

January 19, 2023

VIA ELECTRONIC MAIL

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

**RE: Docket No. 22-49-EL-The Narragansett Electric Company d/b/a Rhode Island Energy
Advanced Metering Functionality Business Case
Responses to PUC Data Requests – PUC Set 1**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (“Rhode Island Energy” or the “Company”), attached is the electronic version of Rhode Island Energy’s responses to the Public Utilities Commission’s First Set of Data Requests in the above-referenced matter.¹

This filing includes a Motion for Protective Treatment of Confidential Information in accordance with Commission Rules of Practice and Procedure 1.3(H)(3) and R.I. Gen. Laws § 38-2-2(4) for the response to Request 1-17, which contains confidential and proprietary business information. For the reasons stated in the Motion for Protective Treatment, the Company seeks protection from public disclosure of a portion of the response to Request 1-17. Accordingly, the Company has provided the Commission with an original and two complete, unredacted copies of the confidential document in a sealed envelope marked “**Contains Privileged and Confidential Information – Do Not Release,**” and has included a redacted version of the response to Request 1-17 for the public filing.

Thank you for your time and attention to this matter. If you have any questions, please contact Jennifer Brooks Hutchinson at 401-316-7429.

Very truly yours,



Jennifer Brooks Hutchinson

Enclosures

¹ Per communication from Commission counsel on October 4, 2021, the Company is submitting an electronic version of this filing followed by hard copies filed with the Clerk within 24 hours of the electronic filing.

Luly E. Massaro, Commission Clerk
 Docket No. 22-49-EL – AMF Business Case
 January 19, 2023
 Page 2 of 6

cc: Docket No. 22-49-EL Service List
 John Bell, Division
 Leo Wold, Esq.

CERTIFICATE OF SERVICE

I certify that a copy of the within documents was forwarded by e-mail to the Service List in the above docket on the 19th day of January, 2023.



Jennifer Brooks Hutchinson, Esq.

The Narragansett Electric Company d/b/a Rhode Island Energy
Docket No. 22-49-EL Advanced Meter Functionality (AMF)
Service list updated 1/10/2023

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STATE OF RHODE ISLAND

RHODE ISLAND PUBLIC UTILITIES COMMISSION

In re: The Narragansett Electric Company)
d/b/a Rhode Island Energy’s Advanced) Docket No. 22-49-EL
Metering Functionality Business Case)

**MOTION OF THE NARRAGANSETT ELECTRIC
COMPANY D/B/A RHODE ISLAND ENERGY FOR PROTECTIVE
TREATMENT OF CONFIDENTIAL INFORMATION**

The Narragansett Electric Company d/b/a Rhode Island Energy (“Rhode Island Energy” or the “Company”) respectfully requests that the Rhode Island Public Utilities Commission (“PUC”) provide confidential treatment and grant protection from public disclosure of certain confidential, competitively sensitive, and proprietary information submitted in this proceeding, as permitted by Rule 1.3(H)(3) of the PUC Rules of Practice and Procedure, 810-RICR-00-00-1-1.3(H)(3) (“Rule 1.3(H)”), and R.I. Gen. Laws § 38-2-2(4)(B). The Company also requests that, pending entry of that ruling, the PUC preliminarily grant the Company’s request for confidential treatment pursuant to Rule 1.3(H)(2).

I. BACKGROUND

Contemporaneously with filing this motion, on January 19, 2023, Rhode Island Energy submitted its Responses to the PUC’s First Set of Data Requests (“PUC Set 1”) in the above-captioned docket. In response to Data Request No. 1-17 (“PUC 1-17”), the Company provided a table detailing the amounts the Company allocates to certain System Ongoing Maintenance categories, and the method for allocating those amounts. The table contains confidential and proprietary commercial and financial information that the Company ordinarily would not share

with the public. More specifically, the table reveals the costs allocated to Rhode Island Energy by PPL Service Corporation to run its information technology (“IT”) systems. Combined with the information in the table regarding PPL Corporation’s (“PPL”) methodology for allocating costs among its operating companies, most of whom are not parties to this proceeding nor subject to the PUC’s jurisdiction, the public could determine the exact costs to PPL – and its other affiliates – to maintain these IT systems. Not only would the Company not ordinarily share this information with the public, the information also gives the Company’s vendors insight into PPL’s total costs, which could place PPL or the Company at a competitive or contracting disadvantage. Therefore, the Company requests that, pursuant to Rule 1.3(H), the PUC afford confidential treatment to the amounts listed in its response to PUC 1.17.

II. LEGAL STANDARD

Rule 1.3(H) provides that access to public records shall be granted in accordance with the Access to Public Records Act (“APRA”), R.I. Gen. Laws § 38-2-1, *et seq.* APRA establishes the balance between “public access to public records” and protection “from disclosure [of] information about particular individuals maintained in the files of public bodies when disclosure would constitute an unwarranted invasion of personal privacy.” Gen. Laws § 38-2-1. Per APRA, “all records maintained or kept on file by any public body” are “public records” to which the public has a right of inspection unless a statutory exception applies. *Id.* § 38-2-3. The definition of “public record” under APRA, however, specifically excludes “trade secrets and commercial or financial information obtained from a person, firm, or corporation that is of a privileged or confidential nature.” *Id.* § 38-2-2(4)(B). The statute provides that such records “shall not be deemed public.” *Id.*

The Rhode Island Supreme Court has held that when documents fall within a specific APRA exemption, they “are not considered to be public records,” and “the act does not apply to them.” *Providence Journal Co. v. Kane*, 577 A.2d 661, 663 (R.I. 1990). Further, the court has held that “financial or commercial information” under APRA includes information “whose disclosure would be likely either (1) to impair the Government’s ability to obtain necessary information in the future, or (2) to cause substantial harm to the competitive position of the person from whom the information was obtained.” *Providence Journal Co. v. Convention Ctr. Auth.*, 774 A.2d 40, 47 (R.I. 2001) (internal quotation marks omitted). The first prong of the test is satisfied when information is provided voluntarily to the governmental agency, and that information is of a kind that would not customarily be released to the public by the person from whom it was obtained. *Id.* at 47.

III. BASIS FOR CONFIDENTIALITY

The Company’s response to PUC 1-17 constitutes “commercial or financial information” to which the APRA public disclosure requirements do not apply. *See* Gen. Laws § 38-2-2(4)(B); *Kane*, 577 A.2d at 663. It contains confidential and proprietary commercial and financial information relating to the Company’s business operations. Specifically, the amounts stated in response to PUC 1-17 represent monthly maintenance fees, operations service fees, and software costs allocated to Rhode Island Energy to run its IT platforms. Combined with PPL’s cost allocation methodology, the amounts in the table would permit the public to determine the exact cost to PPL to run these IT platforms for all of its affiliates. For this reason, Rhode Island Energy, PPL, and PPL’s other affiliates customarily do not release this information to the public. Doing so could put the companies at a competitive or contracting disadvantage with vendors in future negotiations. Furthermore, disclosing the cost amounts would reveal the confidential

financial information of a third party – PPL – that is not a party to this proceeding. Therefore, this information satisfies the APRA exception found in Gen. Laws § 38-2-2(4)(B).

Accordingly, Rhode Island Energy respectfully requests that the PUC grant protective treatment to the amounts stated in the table in response to PUC 1-17 and take the following actions to preserve its confidentiality: (1) maintain amounts stated in the table in response to PUC 1-17 as confidential indefinitely; (2) not place amounts stated in the table in response to PUC 1-17 on the public docket; and (3) disclose the amounts stated in the table in response to PUC 1-17 only to the PUC, its attorneys, and staff as necessary to review this docket. Rhode Island Energy has submitted a proposed redacted version of its response to PUC 1-17 that redacts the confidential information and would be available on the public docket.

IV. CONCLUSION

For the foregoing reasons, Rhode Island Energy respectfully requests that the PUC grant its Motion for Protective Treatment of Confidential Information.

Respectfully submitted,

**THE NARRAGANSETT ELECTRIC
COMPANY d/b/a RHODE ISLAND ENERGY**

By its attorney,



Jennifer Brooks Hutchinson, Esq. (#6176)
The Narragansett Electric Company d/b/a
Rhode Island Energy
280 Melrose Street
Providence, RI 02907
(401) 784-7288
Dated: January 19, 2023

CERTIFICATE OF SERVICE

I certify that a copy of the within document was forwarded by e-mail to the Service List in the above docket on the 19th day of January, 2023.



Jennifer Brooks Hutchinson, Esq.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-1

Request:

Please provide: (a) the date the Company is assuming it will file its next base distribution rate case consistent with the stay out agreement and (b) the date the Company is assuming that new rates arising out of that rate case would take effect.

Response:

- (a) For purposes of this response, the Company's current assumption is that it will file its next base distribution rate case around November 30, 2025. This timing is consistent with PPL's commitment, which was incorporated into the Division of Public Utilities and Carriers' Report and Order No. 24322 in Docket No. D-21-09 at page 250, that the Company will not file a base rate case seeking an increase in base distribution rates for gas and/or electric service sooner than three years from the date that PPL Rhode Island Holdings, LLC closed on its acquisition of the Company from National Grid USA, which occurred on May 25, 2022. This timing also is consistent with PPL's stay out commitment in its Settlement Agreement with Peter Neronha, the Attorney General for the State of Rhode Island dated May 19, 2022, that the Company will not file for a change in base distribution rates unless and until there is at least 12 months of operating experience under PPL's exclusive leadership and after the Transition Services Agreement ("TSA") with National Grid USA Service Company, Inc. terminates. This timeline assumption is based on current TSA schedules and will be subject to change if warranted.
- (b) Assuming the Company files its next rate case in accordance with the timeline described in the Company's response to part (a), above, the Company is assuming that new base distribution rates would take effect on September 1, 2026.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
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Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-2

Request:

Referencing page 6 of the Briggs & Johnson testimony, what is the baseline capital investment spending on metering over which the actual incremental costs of capital placed into service would be measured?

Response:

The Company's proposal is to include all AMF metering capital investments placed into service in the AMF Factor for recovery as incremental costs. There are currently no AMF meters in service as a baseline. As further described in the Company's response to PUC 1-29, metering capital investment additions currently are included in the annual Electric Infrastructure, Safety, and Reliability ("ISR") Plans for recovery; however, once deployment of AMF meters begins, AMF meters placed in service will be included in the AMF Factor and no longer included in the annual Electric ISR Plans.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
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Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-3

Request:

Referencing page 6 of the Briggs & Johnson testimony, what is the baseline spending over which the actual O&M expenses would be measured?

Response:

The actual O&M expenses included for cost recovery in the Company's proposal would be only the O&M costs incurred specifically for the AMF program. As base distribution rates do not currently include O&M costs for the AMF program, all O&M costs incurred for the AMF program proposed in this filing would be included for cost recovery.

PUC 1-4

Request:

In any cost recovery mechanism, among other components, the PUC looks at the following: whether there is an incentive to the Company to spend and manage within the projected budget; the timing of when the Company is required to prove the reasonableness of the expenditure for which cost recovery is sought; ratepayer protections that reduce the risk of spending in excess of what is being projected; and whether there is a shift of risk of overspend to ratepayers and away from the Company.

- a. Please explain the extent to which the Company's cost recovery mechanism addresses each of these components.

Response:

The Company's cost recovery mechanism addresses the specific components above as follows:

- (i) ***Whether there is an incentive to the Company to spend and manage within the projected budget:*** The Company's cost-recovery mechanism incentivizes the Company to remain on target with the scope and schedule of the project and to manage the costs accordingly. Under the Company's proposal, the Company bears the risk for expenditures unless and until such time that the Company's new AMF Recovery Factors to recover costs for the actual spend are effective. Additionally, the Company is incentivized because its proposal includes 80% of the projected avoided O&M benefits passed back to customers regardless of when those benefits are achieved.
- (ii) ***The timing of when the Company is required to prove the reasonableness of the expenditure for which cost recovery is sought:*** The Company proposes to update the AMF Recovery Factor on a bi-annual basis for the historical period revenue requirement, thus providing the Commission with insight into how the project is progressing at two separate intervals each year through the Company's AMF Recovery Factor filings. The Commission has two occasions per year to evaluate the status of the project compared to the Company's approved Plan and then determine if the costs are reasonable and prudent in accordance with the Plan as approved. The AMF Factor filings are in addition to the Company's proposed status reports, which also will include an explanation and status of the work completed and expenditures incurred.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
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Issued December 8, 2022

- (iii) ***Ratepayer protections that reduce the risk of spending in excess of what is being projected:*** As explained in subparts (i) and (ii), above, because the Company's proposed AMF Recovery Factor is based on historical actual costs, customers are paying only for those costs the Company actually incurs, and the Commission will have an opportunity semi-annually to review the Company's spending against the overall project costs. This mitigates the risk that customers are paying for costs that may not be incurred, are not used and useful, or have not yet provided benefits. Also, as described in Section IV, Part E – Project Governance of the Joint Pre-filed Direct Testimony of Company Witnesses Philip J. Walnock and Wanda Reder, the Company will be filing annual AMF Program Reports as well as a mid-year status update in between the annual reports, that will include reporting metrics that span the cost and benefit categories to demonstrate how the Company is progressing in the delivery of the AMF Business Case.
- (iv) ***Whether there is a shift of risk of overspend to ratepayers and away from the Company.*** Please see the Company's responses to subparts (i) through (iii), above. For the same reasons as discussed above, the Company's cost-recovery proposal does not shift the risk of overspend to customers.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-5

Request:

Referencing page 7 of the Briggs & Johnson testimony, how is the Company using the term “non-bypassable basis” in this context?

Response:

The Company's intention is that the AMF Factor (“AMFF”) will apply to all customers taking electric distribution service from Rhode Island Energy and that the AMFF cannot be avoided by shopping for generation services or municipal aggregation.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-6

Request:

Given the fact that any volumetric charge may become by-passable through net metering, please calculate an alternative rate design which is based upon a fixed monthly rate (instead of the kWh factor) that could be embedded within the relevant fixed customer charge for each rate class, allocating the costs to each rate class using the same allocations used for the proposed kWh factors reflected in Schedule SAB/BLJ-3.

Response:

Please see Attachment PUC 1-6 for an illustrative rate design that is a fixed monthly rate factor for each rate class instead of the kWh factor. The revenue requirement for each period used the same rate class allocations as reflected in Schedule SAB/BLJ-3. For purposes of this response, the monthly customer count by rate class for all periods on Pages 2 through 10, Line 6, is the November 2022 customer counts. If the Company was ordered to calculate the factor in this manner, the Company would update the actual customer counts in the semi-annual filings.

