

PUC 3-1 – Supplemental

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.

Original 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

Supplemental Response:

Through this response, Rhode Island Energy is addressing updates to the Advanced Metering Functionality (“AMF”) implementation schedule.

The primary reason for the AMF updates is the schedule shift of the final Transition Services Agreement (“TSA”) exit date from National Grid USA’s systems to PPL’s systems moving from May 2024 to August 2024. The shift of the TSA exit date results in a shift of AMF timing and approach. Along with a needed update in the systems functionality release approach and schedule, meter deployment start will move from January 2025 to March 2025. There is no change to the timing of pre-sweeps and network deployment.

The secondary reason for the AMF updates is a result of finalizing or near finalization of vendor contracts, resulting in firm cost estimates. There is no change to the overall AMF program cost, but the update does reduce FY 2025 forecasted spend and increases FY 2026 and FY 2027.

As per the ISR timeline, the Company is forecasting it will install the following meters in January, February, and March of 2025.

Date	Monthly Exchanges
January-25	0
February-25	0
March-25	70

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 23-48-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

PUC 3-1 – Supplemental, page 2

Additionally, please see Attachment PUC 9-19-5, which is an updated Section 5, Attachment 3, which was originally filed as part of the Proposed FY 2025 Electric Infrastructure, Safety, and Reliability Plan Filing (starting on Bates 277). The revised revenue requirement reflects the updated forecasted FY 2025 capital in service for the reasons described above, as well as reflecting 1) the corrected book depreciation rate for network investments as described in the response to PUC 2-3 and 2) the removal of MDMS costs from software rather than meters as was described in the response to PUC 4-5. On the attachment, the Company has highlighted the cells that have input changes from the originally filed revenue requirement. The Company did not highlight all of the flow through cells that changed.

PUC 3-2 – Supplemental

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.

Original 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.

Supplemental Response:

Through this response, Rhode Island Energy is addressing updates to the Advanced Metering Functionality ("AMF") implementation schedule.

The primary reason for the AMF updates is the schedule shift of the final Transition Services Agreement ("TSA") exit date from National Grid USA's systems to PPL's systems moving from May 2024 to August 2024. The shift of the TSA exit date results in a shift of AMF timing and approach. Along with a needed update in the systems functionality release approach and schedule, meter deployment start will move from January 2025 to March 2025. There is no change to the timing of pre-sweeps and network deployment.

The secondary reason for the AMF updates is a result of finalizing or near finalization of vendor contracts, resulting in firm cost estimates. There is no change to the overall AMF program cost, but the update does reduce FY 2025 forecasted spend and increases FY 2026 and FY 2027.

PUC 3-2 – Supplemental, page 2

As per the ISR updated timeline for the AMF project:

- a. The Solution Validation Phase is forecasted to commence in March 2025 and be completed by May 2025.
- b. Electric Meter Deployment is forecasted to commence June 2025, following the Solution Validation Phase.

Additionally, please see Attachment PUC 9-19-5, which is an updated Section 5, Attachment 3, which was originally filed as part of the Proposed FY 2025 Electric Infrastructure, Safety, and Reliability Plan Filing (starting on Bates 277). The revised revenue requirement reflects the updated forecasted FY 2025 capital in service for the reasons described above, as well as reflecting 1) the corrected book depreciation rate for network investments as described in the response to PUC 2-3 and 2) the removal of MDMS costs from software rather than meters as was described in the response to PUC 4-5. On the attachment, the Company has highlighted the cells that have input changes from the originally filed revenue requirement. The Company did not highlight all of the flow through cells that changed.

PUC 3-3 – Supplemental

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.

Original 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.

