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March 4, 2024

VIA ELECTRONIC MAIL

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

RE: Docket No. 24-06-EE – The Narragansett Electric Company's d/b/a Rhode Island Energy's System Reliability Procurement Investment Proposal for Electric Demand Response 2024-2026 – ConnectedSolutions Responses to PUC Set 1

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company"), enclosed please find the Company's responses to the Public Utilities Commission's ("PUC's") First Set of Data Requests in the above-referenced matter.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-4263.

Sincerely,

Ched m

Andrew S. Marcaccio

Enclosures

cc: Docket No. 24-06-EE Service List

PUC 1-1 Administrative Cost Estimates

Request:

The testimony at Bates page 21 states: "Administration costs include costs of staff resources and vendor/implementation contractor support."

- a. Please provide an estimate of the total "administration costs" of the program on an annual basis.
- b. Please provide a schedule that shows the sources of information from which the costs were obtained and break down of the costs by component.
- c. Please identify the number of internal staff employees the Company expects to be assigned to the program and the estimated annual costs per employee.
- d. Please identify the vendor/implementation contractors and the estimated annual cost incurred from each vendor and contractor.

Response:

a. <u>Table 1</u> Program Planning and Administration (PP&A) Costs, 2024-2026 ConnectedSolutions Program below includes the costs associated with Program Planning & Administration (PP&A) in the 2024-2026 ConnectedSolutions Program budget.

ConnectedSolutions Track	Total Program Planning & Administration Costs					
	2024	2025	2026			
Residential & Small Business (RSB)	\$100,200	\$102,000	\$103,854			
Commercial & Industrial (C&I)	\$89,405	\$85,905	\$87,450			
Total	\$189,605	\$187,905	\$191,304			

Table 1 Program Planning and Administration (PP&A) Costs, 2024-2026 ConnectedSolutions Program
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<u>PUC 1-1, page 2</u> Administrative Cost Estimates

b. <u>Table 2 and Table 3</u> below include the breakdown of costs by component associated with PP&A costs for the 2024-2026 ConnectedSolutions Program budget. The tables also include total spend for PP&A in 2023 for reference.

Table 2 Residential and Small Business PP&A Cost Components, 2024-2026 ConnectedSolutions Program

Residential & Small Business (RSB) ConnectedSolutions							
	2024	2025	2026				
Consultant, Contractor, Vendor(s)	\$20,000	\$20,000	\$20,000				
Technology	\$20,000	\$20,000	\$20,000				
Software	\$200	\$200	\$200				
Company Labor	\$60,000	\$61,800	\$63,654				
Total	\$100,200	\$102,000	\$103,854				

Table 3 Commercial and Industrial PP&A Cost Components, 2024-2026 ConnectedSolutions Program

Commercial & Industrial (C&I) ConnectedSolutions							
	2024	2025	2026				
Consultant, Contractor, Vendor(s)	\$17,405	\$17,405	\$17,405				
Technology	\$15,000	\$15,000	\$15,000				
Software	\$7,000	\$2,000	\$2,000				
Company Labor	\$50,000	\$51,500	\$53,045				
Total	\$89,405	\$85,905	\$87,450				

To determine the costs associated with program planning and administration, the Company examined previous year program costs.

PUC 1-1, page 3 Administrative Cost Estimates

c. Please refer to Table 4, below.

	a 10 a	
Table A Rhode Island Energy	Staff Components 2021 2026	ConnectedSolutions Program
Tuble 7 Knoue Island Energy	Siuff Components, 2027-2020	Connecteusotutions 1 togrum

Rhode Island Energy Staff								
	2024	2025	2026					
Implementation Manager (0.5 FTE)	\$60,000	\$61,800	\$63,654					
Implementation Manager (0.5 FTE)	\$44,702	\$45,596	\$46,508					
Supervisory Support	\$5,298	\$5,904	\$6,537					
Total	\$110,000	\$113,300	\$116,699					

d. The implementation vendor for the 2024 ConnectedSolutions program is EnergyHub. The annual vendor costs were estimated based on the existing contract price structure, which includes a fixed cost and a volumetric component. The Company plans to issue a Request for Proposal (RFP) for the implementation vendor for the 2025 and 2026 program years, and will include updated contract costs in its annual reconciliation.