The Narragansett Electric Company
**Illustrative Proposed AMF Factor - Fixed Monthly Rate
Summary**

<u>Line No.</u>	<u>Source</u>	<u>Residential</u> <u>A-16 / A60</u> (b)	<u>Small C&I</u> <u>C-06</u> (c)	<u>General</u> <u>C&I</u> <u>G-02</u> (d)	<u>Large</u> <u>Demand</u> <u>B-32 / G-32</u> (e)	<u>Propulsion</u> <u>X-01</u> (f)	<u>Lighting S-</u> <u>05 / S-06</u> <u>S-10 / S-14</u> (g)	
<u>AMF Factor</u>								
(1)	Illustrative Proposed AMF Factor Monthly Fixed Charge January 2024 - June 2024	Page 2	\$0.08	\$0.14	\$1.27	\$9.80	\$85.73	\$0.77
(2)	Illustrative Proposed AMF Factor Monthly Fixed Charge July 2024 - December 2024	Page 3	\$0.25	\$0.42	\$3.90	\$30.05	\$262.89	\$2.36
(3)	Illustrative Proposed AMF Factor Monthly Fixed Charge January 2025 - June 2025	Page 4	\$0.25	\$0.42	\$3.90	\$30.05	\$262.89	\$2.36
(4)	Illustrative Proposed AMF Factor Monthly Fixed Charge July 2025 - December 2025	Page 5	\$1.28	\$2.15	\$20.06	\$154.76	\$1,353.84	\$12.18
(5)	Illustrative Proposed AMF Factor Monthly Fixed Charge January 2026 - June 2026	Page 6	\$1.28	\$2.15	\$20.06	\$154.76	\$1,353.84	\$12.18
(6)	Illustrative Proposed AMF Factor Monthly Fixed Charge July 2026 - December 2026	Page 7	\$2.30	\$3.86	\$35.91	\$277.01	\$2,423.33	\$21.80
(7)	Illustrative Proposed AMF Factor Monthly Fixed Charge January 2027 - June 2027	Page 8	\$2.30	\$3.86	\$35.91	\$277.01	\$2,423.33	\$21.80
(8)	Illustrative Proposed AMF Factor Monthly Fixed Charge July 2027 - December 2027	Page 9	\$2.78	\$4.66	\$43.36	\$334.49	\$2,926.18	\$26.32
(9)	Illustrative Proposed AMF Factor Monthly Fixed Charge January 2028 - June 2028	Page 10	\$2.78	\$4.66	\$43.36	\$334.49	\$2,926.18	\$26.32

The Narragansett Electric Company
Illustrative Proposed AMF Factor - Fixed Monthly Rate
For the Period January 1, 2024 through June 30, 2024

<u>Line No.</u>	<u>Total</u> (a)	<u>Residential</u> <u>A-16 / A60</u> (b)	<u>Small C&I</u> <u>C-06</u> (c)	<u>General C&I</u> <u>G-02</u> (d)	<u>Large Demand</u> <u>B-32 / G-32</u> (e)	<u>Propulsion</u> <u>X-01</u> (f)	<u>Lighting</u> <u>S-05 / S-06</u> <u>S-10 / S-14</u> (g)
(1) AMF Revenue Requirement through September 2023	\$392,628						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$392,628	\$218,440	\$43,423	\$60,439	\$59,036	\$514	\$10,776
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$392,628	\$218,440	\$43,423	\$60,439	\$59,036	\$514	\$10,776
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$0.08	\$0.14	\$1.27	\$9.80	\$85.73	\$0.77

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (a)
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

The Narragansett Electric Company
Illustrative Proposed AMF Factor - Fixed Monthly Rate
For the Period July 1, 2024 through December 31, 2024

<u>Line No.</u>	<u>Total</u> (a)	<u>Residential</u> <u>A-16 / A60</u> (b)	<u>Small C&I</u> <u>C-06</u> (c)	<u>General</u> <u>C&I</u> <u>G-02</u> (d)	<u>Large</u> <u>Demand</u> <u>B-32 / G-32</u> (e)	<u>Propulsion</u> <u>X-01</u> (f)	<u>Lighting S-</u> <u>05 / S-06</u> <u>S-10 / S-14</u> (g)
(1) AMF Revenue Requirement through March 2024	\$1,203,946						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$1,203,946	\$669,820	\$133,151	\$185,330	\$181,026	\$1,577	\$33,042
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$1,203,946	\$669,820	\$133,151	\$185,330	\$181,026	\$1,577	\$33,042
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$0.25	\$0.42	\$3.90	\$30.05	\$262.89	\$2.36

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (b) divided by 2
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

The Narragansett Electric Company
Illustrative Proposed AMF Factor - Fixed Monthly Rate
For the Period January 1, 2025 through June 30, 2025

<u>Line No.</u>	<u>Total</u>	<u>Residential A-16 / A60</u>	<u>Small C&I C-06</u>	<u>General C&I G-02</u>	<u>Large Demand B-32 / G-32</u>	<u>Propulsion X-01</u>	<u>Lighting S- 05 / S-06 S-10 / S-14</u>
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
(1) AMF Revenue Requirement through September 2024	\$1,203,946						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$1,203,946	\$669,820	\$133,151	\$185,330	\$181,026	\$1,577	\$33,042
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$1,203,946	\$669,820	\$133,151	\$185,330	\$181,026	\$1,577	\$33,042
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$0.25	\$0.42	\$3.90	\$30.05	\$262.89	\$2.36

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (b) divided by 2
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

The Narragansett Electric Company
**Illustrative Proposed AMF Factor - Fixed Monthly Rate
For the Period July 1, 2025 through December 31, 2025**

<u>Line No.</u>	<u>Total</u> (a)	<u>Residential A-16 / A60</u> (b)	<u>Small C&I C-06</u> (c)	<u>General C&I G-02</u> (d)	<u>Large Demand B-32 / G-32</u> (e)	<u>Propulsion X-01</u> (f)	<u>Lighting S- 05 / S-06 S-10 / S-14</u> (g)
(1) AMF Revenue Requirement through March 2025	\$6,200,115						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$6,200,115	\$3,449,456	\$685,705	\$954,417	\$932,251	\$8,123	\$170,163
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$6,200,115	\$3,449,456	\$685,705	\$954,417	\$932,251	\$8,123	\$170,163
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$1.28	\$2.15	\$20.06	\$154.76	\$1,353.84	\$12.18

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (c) divided by 2
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

The Narragansett Electric Company
Illustrative Proposed AMF Factor - Fixed Monthly Rate
For the Period January 1, 2026 through June 30, 2026

<u>Line No.</u>	<u>Total</u>	<u>Residential A-16 / A60</u>	<u>Small C&I C-06</u>	<u>General C&I G-02</u>	<u>Large Demand B-32 / G-32</u>	<u>Propulsion X-01</u>	<u>Lighting S- 05 / S-06 S-10 / S-14</u>
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
(1) AMF Revenue Requirement through September 2025	\$6,200,115						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$6,200,115	\$3,449,456	\$685,705	\$954,417	\$932,251	\$8,123	\$170,163
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$6,200,115	\$3,449,456	\$685,705	\$954,417	\$932,251	\$8,123	\$170,163
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$1.28	\$2.15	\$20.06	\$154.76	\$1,353.84	\$12.18

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (c) divided by 2
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

**The Narragansett Electric Company
Illustrative Proposed AMF Factor
For the Period July 1, 2026 through December 31, 2026**

<u>Line No.</u>	<u>Total</u>	<u>Residential A-16 / A60</u>	<u>Small C&I C-06</u>	<u>General C&I G-02</u>	<u>Large Demand B-32 / G-32</u>	<u>Propulsion X-01</u>	<u>Lighting S- 05 / S-06 S-10 / S-14</u>
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
(1) AMF Revenue Requirement through March 2026	\$11,097,966						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$11,097,966	\$6,174,392	\$1,227,386	\$1,708,370	\$1,668,693	\$14,540	\$304,585
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$11,097,966	\$6,174,392	\$1,227,386	\$1,708,370	\$1,668,693	\$14,540	\$304,585
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$2.30	\$3.86	\$35.91	\$277.01	\$2,423.33	\$21.80

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (d) divided by 2
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

The Narragansett Electric Company
Illustrative Proposed AMF Factor - Fixed Monthly Rate
For the Period January 1, 2027 through June 30, 2027

<u>Line No.</u>	<u>Total</u>	<u>Residential A-16 / A60</u>	<u>Small C&I C-06</u>	<u>General C&I G-02</u>	<u>Large Demand B-32 / G-32</u>	<u>Propulsion X-01</u>	<u>Lighting S- 05 / S-06 S-10 / S-14</u>
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
(1) AMF Revenue Requirement through September 2026	\$11,097,966						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$11,097,966	\$6,174,392	\$1,227,386	\$1,708,370	\$1,668,693	\$14,540	\$304,585
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$11,097,966	\$6,174,392	\$1,227,386	\$1,708,370	\$1,668,693	\$14,540	\$304,585
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$2.30	\$3.86	\$35.91	\$277.01	\$2,423.33	\$21.80

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (d) divided by 2
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

The Narragansett Electric Company
Illustrative Proposed AMF Factor - Fixed Monthly Rate
For the Period July 1, 2027 through December 31, 2027

<u>Line No.</u>	<u>Total</u>	<u>Residential A-16 / A60</u>	<u>Small C&I C-06</u>	<u>General C&I G-02</u>	<u>Large Demand B-32 / G-32</u>	<u>Propulsion X-01</u>	<u>Lighting S- 05 / S-06 S-10 / S-14</u>
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
(1) AMF Revenue Requirement through March 2027	\$13,400,843						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$13,400,843	\$7,455,606	\$1,482,074	\$2,062,864	\$2,014,954	\$17,557	\$367,787
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$13,400,843	\$7,455,606	\$1,482,074	\$2,062,864	\$2,014,954	\$17,557	\$367,787
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$2.78	\$4.66	\$43.36	\$334.49	\$2,926.18	\$26.32

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (e) divided by 2
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

The Narragansett Electric Company
Illustrative Proposed AMF Factor - Fixed Monthly Rate
For the Period January 1, 2028 through June 30, 2028

<u>Line No.</u>	<u>Total</u>	<u>Residential A-16 / A60</u>	<u>Small C&I C-06</u>	<u>General C&I G-02</u>	<u>Large Demand B-32 / G-32</u>	<u>Propulsion X-01</u>	<u>Lighting S- 05 / S-06 S-10 / S-14</u>
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
(1) AMF Revenue Requirement through September 2027	\$13,400,843						
(2) Percentage of Total	100.00%	55.6%	11.1%	15.4%	15.0%	0.1%	2.7%
(3) Allocated AMF Revenue Requirement	\$13,400,843	\$7,455,606	\$1,482,074	\$2,062,864	\$2,014,954	\$17,557	\$367,787
(4) (Over)/Under Recovery for Prior Period	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5) Total Revenue Requirement and Reconciliation for 6-Month Period	\$13,400,843	\$7,455,606	\$1,482,074	\$2,062,864	\$2,014,954	\$17,557	\$367,787
(6) Customer Count for 6-Month Period	3,071,712	2,685,798	318,330	47,580	6,024	6	13,974
(7) Illustrative Amount per Customer for 6 month period		\$2.78	\$4.66	\$43.36	\$334.49	\$2,926.18	\$26.32

Line Notes:

- (1) Schedule SAB/BJ-1, Page 1, Line 21, Column (e) divided by 2
- (2) Schedule SAB/BJ-2, Page 1, Line 3
- (3) Line (1) Column (a) x Line (2)
- (4) Calculated (over)/under recovery from difference in forecasted vs. actual kWh for prior periods
- (5) Line (3) + Line (4)
- (6) Per November 2022 Customer Counts by Rate Class x 6
- (7) Line (5) divided by Line (6)

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-7

Request:

Referring to Schedule SBA/BLJ-1, AMF Recovery Year 1 indicates a period from October 2022 through September 2023,

- a. If the Company (hypothetically) did not obtain approval until the beginning of AMF Recovery Year 2, would the Company be seeking recovery through the Advanced Metering Functionality Provision of costs incurred prior to the effective date of approval?
- b. If yes, please state the date that cost incurrence is expected to commence during the period prior to the hypothetical approval and the amount estimated for recovery if approval was effective as of the beginning of AMF Recovery Year 2.

Response:

- a. Yes, the Company would be seeking to recover, through the Advanced Metering Functionality Provision, the revenue requirement associated with all incremental AMF costs incurred through the first recovery period, including any costs incurred prior to the date of approval.
- b. As described on Page 46 of the Joint Pre-filed Direct Testimony of Company Witnesses Philip J. Walnock and Wanda Reder, the Company will be incurring costs of approximately \$8 million prior to June 2023, the date by which the Company requested that the Public Utilities Commission approve the filing. If the Company does not receive regulatory approval until October 2023, the Company anticipates it will incur an additional \$2 million of costs prior to receipt of regulatory approval. The Company incurred minimal costs during calendar year ("CY") 2022, with the remaining amounts to be incurred during CY 2023. These costs consist mainly of system development work, where AMF system work will be done in parallel with the transitional work occurring under the Transition Services Agreement between the Company and National Grid USA Service Company, Inc.

Hypothetically assuming that the Company does not receive regulatory approval until the beginning of AMF Recovery Year 2 (October 1, 2023), the Company may not be able to complete the first AMF Factor filing by November 15, 2023, as proposed in the AMF Business Case. In that case, the first AMF Factor filing would occur by May 15, 2024, for rates to be effective July 1, 2024. This filing would include the revenue requirement for the costs the Company incurred for investments placed in service through September 2023 (estimated as \$392,628 on Schedule SAB/BLJ-3, Page 2, Line 1) as well as the revenue requirement for the costs the Company incurred for investments placed in service

The Narragansett Electric Company
d/b/a Rhode Island Energy
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Issued December 8, 2022

during the period October 2023 through March 2024 (estimated to be \$1,203,946 on Schedule SAB/BLJ-3, Page 3, Line 1). The Company will seek recovery of any costs incurred prior to the hypothetical approval at the time that the investments are placed into service (as described in the response to PUC 1-9).

The Company also notes that, if it does not receive regulatory approval until October 2023, there will be a corresponding delay in the implementation schedule.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
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Issued December 8, 2022

PUC 1-8

Request:

Referring to page 13 of the Briggs & Johnson testimony and Schedule SAB/BLJ-1 (lines 16, 18, and 19), please provide a schedule showing the calculation and sources of the amounts being credited in AMF Recovery Year 2 for each of the referenced lines.

Response:

Please see Attachment PUC 1-8 for the schedule showing the calculation and sources of the amounts being credited in AMF Recovery Year 2 on Schedule SAB/BLJ-1.

**The Narragansett Electric Company
d/b/a Rhode Island Energy
Power Sector Transformation (PST)
Rhode Island Renewable Energy
Annual Revenue Requirement Summary
AMF-related investment**

Line No.		<u>Rate Year Ending August 31, 2019</u> Rate Year 1 (a)	<u>Rate Year Ending August 31, 2020</u> Rate Year 2 (b)	<u>Rate Year Ending August 31, 2021</u> Rate Year 3 (c)	<u>Rate Year Ending August 31, 2022</u> Rate Year 4 & forward (d)
	Electric				
	Other Grid Mod:				
1	RTU Separation	\$0	\$0	\$0	\$0
2	Enterprise Service Bus	\$0	\$116,560	\$272,577	\$272,577
3	Data Lake	\$0	\$73,837	\$100,038	\$100,038
4	PI Historian	\$0	\$0	\$0	\$0
5	Advanced Analytics	\$0	\$141,584	\$171,080	\$171,080
6	Telecommunications	\$0	\$155,251	\$231,584	\$231,584
7	Cybersecurity	\$0	\$459,646	\$459,181	\$459,181
8	Subtotal - Other Grid Mod	\$0	\$946,878	\$1,234,459	\$1,234,459
			Schedule SAB/BLJ-1, Page 1, Line 18, Column (b)		Schedule SAB/BLJ-1, Pages 1&2, Line 16, Columns (b) - (u)

Source: AMF allocated portion of revenue requirement in Docket No. 4770/4780, Compliance Attachent 1, Page 7 of 9

Amounts recovered in base rates:

9	September 1, 2019 through August 31, 2020	\$946,878	Column b	Reduce AMF Recovery Year 2, Line 18
10	September 1, 2020 through August 31, 2021	\$1,234,459	Column c	
11	September 1, 2021 through August 31, 2022	\$1,234,459	Column d	
12	September 1, 2022 through August 31, 2023	\$1,234,459	Column d	
13	Total between Rate Case Year 3 and proposed AMF effective recovery	\$3,703,377	Sum Lines 10 -12	
14	Allocated over two (2) AMF recovery years	\$1,851,688	Line 13 divided by 2	Reduce AMF Recovery Year 2 & 3, Line 19
15	Annual amount recovered in base rates until next rate case	\$1,234,459	Column d	Reduce AMF Recovery Year, Line 16 until next rate case

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-9

Request:

Please explain what the Company considers as “placed in service” for each category of investments included in the AMF Business Case and provide the rationale.

