

February 2, 2024

VIA ELECTRONIC MAIL

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

RE: Docket No. 23-48-EL – The Narragansett Electric Company d/b/a
Rhode Island Energy's Proposed FY 2025 Electric Infrastructure, Safety, and
Reliability Plan
Responses to PUC Data Requests – Set 3 (Complete Set)

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company"), enclosed are the Company's responses to the Public Utilities Commission's ("PUC") Third Set of Data Requests, which contains the Company's responses to PUC 3-4, PUC 3-9, PUC 3-10, and PUC 3-19 in the above-referenced matter.

This transmittal completes the Company's responses to the PUC's Third Set of Data Request.

Thank you for your attention to this transmittal. If you have any questions or concerns, please do not hesitate to contact me at 401-784-4263.

Sincerely,

Andrew S. Marcaccio

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Enclosures

cc: Docket No. 23-48-EL Service List

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-1

Request:

The response to PUC 1-1 states: "The first meter is now estimated to be installed in January 2025." Please provide an estimate of how many meters the Company is forecasting it will install in January, February, and March of 2025.

Response:

As per the ISR timeline, the Company is forecasting it will install the following meters:

Date	Monthly exchanges
January-25	465
February-25	7,440
March-25	14,880

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-2

Request:

Referring to bates page 89, Book 2, of the Company's Business Case filing in Docket 22-49-EL, and the paragraph regarding "Electric Meter Deployment," which states that "Electric Meter Deployment' represents the installation of new AMF meters which is preceded by a 'Solution Validation' phase," what is the Company's forecast for the months in which:

- a. the Company will commence and complete the "Solution Validation Phase"; and
- b. the referenced "Electric Meter Deployment" commences.

Response:

As per the ISR timeline for the AMF project:

- a. The Solution Validation Phase is forecasted to commence in January 2025 and be completed in March 2025, with approximately 23,000 meters installed by that time.
- b. Electric Meter Deployment is forecasted to commence April 2025, following the Solution Validation Phase.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-3

Request:

Referring to Figure 1, "AMF Project Timeline," on bates page 87, Book 2, of the Company's Business Case filing in Docket 22-49-EL, please provide an updated version of Figure 1.

Response:

Please see below the updated Figure 1, "AMF Project Timeline" from the Company's AMF Business Case filing in Docket No. 22-49-EL.

The updated timeline reflects an approximate three-month shift in the systems and deployment schedule from what the Company originally had proposed in the AMF Business Case. The Solution Validation Phase is now planned to commence in January 2025 (first quarter) with full electric meter deployment commencing in April 2025 (second quarter). This shift in timing reflects the timing of the Public Utilities Commission's ("Commission") approval in Docket No. 22-49-EL. The Company based the original timeline in the AMF Business Case on an anticipated regulatory approval by June 2023; however, the Commission issued its decision in September 2023. Thus, the AMF Project Timeline, in Figure 1, which also includes Pre-sweep Verifications and Network Deployment, shifted by a commensurate amount of time. The updated Figure 1 does not include the gray box for "Future AMF Functionality" because those functionalities were identified in the AMF Business Case as Group 6 functionalities. Per the Commission's Open Meeting Motions and Votes, Group 6 functionalities were not included within the scope of the Commission's authorization, except for the advancement of load disaggregation & Waveform Analytics and Grid Edge Computing using Sense for the Home Area Network as discussed in the Company's response to RR-11 in Docket No. 22-49-EL. Those functionalities are now included in the "Added AMF Functionality" box in the updated Figure 1.

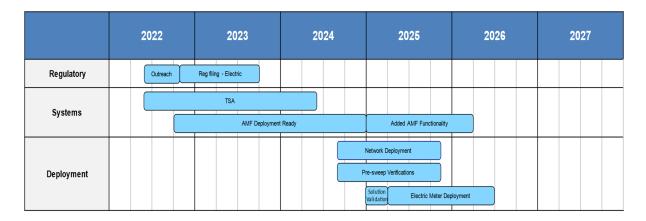
In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-3, page 2

Updated Figure 1

AMF Timeline

Meter Deployment Start Date of January 2025





Business Use 2023 PPL Corporation

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-4

Request:

Referring to the breakdown of cost categories reflected in Attachment PUC 1-2, please breakdown the cost incurrence associated with these categories more granularly to match the categories of costs that were reflected in Attachments PUC 1-11, 1-12, and 1-13 that were provided in Docket 23-49-EL which forecasted capital costs related to software, network, and meters, respectively.

Response:

Please see Attachment PUC 3-4-1, Attachment PUC 3-4-2, and Attachment PUC 3-4-3 for a breakdown of the software, network, and meter costs, similar to Attachments PUC 1-11, 1-12, and 1-13, respectively, that the Company provided in Docket No. 22-49-EL.

The Company prepared Attachments PUC 1-11, 1-12, and 1-13 in Docket No. 22-49-EL based on the BCA Model it had prepared at that time, which included estimates by individual line items. The Company prepared those schedules before it negotiated contracts with vendors to perform the specific services that made up those estimated costs. The Company prepared its response to PUC 1-2 and Attachment PUC 1-2 to reflect the costs it expects to incur through March 2025 (i.e., ISR Fiscal Year 2025) under the contracts it currently is negotiating or has now negotiated and signed with third-party vendors. These contracts will be provided when finalized which is estimated to be late February 2024. Those costs reflect a milestone payment structure that does not break out the costs associated with each milestone payment by the individual line items reflected in the BCA Model.

The BCA model was not formatted to reflect a milestone payment structure. The milestones included in these negotiated contracts are based on estimated services provided and would cover several of the individual line items shown in the format for Attachments PUC 1-11, 1-12, and 1-13. Milestones payments are due upon completion of the work specified for each milestone. The "Notes" column in each attachment explains where the Company made an estimate for the amount to include in that cost category associated with the milestone achievements that correspond to the payments the Company will make. Estimated milestones for meter installations (external vendor) based on sector completion do not occur until ISR FY 2026 as per the contract currently being negotiated with our external vendor.

Additionally, in preparing this response, the Company added some additional line items to Attachment PUC 3-4-1 and Attachment PUC 3-4-2 from those that were reflected in Attachment PUC 1-11 and Attachment PUC 1-12 to reflect additional cost components associated with the work being performed under the contracts.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-4, page 2

In Attachment PUC 3-4-1, which corresponds to Attachment PUC 1-11 from Docket No. 22-49-EL, the Company added: (i) an additional line item each for Cybersecurity, Customer Portal, Outage Alerts, Green Button, Bill Alerts, and ADMS &OMS to distinguish internal from external costs in these categories, and (ii) line items for the Customer Home Area Network and Load Disaggregation App (HAN) to reflect the acceleration of this investment as a result of the Commission's AMF approval order, and (iii) a line item for AFUDC to reflect the allowance for funds used during construction on the software costs up until the start of meter deployment.

In Attachment PUC 3-4-2, which corresponds to Attachment PUC 1-12 from Docket No. 22-49-EL, the Company added two additional Gateway line items – one to reflect the costs for the Service Disconnect Switch and the other to create two line items for (Gateways) Pole (Equipment) to distinguish between steel poles and wood poles.

In Attachment PUC 3-4-3, which corresponds to Attachment PUC 1-13 from Docket No. 22-49-EL, all the cost line items match up, but the Company did not include the separate chart that appeared on the fourth page of Attachment PUC 1-13 from Docket No. 22-49-EL because it did not correspond to the costs being reported in Attachment PUC 1-2 in this docket.

Finally, the Company also is providing Attachment PUC 3-4-4, which reflects Program Management Office costs that do not otherwise correspond to the cost categories included in Attachments PUC 1-11, 1-12, and 1-13 in Docket No. 22-49-EL.

The Company has provided the information requested in this format to comply with this request from the Commission. The Company notes, however, that it requires significant time and effort to create the estimated costs in these specific categories from the milestone payments the Company is making under its contracts with third-party vendors, and the estimates are not exact costs, but instead are the Company's best attempt to disaggregate the costs associated with those payments. This format is not the format in which the Company is tracking costs internally, and the Company proposes to provide the ongoing cost incurrence and estimate information in future data requests in this docket and in future proceedings in the format in which it is tracking costs on this project to: (i) provide the Commission with the data it seeks to oversee the cost incurrence on the project as compared to its approval of the AMF project, while (ii) reducing the administrative burden to provide the requested information.

The Narragansett Electric Company d/b/a Rhode Island Energy AMF - Intangible Software Costs

ISR year 2025

Category Conf. Category Conf. Category Conf. Category Pt. Labor Pt	<u>Cost</u>						Costs through	
1806 1807		Cost Category 2					March 2025	NOTES
Disputer Audy Data Lake							\$1,400,028	<u> </u>
								•
							\$577,200	
Systems SS CS CS Customer Scroke Scrokers Continue Scrokers Stockers Sto	03.Systems	Analytics						•
Deployment Exchange Deployment Exchange Deployment Exchange Management Giberts Perly, s. b., Mg. Deployment Exchange Management Giberts								
	03.Systems						\$2,856,690	<u>*</u>
63.5ystems Headend Headend Headend Headend SV Wendor Headend (Implement) 303 \$1,080,932	03.Systems	Deployment Exchange	l Deployment Exchange Management (Electric	Deply. xchg. Mgt.	***************************************		\$0	•
	03.Systems			Deply. xchg. Mgt.			\$677,280	
	03.Systems	Headend	Headend	Headend	SOW - Vendor - Headend (Implement)	303	\$4,080,932	L&G SaaS implementation services, later releases
	03.Systems	Headend	Headend	Headend		303	\$1,601,400	TCS system integrator services milestone achievement - estimated
	03.Systems	Headend	Headend Upgrade	Headend	E2E System Testing (Headend Upgrade)	303	\$0	N/A, post project
MDMS	03.Systems	Headend	WiSun	WiSun	Software as a Service (SaaS) - WiSun (Implement)	303	\$0	N/A, included in L+G SaaS implementation services Headend
MDMS MDMS MDMS Lygrade MDMS E2E System Testing (MDMS Lygrade) 303 80 80 80 80 80 80 8	03.Systems	MDMS	MDMS	MDMS	SOW - Vendor - MDMS (Implement)	303	\$1,873,737	L&G SaaS implementation services, later releases
	03.Systems	MDMS	MDMS	MDMS	SI Vendor - MDMS (Implement)	303	\$647,700	TCS system integrator services milestone achievement - estimated
03. Systems Middleware Systems CyberSecurity CyberSecurity (Implement) 303 \$31,000 TCL System integrator services milestone achievement -estimated only 03. Systems Customer Engagement Customer Fortal Customer Portal Customer Fortal Systems Customer Engagement Use Fortal Customer Fortal Customer Fortal Customer Fortal C	03.Systems	MDMS	MDMS Upgrade	MDMS	E2E System Testing (MDMS Upgrade)	303	\$0	N/A, post project
Object CyberSecurity St Vectority - CyberSecurity	03.Systems	Middleware	Middleware	Middleware	Middleware (Implement)	303	\$381,243	PPL Internal, connection of interfaces
	03.Systems	Middleware	Middleware	Middleware	Middleware - SI Vendor (Implement)	303	\$41,207	TCS system integrator services milestone achievement - estimated
O3 Systems CyberSecurity CyberSecurity CyberSecurity CyberSecurity CyberSecurity Customer Portal Customer Portal Customer Portal Customer Portal Signature Signatu	03.Systems	CyberSecurity	CyberSecurity	CyberSecurity	CyberSecurity (Implement)	303	\$350,000	External vendor for cyber and penetration testing - estimated only
	03.Systems	CyberSecurity	CyberSecurity	CyberSecurity	CyberSecurity - Internal	303	\$215,000	PPL Internal
	03.Systems	CyberSecurity	CyberSecurity	CyberSecurity	SI Vendor - CyberSecurity (Implement)	303	\$41,207	TCS system integrator services milestone achievement - estimated
Ox. Systems Customer Engagement Outage Alerts Outage Alerts Outage Alerts Customer Outage Alerts Customer Outage Alerts Outage	03.Systems	Customer Engagement	Customer Portal	Customer Portal	Customer Portal	303	\$337,020	external vendor - estimate
03. Systems Customer Engagement Outage Alerts Customer Outage Alerts Customer Outage Alerts Customer Engagement Green Button Green Button Connect 303 \$345,365 PPL Internal 03. Systems Customer Engagement Green Button Green Button Green Button Connect - Internal 303 \$50 03. Systems Customer Engagement Bill Alerts PPL Internal 303 \$50 PPL Internal 03. Systems Customer Engagement Bill Alerts Bill Alerts Bill Alerts Bill Alerts Bill Alerts Bill Alerts PPL Internal 303 \$50 PPL Internal 03. Systems Customer Engagement DG Portal DG Portal Solar Marketplace 303 \$50 out of scope 03. Systems Customer Engagement Carbon Footprint Calc Carbon Footprint Calculator 303 \$50 out of scope 03. Systems Customer Engagement Carbon Footprint Calculator Calculator Engagement Carbon Footprint Calculator 303	03.Systems	Customer Engagement	Customer Portal	Customer Portal	Customer Portal - Internal	303	\$592,000	PPL Internal
Customer Engagement Green Button	03.Systems	Customer Engagement	Outage Alerts	Outage Alerts	Customer Outage Alerts	303	\$0	
	03.Systems	Customer Engagement	Outage Alerts	Outage Alerts	Customer Outage Alerts - Internal	303	\$345,365	PPL Internal
Customer Engagement Bill Alerts Bill A	03.Systems	Customer Engagement	Green Button	Green Button	Green Button Connect	303	\$0	
Customer Engagement Bill Alerts Bill A	03.Systems	Customer Engagement	Green Button	Green Button	Green Button Connect - Internal	303	\$0	PPL Internal
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03.SystemsGrid Edge & Load Diss: Customer Load Dissagregation App (HAN)HAN APPCustomer Load Dissagregation App Vendor (HAN Solution)303\$003.SystemsGrid Edge & Load Diss: Customer Load Dissagregation App (HAN)HAN APPCustomer Load Dissagregation App Vendor (HAN Solution) -303\$0Allowance for Funds Using During Construction - on the software costs up		ADMS & OMS	ADMS & OMS	ADMS & OMS	ADMS & OMS - Internal		\$0	-
03.Systems Grid Edge & Load Diss Customer Load Dissagregation App (HAN) HAN APP Customer Load Dissagregation App Vendor (HAN Solution) - 303 \$0 Allowance for Funds Using During Construction - on the software costs up					Customer Load Dissagregation App Vendor (HAN Solution)			
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	03.Systems	AFUDC	AFUDC	AFUDC	AFUDC	303	\$788,260	