The RISE Group ("RISE") provides administrative support for the HEAT Loan (Residential and Small Business track only). Annual costs were based on the existing contract price structure, which includes a fixed cost and a volumetric component.

The Energy Federation Inc. ("EFI") operates the eCommerce marketplace and related customer support and fulfillment services. Annual costs were based on the existing contract price structure, which includes a fixed cost and a volumetric component.

RISE and EFI also provide services to the Energy Efficiency program; where appropriate, costs were allocated accordingly to either Energy Efficiency or ConnectedSolutions.

PUC 1-1, page 4 Administrative Cost Estimates

<u>Table 5 and Table 6</u> below include the breakdown of costs by component associated with Sales, Technical Assistance and Training (STAT) in the 2024-2026 ConnectedSolutions Program budget.

Table 5 Residential and Small Business Sales, Technical Assistance & Training (STAT) Costs, 2024-2026 ConnectedSolutions Program

Residential & Small Business (RSB) ConnectedSolutions									
2024 2025									
Implementation Vendor	\$673,618	\$854,818	\$1,017,118						
HEAT Loan Administration Vendor	\$2,850	\$1,975	\$1,975						
Marketplace Vendor	\$17,400	\$14,200	\$14,200						
Total	\$693,868	\$870,993	\$1,033,293						

Table 6 Commercial and Industrial Sales, Technical Assistance & Training (STAT) Costs, 2024-2026 ConnectedSolutions Program

Commercial & Industrial (C&I) ConnectedSolutions							
2024 2025 20							
Implementation Vendor	\$300,000	\$350,000	\$400,000				
Total	\$300,000	\$350,000	\$400,000				

PUC 1-2 Administrative Cost Estimates

Request:

Please provide a schedule showing how the administration costs were aggregated by track and calculated as a component of the program costs, by track. Please also show how these costs are allocated by "pathway" within each track.

Response:

This is a two-step calculation summarized in the equations below, followed by relevant schedules.

Step 1 entails determining the estimated kW peak reduction for each pathway, *Supply*_{Pathway}:

 $Supply_{Pathway} = \frac{Participation}{Pathway} * \frac{kW \ reduced}{Participant}$

Where *Participation* is the planned number of participants (in the case of Daily Dispatch and Targeted Dispatch pathways) or participating devices (in the case of BYOT, RSB Battery, and EVDR pathways; i.e., BYOT participation is measured as number of connected thermostats, RSB Battery participation is measured as number of participating batteries, and EVDR participation is measured as number of connected EVs); and $\frac{kW \ reduced}{Participant}$ is the estimated peak demand reduction, measured in kW, per participant or participating device. $\frac{kW \ reduced}{Participant}$ is estimated using historical performance data by the implementation vendor. $Supply_{Pathway}$ is measured in units of kW procured per pathway and may be measured per year or in total over the three-year planning period, 2024-2026.

<u>PUC 1-2, page 2</u> Administrative Cost Estimates

Step 2 entails averaging administrative costs across the kW peak demand reduction planned to be procured from Step 1:

 $Administrative \ Unit \ Cost_{Track} = \frac{Administrative \ Cost_{Track}}{\sum_{Pathway} Supply_{Pathway}}$

Where the numerator *Administrative Cost*_{Track} is calculated using budgets related to all program costs except for enrollment incentives, performance incentives, financial incentives, or regulatory distributions that allocate costs to either the Residential and Small Business track or the Commercial and Industrial track, and the denominator is the sum of all kW peak demand reduction procured per pathway in that track. For planning purposes, the administrative unit cost per track was assigned to each pathway in that track. Administrative unit costs were not calculated by pathway.

