

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 Record Requests
Issued at the Commission's Evidentiary Hearing
On July 20, 2023

Record Request No. 3

Request:

How many soft-offs did the Company perform over the past 12 months? How many truck rolls were there for move in/move out?

Response:

For the period July 1, 2022 through June 30, 2023, Rhode Island Energy performed 53,763 soft-offs. Within that same timeframe, 19,419 truck rolls were associated with move in/move out customer requests.

Record Request No. 4

Request:

If AMF is rolled out, would the Company still charge the \$32 restoration fee listed in paragraph 21 of the Terms and Conditions for Distribution Service – RIPUC No. 2243?

Response:

If AMF is rolled out, the Company still plans to charge a restoration fee for the reconnection of service on AMF meters, even though the Company can restore service remotely without the need to send a technician to the premises to perform the restoration. The Company has not yet determined the precise amount of that fee, but it expects it will be less than the \$32 currently charged for AMR meter service restoration, and that it will be commensurate with the costs the Company incurs to perform these service restorations. The Company expects to propose a revision RIPUC No. 2243 to establish the appropriate fee for Commission review and approval.

For customers who opt out of AMF once it is rolled out, the Company still will charge the \$32 restoration fee for the reconnection of service for involuntary service terminations listed in paragraph 21 of the Terms and Conditions for Distribution Service – RIPUC No. 2243.

Record Request No. 5

Request:

*Please note, we are expanding this record request from what was asked yesterday.

Figure 11.24 of Book 2, please identify the total nominal costs that are incurred in years 1-4 and years 5-20 in each the CapEx and OpEx columns. Also, for each row, please identify the costs that are incurred in years 1-4 and years 5-20.

Figure 11.26 of Book 2, of the total costs, please identify the total nominal costs that are incurred in years 1-4 and years 5-20 in each the CapEx and OpEx columns.

Figure 11.28 of Book 2, of the total costs, please identify the total nominal costs that are incurred in years 1-4 and years 5-20 in each the CapEx and OpEx columns.

Figure 11.30 of Book 2, of the total costs, please identify the total nominal costs that are incurred in years 1-4 and years 5-20 in each the CapEx and OpEx columns.

Figure 11.22 of Book 2, of the total costs, please identify the total nominal costs that are incurred in years 1-4 and years 5-20 in each the CapEx and OpEx columns.

If you have questions about the best formatting, please reach out. I am thinking another set of columns in/added to the tables would be the easiest for us to follow, but we are open to suggestions. We think this information might be in the record in a more granular format so the visual comparison here will be important.

Response:

Please see Attachment RR-5 for the updated tables with the requested information.

Modified Figure 11.24

Systems Costs								
As of October 24, 2022					Nominal (\$M)			
Category	Nominal (\$M)	NPV (\$2022M)	Nominal (\$M)		CapEx		OpEx	
			CapEx	OpEx	Years 1-4	Years 5-20	Years 1-4	Years 5-20
Headend	\$ 65.13	\$ 34.46	\$ 14.52	\$ 50.61	\$ 12.04	\$ 2.48	\$ 3.64	\$ 46.97
MDMS	\$ 33.54	\$ 16.85	\$ 6.86	\$ 26.68	\$ 4.44	\$ 2.42	\$ 1.41	\$ 25.27
Cust Engagement	\$ 12.56	\$ 7.55	\$ 6.67	\$ 5.89	\$ 3.65	\$ 3.02	\$ 0.26	\$ 5.63
Analytics	\$ 7.30	\$ 4.84	\$ 3.78	\$ 3.52	\$ 3.78	\$ -	\$ 0.26	\$ 3.26
Steady State Ops	\$ 6.30	\$ 2.75	\$ -	\$ 6.30	\$ -	\$ -	\$ -	\$ 6.30
Middleware	\$ 4.20	\$ 2.89	\$ 2.76	\$ 1.44	\$ 2.76	\$ -	\$ -	\$ 1.44
ADMS & OMS	\$ 2.96	\$ 1.99	\$ 1.80	\$ 1.17	\$ 1.80	\$ -	\$ -	\$ 1.17
Project Management	\$ 2.80	\$ 2.30	\$ 2.80	\$ -	\$ 2.80	\$ -	\$ -	\$ -
Cyber Security	\$ 2.78	\$ 2.21	\$ 2.58	\$ 0.20	\$ 2.58	\$ -	\$ -	\$ 0.20
CSS	\$ 2.71	\$ 1.86	\$ 1.68	\$ 1.03	\$ 1.68	\$ -	\$ -	\$ 1.03
Grid Edge Comp	\$ 1.90	\$ 0.82	\$ -	\$ 1.90	\$ -	\$ -	\$ -	\$ 1.90
Depl Exchange Mgt	\$ 1.22	\$ 0.99	\$ 1.22	\$ -	\$ 1.22	\$ -	\$ -	\$ -
Total Systems Costs	\$ 143.41	\$ 79.52	\$ 44.67	\$ 98.74	\$ 36.75	\$ 7.92	\$ 5.57	\$ 93.17