\$16,847,475

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-48-EL Attachment PUC 3-4-2 Page 1 of 1

The Narragansett Electric Company d/b/a Rhode Island Energy AMF -Network Costs

Cost Category_1	Cost Category_2	Cost Category_3	Cost Category_4	Full Description	FERC Account	ISR year 2025 Costs through March 2025	NOTES
02.Network	Project Management	Vendor /External Labor	Installation Vendor	RF Network Installation Vendor Project Management Oversight	397	\$ 415,227	L&G installation services milestone achievement - estimated
02.Network	Hardware	Gateway	Network Gateway	(High Capacity Gateways) Hardware - High Capacity Network Gateway	397	\$ 247,170	L&G network hardware
02.Network	Hardware	Gateway	Modem	(High Capacity Gateways) Hardware - Cellular Backhaul Modem	397	\$ -	N/A - fully integrated w, and part of unti price, for network gateways
02.Network	Hardware	Gateway	Telecom Cabinet	(High Capacity Gateways) Hardware - Telecom Cabinet	397	\$ 337,050	RIE purchased hardware
02.Network	Hardware	Gateway	Poles	Service Disconnect Switch	397	\$ 54,133	RIE purchased hardware, 100%
02.Network	Hardware	Gateway	Poles	(Gateways) Pole (Equipment) - Steel	397	\$ 456,376	RIE purchased hardware, 100%
02.Network	Hardware	Gateway	Poles	(Gateways) Pole (Equipment) - Wood	397	\$ 279,257	RIE purchased hardware, 100%
02.Network	Hardware	Gateway	Network Gateway	(Standard Capacity Gateways) Hardware - Network Gateway	397	\$ 750,926	L&G network hardware
02.Network	Hardware	Router	Routers	(Routers) Hardware - Routers	397	\$ 1,072,397	L&G network hardware
02.Network	Hardware	Transformers	Transformers	Additional Transformers required - material	397	\$ 400,955	RIE purchased hardware, 100%
02.Network	Hardware	Gateway	Network Testing	Network Development and Testing - Routers, Gateways, Antennas, Modem	397	\$ 12,642	Antennas, modem, routers for test environment
02.Network	Hardware	Ancillary Equipment	Network Testing	Network Development and Testing - Equipment	397	\$ 8,560	Ancillary hardware for testing: sprectrum analyzer, cables, Gridstream radio
02.Network	Installs	Gateway	Site Installations	(High Capacity Gateways) Site Installation (pole, antennas, cabinets, etc)	397	\$ 60,000	L&G installation services milestone achievement - estimated
02.Network	Installs	Site Engineering	Site Engineering Permits	(High Capacity Gateways) Site Engineering design (power, permits, FAA, etc	397	\$ 300,000	L&G installation services milestone achievement - estimated
02.Network	Installs	Gateway	Network Gateway	(Standard Capacity Gateways) Installation - Network Gateway	397	\$ 140,000	L&G installation services milestone achievement - estimated
02.Network	Installs	Router	Routers	(Routers) Installation - Routers	397	\$ 300,000	L&G installation services milestone achievement - estimated
02.Network	Installs	Transformers	Transformers	Additional Transformers required - Install	397	\$ 50,000	L&G installation services milestone achievement - estimated
02.Network	Installs	Gateway	Network Testing	Network Development and Testing - Installation	397	\$ 50,000	L&G installation services milestone achievement - estimated
02.Network	Hardware	Gateway	Network Gateway (Replacements)	Network equipment replacement - Hardware - Gateways	397	\$ -	Post project - NA
02.Network	Hardware	Router	Routers (Replacements)	Network equipment replacement - Hardware - Routers	397	\$ -	Post project - NA
02.Network	Hardware	Gateway	4G-2-5G Upgrade	Hardware - Cellular Backhaul Modems 4G-2-5G (High Capacity Gateway loc	397	\$ -	Post project - NA
02.Network	Hardware	Gateway	4G-2-5G Upgrade	Hardware - Network Gateway 4G-2-5G (Standard Capacity locations)	397	\$ -	Post project - NA
02.Network	Installs	Gateway	Network Gateway (Replacements)	Network equipment replacement - Install - Gateways	397	\$ -	Post project - NA
02.Network	Installs	Router	Routers (Replacements)	Network equipment replacement - Install - Routers	397	\$ -	Post project - NA
02.Network	Installs	Gateway	4G-2-5G Upgrade	Installation - Cellular Backhaul Modems 4G-2-5G	397	\$ -	Post project - NA
02.Network	Installs	Gateway	4G-2-5G Upgrade	Installation - Network Gateway 4G-2-5G	397	\$ -	Post project - NA
04.Program	Project Management	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network lead	397	\$ -	shown in Program
04.Program	Project Management	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network Analyst	397	\$ -	shown in Program

Note: All hardware includes 7% sales tax

\$4,934,693

The Narragansett Electric Company d/b/a Rhode Island Energy AMF -Meter Costs

ISR year 2025

Cost						Costs through March	
Category_1	Cost Category_2	Cost Category_3	Cost Category_4	Full Description	FERC Account	O	NOTES
01.Meter	Project Managemen	nt Vendor /External Labor	Installation Vendor	Meter Installation Vendor Project Management Oversight	370	\$643,275	Meter installation services milestone achievement - estimated
01.Meter	Hardware	Ancillary Equipment	Antennas	External Antenna Cost (Residential)	370	\$441,017	L&G contract - network
01.Meter	Hardware	Ancillary Equipment	Antennas	External Antenna Cost (Commercial)	370	\$22,142	L&G contract - network
01.Meter	Hardware	Meters	Meters	Meter Development and Testing - Meters	370	\$0	N/A
01.Meter	Pre-Sweeps	Meter Base	Meter Bases	Total Electric Meter Pre-Sweeps for deployment	370	\$1,638,703	pre sweeps - external vendor labor
01.Meter	Installs	QA/QC	Testing Vendor	Shipment Sample Meter Testing (Residential & Commercial)	370	\$12,490	sample meter testing per ANSI standard
01.Meter	Installs	Facility	Crossdock	Deployment Center, Facility cost (Crossdock)	370	\$454,559	Meter installation services milestone achievement - estimated
01.Meter	Installs	Facility	Call Center	Deployment Call Center & Notification Letters	370	\$546,891	Meter installation services milestone achievement - estimated
01.Meter	Installs	Meters	Resid. Meters	Deployment - Automated RF (AMF) Meter Install Cost - Residential	370	\$0	no vendor fees for meter installs in ISR yr 2025
01.Meter	Installs	Meters	C&I Meters	Deployment - Automated RF (AMF) Meter Install Cost - Commercial	370	\$0	no vendor fees for meter installs in ISR yr 2025
01.Meter	Installs	Meters	Resid. Antennas	Deployment - External Antenna Electric Meter Install Cost - Residential	370	\$0	no vendor fees for meter installs in ISR yr 2025
01.Meter	Installs	Meters	C&I Antennas	Deployment - External Antenna Electric Meter Install Cost - Commercial	370	\$0	no vendor fees for meter installs in ISR yr 2025
04.Program	Project Managemen	nt PPL Labor	PPL Labor	PPL PMO Oversight - AMF Implementation PMO	370	\$24,192	internal install costs
04.Program	Project Managemen	nt Vendor /External Labor	PMO Vendor Labor	PMO Vendor - Project Manager / Deployment Lead	370	\$0	shown in Program
04.Program	Project Managemen	nt Vendor /External Labor	PMO Vendor Labor	PMO Vendor - Metrics, Measures, and Financial Tracking	370	\$0	shown in Program
04.Program	Project Managemen	nt Vendor /External Labor	PMO Vendor Labor	PMO Vendor - Meter Inventory Management Analyst	370	\$0	shown in Program
04.Program	Project Managemen	nt Vendor /External Labor	PMO Vendor Labor	PMO Vendor - Deployment Exception Coordinator(s)	370	\$0	shown in Program
01.Meter	Hardware	Meters	Meters (Growth)	Growth - Automated RF (AMF) Meter Cost (Residential)	370	\$0	Post project - NA
01.Meter	Hardware	Meters	Meters (Growth)	Growth - Automated RF (AMF) Meter Cost (Commercial)	370	\$0	Post project - NA
01.Meter	Hardware	Meters	Meters (Replacements)	Meter Replacements - Automated RF (AMF) Meter Cost (Residential)	370	\$0	Post project - NA
01.Meter	Hardware	Meters	Meters (Replacements)	Meter Replacements - Automated RF (AMF) Meter Cost (Commercial)	370	\$0	Post project - NA
01.Meter	Hardware	Meters	Meters	Automated RF (AMF) Meter Cost (Residential)	370	\$22,090,170	Hardware - residential meters
01.Meter	Hardware	Meters	Meters	Automated RF (AMF) Meter Cost (Commercial)	370	\$2,782,033	Hardware - commercial meters
01.Meter	Hardware	Meters	Meter Seed Stock	Automated RF (AMF) Meter Cost - Spares / Seed Stock (Residential)	370	\$0	all spares will be included in ISR yr 2026 shipments
01.Meter	Hardware	Meters	Meter Seed Stock	Automated RF (AMF) Meter Cost - Spares / Seed Stock (Commercial)	370	\$0	all spares will be included in ISR yr 2026 shipments

\$28,655,472

The Narragansett Electric Company d/b/a Rhode Island Energy AMF - PMO Program Costs

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-48-EL Attachment PUC 3-4-4 Page 1 of 1

					ISR year 2025
Cost Category 1	Cost Category_3	Cost Category 4	Description	FERC Account	Costs through March 2025
04.Program	Vendor /External Labor	PMO Vendor Labor	PMO External		\$2,767,070
04.Program	PMO/Internal Labor	PMO Internal Labor	PMO Internal		\$1,956,581

NOTES

\$4,723,651

Project oversight- outside consultants - will be allocated to meters, network, and software. External vendor labor personnel that will directly support the AMF Program.

Project oversight- internal - will be allocated to meters, network, and software. Includes dedicated PPL and Rhode Island Energy internal labor directly responsible for implementing the AMF Program.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-5

Request:

Please provide the original FY 2025 budget provided to the Division at the start of their review phase.

Response:

Please see Attachment PUC 3-5 for the FY 2025 budget filed with the Division at the start of their review phase in October.

The Company and Division started discussions in the summer regarding the FY 2025 ISR Plan.

The initial budgets shared with the Division totaled approximately \$213 million. After discussions and multiple revisions, looking at items such as resource availability, material lead times and overall level of spend, the Company submitted a plan totaling \$179 million.

Spending			5 Y	ear Investme	ent Plan - Ca	pital Spendir	ng			Major Pro	ject - Deta	ils		
Rationale and Category	ISR Grouping	FY 2024 Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Major Project - Current Phase	Total Current Sanction	Initial Irrent Estimate		Est. Constr Start	Est. Const End	PY Capita Spendin
1 Customer Requ	est/Public Requirement													
1 2	New Business - Commercial	9,093	9,366	9,647	9,937	10,235	10,542							
1	New Business - Residential	7,212	7,428	7,651	7,880	8,117	8,361							
l i	Public Requirements	1,249	3,140	3,234	3,331	3,431	3,531							
1	Transformers and Related Equipment	5,000	5,300	5,600	5,800	6,100	6,283							
i r	Meters and Meter Work	2,605	2,533	2,603	2,638	2,708	2,789							
' [Distributed Generation	1,000	1,000	1,000	1,000	1,000	1,000							
1	Third Party Attachments	280	288	297	306	315	324							
l L	Land and Land Rights	500	515	530	546	562	579							
	Outdoor Lighting	575	592	610	628	647	666							
. F	Reimbursement to DG Customers	-	26,196	1,895	-	-	-							
2 Total Custon	ner Request/Public Requirement	27,514	56,358	33,067	32,066	33,115	34,076							
Damage Failure														
1 [Damage /Failure	10,940	11,268	11,606	11,954	12,313	12,682							
5 F	Reserves	979	1,008	1,038	1,070	1,102	1,135							
5 F	Failed Assets	1,323	1,737	1,972	-	-	-							
7	Storms	1,950	3,000	3,000	3,000	3,000	3,000							
Total Damag	ge Failure	15,192	17,013	17,616	16,024	16,415	16,817							
Total Non-Disc	cretionary	42,706	73,371	50,683	48,090	49,530	50,893							

