280 Melrose Street Providence, RI 02907 Phone 401-784-4263



March 11, 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 11

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") Eleventh Set of Data Requests in the above-referenced matter.

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,

Cone & m

Andrew S. Marcaccio

Enclosures

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

PUC 11-1 AMF Revenue Requirement

Request:

Please provide a schedule showing more precisely how the AFUDC of \$788,260 was calculated for software, including all the cost of capital components (i.e., interest rates, etc.) assumed in the calculation resulting in the figures shown in the row labeled "Estimate of AFUDC" in Attachment PUC 7-1.

Response:

This response reflects 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.

Allowance for funds used during construction ("AFUDC") represents the estimated cost of funds used to finance construction activity. When a capital project is completed and placed in service, the application of AFUDC to the project ends. The AMF project incurs AFUDC on the software costs balances up until the applicable project goes into service. AFUDC is applied to all projects on the operating companies having construction work in progress ("CWIP") balances and where the construction period is greater than 30 days, including the buildout of software assets. AFUDC rates are calculated monthly based on CWIP balances, as well as debt outstanding and interest rates received from the Company's Treasury department.

Please see Attachment PUC 11-1 for an estimate of the AFUDC based on projected balances and estimated rates.

Estimate of AFUDC (calculation)

Business Units	Rate Type	Dec 2023
RI Companies	AFUDC Debt	0.00145833
RI Companies	AFUDC Equity	0.00465833

AFUDC rates are calculated monthly based on construction work in progress balances, as well as debt outstanding and interest rates received from the Company's Treasury department. The rates are obtained from the Company's Treasury department and change monthly.

AFUDC is a summation of cumulative balance times the debt rate and the cumulative balance times the equity rate.

		Jan to Dec 23	January-24	February-24	March-24	April-24	May-24	June-24	July-24	August-24	September-24	October-24	November-24	December-24	January-25	February-25	March-25	Total
Estimate of Balance to which AFUDC is applied - software		1,215,642	338,790	1,044,365	838,790	359,915	390,079	3,212,380	390,079	965,079	1,865,079	390,079	390,079	2,055,775	144,624	744,624	244,624	
Balances - cumulative		1,215,642	1,554,432	2,598,796	3,437,586	3,797,501	4,187,580	7,399,959	7,790,038	8,755,116	10,620,195	11,010,273	11,400,352	13,456,127	13,600,751	14,345,375	14,589,999	
AFUDC Debt Rate Estimate	0.00145833		2,267	3,790	5,013	5,538	6,107	10,792	11,360	12,768	15,488	16,057	16,625	19,623	19,834	20,920	21,277	
AFUDC Equity Rate Estimate	0.00465833		7,241	12,106	16,013	17,690	19,507	34,471	36,289	40,784	49,472	51,289	53,107	62,683	63,357	66,825	67,965	
Estimated AFUDC Total		2,000	9,508	15,896	21,027	23,228	25,614	45,263	47,649	53,552	64,960	67,346	69,732	82,307	83,191	87,746	89,242	788,260

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-48-EL Proposed FY 2025 Electric ISR Plan Attachment PUC 11-1 Page 1 of 1

PUC 11-2 AMF Revenue Requirement

Request:

Please indicate whether the Company is including or is not including AFUDC for investments made for the purchase and deployment of the AMF Network.

Response:

No, AFUDC is not included for the purchase and deployment of the AMF network.

PUC 11-3 AMF Revenue Requirement

Request:

Referring to PUC 7-1, please explain why the Company has included AFUDC in the revenue requirement for software projects in the months of January through March of 2025 while at the same time, is forecasting that software will be treated as being "placed in service" in January 2025 (as indicated in PUC 1-2).

Response:

This response reflects 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.

Based on the first meter installation in March 2025, the software will be operational and useful as of March 2025, which will be the last month to apply AFUDC. The Company is providing a supplemental response to PUC 7-1 identifying the initial error in timing, thus aligning when the initial meter installation is planned; which is the last month AFUDC is captured. The Company policy establishing the applicability of AFUDC to capital projects is titled Accounting Policies and Procedures – Asset Accounting – AFUDC – 605. A copy of that is provided as Attachment PUC 11-3.