Modified Figure 11.26

Meter Costs								
As of October 24, 2022					Nominal (\$M)			
Category	Nominal (\$M)	NPV (\$2022M)	Nominal (\$M)		CapEx		OpEx	
			CapEx	OpEx	Years 1-4	Years 5-20	Years 1-4	Years 5-20
Hardware	\$ 73.01	\$ 55.84	\$ 72.85	\$ 0.16	\$ 68.18	\$ 4.67	\$ 0.16	\$ -
Installs	\$ 19.03	\$ 14.85	\$ 19.03	\$ -	\$ 19.03	\$ -	\$ -	\$ -
Pre-Sweeps	\$ 4.40	\$ 3.52	\$ 4.40	\$ -	\$ 4.40	\$ -	\$ -	\$ -
Project Management	\$ 3.39	\$ 2.73	\$ 3.39	\$ -	\$ 3.39	\$ -	\$ -	\$ -
Repairs	\$ 3.02	\$ 2.35	\$ -	\$ 3.02	\$ -	\$ -	\$ 3.02	\$ -
Total Meter Costs	\$ 102.85	\$ 79.29	\$ 99.67	\$ 3.18	\$ 95.00	\$ 4.67	\$ 3.18	\$ -

Modified Figure 11.28

Network Costs								
As of October 24, 2022					Nominal (\$M)			
Category	Nominal (\$M)	NPV (\$2022M)	Nominal (\$M)		CapEx		OpEx	
			CapEx	OpEx	Years 1-4	Years 5-20	Years 1-4	Years 5-20
Installs	\$ 10.76	\$ 7.22	\$ 7.18	\$ 3.58	\$ 6.62	\$ 0.56	\$ 0.33	\$ 3.25
Steady State Operation	\$ 8.97	\$ 3.92	\$ -	\$ 8.97	\$ -	\$ -	\$ -	\$ 8.97
Hardware	\$ 6.57	\$ 4.92	\$ 6.57	\$ -	\$ 4.89	\$ 1.68	\$ -	\$ -
Project Management	\$ 1.19	\$ 0.97	\$ 1.19	\$ -	\$ 1.19	\$ -	\$ -	\$ -
Total Network Costs	\$ 27.49	\$ 17.03	\$ 14.94	\$ 12.55	\$ 12.70	\$ 2.24	\$ 0.33	\$ 12.22

Modified Figure 11.30

Program Costs								
As of October 24, 2022					Nominal (\$M)			
Category	Nominal (\$M)	NPV (\$2022M)	Nominal (\$M)		CapEx		OpEx	
			CapEx	OpEx	Years 1-4	Years 5-20	Years 1-4	Years 5-20
Project Management	\$ 10.03	\$ 8.07	\$ 10.03	\$ -	\$ 10.03	\$ -	\$ -	\$ -
Change Management	\$ 5.24	\$ 4.08	\$ -	\$ 5.24	\$ -	\$ -	\$ 4.37	\$ 0.87
Total Program Costs	\$ 15.27	\$ 12.14	\$ 10.03	\$ 5.24	\$ 10.03	\$ -	\$ 4.37	\$ 0.87

Modified Figure 11.22

AMF Full Deployment Costs								
As of October 24, 2022					Nominal (\$M)			
Category	Nominal (\$M)	NPV (\$2022M)	Nominal (\$M)		CapEx		OpEx	
			CapEx	OpEx	Years 1-4	Years 5-20	Years 1-4	Years 5-20
Systems	\$ 143.41	\$ 79.52	\$ 44.66	\$ 98.74	\$ 36.75	\$ 7.91	\$ 5.57	\$ 93.17
Meters	\$ 102.85	\$ 79.29	\$ 99.67	\$ 3.18	\$ 95.00	\$ 4.67	\$ 3.18	\$ -
Network	\$ 27.49	\$ 17.03	\$ 14.94	\$ 12.55	\$ 12.70	\$ 2.24	\$ 0.33	\$ 12.22
Program	\$ 15.27	\$ 12.14	\$ 10.03	\$ 5.24	\$ 10.03	\$ -	\$ 4.37	\$ 0.87
Total AMF Costs	\$ 289.01	\$ 187.98	\$ 169.30	\$ 119.71	\$ 154.48	\$ 14.82	\$ 13.45	\$ 106.26

Record Request No. 6

Request:

What does the Company expect the value of its proposed regulatory asset to be in its next base rate case and what the expected reduction of 100% of the non-OMS savings. Estimated expenses recorded there and 100% of the forecasted non-OMS savings.