Spending		5 Year Investment Plan - Capital Spending						Major Project - Details						
Rationale and Category	d ISR Grouping	FY 2024 Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Major Project - Current Phase	Total Current Sanction	Initial Estimate	Date of Last Sanction	Est. Constr Start	Est. Const End	PY Capital Spending
1 Asset Conditi	<u>ion</u>													
Major														
2 Projects	Dyer Street Substation	-	15	-	-	-	-	Construction	\$21,730	\$14,154	\$44,316	\$44,469	FY 2025	\$21,255
3	Providence LT Study Programs	24,314	28,395	10,580	7,064	-	-	various	various	various	various	various	various	various
4	Southeast Substation	66	-	-	-	-	-	Construction	\$25,440	\$18,600	\$43,646	\$43,769	FY 2025	\$23,650
5 Other	Underground Cable Replacement	5,500	5,500	6,000	6,000	6,000	6,500							
6	URD Cable Replacement	6,276	7,008	7,419	7,731	7,831	7,508							
7	Blanket Projects	5,220	6,177	6,338	6,504	6,676	6,480							
8	I&M	3,000	3,000	3,000	3,000	3,000	3,000							
9	Substation Breakers & Reclosers	437	736	2,060	3,240	-	-							
10	Other Area Study Projects - BSVS	-	1,481	1,556	2,457	2,280	1,156							
11	Other Area Study Projects - CRIE	-	200	1,195	2,015	2,043	1,015							
12	Other Area Study Projects - CRIW	-	1,883	6,317	10,196	3,730	390							
13	Other Area Study Projects - East Bay	-	200	6,233	7,810	2,018	514							
14	Other Area Study Projects - Newport	-	1,166	7,430	14,333	6,058	3,777							
15	Other Area Study Projects - NWRI	-	500	3,007	2,725	1,432	250							
16	Other Area Study Projects - Providence	-	492	5,396	7,407	6,293	9,619							
17	Other Area Study Projects - SCW	-	-	-	-	1,029	2,297							
18	Tiverton Substation	-	75	393	786	786	393							
19	Reserve	-	-	1,000	1,000	1,000	1,000							
20	Batteries / Chargers	230	195	387	319	100	-							
21	Recloser Replacements	1,300	-	-	-	-	-							
22	UG Improvements and Other	1,383	700	565	-	-	-]						
23 Total Asse	et Condition	47,726	57,723	68,876	82,587	50,276	43,900							

														rage 5 or 5
Spending			5 V	ear Investme	ent Plan - Ca	pital Spendin	ng			Major Pro	ject - Deta	ile		
Rationale and	d ISB Customine			car mvestime	int i iaii - Ca	picar speriari	15			Wajor 110	ject - Deta	113		
Category	ISR Grouping	FY 2024 Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Major Project - Current Phase	Total Current Sanction	Initial Estimate	Date of Last Sanction	Est. Constr Start	Est. Const End	PY Capital Spending
1 Non-Infrastru	<u>icture</u>													
2	General Equip & Telecom Blanket	700	712	724	737	750	764							
3	Verizon Copper to Fiber	1,000	1,000	1,000	-	-	-							
4 Total Non-	-Infrastructure	1,700	1,712	1,724	737	750	764							
5 System Capac	city & Performance													
6	Aquidneck Island	1,038	-	-	-	-	-							
7	New Lafayette Substation	750	910	5,886	151	-	-							
8	Warren Substation	1,969	2,800	2,943	747	111	-							
9	Nasonville Substation	1,912	3,674	3,228	489	-	-							
10	East Providence Substation	1,330	6,285	5,009	5,003	-	-							
11	Weaver Hill Road Substation	1,507	1,105	3,054	3,475	2,496	1,229							
12	3V0	1,095	540	-	-	-	-							
13	EMS/RTU	658	135	1,147	2,350	750	-							
14	Overloaded Transformer Replcmts	1,500	1,500	1,500	1,500	1,500	1,500							
15	Blanket Projects	2,490	2,605	2,725	2,851	2,983	3,072							
16	Other Area Study Projects - BSVS	400	680	681	968	-	-							
17	Other Area Study Projects - CRIW	1,371	1,441	1,125	1,125	675	-							
18	Other Area Study Projects - East Bay	-	84	378	378	-	-							
19	Other Area Study Projects - Newport	-	793	976	461	-	-							
20	Other Area Study Projects - NWRI	1,933	-	-	-	-	-							
21	Other Area Study Projects - SCE	-	1,684	6,404	333	-	-							
22	Other Area Study Projects - SCW	364	927	5,107	5,921	3,582	2,153							
23	Tiverton D-Line	109	328	656	656	328	440							
24	Reserve	-	-	1,000	1,000	1,000	1,000							
25	CEMI-4	1,230	5,312	4,547	4,683	4,824	-							
26	ERR	-	4,448	4,581	4,719	4,860	2,251							
27	Distrib Automation Recloser Program	-	7,426	8,909	13,418	14,623	18,368							
28	ADMS/DERMS Advanced	-	-	-	3,159	1,568	-							
29	DER Monitor/Manage	-	-	-	2,288	4,043	-							
30	Electromech RelayUpgrades	-	1,234	603	1,267	2,513	1,263							
31	Fiber Network	-	200	12,980	17,368	17,368	-							
32	VVO - Smart Capacitors and Regulators	-	400	8,439	6,701	6,701	6,701							
33	Mobile Substation	-	1,278	3,834	7,668	-	-							
34	Other projects and programs	541	478	100	100	100	100							
	em Capacity & Performance	20,197	46,267	85,813	88,780	70,026	38,078							
36 Total Discre	tionary	69,623	105,702	156,413	172,104	121,053	82,741							
37 Total Capital	l Spending	112,329	179,073	207,096	220,194	170,583	133,634							

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests

Issued on January 12, 2024

PUC 3-6

Request:

Is the reference to the first quarter on Bates page 18 a reference to the period January through March or April through June?

Response:

The reference to the first quarter on Bates page 18 refers to the period of January through March of 2024.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-7

Request:

The Company is proposing a \$100,000 budget "to trial a program to apply tree growth regulator treatments to specific fast-growing trees to reduce growth." Bates page 215.

- a. Please identify the types of chemicals the Company is considering;
- b. Has the Company taken this approach in any of its other jurisdictions? If so, please explain what measures the Company has taken to coordinate with municipalities and provide any reported results.
- c. What communities is the Company targeting for the "trial"?
- d. Has the Company met with the municipalities and/or their active Tree Wardens to discuss this measure prior to seeking approval from the Commission (both in and out of the targeted communities)? If not, why not?

Response:

- a. Rhode Island Energy will be contracting with the Davey Resource Group to provide this service. The product they will be using is Arborlock 2SC. Davey Tree specifically developed this product, which is registered for use in Rhode Island. Like other tree growth regulator ("TGR") products, Arborlock 2SC's main chemical active ingredient is Paciobutrazol.
- b. Currently, PPL has not taken this approach in any other jurisdictions; however, The Narragansett Electric Company, under National Grid USA ownership, used tree growth regulators in Rhode Island during FY 2017 and FY 2018. Rainbow Tree performed these applications on municipally owned trees in Providence and on Rhode Island Department of Transportation ("RIDOT") properties throughout the state. Specific trees located on the Company's property (substations and grounds) also were treated. In addition, the Company coordinated with the University of Rhode Island, treating six Maple Trees by the Ryan Center. These trees were growing underneath the sub-transmission infrastructure responsible for feeding the campus. Prior to applying these treatments, the Company coordinated with all officials regarding the use of this product on their trees. Officials such as the previous Providence City Forester, Doug Still, William Whalen from RIDOT (Superintendent of Roadside Maintenance), and Sheleen Clarke (Assistant Director of Building and Grounds) have approved the use of this product.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-7, page 2

In 1986, The Narragansett Electric Company also experimented with using TGRs on trees in the Barrington.

- c. The Company is targeting municipally owned trees in Providence, East Providence, Cranston, and Newport. These treatments will coincide with circuits scheduled to be trimmed in these communities.
- d. The Company has had discussions with RIDOT and the City of Newport to seek approval for these treatments. Both have entities have given us the go ahead for next year. The Company has presentations planned for the cities of East Providence and Cranston scheduled soon. The Company has also contacted the new Providence City Forester and will be meeting with them soon to discuss this program.

EX7.202.4

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-8

Request:

With respect to the "New Business – Commercial" under the "Customer Request/Public Requirement" category, please provide the following:

- a. a forecast of actual spending for this category for FY 2024 and provide a schedule identifying each project over \$200,000 that is included in the actual/forecasted spending total for FY 2024.
- b. For each of the projects exceeding \$200,000 please also indicate whether there were any customer contributions to the project cost and identify the amount, if any.
- c. Please provide a schedule showing historical budget-to-actuals spending data from FY 2020 through forecasted spending for FY 2024 relating to this category.

Response:

a. Please see Attachment PUC 3-8 for a list of New Business Commercial projects and their FY 2024 forecasted capital spending.

Projects with forecasted FY 2024 capital spending over \$200,000 are highlighted on Attachment PUC 3-8 and listed below. There were no individual projects in the New Business Commercial Blanket project with forecasted FY 2024 spending over \$200,000.

		<u>F Y 2024</u>
Project #	Project Description	Forecast
COS0011	New Business Commercial Blanket	\$5,900,300
C083046	T Mobile New Service, E Providence	\$330,565
C089206	City of Newport Upgrade	\$353,719
C089214	Christine Apartment, East Providence	\$472,155

- b. Please see columns (d) and (e) on Attachment PUC 3-8 for the New Business Commercial projects exceeding \$200,000 and amount of customer contribution received.
- c. Please see the table below showing historical budget to actuals spending data from FY 2020 through forecasted spending for FY 2024 related to this category.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-8, page 2

ISR Year	Budget	Actual/Forecast
FY 2020	\$7,140,000	\$8,665,612
FY 2021	\$8,405,000	\$7,158,031
FY 2022	\$9,066,000	\$8,330,547
FY 2023	\$8,950,000	\$10,379,162
FY 2024	\$9,093,000	\$9,139,456 *

^{*}Forecasted

Capital Spending - New	Business Commercial (\$'000's)
(a)	(b)

	(a)	(b)	(c)		(d)	(e) Customer
			FY 2024 Forecast		<u>Customer</u> <u>Contribution</u>	Contribution Amount
Line	Project #	Project Description	<u>\$000's</u>		Received?	<u>\$000's</u>
1	C082193	Westminster_NewSvc_ProvidenceRI	\$29			
2	C084159	LinkStllc_NewDev_ProvidenceRI	46			
3	C085349	EM28_ProvidenceRI	0			
4	C087710	AMAZON_JOHNSON	173			
5	C087846	DEXTER_STREET_COMMONS_PAWTUCK	(1)			
6	C087995	EIECTRIC_BOAT_NORTH_KINGSTOWN	35			
7	C088226	16_BROAD_ST_LLC_WESTERLY	2			
8		BRADY_SULLIVAN_PROVIDENCE	6			
9	C088360	50_PLEASANT_ST_PAWTUCKET	13			
10	C088799	49_WESTFIELD_ST_PROVIDENCE	120			
11		New Business Commercial Blanket	5,900		N/A	
12		Reserve for New Business Commercial	976	*		
13	C083046	TMobile_NewSvc_EProvidenceRI	331		Yes	\$449
14		ProvidenceChestnut_New_ProvidenceRI	(50)			
15		TESLA_PROVIDENCE	15			
16		1290_WESTMINSTER_LLC_WEST_WARW	170			
17	C089206	CITY_OF_NEWPORT_UPGRADE	354		Yes	\$96
18	C089214	CHRISTINE_APARTMENT_EAST_PROVID	472		Yes	\$193
19		MATERIAL_S&G_NSMITHFIELD	126			
20		CRANSTON_PUBLIC_SCHOOL	29			
21		137_FRIENDSHIP_ST_PROVIDENCE	4			
22		ELECTRIC_BOAT_CORP_NKINGSTOWN	17			
23		WALMART_STORES_EAST_COVENTRY	0			
24		FANE_TOWER_TEMP_PROVIDENCE	(38)			
25		SAND_TRACE_LLC_SMITHFIELD	(3)			
26		PROV_PRESERVATION_PROVIDENCE	128			
27		244_WEYBOSSET_LLC_PROVIDENCE	77			
28		PENNROSE_PARCEL_PROVIDENCE	161			
29		OMNI_COMBINED_PROVIDENCE	19			
30			5			
31		UNION_STATION_ASSOCIATES_PROVIDE	9			
32	C091865	IGUS_INC_RUMFORD	14	_		
34	Total - Ne	ew Business Commercial	\$9,139	_		

^{*} The Reserve for New Business Commercial budget is a placeholder for unidentified projects that will be above the blanket threshold of \$500,000. Also see response to PUC 3-14.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-9

Request:

Regarding the East Providence Substation project (line item 6 on Bates page 86), please provide a schedule showing annual capital spending from the commencement of the project by identifiable major categories of spending through FY 2024 and provide a schedule forecasting such annual spending for FY 2025 and beyond.

Response:

Please see below for project (Actuals and Forecast) by fiscal year and category as requested. The current substation conceptual estimate was circa 2016 and assumed construction was complete in 2022. An updated conceptual estimate is expected by the end of March 2024; it will be based on the original conceptual estimate, with an updated in-service date (2027 versus 2022), inflation, and bids received on the transformer and metal clad switch gear.

The design deliverables for the transformer and metal clad switch engineering are scheduled to be delivered in July/August 2024. These deliverables will allow the substation design to be completed and construction grade estimate (\pm 10%) developed by the end of FY 2025. Currently, it is estimated that the substation is at \pm 20% design.

Based on the transformer and metal clad switch gear bids, the preliminary information suggests the substation is expected to cost approximately \$16 million, as opposed to the \$8.8 million in the current ISR multi-year forecast. The Company will update the forecast when the updated estimate is available.