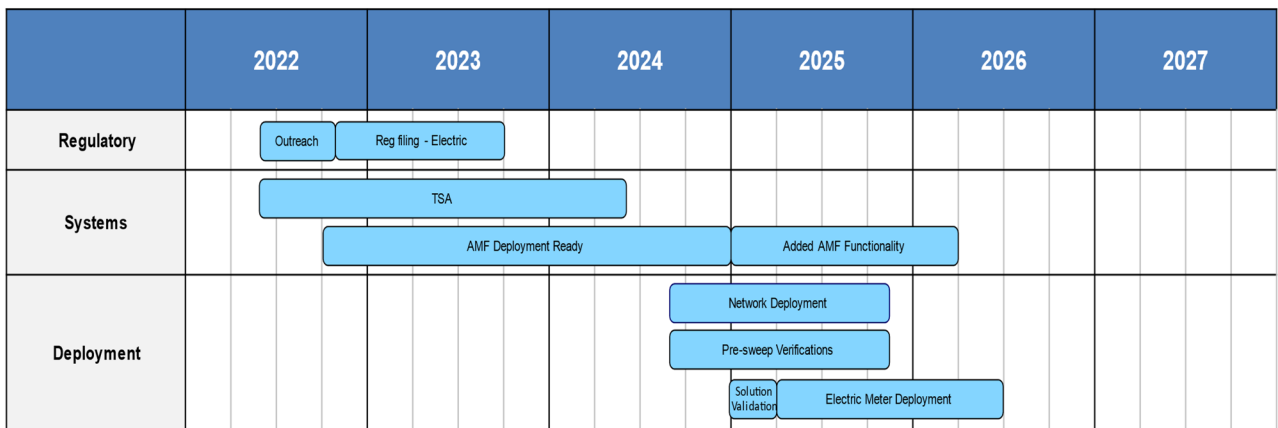
The updated timeline reflects an approximate three-month shift in the systems and deployment schedule from what the Company originally had proposed in the AMF Business Case. The Solution Validation Phase is now planned to commence in January 2025 (first quarter) with full electric meter deployment commencing 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.

PUC 3-3, page 2

Updated Figure 1

AMF Timeline

Meter Deployment Start Date of January 2025



PUC 3-3 – Supplemental

Supplemental Response:

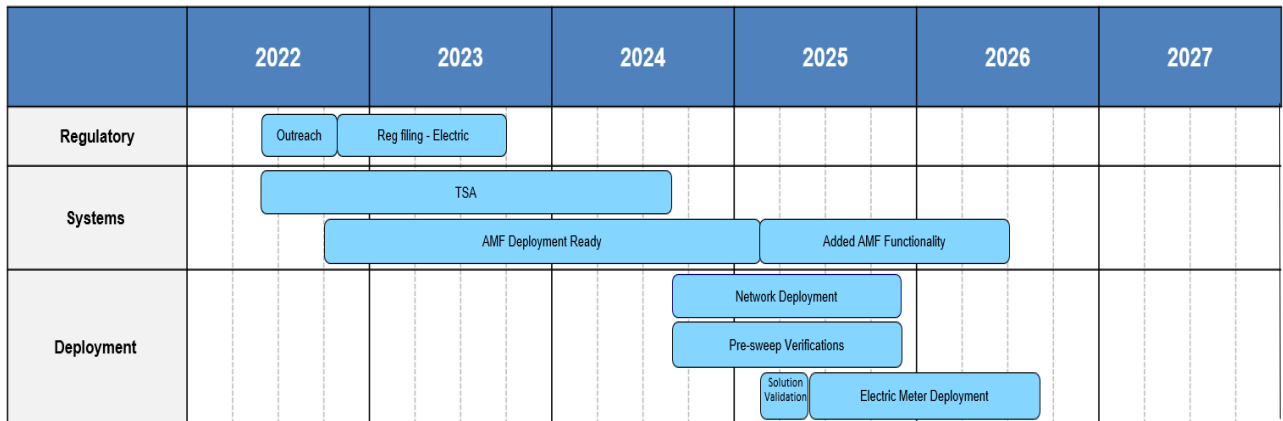
Through this response, Rhode Island Energy is addressing updates to the Advanced Metering Functionality (“AMF”) implementation schedule.