Response:

Capital investments in the Company's AMF Business Case and cost-recovery proposal are considered placed in service when the costs have been incurred and the investment is ready for its intended use. If there are future enhancements after an investment is placed into service, those enhancements would be placed into service as an additional capital investment.

For Meters and related costs, the Company will consider these as placed in service once they have been purchased and sample meter tested for quality. Once the new meters have been tested and determined to satisfy the guidelines, they will be functioning as a customer meter and considered as placed in service in the Company's plant accounting records.

For Software Systems and related costs in the AMF Business Case, many of the costs are expected to be incurred over a multi-year deployment. Each software system related to AMF will be tracked separately and will not be considered as placed in service in the Company's plant accounting records until the Company has incurred all costs for that specific system and has determined that the system is ready to function for its intended use. Once the Company has completed a software system and incurred the costs for that work, the Company will evaluate whether (1) the system is ready to function for its intended use independent of other software or network costs and should be considered as placed in service in the plant accounting records or (2) the system is not ready to function for its intended use because it depends on another system or network to be completed before it can be placed in service.

Similar to software system costs, the majority of the Communications Network Equipment and Installation costs are expected to be incurred over a multi-year deployment. The Company will apply the same process described above for software costs to determine whether the investment is considered as placed in service in the Company's plant accounting records. Specifically, once the Company has completed the Communications Network investment work and incurred the costs for that work, the Company will evaluate whether (1) the investment is ready to function for its intended use and should be considered as placed in service in the Company's plant accounting records or (2) the investment is not ready to function for its intended use because it depends on another project to be completed before it can be considered as placed in service in the Company's plant accounting records.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
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Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-10

Request:

In the context of the Company's proposal, are the capital investments considered placed in service when they are completed, when they are literally being used, and/or when they are providing the value to customers and the Company reflected in the BCA? Please explain.

Response:

Please see the Company's response to PUC 1-9 for an explanation of when the Company considers the capital investments as "placed in service."

In the context of the Joint Pre-filed Direct Testimony of Company Witnesses Stephanie A. Briggs and Bethany L. Johnson, the term "placed in service" in regard to capital investments included for recovery in the AMF Factor are those capital investments that have been included as plant additions in the Company's plant accounting records. For each AMF Factor filing, the Company would determine the amount of additional plant additions during the reporting period from the plant accounting records to include in the calculation of the revenue requirement.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
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Issued December 8, 2022

PUC 1-11

Request:

Referring to Schedule SAB/BLJ-1, page 13, please provide a description of each of the investments upon which the capex costs were calculated in the CapEx column for each year, including (a) a breakdown of intangible software costs by component, (b) the functionality and purpose of each investment, (c) the date when the Company assumes the software component will be in service, and (d) the estimated date it will be performing the functionality.

Response:

Please see Attachment PUC 1-11 for a breakdown of the intangible software costs by component for each year on Schedule SAB/BLJ-1, Page 13. Please see Attachment H to the AMF Business Case, beginning on Page 25, for detailed descriptions for each of the components on Attachment PUC 1-11, including the functionality and purpose of each investment along with the estimated functionality dates. As indicated in the Company's response to PUC 1-19 and in the descriptions in Attachment H, the majority of the intangible software components are anticipated to be deployed and implemented in AMF Year 4. On Attachment PUC 1-11, the year in which the costs are reflected is the respective year that the Company anticipates the component will be placed in service and performing its functionality.

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

		DEPLOYMENT				POST-DEPLOYMENT / OPERATIONS					
		AMF Recovery Year 1	AMF Recovery Year 2	AMF Recovery Year 3	AMF Recovery Year 4	AMF Recovery Year 5	AMF Recovery Year 6	AMF Recovery Year 7			
Cost Category 1	Cost Category 3	Cost Category 4	Full Description	FERC Account	October to September 2023	October to September 2024	October to September 2025	October to September 2026	October to September 2027	October to September 2028	October to September 2029
04. Program	PPL Labor	PPL Labor	PPL PMO Oversight (IT) - AMF Implementation PMO	303	\$731,567	\$954,136.13	\$898,860.71	\$215,492.11	\$0.00	\$0.00	\$0.00
03.Systems	Network Model Analytics	NMA/AGA	Network Model Analytics / AGA	303	0	0	0	\$391,538.00	\$0.00	\$0.00	\$0.00
03.Systems	Data Lake	Data Lake	Data Lake	303	0	0	0	\$1,321,842.80	\$0.00	\$0.00	\$0.00
03.Systems	Advanced Analytics	Adv.Analytics	Advanced Analytics	303	0	0	0	\$845,259.62	\$0.00	\$0.00	\$0.00
03.Systems	Data Lake	Data Lake	Data Lake - SI VENDOR	303	0	0	0	\$1,218,090.00	\$0.00	\$0.00	\$0.00
03.Systems	CSS	CSS	Customer Service Software	303	0	0	0	\$1,682,263.92	\$0.00	\$0.00	\$0.00
03.Systems	Deployment Exchange Management (Electric)	Deply. xchg. Mgt.	Deployment Exchange Management	303	0	0	0	\$334,411.30	\$0.00	\$0.00	\$0.00
03.Systems	Deployment Exchange Management (Electric)	Deply. xchg. Mgt.	Deployment Work Management - SI Vendor	303	0	0	0	\$886,855.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend	Headend	Software as a Service (SaaS) Vendor - Headend (Implement)	303	0	0	0	\$6,713,923.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend	Headend	SI Vendor - Headend (Implement)	303	0	0	0	\$3,355,090.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend Upgrade	Headend	E2E System Testing (Headend Upgrade)	303	0	0	0	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	WiSun	WiSun	Software as a Service (SaaS) - WiSun (Implement)	303	0	0	0	\$1,967,347.00	\$0.00	\$0.00	\$0.00
03.Systems	MDMS	MDMS	Software as a Service (SaaS) Vendor - MDMS (Implement)	303	0	0	0	\$3,082,659.80	\$0.00	\$0.00	\$0.00
03.Systems	MDMS	MDMS	SI Vendor - MDMS (Implement)	303	0	0	0	\$1,356,995.00	\$0.00	\$0.00	\$0.00
03.Systems	MDMS Upgrade	MDMS	E2E System Testing (MDMS Upgrade)	303	0	0	0	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Middleware	Middleware	Middleware (Implement)	303	0	0	0	\$758,467.96	\$0.00	\$0.00	\$0.00
03.Systems	Middleware	Middleware	Middleware - SI Vendor (Implement)	303	0	0	0	\$1,998,095.00	\$0.00	\$0.00	\$0.00
03.Systems	CyberSecurity	CyberSecurity	CyberSecurity (Implement)	303	0	0	0	\$708,353.37	\$0.00	\$0.00	\$0.00
03.Systems	CyberSecurity	CyberSecurity	SI Vendor - CyberSecurity (Implement)	303	0	0	0	\$1,869,875.00	\$0.00	\$0.00	\$0.00
03.Systems	Customer Portal	Customer Portal	Customer Portal	303	0	0	0	\$1,079,000.00	\$0.00	\$0.00	\$0.00
03.Systems	Outage Alerts	Outage Alerts	Customer Outage Alerts	303	0	0	0	\$332,000.00	\$0.00	\$0.00	\$0.00
03.Systems	Green Button	Green Button	Green Button Connect	303	0	0	0	\$664,000.00	\$0.00	\$0.00	\$0.00
03.Systems	Bill Alerts	Bill Alerts	Bill Alerts	303	0	0	0	\$332,000.00	\$0.00	\$0.00	\$0.00
03.Systems	DG Portal	DG Portal	Solar Marketplace	303	0	0	0	\$664,000.00	\$0.00	\$0.00	\$0.00
03.Systems	Carbon Footprint Calc.	Carbon Footprint Calc.	Carbon Footprint Calculator	303	0	0	0	\$166,000.00	\$0.00	\$0.00	\$0.00
03.Systems	C&I and Multi-Family Port. View	Portfolio View	C&I and Multi-Family Portfolio View	303	0	0	0	\$415,000.00	\$0.00	\$0.00	\$0.00
03.Systems	Time Varying Rates (TVR)	TVR	Time Varying Rates (TVR) - Full Implementation	303	0	0	0	\$0.00	\$791,745.41	\$1,734,299.48	\$490,128.11
03.Systems	ADMS & OMS	ADMS & OMS	ADMS & OMS	303	0	0	0	\$1,794,901.56	\$0.00	\$0.00	\$0.00
					\$731,567.23	\$954,136.13	\$898,860.71	\$34,153,460.44	\$791,745.41	\$1,734,299.48	\$490,128.11

(1) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H

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

POST-DEPLOYMENT / OPERATIONS

<u>Cost Category 1</u>	<u>Cost Category 3</u>	<u>Cost Category 4</u>	<u>Full Description</u>	<u>FERC Account</u>	<u>AMF Recovery Year 8</u>	<u>AMF Recovery Year 9</u>	<u>AMF Recovery Year 10</u>	<u>AMF Recovery Year 11</u>	<u>AMF Recovery Year 12</u>	<u>AMF Recovery Year 13</u>	<u>AMF Recovery Year 14</u>	<u>AMF Recovery Year 15</u>
					<u>October to September 2030</u>	<u>October to September 2031</u>	<u>October to September 2032</u>	<u>October to September 2033</u>	<u>October to September 2034</u>	<u>October to September 2035</u>	<u>October to September 2036</u>	<u>October to September 2037</u>
04. Program	PPL Labor	PPL Labor	PPL PMO Oversight (IT) - AMF Implementation PMO	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Network Model Analytics	NMA/AGA	Network Model Analytics / AGA	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Data Lake	Data Lake	Data Lake	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Advanced Analytics	Adv.Analytics	Advanced Analytics	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Data Lake	Data Lake	Data Lake - SI VENDOR	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	CSS	CSS	Customer Service Software	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Deployment Exchange Management (Electric)	Deply. xchg. Mgt.	Deployment Exchange Management	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Deployment Exchange Management (Electric)	Deply. xchg. Mgt.	Deployment Work Management - SI Vendor	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend	Headend	Software as a Service (SaaS) Vendor - Headend (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend	Headend	SI Vendor - Headend (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend Upgrade	Headend	E2E System Testing (Headend Upgrade)	303	\$552,195.95	\$184,065.32	\$0.00	\$0.00	\$0.00	\$618,687.56	\$206,229.19	\$0.00
03.Systems	WiSun	WiSun	Software as a Service (SaaS) - WiSun (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	MDMS	MDMS	Software as a Service (SaaS) Vendor - MDMS (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	MDMS	MDMS	SI Vendor - MDMS (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	MDMS Upgrade	MDMS	E2E System Testing (MDMS Upgrade)	303	\$0.00	\$847,344.69	\$282,448.23	\$0.00	\$0.00	\$0.00	\$0.00	\$971,211.71
03.Systems	Middleware	Middleware	Middleware (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Middleware	Middleware	Middleware - SI Vendor (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	CyberSecurity	CyberSecurity	CyberSecurity (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	CyberSecurity	CyberSecurity	SI Vendor - CyberSecurity (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Customer Portal	Customer Portal	Customer Portal	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Outage Alerts	Outage Alerts	Customer Outage Alerts	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Green Button	Green Button	Green Button Connect	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Bill Alerts	Bill Alerts	Bill Alerts	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	DG Portal	DG Portal	Solar Marketplace	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Carbon Footprint Calc.	Carbon Footprint Calc.	Carbon Footprint Calculator	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	C&I and Multi-Family Port. View	Portfolio View	C&I and Multi-Family Portfolio View	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Time Varying Rates (TVR)	TVR	Time Varying Rates (TVR) - Full Implementation	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	ADMS & OMS	ADMS & OMS	ADMS & OMS	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
					\$552,195.95	\$1,031,410.00	\$282,448.23	\$0.00	\$0.00	\$618,687.56	\$206,229.19	\$971,211.71

(1) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H

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

					POST-DEPLOYMENT / OPERATIONS				
					AMF Recovery Year 16	AMF Recovery Year 17	AMF Recovery Year 18	AMF Recovery Year 19	AMF Recovery Year 20
<u>Cost Category 1</u>	<u>Cost Category 3</u>	<u>Cost Category 4</u>	<u>Full Description</u>	<u>FERC Account</u>	October to September 2038	October to September 2039	October to September 2040	October to September 2041	October to September 2042
04. Program	PPL Labor	PPL Labor	PPL PMO Oversight (IT) - AMF Implementation PMO	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Network Model Analytics	NMA/AGA	Network Model Analytics / AGA	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Data Lake	Data Lake	Data Lake	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Advanced Analytics	Adv.Analytics	Advanced Analytics	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Data Lake	Data Lake	Data Lake - SI VENDOR	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	CSS	CSS	Customer Service Software	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Deployment Exchange Management (Electric)	Deply. xchg. Mgt.	Deployment Exchange Management	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Deployment Exchange Management (Electric)	Deply. xchg. Mgt.	Deployment Work Management - SI Vendor	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend	Headend	Software as a Service (SaaS) Vendor - Headend (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend	Headend	SI Vendor - Headend (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Headend Upgrade	Headend	E2E System Testing (Headend Upgrade)	303	\$0.00	\$0.00	\$693,185.64	\$231,061.88	\$0.00
03.Systems	WiSun	WiSun	Software as a Service (SaaS) - WiSun (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	MDMS	MDMS	Software as a Service (SaaS) Vendor - MDMS (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	MDMS	MDMS	SI Vendor - MDMS (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	MDMS Upgrade	MDMS	E2E System Testing (MDMS Upgrade)	303	\$323,737.24	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Middleware	Middleware	Middleware (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Middleware	Middleware	Middleware - SI Vendor (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	CyberSecurity	CyberSecurity	CyberSecurity (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	CyberSecurity	CyberSecurity	SI Vendor - CyberSecurity (Implement)	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Customer Portal	Customer Portal	Customer Portal	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Outage Alerts	Outage Alerts	Customer Outage Alerts	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Green Button	Green Button	Green Button Connect	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Bill Alerts	Bill Alerts	Bill Alerts	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	DG Portal	DG Portal	Solar Marketplace	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Carbon Footprint Calc.	Carbon Footprint Calc.	Carbon Footprint Calculator	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	C&I and Multi-Family Port. View	Portfolio View	C&I and Multi-Family Portfolio View	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	Time Varying Rates (TVR)	TVR	Time Varying Rates (TVR) - Full Implementation	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
03.Systems	ADMS & OMS	ADMS & OMS	ADMS & OMS	303	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
					\$323,737.24	\$0.00	\$693,185.64	\$231,061.88	\$0.00

(1) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-12

Request:

Referring to Schedule SAB/BLJ-1, page 11, please provide a description of each of the investments upon which the capex costs were calculated in the CapEx column for each year, including (a) a breakdown of the communications equipment costs by component, (b) the functionality and purpose of each investment, (c) the date when the Company assumes the communication component will be in service, and (d) the estimated date it will be performing the functionality.

Response:

- a. Please see Attachment PUC 1-12 for a breakdown of the communication equipment network costs by component for each year on Schedule SAB/BLJ-1, Page 11.
- b. Please see Attachment H to the AMF Business Case, beginning on Page 24, for a detailed description for the components on Attachment PUC 1-12, including the functionality and purpose of each investment.
- c. On Attachment PUC 1-12, the year in which the costs are listed is the respective year that the Company anticipates the component will be placed in service and performing its functionality.
- d. Please see the response to Subpart (c).