Please note a construction grade estimate for the East Providence substation (+/- 10%) is scheduled to be completed by the end of March 2025.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-9, page 2

D-Sub (preliminary conceptual forecast)

East Prov D-Sub	TOTA	ıL.	FY18	3	FY19		FY20		FY21		FY22		FY23		FY24		FY2	5	FY26	5	FY27	
Transformer	\$	2,262,600												The state of the s	\$	452,520	\$		\$		\$	1,810,080
Metal Clad	\$	2,700,000													\$	-	\$	1,350,000	\$	1,350,000	\$	-
Material (Other)	\$	915,000													\$	-	\$	-	\$	500,000	\$	415,000
Eng	\$	705,301			\$	20,491	\$	10,896	\$	13,444	\$	75,232	\$	69,238	\$	166,000	\$	300,000	\$	50,000	\$	-
Construction	\$	4,500,000													\$		\$		\$	1,500,000	\$	3,000,000
PM & Admin	\$	1,538,606	\$	234	\$	107,637	\$	45,142	\$	35,855	\$	65,738	\$	50,990			\$	198,000	\$	408,000	\$	627,010
Overheads	\$	2,462,517	\$	56,378	\$	68,125	\$	38,527	\$	25,259	\$	56,263	\$	35,175	\$	111,334	\$	332,640	\$	685,440	\$	1,053,376
AFUDC	\$	924,555	\$	75	\$	6,546	\$	6,951	\$	21,126	\$	27,163	\$	30,659			\$	133,610	\$	275,318	\$	423,106
TOTAL	\$	16,008,578	\$	56,687	\$	202,799	\$	101,516	\$	95,684	\$	224,396	\$	186,062	\$	729,854	\$	2,314,250	\$	4,768,758	\$	7,328,572
ISR BUDGET	\$	8,793,000													\$	847,000	\$	2,685,000	\$	2,309,000	\$	2,952,000

D-Line (approximately 60% design complete)

East Prov D-Line	TOTA	ıL.	FY18		FY19		FY20		FY21		FY22		FY23	1	FY24		FY25		FY26		FY27	
Work Hours		20000																				
Rate		196.1																				
Total Construction	\$	3,922,000															\$	392,200	\$	1,961,000	\$	1,568,800
Material	\$	2,715,231															\$	2,172,185	\$	543,046	\$	-
Eng	\$	830,426			\$	19,980	\$	243,696	\$ 9	95,512	\$	8,775	\$	137,563	\$	174,900	\$	150,000	\$	-	\$	-
PM & Admin	\$	885,521			\$	9,723	\$	6,519	\$	3,631	\$	12,248	\$	17,944	\$	20,988	\$	325,726	\$	300,486	\$	188,256
Overheads	\$	1,614,963	\$	77,580	\$	6,808	\$	55,103	\$ 3	33,916	\$	12,621	\$	25,369	\$	35,260	\$	547,220	\$	504,816	\$	316,270
AFUDC	\$	621,110	\$	103	\$	974	\$	3,670	\$ 1	11,627	\$	19,583	\$	21,387	\$	14,163	\$	219,800	\$	202,768	\$	127,035
TOTAL FORECAST	\$	10,589,250	\$	77,683	\$	37,485	\$	308,988	\$ 14	44,686	\$	53,227	\$	202,263	\$	245,311	\$	3,807,131	\$	3,512,115	\$	2,200,361
ISR BUDGET	Ś	8.834.000													Ś	483.000	Ś	3.600.000	Ś	2.700.000	Ś	2.051.000

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-10

Request:

Refer to Attachment 3 at Bates page 85 of Book 1, line 21, showing FY 2024 and FY 2025 budgets for the line entitled "Providence Area LT Supply & Distrib Study." Please provide an itemization of each project/program which comprised the original \$21.5 million of capex in the budget for FY 2024 and for each item, along with any new projects that were not within the FY 2024 budget (but now appear in the FY 2025 budget), please provide the information for each project in a format similar to the table below:

Project List and Spending for Projects within "Providence Area LT Supply & Distrib Study"

	Project Name	FY 2024 Budgeted Amount	Forecasted Spend		FY 2025 Budgeted	Forecast of Capex spend from FY 2025 through Project	through Project Completion (including spend	Forecasted ISR Fiscal Year When Completed
	Project Name	Amount	11111 2024	2024	Amount (ii any)	Completion	prior to F1 2023j	Completed
1								
2								
3								
4								
5								
6								
7								
etc.								

Response:

Please see the table below for the requested information.

The Company added two additional columns to the table. The first column was Estimate Type and the second one was Prior to FY24 spend. The information in column title "Total Year to Date CAPEX Spend through FY 2024" is FY24 Year to Date Actuals from April 2023 through Dec. 2023.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 23-48-EL
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Issued on January 12, 2024

PUC 3-10, page 2

Project#	<u>Project Name</u>	Estimate Type	Prior to FY24 Spend	FY 2024 Budgeted	Forecasted Spend in FY 2024	Total Year to Date CAPEX Spend through FY 2024*	FY 2025 Budgeted Amount (if any)	Forecast of CAPEX Spend from FY 2025 through Project Completion	Forecast of Total CAPEX Spend through Project Completion (including Spend prior to FY 2025)	Forecasted ISR Fiscal Year When Completed
C078796	Ph 1B-ProvStudy Admiral St-Rochamb D-Line	Construction	-		237	219	-	-	647	FY24
C078797	Ph 1B-PROVSTUDY ADMIRAL ST-ROCHAMB D-SUB	Construction	1,597	600	1,819	1,835	-	-	3,416	FY24
C078801	Ph 1B-ProvStudy Admiral St Demolition	Conceptual	311	-	64	79	-	-	376	FY25
C078802	Ph 1B-PROVSTUDY OLNEYVILLE 4KV D-LINE	Construction	4,150	720	357	362	-	-	4,507	FY24
C078803	Ph 1B-PROVSTUDY ADMIRAL ST 12KV MH&DUCT	Construction	620	8,037	6,266	5,966	3,540	3,540	10,427	FY25
C078804	Ph 1B-PROVSTUDY ADMIRAL ST 12KV CABLES	Conceptual	222	1,800	1,706	2,437	5,930	7,230	9,158	FY27
CRI3061	Ph 2 - ProvStudy HarrisAve 11kV(1129&1137)	Conceptual		122	-	-	260	1,254	1,254	FY28
C078857	Ph 2-PROVSTUDY HARRIS AVE 4&11KV RETIRE	Conceptual	264	923	338	62	1,288	6,926	7,528	FY28
CRI3055	Ph 2 - ProvStudy Geneva, Olnyvile, Rocham4kV	Conceptual		553	894	6	1,374	15,468	16,362	FY28
C078805	Ph 4-PROVSTUDY KNIGHTSVILLE 4KV CONVERT	Construction	1,390	7,187	8,229	5,945	5,045	6,045	15,664	FY26
C078806	Ph 4-PROVSTUDY KNIGHTSVILLE 4KV D-SUB	Conceptual	529	1,589	607	357	2,945	3,631	4,766	FY26
			9,082	21,530	20,517	17,267	20,382	44,094	\$ 74,103.87	-

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-11

Request:

When was the Blanket project spending level increased from \$100,000 per project to \$500,000?

Response:

The Blanket project spending level increased from \$100,000 per project to \$500,000 during fiscal year 2024 when Rhode Island Energy was reviewing PPL's practices for work order creation. The Company also considered the type of work that typically falls under a blanket and how cost increases could result in values over \$100,000 for this typical work.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-12

Request:

Please provide a schedule identifying every line item within the total FY 2025 ISR budget proposal that is classified as a "blanket," indicating the amount budgeted to the blanket for FY 2025 compared to the amount of actual spending forecasted for each such blanket in FY 2024. Please also separately sum the total budget forecasted spending for all the blankets listed for FY 2024 and the budgeted amounts FY 2025.

Response:

Please see attachment PUC 3-12-1 highlighting blanket project line items in the FY 2025 ISR budget proposal. The FY 2025 proposed capital spending budget amount is shown in column (f) and the FY 2024 forecasted capital spending amount is shown in column (g).

Please see Attachment PUC 3-12-2 for a list of blanket projects, FY 2024 forecasted and budgeted capital spending amounts, and FY 2025 proposed capital spending budget amounts.

Line	(a)	(b)	(c)	(e)	(f) <u>FY 2025</u> <u>Budget</u>	(g) FY 2024 Q2 Forecast
Number	Project #	Project Description	Spending Rationale	Jurisdictional Spotlight	\$000's \$288	\$000's
1 2	COS0022 DG	3rd Party Attachment Blanket Distributed Generation Placeholder	Customer Request / Public Requirer	·	1,000	\$280
3		Land and Land Rights	Customer Request / Public Requirer Customer Request / Public Requirer		515	
4		Meter Purchases (AMR)	Customer Request / Public Requirer		1,681	
5		Meter Blanket	Customer Request / Public Requirer		852	835
6	C046977	Reserve for New Business Commercial	Customer Request / Public Requirer		3,289	633
7	COS0011	New Business Commercial Blanket	Customer Request / Public Requirer		6,077	5,900
8	C046978	Reserve for New Business Residential	Customer Request / Public Requirer		424	3,700
9		New Business Residential Blanket	Customer Request / Public Requirer		7,004	6,800
10		Streetlighting Blanket	Customer Request / Public Requirer		592	575
11	C086669	JO Pole Billing Project - RI	Customer Request / Public Requirer		(1,800)	
12	C046970	Reserve for Public Requirements	Customer Request / Public Requirer		2,816	
13	COS0013	Public Requirements Blanket	Customer Request / Public Requirer	ments Public Requirements	2,124	1,200
14	CN04920	Transformer Purchases	Customer Request / Public Requirer	ments Transformer Purchases	8,000	
15	CRI3010	Hopkins Hill - Damage/Failure	Damage/Failure	Damage/Failure	50	
16	CRIAPDF	Apponaug Transformer Failure	Damage/Failure	Damage/Failure	50	
17	C081110	Westerly Transformer #4 Failure	Damage/Failure	Damage/Failure	-	
18	C091379	Nasonville Substation Rebuild	Damage/Failure	Damage/Failure	1,637	
19		ACNW Vlt 72 Reconstruction, Prov.	Damage/Failure	Damage/Failure	800	
20	COS0002	Damage Failure Blanket - Substation	Damage/Failure	Damage/Failure	659	721
21		Damage/Failure Blanket	Damage/Failure	Damage/Failure	10,609	10,300
22	C022433	Major Storms	Damage/Failure	Major Storms	3,000	
23	C046986	Reserve for Damage Failure	Damage/Failure	Damage/Failure	212	
24	C051608	Reserve for Damage Failure Substation	Damage/Failure	Damage/Failure	796	
25	COS0006	General Equipment Blanket	Non-Infrastructure	Blanket	412	400
26	C040644	Telecom Small Capital Work	Non-Infrastructure	Other	300	
27	C086391	Verizon Copper to Fiber Conversions	Non-Infrastructure	Other	180	
28	CRI3033	Apponaug Substation(D-Sub)	Asset Condition	Other Area Study Projects - CRIE	150	
29	CRI3034	Apponaug Substation (D-Line)	Asset Condition	Other Area Study Projects - CRIE	50	
30	C051205	Dyer St Substation	Asset Condition	Separately Tracked Major Projects	-	
31 32	C051211	Dyer St Substation D-Line	Asset Condition	Other Projects	15	
	C078735	Ph 1B - NEW ADMIRAL ST 12KV D-SUB	Asset Condition	Separately Tracked Major Projects	5,513	
33 34	C078803	Ph 1B - ADMIRAL ST 12KV MH&DUCT	Asset Condition Asset Condition	Other Area Studies - Prov Other Area Studies - Prov	3,540	
35	C078804 CRI3061	Ph 1B - ADMIRAL ST 12KV CABLES Ph 2 - HarrisAve 11kV(1129&1137)	Asset Condition	Other Area Studies - Prov	5,930 260	
36	CRI3001 CRI3055	Ph 2 - Geneva,Olnyvile,Rocham4kV	Asset Condition	Other Area Studies - Prov	1,374	
37	C078857	Ph 2 - HARRIS AVE 4&11KV RETIRE	Asset Condition	Other Area Studies - Prov	1,288	
38	C078805	Ph 4 - KNIGHTSVILLE 4KV CONVERT	Asset Condition	Other Area Studies - Prov	5,045	
39	C078806	Ph 4 - KNIGHTSVILLE 4KV D-SUB	Asset Condition	Other Area Studies - Prov	2,945	
40	C053657	SOUTHEAST SUBSTATION (D-SUB)	Asset Condition	Separately Tracked Major Projects	2,743	
41	C053658	SOUTHEAST SUBSTATION (D-LINE)	Asset Condition	Other	_	
42	C055683	PAWTUCKET NO 1 (D-SUB)	Asset Condition	Separately Tracked Major Projects	_	
43	CRI3003	Tiverton Sub (D-Sub)	Asset Condition	Other Area Studies - Tiverton	75	
44	C032019	Batteries/Chargers Replacement	Asset Condition	Battery Repl Program	195	
45	C026281	I&M	Asset Condition	I&M	1,530	
46	COS0017	Asset Replacement Blanket	Asset Condition	Blanket	5,847	4,900
47	COS0026	Substation Asset Repl Blanket	Asset Condition	Blanket	330	320
48	C047829	IRURD HIGH HAWK	Asset Condition	URD Program	1,500	
49	C049291	IRURD WOOD ESTATES PHASE 2	Asset Condition	URD Program	675	
50	C049356	IRURD SILVER MAPLE PHASE 2	Asset Condition	URD Program	467	
51	C050070	IRURD PLACEHOLDER	Asset Condition	URD Program	878	
52	C057882	IRURD CHATEAU APTS URD REHAB	Asset Condition	URD Program	171	
53	C057903	IRURD WESTERN HILLS VILLAGE URD	Asset Condition	URD Program	156	
54	C057906	IRURD WOODVALE ESTATES URD	Asset Condition	URD Program	156	
55	C057921	IRURD-ROBIN HILLS ESTATES	Asset Condition	URD Program	208	
56	C058045	IRURD-TOCKWOTTON FARM ROAD	Asset Condition	URD Program	156	
57		CLX Cable Replacement	Asset Condition	URD Program	633	
58		Spare Transformer	Asset Condition	Substation Spares	540	
59		Spare Regulators	Asset Condition	Substation Spares	96	
60 61	C055343	Spare Bushings	Asset Condition	Substation Spares UG Cable Replacement	100	
62		UG Cable Replacement Placeholder	Asset Condition	·	5,500	
63		Crossman St #111 Sub (D-Line) Central Falls #104 Sub (D-Line)	Asset Condition Asset Condition	Other Area Study Projects - BSVS Other Area Study Projects - BSVS	350 231	
64		Valley #102 & Farnum #105 Sub D-Line	Asset Condition Asset Condition	Other Area Study Projects - BSVS Other Area Study Projects - BSVS	200	
65	CRI3037	Division St. 61F2 Reconductoring D Line	Asset Condition	Other Area Study Projects - BSVS Other Area Study Projects - CRIW	240	
66	CRI3037 CRI3042	Hopkins Hill 63F6 Feeder Tie D Line	Asset Condition	Other Area Study Projects - CRIW Other Area Study Projects - CRIW	184	
67	CRI3042 CRI3017	Div St#61 T1 T2 Replacement	Asset Condition	Other Area Study Projects - CRIW	500	
68	CRI3017 CRI3019	Anthony #64 Equipment Replacement	Asset Condition	Other Area Study Projects - CRIW	350	
69	CRI3019 CRI3022	Natick #29 Equipment Replacement	Asset Condition	Other Area Study Projects - CRIW	50	
70	CRI3022 CRI3020	Warwick Mall #28 Equipment Replacement	Asset Condition	Other Area Study Projects - CRIW	150	
71	CRI3020 CRI3018	Coventry #54 Sub Relocation	Asset Condition	Other Area Study Projects - CRIW	200	
72	CRI3021	Hope #15 Equipment Replacement	Asset Condition	Other Area Study Projects - CRIW	209	
73	CRI3072	Dexter #36 Equipment Replacement	Asset Condition	Other Area Study Projects - Newport		
74		Gate II Equipment Replacement	Asset Condition	Other Area Study Projects - Newport		
75	CRI3073	Hospital #146 Equipment Replacement	Asset Condition	Other Area Study Projects - Newport	320	

