targeted overhead structures and elevated voltage testing on January 1, 2023 as inspections and elevated voltage testing now take place on a calendar year basis. During the Plan Year 2023, the Company’s manual elevated voltage testing identified one instances of elevated voltage. The table below shows the number of units tested during this period.

Manual Elevated Voltage Testing				
Manual Elevated Voltage Testing	Total System Units Requiring Testing	Units Completed 1/1/23 thru 3/31/23	Units with Voltage Found (>1.0v)	Percent of Units Tested with Voltage (>1.0v)
Distribution Facilities	274,396	16,298	0	0.000%
Underground Facilities	12,438	0	0	0.000%
Street Lights and Signal Controls	4,929	0	0	0.000%

Attachment A

Capital Spending by Spending Rationale For the Year Ending March 31, 2023 (\$000)

	Plan Year 2023		
	Budget	Actuals	Over Spend / (Under Spend)
Customer Request/Public Requirement	\$27,183	\$31,799	\$4,616
Damage Failure	14,251	17,461	3,210
<i>Non-Discretionary Spending</i>	41,433	49,260	7,827
Asset Condition	24,979	23,370	(1,608)
Non-Infrastructure	1,520	1,554	34
System Capacity & Performance	9,188	12,631	3,443
	35,687	37,555	1,868
Large Projects Separately Tracked	27,629	21,701	(5,928)
<i>Discretionary Spending</i>	63,316	59,256	(4,060)
Total Capital Spending	\$104,750	\$108,516	\$3,767

Attachment B

Plant Additions by Spending Rationale For the Year Ending March 31, 2023 (\$000)

	Plan Year 2023 Target	Actuals	% of Target Placed In Service
Customer Request/Public Requirement	\$27,143	\$29,930	110%
Damage Failure	15,971	13,452	84%
<i>Subtotal Non-Discretionary</i>	<i>43,114</i>	<i>43,382</i>	<i>101%</i>
Asset Condition (w/Sep Tracked Large Projects)	48,224	40,972	85%
Non- Infrastructure	1,427	371	26%
System Cap & Perf (w/Sep Tracked Large Projects)	12,498	11,977	96%
<i>Subtotal Discretionary</i>	<i>62,150</i>	<i>53,320</i>	<i>86%</i>
Total Plant Additions	\$105,264	\$96,702	92%

Attachment C

Vegetation Management For the Year Ending March 31, 2023 (\$000)

Vegetation Management O&M Spending

	2023 Budget	Actual Spending	% Spend
Cycle Pruning (Base)	\$7,300	\$7,974	109%
Hazard Tree	1,750	1,425	81%
Sub-T (on & off road)	350	184	53%
Police/Flagger Details	775	1,010	130%
Pockets of Poor Performance	200	182	91%
Risk Reduction - Extra	0	427	0%
Core Crew (all other activities)	1,500	1,547	103%
Total O&M Spending	\$11,875	\$12,748	107%

Enhanced Hazard Tree Mitigation Update

District	Circuit	Substation	Hazard Tree Removals
Capital	4F1	Barrington	44
Capital	5F1	Warren	5
Capital	127W40	Nasonville	35
Capital	126W50	Washington	46
Coastal	52F3	Warwick	38
Capital	34F2	Chopmist	41
Capital	38F1	Putnam Pike	37
Capital	34F1	Chopmist	169
Coastal	54F1	Coventry	45
Capital	34F3	Chopmist 34	20
Coastal	68F1	Kenyon 68	46
Coastal	54F1	Coventry 54	45
Coastal	88F1	Tower Hill 88	109
Coastal	155F8	Chase Hill 155	13
Coastal	155F6	Chase Hill 155	12
Coastal	155F4	Chase Hill 155	19
Coastal	16F2	Westerly 16	18
Coastal	63F6	Hopkins Hill 63	8
Totals			750

Attachment D

**Inspection and Maintenance Program and Other O&M Spending
For the Year Ending March 31, 2023
(\$000)**

	2023 Budget	Actuals	% Spend
Opex Related to Capex	\$540	\$200	37%
Inspections & Repair Related Costs	475	512	108%
System Planning & Protection Coordination Study	25	0	0%
VVO/CRV Program	224	271	121%
Total O&M Spending	\$1,264	\$983	

Attachment E

Project Variance Report For the Year Ending March 31, 2023 (\$000)