PPL Corporation Financial Department Accounting Policies and Procedures

Section: Asset Accounting

Last Update/Reviewed: 12/31/2023

Subject: AFUDC

Contact: Robert Phillips

Number: 605

I. Purpose

To establish a policy for determining when AFUDC is applicable and how AFUDC is applied to capital projects.

II. Applicability

Applicable to all PPL Electric Utilities Corporation (PPL EU) and Rhode Island Energy (RIE) business lines that utilize PowerPlan project costing to account for capital expenditures.

III. Definitions

Allowance for funds used during construction (AFUDC) - the cost of funds expended for each regulated capital project during its period of construction.

IV. Accounting Practice

1. Background

Allowance for funds used during construction (AFUDC) represents the estimated cost of funds used to finance construction activity. When a capital project is completed and placed in service the application of AFUDC to the project terminates. This policy explains the Company's procedure for computing AFUDC and the means for determining application of AFUDC to projects.

The AFUDC rate is updated monthly based on the requirements in the FERC Uniform System of Accounts Electric Plant Instruction 17. See Appendix B for details.

2. Accounting

The AFUDC used during construction is computed for applicable projects each month as follows:

<u>Computation of AFUDC During the Construction Period for Each Project</u>

Page 1 of 8

Version 1.10.2

$$\textit{AFUDC Rate} \times \left[\textit{Beginning AFUDC Base} + \left(\frac{\textit{Current Month's Charges}}{2}\right)\right]$$

- For idle projects receiving no charges other than AFUDC for a period of six months or more for EU, and three months or more for RIE, application of AFUDC will be automatically terminated until the project receives further charges. Upon resuming application, AFUDC will not be applied retroactively for the idle period.
- AFUDC ceases in the month after the applicable project goes into service.
- Non-cash expenditures, primarily accruals, are excluded from the AFUDC base.

V. Procedures

• Generally, Asset Accounting calculates monthly the AFUDC rates based on construction work in progress balances as well as debt outstanding and interest rates received from Treasury. Once the rates are calculated, Asset Accounting inputs these rates into the PowerPlan system.

Application of AFUDC

Generally, projects issued for construction of facilities have AFUDC applied, whereas projects issued for pure purchase of capital assets not requiring substantial installation do not. The following types of projects do not receive AFUDC:

- Projects which are in service, canceled, temporarily closed or have a construction period of less than 30 days.
- Projects for purchases of computer equipment, furniture, tools, etc.
- All blanket projects including those for specific property.
- Future Use projects (classified in Account 10571)
- Projects where CWIP is included in rate base (the regulatory jurisdiction permits a return on CWIP, covering project financing costs).
- Projects which are billable to Independent Power Producers (IPPs).
- Projects for the acquisition of land or rights of way, subject to exception approval by Asset Accounting in the event that construction is required to secure possession.

Note that for cancelled projects, any AFUDC previously recorded should be reversed, consistent with FERC guidance.

The listing in "**Appendix A**" which parallels the "Project Numbers" section in the <u>Classification of Accounts</u>, is provided as an aid in determining whether AFUDC should be applied.

VI. Responsibility

- A. PPL EU and RIE business lines are responsible for applying AFUDC to applicable capital projects and placing them in-service on a timely basis.
- B. Asset Accounting is responsible for ensuring that AFUDC is applied appropriately to capital projects deemed eligible for AFUDC.
- C. Treasury is responsible for supplying required information to Asset Accounting for AFUDC rates calculation.
- D. Asset Accounting is responsible for calculating and issuing the rates.
- E. Asset Accounting is responsible for loading the rates into the system.
- F. Asset Accounting is responsible for reviewing application of correct AFUDC rates processed monthly.

VII. Related Publications

ASC 980-10 - Accounting for the Effects of Certain Types of Regulation.