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

				DEPLOYMENT				POST-DEPLOYMENT / OPERATIONS		
<u>Cost Category 1</u>	<u>Cost Category 3</u>	<u>Cost Category 4</u>	<u>Full Description</u>	<u>AMF Recovery Year 1</u>	<u>AMF Recovery Year 2</u>	<u>AMF Recovery Year 3</u>	<u>AMF Recovery Year 4</u>	<u>AMF Recovery Year 5</u>	<u>AMF Recovery Year 6</u>	<u>AMF Recovery Year 7</u>
			<u>FERC Account</u>	<u>October to September 2023</u>	<u>October to September 2024</u>	<u>October to September 2025</u>	<u>October to September 2026</u>	<u>October to September 2027</u>	<u>October to September 2028</u>	<u>October to September 2029</u>
02.Network Year 4	Vendor /External Labor	Installation Vendor	RF Network Installation Vendor Project Management Oversight	397	\$0	\$0	0	\$1,190,003	\$0	\$0
02.Network	Gateway	Network Gateway	(High Capacity Gateways) Hardware - High Capacity Network Gateway	397	\$0	\$0	\$408,205	\$0	\$0	\$0
02.Network	Gateway	Modem	(High Capacity Gateways) Hardware - Cellular Backhaul Modem	397	\$0	\$0	\$174,945	\$0	\$0	\$0
02.Network	Gateway	Telecom Cabinet	(High Capacity Gateways) Hardware - Telecom Cabinet	397	\$0	\$0	\$291,575	\$0	\$0	\$0
02.Network	Gateway	Poles	(Gateways) Pole (Equipment)	397	\$0	\$0	\$787,349	\$0	\$0	\$0
02.Network	Gateway	Network Gateway	(Standard Capacity Gateways) Hardware - Network Gateway	397	\$0	\$0	\$1,247,406	\$0	\$0	\$0
02.Network	Router	Routers	(Routers) Hardware - Routers	397	\$0	\$0	\$1,787,328	\$0	\$0	\$0
02.Network	Transformers	Transformers	Additional Transformers required - material	397	\$0	\$0	\$173,717	\$0	\$0	\$0
02.Network	Gateway	Network Testing	Network Development and Testing - Routers, Gateways, Antennas, Modem	397	\$0	\$0	\$12,642	\$0	\$0	\$0
02.Network	Ancillary Equipment	Network Testing	Network Development and Testing - Equipment	397	\$0	\$0	\$8,560	\$0	\$0	\$0
02.Network Year 4	Gateway	Site Installations	(High Capacity Gateways) Site Installation (pole, antennas, cabinets, etc)	397	\$0	\$0	\$0	\$4,665,200	\$0	\$0
02.Network	Site Engineering	Site Engineering Permits	(High Capacity Gateways) Site Engineering design (power, permits, FAA, etc)	397	\$0	\$0	\$327,000	\$0	\$0	\$0
02.Network Year 4	Gateway	Network Gateway	(Standard Capacity Gateways) Installation - Network Gateway	397	\$0	\$0	\$0	\$351,750	\$0	\$0
02.Network Year 4	Router	Routers	(Routers) Installation - Routers	397	\$0	\$0	\$0	\$1,120,000	\$0	\$0
02.Network Year 4	Transformers	Transformers	Additional Transformers required - Install	397	\$0	\$0	\$0	\$147,175	\$0	\$0
02.Network	Gateway	Network Testing	Network Development and Testing - Installation	397	\$0	\$0	\$4,375	\$0	\$0	\$0
02.Network	Gateway	Network Gateway (Replacements)	Network equipment replacement - Hardware - Gateways	397	\$0	\$0	\$0	\$0	\$0	\$6,967
02.Network	Router	Routers (Replacements)	Network equipment replacement - Hardware - Routers	397	\$0	\$0	\$0	\$0	\$0	\$7,521
02.Network	Gateway	4G-2-5G Upgrade	Hardware - Cellular Backhaul Modems 4G-2-5G (High Capacity Gateway locations)	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	4G-2-5G Upgrade	Hardware - Network Gateway 4G-2-5G (Standard Capacity locations)	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Gateway (Replacements)	Network equipment replacement - Install - Gateways	397	\$0	\$0	\$0	\$0	\$0	\$1,882
02.Network	Router	Routers (Replacements)	Network equipment replacement - Install - Routers	397	\$0	\$0	\$0	\$0	\$0	\$4,713
02.Network	Gateway	4G-2-5G Upgrade	Installation - Cellular Backhaul Modems 4G-2-5G	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	4G-2-5G Upgrade	Installation - Network Gateway 4G-2-5G	397	\$0	\$0	\$0	\$0	\$0	\$0
04.Program	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network lead	397	\$144,000	\$336,000	\$287,520	\$63,840	\$0	\$0
04.Program	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network Analyst	397	\$126,000	\$294,000	\$210,000	\$42,000	\$0	\$0
				\$270,000	\$630,000	\$5,720,622	\$7,579,967	\$0	\$0	\$21,083

(1) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H

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

POST-DEPLOYMENT / OPERATIONS

<u>Cost Category 1</u>	<u>Cost Category 3</u>	<u>Cost Category 4</u>	<u>Full Description</u>	<u>FERC Account</u>	<u>AMF Recovery Year 8</u>	<u>AMF Recovery Year 9</u>	<u>AMF Recovery Year 10</u>	<u>AMF Recovery Year 11</u>	<u>AMF Recovery Year 12</u>	<u>AMF Recovery Year 13</u>	<u>AMF Recovery Year 14</u>
					<u>October to September 2030</u>	<u>October to September 2031</u>	<u>October to September 2032</u>	<u>October to September 2033</u>	<u>October to September 2034</u>	<u>October to September 2035</u>	<u>October to September 2036</u>
02.Network Year 4	Vendor /External Labor	Installation Vendor	RF Network Installation Vendor Project Management Oversight	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Gateway	(High Capacity Gateways) Hardware - High Capacity Network Gateway	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Modem	(High Capacity Gateways) Hardware - Cellular Backhaul Modem	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Telecom Cabinet	(High Capacity Gateways) Hardware - Telecom Cabinet	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Poles	(Gateways) Pole (Equipment)	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Gateway	(Standard Capacity Gateways) Hardware - Network Gateway	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Router	Routers	(Routers) Hardware - Routers	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Transformers	Transformers	Additional Transformers required - material	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Testing	Network Development and Testing - Routers, Gateways, Antennas, Modem	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Ancillary Equipment	Network Testing	Network Development and Testing - Equipment	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network Year 4	Gateway	Site Installations	(High Capacity Gateways) Site Installation (pole, antennas, cabinets, etc)	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Site Engineering	Site Engineering Permits	(High Capacity Gateways) Site Engineering design (power, permits, FAA, etc)	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network Year 4	Gateway	Network Gateway	(Standard Capacity Gateways) Installation - Network Gateway	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network Year 4	Router	Routers	(Routers) Installation - Routers	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network Year 4	Transformers	Transformers	Additional Transformers required - Install	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Testing	Network Development and Testing - Installation	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Gateway (Replacements)	Network equipment replacement - Hardware - Gateways	397	\$9,307	\$9,330	\$9,354	\$9,377	\$9,400	\$9,424	\$9,447
02.Network	Router	Routers (Replacements)	Network equipment replacement - Hardware - Routers	397	\$10,047	\$10,073	\$10,098	\$10,123	\$10,148	\$10,174	\$10,199
02.Network	Gateway	4G-2-5G Upgrade	Hardware - Cellular Backhaul Modems 4G-2-5G (High Capacity Gateway locations)	397	\$0	\$0	\$0	\$43,299	\$57,732	\$59,044	\$14,870
02.Network	Gateway	4G-2-5G Upgrade	Hardware - Network Gateway 4G-2-5G (Standard Capacity locations)	397	\$0	\$0	\$0	\$308,733	\$411,644	\$421,000	\$106,030
02.Network	Gateway	Network Gateway (Replacements)	Network equipment replacement - Install - Gateways	397	\$2,514	\$2,520	\$2,526	\$2,532	\$2,539	\$2,545	\$2,551
02.Network	Router	Routers (Replacements)	Network equipment replacement - Install - Routers	397	\$6,296	\$6,312	\$6,328	\$6,343	\$6,359	\$6,375	\$6,391
02.Network	Gateway	4G-2-5G Upgrade	Installation - Cellular Backhaul Modems 4G-2-5G	397	\$0	\$0	\$0	\$23,605	\$31,474	\$32,189	\$8,107
02.Network	Gateway	4G-2-5G Upgrade	Installation - Network Gateway 4G-2-5G	397	\$0	\$0	\$0	\$87,058	\$116,078	\$118,716	\$29,899
04.Program	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network lead	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
04.Program	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network Analyst	397	\$0	\$0	\$0	\$0	\$0	\$0	\$0
					\$28,164	\$28,234	\$28,305	\$491,071	\$645,374	\$659,466	\$187,495

(I) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H

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

POST-DEPLOYMENT / OPERATIONS

<u>Cost Category 1</u>	<u>Cost Category 3</u>	<u>Cost Category 4</u>	<u>Full Description</u>	<u>FERC Account</u>	<u>AMF Recovery Year 15</u>	<u>AMF Recovery Year 16</u>	<u>AMF Recovery Year 17</u>	<u>AMF Recovery Year 18</u>	<u>AMF Recovery Year 19</u>	<u>AMF Recovery Year 20</u>
					<u>October to September 2037</u>	<u>October to September 2038</u>	<u>October to September 2039</u>	<u>October to September 2040</u>	<u>October to September 2041</u>	<u>October to September 2042</u>
02.Network Year 4	Vendor /External Labor	Installation Vendor	RF Network Installation Vendor Project Management Oversight	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Gateway	(High Capacity Gateways) Hardware - High Capacity Network Gateway	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Modem	(High Capacity Gateways) Hardware - Cellular Backhaul Modem	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Telecom Cabinet	(High Capacity Gateways) Hardware - Telecom Cabinet	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Poles	(Gateways) Pole (Equipment)	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Gateway	(Standard Capacity Gateways) Hardware - Network Gateway	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Router	Routers	(Routers) Hardware - Routers	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Transformers	Transformers	Additional Transformers required - material	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Testing	Network Development and Testing - Routers, Gateways, Antennas, Modem	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Ancillary Equipment	Network Testing	Network Development and Testing - Equipment	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network Year 4	Gateway	Site Installations	(High Capacity Gateways) Site Installation (pole, antennas, cabinets, etc)	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Site Engineering	Site Engineering Permits	(High Capacity Gateways) Site Engineering design (power, permits, FAA, etc)	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network Year 4	Gateway	Network Gateway	(Standard Capacity Gateways) Installation - Network Gateway	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network Year 4	Router	Routers	(Routers) Installation - Routers	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network Year 4	Transformers	Transformers	Additional Transformers required - Install	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Testing	Network Development and Testing - Installation	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Gateway (Replacements)	Network equipment replacement - Hardware - Gateways	397	\$9,471	\$9,495	\$9,519	\$9,542	\$9,566	\$2,393
02.Network	Router	Routers (Replacements)	Network equipment replacement - Hardware - Routers	397	\$10,225	\$10,250	\$10,276	\$10,301	\$10,327	\$2,583
02.Network	Gateway	4G-2-5G Upgrade	Hardware - Cellular Backhaul Modems 4G-2-5G (High Capacity Gateway locations)	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	4G-2-5G Upgrade	Hardware - Network Gateway 4G-2-5G (Standard Capacity locations)	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	Network Gateway (Replacements)	Network equipment replacement - Install - Gateways	397	\$2,558	\$2,564	\$2,571	\$2,577	\$2,583	\$646
02.Network	Router	Routers (Replacements)	Network equipment replacement - Install - Routers	397	\$6,407	\$6,423	\$6,439	\$6,455	\$6,471	\$1,619
02.Network	Gateway	4G-2-5G Upgrade	Installation - Cellular Backhaul Modems 4G-2-5G	397	\$0	\$0	\$0	\$0	\$0	\$0
02.Network	Gateway	4G-2-5G Upgrade	Installation - Network Gateway 4G-2-5G	397	\$0	\$0	\$0	\$0	\$0	\$0
04.Program	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network lead	397	\$0	\$0	\$0	\$0	\$0	\$0
04.Program	Vendor /External Labor	PMO Vendor Labor	PMO Vendor - AMO Network Analyst	397	\$0	\$0	\$0	\$0	\$0	\$0
					\$28,661	\$28,732	\$28,804	\$28,876	\$28,948	\$7,242

(1) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-14

Request:

Referring to Schedule SAB/BLJ-1, pages 1-2, line 8, please provide a comprehensive description of each of the "Outside Services" and explain why the cost ramps up to over \$5 million by AMF Recovery Year 4 and remains above \$5 million per year in all the following years. Please provide a schedule showing how the annual amounts were determined and calculated.

Response:

Please see Attachment PUC 1-14 for a schedule of the Outside Services costs that comprise Line 8 on Schedule SAB/BLJ-1, Pages 1-2. In the first four years during the deployment period, there are costs associated with program and change management that phase out after deployment is complete. Beginning in Recovery Year 2 and ramping up to a steady state in Recovery Year 4 are annual costs and license fees. As shown on Attachment PUC 1-14, a significant amount of the annual costs is for the annual license (SaaS) fees for the Headend, WiSun and MDMS. Attachment H to the AMF Business Case, starting on Page 23, contains a detailed description of the functions of the categories as well as the basis for calculating the estimated costs.