The primary reason for the AMF updates is the schedule shift of the final Transition Services Agreement (“TSA”) exit date from National Grid USA’s systems to PPL’s systems moving from May 2024 to August 2024. The shift of the TSA exit date results in a shift of AMF timing and approach. Along with a needed update in the systems functionality release approach and schedule, meter deployment start will move from January 2025 to March 2025. There is no change to the timing of pre-sweeps and network deployment.

The secondary reason for the AMF updates is a result of finalizing or near finalization of vendor contracts, resulting in firm cost estimates. There is no change to the overall AMF program cost, but the update does reduce FY 2025 forecasted spend and increases FY 2026 and FY 2027.

Please see below:

- Updated “AMF Project Timeline” from the Company’s AMF Business Case filing in Docket No. 22-49-EL, Figure 8.1, located in Book 2 of 3 on Bates page 87; and
- An added chart comparing the updated timing of AMF functionalities from the Company’s AMF Business Case filing in Docket No. 22-49-EL, Figure 6.1, located in Book 2 of 3 on Bates page 70.



The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 23-48-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

PUC 3-3 – Supplemental, page 2

AMF Functionality	PUC Approved Plan	Updated Plan
Deployment Exchange Management Solution	May-24	August-24
Remote Meter Configuration & Investigation	May-24	August-24
AMO Data Driven Operations	May-24	August-24
Remote (AMF) Meter Reading & Billing	September-24	February-25
Alerts & Alarms: High Temp	September-24	February-25
CP: Customer Portal	September-24	February-25
Remote Electric Connect & Disconnect	March-25	February-25
Proactive Outage Management (Last Gasp / Power-up)	March-25	June-25
Customer Outage Alerts	March-25	June-25
CP: Bill Alerts	March-25	June-25
CP: Green Button Connect	September-25	January-26
CP: Near Real-Time Customer Data Access	September-25	January-26
CP: In-Home Device Support	September-25	January-26
Load Disaggregation & Waveform Analytics	Group 6 (future)	January-26
Grid Edge Computing (writing applications to the meter)	Group 6 (future)	
ADMS: Voltage Conservation (Volt-Var Optimization)	March-26	June-26
ADMS: Voltage Automated Notification (Sag/Swell)	March-26	June-26
ADMS: On Demand Voltage Measurement (to ADMS)	March-26	June-26
Network Model Analytics	March-26	June-26
Theft Detection Analytics	March-26	June-26
ADMS-DER: Monitor & Management	March-26	June-26
TVR Foundational	n/a	n/a
CP: Solar Marketplace	n/a	n/a
CP: Carbon Footprint Calculator	n/a	n/a
CP: C&I and Multi-Family Portfolio View	n/a	n/a
CP: Streamlined Energy Efficiency & Demand Response Program Signup	n/a	n/a
Enable TVR	n/a	n/a

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 23-48-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

PUC 3-3 – Supplemental, page 3

Additionally, please see Attachment PUC 9-19-5, which is an updated Section 5, Attachment 3, which was originally filed as part of the Proposed FY 2025 Electric Infrastructure, Safety, and Reliability Plan Filing (starting on Bates 277). The revised revenue requirement reflects the updated forecasted FY 2025 capital in service for the reasons described above, as well as reflecting 1) the corrected book depreciation rate for network investments as described in the response to PUC 2-3 and 2) the removal of MDMS costs from software rather than meters as was described in the response to PUC 4-5. On the attachment, the Company has highlighted the cells that have input changes from the originally filed revenue requirement. The Company did not highlight all of the flow through cells that changed.

PUC 3-4 – Supplemental

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.

Original 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.

PUC 3-4 – Supplemental, 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.

PUC 3-4 – Supplemental, page 3

Supplemental Response:

Through this response, Rhode Island Energy is addressing updates to the Advanced Metering Functionality (“AMF”) implementation schedule.