Please refer to Attachments PUC 1-2-1 through PUC 1-2-3 for the results of these calculations for each year 2024-2026.

Attachment PUC 1-2-1

Program Year 2024

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
			Participating	kW per	Planned	Supply per	Supply per Track	Administrative Cost	Administrative Unit	Administrative Unit Cost per
Track		Pathway	Unit	Ûnit	Participation (Unit)	Pathway (kW)	(kW)	per Track	Cost per Track	Pathway
	(1)	BYOT repeat	device	0.65	11,379	7,396				\$ 52.76
	(2)	BYOT first	device	0.65	4,000	2,600				\$ 52.76
	(3)	EVDR repeat	device	0.32	-	-				\$ 52.76
Residential	(4)	EVDR first	device	0.32	500	160	15,190	\$ 801,518	\$ 52.76	\$ 52.76
	(5)	Battery 200	participant	5.84	22	128				\$ 52.76
	(6)	Battery 225	participant	5.84	50	292				\$ 52.76
	(7)	Battery 400	participant	5.84	790	4,614				\$ 52.76
	(8)	TD	kW	1.00	12,940	12,940				\$ 13.65
Commercial	(9)	DD 275	kW	1.00	1,465	1,465	29,054	\$ 396,555	\$ 13.65	\$ 13.65
	(10)	DD 300	kW	1.00	14,649	14,649				\$ 13.65

Notes: The pathways in Schedules 1-2 through 1-5 refer to the following: BYOT is the Bring Your Own Thermostat pathway, which is disaggregated for first-time participations ("BYOT first") and repeat participants ("BYOT repeat"). EVDR is the Electric Vehicle Demand Response pathway, which is disaggregate in the same manner as BYOT. Battery refers to battery dispatch in the Residential and Small Business track, where the number (i.e., 200, 225, 400) indicates the amount of the incentive per kW. TD is the Targeted Dispatch pathway. DD is the Daily Dispatch pathway, where the number (i.e., 275, 300) indicates the amount of the incentive per kW.

Attachment 1-2-2

Program Yea	r 2025	5								
(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
Track		Pathway	Participating Unit	kW per Unit	Planned Participation (Unit)	Supply per Pathway (kW)	Supply per Track (kW)	strative Cost r Track	strative Unit per Track	Administrative Unit Cost per Pathway
	(1)	BYOT repeat	device	0.65	15,379	9,996				\$ 53.56
	(2)	BYOT first	device	0.65	4,000	2,600				\$ 53.56
	(3)	EVDR repeat	device	0.32	500	160				\$ 53.56
Residential	(4)	EVDR first	device	0.32	750	240	18,322	\$ 981,318	\$ 53.56	\$ 53.56
	(5)	Battery 200	participant	5.84	90	526				\$ 53.56
	(6)	Battery 225	participant	5.84	100	584				\$ 53.56
	(7)	Battery 400	participant	5.84	722	4,216				\$ 53.56
	(8)	TD	kW	1.00	13,587	13,587				\$ 14.15
Commercial	(9)	DD 275	kW	1.00	16,299	16,299	31,313	\$ 443,055	\$ 14.15	\$ 14.15
	(10)	DD 300	kW	1.00	1,427	1,427				\$ 14.15

Notes: The pathways in Schedules 1-2 through 1-5 refer to the following: BYOT is the Bring Your Own Thermostat pathway, which is disaggregated for first-time participations ("BYOT first") and repeat participants ("BYOT repeat"). EVDR is the Electric Vehicle Demand Response pathway, which is disaggregate in the same manner as BYOT. Battery refers to battery dispatch in the Residential and Small Business track, where the number (i.e., 200, 225, 400) indicates the amount of the incentive per kW. TD is the Targeted Dispatch pathway. DD is the Daily Dispatch pathway, where the number (i.e., 275, 300) indicates the amount of the incentive per kW.