The Narragansett Electric Company
d/b/a Rhode Island Energy
Outside Services - O&M Costs

						DEPLOYMENT				POST-DEPLOYMENT / OPERATIONS		
Cost Category 1	Cost Category 3	Cost Category 4	Full Description	FERC Account	AMF Recovery Year 1	AMF Recovery Year 2	AMF Recovery Year 3	AMF Recovery Year 4	AMF Recovery Year 5	AMF Recovery Year 6	AMF Recovery Year 7	
					October to September 2023	October to September 2024	October to September 2025	October to September 2026	October to September 2027	October to September 2028	October to September 2029	
02.Network	PPL Labor	AMF RF Network	RF Network Operations - PPL Internal Labor	921	\$0	\$0	\$0	\$121,979	\$165,688	\$169,830	\$174,076	
02.Network	Vendor /External Labor	RF Network Ops MSP	RF Network Operations & Maintenance - MSP	921	\$0	\$0	\$0	\$228,837	\$310,379	\$317,518	\$324,820	
03.Systems	PPL Labor	AMO	AMO Headend & MDMS Operations - PPL Internal Labor	921	\$0	\$0	\$0	\$243,958	\$331,376	\$339,660	\$348,152	
03.Systems	Operations	NMA/AGA	Network Model Analytics / AGA - SaaS	921	\$0	\$0	\$195,195	\$496,088	\$143,674	\$0	\$0	
03.Systems	Operations	Data Lake	Analytics RTB Cost	921	\$0	\$0	\$0	\$39,774	\$54,027	\$55,377	\$56,762	
03.Systems	Operations	Data Lake	Data Lake & Analytics (Storage, Processing, Visualization, Software License, VMs) OpEx cost	921	\$0	\$0	\$0	\$76,222	\$101,819	\$102,074	\$102,329	
03.Systems	Annual License (SaaS) - Headend	Headend	Annual License (SaaS) - Headend	921	\$0	\$692,883	\$1,270,958	\$1,494,907	\$1,553,953	\$1,585,032	\$1,616,733	
03.Systems	Operations	Headend	AMF Headend RTB Cost	921	\$0	\$0	\$0	\$39,774	\$54,027	\$55,377	\$56,762	
03.Systems	WiSun	WiSun	AMF WiSun RTB Cost	921	\$0	\$0	\$0	\$39,774	\$54,027	\$55,377	\$56,762	
03.Systems	Annual License (SaaS) - WiSun	WiSun	Annual License (SaaS) & Support - WiSun	921	\$0	\$397,708	\$729,518	\$858,062	\$891,954	\$909,793	\$927,989	
03.Systems	Annual License (SaaS) - MDMS	MDMS	Annual License (SaaS) - MDMS	921	\$0	\$208,021	\$915,483	\$1,216,257	\$1,264,297	\$1,289,583	\$1,315,375	
03.Systems	MDMS	MDMS	AMF MDMS RTB Cost	921	\$0	\$0	\$0	\$79,548	\$108,053	\$110,755	\$113,523	
03.Systems	Operations	Middleware	Middleware RTB Cost (Labor)	921	\$0	\$0	\$0	\$39,774	\$54,027	\$55,377	\$56,762	
03.Systems	Operations	Middleware	Middleware RTB Cost (Non-Labor)MS Azure On-Going Middleware)	921	\$0	\$0	\$0	\$19,055	\$25,455	\$25,518	\$25,582	
03.Systems	Operations	Cybersecurity	On-Going CyberSecurity Updates and Best Practice System Buildout	921	\$0	\$0	\$0	\$0	\$9,770	\$13,051	\$13,084	
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Labor) - ADMS	921	\$0	\$0	\$0	\$23,865	\$32,416	\$33,226	\$34,057	
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Labor) - OMS	921	\$0	\$0	\$0	\$11,932	\$16,208	\$16,613	\$17,029	
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Non-Labor) - ADMS GE Eterra	921	\$0	\$0	\$0	\$9,612	\$12,840	\$12,872	\$12,904	
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Non-Labor) - OMS GE PowerOn	921	\$0	\$0	\$0	\$1,547	\$2,067	\$2,072	\$2,077	
03.Systems	Operations	Grid Edge & Load Dissag.	Grid Edge Computing & Load Disaggregation (System Cost)	921	\$0	\$0	\$0	\$0	\$92,217	\$122,955	\$124,816	
04.Program	Labor	Labor	Labor - Change Management	921	\$157,813	\$570,230	\$570,467	\$187,025	\$73,870	\$75,717	\$19,045	
04.Program	Vendor /External Labor	Change Management Vendor Labor	PMO Vendor - Change Management - Business Integration Lead (Opex)	921	\$144,000	\$336,000	\$312,000	\$72,000	\$0	\$0	\$0	
04.Program	Vendor /External Labor	Change Management Vendor Labor	PMO Vendor - Change Management - Analyst(s) (Opex)	921	\$126,000	\$546,000	\$420,000	\$84,000	\$0	\$0	\$0	
					\$427,813	\$2,750,842	\$4,413,621	\$5,383,990	\$5,352,143	\$5,347,779	\$5,398,638	

(1) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H
Costs ramp up in Year 4 and forward due to Annual license (SaaS) costs for Headend, WiSun, MDMS.

The Narragansett Electric Company
d/b/a Rhode Island Energy
Outside Services - O&M Costs

				POST-DEPLOYMENT / OPERATIONS							
				AMF Recovery Year 8	AMF Recovery Year 9	AMF Recovery Year 10	AMF Recovery Year 11	AMF Recovery Year 12	AMF Recovery Year 13	AMF Recovery Year 14	AMF Recovery Year 15
				October to September 2030	October to September 2031	October to September 2032	October to September 2033	October to September 2034	October to September 2035	October to September 2036	October to September 2037
Cost Category 1	Cost Category 3	Cost Category 4	Full Description								
02.Network	PPL Labor	AMF RF Network	RF Network Operations - PPL Internal Labor	\$178,428	\$182,889	\$187,461	\$192,147	\$196,951	\$201,875	\$206,922	\$212,095
02.Network	Vendor /External Labor	RF Network Ops MSP	RF Network Operations & Maintenance - MSP	\$332,291	\$339,934	\$347,752	\$355,751	\$363,933	\$372,304	\$380,866	\$389,626
03.Systems	PPL Labor	AMO	AMO Headend & MDMS Operations - PPL Internal Labor	\$356,856	\$365,777	\$374,922	\$384,295	\$393,902	\$403,750	\$413,843	\$424,189
03.Systems	Operations	NMA/AGA	Network Model Analytics / AGA - SaaS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
03.Systems	Operations	Data Lake	Analytics RTB Cost	\$58,181	\$59,635	\$61,126	\$62,654	\$64,221	\$65,826	\$67,472	\$69,159
03.Systems	Operations	Data Lake	Data Lake & Analytics (Storage, Processing, Visualization, Software License, VMs) OpEx cost	\$102,585	\$102,841	\$103,099	\$103,356	\$103,615	\$103,874	\$104,133	\$104,394
03.Systems	Annual License (SaaS) - Headend	Headend	Annual License (SaaS) - Headend	\$1,649,067	\$1,682,049	\$1,715,689	\$1,750,003	\$1,785,003	\$1,820,703	\$1,857,117	\$1,894,260
03.Systems	Operations	Headend	AMF Headend RTB Cost	\$58,181	\$59,635	\$61,126	\$62,654	\$64,221	\$65,826	\$67,472	\$69,159
03.Systems	WiSun	WiSun	AMF WiSun RTB Cost	\$58,181	\$59,635	\$61,126	\$62,654	\$64,221	\$65,826	\$67,472	\$69,159
03.Systems	Annual License (SaaS) - WiSun	WiSun	Annual License (SaaS) & Support - WiSun	\$946,548	\$965,479	\$984,789	\$1,004,485	\$1,024,574	\$1,045,066	\$1,065,967	\$1,087,287
03.Systems	Annual License (SaaS) - MDMS	MDMS	Annual License (SaaS) - MDMS	\$1,341,682	\$1,368,516	\$1,395,886	\$1,423,804	\$1,452,280	\$1,481,326	\$1,510,952	\$1,541,171
03.Systems	MDMS	MDMS	AMF MDMS RTB Cost	\$116,362	\$119,271	\$122,252	\$125,309	\$128,441	\$131,652	\$134,944	\$138,317
03.Systems	Operations	Middleware	Middleware RTB Cost (Labor)	\$58,181	\$59,635	\$61,126	\$62,654	\$64,221	\$65,826	\$67,472	\$69,159
03.Systems	Operations	Middleware	Middleware RTB Cost (Non-Labor)MS Azure On-Going Middleware)	\$25,646	\$25,710	\$25,775	\$25,839	\$25,904	\$25,968	\$26,033	\$26,098
03.Systems	Operations	Cybersecurity	On-Going CyberSecurity Updates and Best Practice System Buildout	\$13,117	\$13,150	\$13,182	\$13,215	\$13,248	\$13,282	\$13,315	\$13,348
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Labor) - ADMS	\$34,908	\$35,781	\$36,676	\$37,593	\$38,532	\$39,496	\$40,483	\$41,495
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Labor) - OMS	\$17,454	\$17,891	\$18,338	\$18,796	\$19,266	\$19,748	\$20,242	\$20,748
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Non-Labor) - ADMS GE Eterra	\$12,936	\$12,969	\$13,001	\$13,034	\$13,066	\$13,099	\$13,132	\$13,164
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Non-Labor) - OMS GE PowerOn	\$2,082	\$2,087	\$2,093	\$2,098	\$2,103	\$2,108	\$2,114	\$2,119
03.Systems	Operations	Grid Edge & Load Dissag.	Grid Edge Computing & Load Disaggregation (System Cost)	\$125,671	\$125,986	\$126,300	\$126,616	\$126,933	\$127,250	\$127,568	\$127,887
04.Program	Labor	Labor	Labor - Change Management	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
04.Program	Vendor /External Labor	Change Management Vendor Labor	PMO Vendor - Change Management - Business Integration Lead (Opex)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
04.Program	Vendor /External Labor	Change Management Vendor Labor	PMO Vendor - Change Management - Analyst(s) (Opex)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
				\$5,488,358	\$5,598,870	\$5,711,720	\$5,826,958	\$5,944,635	\$6,064,805	\$6,187,519	\$6,312,833

(1) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H
Costs ramp up in Year 4 and forward due to Annual license (SaaS) costs for Headend, WiSun, MDMS.

The Narragansett Electric Company
d/b/a Rhode Island Energy
Outside Services - O&M Costs

POST-DEPLOYMENT / OPERATIONS

Cost				AMF Recovery Year 16	AMF Recovery Year 17	AMF Recovery Year 18	AMF Recovery Year 19	AMF Recovery Year 20
Category 1	Cost Category 3	Cost Category 4	Full Description	October to September 2038	October to September 2039	October to September 2040	October to September 2041	October to September 2042
02.Network	PPL Labor	AMF RF Network	RF Network Operations - PPL Internal Labor	\$217,397	\$222,832	\$228,403	\$234,113	\$58,887
02.Network	Vendor /External Labor	RF Network Ops MSP	RF Network Operations & Maintenance - MSP	\$398,588	\$407,755	\$417,134	\$426,728	\$107,285
03.Systems	PPL Labor	AMO	AMO Headend & MDMS Operations - PPL Internal Labor	\$434,794	\$445,664	\$456,806	\$468,226	\$117,775
03.Systems	Operations	NMA/AGA	Network Model Analytics / AGA - SaaS	\$0	\$0	\$0	\$0	\$0
03.Systems	Operations	Data Lake	Analytics RTB Cost	\$70,888	\$72,660	\$74,476	\$76,338	\$19,202
03.Systems	Operations	Data Lake	Data Lake & Analytics (Storage, Processing, Visualization, Software License, VMs) OpEx cost	\$104,655	\$104,916	\$105,179	\$105,442	\$26,377
03.Systems	Annual License (SaaS) - Headend	Headend	Annual License (SaaS) - Headend	\$1,932,145	\$1,970,788	\$2,010,204	\$2,050,408	\$515,127
03.Systems	Operations	Headend	AMF Headend RTB Cost	\$70,888	\$72,660	\$74,476	\$76,338	\$19,202
03.Systems	WiSun	WiSun	AMF WiSun RTB Cost	\$70,888	\$72,660	\$74,476	\$76,338	\$19,202
03.Systems	Annual License (SaaS) - WiSun	WiSun	Annual License (SaaS) & Support - WiSun	\$1,109,032	\$1,131,213	\$1,153,837	\$1,176,914	\$295,678
03.Systems	Annual License (SaaS) - MDMS	MDMS	Annual License (SaaS) - MDMS	\$1,571,995	\$1,603,434	\$1,635,503	\$1,668,213	\$419,108
03.Systems	MDMS	MDMS	AMF MDMS RTB Cost	\$141,775	\$145,320	\$148,953	\$152,676	\$38,403
03.Systems	Operations	Middleware	Middleware RTB Cost (Labor)	\$70,888	\$72,660	\$74,476	\$76,338	\$19,202
03.Systems	Operations	Middleware	Middleware RTB Cost (Non-Labor)MS Azure On-Going Middleware)	\$26,164	\$26,229	\$26,295	\$26,360	\$6,594
03.Systems	Operations	Cybersecurity	On-Going CyberSecurity Updates and Best Practice System Buildation	\$13,381	\$13,415	\$13,448	\$13,482	\$3,373
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Labor) - ADMS	\$42,533	\$43,596	\$44,686	\$45,803	\$11,521
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Labor) - OMS	\$21,266	\$21,798	\$22,343	\$22,901	\$5,760
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Non-Labor) - ADMS GE Eterra	\$13,197	\$13,230	\$13,263	\$13,297	\$3,326
03.Systems	Operations	ADMS & OMS	OMS Integration RTB (Non-Labor) - OMS GE PowerOn	\$2,124	\$2,129	\$2,135	\$2,140	\$535
03.Systems	Operations	Grid Edge & Load Dissag.	Grid Edge Computing & Load Disaggregation (System Cost)	\$128,207	\$128,527	\$128,849	\$129,171	\$32,313
04.Program	Labor	Labor	Labor - Change Management	\$0	\$0	\$0	\$0	\$0
04.Program	Vendor /External Labor	Change Management Vendor Labor	PMO Vendor - Change Management - Business Integration Lead (Opex)	\$0	\$0	\$0	\$0	\$0
04.Program	Vendor /External Labor	Change Management Vendor Labor	PMO Vendor - Change Management - Analyst(s) (Opex)	\$0	\$0	\$0	\$0	\$0
				\$6,440,804	\$6,571,487	\$6,704,941	\$6,841,227	\$1,718,869

(1) Descriptions of cost line items can be found in Benefit Cost Guide Memo - CONFIDENTIAL - Attachment H
Costs ramp up in Year 4 and forward due to Annual license (SaaS) costs for Headend, WiSun, MDMS.

PUC 1-15

Request:

Referring to Section 6 of the Business Case filing, Figures 6.2, 6.3, and 6.4, please indicate the Company's forecast of when the functionalities identified in each of the referenced figures will be fully operational (i.e, in which "AMF Recovery Year" designated in Schedule SAB/BLJ-1, page 1).

Response:

In reference to Figures 6.2, 6.3, and 6.4, the Company's forecast of when functionalities will be Operationally available is as follows:

At Meter Deployment Start (estimated July 2024)

AMF Recovery Year 2

Remote (AMF) Meter Reading & Billing
Remote Meter Configuration & Investigation
Deployment Exchange
AMO Data Driven Operations
Alerts & Alarms: High Temp
Proactive Outage Management (Last Gasp/Power-up)
Remote Electric Connect & Disconnect
CP: Customer Portal
Customer Outage Alerts

Within Six Months from Meter Deployment Start (estimated December 2024)

AMF Recovery Year 3

CP: Green Button Connect
CEMP - Bill Alerts
CP: Near Real-Time Customer Data Access
CP: In-Home Device Support

Within 12 Months from Meter Deployment Start (estimated July 2025)

AMF Recovery Year 3

ADMS: Voltage Conservation
(Volt-Var Optimization)

ADMS: Voltage Automated Notification (Sag/Swell)

ADMS: On Demand Voltage Measurement (to ADMS)

Network Model Analytics

Theft Detection Analytics

Within 18 Months from Meter Deployment Start (estimated December 2025)

AMF Recovery Year 4

CP: Solar Marketplace

CP: Carbon Footprint Calculator

CP: C&I and Multi-Family Portfolio View

ADMS-DER: Monitor & Management

Time Varying Rates (“TVR”) Foundational

Post Meter Deployment

**AMF Recovery Year 4
and beyond**

Load Disaggregation & Waveform Analytics

Grid Edge Computing (writing applications to the meter)

Enabled TVR

CP: Streamlined Energy Efficiency & Demand Response Program
Signup

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-16

Request:

Are there any capex investments reflected in the Company's schedules which are based on estimates derived from the allocated cost of assets being shared with a PPL affiliate? If yes, please identify each investment, the total cost of the asset, and the portion of cost allocated to Rhode Island Energy, and explain the basis of the allocation in each instance.

Response:

No. The CapEx investments in the Company's AMF cost model are 100% for Rhode Island Energy. There are no CapEx investment estimates derived from allocated costs being shared with a PPL Corporation ("PPL") affiliate (or any other PPL operating company).

Please see the AMF Benefit-Cost (BCA) Spreadsheet and Narrative Attachment H for more details on the costs.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission’s First Set of Data Requests
Issued December 8, 2022

Redacted
PUC 1-17

Request:

Are there any O&M expenses reflected in the Company’s schedules which are based on estimates derived from the allocated cost of any services being shared with a PPL affiliate? If yes, please identify each category of O&M expense, the total cost of the shared services, the portion of shared service cost allocated to Rhode Island Energy, and explain the basis of the allocation in each instance.