The primary reason for the AMF updates is the schedule shift of the final Transition Services Agreement (“TSA”) exit date from National Grid USA’s systems to PPL’s systems moving from May 2024 to August 2024. The shift of the TSA exit date results in a shift of AMF timing and approach. Along with a needed update in the systems functionality release approach and schedule, meter deployment start will move from January 2025 to March 2025. There is no change to the timing of pre-sweeps and network deployment.

The secondary reason for the AMF updates is a result of finalizing or near finalization of vendor contracts, resulting in firm cost estimates. There is no change to the overall AMF program cost, but the update does reduce FY 2025 forecasted spend and increases FY 2026 and FY 2027.

Please see Attachment PUC 3-4-1 - Supplemental for software, Attachment PUC 3-4-2 - Supplemental for network, and Attachment PUC 3-4-3 - Supplemental for meter and Attachment PUC 3-4-4 - Supplemental for program management costs for costs through March 2025. Total is equal to \$50,723,186.

Additionally, please see Attachment PUC 9-19-5, which is an updated Section 5, Attachment 3, which was originally filed as part of the Proposed FY 2025 Electric Infrastructure, Safety, and Reliability Plan Filing (starting on Bates 277). The revised revenue requirement reflects the updated forecasted FY 2025 capital in service for the reasons described above, as well as reflecting 1) the corrected book depreciation rate for network investments as described in the response to PUC 2-3 and 2) the removal of MDMS costs from software rather than meters as was described in the response to PUC 4-5. On the attachment, the Company has highlighted the cells that have input changes from the originally filed revenue requirement. The Company did not highlight all of the flow through cells that changed.