Response:

Assuming that new base distribution rates after the next base distribution rate case would be effective on October 1, 2026, the Company expects that, as of that date:

- (a) the total amount of AMF O&M expenses that would be recorded to the proposed regulatory asset would be \$16,555,336, which is reflected in Attachment RR-7, Table 2, Line 4, Column (d);
- (b) the total Non-OMS AMF O&M benefits attributable to avoided cost savings ("Non-OMS avoided cost savings") that would be credited against the regulatory asset would be \$4,656,964, which is reflected in Attachment RR-7, Table 2, Line 5, Column (d) and represents 100 percent of the forecasted Non-OMS avoided cost savings related to AMF implementation through September 30, 2026; and
- (c) the total value of the regulatory asset would be \$11,898,372, which represents the net of the AMF O&M expenses incurred against the credited Non-OMS avoided cost savings and is reflected on Attachment RR-7, Table 2, Line 6, Column (d)..

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Record Request No. 7

Request:

Recreate PUC Exhibit 7 using October 1-September 30 program years and with reliable numbers. If the Company picks different program years, please provide appropriate explanations.

Response:

Please see Attachment RR-7 for an updated PUC Exhibit 7 using the assumption that PUC approves AMF cost recovery to commence on October 1, 2023 and that new base distribution rates following the next base distribution rate case would be effective October 1, 2026. Tables 1 and 2 on Attachment RR-7 reflect the Company's forecasted AMF O&M costs and non-O&M savings during this period and do not include any O&M costs incurred or expected to be incurred before October 1, 2023. The MRP rate level credits in Table 3 on Attachment RR-7 reflect the cumulative amounts recovered in base rates for AMF since the last distribution rate case, as shown on Schedule SAB/BLJ-1, page 1, line 16, and lines 18-20, as well as the annual amount that the Company will continue to collect until new base distribution rates are effective.

Calculation of Net O&M Costs Prior to New Base Rates from Rate Case

(Assumes No O&M Reconciliation; Company retains 100% Opex Benefits and Company retains 100% MRP Rate Credits Prior to New Base Rates from Rate Case)

Table 1

Description	Source	(a)	(b)	(c)	Assumes Approval by October 1, 2023 & no O&M incurred prior to that date is included in these amounts
		<u>October 2023 - September 2024</u>	<u>October 2024 - September 2025</u>	<u>October 2025 - September 2026</u>	
1 O&M Expense	Company forecast*	3,136,306	6,360,269	7,058,761	
2 80% Opex Benefits	Company forecast*	(13,010)	(1,008,228)	(2,704,334)	
3		3,123,296	5,352,041	4,354,428	

*Reflects shifting of costs by 3 months from Schedule SAB/BLJ-1.

Table 2

Description	Source	(a)	(b)	(c)	(d)
		<u>October 2023 - September 2024</u>	<u>October 2024 - September 2025</u>	<u>October 2025 - September 2026</u>	<u>Total O&M Prior to New Base Rates</u>
4 O&M Prior to New Base Rates	Line 1	3,136,306	6,360,269	7,058,761	16,555,336
5 100% Opex Benefits (instead of 80%)	Line 2 / 80%	(16,262)	(1,260,285)	(3,380,417)	(4,656,964)
6 Net O&M		3,120,044	5,099,984	3,678,344	11,898,372

Table 3

MRP Rate Level Credits	Source	(a)	(b)	(c)	(d)
		<u>October 2023 - September 2024</u>	<u>October 2024 - September 2025</u>	<u>October 2025 - September 2026</u>	<u>Total MRP Credits Prior to New Base Rates</u>
7 Annual level of base rate recovery	SAB/BLJ-1, Pg. 1, Line 16	(1,234,459)	(1,234,459)	(1,234,459)	(3,703,377)
8 Cumulative level of base rate recovery thru September 2023 since last rate case	SAB/BLJ-1, Pg. 1, Line 18 thru 20	-	-	-	(4,975,989)
9	Line 7 + 8			Total Credits	(8,679,366)

Table 4

Netting of Benefits & Credits Against O&M Cost Prior to New Base Rates

10	Net O&M	11,898,372	line 6, col. (d)
11	Credits through Sept. 30, 2026	(8,679,366)	line 9, col. (d)
12	Net O&M Cost to Company	3,219,006	

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Record Request No. 8

Request:

How does the non-OMS savings factor into the \$289M, if at all?

