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

Issued on February 6, 2024

#### <u>PUC 7-1 – Supplemental</u>

#### Request:

Please provide a schedule showing how the AFUDC amount of \$788,260 shown on Attachment PUC 3-4-1 was calculated and determined.

## Original Response:

The AMF project incurs AFUDC (Allowance for Funds Used During Construction) on the software costs balances up until the applicable project goes into service. AFUDC ceases in the month after 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. On the other hand, costs for equipment purchases (such as meters) are excluded from AFUDC as there is no construction/development involved. AFUDC rates are estimates based on the rates at one point in time. 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 7-1 for an estimate of the AFUDC based on projected balances and estimated rates.

## 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. No changes are needed to the estimated \$788,260. Based on a March 2025 deployment date, AFUDC would cease in the month after the applicable project would go in service.

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When PUC 7-1 was submitted originally, the calculation was incorrect and should have only gone through January 2025, assuming a January 2025 meter deployment start date. Now with a shift to a March 2025 deployment date, the estimate remains as per the calculation on Attachment PUC 7-1 as previously submitted.

# Original Attachmnent PUC 7-1

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 23-48-EL Attachment PUC 7-1 Page 1 of 1

Estimate of AFUDC (calculation)

	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	\$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 YTD	\$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	
Balance *ADFUDC Debt		\$2,266.87	\$3,789.90	\$5,013.14	\$5,538.01	\$6,106.87	\$10,791.58	\$11,360.45	\$12,767.85	\$15,487.75	\$16,056.61	\$16,625.48	\$19,623.47	\$19,834.38	\$20,920.29	\$21,277.03	
Balance * AFUDC Equity		\$7,241.06	\$12,106.05	\$16,013.41	\$17,690.01	\$19,507.13	\$34,471.45	\$36,288.57	\$40,784.22	\$49,472.37	\$51,289.49	\$53,106.60	\$62,683.08	\$63,356.79	\$66,825.49	\$67,965.03	
Estimate of AFUDC	\$2,000.00	\$9,507.93	\$15,895.95	\$21,026.55	\$23,228.02	\$25,614.00	\$45,263.03	\$47,649.01	\$53,552.07	\$64,960.12	\$67,346.10	\$69,732.08	\$82,306.55	\$83,191.17	\$87,745.78	\$89,242.06	\$788,260.43

Business Units	Rate Type	12/2023			
RI Companies	AFUDC Debt	0.00145833			
RI Companies	AFUDC Equity	0.00465833			

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### PUC 7-4 – Supplemental

#### Request:

For each of the line items shown in "Meter Costs" on Attachment PUC 3-4-3 that are associated with meters or other equipment being installed in the Company's service area in FY 2025, please describe where in the service area that the meters will be located.

#### Original Response:

The meters that will be installed in ISR FY 2025 will be in the AMF program's defined Sector of Westerly, which is comprised of the towns of Westerly, Charlestown, South Kingstown, Narraganset, Hopkinton, and Richmond. Based on a January 2025 meter deployment start date, approximately 50% of the Westerly AMF Sector would be deployed. Weekly deployment activities will be directed by the installation vendor, with Rhode Island Energy oversight, and could be completed in any town within the deployment sector.

#### 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.

Based on the March 2025 solution validation meter deployment start date, 70 meters are planned to be installed in ISR FY 2025. These meters will be in the AMF program's defined Sector of Westerly in the Town of Westerly.

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#### PUC 7-7 – Supplemental

#### Request:

Of the meters included in the counts shown on PUC 3-1, please indicate how many of the meters will be used and are needed during the "Solution Validation Phase" to successfully complete that testing phase. Please also describe how the "Solution Validation Phase" will be carried out, including a general description of the activities that take place during that phase. Please also indicate what metric the Company will be using to determine that the validation phase is successful.

#### Original Response:

The Solution Validation Phase consists of approximately 20,000 AMF meters and the related network hardware. Validation begins with the first meter installed and continues with a gradual ramp-up. The purpose of the Solution Validation phase will be to implement the processes and tools planned for full deployment with a limited meter population and slower deployment rate, as well as to further optimize the RF mesh network. Installing a limited number of meters during this phase will allow for fine-tuning of the meter and communications network following the field testing of equipment and systems. Solution Validation will begin only in a sector where pre-sweep verifications have been completed. Solution Validation will allow the Deployment team to perform end-to-end testing of Network and Meter communications and validate that back-office Systems and processes are working as anticipated ahead of Full Meter Deployment. Solution Validation testing will include Network and Meter communications, Systems validations including Head End, Meter Data Management System, and Billing.

The goal of Solution Validation is to test the new AMF solution from end to end to ensure the entire system is working as designed, prior to full deployment of electric meters. Prior to starting full deployment of electric meters, the go/no-go decision will be made by the AMF Program Leadership Team after performing an assessment of the systems' operational performance, downstream systems processing, and any open issues.