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

Attachment 3-4-1 supplemental

Row No.	Cost Category 1	Cost Category 2	Cost Category 3	Cost Category 4	Full Description	FERC Account	FY24		FY25		NOTES
							April 2023 to March 2024	April 2024 to March 2025	April 2023 to March 2024	April 2024 to March 2025	
1	04.Program	Project Management	PPL Labor	PPL Labor	PPL PMO Oversight (IT) - AMF Implementation PMO	303	\$280,006	\$	\$1,120,022		PPL internal technical oversight resource costs
2	03.Systems	Analytics	Network Model Analytics	NMA/AGA	Network Model Analytics / AGA	303	\$	\$	\$		L&G SaaS AGA implementation services
3	03.Systems	Analytics	Data Lake	Data Lake	Data Lake - Internal	303	\$	\$	\$288,600		PPL internal, data archival for meter data - estimated
4	03.Systems	Analytics	Advanced Analytics	Adv. Analytics	Advanced Analytics (Theft Analytics)	303	\$	\$	\$		
5	03.Systems	Analytics	Data Lake	Data Lake	Data Lake - SI VENDOR	303	\$	\$	\$244,170		TCS system integrator services milestone achievement - estimated
6	03.Systems	CSS	CSS	CSS	Customer Service Software	303	\$741,064	\$	\$1,803,284		Accenture CSS-AMF technical services phases 1 & 2
7	03.Systems	CSS	CSS	CSS	Customer Service Software - internal	303	\$	\$	\$384,800		internal labor
8	03.Systems	Deployment Exchange Mgt.	Deployment Exchange Management (Electric)	Deply. xchg. Mgt.	Deployment Exchange Management - internal	303	\$	\$	\$96,200		internal costs
9	03.Systems	Deployment Exchange Mgt.	Deployment Exchange Management (Electric)	Deply. xchg. Mgt.	Deployment Work Management - SI Vendor	303	\$	\$	\$761,940		TCS system integrator services milestone achievement - estimated
10	03.Systems	Headend	Headend	Headend	SOW - Vendor - Headend (Implement)	303	\$696,053	\$	\$1,934,216		L&G SaaS implementation services
11	03.Systems	Headend	Headend	Headend	SI Vendor - Headend (Implement)	303	\$	\$	\$859,276		TCS system integrator services milestone achievement - estimated
12	03.Systems	Headend	Headend Upgrade	Headend	E2E System Testing (Headend Upgrade)	303	\$	\$	\$		N/A, post project
13	03.Systems	Headend	WiSun	WiSun	Software as a Service (SaaS) - WiSun (Implement)	303	\$	\$	\$		N/A, included in L+G SaaS implementation services Headend
14	03.Systems	MDMS	MDMS	MDMS	SOW - Vendor - MDMS (Implement)	303	\$319,589	\$	\$888,085		L&G SaaS implementation services
15	03.Systems	MDMS	MDMS	MDMS	SI Vendor - MDMS (Implement)	303	\$	\$	\$284,152		TCS system integrator services milestone achievement - estimated
16	03.Systems	MDMS	MDMS Upgrade	MDMS	E2E System Testing (MDMS Upgrade)	303	\$	\$	\$		N/A, post project
17	03.Systems	Middleware	Middleware	Middleware	Middleware (Implement)	303	\$	\$	\$340,080		PPL Internal, connection of interfaces