Code of Federal Regulations Title 18, Chapter 1, Part 101 - FERC Uniform System of Accounts Electric Plant Instruction 17

	Apply AFUDC?
Bulk Power Transmission	
Substations	Yes
Lines (Over 69 KV)	Yes
Forced Relocations	Yes (1)
Fee-owned land	No (2)
Siting and rights of way	No (2)
Regional Supply	
Substations (230/69 KV	
New Subs and Additional Capacity at Existing Subs (including terminals)	Yes
Improvements, Additions and Replacements	Yes
Power Transformers installation	Yes
Power Circuit Breakers installation	Yes
Lines:	
New Lines and Substation Terminals	Yes
Improvements, Additions and Replacements	Yes
Forced Relocations	Yes (1)
Fee-owned Land	No (2)
Siting and rights of way	No (2)
Revenue Extensions (69/138 KV)	Yes
Area Supply	
Substations (69/12 KV and below):	
New Substations and Additional Capacity at Existing Substations	Yes
Power Transformers installation	Yes
Power Circuit Breakers installation	Yes
Improvements, Additions and Replacements	Yes
Lines (if not charged to blankets):	
New Connecting Lines and Capacity Additions	Yes
Overhead Equipment Failure	Yes
Revenue Extensions	Yes
Electrical Systems Minor Improvements	Yes
12 KV Conversions	Yes
Forced Relocations:	
- Billing Required	Yes (1)
- At PPL Expense	Yes

Appendix A Guide To Determining Application Of AFUDC To Projects

Improvements, Additions and Replacements	Yes
Underground Equipment Failures	Yes
Substation Underground Getaways	Yes
Low Tension Network	Yes
Street Lighting	Yes
Fee-owned land	No (2)
Siting and rights of way	No (2)
General Projects	
Office Buildings and Service Facilities	Yes
Office Furniture and Equipment	No
Tools and Equipment	No
Communication Systems	Yes
Computer Software	Yes
Fee-owned Land	No (2)
Siting and rights of way	No (2)
Power Management System	Yes
Other Projects	
Retirements (not included under Other Budget Items)	No
Financial Department, Plant Accounting Use	(3)
Research & Development	(3)
Leasehold Improvements	(3)
Perpetual Projects	No
Special Billing	No
System Emergency	No
Independent Power Producer (IPP) Billable Projects	No
Storm Projects	No
ELECTRIC UTILITIES SUBORDINATE	
Bulk Power Transmission	(3)
Regional Supply	(3)
Area Supply	
Power Transformers - 69 KV or less (replacement only)	No
Substations (69/12 or 138/12 KV)	(3)
General Projects	(3)
BLANKET PROJECTS FOR MASS PROPERTY	No
NON-UTILITY PROPERTY PROJECTS	No
Non-Cash Accruals to Construction Work in Progress	No

1. Yes, when expenditures exceed advance payments received.

 In the event that substantial construction efforts are planned in association with the acquisition of land or rights of way, contact Asset Accounting for determining Page 5 of 8
Version 1.10.2 applicability of AFUDC.

3. Contact Asset Accounting for determining applicability of AFUDC.

Appendix B Code of Federal Regulations Title 18, Chapter 1, Part 101 - FERC Uniform System of Accounts Electric Plant Instruction 17:

(17) Allowance for funds used during construction (Major and Nonmajor Utilities) includes the net cost for the period of construction of borrowed funds used for construction purposes and a reasonable rate on other funds when so used, not to exceed, without prior approval of the Commission, allowances computed in accordance with the formula prescribed in paragraph (a) of this subparagraph. No allowance for funds used during construction charges shall be included in these accounts upon expenditures for construction projects which have been abandoned.

(a) The formula and elements for the computation of the allowance for funds used during construction shall be:

$$A_{i} = s\left(\frac{S}{W}\right) + d\left(\frac{D}{D+P+C}\right)\left(1 - \frac{S}{W}\right)$$

$$A_{\varepsilon} = \left(1 - \frac{S}{W}\right) \left[p\left(\frac{P}{D+P+C}\right) + c\left(\frac{C}{D+P+C}\right) \right]$$

 A_i = Gross allowance for borrowed funds used during construction rate.

 A_e = Allowance for other funds used during construction rate.

S = Average short-term debt.

s = Short-term debt interest rate.