Response:

The non-OMS savings are not included in the \$289 million nominal costs for the AMF Project. The costs of the project, both capital and expense, total \$289 million and do not include an offset for the benefits that were included as an offset to the revenue requirement.

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Record Request No. 9

Request:

Please provide the Capex and Opex project implementation costs by years based on the original filing with no adjustment to scope. Please use same format as RR-5.

Response:

See Attachment RR-9.

Systems Costs				
Category	Nominal (\$M)			
	CapEx		OpEx	
	Project Implementation	Year 1-4	Project Implementation	Year 1-4
Headend	\$ 12.04	\$ 12.04	\$ -	\$ 3.64
MDMS	\$ 4.44	\$ 4.44	\$ -	\$ 1.41
Cust Engagement	\$ 3.65	\$ 3.65	\$ -	\$ 0.26
Analytics	\$ 3.78	\$ 3.78	\$ -	\$ 0.26
Steady State Ops	\$ -	\$ -	\$ -	\$ -
Middleware	\$ 2.76	\$ 2.76	\$ -	\$ -
ADMS & OMS	\$ 1.80	\$ 1.80	\$ -	\$ -
Project Management	\$ 2.80	\$ 2.80	\$ -	\$ -
Cyber Security	\$ 2.58	\$ 2.58	\$ -	\$ -
CSS	\$ 1.68	\$ 1.68	\$ -	\$ -
Grid Edge Comp	\$ -	\$ -	\$ -	\$ -
Depl Exchange Mgt	\$ 1.22	\$ 1.22	\$ -	\$ -
Total Systems Costs	\$ 36.75	\$ 36.75	\$ -	\$ 5.57

Meter Costs				
Category	Nominal (\$M)			
	CapEx		OpEx	
	Project Implementation	Year 1-4	Project Implementation	Year 1-4
Hardware	\$ 68.18	\$ 68.18	\$ 0.16	\$ 0.16
Installs	\$ 19.03	\$ 19.03	\$ -	\$ -
Pre-Sweeps	\$ 4.40	\$ 4.40	\$ -	\$ -
Project Management	\$ 3.39	\$ 3.39	\$ -	\$ -
Repairs	\$ -	\$ -	\$ 3.02	\$ 3.02
Total Meter Costs	\$ 95.00	\$ 95.00	\$ 3.18	\$ 3.18

Network Costs				
Category	Nominal (\$M)			
	CapEx		OpEx	
	Project Implementation	Year 1-4	Project Implementation	Year 1-4
Installs	\$ 6.62	\$ 6.62	\$ 0.33	\$ 0.33
Steady State Operations	\$ -	\$ -	\$ -	\$ -
Hardware	\$ 4.89	\$ 4.89	\$ -	\$ -
Project Management	\$ 1.19	\$ 1.19	\$ -	\$ -
Total Network Costs	\$ 12.70	\$ 12.70	\$ 0.33	\$ 0.33

Program Costs				
Category	Nominal (\$M)			
	CapEx		OpEx	
	Project Implementation	Year 1-4	Project Implementation	Year 1-4
Project Management	\$ 10.03	\$ 10.03	\$ -	\$ -
Change Management	\$ -	\$ -	\$ 4.37	\$ 4.37
Total Program Costs	\$ 10.03	\$ 10.03	\$ 4.37	\$ 4.37

AMF Full Deployment Costs				
Category	Nominal (\$M)			
	CapEx		OpEx	
	Project Implementation	Year 1-4	Project Implementation	Year 1-4
Systems	\$ 36.75	\$ 36.75	\$ -	\$ 5.57
Meters	\$ 95.00	\$ 95.00	\$ 3.18	\$ 3.18
Network	\$ 12.70	\$ 12.70	\$ 0.33	\$ 0.33
Program	\$ 10.03	\$ 10.03	\$ 4.37	\$ 4.37
Total AMF Costs	\$ 154.48	\$ 154.48	\$ 7.88	\$ 13.45

Record Request No. 10

Request:

What are the GBC reporting requirements in KY and how were they developed?

Response:

The Kentucky Public Service Commission ordered that Louisville Gas & Electric ("LG&E")¹ and Kentucky Utilities ("KU")² file notice that it obtained certifications of its Green Button Connect My Data for residential and non-residential customers on or before June 30, 2023. LG&E and KU filed the required notice with the Kentucky Public Service Commission on June 30, 2023.