18	03.Systems	Middleware	Middleware	Middleware	Middleware - SI Vendor (Implement)	303	\$	\$	\$468,684		TCS system integrator services milestone achievement - estimated
19	03.Systems	CyberSecurity	CyberSecurity	CyberSecurity	CyberSecurity (Implement)	303	\$	\$	\$253,500		External vendor for cyber and penetration testing
20	03.Systems	CyberSecurity	CyberSecurity	CyberSecurity	CyberSecurity - Internal	303	\$	\$	\$109,200		PPL Internal
21	03.Systems	CyberSecurity	CyberSecurity	CyberSecurity	SI Vendor - CyberSecurity (Implement)	303	\$	\$	\$431,778		TCS system integrator services milestone achievement - estimated
22	03.Systems	Customer Engagement	Customer Portal	Customer Portal	Customer Portal	303	\$	\$	\$205,840		Vendor costs
23	03.Systems	Customer Engagement	Customer Portal	Customer Portal	Customer Portal - Internal	303	\$	\$	\$592,000		PPL Internal - estimated
24	03.Systems	Customer Engagement	Outage Alerts	Outage Alerts	Customer Outage Alerts	303	\$	\$	\$		
25	03.Systems	Customer Engagement	Outage Alerts	Outage Alerts	Customer Outage Alerts - Internal	303	\$	\$	\$		PPL Internal
26	03.Systems	Customer Engagement	Green Button	Green Button	Green Button Connect	303	\$	\$	\$		
27	03.Systems	Customer Engagement	Green Button	Green Button	Green Button Connect - Internal	303	\$	\$	\$		PPL Internal
28	03.Systems	Customer Engagement	Bill Alerts	Bill Alerts	Bill Alerts	303	\$	\$	\$		
29	03.Systems	Customer Engagement	Bill Alerts	Bill Alerts	Bill Alerts - Internal	303	\$	\$	\$		PPL Internal
30	03.Systems	Customer Engagement	DG Portal	DG Portal	Solar Marketplace	303	\$	\$	\$		out of scope
31	03.Systems	Customer Engagement	Carbon Footprint Calc.	Carbon Footprint Calc.	Carbon Footprint Calculator	303	\$	\$	\$		out of scope
32	03.Systems	Customer Engagement	C&I and Multi-Family Port. View	Portfolio View	C&I and Multi-Family Portfolio View	303	\$	\$	\$		out of scope
33	03.Systems	Customer Engagement	Time Varying Rates (TVR)	TVR	Time Varying Rates (TVR) - Full Implementation	303	\$	\$	\$		out of scope
34	03.Systems	ADMS & OMS	ADMS & OMS	ADMS & OMS	ADMS & OMS	303	\$	\$	\$		Vendor costs
35	03.Systems	ADMS & OMS	ADMS & OMS	ADMS & OMS	ADMS & OMS - Internal	303	\$	\$	\$		PPL Internal
36	03.Systems	Grid Edge & Load Dissag.	Customer Load Dissagregation App (HAN)	HAN APP	Customer Load Dissagregation App Vendor (HAN Solution)	303	\$	\$	\$		Vendor costs
37	03.Systems	Grid Edge & Load Dissag.	Customer Load Dissagregation App (HAN)	HAN APP	Customer Load Dissagregation App Vendor (HAN Solution) - Internal	303	\$	\$	\$		PPL Internal
37	03.Systems	AFUDC	AFUDC	AFUDC	AFUDC	303	\$367,054	\$	\$421,206		Allowance for Funds Using During Construction - on the software costs up until 1st meter is installed
38											
39											
40											
41											