Project Description	Plan Year 2023			Variance Cause
	Budget	Actuals	Over / (Under)	
New Lafayette Substation	\$2,914	\$1,010	(\$1,904)	Schedule adjusted due to transmission outage coordination issues.
Dyer Street Substation (at South Street)	\$3,500	\$10,877	\$7,377	See Attachment G for additional details.
Providence Study - Phase 1A	\$1,484	\$1,718	\$233	See Attachment G for additional details.
Providence Study - Phase 1B	\$16,585	\$5,992	(\$10,593)	See Attachment G for additional details.
Providence Study - Phase 2	\$300	\$14	(\$286)	See Attachment G for additional details.
Providence Study - Phase 4	\$1,217	\$1,480	\$263	See Attachment G for additional details.
East Providence Substation	\$2,495	\$461	(\$2,034)	See Attachment G for additional details.
Warren Substation	\$1,824	\$372	(\$1,452)	See Attachment G for additional details.
Franklin Sq Breaker Replacement	\$1,837	\$2,128	\$291	FY22 breaker carryover work installed and additional breakers on order. Installation will take place next year.
South Street Substation	\$0	\$1,123	\$1,123	Substation property fencing.
Mainline Recloser Project	\$0	\$1,743	\$1,743	Project to install mainline reclosers to reduce mainline fault impacts.
3763 Pole Replacements	\$1,250	\$271	(\$979)	Deferral of a portion of spending to next year due to material delivery dates. Work can't be done in Winter.
	\$33,407	\$27,189	(\$6,218)	

Attachment F

Damage/Failure Detail by Work Type For the Year Ending March 31, 2023 (\$000)

Operation Description	D Line Blanket	Property Damage	D Sub Blanket	Storms	Specifics	Grand Total
Engineering/Design/Supervision	\$ 827	\$ 99	\$ 45	\$ 178	\$ 2	\$ 1,150
OH Elec Distribution	3,345	298	0	1,839	0	5,482
OH Transformers/Capacitors/Regulators/Meters	585	(2)	0	150	0	733
Other	1,009	158	(290)	1,289	544	2,709
Outdoor Lighting	12	2	0	0	0	13
Substation	0	0	867	0	424	1,291
Switching and Restoration	76	(16)	159	1	0	220
Traffic Control	270	104	0	36	0	410
UG Elec Distribution	2,036	422	0	92	0	2,550
UG Transformers/Capacitors/Regulators/Meters	181	(0)	0	8	0	189
Not Available	2,843	470	334	(471)	191	3,368
Total before reclassification	11,184	1,533	1,115	3,122	1,161	18,115
Reclassification adjustment - D/F to A/R	(654)					(654)
Total after reclassification	\$ 10,530	\$ 1,533	\$ 1,115	\$ 3,122	\$ 1,161	\$ 17,461

Attachment G

Separately Tracked Large Projects For the Year Ending March 31, 2023

Southeast Substation

Predates Existing Area Study Process

Current Status – Design and Execute

(\$ 000's)	Actuals & Current Forecast		ISR Plan Budget	
	FY 2023 Actuals	Total Project Cost Forecast	FY23 Budget	Total Project Cost Forecast
Southeast Substation Project	\$787	\$23,716	\$223	\$23,131

Capital spending for the Southeast Substation project was \$0.8 million for the Plan Year. The Dunnell Park substation portion of this project is complete. The majority of the assets associated with the distribution line project are in service. The engineering for the Pawtucket #1 Substation project is complete and building demolition will begin in January 2024.

In total, the Company currently expects capital spending of \$23.7 million for this project as compared with the estimate when sanctioned of \$21.1 million. Additional spending was necessary because of field conditions requiring environmental management of an additional volume of soil; construction site congestion requiring additional resources such as crane and other equipment rentals; increased costs on final civil work at Dunnell Park substation; and the reconfiguration and equipment on the distribution network to avoid reliability issues.

Dyer Street Substation at South Street

Predates Existing Area Study Process

Current Status – Design and Execute

(\$ 000's)	Actuals & Current Forecast		ISR Plan Budget	
	Total Project		Total Project	
	FY 2023 Actuals	Cost Forecast	FY23 Budget	Cost Forecast
	\$10,877	\$25,713	\$3,500	\$16,504
Dyer Street Substation Project				

During the year ending March 31, 2023, capital spending on the Dyer Street Substation project was \$10.9 million. Capital spending during the year related to the installation of the metal clad switchgear which was deferred from the previous year, transformers, and civil work. Capital spending came in under the amount forecasted in the third quarter report because of delays in delivery and the condition of the delivered conduit. During December 2022, the substation portion of the project was placed in service.