Solution Validation will not be limited to a single metric. The Solution Validation assessment will include a checklist of operational metrics applied to the individual AMF technology elements. These metrics will not only be used to test and verify functionality specific to each element, but also to verify that the integrated processes are working together for the entire AMF technical solution. A summary of operational metrics includes, but is not limited to, the following:

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- Verify communication and receipt of meter data in the Head End System (HES) through the RF Mesh network equipment.
- Verify completion of meter exchange work orders, data accuracy, and billing processes in the Customer Service System (CSS).
- Verify receipt of meter data in the Meter Data Management System (MDMS) from the Head End System (HES) for VEE (validation, estimation, editing) interval data processing.
- Verify meter data transfer from MDMS to CSS, Customer Portal, Supplier Portal, and Settlement applications.

## 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.

The Solution Validation phase will include approximately 500 meters referenced in the supplemental response to PUC3-1. This limited population of meters installed at the start of the project is to ensure that the end-to-end functional and operational readiness of the AMF platform, from meter through the network to the various systems, is working as expected. Processes monitored will include Network and Meter communications, Systems validations including Head End, Meter Data Management Systems, Billing and an optimization of connectivity to the RF mesh network. Outcomes will trigger a go/no-go decision made by the AMF Program Leadership Team.

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Solution Validation assessment includes a checklist of operational readiness applied to the individual AMF technology elements. Each of these requirements must be met for successful completion of Solution Validation. Once all requirements are met the 'green light' is provided to proceed to mass meter deployment. The requirements are as follows:

#### Solution Validation Requirement

Confirm initial set of meters are in the correct status in Meter Asset Management (MAM) and Customer Service System (CSS) inventory.

Validate network is communicating and ready for meter installations.

Validate successful meter provisioning in Head End system at time of exchange.

Receive, validate, and process deployment vendor installation file in CSS.

Run CSS job to process meter exchanges.

Confirm account in Meter Data Management System (MDMS).

Verify Remote Connect / Remote Disconnect Functionality.

Validate daily assignment of meter exchanges.

Validate meter status in MAM.

Validate that all meter exchange service orders completed successfully and validate that meters are in the correct status in CSS and MAM.

Validate transfer of data from MDMS to CSS.

Identify reads in Head End System (HES).

Validate reads in MDMS pending table.

Successful Batch Job Run: Daily maintenance runs (CSS to MDMS).

Successful Batch Job Run: Meters sent from MDMS to HES (MMF, CIF, IIF).

Successful Batch Job Run: Meter reads (register and interval) sent from CC to MDMS.

Successful Batch Job Run: Daily maintenance runs (CSS to MDMS).

Successful Batch Job Run: Meter reads (register and interval) sent from CC to MDMS.

Verify all meters scheduled for the day are installed.

Verify all meters are visible in HES.

Validate RF meters are loaded into MDMS - validate register read, load profiles and nominal voltage.

Validate data sync with Work Order Management System

Validate reads from MDMS pending to MDMS load profile data (Pre VEE).

Validate reads from MDMS pending to MDMS load profile data (Post VEE).

Validate reads from MDMS pending to MDMS Cumulative reads (Pre VEE).

Validate reads from MDMS pending to MDMS Cumulative reads (Post VEE).

Validate RF meters are communicating with the network.

Validate gap reconciliation in HES.

Process Bill Cycle Demand.

Validate that RF meter reads (register and interval) are recorded in MDMS. View the interval data for each account in MDMS.

Confirm VEE process in MDMS.

Validate interval data transfer to Settlement application, Supplier Portal, and Customer Portal.

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### PUC 7-8 – Supplemental

#### Request:

Please explain the timing of the completion of the "customer portal" referenced on Attachment PUC 3-4-1 and the extent to which the Company expects customers to be using the customer portal in FY 2025.

#### Original Response:

The Customer Portal is planned to be available to customers with AMF meters installed at the end of Solution Validation. After Solution Validation, the Customer Portal will be available to Rhode Island Energy customers once their AMF meter has been installed. By the end of March 2025, which coincides with the end of Solution Validation, the Company anticipates having approximately 20,000 customers with AMF meters and the availability to access the Customer Portal.

The initial release of the Customer Portal will display the prior day's interval usage data. Near Real Time Data Access will become available in a later functionality release expected around the end of September 2025.

#### 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. The Customer Portal is planned to be available to customers with AMF meters installed at the end of Solution Validation. Solution Validation is planned to start in March 2025, taking up to 3 months to complete.

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The initial release of the Customer Portal will display the prior day's interval usage data. Near real time data functionality and customer availability is planned for the end of January 2026.