Green Button Connect went live in Kentucky on June 30, 2023, and the Company is tracking third-party registrations. As of July 27, 2023, there have been no third-party registrations.

¹ See Order Item 14 on page 71 of https://psc.ky.gov/pscscf/2020%20Cases/2020-00350//20210630_PSC_ORDER.pdf

² See Order Item 14 on page 64 of https://psc.ky.gov/pscscf/2020%20Cases/2020-00349//20210630_PSC_ORDER.pdf

Record Request No. 11

Request:

Please explain the differences in the Business Case as filed if the Company were to use Sense to provide the relevant functionalities in Figure 6.3 as compared to the original proposal. Include the estimated cost difference, which categories those costs affect, whether the change would fall under the proposed cost cap, and any timing differences compared to Figure 6.1.

Response:

Sense is a home energy monitoring software that is pre-installed on Landis+Gyr's Revelo meter. Sense uses high resolution waveform voltage data to power real-time customer experience on energy usage with details to the device or appliance level. In the originally filed AMF Business Case, the Company proposed to enable Sense as the solution for the Load Disaggregation and Waveform Analytics functionalities captured in Group 6 of the AMF functionality roadmap in Figure 6.1, Bates Page 70, Book 2 of 3 and Figure 6.4, Bates Page 74. Under the original proposal, Sense is not included in the AMF functionalities during meter deployment listed in Figure 6.1, Bates Page 70, Book 2 of 3.

The Company originally estimated the availability of Sense specifically for load disaggregation functionality for customers in Year 6 of the BCA. The cost to enable the load disaggregation functionality is captured in the BCA and Attachment H BCA Narrative under the Grid Edge and Load Disaggregation line item of the Systems cost category and is included in the proposed \$289 million cost cap. The intention was to enable this capability with no change to the Sense offering, meaning no customizations for functions or joint branding with Rhode Island Energy. For a general video demonstration on how the Sense app works between the Revelo meter, the customer's energy use, and the Sense App running on the customers' smartphone, please see the video available at <https://www.youtube.com/watch?v=o6WqYs0LqI4&t=85s>.

During the AMF hearings, Rhode Island Energy witnesses discussed the potential to use Sense as the customer Home Area Network or "HAN" solution. Rhode Island Energy could use Sense as the solution to enable the CP: In Home Device Support functionality, which is included in the originally filed AMF Business Case as part of Group 3, as shown in Figure 6.1 on Bates Page 70, Book 2 of 3 and listed in Figure 6.3 on Bates Page 72, Book 2 of 3. The CP: In Home Device Support functionality is described in the AMF Business Case and was referred to in the AMF hearings as the Home Area Network or "HAN." The CP: In Home Device Support cost is captured in the customer engagement line item of the Systems cost category.

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If the Company were to use Sense to enable the CP: In Home Device Support functionality (the HAN functionality) as part of Group 3, the Company also would enable the load disaggregation functionality (originally proposed in Group 6) at that time. This would enable real time energy usage viewing by customers via the HAN, along with details of energy used in the home provided by the load disaggregation functionality via Sense. A customer would connect to the Sense app from their device over their Wi-Fi connection behind the meter. Rhode Island Energy envisions the inclusion of the CP: In Home Device Support / Home Area Network functionality would involve the creation of a joint branded landing page, links to the landing page from the Rhode Island Energy website, and other customizations that jointly brand Rhode Island Energy and Sense.

The cost to enable the load disaggregation functionality in Group 3 rather than Group 6, along with CP: In Home Device Support in Group 3, is a net OpEx increase in Years 1-4 of \$72,414 in the Grid Edge and Load Disaggregation line item of the Systems cost category as compared to the originally filed AMF Business Case. This net OpEx increase results from a (\$60,788) decrease in the customer engagement line item and a \$133,202 increase in the Grid Edge & Load Disaggregation line item. The increase in the Grid Edge & Load Disaggregation line item occurs because the Company would commence Sense services earlier than originally proposed (i.e., from year 6 to the end of year 3). The decrease in the customer engagement line item occurs because of the shift to use Sense for the CP: In Home Support / Home Area Network, which reduces the incremental IT Maintenance provided by PPL Services.

Over 20 years, the cost is a net OpEx decrease of (\$318,520). The net OpEx decrease, contained within the Systems cost category, is a result of a (\$574,677) decrease in the customer engagement line item offset by a \$256,157 increase in the Grid Edge & Load Disaggregation line item. The reason for the decrease in the customer engagement line items is the shift to using Sense as the CP: In Home Support / Home Area Network which reduces the incremental IT Maintenance provided by PPL Services over the 20 years. The reason for the increase in the Grid Edge & Load Disaggregation line item is earlier start to the use of Sense services than originally proposed (i.e., from Year 6 to the end of Year 3).