The total project cost forecast increased due to:

- Supply chain delays adding a year to the project schedule
- Scope increases due to underground obstructions and a collapsed duct bank
- Underground construction bids higher than expected

The remaining project spend includes the work deferred due to material delays and scope increase, as well as the completion of the civil work and building demolition.

As discussed in the Company’s response to Record Request No. 8 issued under Docket No. 22-53-EL at the Commission’s Evidentiary Hearings on March 8 and 9, 2023, the Company has written off \$0.9 million of costs associated with the refurbishment of the DC Building. Once the project is complete, the Company will again review all costs to ensure spending related to the refurbishment of the DC Building is not included in the ISR rate base or revenue requirement.

Providence Study – Admiral Street Substation - Phase 1A
Providence Area Study Implementation Plan 2016 – 2030 (May 2017)
Current Status – Design and Execute

<i>(\$ 000's)</i>	Actuals & Current Forecast		ISR Plan Budget	
	Total Project		Total Project	
	FY 2023 Actuals	Cost Forecast	FY23 Budget	Cost Forecast
Providence Study Projects - Phase 1A	\$1,718	\$8,677	\$1,484	\$8,973

During the year ending March 31, 2023, capital spending on the Phase 1A project of the Providence Study was \$1.7 million. The assets associated with this project are all in service. Minor removal work will take place in the next year. In total, capital spending was \$8.7 million compared to the \$9.0 million budget presented in the 2023 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 – Final Engineering/Design and Execute

(\$ 000's)	Actuals & Current Forecast		ISR Plan Budget	
	FY 2023 Actuals	Total Project Cost Forecast	FY23 Budget	Total Project Cost Forecast
Providence Study Projects - Phase 1B	\$5,992	\$46,512	\$16,585	\$45,366

During the year ending March 31, 2023, capital spending on Phase 1B projects of the Providence Study was \$6.0 million against the budget of \$16.6 million. Construction began in April 2022.

The underspend for the year was caused by the following major drivers:

- The manhole and duct bank work were pushed out due to the winter moratorium.
- A construction contract bid came in lower than expected.
- Resources were pulled from the Olneyville construction for customer emergent work.

Project spend for the next year includes:

- Manhole and duct bank construction, cable pulling and restoration.
- Admiral St Substation construction and demolition.
- Olneyville conversion construction.

In total, the Company expects capital spending of \$46.5 million for this project compared to the \$45.4 million budget presented in the 2023 ISR Plan and \$45.6 million sanctioning amount.

Providence Study Projects - Phase 2

Providence Area Study Implementation Plan 2016 – 2030 (May 2017)

Current Status – Develop & Sanction

<i>(\$ 000's)</i>	Actuals & Current Forecast		ISR Plan Budget	
	Total Project FY 2023 Actuals	Cost Forecast	FY23 Budget	Total Project Cost Forecast
Providence Study Projects - Phase 2	\$14	\$25,145	\$300	\$25,324

Actual capital spending on the Phase 2 projects of the Providence Study was minimal during the Plan year. In total, the Company currently expects capital spending of \$25.1 million for these projects as compared to the \$25.3 million budget presented in the 2023 ISR Plan. Work pushed out a year compared to original sanction dates, following the sequencing of predecessor phases of the Providence Study portfolio. Capital spending during the next year will primarily be design work, as design packages are currently out to bid.

Providence Study – Knightsville Substation - Phase 4

Providence Area Study Implementation Plan 2016 – 2030 (May 2017)

Current Status – Construction

(\$ 000's)	Actuals & Current Forecast		ISR Plan Budget	
	FY 2023 Actuals	Total Project Cost Forecast	FY23 Budget	Total Project Cost Forecast
Providence Study Projects - Phase 4	\$1,480	\$19,981	\$1,217	\$8,392

Actual capital spending was \$1.5 million on the Phase 4 projects of the Providence Study during the Plan year. During the year, the project team has achieved engineering, sequencing, and material procurement to prepare the conversion work to be in construction during 2024. Additionally, substation civil work will begin in the next year. This phase is expected to have over 40,000 labor hours for the conversion work.