Response:

Yes. The O&M expense estimates in the Company’s cost model were developed assuming that there would be shared responsibility for on-going operational costs among PPL Corporation’s (“PPL”) operating companies. The allocations were based on PPL’s cost allocation methodology; specifically, for metering, it is based on customer end points. Per the AMF Benefit-Cost Analysis (BCA) Spreadsheet and Narrative Attachment H (“Attachment H”) to the AMF Business Case, many systems will be supported for ongoing maintenance and support by individuals serving both the Rhode Island and Pennsylvania operating companies; with these individuals direct charging their time such that only time associated with Rhode Island will be charged to specific Rhode Island charge numbers.

The following Systems costs (other than labor) will be allocated as follows and as outlined in Attachment H:

System Ongoing Maintenance	Amount	Allocation Methodology
Customer Portal		Based on total endpoints RI and PA
Analytics		Based on total endpoints RI and PA
Middleware		Based on total endpoints RI and PA
ADMS		Based on total endpoints RI and PA
OMS		Based on total endpoints RI and PA
Cybersecurity		Based on total endpoints RI and PA

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PUC 1-18

Request:

Referring to the Briggs and Johnson testimony at pages 14-15 and the proposal to provide an 80% O&M savings credit until new base distribution rates are set, please use the Company's projected date for new rates taking effect from the next base distribution rate case to calculate the total amount of guaranteed savings that ratepayers would receive as an offset to the revenue requirements prior to new base rates going into effect, based on the illustrative Schedule SAB/BLJ-1. Please also provide this calculation based on a hypothetical assumption that approval of the Company's AMF proposal does not occur until September 1, 2023.

Response:

As indicated in the Company's response to PUC 1-1, part (b), the Company's assumption at this time is that new base distribution rates would be effective September 1, 2026. Based on the estimated O&M savings included in the illustrative Schedule SAB/BLJ-1 that would be credited to customers, the estimated total amount of guaranteed savings that customers would receive as an offset to the revenue requirement prior to the new base distribution rates going into effect would be approximately \$910,000.

There would be no difference in the estimated amount stated above based on a hypothetical assumption that approval of the AMF proposal does not occur until September 1, 2023. There are no forecasted O&M savings to be credited during the first AMF Recovery Year.

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PUC 1-19

Request:

Referring to Schedule SAB/BLJ-1, page 13, please explain why the vast majority of the software investment is forecasted to occur in Year 4 (i.e., \$34.2 million).

Response:

As described in the Company's response to PUC 1-9, the majority of the software investment costs are expected to be incurred over a multi-year period, with the Company incurring most of the costs for software projects through Year 4. A software investment will not be capitalized and included in the revenue requirement for cost recovery until all the costs for that project have been incurred and the investment is considered ready for its intended use. Schedule SAB/BLJ-1, Page 13, column (b), represents the amount of software investment that will be placed into service during the respective years in column (a) and not the amount of spend in that year. Because the majority of software projects are forecasted to have spend through Year 4, that is the year that has the largest amount of forecasted capital investment on Schedule SAB/BLJ-1, Page 13. The recovery proposal would include actual capital investments based on the Company's plant accounting records for each respective AMF Factor filing.

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PUC 1-20

Request:

On page 10 of the Briggs & Johnson testimony, the Company states that “pursuant to the [Multi-Year Rate Plan (MRP)] Reopener, the Company would include approximately three years of estimated incremental AMF capital and O&M costs (through the end of the stay-out period) for recovery in base distribution rates beginning upon approval of the AMF Business Case.”

- a. If one were to assume the Company were required to follow the Reopener provision of the MRP and include the estimated revenue requirement in base distribution rates, what annual amounts would be included in the annual revenue requirement for each of the years prior to the effective date of new rates going into effect from the next distribution base rate case?
- b. Under this scenario, if the Company were to spend in excess of the rate allowance, how would any capex and O&M overspend be treated for rate accounting purposes?

Response:

- a. For hypothetical purposes, if the Company were required to follow the Reopener provision of the MRP and include the estimated AMF revenue requirement in base distribution rates, the Company would include the estimated annual revenue requirement amounts in AMF Recovery Year 1 through Year 4 shown on Schedule SAB/BLJ-1, Page 1, Columns a through d, Line 21, for a total of approximately \$37.4 million. The Company's proposal would be to recover the estimated \$37.4 million revenue requirement over a three-year period (September 2023 to August 2026), which would align with the proposed approval timeline in this filing and the anticipated effective date of new base distribution rates as indicated in the Company's response to PUC 1-1. The Company would propose to recover the total amount of \$37.4 million equally over the three-year period for an annual amount of approximately \$12.5 million per year.
- b. Under the scenario in part a, if the actual net AMF revenue requirement over the three-year period was in excess of the rate allowance for that period, the Company would propose to defer the excess amount for future recovery from customers in a manner to be determined by the Public Utilities Commission.

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PUC 1-21

Request:

On page 12 of the Briggs & Johnson testimony, the Company indicates that the revenue requirement will use the depreciation rates approved in Docket No. 4770 for all new AMF plant in service. Referring to that study, for each capital investment for new AMF plant in service, please show the source of the depreciation rate and explain why it is appropriate for that new asset.

Response:

As further explained in the response to PUC 1-23, there is no asset history for the new AMF capital investments and therefore using the depreciation rates established in the Company's last base distribution rate case, Docket No. 4770, for similar assets is appropriate.

For purposes of calculating the illustrative revenue requirement on Schedule SAB/BLJ-1, the Company classified the AMF capital investments by anticipated asset account (370-Meters, 303-Intangible Software; and 397-Communication Equipment). Please see Attachment PUC 1-11, Attachment PUC 1-12 and Attachment PUC 1-13, for the detailed breakdown of the AMF capital investments that are included in the asset accounts Intangible Software, Communications Equipment, and Meters, respectively.

The Company then applied the depreciation rates from the last base distribution rate case, Docket No. 4770 to these asset accounts as shown on Schedule SAB/BLJ-1, Pages 9 through 14. Please see Attachment PUC 1-21 for the source and calculation of the depreciation rates.

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AMF Book Depreciation Rates**

Source: Docket No. 4770, Compliance Attachment 2, Schedule 6-ELEC, page 3 of 5 & Schedule NWA-2 Electric, Page 49 & 50

Account	Account Name	Survivor Curve	Total Accrual Rate Column (8)	Composite Remaining Life Column (9)
370.1	Small Meters - Bare Cost	20-S2	5.61% *	8.2
397	Communication equipment - Telephone	20-SQ	5% **	4.3

	Original Cost Annual Accrual Rate	Cost of Removal Annual Accrual Rate	Total Accrual Rate
	(a)	(b)	(c)=(a)+(b)
370.1 Small Meters - Bare Cost	4.49%	1.12%	5.61% *
397 Communication equipment - Telephone	5.00%	0.00%	5.00% **
Intangible Software			
303 Intangible Software	14.29%	Straight Line - 7 years	

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PUC 1-22

Request:

Are the depreciation rates being used in the AMF revenue requirement filing consistent with the rates used in PPL's other jurisdictions? Please detail any differences with an explanation.

Response:

Yes. See Attachment PUC 1-22 for a comparison of the depreciation rates used in PPL's other jurisdictions. Notably, the Company used the depreciation rates approved in its prior base distribution rate case, Docket No. 4770, for existing accounts of plant-in-service and depreciation, as described in its response to PUC 1-21.

Company	E/G/C	FERC Account	FERC Account Description	Asset Description	Rate	Implied Service Life
Kentucky Utilities	Electric	303	Miscellaneous Intangible Plant	AMI Software	6.67%	~15 years
Louisville Gas & Electric	Common	303	Miscellaneous Intangible Plant	AMI Software	6.67%	~15 years
PPL Electric Corporation	Electric	303	Miscellaneous Intangible Plant	RF Mesh AMR Software	20.00%	~5 years
Rhode Island Energy	Electric	303	Miscellaneous Intangible Plant	Intangible Software	14.29%	~7 years
Kentucky Utilities	Electric	397	Communication Equipment	AMI Communication Equip	6.67%	~15 years
Rhode Island Energy	Electric	397	Communication Equipment	Communication Equipment	5.00%	~20 years
Louisville Gas & Electric	Common	397	Communication Equipment	AMI Communication Equip	6.67%	~15 years
PPL Electric Corporation	Electric	362	Station Equipment	Station Equipment - RF Mesh	2.00%	~50 years
PPL Electric Corporation	Electric	365	Overhead Conductors and Devices	Overhead Conductors and Devices - RF Mesh	6.34%	~16 years
PPL Electric Corporation	Electric	391	Office Furniture and Equipment	Office Furniture and Equipment - RF Mesh AMR Computer Equipment	20.00%	~5 years
PPL Electric Corporation	Electric	370	Meters	Meters - RF Mesh AMR	6.67%	~15 years
Rhode Island Energy	Electric	370	Electric Meters	Electric Meters	4.49%	~23 years
Kentucky Utilities	Electric	370	Meters	Electric Meters - AMI	6.88%	~15 years
Louisville Gas & Electric	Electric	370	Meters	Electric Meters - AMI	6.78%	~15 years
Louisville Gas & Electric	Gas	381	Metes	Gas Meters - AMI	3.83%	~20 years

Service Life for each jurisdiction has been approved or directed by the respective public utility commission based on documentation filed by the utility in the form of a depreciation study and/or as part of a base distribution rate case.

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PUC 1-23

Request:

Please explain why the Company believes it is unnecessary to perform a new depreciation study for the AMF investments.

Response:

Depreciation studies are typically performed to evaluate the service life history of the assets. The service life study includes analysis of the retirement history of categories of assets to evaluate the adequacy of the depreciation rates and reserve balances. It also includes a physical inspection of a sample of the assets to assess the condition of the plant-in-service and based on that condition, determine the appropriate remaining life of the in-service assets. Because the AMF capital investments are not in-service, there is no physical in-service asset or service history to evaluate, and it is appropriate to use the rates established for these asset accounts in the Company's last base distribution rate case, Docket No. 4770.

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PUC 1-24

Request:

Referring to Schedule SAB/BLJ-1, pages 9 through 14, please explain the percentages listed in the unlabeled line above each of the tables (i.e., 4.49%, 5.00%, and 14.29%).

Response:

On Schedule SAB/BLJ-1, Pages 9 through 14, the percentages listed in the unlabeled lines above each of the tables are the annual book depreciation rates used to calculate annual book depreciation expense on the capital assets placed into service.

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PUC 1-25

Request:

Referring to Schedule SAB/BLJ-1, page 13-14, please explain the basis for depreciating intangible software over a period of 8 years.

Response:

On Schedule SAB/BLJ-1, Pages 13-14, the intangible software is depreciated using a 7-year life. For the calculation of annual book depreciation in the revenue requirement, the Company applies a one-half year convention in the year that the asset was placed in service, meaning that depreciation expense in the first year is only half of the annual depreciation amount. As a result, there will be additional one-half year of depreciation, in this case the 8th year. Please see the response to PUC 1-21 for the basis of the depreciation rates.

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PUC 1-26

Request:

Referring to page 14 of the Briggs & Johnson testimony regarding the spending to develop the Updated AMF Business Case,

- a. Please provide a schedule showing how much the Company spent on the development of the Updated AMF Business Case by calendar year since the approval of the Amended Settlement (including both National Grid's spending and Rhode Island Energy spending). (If any costs were incurred prior to the rates going into effect for Rate Year 1 of the "MRP" rate plan, please also identify any such amounts included in the schedule).
- b. please show separately (i) the costs that were incurred by the Company up to the date of the filing of the original AMF proposal prior to the acquisition of the Company by PPL and (ii) the costs incurred by the Company in preparing the second post-acquisition filing made in this case, from the date of the acquisition by PPL, up to the date of the filing in this docket.
- c. Please indicate how the Company has treated or proposes to treat the costs for developing the Updated AMF Business Case for rate accounting purposes (i.e., O&M and/or capex) and explain whether the Company is proposing to recover any revenue requirement for any of those expenses through the proposed Advanced Metering Functionality Provision.
- d. If any O&M or capex incurred prior to the date of the filing in this case was included in the illustrative Schedule SAB/BLJ-1, please indicate the amounts included in the schedule.

Response:

- a. and b. Please see Attachment PUC 1-26.
- c. The Company has recorded the costs incurred related to the Updated AMF Business Case as O&M costs on the Company's books. The Company does not propose to recover any revenue requirement for any costs to develop the Updated AMF Business Case through the proposed Advanced Metering Functionality Provision.
- d. There were no O&M or capex costs incurred prior to the date of the filing in this case that are included in the illustrative Schedule SAB/BLJ-1.

**The Narragansett Electric Company
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AMF Updated Business Case Costs**

		<u>NG or PPL</u>	
<u>Pre-Sale (prior to May 25, 2022)</u>		<u>Spending</u>	
June 2018 to August 2018	\$ 492,209.17	NG	Incurred Prior to Rate Year 1 of the MRP
September 2018 to December 2018	\$ 382,145.24	NG	
CY 2019	\$ 1,254,792.81	NG	
CY 2020	\$ 157,119.39	NG	
CY 2021	<u>\$ 17,105.00</u>	NG	Costs incurred for original AMF Proposal (by end of Rate Year 4)
Total Pre-Sale	<u>\$ 2,303,371.61</u>		
<u>Post Sale (after May 26, 2022)</u>			
CY 2022 (May 26, 2022 to November 2022)	<u>\$ 1,270,000.00</u>	PPL	* Incurred for second filing through filing in November 2022
Total Pre-Sale and Post Sale AMF Business Case Costs	<u><u>\$ 3,573,371.61</u></u>		

* - Any costs incurred during CY 2022 but prior to the sale date were part of the overall RI Integration Project and cannot be split out specific to the Updated AMF Business Case

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PUC 1-27

Request:

Referring to the rate allowance in the Amended Settlement which was intended to spread \$2 million for the development of the Updated AMF Business Case over rate years 1 through 3 (see Article II., Part C, Section 16a, last paragraph),

- a. please provide an estimate of the total revenue that will be recovered from ratepayers from the rate allowance, from the date the Amended Settlement rates went into effect through October 31, 2022, compared to total cost incurrence in developing the Updated AMF Business Case over the same period,
- b. please explain why the testimony of Briggs and Johnson (page 14) identifies a forecast of \$2.3 million of spending for updating the AMF business case given the fact that the Amended Settlement expressly forecasted spending of only \$2 million (in Section 16a) which was used to establish the allowance to fund the development of the Updated AMF Business Case, and
- c. referring to Schedule SAB/BLJ-1, please explain why the annual rate allowance that was designed to allow the Company to fund the \$2 million cost of the Updated AMF Business Case over three years (i.e., \$666,667 per rate year) is not being credited as excess base rate recovery against the annual AMF-related revenue requirement for each AMF Recovery Year in the same manner as shown for the excess base rate recovery in line 16?

Response:

- a. The total revenue that was recovered from customers from September 1, 2018, through November 2022 (filing date in this docket) was \$2,833,333.33. This compares to the \$3,573,371.61 of costs incurred for the development of the Updated AMF Business Case over the same period, as shown in the Company's response to PUC 1-26.
- b. In the Company's response to PUC 3-9 in Docket No. 4770 regarding the Company's Rate Year 3 Compliance Filing, the Company provided a schedule through Rate Year 4 showing the amount to be collected in base distribution rates for the Updated AMF Business Case (\$2.6 million) compared to the forecasted costs to be incurred for the same period (\$2.3 million). In that response, the Company proposed to credit customers in the AMF revenue requirement for the overcollection of \$0.3 million through Rate Year 4, which is shown on Schedule SAB/BLJ-1, Page 1, Line 20, column (a). As described in the Company's response to part c, below, the entire \$666,666.67 collected annually in base distribution

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rates beginning in Rate Year 4 should be deferred for refund to customers. The Company has been recording a deferral for any collection over the allowance of \$2 million. Therefore, a separate adjustment is unnecessary on Schedule SAB/BLJ-1, Line 20, because the amount is included in the deferral described in the response to part c, below.