\$2,403,766 **\$11,487,033**

\$13,890,799

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

Attachment 3-4-2 supplemental

Row No.	Cost Category_1	Cost Category_2	Cost Category_3	Cost Category_4	Full Description	FERC Acct	FY24		FY25		NOTES
							April 2023 to March 2024	April 2024 to March 2025	April 2023 to March 2024	April 2024 to March 2025	
1	02.Network	Project Management	Vendor /External Labor	Installation Vendor	RF Network Installation Vendor Project Management Oversight	397	\$ -	\$ -	\$ 350,000		L&G installation services milestone achievement - estimated
2	02.Network	Project Management	Vendor /External Labor	Network Gateway	RF Network Installation Vendor Project Management Oversight	397	\$ -	\$ -	\$ -		L&G installation services milestone achieve - 1X network license cost
3	02.Network	Hardware	Gateway	Network Gateway	(High Capacity Gateways) Hardware - High Capacity Network Gateway	397	\$ -	\$ -	\$ 247,170		L&G network hardware N/A - fully integrated w, and part of unit price, for network gateways
4	02.Network	Hardware	Gateway	Modem	(High Capacity Gateways) Hardware - Cellular Backhaul Modem	397	\$ -	\$ -	\$ -		
5	02.Network	Hardware	Gateway	Telecom Cabinet	(High Capacity Gateways) Hardware - Telecom Cabinet	397	\$ -	\$ -	\$ 337,050		RIE purchased hardware, cabinets
6	02.Network	Hardware	Gateway	Poles	Service Disconnect Switch	397	\$ -	\$ -	\$ 54,133		RIE purchased hardware, disconnect switch
7	02.Network	Hardware	Gateway	Poles	(Gateways) Pole (Equipment) - Steel	397	\$ -	\$ -	\$ 456,376		RIE purchased hardware, steel poles
8	02.Network	Hardware	Gateway	Poles	(Gateways) Pole (Equipment) - Wood	397	\$ -	\$ -	\$ 60,926		RIE purchased hardware, wood poles
9	02.Network	Hardware	Gateway	Network Gateway	(Standard Capacity Gateways) Hardware - Network Gateway	397	\$ -	\$ -	\$ 750,926		L&G network hardware
10	02.Network	Hardware	Router	Routers	(Routers) Hardware - Routers	397	\$ -	\$ -	\$ 1,072,397		L&G network hardware
11	02.Network	Hardware	Transformers	Transformers	Additional Transformers required - material	397	\$ -	\$ -	\$ 94,226		RIE purchased hardware, transformers
12	02.Network	Hardware	Gateway	Network Testing	Network Development and Testing - Routers, Gateways, Antennas, Modem	397	\$ -	\$ -	\$ 12,642		Antennas, modem, routers for test environment Ancillary hardware for testing: spectrum analyzer, cables,
13	02.Network	Hardware	Ancillary Equipment	Network Testing	Network Development and Testing - Equipment	397	\$ -	\$ -	\$ 8,560		Gridstream radio
14	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
15	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
16	02.Network	Installs	Gateway	Network Gateway	(Standard Capacity Gateways) Installation - Network Gateway	397	\$ -	\$ -	\$ 140,000		L&G installation services milestone achievement - estimated
17	02.Network	Installs	Router	Routers	(Routers) Installation - Routers	397	\$ -	\$ -	\$ 472,500		L&G installation services milestone achievement - estimated
18	02.Network	Installs	Transformers	Transformers	Additional Transformers required - Install	397	\$ -	\$ -	\$ 50,000		L&G installation services milestone achievement - estimated
19	02.Network	Installs	Gateway	Network Testing	Network Development and Testing - Installation	397	\$ -	\$ -	\$ 12,000		L&G installation services milestone achievement - estimated
20	02.Network	Hardware	Gateway	Network Gateway (Replacements)	Network equipment replacement - Hardware - Gateways	397	\$ -	\$ -	\$ -		Post project - NA
21	02.Network	Hardware	Router	Routers (Replacements)	Network equipment replacement - Hardware - Routers	397	\$ -	\$ -	\$ -		Post project - NA
22	02.Network	Hardware	Gateway	4G-2-5G Upgrade	Hardware - Cellular Backhaul Modems 4G-2-5G (High Capacity Gateway locations)	397	\$ -	\$ -	\$ -		Post project - NA
23	02.Network	Hardware	Gateway	4G-2-5G Upgrade	Hardware - Network Gateway 4G-2-5G (Standard Capacity locations)	397	\$ -	\$ -	\$ -		Post project - NA
24	02.Network	Installs	Gateway	Network Gateway (Replacements)	Network equipment replacement - Install - Gateways	397	\$ -	\$ -	\$ -		Post project - NA
25	02.Network	Installs	Router	Routers (Replacements)	Network equipment replacement - Install - Routers	397	\$ -	\$ -	\$ -		Post project - NA
26	02.Network	Installs	Gateway	4G-2-5G Upgrade	Installation - Cellular Backhaul Modems 4G-2-5G	397	\$ -	\$ -	\$ -		Post project - NA
27	02.Network	Installs	Gateway	4G-2-5G Upgrade	Installation - Network Gateway 4G-2-5G	397	\$ -	\$ -	\$ -		Post project - NA
28	04.Program	Project Management	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network lead	397	\$ -	\$ -	\$ -		captured in Program
29	04.Program	Project Management	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network Analyst	397	\$ -	\$ -	\$ -		captured in Program
30							\$ -	\$ -	\$ 4,478,906		