T	(a)	(b)	(c)	(e)	(f) FY 2025 Budget	(g) FY 2024 Q2 Forecast
<u>Line</u> Number	Project #	Project Description	Spending Rationale	Jurisdictional Spotlight	\$000's	\$000's
76		Kingston #131 Equipment Replacement	Asset Condition	Other Area Study Projects - Newport	400	φοσο 3
77		Eldred 45J3 Reconfiguration	Asset Condition	Other Area Study Projects - Newport	53	
78		_	Asset Condition		170	
78 79		Dexter 36W44 Asset Replacement		Other Area Study Projects - Newport		
	CRI3029	Phillipsdale D-Sub	Asset Condition	Separately Tracked Major Projects	100	
80	CRI3030	Phillipsdale D-Line	Asset Condition	Other Area Study Projects - East Bay	100	
81	CRI3031	Centredale #50 Sub (D-Sub)	Asset Condition	Other Area Study Projects - NWRI	350	
82	CRI3032	Centredale #50 Sub (D-Line)	Asset Condition	Other Area Study Projects - NWRI	150	
83		Auburn Substation 4kV conversions common	Asset Condition	Other Area Study Projects - Providence	100	
84	PROV002	Auburn Substation 4kV conversions (115kV op	Asset Condition	Other Area Study Projects - Providence	100	
85	PROV003	Elmwood 7F4 Rebuild Common	Asset Condition	Other Area Study Projects - Providence	152	
86	PROV004	Pontiac 27F2 Rebuild Common	Asset Condition	Other Area Study Projects - Providence	136	
87	PROV005	Lincoln Ave 72F6 Load Break	Asset Condition	Other Area Study Projects - Providence	4	
88	C089195	ACNW Vault Vent Blower Replacement	Asset Condition	Other	700	
89	C046726	East Providence Substation D-Sub	System Capacity & Performance	East Providence Substation	2,685	
90	C046727	East Providence Substation D-Line	System Capacity & Performance	East Providence Substation	3,600	
91		New Lafayette 115/12KV D-Sub	System Capacity & Performance	New Lafayette Substation	160	
92		New Lafayette 115/12KV D-Line	System Capacity & Performance	New Lafayette Substation	750	
93		Staples #112 Reliability 112W43	System Capacity & Performance	Other Area Study Projects - BSVS	340	
94		Staples #112 Reliability 112W44	System Capacity & Performance	Other Area Study Projects - BSVS	340	
95	C065166	*		Warren Substation	1,050	
96		Warren Substation Expansion D-Sub	System Capacity & Performance			
	C065187	Warren Substation Expansion D-Line	System Capacity & Performance	Warren Substation	750	
97	CRI3023	Weaver Hill Rd DSub	System Capacity & Performance	Weaver Hill Rd Substation	855	
98	CRI3052	Weaver Hill Rd. SubT Extension	System Capacity & Performance	Weaver Hill Rd Substation	150	
99	CRI3025	Weaver Hill Rd Feeder DLine	System Capacity & Performance	Weaver Hill Rd Substation	100	
100		Nasonville #127 Sub (D-Sub)	System Capacity & Performance	Nasonville Substation	3,566	
101	CRI3028	Nasonville #127 Sub (D-Line)	System Capacity & Performance	Nasonville Substation	108	
102	CRI3004	Tiverton D-Line	System Capacity & Performance	Other Area Study Projects - Tiverton	328	
103	C088864	Clarkson St 3V0	System Capacity & Performance	3V0	186	
104	COS0015	Reliability Blanket	System Capacity & Performance	Blanket	2,100	2,795
105		Load Relief Blanket	System Capacity & Performance	Blanket	247	824
106		Substation LR/Reliability Blanket	System Capacity & Performance	Blanket	258	250
107		EMS - Wampanoag	System Capacity & Performance	EMS	75	
108		EMS - W. Greenville	System Capacity & Performance	EMS	60	
109		Smart Capacitors & Regulators	System Capacity & Performance	VVO	400	
110		Coventry 54F1 Reconductoring			900	
111			System Capacity & Performance	Other Area Study Projects - CRIW	333	
		2232 Panto Rd. ERR	System Capacity & Performance	Other Area Study Projects - CRIW		
112		2232 Industrial Dr. ERR	System Capacity & Performance	Other Area Study Projects - CRIW	208	
113		Bristol D Line	System Capacity & Performance	Other Area Study Projects - East Bay	59	
114		Bristol D-Sub	System Capacity & Performance	Other Area Study Projects - East Bay	25	
115	NWPT007	Newport 203WS D Line	System Capacity & Performance	Other Area Study Projects - Newport	64	
116	NWPT009	Jamestown Capacitor Bank	System Capacity & Performance	Other Area Study Projects - Newport	100	
117		Eldred 45J4 D Line	System Capacity & Performance	Other Area Study Projects - Newport	65	
118	NWPT015	37K22 and 37K33 Reconfiguration	System Capacity & Performance	Other Area Study Projects - Newport	235	
119	NWPT016	65J2 Feeder Upgrade D-Line	System Capacity & Performance	Other Area Study Projects - Newport	329	
120	SCE001	Lafayette 30F2 Feeder Tie	System Capacity & Performance	Other Area Study Projects - SCE	285	
121	SCE002	Wakefield 17F2 Feeder Upgrade D-Line	System Capacity & Performance	Other Area Study Projects - SCE	286	
122	SCE003	Wakefield 17F2 Feeder Upgrade D-Sub	System Capacity & Performance	Other Area Study Projects - SCE	166	
123	SCE004	Wakefield 17F3 Feeder Relief	System Capacity & Performance	Other Area Study Projects - SCE	130	
124	SCE005	Peacedale 59F3 Feeder Relief	System Capacity & Performance	Other Area Study Projects - SCE	456	
125	SCE005	Lafayette 30F2 Feeder Upgrade	System Capacity & Performance	Other Area Study Projects - SCE	361	
126		Kenyon Common Items	System Capacity & Performance	Other Area Study Projects - SCE	195	
126		Kenyon Common Items Kenyon 68FS Extension		• •	532	
	CRI3043	•	System Capacity & Performance	Other Area Study Projects - SCW		
128		Chase Hill Common Items	System Capacity & Performance	Other Area Study Projects - SCW	200	
129		CEMI 4 Program	System Capacity & Performance	CEMI	2,619	
130		ERR Program	System Capacity & Performance	ERR	2,000	
131	CRIFIBN	Fiber Network	System Capacity & Performance	Fiber Network	200	
132	CRIDARP	Distrib Automation Recloser Program	System Capacity & Performance	DARP	5,957	
133	CRIEMRR	Electromechanical Relay Replacement Program	System Capacity & Performance	Electromech Rlay Rplcmt	1,234	
134	C005505	Transformer Upgrades	System Capacity & Performance	Other	1,500	
135		PS&I Activity	System Capacity & Performance	Other	100	
136		Lafayette 30F4 - Narrow Ln 3-Phase	System Capacity & Performance	Other	378	
137		Mobile Substation	System Capacity & Performance	Mobile Substation	1,278	
138		Spending excluding AMF	System Cupacity & Ferromanice		140,915	36,102
139	-	Meter Costs	Advanced Metering Europionality		28,655	50,102
			Advanced Metering Functionality			
140		Network Costs	Advanced Metering Functionality		4,935	
141		System Costs	Advanced Metering Functionality		14,356	
142		Program Costs	Advanced Metering Functionality	_	3,779	44
143	Total Capital	Spending including AMF		=	\$192,640	\$36,102

	(a)	(b)	(c)	(d)	(e)
			FY 2024		
			Forecast		
			(FY 2024 Q2	FY 2024	FY 2025
			Report)	Budget	Budget
Line	Project #	Project Description	<u>\$000's</u>	<u>\$000's</u>	<u>\$000's</u>
1	COS0002	Damage Failure Blanket - Substation	\$721	\$640	\$659
2	COS0004	Meter Blanket	835	835	852
3	COS0006	General Equipment Blanket	400	400	412
4	COS0010	New Business Residential Blanket	6,800	6,800	7,004
5	COS0011	New Business Commercial Blanket	5,900	5,900	6,077
6	COS0012	Streetlighting Blanket	575	575	592
7	COS0013	Public Requirements Blanket	1,200	1,200	2,124
8	COS0014	Damage/Failure Blanket	10,300	10,300	10,609
9	COS0015	Reliability Blanket	2,795	2,000	2,100
10	COS0016	Load Relief Blanket	824	240	247
11	COS0017	Asset Replacement Blanket	4,900	4,900	5,847
12	COS0022	3rd Party Attachment Blanket	280	280	288
13	COS0025	Substation LR/Reliability Blanket	250	250	258
14	COS0026	Substation Asset Repl Blanket	320	320	330
15	Total Capit	al Spending - Blanket Projects	\$36,102	\$34,640	\$37,399

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-13

Request:

With respect to "Blanket Projects" within the Asset Condition category, on Bates page 68, the filing states, in part: "The amount of funding in the blanket project is reviewed and approved each year based on historical trends in the volume of work required, input from local Operations, and forecasted impact of inflation on material and labor rates. The individual work requests have a value of less than \$500,000."

- a. Please provide a schedule showing how the proposed budget amount of \$6,177,000 was determined and calculated.
- b. Please provide a forecast of actual spending through the end of FY 2024, as compared to the budget of \$5,220,000. Please identify each "individual work request" in FY 2024 which was greater than \$200,000 that was funded through this Blanket Project category.
- c. Please provide a schedule showing historical budget-to-actuals spending data from FY 2020 through forecasted spending for FY 2024 relating to Blanket Projects under the Asset Condition category.

Response:

a. Please see the schedule below showing how the proposed budget amount of \$6,177,000 was calculated.

	Asset Replmnt Blanket	Substation Asset Replmnt Blanket in \$000's	Total Asset Replmnt Blankets
FY 2024 Budget	in \$000's \$4,900	\$320	in \$000's \$5,220
Increase for inflation of 3%	147	10	157
Replacement of secondary cable sections that have seen severe fault current resulting from a cable fault	<u>800</u>	==	<u>800</u>
FY 2025 Budget	<u>\$5,847</u>	<u>\$330</u>	<u>\$6,177</u>

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-13, page 2

b. Please see the schedule below showing the FY 2024 forecasted capital spending for the Asset Replacement Blanket projects.

	Asset Replmnt Blanket in \$000's	Substation Asset Replmnt Blanket in \$000's	Total Asset Replmnt Blanket in \$000's
FY 2024 Forecast	<u>\$4,900</u>	<u>\$320</u>	<u>\$5,220</u>

The one individual Asset Replacement Blanket project work request that was greater than \$200,000 is shown below.

Work Request #	Work Request Description	Amount
10030795257	UG FAULT, 5/27/23, MH 965	\$324,243

c. Please see the table below showing historical budget to actuals spending data from FY 2020 through forecasted spending for FY 2024 related to this category.

	_	cement Blanket OS0017)		et Replacement COS0026)
ISR Year	Budget	Actual/Forecast	Budget	Actual/Forecast
FY 2020	\$3,200,000	\$3,315,634	\$215,000	\$182,135
FY 2021	\$3,300,000	\$4,384,995	\$180,000	\$365,797
FY 2022	\$3,399,000	\$4,118,562	\$193,000	\$ 50,145
FY 2023	\$4,850,000	\$5,260,678	\$310,000	\$122,106
FY 2024	\$4,900,000	\$4,899,535*	\$320,000	\$320,476*

^{*}Forecasted

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-14

Request:

Please describe the purpose and types of spending which are covered by the "Reserve for New Business Commercial Blanket" (Attachment 2, Bates page 80) and distinguish this line item from "New Business Commercial Blanket."

Response:

The Reserve for New Business Commercial (Line 6 on Bates page 80) is budgeted for projects that will be above the blanket threshold. New Business Commercial Blanket (Line 7 on Bates page 80) is budgeted for projects that will be below the blanket threshold for spend.

The categories of work performed under the blanket and reserve include new services, line extensions to serve new customer, conversion to serve new customer or substantial new load, addition of one or two new phases to serve new three phase load, riser & riser poles for new underground service and increase size of service due to added load.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-15

Request:

Referencing Bates page 96, please explain the reason for the CY 2022 increase in Intentional events over the prior two years.