D = Long-term debt.

d = Long-term debt interest rate.

P = Preferred stock.

p = Preferred stock cost rate.

C = Common equity.

c = Common equity cost rate.

W = Average balance in construction work in progress plus nuclear fuel in process of refinement, conversion, enrichment and fabrication, less asset retirement costs (See General Instruction 25) related to plant under construction.

(b) The rates shall be determined annually. The balances for long-term debt, preferred stock and common equity shall be the actual book balances as of the end of the prior year. The cost rates for long-term debt and preferred stock shall be the weighted average cost determined in the manner indicated in §35.13 of the Commission's Regulations Under the Federal Power Act. The cost rate for common equity shall be the rate granted common equity in the last rate proceeding before the ratemaking body having primary rate jurisdictions. If such cost rate is not available, the average rate actually earned during the preceding three years shall be used. The short-term debt balances and related cost and the average balance for construction work in progress plus nuclear fuel in process of refinement, conversion, enrichment, and fabrication shall

be estimated for the current year with appropriate adjustments as actual data becomes available.

NOTE: When a part only of a plant or project is placed in operation or is completed and ready for service but the construction work as a whole is incomplete, that part of the cost of the property placed in operation or ready for service, shall be treated as Electric Plant in Service and allowance for funds used during construction thereon as a charge to construction shall cease. Allowance for funds used during construction on that part of the cost of the plant which is incomplete may be continued as a charge to construction until such time as it is placed in operation or is ready for service, except as limited in item 17, above.

PUC 11-4 AMF Revenue Requirement

Request:

Refer to PUC 7-1 and Attachment PUC 2-3 corrected (page 3). The Company is proposing a revenue requirement based on the half-year convention which, in effect, treats the assets for ratemaking purposes as if they were placed in service on October 1 of the fiscal year. In turn, this results in the revenue requirement compensating the Company for the cost of capital for the period beginning in October through the end of the fiscal year. It appears, however, that the Company's proposal results in double-counting the cost of capital on software within the revenue requirement because the Company's revenue requirement calculation also includes an allowance for funds used during construction (AFUDC) for the same six months from October through March of the fiscal year.

- a. Does the Company agree with this conclusion of double counting? If so, please explain why it is reasonable to recover the cost of capital twice?
- b. If not, please explain why the conclusion is mistaken and it does not result in double counting for the cost of capital over that same six-month period?

Response:

a. and b.

The Company agrees that, for this specific example, it is being compensated twice for the cost of capital through the ISR. The half year convention methodology is consistent with how the Company calculates the revenue requirement for all other electric and gas ISR capital investments. Due to the complexity it would take to perform a monthly revenue requirement for the capital investments that were placed in service during each month in an ISR plan year, the Company performs an annual revenue requirement for all capital investments placed in service during that year for the annual ISR plan filings and related reconciliations. As indicated above, by applying a half year convention in the annual revenue requirement, the calculation treats all assets as placed in service on October 1 of that ISR year for ratemaking purposes. For some capital investments, such as the software example above, that means that there may be AFUDC included in the total capital investment amount as well as a return from October to March through the ISR mechanism because the timing of AFUDC on a project is tied to the actual inservice date of that project. However, for other capital investments included in the ISR filing that are placed in service on the books prior to October 1, those investments will have AFUDC stop accruing in the next month to the capital investment when it is placed in service on the Company books but will not begin to earn a return through the ISR revenue requirement until October 1 using the same half year convention methodology. For example, if an asset was

<u>PUC 11-4, page 2</u> AMF Revenue Requirement

placed in service on the Company's books in May, AFUDC would stop accruing in May and there would be no additional AFUDC added for the months of June through September and the capital balance as of May would be used in the revenue requirement. Using the half year convention in the revenue requirement model, the asset would get a return beginning in October. As a result, for the months of June through September, that asset is getting neither AFUDC nor a return for ratemaking purposes. The Company believes this is a reasonable method to account for the various in-service dates throughout a year that has been and continues to be used for all other ISR capital investments and should be applicable to AMF capital investments as well.