In total, the Company currently expects capital spending of \$20.0 million for this phase of the project as compared to the \$8.4 million budget presented in the 2023 ISR Plan. As discussed in the 2022 ISR Plan reporting, 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 were 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

East Providence Substation
East Bay Area Study (August 2015)
Current Status – Develop & Sanction

(\$ 000's)	Actuals & Current Forecast		ISR Plan Budget	
	FY 2023 Actuals	Total Project Cost Forecast	FY23 Budget	Total Project Cost Forecast
East Providence Substation	\$461	\$17,559	\$2,495	\$17,025

During the year ending March 31, 2023, capital spending on the East Providence Substation project was \$0.5 million against a budget of \$2.5 million. The project has been delayed due to real estate issues. In preparation for construction, design and procurement efforts will take place next year.

In total, the Company currently expects capital spending of \$17.6 million for this project compared to the \$17.0 million budget presented in the ISR Plan. This project consists of building a new 115/12.4kV substation in East Providence to relieve heavily loaded distribution feeders, address MWh violations, and provide capacity to supply load growth. This new substation is part of a comprehensive plan that eliminates the need for major upgrades on the 23kV sub-transmission system and the need to build a new 115/23kv station at Mink Street.

Warren Substation

East Bay Area Study (August 2015)
Current Status – Develop & Sanction

<i>(\$ 000's)</i>	Actuals & Current Forecast		ISR Plan Budget	
	Total Project FY 2023 Actuals	Cost Forecast	FY23 Budget	Total Project Cost Forecast
Warren Substation	\$372	\$10,173	\$1,824	\$9,685

During the year ending March 31, 2023, capital spending on the Warren Substation project was \$0.4 million. Final design and procurement have been delayed due to the need to coordinate with external parties. In total, the Company currently expects capital spending of \$10.2 million for this project compared to the \$9.7 million budget presented in the 2023 ISR Plan. Capital spending was increased for potential flood mitigation. This project encountered delays with permitting along the East Bay Bike Path. It is currently being reviewed with RIDOT and RIDEM. During the next year, the overhead and substation work, independent of the bike path, will continue to progress as the permitting requirements around the underground portion are satisfied.

This project will expand the Warren 115/12.47kV substation by adding two new distribution feeders and two 7.2 MVAR station capacitor banks. The new feeders will be routed into Barrington and used to retire the Barrington substation. This expansion project addresses asset and safety concerns at the Barrington substation and is part of a comprehensive plan that eliminates the need for major upgrades on the 23kV sub-transmission system and the need to build a new 115/23kV station at Mink Street.

Tiverton

Tiverton Area Study 33F6

In the Tiverton area, the DG application for the installation of a new feeder, 33F6, has been approved and the project is progressing. This generation site is expected to be in-service late 2022 or early 2023. The Tiverton Area Study (September 2021) identified the need to extend the proposed 33F6 circuit to the south for thermal (capacity) limits, contingency response capability, and voltage issues. The Study included a cash flow showing the circuit extension to be in-service in 2028. As a result of cost sharing complications that are expected to occur for this project, the Company plans to include the Tiverton 33F6 extension project in Attachment G of future ISR Plan quarterly reports.

Attachment H

Meter Purchases For the Year Ending March 31, 2023

Quantity of Meters Purchased		
Type	Description	Quantity
METER	CENTRON - 2S 240V CL200	15,300
METER	CENTRON - 12S ERT CL200	7,920
METER	CENTRON - 16S CL320	240
METER	CENTRON - 3-ERT AMR	480
METER	KV2C METER 9S	192
INSTRUMENT TRANSFORMER	CUR OUTDOOR 70/1 8.4KV	47
INSTRUMENT TRANSFORMER	CUR OUTDOOR 200/1	12
INSTRUMENT TRANSFORMER	CUR OUTDOOR 15KV	15
INSTRUMENT TRANSFORMER	CUR OUTDOOR 5/5 15KV	15
INSTRUMENT TRANSFORMER	CUR OUTDOOR 15/5 15KV	15
INSTRUMENT TRANSFORMER	CUR OUTDOOR 25/5 15KV	23
INSTRUMENT TRANSFORMER	CUR OUTDOOR 50/5 15KV	16
INSTRUMENT TRANSFORMER	CUR OUTDOOR 75/5 15KV	42
INSTRUMENT TRANSFORMER	CUR OUTDOOR 100/5 15KV	12
INSTRUMENT TRANSFORMER	800:5 BASE BUSHINGS	60
INSTRUMENT TRANSFORMER	2000:5 BASE BUSHINGS	24
INSTRUMENT TRANSFORMER	3000:5 BASE BUSHINGS	24
INSTRUMENT TRANSFORMER	200:5 CAP	10
	TOTAL	24,447