Response:

The Intentional category includes any outages due to maintenance, 911 response, emergency repair work and load shedding.

The Customer Interrupted increase in "Intentional" events in CY2022 is mainly due to an increase in the number of customers affected by emergency repairs.

Emergency repair means the crew responded to an event (outage, or non-outage) and had to deenergize customers to safely make the repair. This could be caused by motor vehicle accidents, parted phases, failed equipment, etc. The safety of employees and the public is of paramount importance. The Company recognizes that any outages can be an inconvenience for customers and, therefore, endeavors to do work on energized lines where possible and only de-energizes lines for emergency repair work if the Company determines it is is not possible to perform the work safely while the equipment is energized.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests

Issued on January 12, 2024

PUC 3-16

Request:

Referencing Bates page 92 of Book 1, Attachment 4, Chart 4, please update the table to add what TMED was.

Response:

Please see the table below, which updates the table on Bates page 92 of Book 1, Attachment 4, Chart 4 to add TMED values from CY2013 to CY2022:

	CY13	CY14	CY15	CY16	CY17	CY18	CY19	CY20	CY21	CY22
SAIFI - Target 1.05	0.72	0.78	0.94	0.97	0.78	1.00	1.02	0.95	0.95	0.87
# of Major Event Days	3	0	1	4	4	6	6	6	4	1
Total Customers Interrupted on major event days	268,925	7,287	141,046	114,772	203,211	282,481	177,296	352,939	240,195	45,070
,	,	,	,	,	,	,	,	,	,	,
Tmed	5.74	5.64	5.48	5.26	4.58	4.49	5.05	6.03	6.67	6.88

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-17

Request:

Please provide the preliminary 2023 SAIDI and SAIFI data when available (if not available for the response deadline to these data requests, please provide the date when the information will be available).

Response:

The preliminary Regulatory 2023 SAIDI and SAIFI data for Rhode Island Energy, excluding major storm days, are:

SAIFI: 0.771

SAIDI: 53.07

This is based on the best data currently available.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-18

Request:

Please provide 2022 SAIDI and SAIFI maps similar to those provided in Docket No. 22-53-EL (RR-15).

Response:

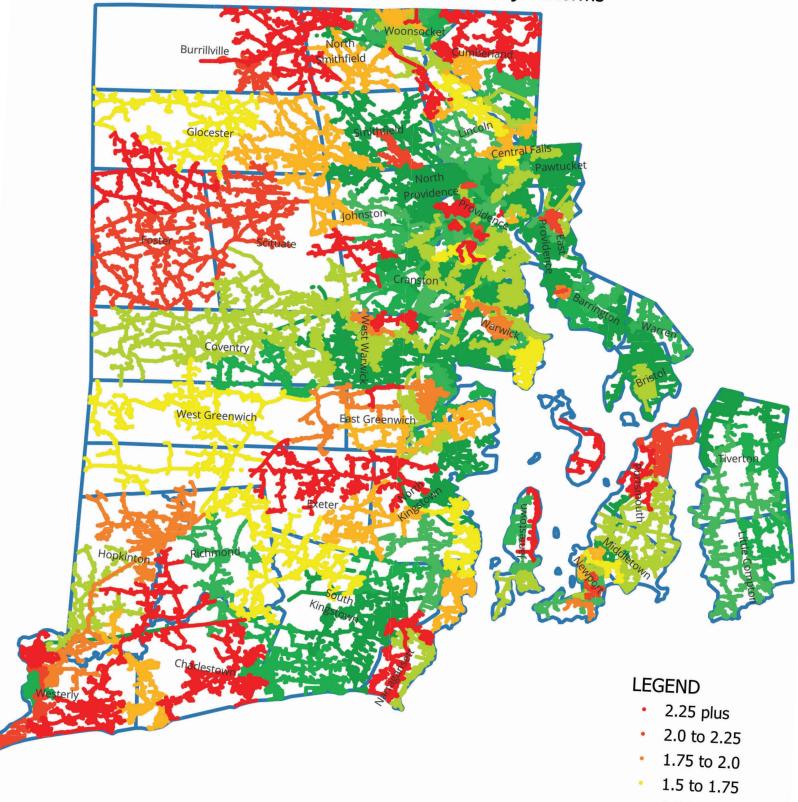
Please see:

- Attachment PUC 3-18-1 for a map of 2022 SAIFI by Feeder without Major Storms;
- Attachment PUC 3-18-2 for a map of 2022 SAIDI by Feeder without Major Storms;
- Attachment PUC 3-18-3 for a map of 2022 SAIFI by Feeder with Major Storms; and
- Attachment PUC 3-18-4 for a map of 2022 SAIDI by Feeder with Major Storms.
 - ➤ To allow for easier identification between SAIDI ranges, the Attachment PUC 3-18-4 map uses different color codes as compared to Attachment RR 15-4 in Docket No. 22-53-EL.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

Attachment PUC 3-18-1

Narragansett Electric 2022 SAIFI - By Feeder - Without Major Storms



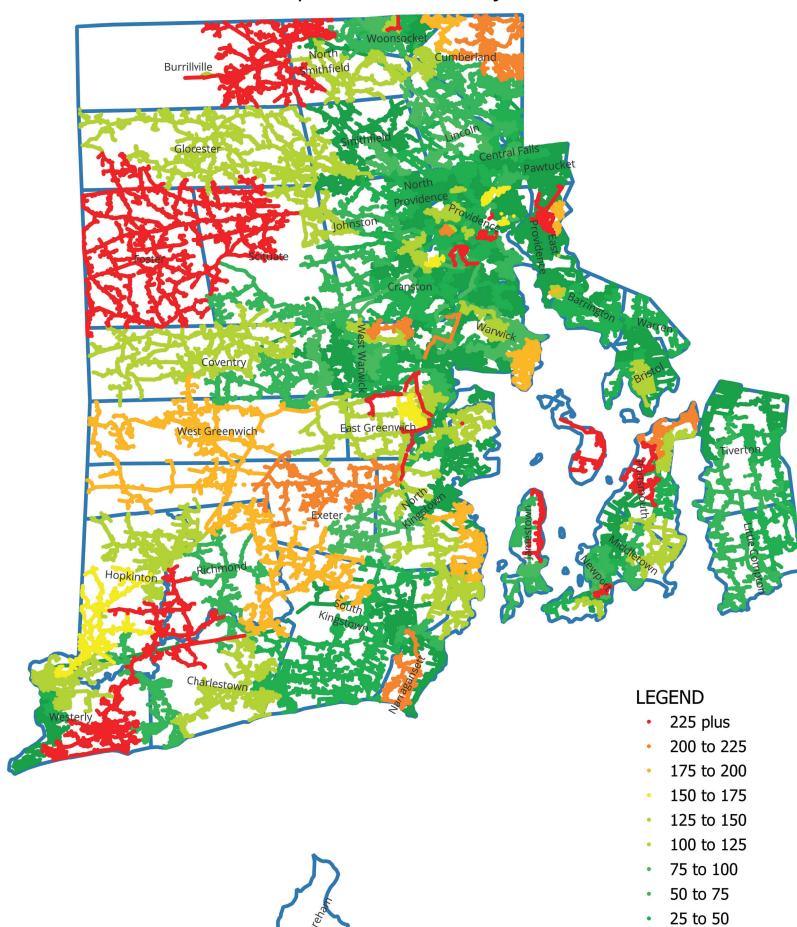


- 1.25 to 1.5
- 1.0 to 1.25
- 0.75 to 1.0
- 0.5 to 0.75
- 0.25 to 0.5
- 0 to 0.25

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

Attachment PUC 3-18-2

Narragansett Electric 2022 SAIDI - By Feeder - Without Major Storms

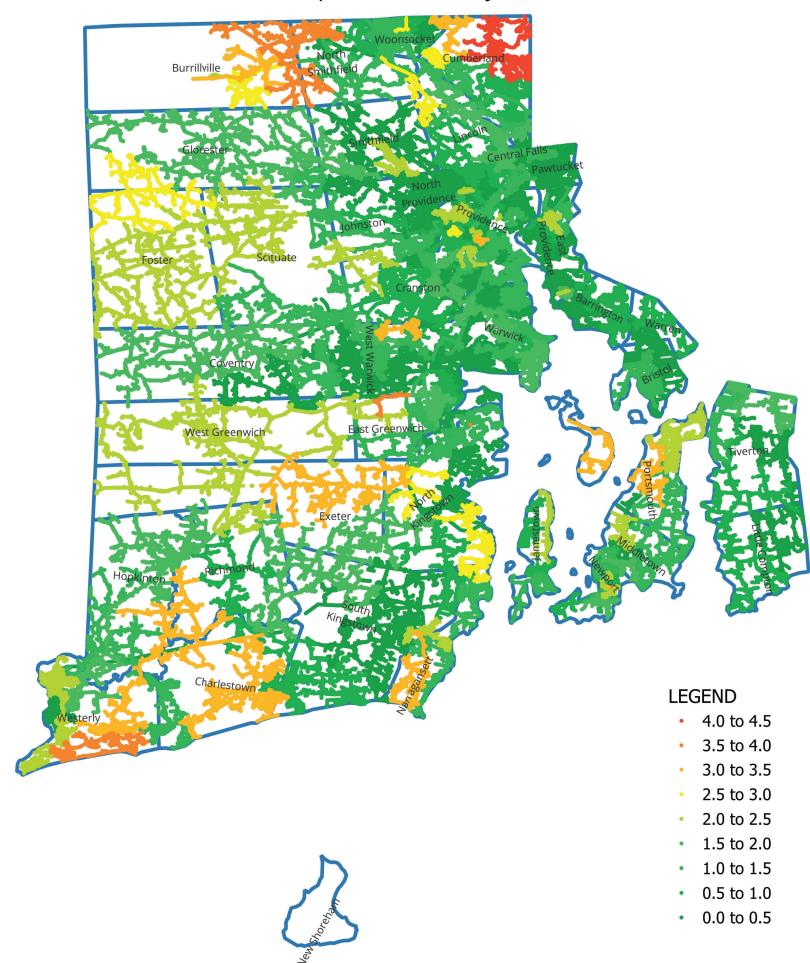


0 to 25

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

Attachment PUC 3-18-3

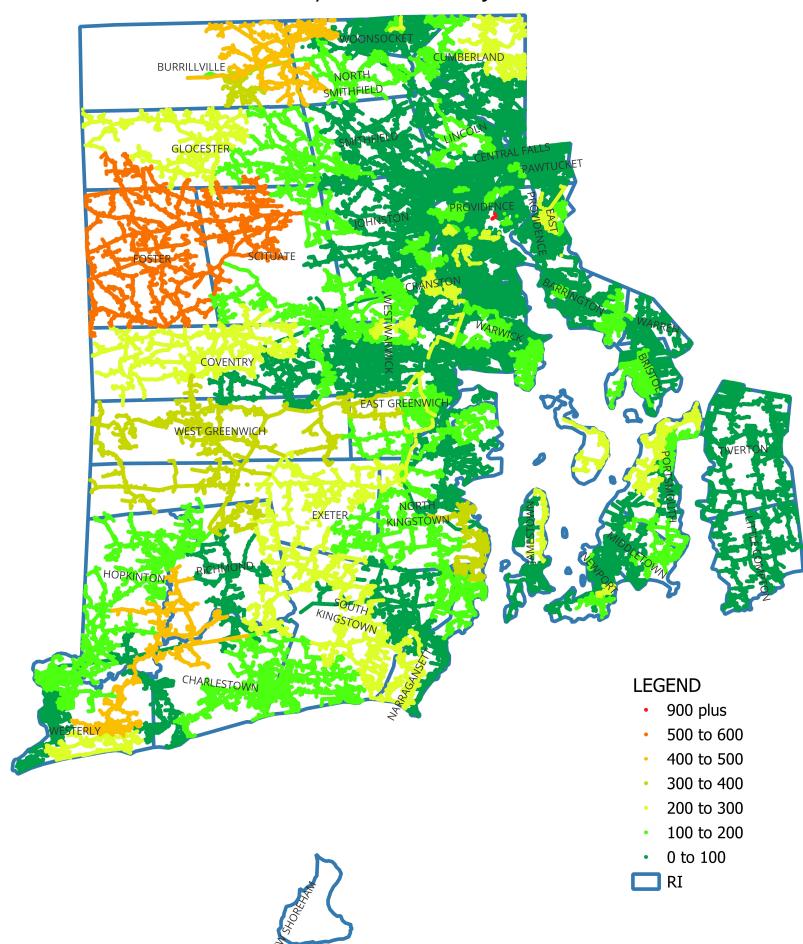
Narragansett Electric 2022 SAIFI - By Feeder - With Major Storms



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Attachment PUC 3-18-4

Narragansett Electric 2022 SAIDI - By Feeder - With Major Storms



In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-19

Request:

For each program or project for which the Company relied on the DOE ICE Calculator, please provide a description of all assumptions made behind the inputs to the ICE calculator and the foundation of the assumptions.

Response:

An assumption summary is provided below by variable.

Inflation

An inflation value of 2 percent was used for initial program development. A value of 2.1% was used for Docket 4600 analysis. Two percent was used initially because it is the DOE ICE Calculator default value. In parallel to ISR related efforts, there was an effort to update non-wires alternative economic inputs, which determined the final 2.1 percent value. The non-wires alternative modeling updates coincided with the Docket 4600 work, and so the new inflation number was used. Rhode Island Energy considers the change inconsequential. Also see the Company's responses to DIV 3-27 and DIV 4-32.