PUC 11-5 AMF Revenue Requirement

Request:

The response to PUC 5-9 refers to AMF deployment "sectors," using the name of Rhode Island municipalities. Please provide a list of all the AMF program "sectors," including a listing of all municipalities which the Company includes within each of the respective "sectors." Please also provide a color-coded map (using a different distinct color for each sector).

Response:

The table below lists all municipalities the Company includes within each of the respective sectors. The 10 deployment sectors are as follows: Westerly, Middletown, North Kingstown – West, North Kingstown – East, Providence – West, Providence – East, Providence, Chopmist, Lincoln – East, Lincoln – West. Dividing the State using these deployment sectors provides for manageable pieces for network and meter deployment that align directly to the network and meter installation vendor contracts milestones. The use of deployment sectors was a best practice learning for the Pennsylvania implementation based on feedback from other utilities who had already deployed and were in the process of deploying AMF meters.

AMF Program Sector	Municipality
Westerly	Westerly
Westerly	Hopkinton
Westerly	Richmond
Westerly	Charlestown
Westerly	South Kingstown
Westerly	Narragansett
Middletown	Jamestown
Middletown	Newport
Middletown	Middletown
Middletown	Little Compton
Middletown	Tiverton
Middletown	Portsmouth
North Kingstown-West	North Kingstown
North Kingstown-West	Exeter
North Kingstown-West	West Greenwich
North Kingstown-West	Coventry
North Kingstown-West	East Greenwich
North Kingstown-East	West Warwick
North Kingstown-East	Warwick
Providence-West	Cranston
Providence-West	Johnston
Providence-East	East Providence
Providence-East	Barrington
Providence-East	Warren
Providence-East	Bristol
Providence	Providence
Chopmist	Foster
Chopmist	Scituate
Chopmist	Glocester
Chopmist	Smithfield
Chopmist	North Providence
Lincoln-East	North Providence
Lincoln-East	Pawtucket

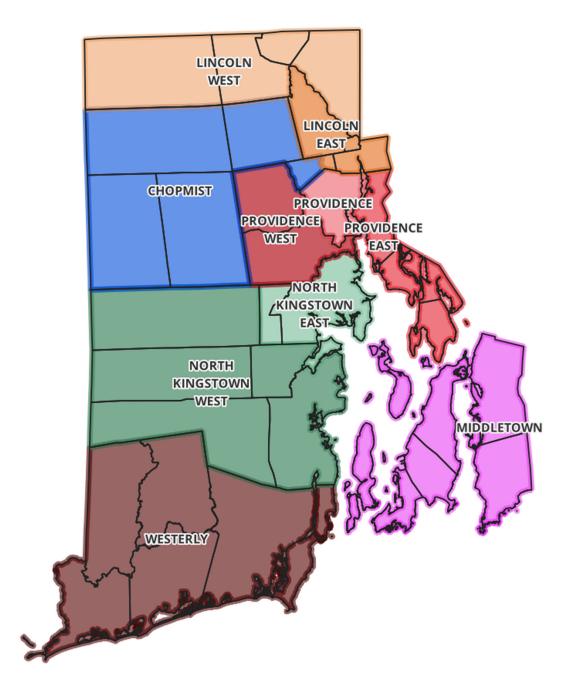
PUC 11-5, page 2 AMF Revenue Requirement

PUC 11-5, page 3 AMF Revenue Requirement

AMF Program Sector	Municipality
Lincoln-East	Central Falls
Lincoln-East	Lincoln
Lincoln-West	Cumberland
Lincoln-West	Woonsocket
Lincoln-West	North Smithfield
Lincoln-West	Burrillville

Provided below is a color-coded map for identifying the 10 AMF program sectors.

<u>PUC 11-5, page 4</u> AMF Revenue Requirement



PUC 11-6 AMF Revenue Requirement

Request:

Referring to Attachment PUC 5-9-1, please provide a new table (with line numbers). In the new table, please add the following columns: (1) the forecasted number of AMF meters that the Company will have installed in each of the listed towns when full deployment is completed, (2) the number of AMF meters that the Company is forecasting to be installed in each of the referenced towns in fiscal year 2025, (3) an allocation of the total Network costs of \$5,407,058 (shown in Attachment PUC 2-3 corrected, page 3) based on the number of meters that the Company will have installed in each of the listed towns when full deployment of AMF meters is completed, and (4) if a segmentation of Network costs by town can be reasonably estimated, the forecasted cost of the Network that will be deployed in each of the referenced towns in fiscal year 2025.