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

Attachment 3-4-3 supplemental

Row No.	Cost Category_1	Cost Category_2	Cost Category_3	Cost Category_4	Full Description	FERC Account	FY24		FY25		NOTES	
							April 2023 to March 2024	April 2023 to March 2024	April 2023 to March 2024	April 2023 to March 2024		
1	01.Meter	Project Management	Vendor /External Labor	Installation Vendor	Meter Installation Vendor Project Management Oversight	370	\$	\$	643,275		Meter installation services milestone achievement - estimated	
2	01.Meter	Hardware	Ancillary Equipment	Antennas	External Antenna Cost (Residential)	370	\$	-	26,868		L&G contract - network	
3	01.Meter	Hardware	Ancillary Equipment	Antennas	External Antenna Cost (Commercial)	370	\$	\$	2,985		L&G contract - network	
4	01.Meter	Hardware	Meters	Meters	Meter Development and Testing - Meters	370	\$	\$			N/A	
5	01.Meter	Pre-Sweeps	Meter Base	Meter Bases	Total Electric Meter Pre-Sweeps for deployment	370	\$	-	2,165,316		pre sweeps - milestone achievement - estimated	
6	01.Meter	Installs	QA/QC	Testing Vendor	Shipment Sample Meter Testing (Residential & Commercial)	370	\$	\$	12,490		sample meter testing per ANSI standard	
7	01.Meter	Installs	Facility	Crossdock	Deployment Center, Facility cost (Crossdock)	370	\$	\$	454,559		Meter installation services milestone achievement - estimated	
8	01.Meter	Installs	Facility	Call Center	Deployment Call Center & Notification Letters	370	\$	-	546,891		Meter installation services milestone achievement - estimated	
9	01.Meter	Installs	Meters	Resid. Meters	Deployment - Automated RF (AMF) Meter Install Cost - Residential	370	\$	-			Meter installation services milestone achievement	
10	01.Meter	Installs	Meters	C&I Meters	Deployment - Automated RF (AMF) Meter Install Cost - Commercial	370	\$	-			Meter installation services milestone achievement	
11	01.Meter	Installs	Meters	Resid. Antennas	Deployment - External Antenna Electric Meter Install Cost - Residential	370	\$	-			based on unit cost to install external antenna w/ meter install	
12	01.Meter	Installs	Meters	C&I Antennas	Deployment - External Antenna Electric Meter Install Cost - Commercial	370	\$	-			based on unit cost to install external antenna w/ meter install	
13	04.Program	Project Management	PPL Labor	PPL Labor	PPL PMO Oversight - AMF Implementation PMO	370	\$	-			internal install costs, RIE - CMS install costs	
14	04.Program	Project Management	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - Project Manager / Deployment Lead	370	\$	-			shown in Program	
15	04.Program	Project Management	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - Metrics, Measures, and Financial Tracking	370	\$	-			shown in Program	
16	04.Program	Project Management	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - Meter Inventory Management Analyst	370	\$	-			shown in Program	
17	04.Program	Project Management	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - Deployment Exception Coordinator(s)	370	\$	-			shown in Program	
18	01.Meter	Hardware	Meters	Meters (Growth)	Growth - Automated RF (AMF) Meter Cost (Residential)	370	\$	-			Post project - NA	
19	01.Meter	Hardware	Meters	Meters (Growth)	Growth - Automated RF (AMF) Meter Cost (Commercial)	370	\$	-			Post project - NA	
20	01.Meter	Hardware	Meters	Meters (Replacements)	Meter Replacements - Automated RF (AMF) Meter Cost (Residential)	370	\$	-			Post project - NA	
21	01.Meter	Hardware	Meters	Meters (Replacements)	Meter Replacements - Automated RF (AMF) Meter Cost (Commercial)	370	\$	-			Post project - NA	
22	01.Meter	Hardware	Meters	Meters	Automated RF (AMF) Meter Cost (Residential)	370	\$	\$	22,090,170		Hardware - residential meters	
23	01.Meter	Hardware	Meters	Meters	Automated RF (AMF) Meter Cost (Commercial)	370	\$	-	2,782,033		Hardware - commercial meters	
24	01.Meter	Hardware	Meters	Meter Seed Stock	Automated RF (AMF) Meter Cost - Spares / Seed Stock (Residential)	370	\$	-				
25	01.Meter	Hardware	Meters	Meter Seed Stock	Automated RF (AMF) Meter Cost - Spares / Seed Stock (Commercial)	370	\$	-				
26												
27												
									\$0	\$	28,724,587	

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

Attachment 3-4-4 supplemental

Row No.	Cost Category_1	Cost Category_3	Cost Category_4	Description	FERC Account	FY24	FY25	NOTES
						April 2023 to March 2024	April 2024 to March 2025	
1	04.Program	Vendor /External Labor	PMO Vendor Labor	PMO External		\$ -	\$ 1,978,054	Project oversight- outside consultants - will be allocated to meters, network, and software. External vendor labor personnel that will directly support the AMF Program.
2	04.Program	PMO/Internal Labor	PMO Internal Labor	PMO Internal		\$ 126,988	\$ 1,523,851	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.
						\$ 126,988	\$ 3,501,905	