Attachment 1-2-3

Program Year 2026

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
				kW						Administrative
			Participating	per	Planned	Supply per	Supply per Track	Administrative Cost	Administrative Unit	Unit Cost per
Track		Pathway	Unit	Unit	Participation (Unit)	Pathway (kW)	(kW)	per Track	Cost per Track	Pathway
	(1)	BYOT repeat	device	0.65	19,379	12,596				\$ 51.79
	(2)	BYOT first	device	0.65	4,000	2,600				\$ 51.79
	(3)	EVDR repeat	device	0.32	1,250	400				\$ 51.79
Residential	(4)	EVDR first	device	0.32	1,000	320	22,118	\$ 1,145,472	\$ 51.79	\$ 51.79
	(5)	Battery 200	participant	5.84	190	1,110				\$ 51.79
	(6)	Battery 225	participant	5.84	250	1,460				\$ 51.79
	(7)	Battery 400	participant	5.84	622	3,632				\$ 51.79
	(8)	TD	kW	1.00	14,266	14,266				\$ 14.65
Commercial	(9)	DD 275	kW	1.00	19,088	19,088	33,764	\$ 494,600	\$ 14.65	\$ 14.65
	(10)	DD 300	kW	1.00	410	410				\$ 14.65

Notes: The pathways in Schedules 1-2 through 1-5 refer to the following: BYOT is the Bring Your Own Thermostat pathway, which is disaggregated for first-time participations ("BYOT first") and repeat participants ("BYOT repeat"). EVDR is the Electric Vehicle Demand Response pathway, which is disaggregate in the same manner as BYOT. Battery refers to battery dispatch in the Residential and Small Business track, where the number (i.e., 200, 225, 400) indicates the amount of the incentive per kW. TD is the Targeted Dispatch pathway. DD is the Daily Dispatch pathway, where the number (i.e., 275, 300) indicates the amount of the incentive per kW.

PUC 1-3 Administrative Cost Estimates

Request:

The testimony at Bates pages 20-21 states: "Unit cost is comprised of the cost of the incentive per unit, the cost of financing (if available) per unit, the cost of administration per unit, and any other costs associated with procuring each unit of peak demand." Please provide schedules showing how the unit cost was derived for each track and "pathway" identified in the Company's proposal. Please identify the sources of cost from which the calculation of unit cost was derived.

Response:

Unit cost is comprised of the incentive per unit, the cost of financing (if available) per unit, the cost of administration per unit, and any other costs associated with procuring each unit of peak demand. The Company explains the derivation and the sources of costs for each component. Please refer to the Company's response to PUC 1-2 (specifically, Step 1) for an explanation of how the Company calculated planned supply (kW) of peak demand reduction per pathway.

Incentive per unit

The incentive per unit includes any upfront enrollment incentive (if applicable) and performance incentive. For each pathway in each year, the Company multiplied is anticipated participation by the relevant incentive to calculate the total annual incentive cost per pathway, which was then divided by the supply (kW) of peak demand reduction per pathway per year. Please refer to the Company's response to PUC 1-4 for further explanation and schedules.

Cost of financing per unit

The only pathway with non-zero financing costs is the RSB Battery pathway; financing unit costs for all other pathways are \$0/kW. There are three cost components for financing: a monthly administrative charge, a fee per loan, and the interest buy-down cost per loan. The Company considered financing costs to be sunk for all battery participants except for participants in their first year. The Company estimated the annual financing cost in total based on anticipated uptake of the HEAT Loan in 2024 through the proposed June 1, 2024, cutover date and then constrained uptake of the HEAT Loan in 2024-2026 due to eligibility criteria. The Company divided these annual costs by planned supply (kW) of peak demand reduction per year. Please refer to the Company's response to PUC 1-5 for further explanation and schedules.

<u>PUC 1-3, page 2</u> Administrative Cost Estimates

Administration costs per unit

Please refer to the Company's response to PUC 1-2 for a detailed description of administration unit cost and associated schedules.