- c. Since new base distribution rates went into effect on September 1, 2018, the Company has had a process in place to defer on its books for future refund to customers any amount collected through base distribution rates that exceeds the \$2 million rate allowance until new base distribution rates are effective. The Company continues to defer each month the amount of \$55,555.56 (or \$666,666.67 annually) that is being recovered through base distribution rates, together with interest at the customer deposit rate. Because the Company had established this deferral and continued to defer the excess base distribution rate recovery, including interest, the Company does not propose to offset the AMF-related revenue requirement in the same manner as the base distribution rate recovery in Line 16. The Company proposes to continue to record a deferral on its books for the excess recovery until new base distribution rates are effective.

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PUC 1-28

Request:

On pages 16-17 of the Briggs & Johnson testimony, the Company indicates that it will not seek recovery of the undepreciated investments in legacy metering assets as part of this filing but will address that unrecovered expense in its next base distribution rate case.

- a. During the interim period, how will the undepreciated investments be treated for rate accounting purposes?

Response:

Until new base distribution rates are established in the Company's next base distribution rate case, the Company will continue to recover the annual level of depreciation expense for legacy metering assets that was established in the Company's last base distribution rate case, Docket No. 4770. In addition, the Company will recover the depreciation expense associated with metering assets placed into service since the last base distribution rate case through its Electric Infrastructure, Safety, and Reliability ("ISR") Factors.

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PUC 1-29

Request:

Please describe how the Company is recovering metering capital investment expense currently. To what extent is the Company's proposal in this case different from how it has been recovering such investment expense since September 1, 2018?

Response:

Since September 1, 2018, additional metering capital investment expense is forecasted annually and included for recovery in the Customer/Request Public Requirement (Non-Discretionary) category in the Company's annual Electric Infrastructure, Safety, and Reliability ("ISR") Plans. Subsequently, an annual reconciliation is completed to compare the forecasted capital investments approved by the Public Utilities Commission with the actual capital investment costs incurred during the previous Electric ISR Plan year. As part of this current process, when a new base distribution rate case is filed, the actual metering capital investment expenses incurred as of that time would be captured in rate base and recovered through new base distribution rates. Any incremental metering capital investment expense after new base distribution rates are established would be included in future annual Electric ISR Plans.

The Company's proposal in this case is different than the above process in that it proposes to include AMF metering capital investment expense in the revenue requirement used to develop the separate AMF Factor, along with all other incremental AMF capital and O&M costs. The costs included in the AMF Factor for recovery will be actual metering capital investment expenses rather than the forecasted amounts that currently are used in the Electric ISR Plans. As indicated on Page 8 of the Joint Pre-Filed Direct Testimony of Company Witnesses Stephanie A. Briggs and Bethany L. Johnson, the Company proposes that, when it files for its next base distribution rate case, it would include in rate base the depreciated value of the AMF investments (including metering capital investments) that have been placed into service at that point. The inclusion in rate base in a new distribution base rate case is similar to the process described above that currently is in place for the Electric ISR Plan investments when the Company files for new base distribution rates. The testimony also indicates that, as part of the next base distribution rate case filing, the Company would propose either to continue with a separate AMF Factor going forward or include future AMF capital costs (if any) in base distribution rates.

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PUC 1-30

Request:

Please describe how the Company is recovering metering O&M expense currently. To what extent is the Company's proposal in this case different from how it has been recovering such expenses since September 1, 2018?

Response:

Since September 1, 2018, the Company has been recovering metering O&M expense through base distribution rates at the level approved by the Public Utilities Commission (the "Commission") in the Company's last base distribution rate case (Docket No. 4770). The Company will continue to do so until new base distribution rates become effective. The Company's proposal in this case is to continue to recover O&M expense associated with metering through base distribution rates. The only metering O&M expense included in the AMF Factor is the O&M cost related to the installation and deployment of the AMF meters during the deployment schedule. The on-going costs, such as meter reading and other metering expense are not included in Schedule SAB/BLJ-1.

As described on Pages 14 and 15 of the Joint Pre-Filed Direct Testimony of Company Witnesses Stephanie A. Briggs and Bethany L. Johnson, the Company also proposes to credit customers with 80 percent of the projected Non-OMS Avoided O&M Costs (including metering O&M costs such as meter reading and other meter expenses) in the AMF Factor calculation until the next base distribution rate case, as shown on Schedule SAB/BLJ-1, Lines 11-13. Under the current method of recovery in base distribution rates, operational savings in meter expenses would not be reflected or passed back to customers until new base distribution rates are established.

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PUC 1-31

Request:

Does the Company believe the AMF capital investment expense could properly be included in the annual Electric ISR Plan? If not, please explain why it cannot properly be included.

Response:

Yes, the AMF capital investment costs can be included in the annual Electric Infrastructure, Safety, and Reliability (“ISR”) Plan with some modifications to the terminology in R.I.P.U.C. No. 2255 specifically to include all of the AMF capital investment categories. If the AMF capital investments were included in the annual Electric ISR Plan, they would be forecasted amounts and the variance from actual amounts would be captured in the annual Electric ISR reconciliation.

Notwithstanding the above, the Company does not propose including AMF capital investment expense in the annual Electric ISR Plan. The AMF project design assumes a continuous flow of meter equipment for a high-volume meter exchange process occurring across multiple years to deploy most efficiently and cost effectively. Critical to the project design are multi-year contracts that provide certainty to the supply of goods and services to meet the ongoing needs of the project schedule. PUC approval for timely recovery of the full cost for the AMF implementation investment as proposed in this filing provides the Company with the necessary assurances to deploy a large-scale multi-year program, such as AMF. By including AMF capital investment expense in the annual Electric ISR Plan, it would introduce evaluations that span across annual filings that could potentially interrupt or change the rate of deployment. These interruptions or changes could negatively impact the project timeline and the project cost because of the uncertainties, inefficiencies, and potential impacts on vendors to meet their contractual commitments.

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PUC 1-32

Request:

Assuming the AMF capital investment expense could properly be included in the annual Electric ISR Plan, under which category would it be included (customer requirements, asset condition, etc.)? Please explain.

Response:

Assuming the AMF capital investments could be properly included in the Electric ISR Plan, the capital costs should be included as non-discretionary spending in a new category, specifically for AMF spending. Although meter purchases and programs are included in the Customer Request/Public Requirement spending category of the current ISR Plans, it would be more transparent to have all AMF costs under one category to allow for alignment with the periodic reporting proposed in this filing and the multi-year AMF deployment schedule.

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PUC 1-33

Request:

Is there any reason why Capex could not be evaluated and addressed annually through the Electric ISR without the need for any separate Advanced Metering Functionality Factor?

Response:

Please see the Company's response to PUC 1-31.

From a cost recovery perspective, if the Public Utilities Commission directs the Company to include the incremental AMF capital investment in the Electric Infrastructure, Safety, and Reliability ("ISR") Plan filings, the Company could include the forecasted AMF capital investment costs in the revenue requirements calculations in the respective Electric ISR Plan filings. Including the AMF capital investment costs in the Electric ISR recovery mechanism, however, would require the use of forecasted costs for the upcoming ISR Plan year, whereas the proposed AMF Factor seeks to recover only actual costs that the Company has incurred.

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PUC 1-34

Request:

Is there any reason why recovery of O&M through an annual reconciliation such as the Advanced Metering Functionality Provision could not be limited to the stay out period, and for the years following the stay out, all O&M be recovered through base distribution rates?

Response:

No; however, the magnitude of the project and the specific start and end dates for deployment of AMF warrant a separate cost recovery mechanism at least through the stay-out period and including the time until new base distribution rates take effect (i.e., the period starting at the end of the stay-out period and until the effective date of new base distribution rates). As indicated on Page 8 of the Joint Pre-filed Direct Testimony of Company Witnesses Stephanie A. Briggs and Bethany L. Johnson, at the time of the Company's next base distribution rate case, the Company would evaluate whether to propose to continue with a separate mechanism or include the O&M costs in base distribution rates. At that time, the Company would be able to evaluate the AMF project status and associated cost recovery, as well as expected future costs, allowing both the Company and stakeholders to determine if it is best to include the forecasted level of O&M expense in base distribution rates or continue to recover those costs through the AMF Factor and adjust it on a bi-annual basis as the project continues.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
In Re: Advanced Metering Functionality Business Case
and Cost Recovery Proposal
Responses to the Commission's First Set of Data Requests
Issued December 8, 2022

PUC 1-35

Request:

Using the format of the depreciation schedules provided in Schedule SAB/BLJ-1 (pages 9-10), please provide a summary schedule which sums the capex investments and total capex-related annual revenue requirements. In the requested summary schedule, sum the total capex in column (b) for each year from Meters, Communication Equipment, and Intangible Software in lines 1 through 20, then sum the total associated revenue requirement for each AMF Recovery Year in columns (c) through (v). The summary schedule should be created to result in the total capex-related annual revenue requirement for each AMF Recovery Year in the requested summary schedule on line 21 tying out to line 4 of the schedule on pages 1 and 2 of Schedule SAB/BLJ-1. (Please consult with counsel for the Commission if there are any questions related to the creation and/or formatting of this summary schedule.)

Response:

Please see Attachment PUC 1-35 for the capex and capex-related revenue requirements for each year in the same format as Schedule SAB/BLJ-1, Pages 9 and 10. Pages 1 and 2 of Attachment PUC 1-35 are the combined capex and revenue requirement for Meters, Communication Equipment and Intangible Software. Pages 3 and 4 are the capex and related revenue requirements by year for Meters, Pages 5 and 6 are the capex and related revenue requirements by year for Communication Equipment, and Pages 7 and 8 are the capex and related revenue requirements by year for Intangible Software.

The Narragansett Electric Company
AMF Plan
Summary Capex and Revenue Requirement

Total Meters, Network and Software

		Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement
Year	CapEx	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
1	1	\$2,390,228	\$183,673	\$376,909	\$399,853	\$377,421	\$357,407	\$338,768	\$320,497	\$251,947	\$188,348	\$180,171
2	2	\$36,577,701	\$0	\$2,332,745	\$5,607,520	\$5,394,105	\$5,186,246	\$4,984,514	\$4,787,268	\$4,593,151	\$4,335,805	\$4,086,213
3	3	\$59,853,320	\$0	\$0	\$3,792,150	\$9,118,652	\$8,760,738	\$8,419,160	\$8,088,742	\$7,766,451	\$7,453,662	\$7,085,417
4	4	\$55,641,299	\$0	\$0	\$0	\$5,071,912	\$11,336,611	\$10,537,565	\$9,798,436	\$9,164,333	\$8,588,161	\$8,020,531
5	5	\$919,773	\$0	\$0	\$0	\$0	\$94,219	\$206,905	\$191,051	\$176,250	\$163,742	\$152,481
6	6	\$1,905,323	\$0	\$0	\$0	\$0	\$0	\$199,540	\$436,691	\$402,555	\$370,717	\$343,891
7	7	\$745,724	\$0	\$0	\$0	\$0	\$0	\$0	\$69,381	\$154,722	\$143,873	\$133,729
8	8	\$867,852	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$79,904	\$178,499	\$166,110
9	9	\$1,389,608	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$134,745	\$298,451
10	10	\$651,658	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,882
11	11	\$832,407	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	12	\$987,143	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	13	\$1,620,357	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	14	\$736,362	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	15	\$1,342,947	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	16	\$695,981	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	17	\$372,754	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	18	\$1,066,451	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	19	\$604,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	20	\$93,477	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21		\$169,295,205	\$183,673	\$2,709,655	\$9,799,523	\$19,962,090	\$25,735,221	\$24,686,452	\$23,692,065	\$22,589,313	\$21,557,552	\$20,520,875

**The Narragansett Electric Company
AMF Plan
Summary Capex and Revenue Requirement**

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-49-EL
Attachment PUC 1-35
Page 2 of 8

Total Meters, Network and Softs

		Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement
Year	CapEx	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Total	
(a)	(b)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	w = sum (c) to (v)	
1	1	\$2,390,228	\$171,994	\$163,818	\$155,641	\$147,464	\$139,287	\$131,111	\$122,934	\$114,757	\$106,581	\$98,404	\$4,326,987
2	2	\$36,577,701	\$3,909,094	\$3,731,975	\$3,554,857	\$3,377,738	\$3,200,620	\$3,023,501	\$2,846,382	\$2,669,264	\$2,492,145	\$2,315,027	\$72,428,171
3	3	\$59,853,320	\$6,725,270	\$6,433,514	\$6,141,758	\$5,850,001	\$5,558,246	\$5,266,489	\$4,974,734	\$4,682,977	\$4,391,221	\$4,099,465	\$114,608,647
4	4	\$55,641,299	\$5,099,510	\$2,407,637	\$2,302,898	\$2,198,159	\$2,093,419	\$1,988,680	\$1,883,940	\$1,779,201	\$1,674,461	\$1,569,722	\$85,515,175
5	5	\$919,773	\$141,230	\$75,314	\$14,703	\$14,066	\$13,429	\$12,792	\$12,155	\$11,517	\$10,880	\$10,243	\$1,300,977
6	6	\$1,905,323	\$319,789	\$295,700	\$151,863	\$19,641	\$18,790	\$17,939	\$17,088	\$16,236	\$15,385	\$14,534	\$2,640,359
7	7	\$745,724	\$125,032	\$117,129	\$109,264	\$67,580	\$29,187	\$27,921	\$26,655	\$25,389	\$24,123	\$22,857	\$1,076,841
8	8	\$867,852	\$154,524	\$144,574	\$135,523	\$126,520	\$79,420	\$36,028	\$34,465	\$32,903	\$31,340	\$29,777	\$1,229,587
9	9	\$1,389,608	\$276,655	\$256,297	\$238,959	\$223,272	\$207,637	\$120,817	\$40,913	\$39,139	\$37,364	\$35,590	\$1,909,840
10	10	\$651,658	\$122,685	\$115,172	\$108,112	\$101,914	\$96,198	\$90,534	\$65,404	\$42,178	\$40,348	\$38,519	\$874,944
11	11	\$832,407	\$52,650	\$125,721	\$119,354	\$113,905	\$108,839	\$104,022	\$99,719	\$95,704	\$91,702	\$87,702	\$999,316
12	12	\$987,143	\$0	\$62,512	\$149,088	\$141,298	\$134,705	\$128,606	\$122,827	\$117,716	\$112,975	\$108,248	\$1,077,975
13	13	\$1,620,357	\$0	\$0	\$130,805	\$297,848	\$278,079	\$260,347	\$244,901	\$230,749	\$217,278	\$161,464	\$1,821,470
14	14	\$736,362	\$0	\$0	\$0	\$55,838	\$128,930	\$121,401	\$114,514	\$108,384	\$102,688	\$97,204	\$728,959
15	15	\$1,342,947	\$0	\$0	\$0	\$0	\$129,038	\$286,235	\$265,517	\$246,160	\$229,650	\$214,699	\$1,371,298
16	16	\$695,981	\$0	\$0	\$0	\$0	\$0	\$58,568	\$132,925	\$124,603	\$116,789	\$109,958	\$542,843
17	17	\$372,754	\$0	\$0	\$0	\$0	\$0	\$0	\$23,349	\$56,309	\$54,183	\$52,140	\$185,981
18	18	\$1,066,451	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$98,860	\$220,602	\$205,198	\$524,661
19	19	\$604,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,573	\$111,202	\$159,775
20	20	\$93,477	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,855	\$5,855
21		\$169,295,205	\$17,098,434	\$13,929,364	\$13,312,823	\$12,735,245	\$12,215,823	\$11,674,990	\$11,028,421	\$10,492,044	\$10,018,290	\$9,387,808	\$293,329,662