Discount Rate

A discount rate of 6 percent was used for initial program development. A value of 6.97% was used for Docket 4600 analysis. Six percent was used initially because it is the DOE ICE Calculator default value. In parallel to ISR related efforts, there was an effort to update non-wires alternative economic inputs, which determined the final 6.97 percent value%. The non-wires alternative modeling updates coincided with the Docket 4600 work, and so the new discount rate was used. Although a nearly 1 percent difference in the discount rate can be impactful, Rhode Island Energy reviewed the relevant benefit cost analysis and the ratio remained above 1. Also see the Company's responses to DIV 3-27 and DIV 4-32.

Customer Count

Customer counts were sized to the specific reliability program with residential, small commercial & industrial, and large commercial & industrial breakdowns based on system percentages.

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PUC 3-19, page 2

	System %	Distribution	Distribution	Engineering	CEMI-4
		Automation	Automation	Reliability	Program
		Recloser	Recloser	Reviews –	
		Program	Program –	FY25	
			FY25		
Total		465483	80962	27981	45000
Residential	87.3%	406376	70681	24428	45000
Small C&I	12.4%	57520	10005	3458	0
Large C&I	0.3%	1587	276	95	0

The DOE ICE Calculator method used for the CEMI-4 program allocated all customers to the residential category due to the expectation that the majority of the work would be in rural areas. Also see the Company's response to DIV 4-33.

Reliability Improvement

- Distribution Automation Recloser Program
 - 25% improvement in frequency and duration per consultation with subject matter experts
 - o System frequency improvement from 0.671 to 0.503
 - O System duration improvement from 42.9 to 32.2
 - o Attachment DIV 4-43-2, Alt Savings tab, Case 1 explains how the frequency reduction associated with a 25% case is derived.
 - Also see Book 1 of the FY 2025 ISR Filing, Bates pages 164 to 165 and Attachment DIV 4-34-1.
- Engineering Reliability Reviews (ERRs)
 - o Subset frequency improvement from 1.748 to 1.311.
 - o Subset duration improvement from 141.2 to 105.9.
 - Attachment DIV 7-7-1, Reliability Details tab shows how the reliability improvement was derived for the ERRs.
- CEMI-4
 - o Frequency improvement from 4 to 1.
 - Outage duration = 240 minutes
 - The Company's response to DIV 3-24 contains the justification. Also see the Company's response to DIV 3-28.
 - o Also see Book 1 of the FY 2025 ISR Filing, Bates pages 182 to 183.

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PUC 3-20

Request:

Is the Distribution Automation Recloser Program the new name of the mainline recloser program? If not, are both included in the FY 2025 budget and what is the difference?

Response:

The Distribution Automation Recloser Program is not the new name of the Mainline Recloser Program; it is a new program that the Company is proposing in the FY 2025 ISR budget. The Mainline Recloser Program is not in the FY 2025 ISR budget as a separate line item. Although the Distribution Automation Recloser Program is similar to the Mainline Recloser Program in that it proposes to install reclosers in automated schemes, there are significant and meaningful differences in prioritization that address some of the concerns raised previously with the Mainline Recloser Program.

First, the Mainline Recloser Program had specific mainline outage analysis that appeared to cause confusion when compared to system and circuit reliability metrics. The Distribution Automation Recloser Program creates clear links to circuit and system reliability metrics, which drives the prioritization. Second, the Distribution Automation Recloser Program proposes a staggered deployment approach to the Mainline Recloser Program and Grid Modernization Recloser Investments with opportunities for further review year to year in response to overall sensitivity to ISR affordability. Although the Company remains focused on driving reliability performance, the Distribution Automation Recloser Program is intended to be a clearer and more scalable program that addresses concerns raised by the Division of Public Utilities and Carriers and the Public Utilities Commission during the FY 2024 ISR proceeding regarding the Mainline Recloser Program.

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PUC 3-21

Request:

The Company uses the following acronyms in its filing. What is a CMR (Book 1, Bates page 194)? Referencing Division 3-23, is it a line recloser and if not, please explain how a CMR is different.

Response:

A CMR is a cutout mounted recloser. A cutout mounted recloser is a single phase vacuum fault interrupter that is hung in cutout brackets. CMRs are factory programmed with standard fuse curves and will operate twice to clear a fault before dropping open. The Company typically installs these on single-phase radial tap locations where temporary faults, such as a limb brushing the primary or a lightning event, have occurred.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-22

Request:

Please provide a schedule identifying every line item within the total FY 2025 ISR budget proposal which includes an estimate for the installation of reclosers as a component of such line item. For each line item, please provide an estimate of the total cost of the reclosers included in the line item. Please also sum the total of all the recloser costs reflected in the schedule.

Response:

The attached schedule below identified the recloser components for the CEMI-4, Engineering Reliability Review, and Distribution Automation Recloser Programs.

There are new business efforts and major projects spanning multiple years that may also have reclosers as a regular course of business. For example, as the First Street (East Providence) Substation is installed and the new feeders are established, new reclosers will be installed to establish the new feeders. The specific year these new reclosers are installed will span the years of the overall project execution and these major projects are not included in the schedule.

Item	FY25	Estimated	Estimated
	Capex \$k	Recloser	Recloser Cost
		Count	\$k
CEMI-4	\$2,619	11	\$898
ERR	\$2,000	4	\$326
Distrib. Automation Recloser Program	\$5,957	73	\$5,957
Total	\$10,576	88	\$7,181

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-23

Request:

What is the primary goal of the Distribution Automation Recloser Program?

Response:

The fundamental purpose of the Distribution Automation Recloser Program is to drive performance to meet the growing reliability expectations of customers in a cost-effective manner. This aligns with the Company's goals, which are to meet both state regulatory targets and be in the first quartile for reliability performance both nationally and regionally.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-24

Request:

What is the primary goal of the Engineering Reliability Review?

Response:

The goal of the Engineering Reliability Review program is to reduce the impact, duration, and frequency of outages on historically poor performing circuits. The review looks closely at the location of outages, their cause, and develops low- to moderate-cost system improvements.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-25

Request:

What is the primary goal of CEMI-4?

Response:

The primary goal of the CEMI-4 program is to develop and implement a 5-year program that funds, identifies, and fixes reliability issues for customers who are experiencing significantly poorer service than system or circuit averages.

From 2019 through 2021 the average Rhode Island Energy customer experienced 0.98 regulatory reported interruptions and 1.49 interruptions when major storm events are included. However, 11.46 % of the roughly 500,000 customers served experienced 4 or more events per year over the same period.

System and circuit based reliability matrices such as SAIFI, SAIDI, CKAIFI, and CKAIDI are commonly used by utility companies and regulators for system planning, benchmarking, and performance-based rate making. While effective in describing overall system and individual circuit performance, using system averages exclusively can drive planning and investment decisions to parts of the system that have the highest customer densities. This can lead to uneven reliability performance in areas that do not have the customer counts to statistically influence system averages. As a result, reliability performance experienced by some customers can degrade to a point that is several times worse than the average customer.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-26

Request:

What is the primary difference between the Engineering Reliability Review and CEMI-4 programs?

Response:

As stated in the Company's response to Division 4-8, issued on November 3, 2023, the primary differences between the CEMI-4 and the Engineering Reliability Review ("ERR") programs are how poor performance is defined and which parts of the circuit are improved.

CEMI-4 is a reliability based customer satisfaction program designed to improve reliability for Rhode Island Energy's customers experiencing significantly more interruptions than the average customer. Program solutions start at the customer's address and work back to the circuit's source. This enables work to be prescribed on sections of the circuit that have lower customer counts and, therefore, little statistical influence on the circuit's overall reliability performance.

As stated in Attachment 8 of the Proposed FY 2025 ISR Program, the primary goal of the ERR program is to reduce the frequency and duration statistics of poor preforming distribution circuits as measured by CKAIFI and CKAIDI. Outage trend data (noted by multiple operations at the same protective device) and high impact outages (on sections of the circuit with a high percentage of customers) are the focal point for capital improvements.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-27

Request:

How are costs allocated between solutions identified in the Engineering Reliability Review and CEMI-4 budgets?

Response:

Cost allocations are applied to circuits associated with each program. That is, solutions identified on CEMI circuits are charged to the CEMI funding number. Solutions identified on circuits assigned to Engineering Reliability Review ("ERR") are charged to the ERR account number.

Rhode Island Energy recognizes that CEMI reviews were done on some circuits identified in the ERR program in FY 2024. This occurrence was an exception that should not recur. The duplication was the result of two colliding conditions as described further below.

First, the ERR program was funded from the reliability blanket. ERR projects compete with other projects within the blanket's budget. Because the cost of the work in queue is typically greater than the yearly budget, the Company must make choices as to which projects are moved forward and which are delayed.

FY 2024 was also the first year the CEMI program was included in the ISR filing. When evaluating program circuit selection criteria (described in section 4.1, Attachment 7, of the proposed FY 2025 ISR filing) Rhode Island Energy found the overlapping circuits within the informally funded ERR program. Where scope that was identified from the ERR investigations provided reliability benefits for customers targeted under the CEMI program, the scope was included and funded by the CEMI program. The remaining scope from the ERR investigations was funded under the reliability blanket.

Now that the ERR is a specific program, circuit selections between the two programs will not overlap, and there will be no need to allocate costs for solutions between the two program budgets.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-28

Request:

Referencing DIV 3-22, specifically Attachment 3-22-3, "Memorandum – CEMI and ERR – Feeder 56-155F8":

- a. Please provide the tables included in the Attachment 3-22-3 as excel files.
- b. On page one of the Memorandum (Book 3, Bates page 128), please reproduce the tables, showing System SAIDI on the first table.
- c. On the second set of tables (Book 3, Bates page 128) please confirm the CKAIDI label should be CKAIFI and double check the numbers in both tables.
- d. Please compare the SAIFI values reported on the tables presented in Book 3, Bates page 128 with the values reported on the tables in Book 1, Bates pages 93-94 and explain the differences.
- e. Reviewing the second set of tables in Book 3, Bates page 128, did the circuit perform better than the system average in all included years except for 2018?
- f. Please provide the dates of completed work.
- g. Why would this feeder qualify for CEMI-4? Please provide the CEMI-4 index for the feeder for each year included in the table. Please also provide the CEMI-4 index for the system for each year included in the table.
- h. Please explain why some of the 2023 recommendations in Book 3, Bates page 131 fall under CEMI and others under ERR.

Response:

a. See Attachment PUC 3-28 for the requested Excel file.

b.

SAIDI 5 % Threshold (minutes)					
2022	2021	2020	2019	2018	
281	262	256	234	237	

_						CKAIDI F	Performan	ce History	
CKAIDI Feeder	5 year Combine d CI and CMI rank	Cust. Served	Const_ Type	3 Ph OH Line Miles	2022* Min	2021 Min	2020 Min	2019 Min	2018 Min
56-155F8	13	1955	ОН	23.27	126.9	155.7	99.0	331.5	1195.7

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- c. The "CKAIDI Performance History" column label on the second set of tables (Book3, Bates page 128) should say "CKAIFI Performance History."
- d. The tables in Book 3, Bates page 128 list the five percent threshold for individual circuit performance. That is, circuits at or above the threshold were among the worst five percent as compared to all Rhode Island Energy distribution circuits.
 - Book 1, Bates pages 93-94 list the Company's system SAIFI and SAIDI
 - Rhode Island Energy recognizes that table headers in Book 3, Bates page 128 are mislabeled. The correct headers are 'SAIDI 5% Threshold (minutes)' and 'SAIFI 5% Threshold'.
- e. No, the circuit did not perform better than system averages. The second table in Book 3, page 128 indicates five percent threshold rather than System Averages.
- f. The capital work in 'Recommended Work' table, Book 3, Bates 131 is reproduced here with completion dates or comments.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-28, page 3

Title/Description	Storms WO	Status
Replace 3-65K fuses with 3-65K CMRs at P44 Arcadia Road, Hopkinton.	30792008	Complete July 2023
Install a 40K CMR on Phase B (RH) and a 40K fuse on Phase C (LH) at P7 Arcadia Road. Review P1 Arcadia Road to confirm there is no C/O. Hopkinton	30828751	Complete October 2023
The ROW off of Ashway Road heading southwest only serves 132 customer and creates 4,400 feet of exposure to the 1,925 customer on the circuit. This line should be removed, and the customers pick up from the 155W6 or the 155W4. Further study required.	TBD	Future Study
Replace 40K fuse at P44 Farview Avenue with a 40K CMR. Add mainline cutout at P24 Fairview Avenue. Fuse mainline and tap to Clarke Ave with 25K fuses.	30830268	Complete October 2023
At P47 Main Street, upgrade lower arm on pole top to separate north and south taps. Install three 65K fuses looking toward P26 Highview Ave. Install three line insulators looking toward P25-50 Highview Ave. Create new tap on phase C (Left Hand) and install 65K CMR. Remove C/O and tap over at P25 Highview Ave.	30855650	Complete October 2023
Replace 40K fuse at P70 Fenner Hill Road with a 40K CMR. Hopkinton.	30830239	Complete October 2023
Upon replace of the 635033 PTR at P40 Main St, the new PTR should be placed near P32 Main St, the existing location of a LBS. This would put this device beyond the Spring Street tap with 426 customers. There is a PTR there currently and the minimal addition exposure would greatly reduce the existing exposure to these customers for fault on Main Street.	TBD	TBD

g. This circuit qualifies for the CEMI-4 program because an average of 1237 customers experienced 4 or more interruptions (CEMI 4+) annually from 2019 through 2022. At least one customer on the circuit experienced 10 interruptions in a rolling 12 month period from April 2022 though April 2023.

CEMI-4 was a new program for FY 2024. The data set created for program justification is shown in Attachment 7 of the Proposed FY 2025 ISR. CEMI 4+ customers counts were 745 in 2019, 771 in 2020, and 2,194 in 2022. This ranked ninth worst among all Rhode Island Energy distribution circuits.