Other costs

For planning purposes, other costs are comprised only of regulatory allocations directed to Rhode Island Office of Energy Resources and Energy Efficiency Resource Management Council, which are set at three percent of program costs.

Unit cost

The unit cost is the sum of the above:

Unit Cost_{Pathway} = Incentive Unit Cost_{Pathway} + Financing Unit Cost_{Pathway} + Administration Unit Cost_{Pathway} + Other Costs_{Pathway}

Please refer to Attachments PUC 1-3-1 through PUC 1-3-3 for the results of these derivations for each year 2024-2026.

Attachment PUC 1-3-1

(A)	(B)	(C)		(D)		(E)		(F)		(G)		(H)		(I)
			Inc	entive Unit	Fina	ancing Unit	Ad	lministrative	Pro	gram Unit	Otł	ner Unit	Un	it Cost per
	Track	Pathway		Cost		Cost		Unit Cost		Cost		Cost]	Pathway
(1)	Residential	BYOT repeat	\$	30.77	\$	-	\$	52.76	\$	83.53	\$	2.51	\$	86.04
(2)	Residential	BYOT first	\$	107.69	\$	-	\$	52.76	\$	160.46	\$	4.81	\$	165.27
(3)	Residential	EVDR repeat	\$	62.50	\$	-	\$	52.76	\$	115.26	\$	3.46	\$	118.72
(4)	Residential	EVDR first	\$	218.75	\$	-	\$	52.76	\$	271.51	\$	8.15	\$	279.66
(5)	Residential	Battery 200	\$	200.00	\$	-	\$	52.76	\$	252.76	\$	7.58	\$	260.35
(6)	Residential	Battery 225	\$	225.00	\$	472.09	\$	52.76	\$	749.85	\$	22.50	\$	772.35
(7)	Residential	Battery 400	\$	400.00	\$	-	\$	52.76	\$	452.76	\$	13.58	\$	466.35
(8)	Commercial	TD	\$	35.00	\$	-	\$	13.65	\$	48.65	\$	1.46	\$	50.11
(9)	Commercial	DD 275	\$	275.00	\$	-	\$	13.65	\$	288.65	\$	8.66	\$	297.31
(10)	Commercial	DD 300	\$	300.00	\$	-	\$	13.65	\$	313.65	\$	9.41	\$	323.06

Notes: The pathways in Schedules 1-2 through 1-5 refer to the following: BYOT is the Bring Your Own Thermostat pathway, which is disaggregated for firsttime participations ("BYOT first") and repeat participants ("BYOT repeat"). EVDR is the Electric Vehicle Demand Response pathway, which is disaggregate in the same manner as BYOT. Battery refers to battery dispatch in the Residential and Small Business track, where the number (i.e., 200, 225, 400) indicates the amount of the incentive per kW. TD is the Targeted Dispatch pathway. DD is the Daily Dispatch pathway, where the number (i.e., 275, 300) indicates the amount of the incentive per kW.

Attachment 1-3-2

Program Year 2025

(A)	(B)	(C)		(D)		(E)		(F)		(G)		(H)		(I)
			Inco	entive Unit	Fina	ncing Unit	Ad	lministrative	Pro	gram Unit	Otl	ner Unit	Un	it Cost per
	Track	Pathway		Cost		Cost		Unit Cost		Cost		Cost]	Pathway
(1)	Residential	BYOT repeat	\$	30.77	\$	-	\$	53.56	\$	84.33	\$	2.53	\$	86.86
(2)	Residential	BYOT first	\$	107.69	\$	-	\$	53.56	\$	161.25	\$	4.84	\$	166.09
(3)	Residential	EVDR repeat	\$	62.50	\$	-	\$	53.56	\$	116.06	\$	3.48	\$	119.54
(4)	Residential	EVDR first	\$	218.75	\$	-	\$	53.56	\$	272.31	\$	8.17	\$	280.48
(5)	Residential	Battery 200	\$	200.00	\$	46.57	\$	53.56	\$	300.12	\$	9.00	\$	309.13
(6)	Residential	Battery 225	\$	225.00	\$	-	\$	53.56	\$	278.56	\$	8.36	\$	286.92
(7)	Residential	Battery 400	\$	400.00	\$	-	\$	53.56	\$	453.56	\$	13.61	\$	467.17
(8)	Commercial	TD	\$	35.00	\$	-	\$	14.15	\$	49.15	\$	1.47	\$	50.62
(9)	Commercial	DD 275	\$	275.00	\$	-	\$	14.15	\$	289.15	\$	8.67	\$	297.82
(10)	Commercial	DD 300	\$	300.00	\$	-	\$	14.15	\$	314.15	\$	9.42	\$	323.57