The Narragansett Electric Company
AMF Plan
Summary Capex and Revenue Requirement

E370-M Electric Meters

		Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement
Year	CapEx	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
1	1	\$1,388,661	\$86,857	\$209,780	\$202,266	\$194,878	\$187,605	\$180,440	\$173,375	\$166,401	\$159,482	\$152,570
2	2	\$34,993,565	\$0	\$2,188,764	\$5,286,349	\$5,097,004	\$4,910,820	\$4,727,561	\$4,547,009	\$4,368,960	\$4,193,225	\$4,018,859
3	3	\$53,233,838	\$0	\$0	\$3,329,650	\$8,041,840	\$7,753,799	\$7,470,568	\$7,191,786	\$6,917,122	\$6,646,264	\$6,378,929
4	4	\$13,907,871	\$0	\$0	\$0	\$869,904	\$2,101,011	\$2,025,757	\$1,951,760	\$1,878,926	\$1,807,167	\$1,736,403
5	5	\$128,027	\$0	\$0	\$0	\$0	\$8,008	\$19,341	\$18,648	\$17,967	\$17,296	\$16,636
6	6	\$171,023	\$0	\$0	\$0	\$0	\$0	\$10,697	\$25,836	\$24,910	\$24,001	\$23,105
7	7	\$234,512	\$0	\$0	\$0	\$0	\$0	\$0	\$14,668	\$35,427	\$34,158	\$32,910
8	8	\$287,492	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,982	\$43,430	\$41,875
9	9	\$329,963	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,638	\$49,846
10	10	\$340,904	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,323
11	11	\$341,336	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	12	\$341,769	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	13	\$342,203	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	14	\$342,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	15	\$343,075	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	16	\$343,512	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	17	\$343,950	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	18	\$344,390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	19	\$344,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	20	\$86,235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21		\$108,189,796	\$86,857	\$2,398,544	\$8,818,266	\$14,203,626	\$14,961,244	\$14,434,365	\$13,923,082	\$13,427,694	\$12,945,662	\$12,472,456

The Narragansett Electric Company
AMF Plan
Summary Capex and Revenue Requirement

E370-M Electric Meters

		Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement
Year	CapEx	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Total	
(a)	(b)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	w = sum (c) to (v)	
1	1	\$1,388,661	\$145,659	\$138,747	\$131,836	\$124,924	\$118,013	\$111,101	\$104,190	\$97,278	\$90,367	\$83,455	\$2,859,224
2	2	\$34,993,565	\$3,844,692	\$3,670,526	\$3,496,359	\$3,322,193	\$3,148,026	\$2,973,860	\$2,799,693	\$2,625,527	\$2,451,360	\$2,277,194	\$69,947,984
3	3	\$53,233,838	\$6,113,675	\$5,848,725	\$5,583,775	\$5,318,824	\$5,053,875	\$4,788,924	\$4,523,974	\$4,259,024	\$3,994,074	\$3,729,123	\$102,943,952
4	4	\$13,907,871	\$1,666,559	\$1,597,259	\$1,528,038	\$1,458,817	\$1,389,596	\$1,320,375	\$1,251,154	\$1,181,933	\$1,112,712	\$1,043,492	\$25,920,863
5	5	\$128,027	\$15,984	\$15,341	\$14,703	\$14,066	\$13,429	\$12,792	\$12,155	\$11,517	\$10,880	\$10,243	\$229,006
6	6	\$171,023	\$22,222	\$21,352	\$20,493	\$19,641	\$18,790	\$17,939	\$17,088	\$16,236	\$15,385	\$14,534	\$292,231
7	7	\$234,512	\$31,682	\$30,472	\$29,279	\$28,101	\$26,933	\$25,766	\$24,598	\$23,431	\$22,264	\$21,097	\$380,786
8	8	\$287,492	\$40,345	\$38,840	\$37,356	\$35,894	\$34,450	\$33,017	\$31,586	\$30,156	\$28,725	\$27,294	\$440,949
9	9	\$329,963	\$48,061	\$46,305	\$44,577	\$42,875	\$41,196	\$39,539	\$37,895	\$36,253	\$34,610	\$32,968	\$474,764
10	10	\$340,904	\$51,499	\$49,655	\$47,841	\$46,056	\$44,297	\$42,562	\$40,850	\$39,151	\$37,455	\$35,758	\$456,446
11	11	\$341,336	\$21,350	\$51,564	\$49,717	\$47,901	\$46,114	\$44,353	\$42,616	\$40,902	\$39,201	\$37,502	\$421,221
12	12	\$341,769	\$0	\$21,377	\$51,630	\$49,781	\$47,962	\$46,172	\$44,409	\$42,670	\$40,954	\$39,251	\$384,205
13	13	\$342,203	\$0	\$0	\$21,404	\$51,695	\$49,844	\$48,023	\$46,231	\$44,465	\$42,724	\$41,006	\$345,392
14	14	\$342,638	\$0	\$0	\$0	\$21,431	\$51,761	\$49,907	\$48,084	\$46,290	\$44,522	\$42,779	\$304,774
15	15	\$343,075	\$0	\$0	\$0	\$0	\$21,458	\$51,827	\$49,971	\$48,145	\$46,349	\$44,579	\$262,329
16	16	\$343,512	\$0	\$0	\$0	\$0	\$0	\$21,486	\$51,893	\$50,034	\$48,207	\$46,408	\$218,028
17	17	\$343,950	\$0	\$0	\$0	\$0	\$0	\$0	\$21,513	\$51,959	\$50,098	\$48,268	\$171,839
18	18	\$344,390	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,541	\$52,026	\$50,162	\$123,729
19	19	\$344,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,568	\$52,092	\$73,661
20	20	\$86,235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,394	\$5,394
21		\$108,189,796	\$12,001,729	\$11,530,163	\$11,057,009	\$10,582,199	\$10,105,743	\$9,627,643	\$9,147,900	\$8,666,513	\$8,183,481	\$7,682,598	\$206,256,776

The Narragansett Electric Company
AMF Plan
Summary Capex and Revenue Requirement

E397-M Communication Equipment - Electric												
		Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	
Year	CapEx	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	
22	1	\$270,000	\$17,209	\$40,773	\$38,287	\$36,290	\$34,487	\$32,807	\$31,396	\$30,131	\$28,866	\$27,601
23	2	\$630,000	\$0	\$40,155	\$95,136	\$89,337	\$84,677	\$80,470	\$76,550	\$73,258	\$70,306	\$67,354
24	3	\$5,720,622	\$0	\$0	\$364,626	\$863,871	\$811,212	\$768,893	\$730,698	\$695,105	\$665,207	\$638,401
25	4	\$7,579,967	\$0	\$0	\$0	\$483,138	\$1,144,651	\$1,074,876	\$1,018,803	\$968,193	\$921,032	\$881,416
26	5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27	6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	7	\$21,083	\$0	\$0	\$0	\$0	\$0	\$0	\$1,344	\$3,184	\$2,990	\$2,834
29	8	\$28,164	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,795	\$4,253	\$3,994
30	9	\$28,234	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,800	\$4,264
31	10	\$28,305	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,804
32	11	\$491,071	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33	12	\$645,374	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
34	13	\$659,466	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	14	\$187,495	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
36	15	\$28,661	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37	16	\$28,732	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
38	17	\$28,804	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39	18	\$28,876	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40	19	\$28,948	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41	20	\$7,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
42		\$16,441,044	\$17,209	\$80,928	\$498,049	\$1,472,636	\$2,075,027	\$1,957,047	\$1,858,791	\$1,771,666	\$1,694,453	\$1,627,667

The Narragansett Electric Company
AMF Plan
Summary Capex and Revenue Requirement

E397-M Communication Equipn

		Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement
Year	CapEx	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Total	
(a)	(b)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	w = sum (c) to (v)	
22	1	\$270,000	\$26,335	\$25,070	\$23,805	\$22,540	\$21,275	\$20,010	\$18,744	\$17,479	\$16,214	\$14,949	\$524,270
23	2	\$630,000	\$64,402	\$61,449	\$58,497	\$55,545	\$52,593	\$49,641	\$46,689	\$43,737	\$40,785	\$37,833	\$1,188,415
24	3	\$5,720,622	\$611,595	\$584,789	\$557,983	\$531,177	\$504,371	\$477,565	\$450,759	\$423,953	\$397,147	\$370,341	\$10,447,695
25	4	\$7,579,967	\$845,898	\$810,379	\$774,860	\$739,342	\$703,823	\$668,305	\$632,786	\$597,267	\$561,749	\$526,230	\$13,352,748
26	5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27	6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	7	\$21,083	\$2,693	\$2,562	\$2,452	\$2,353	\$2,254	\$2,155	\$2,056	\$1,958	\$1,859	\$1,760	\$32,453
29	8	\$28,164	\$3,785	\$3,597	\$3,422	\$3,275	\$3,143	\$3,011	\$2,879	\$2,747	\$2,615	\$2,483	\$41,000
30	9	\$28,234	\$4,004	\$3,795	\$3,606	\$3,431	\$3,283	\$3,151	\$3,019	\$2,886	\$2,754	\$2,622	\$38,614
31	10	\$28,305	\$4,274	\$4,014	\$3,804	\$3,615	\$3,439	\$3,291	\$3,159	\$3,026	\$2,893	\$2,761	\$36,082
32	11	\$491,071	\$31,300	\$74,157	\$69,636	\$66,004	\$62,725	\$59,669	\$57,103	\$54,802	\$52,501	\$50,200	\$578,096
33	12	\$645,374	\$0	\$41,135	\$97,458	\$91,517	\$86,743	\$82,434	\$78,418	\$75,046	\$72,021	\$68,997	\$693,770
34	13	\$659,466	\$0	\$0	\$42,034	\$99,586	\$93,515	\$88,637	\$84,234	\$80,131	\$76,684	\$73,594	\$638,415
35	14	\$187,495	\$0	\$0	\$0	\$11,951	\$28,314	\$26,588	\$25,201	\$23,949	\$22,782	\$21,802	\$160,586
36	15	\$28,661	\$0	\$0	\$0	\$0	\$1,827	\$4,328	\$4,064	\$3,852	\$3,661	\$3,483	\$21,215
37	16	\$28,732	\$0	\$0	\$0	\$0	\$0	\$1,831	\$4,339	\$4,074	\$3,862	\$3,670	\$17,776
38	17	\$28,804	\$0	\$0	\$0	\$0	\$0	\$0	\$1,836	\$4,350	\$4,085	\$3,871	\$14,142
39	18	\$28,876	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,841	\$4,361	\$4,095	\$10,296
40	19	\$28,948	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,845	\$4,371	\$6,217
41	20	\$7,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$462	\$462
42		\$16,441,044	\$1,594,287	\$1,610,948	\$1,637,558	\$1,630,336	\$1,567,305	\$1,490,616	\$1,415,286	\$1,341,098	\$1,267,818	\$1,193,524	\$27,802,250

The Narragansett Electric Company
AMF Plan
Summary Capex and Revenue Requirement

E303-M Intangible Software

		Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement	Revenue Requirement
	Year	CapEx	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
43	1	\$731,567	\$79,607	\$126,357	\$159,300	\$146,254	\$135,315	\$125,520	\$115,726	\$55,414	\$0	\$0
44	2	\$954,136	\$0	\$103,826	\$226,035	\$207,764	\$190,749	\$176,482	\$163,708	\$150,934	\$72,274	\$0
45	3	\$898,861	\$0	\$0	\$97,874	\$212,940	\$195,727	\$179,698	\$166,258	\$154,224	\$142,190	\$68,087
46	4	\$34,153,460	\$0	\$0	\$0	\$3,718,869	\$8,090,948	\$7,436,932	\$6,827,872	\$6,317,214	\$5,859,963	\$5,402,712
47	5	\$791,745	\$0	\$0	\$0	\$0	\$86,211	\$187,564	\$172,403	\$158,284	\$146,446	\$135,846
48	6	\$1,734,299	\$0	\$0	\$0	\$0	\$0	\$188,843	\$410,855	\$377,645	\$346,717	\$320,786
49	7	\$490,128	\$0	\$0	\$0	\$0	\$0	\$0	\$53,369	\$116,111	\$106,726	\$97,985
50	8	\$552,196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,127	\$130,815	\$120,241
51	9	\$1,031,410	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$112,307	\$244,341
52	10	\$282,448	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,755
53	11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54	12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
55	13	\$618,688	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
56	14	\$206,229	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
57	15	\$971,212	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58	16	\$323,737	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
59	17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
60	18	\$693,186	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
61	19	\$231,062	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
62	20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
63		\$44,664,365	\$79,607	\$230,182	\$483,209	\$4,285,827	\$8,698,951	\$8,295,039	\$7,910,192	\$7,389,954	\$6,917,437	\$6,420,752

**The Narragansett Electric Company
AMF Plan
Summary Capex and Revenue Requirement**

The Narragansett Electric Company
d/b/a Rhode Island Energy
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E303-M Intangible Software

	<u>Year</u>	<u>CapEx</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Revenue</u>
			<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>	<u>Requirement</u>
	(a)	(b)	<u>Year 11</u>	<u>Year 12</u>	<u>Year 13</u>	<u>Year 14</u>	<u>Year 15</u>	<u>Year 16</u>	<u>Year 17</u>	<u>Year 18</u>	<u>Year 19</u>	<u>Year 20</u>	<u>Total</u>
			(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	w = sum (c) to (v)
43	1	\$731,567	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$943,493
44	2	\$954,136	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,291,773
45	3	\$898,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,216,999
46	4	\$34,153,460	\$2,587,053	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$46,241,564
47	5	\$791,745	\$125,246	\$59,973	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,071,972
48	6	\$1,734,299	\$297,567	\$274,348	\$131,370	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,348,129
49	7	\$490,128	\$90,657	\$84,095	\$77,533	\$37,126	\$0	\$0	\$0	\$0	\$0	\$0	\$663,602
50	8	\$552,196	\$110,394	\$102,137	\$94,744	\$87,351	\$41,828	\$0	\$0	\$0	\$0	\$0	\$747,637
51	9	\$1,031,410	\$224,590	\$206,197	\$190,775	\$176,967	\$163,158	\$78,127	\$0	\$0	\$0	\$0	\$1,396,462
52	10	\$282,448	\$66,912	\$61,503	\$56,466	\$52,243	\$48,462	\$44,680	\$21,395	\$0	\$0	\$0	\$382,416
53	11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54	12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
55	13	\$618,688	\$0	\$0	\$67,367	\$146,567	\$134,720	\$123,686	\$114,436	\$106,153	\$97,870	\$46,864	\$837,663
56	14	\$206,229	\$0	\$0	\$0	\$22,456	\$48,856	\$44,907	\$41,229	\$38,145	\$35,384	\$32,623	\$263,599
57	15	\$971,212	\$0	\$0	\$0	\$0	\$105,752	\$230,080	\$211,482	\$194,162	\$179,641	\$166,638	\$1,087,755
58	16	\$323,737	\$0	\$0	\$0	\$0	\$0	\$35,251	\$76,693	\$70,494	\$64,721	\$59,880	\$307,039
59	17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
60	18	\$693,186	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,479	\$164,216	\$150,941	\$390,636
61	19	\$231,062	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,160	\$54,739	\$79,898
62	20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
63		\$44,664,365	\$3,502,418	\$788,253	\$618,256	\$522,710	\$542,775	\$556,731	\$465,235	\$484,433	\$566,991	\$511,686	\$59,270,636