There would be no change to the estimated CapEx costs for any year as a result of the shift in timing to use Sense. The Company would develop a jointly branded landing page(s) and other customizations for the Sense app to match the proposed CP: In Home Support function.

Overall, Rhode Island Energy would seek an additional \$72,414 in OpEx in Years 1-4 to account for the acceleration of load disaggregation capabilities from Group 6/Year 6 to Group 3/Year 3/Month 12, if the cost cap was to apply to Years 1-4 only. For Years 1-20 BCA, the forecasted total costs would be reduced by (\$318,520) in OpEx.

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Record Request No. 12

Request:

How many REG production meters were assumed to be changed out as part of the Business Case? What were the assumptions used to derive the amount?

Response:

Based on actual data from the CIS Database and Salesforce application as of November 2022, the Company included 6,685 REG program meters that would be replaced with AMF meters as part of the AMF Business Case. The Company assumed 144 REG program meters currently read through the MV90 system would not be replaced with an AMF meter.

For the benefit cost analysis, the Company used an annual growth rate of 0.25% and an out of warranty failure rate of 0.25% for all AMF meters, which includes REG program meters, in subsequent years.

Record Request No. 13

Request:

- (a) Please reproduce the response to Record Request 7, but please break out line 4 into the following sub-categories: (1) O&M related to implementation; (2) O&M related to ongoing IT maintenance; (3) SaaS; and (4) other (please explain what is in other, if anything).
- (b) The Company's response to Record Request 9 includes project implementation OpEx, Years 1-4 of \$13.45M. The Company's response to Record Request 7 includes total O&M prior to new base rates of approximately \$16.56M. Please reconcile these amounts, specifically addressing the four subcategories in (a) and any other explanation needed.
- (c) Throughout the proceedings, the term deployment has been used to be synonymous with implementation. Please provide a precise definition for each term.
- (d) To the extent there are costs associated with implementation that are not included in deployment, please list them separately using RR-9 as the template by year.

Response:

- (a) Please see Attachment RR-13-1, which reproduces Attachment RR-7, but breaks down the O&M expenses prior to the current estimated date that new base distribution rates will become effective on Line 4 into the sub-categories requested above. This includes all AMF O&M costs forecasted to be incurred from October 1, 2023 (the assumed date of PUC approval) through September 30, 2026 (which is the date through which the Company currently assumes existing base distribution rates will remain in effect). The project implementation period is projected to be completed March 31, 2026. This is a three-month shift from the filed AMF Business Case specific to project implementation, which originally planned to be completed December 31, 2025. This is the reason why the original illustrative revenue requirement in Schedule SAB/BLJ-1 for O&M in the AMF Recovery Year 1 for the period of October 1, 2022 – September 30, 2023 shifted from \$534,688 to \$0. This amount is the O&M to be incurred as part the change management line item in the Program cost category, which would now not start until October 2023. Additionally, the filed BCA is based on a January through December calendar year and is adjusted to October through September for the AMF Recovery Years in Schedule SAB/BLJ-1. The O&M for project implementation can be found on line 5, Column (b) of Attachment RR-13-2. The total for project implementation O&M, which does not

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include IT Maintenance and SaaS, is \$7.88 million. O&M related to ongoing IT Maintenance is \$0.3 million and can be found on Line 13, column (b) of Attachment RR-13-2. O&M related to SaaS is \$5.3M and can be found on Line 17, Column (b) of Attachment RR-13-2. The approximate \$5.6 million (\$0.3 million + \$5.3 million) for ongoing IT Maintenance and SaaS costs makes up the difference between the project implementation O&M costs and O&M costs for Years 1-4 (ending March 31, 2026) for a total O&M of \$13.45 million.

In Schedule SAB/BLJ-1 Page 1 of 27, the total O&M for the periods October 1, 2022 through September 30, 2026 was \$17.94 million. These amounts were adjusted for the new start date of October 1, 2023, including moving the dollars in AMF Recovery Year 1 into AMF Recovery Year 2. As shown in Attachment RR-13-2, O&M for the period through September 30, 2026 is \$16.56 million, Line 21, Column (a).