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PUC 3-28, page 4

h. The first two projects were identified as CEMI-4 projects because the proposed cutout mounted reclosers ("CMRs") directly impact the reliability of a customer in Hope Valley RI that experienced 10 interruptions in the previous rolling 12 months. The other recommended work either improved vulnerable sections of the circuit, which, if interrupted, would have a greater statistical influence on the circuit reliability or there were multiple operations of the same device that needed attention.

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PUC 3-29

Request:

In DIV 4-3, the Company stated that it does not use the quarterly Feeder Ranking report of the worst performing 25 circuits (5%) to select feeder reliability improvements projects in the CEMI-4 and in the ERR program.

- a. What does the Company see as the primary purpose of the Feeder Ranking Report?
- b. To the extent the Company has indicated it does not use the Feeder Ranking Report internally, what information would the Company propose to file with the Commission that it uses for investment planning purposes, and which would provide the same information as the Feeder Ranking Report?

Response:

- a. The primary purpose of the Feeder Ranking report is to satisfy the request of the Public Utilities Commission.
- b. The Company does not have a proposal to submit any other information to the Public Utilities Commission that would provide the same information as the Feeder Ranking report because the Company does not believe that such detailed reliability information is necessary for investment planning purposes. For the FY 2025 ISR proposal, the Company has submitted example prioritization information with its reliability program documents. In response to Division data requests, the Company also has provided example reliability information to substantiate the program prioritization. In response to the Division's data requests, information similar to the Feeder Ranking reports has been provided; however, the Company maintains that level of detail is not necessary for investment planning.

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PUC 3-30

Request:

Please prepare a cross-program summary for Distribution Automation Recloser Program, Engineering Reliability Review, and CEMI-4.

Response:

A cross-program summary is shown below.

Program	Distribution Automation Recloser Program	Engineering Reliability Review Program	CEMI-4 Program
Purpose	Meet both state regulatory targets and support RI Energy's goal of national and regional first quartile reliability performance.	Address reliability issues for circuits with high frequency and duration metrics.	Address reliability issues for a subset of customers who can experience many more interruptions than the average customer.
Drivers	Circuits with high frequency and duration statistics	Circuits with high frequency and duration statistics	Circuits with customer subsets experiencing multiple interruptions
Prioritization	Reliability performance, circuit characteristics	Worst 5% (approximately 20) feeders per year.	CEMI ranking with 3- year and 12 month rolling data sets.
Population	System wide population. Predominantly 15kV class circuits.	System wide population.	System wide population.
Scope	80 to 200 reclosers per year subject to alignment and coordination with ERR and CEMI programs	Miscellaneous scope per program document. Typically 3-5 reclosers per year.	Miscellaneous scope per program document. Typically 10-12 reclosers per year.
Schedule	5 to 10 year program	Annual program	5 year program
Cost	\$6-\$17M	\$2-\$3M per year	\$2-\$3M per year
Benefit-Cost Ratio	1.05	8.7	1.8

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

PUC 3-31

Request:

On Bates page 16, the Company states, "As part of the consensus on the proposed FY 2025 budget, the Company has agreed to provide the Division with information prior to progressing any recloser installations as part of the Customers Experiencing Multiple Interruptions ("CEMI"), Engineering Reliability Review ("ERR") and Distribution Automation Recloser Program ("DARP") Programs."

- a. Please list the information the Company will be providing to the Division.
- b. Please explain the process that will occur between the Company and Division as a result of the information provided in part a.

Response:

- a. The Company and the Division of Public Utilities and Carriers (the "Division") have met and discussed the information to be provided in advance of progressing the recloser installations. The Company is now in the process of finalizing a template to be provided to the Division for each feeder on which the Company plans to install a recloser in FY 2025. This memo includes information such as mainline interruption history, existing and proposed circuit configurations with one-lines, recloser placements, consideration of lowest cost solution development and forecasted reliability improvements.
- b. As agreed to with the Division, the Company will provide this information for each feeder 60 days in advance of progressing with the work. For example, if the Company is planning to start work on April 1 on a particular feeder, it would provide the information to the Division on February 1. This information is being provided to the Division to demonstrate the completion of a circuit reliability analysis confirming the appropriateness of recloser investments. This compromise addresses the Division's position that the delivery of a reliability study should occur prior to inclusion of investments in the ISR versus the Company's position that analysis should occur just prior to execution of the investment, typical to other programmatic investments. The Company will respond to any questions the Division may have on the information provided but does not expect to be subject to a formal approval process which will delay execution of these investments.

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Issued on January 12, 2024

PUC 3-32

Request:

In Order No. 24873 (Docket No. 22-53), the Commission included reporting requirements related to CEMI-4 in its reconciliation filing. In DIV 3-18, the Company advised that it began identifying circuits in July. For FY 2024, please describe what was started in CEMI-4 program. The Q2 Report includes spending but not explanation. Please include, to the extent available:

- a. Which feeder(s) were chosen?
- b. What was the CEMI number?
- c. Why was the feeder prioritized over another with a similar CEMI?
- d. What was the problem identified?
- e. What were the alternative solutions identified?
- f. What were the estimated costs of each solution?
- g. If a solution was chosen, why did the Company choose the solution intended to be advanced?
- h. In which fiscal year will the solution be advanced?

Response:

a. & b. The feeders chosen at the start of the FY24 CEMI-4 program and their CEMI statistics are listed in the table below.

RI Energy FY24 CEMI 4 + Circuits					
Circuits	Highest CEMI Customer	Average Annual CEMI 4 + Customer count previous three years.			
53-112W44	9	651			
53-127W40	9	1137			
53-34F1	8	1024			
56-54F1	11	1701			
56-63F6	8	1390			
56-68F1	8	778			
56-155F8	10	1236			

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- c. Circuits were prioritized based on the selection criteria described in Section 4 of the CEMI-4 program document. See Book 1, Bates pages 177-178 of the FY 2025 Proposed ISR Plan. Note that the program includes consideration of "...input from RI Energy's Operations group." and "Final circuit selections will also consider proposed area study work and other pending capital projects to effectively align and balance work across all Company efforts".
- d. The problems/outages that drove high CEMI counts included tree related issues, animal contacts, lightning, motor vehicle accidents, and deteriorated equipment.
- e. As noted on Book 1, Bates page 180-181 of the Proposed ISR Plan, due to the specific location, cause characteristics, and relatively low cost of each proposed solution, an alternative analysis would not have provided value. For example, if customer interruptions at a specific address are related to animal contact issues, an alternative analysis is not required to provide confidence that installing animal guards was the best, most economical solution.
- f. Estimates for specific circuits in addition to generic estimates are included in Attachment DIV 3-21-2.
- g. As noted in the CEMI-4 program documentation and shown in the sample chart on Book 1, Bates page 181 of the Proposed FY 2025 ISR Plan, recommended solutions to improve customer CEMI are relatively low cost. Solutions are chosen by reviewing the events, and working through lowest cost solutions first. The solutions are selected by determining the lowest cost solution to solve the issue.
- h. The solutions for the FY 2024 CEMI circuits are being advanced in FY 2024.

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PUC 3-33

Request:

Attachments 3 of the ISR Plan, Book 1, Bates pages 84-86 includes \$200,000 in spending on fiber, and has no spending in FY 2026 through FY 2029. However, on Bates page 144, the Company projects spending in these fiscal years.

- a. Please explain.
- b. Please also confirm that the \$200,000 will not be capitalized nor included in the ISR revenue requirement unless and until the fiber capital project is placed in service.

Response:

- a. Bates page 144 is the Long Range Plan, which was completed in September of 2023. The cash flows included estimated investment levels for fiber work in future years based on the foundational investments in the Docket 22-56-EL Grid Modernization Plan.
 - The \$200,000 proposed for the FY 2025 ISR is for a study to determine the needed investment levels for future years. The Company decided to remove the fiber spend for future years in Attachment 3 (Bates pages 84-86) of the ISR Filing until this study is complete and a better estimate for the level of spending is defined.
- b. The \$200,000 is not included in the FY 2025 ISR revenue requirement and will not be capitalized until fiber capital work is completed and placed into service in future years.

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PUC 3-34

Request:

Regarding the Company's proposal to purchase three new mobile substations and one mobile regulator (Attachment 5, page 53 of 57), if the Company encountered a problem with a substation outage today due to a transformer failure and none of the existing mobile substations were available, what actions would the Company take to restore service and how long does the Company estimate that it would it take for the Company to restore service? Please provide various scenarios to explain the nature of the risk to customers of not having extra mobile substations owned by the Company today.

Response:

The Company has an existing agreement with National Grid that enables the Company to lease a mobile substation because of a triggering event. A triggering event is defined as an event that results in the destruction or long-term disabling of one of more electric transformers that creates an inability to service significant load and maintain grid stability.

If the Company had a failure today and did not have an existing mobile substation available, the Company would first look at offloading the impacted feeders onto adjacent feeders. Depending on the reconfigured feeder loading, if the voltage is fluctuating outside regulatory requirements, the Company would also investigate renting mobile generation to stabilize the voltage. In parallel to the initial response, the Company also would reach out to National Grid to understand the availability of their mobile substations.

Once customers were restored, the failed substation power transformer would be evaluated to understand the extent of the damage. If the damage was field repairable, and all parties agreed that the existing loading and feeder configurations were adequate, no mobile substation would be required or leased. However, if the evaluation determined that the transformer was non-field repairable, the Company would work with National Grid to lease a mobile substation until a new substation transformer could be ordered and delivered. At the time of this response, the lead time for a substation transformer is around 2-3 years.

If a mobile substation is needed from National Grid, the estimated time to energize would be 3-5 days depending on the mobile substation location, permitting, resource availability, and testing requirements. It is assumed that all customers will be restored prior to energizing the mobile substation via adjacent feeders.

In Re: Proposed FY 2025 Electric Infrastructure, Safety and Reliability Plan Responses to the Commission's Third Set of Data Requests Issued on January 12, 2024

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Even though customers would be restored relatively quickly (within 24 hours) via feeder ties, this does not mean that the abnormal feeder configuration could be maintained indefinitely. Abnormal configurations can cause service voltages to fall outside regulatory limits, conductor burndown, and other equipment failures due to overloads. These conditions can potentially damage customer equipment and increase reliability risk. In addition, feeders will be physically longer and expose a larger number of customers to outages caused by motor vehicle accidents, tree contacts, and other events. During a contingency event, it is important to return to precontingency conditions as soon as possible. Having a mobile substation within the service territory allows the Company to quickly mobilize internal crews, test the equipment, and energize the mobile substation within 24-72 hours once delivered to the substation. Unlike the existing lease agreement with National Grid, where they can request the mobile substation be returned at any given time, the Company will have full control of the unit and can keep it at the substation until a replacement transformer is delivered.

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

<u>February 2, 2024</u> Date

Docket No. 23-48-EL – RI Energy's Electric ISR Plan FY 2025 Service List as of 1/10/2024

Name/Address	E-mail Distribution	Phone
The Narragansett Electric Company	amarcaccio@pplweb.com;	401-784-4263
d/b/a Rhode Island Energy		<u> </u>
Andrew Marcaccio, Esq.	cobrien@pplweb.com;	
280 Melrose St.	jscanlon@pplweb.com;	
Providence, RI 02907	aramos@hinckleyallen.com;	
Adam S. Ramos, Esq.	<u>aramos(a)mieric yanen.com</u> ,	
Hinckley Allen	sbriggs@pplweb.com;	
100 Westminster Street, Suite 1500	NABegnal@RIEnergy.com;	
Providence, RI 02903-2319	smtoronto@RIEnergy.com;	
	ATLaBarre@RIEnergy.com;	
	rconstable@RIEnergy.com;	
	krcastro@RIEnergy.com;	
	CJRooney@RIEnergy.com;	
	joliveira@pplweb.com;	
	TGShields@pplweb.com;	
	nhawk@pplweb.com;	
Division of Public Utilities (Division)	gSchultz@riag.ri.gov;	
Gregory Schultz, Esq. Dept. of Attorney General	Ellen.golde@dpuc.ri.gov;	
150 South Main St.	John.bell@dpuc.ri.gov;	
Providence, RI 02903	Al.contente@dpuc.ri.gov;	
,	Robert.Bailey@dpuc.ri.gov;	
	Christy.Hetherington@dpuc.ri.gov;	
	Margaret.l.hogan@dpuc.ri.gov;	
	Paul.roberti@dpuc.ri.gov;	

David Effron	Djeffron@aol.com;	603-964-6526
Berkshire Consulting		
12 Pond Path		
North Hampton, NH 03862-2243		010 111 6110
Gregory L. Booth, PLLC	gboothpe@gmail.com;	919-441-6440
14460 Falls of Neuse Rd.		
Suite 149-110		
Raleigh, N. C. 27614		
Linda Kushner	Lkushner33@gmail.com;	919-810-1616
L. Kushner Consulting, LLC		
514 Daniels St. #254		
Raleigh, NC 27605		
Office of Energy Resources	Albert.vitali@doa.ri.gov;	
Al Vitali, Esq.	nancy.russolino@doa.ri.gov;	
	Christopher.Kearns@energy.ri.gov;	
	Shauna.Beland@energy.ri.gov;	
	William.Owen@energy.ri.gov;	
Office of Attorney General	nvaz@riag.ri.gov;	401-274-4400
Nick Vaz, Esq.		x 2297
150 South Main St.	mbedell@riag.ri.gov;	
Providence, RI 02903	modernesting.ii.gov,	
File an original & five (5) copies w/:	Luly.massaro@puc.ri.gov;	401-780-2107
Luly E. Massaro, Commission Clerk	Cynthia.WilsonFrias@puc.ri.gov;	
Cynthia Wilson-Frias, Esq.	Cynama. Wilsom Has(a/puc.H.gov),	
Public Utilities Commission 89 Jefferson Blvd.	Todd.bianco@puc.ri.gov;	
Warwick, RI 02888	Alan.nault@puc.ri.gov;	
	Kristen.L.Masse@puc.ri.gov;	
Matt Sullivan, Green Development LLC	ms@green-ri.com;	