Response:

This response reflects 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.

The table below lists, as we interpret, the (1) planned number of AMF meters installed, by town, for the full deployment, (2) the planned number of AMF meters, to be installed, by town, in FY2025, (3) the total network costs, estimated by town, for the full network deployment, and (4) the total network cost by town for FY2025. Please note that spend at the town level is estimated, while spend at the sector level is planned for and spent when milestone achievement occurs.

	(1)	(2)	(3)	(4)
Town	Quantity Meters Full Deployment	Quantity Meters FY 2025	Estimated Network Cost Allocation based on Meters Deployed	Estimated Network Cost Allocation FY 2025
Westerly	14,772	70	\$265,394	\$265,394
Hopkinton	4,064		\$370,885	\$370,885
Richmond	3,701		\$364,712	\$364,712
Charlestown	6,044		\$347,684	\$347,684
South Kingstown	15,236		\$433 <i>,</i> 848	\$433 <i>,</i> 848
Narragansett	10,701		\$121,252	\$121,252
Jamestown	3,776		\$127,714	\$127,714
Newport	16,412		\$173,893	\$173,893
Middletown	9,263		\$100,646	\$100,646
Little Compton	2,682		\$110,257	\$110,257
Tiverton	8,558		\$267,223	\$267,223
Portsmouth	10,430		\$236,405	\$236,405
North Kingstown	14,465		\$393,956	\$393,956
Exeter	3,176		\$442,016	\$442,016
West Greenwich	3,022		\$331,789	\$331,789
Coventry	16,400		\$575,252	\$575,252
East Greenwich	6,502		\$178,870	\$178,870
		TOTAL FY 2025	\$4,841,796	\$4,841,796
		End of FY2	025	
West Warwick	15,357		\$259,882	
Warwick	41,814		\$611,410	
Cranston	37,040		\$516,808	
Johnston	14,288		\$529,415	
East Providence	23,263		\$304,699	
Barrington	7,157		\$87,598	
Warren	6,355		\$111,604	
Bristol	10,730		\$144,734	
Providence	79,797		\$731,051	
Foster	2,180		\$759,105	

<u>PUC 11-6, page 2</u> AMF Revenue Requirement

Prepared by or under the supervision of: Parker Capwell and Philip Walnock

	(1)	(2)	(3)	(4)
Town	Quantity Meters Full Deployment	Quantity Meters FY 2025	Estimated Network Cost Allocation based on Meters Deployed	Estimated Network Cost Allocation FY 2025
Scituate	4,970		\$710,056	
Glocester	4,985		\$806,382	
Smithfield	9,511		\$444,760	
North Providence	17,112		\$129,153	
Pawtucket	36,385		\$290,010	
Central Falls	8,104		\$53,351	
Lincoln	10,800		\$475,134	
Cumberland	16,353		\$633,792	
Woonsocket	20,230		\$246,477	
North Smithfield	6,257		\$472,468	
Burrillville	2,785		\$405,857	
		TOTAL FY 2026	\$8,723,746	

PUC 11-6, page 3 AMF Revenue Requirement

PUC 11-7 AMF Revenue Requirement

Request:

Referring to PUC 7-6, please identify the towns in which the external vendor will be performing "pre-sweeps for deployment" in FY 2025. Please also provide an explanation and calculation showing how the pre-sweep cost of \$1,638,703 (in Attachment 3-4-3) was estimated, including the sources upon which the cost was based.

Response:

This response reflects 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.

The table below lists the towns in which the external vendor will be performing pre-sweeps for deployment in FY 2025.