- (b) The Company's response to Record Request 7 and Part (a) above, reflect the AMF O&M costs of \$16.56 million that are expected be incurred from October 1, 2023 through September 30, 2026. The Company's response to RR-9, Attachment RR-9, reflects the AMF O&M costs of \$13.45 million that are expected to be incurred during Years 1 through 4 in the AMF Business Case, which covered the time period January 1, 2022 through December 31, 2025, adjusted for recovery years and the start date of October 1, 2023; therefore the \$13.45 million covers the period October 1, 2023 through March 31, 2026. The difference between the amounts in the record requests is the additional six months of O&M costs that will be incurred for the period April 2026 through September 2026 for ongoing IT Maintenance and SaaS that are included in Record Request 7. Please see Attachment RR-13-2 for a breakdown of these differences by sub-categories.
- (c) Referencing figure 8.1 AMF Project Timeline, Bates 87, book 2 of 3, Deployment refers to the activities specific to the work needed for the end-to-end installation of the new RF communications network and AMF meters. Project implementation includes deployment as well as the installation of the systems necessary to enable the end-to-end meter data flow from the meter through the network to the back-office systems. Deployment costs are captured in the cost categories of Meters, Network, and Program. Project Implementation includes all cost categories captured in deployment plus Systems cost categories. The System cost categories in Years 1-4, minus the incremental IT costs and SaaS costs, are required to enable Deployment. Thus, Deployment is a subset of Implementation, and Implementation is the term that covers the work necessary for the AMF system to be completely installed and operational.

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 Record Requests
Issued at the Commission’s Evidentiary Hearing
On July 31, 2023

In paragraph 1(d) of the Company’s Statement of Alternative or Additional Positions (Exhibit 9), the Company used the term “implementation,” but did not intend to use it in the defined sense set forth in this response. Rather, in that document, regarding the O&M expenses that would be included in the proposed regulatory asset for cost recovery purposes, the Company intended to include all O&M costs that the Company would incur in connection with the AMF program up until the time that new base distribution rates take effect following the next base distribution rate case.

- (d) The chart below captures the CapEx and OpEx (O&M) for deployment and project implementation from the filed BCA. Deployment includes the costs categories of Meters, Network and Program. Project Implementation includes Deployment plus the Systems cost category. The Systems work, specifically CapEx, is required to enable Deployment and the functionalities captured in figure 6.1, Bates 70, book 2 of 3 of the Business Case.

CapEx and OpEx (O&M) from the BCA (in Millions):

		Deployment	Project Implementation
CAPEX	Systems	\$ -	\$ 36.75
	Meters	\$ 95.00	\$ 95.00
	Network	\$ 12.70	\$ 12.70
	Program	\$ 10.03	\$ 10.03
		<u>\$ 117.73</u>	<u>\$ 154.48</u>
OPEX	Systems	\$ -	\$ -
	Meters	\$ 3.18	\$ 3.18
	Network	\$ 0.33	\$ 0.33
	Program	\$ 4.37	\$ 4.37
		<u>\$ 7.88</u>	<u>\$ 7.88</u>

Calculation of Net O&M Costs Prior to New Base Rates from Rate Case

(Assumes No O&M Reconciliation; Company retains 100% Opex Benefits and Company retains 100% MRP Rate Credits Prior to New Base Rates from Rate Case)

Table 1

Description	Source	(a)	(b)	(c)	Assumes Approval by October 1, 2023 & no O&M incurred prior to that date is included in these amounts
		<u>October 2023 - September 2024</u>	<u>October 2024 - September 2025</u>	<u>October 2025 - September 2026</u>	
1 O&M Expense	Company forecast	3,136,306	6,360,269	7,058,761	
2 80% Opex Benefits	Company forecast	(13,010)	(1,008,228)	(2,704,334)	
3		<u>3,123,296</u>	<u>5,352,041</u>	<u>4,354,428</u>	