<u>PUC 11-7, page 2</u> AMF Revenue Requirement

Town
Westerly
Hopkinton
Richmond
Charlestown
South Kingstown
Narragansett
Jamestown
Newport
Middletown
Little Compton
Tiverton
Portsmouth
North Kingstown
Exeter
West Greenwich
Coventry
East Greenwich
West Warwick
Warwick

The FY 2025 pre-sweep cost of \$2,165,316 in Attachment PUC 3-4-3 – Supplemental is estimated based on the external vendor successfully completing 200,122 meter pre-sweep validation locations. This spend is estimated using the average unit cost for the anticipated number of successfully completed pre-sweeps.

PUC 11-8 AMF Revenue Requirement

Request:

Please reconcile (i) the statement on Bates page 89 of the Company's Business Case (Docket No. 22-49-EL Book 2) stating that "This Solution Validation phase . . . will include a total deployment of up to 500 meters," with (ii) the statement in PUC 7-7 that "The Solution Validation Phase consists of approximately 20,000 AMF meters" In Docket No. 22-49-EL, on Bates page 236 of Book 2, the Company illustrated a 3-month validation solution phase. Does the Company only need meters up to 500 for the actual validation but has chosen to deploy 20,000 for other reasons during the validation phase? Please explain.

Response:

This response reflects 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.

The Company's original response to PUC 7-7 was incorrect. The solution validation phase is planned for 500 meters. The Company now plans to install only 70 meters in FY 2025 to begin the solution validation phase.

PUC 11-9 AMF Revenue Requirement

Request:

Attachment PUC 3-4-3 shows a total meter installation cost of approximately \$28.7 million for residential and commercial meters forecasted to be installed in FY 2025. Please provide a table similar to the one in PUC 3-1 with an additional column which allocates the forecasted cost of \$28.7 million to each month based on the number of meters installed in each month.

Response:

This response reflects 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 updated ISR timeline, the Company is forecasting it will install the following meters:

Date	Monthly exchanges	Allocated cost
March-25	70	\$28.7M

Please see the Company's supplemental response to PUC 1-2, part b, for an explanation of the placement of these meter costs into service in FY 2025. The equipment costs for the 70 meters planned to be installed in FY 2025 is \$8,636.

PUC 11-10 Spare Transformers

Request:

Please provide a schedule that includes a line for each spare transformer the company proposes to purchase through FY 2031. Please also identify the amount of capital spending by fiscal year through FY 2031 for each transformer. The total of all the capital spending in the schedule should equal the approximate \$40 million total proposed transformer spending in the long-range plan (see Bates 149 of Book 1). If the totals don't match, please reconcile. Please include totals, row numbers and column letters where appropriate.

Response:

The proposed spending shown on Bates page 149 of Book 1, reflects the total forecasted spend per fiscal year for all spare equipment including spare transformers, spare regulators, spare breakers, and spare bushings. The specific forecasted spend for spare transformers in FY 2025 is shown on Bates page 81 of Book 1. As seen in Attachment PUC 11-10, column (c), row (25), the forecasted spend for FY 2025 remains the same and includes material and engineering costs.

The total forecasted spend shown in column (j) row (25), is \$36,267,000. This total is comprised of equipment costs, engineering costs, and construction costs. Transformer foundation construction costs were not initially included in the spare transformer spending forecast and have since been added in column (e), row (24) and column (f), row (24). The Company initially proposed procuring 23 spare transformers. Upon further review, the Company is proposing to purchase 21 spare transformers under the spare transformer program. This reduction of two spare transformers is included in the total forecasted spend shown in column (j), row (25) of Attachment PUC 11-10 and has been removed from the FY2028-FY2031 forecasted spend shown in column (f), row (25), column (g), row (25), column (h), row (25), and column (i), row (25).

The costs shown in Attachment PUC 11-10 are based on historical pricing and the assumption that transformer manufacturers will follow a payment schedule of 10% upon receipt of order, 30% upon engineering drawing review, 30% upon delivery, and 30% upon acceptance testing. Changes to this payment schedule will have an impact on the forecasted spend.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
						Spare Transformer	Purchases			
	Voltage and Rating	Winding Configuration	FY25	FY26	FY27	FY28	FY29	FY30	FY31	Total Cost (\$) per Transformer
(1)	115-13.2kV 33/44/55 LTC	Delta-Wye	\$200,000	\$600,000	\$1,200,000					\$2,000,000
(2)	115-13.2kV 33/44/55 LTC	Delta-Wye				\$200,000	\$600,000	\$1,200,000		\$2,000,000
(3)	115-13.2 24/32/40 LTC	Delta-Wye		\$200,000	\$600,000	\$1,200,000				\$2,000,000
(4)	115-13.2 24/32/40 LTC	Delta-Wye			\$200,000	\$600,000	\$1,200,000			\$2,000,000
(5)	115-13.2 24/32/40 LTC	Delta-Wye					\$200,000	\$600,000	\$1,200,000	\$2,000,000
(6)	115-34.5kV 48/64/80	Delta-Wye		\$270,000	\$810,000	\$1,620,000				\$2,700,000
(7)	115-34.5kV 33/44/55	Wye-Wye					\$200,000	\$600,000	\$1,200,000	\$2,000,000
(8)	115-34.5kV 33/44/55	Delta-Wye					\$200,000	\$600,000	\$1,200,000	\$2,000,000
(9)	115Y/66.4kV - 34.5Y/19.92kV 33/44/55 MVA with LTC	Wye-Wye-Delta					\$200,000	\$600,000	\$1,200,000	\$2,000,000
(10)	115-34.5-13.8 24/32/40 MVA	Wye-Wye				\$180,000	\$540,000	\$1,080,000		\$1,800,000
(11)	115-23kV 30/40/50	Delta-ZigZag			\$180,000	\$540,000	\$1,080,000			\$1,800,000
(12)	115Y/66.4kV - 24kV 33/44/55 LTC	Wye-Delta		\$200,000	\$600,000	\$1,200,000				\$2,000,000
(13)	69-13.8kV 24/32/40 LTC	Delta-Wye	\$160,000	\$480,000	\$960,000					\$1,600,000
(14)	69-24 kV 25/33.3/46.6 MVA LTC	Wye-Delta				\$160,000	\$480,000	\$960,000		\$1,600,000
(15)	33.6-12.470Y kV 24/32/40 MVA LTC	Delta-Wye			\$180,000	\$540,000	\$1,080,000			\$1,800,000
(16)	34.5x23-12.47 kV 7.5/9.375 MVA	Delta-Wye			\$60,000	\$180,000	\$360,000			\$600,000
(17)	34.5-12.47kV 7.5/9.375MVA	Delta-ZigZag		\$60,000	\$180,000	\$360,000				\$600,000
(18)	34.5-11.0 kV 12/16/20 MVA	ZigZag-Delta	\$120,000	\$360,000	\$720,000					\$1,200,000
(19)	23.5-13.2 kV 15/20/25 MVA LTC	Delta-Wye		\$140,000	\$420,000	\$840,000				\$1,400,000
(20)	23-11.5kV 10/12.5MVA	ZigZag-Delta				\$60,000	\$180,000	\$360,000		\$600,000
(21)	22.9-4.16 kV 7.5/9.375 MVA LTC	Delta-Wye			\$80,000	\$240,000	\$480,000			\$800,000
(22)		Total Material Cost (\$) per FY	\$480,000	\$2,310,000	\$6,190,000	\$7,920,000	\$6,800,000	\$6,000,000	\$4,800,000	\$34,500,000
(23)		Total Engineering Cost (\$) per FY	\$60,000	\$170,000	\$75,000	\$45,000	\$25,000	\$0	\$0	\$375,000
(24)		Total Construction Cost (\$) per FY	\$0	\$0	\$1,171,000	\$221,000	\$0	\$0	\$0	\$1,392,000
(25)		Total Overall Cost (\$) per FY	\$540,000	\$2,480,000	\$7,436,000	\$8,186,000	\$6,825,000	\$6,000,000	\$4,800,000	\$36,267,000

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-48-EL Attachment PUC 11-10 Page 1 of 1

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

March 11, 2024 Date

Docket No. 23-48-EL – RI Energy's Electric ISR Plan FY 2025 Service List as of 1/25/2024

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