Table 2

Description	(a)	(b)	(c)	(d)
	<u>October 2023 - September 2024</u>	<u>October 2024 - September 2025</u>	<u>October 2025 - September 2026</u>	<u>Total O&M Prior to New Base Rates</u>
4 O&M Prior to New Distribution Base Rates				
O&M related to implementation				
a Meters- Ancillary Equipment	37,270	80,250	42,980	160,500
b Meter base repairs	371,482	1,511,037	1,139,555	3,022,074
c Network installs - backhaul	65,355	164,761	199,061	429,177
d Change Management	1,771,636	1,825,216	891,815	4,488,667
e sub-total O&M related to implementation	<u>2,245,743</u>	<u>3,581,264</u>	<u>2,273,411</u>	<u>8,100,418</u>
O&M related to ongoing IT Maintenance				
f ADMS & OMS - RTB	-	-	31,304	31,304
g Analytics-RTB cost, Data Lake	-	-	77,330	77,330
h CSS RTB costs	-	-	26,516	26,516
i Customer Engagement - RTB costs	24,821	127,741	207,842	360,405
j Headend - RTB cost	-	-	53,032	53,032
k MDMS - RTB cost	-	-	53,032	53,032
l Middleware - RTB cost	-	-	39,220	39,220
m Subtotal O&M related to ongoing IT Maintenance	<u>24,821</u>	<u>127,741</u>	<u>488,276</u>	<u>640,839</u>
SaaS				
n Analytics SaaS	-	130,130	417,479	547,609
o Headend SaaS	727,061	1,818,358	2,296,177	4,841,596
p MDMS SaaS	138,680	702,775	1,186,902	2,028,357
q Subtotal SaaS	<u>865,741</u>	<u>2,651,263</u>	<u>3,900,558</u>	<u>7,417,563</u>
Other				
r Network Labor (vendor/PPL/MSP)	-	-	233,877	233,877
s Steady State Operations - PPL Labor	-	-	162,639	162,639
t Subtotal Other	<u>-</u>	<u>-</u>	<u>396,516</u>	<u>396,516</u>
4 Total O&M through new distribution base rates	<u>3,136,306</u>	<u>6,360,269</u>	<u>7,058,761</u>	<u>16,555,336</u>
5 100% Opex Benefits (instead of 80%)	<u>(16,262)</u>	<u>(1,260,285)</u>	<u>(3,380,417)</u>	<u>(4,656,964)</u>
6 Net O&M	<u>3,120,044</u>	<u>5,099,984</u>	<u>3,678,344</u>	<u>11,898,372</u>

Table 3

MRP Rate Level Credits	SAB/BLI-1, Pg. 1, Line 16	(a)	(b)	(c)	(d)
		<u>October 2023 - September 2024</u>	<u>October 2024 - September 2025</u>	<u>October 2025 - September 2026</u>	<u>Total MRP Credits Prior to New Base Rates</u>
7 Annual level of base rate recovery		(1,234,459)	(1,234,459)	(1,234,459)	(3,703,377)
8 Cumulative level of base rate recovery thru September 2023 since last rate case	SAB/BLI-1, Pg. 1, Line 18 thru 20	-	-	-	(4,975,989)
9	Line 7 + 8			Total Credits	(8,679,366)

Table 4

Netting of Benefits & Credits Against O&M Cost Prior to New Base Rates

10	Net O&M	11,898,372	line 6, col. (d)
11	Credits through Sept. 30, 2026	(8,679,366)	line 9, col. (d)
12	Net O&M Cost to Company	3,219,006	

	(a)	(b)	(c) = (a) - (b)
O&M Prior to New Base Rates	<u>Total O&M Prior to New Base Rates (October 1, 2023 through September 30, 2026)</u>	<u>Total O&M Years 1 through 4 (which ends March 31, 2026)</u>	<u>Difference (O&M April 1, 2026 through September 30, 2026)</u>
<i>O&M related to implementation</i>			
1	Meters- Ancillary Equipment	160,500	-
2	Meter base repairs	3,022,074	-
3	Network installs - backhaul	429,177	99,655
4	Change Management	4,488,667	125,317
5	sub-total O&M related to implementation	<u>8,100,418</u>	<u>224,972</u>
<i>O&M related to ongoing IT Maintenance</i>			
6	ADMS & OMS - RTB	31,304	31,304
7	Analytics-RTB cost, Data Lake	77,330	77,330
8	CSS RTB costs	26,516	26,516
9	Customer Engagement - RTB costs	360,405	104,923
10	Headend - RTB cost	53,032	53,032
11	MDMS - RTB cost	53,032	53,032
12	Middleware - RTB cost	39,220	39,220
13	Subtotal O&M related to ongoing IT Maintenance	<u>640,839</u>	<u>385,357</u>
<i>SaaS</i>			
14	Analytics SaaS	547,609	287,348
15	Headend SaaS	4,841,596	1,204,881
16	MDMS SaaS	2,028,357	622,806
17	Subtotal SaaS	<u>7,417,563</u>	<u>2,115,036</u>
<i>Other</i>			
18	Network Labor (vendor/PPL/MSP)	233,877	233,877
19	Steady State Operations - PPL Labor	162,639	162,639
20	Subtotal Other	<u>396,516</u>	<u>396,516</u>
21	Total O&M	<u><u>16,555,336</u></u>	<u><u>13,433,455</u></u>

Attachment RR-13-1
Column (d), Line 4

Attachment RR-9