Notes: The pathways in Schedules 1-2 through 1-5 refer to the following: BYOT is the Bring Your Own Thermostat pathway, which is disaggregated for firsttime participations ("BYOT first") and repeat participants ("BYOT repeat"). EVDR is the Electric Vehicle Demand Response pathway, which is disaggregate in the same manner as BYOT. Battery refers to battery dispatch in the Residential and Small Business track, where the number (i.e., 200, 225, 400) indicates the amount of the incentive per kW. TD is the Targeted Dispatch pathway. DD is the Daily Dispatch pathway, where the number (i.e., 275, 300) indicates the amount of the incentive per kW.

Attachment PUC 1-3-3

Program Year 2026

(A)	(B)	(C)		(D)		(E)		(F)		(G)		(H)		(I)
			Inc	entive Unit	Fina	ncing Unit	Ad	lministrative	Pro	gram Unit	Otl	ner Unit	Un	it Cost per
	Track	Pathway		Cost		Cost		Unit Cost		Cost		Cost]	Pathway
(1)	Residential	BYOT repeat	\$	30.77	\$	-	\$	51.79	\$	82.56	\$	2.48	\$	85.03
(2)	Residential	BYOT first	\$	107.69	\$	-	\$	51.79	\$	159.48	\$	4.78	\$	164.26
(3)	Residential	EVDR repeat	\$	62.50	\$	-	\$	51.79	\$	114.29	\$	3.43	\$	117.72
(4)	Residential	EVDR first	\$	218.75	\$	-	\$	51.79	\$	270.54	\$	8.12	\$	278.65
(5)	Residential	Battery 200	\$	200.00	\$	22.06	\$	51.79	\$	273.85	\$	8.22	\$	282.06
(6)	Residential	Battery 225	\$	225.00	\$	-	\$	51.79	\$	276.79	\$	8.30	\$	285.09
(7)	Residential	Battery 400	\$	400.00	\$	-	\$	51.79	\$	451.79	\$	13.55	\$	465.34
(8)	Commercial	TD	\$	35.00	\$	-	\$	14.65	\$	49.65	\$	1.49	\$	51.14
(9)	Commercial	DD 275	\$	275.00	\$	-	\$	14.65	\$	289.65	\$	8.69	\$	298.34
(10)	Commercial	DD 300	\$	300.00	\$	-	\$	14.65	\$	314.65	\$	9.44	\$	324.09

Notes: The pathways in Schedules 1-2 through 1-5 refer to the following: BYOT is the Bring Your Own Thermostat pathway, which is disaggregated for firsttime participations ("BYOT first") and repeat participants ("BYOT repeat"). EVDR is the Electric Vehicle Demand Response pathway, which is disaggregate in the same manner as BYOT. Battery refers to battery dispatch in the Residential and Small Business track, where the number (i.e., 200, 225, 400) indicates the amount of the incentive per kW. TD is the Targeted Dispatch pathway. DD is the Daily Dispatch pathway, where the number (i.e., 275, 300) indicates the amount of the incentive per kW.

PUC 1-4 Administrative Cost Estimates

Request:

Please provide schedules showing how the incentive unit cost was derived for every proposed incentive for each of the program "pathways" identified in the Company's proposal.

Response:

The incentive unit cost includes any upfront enrollment incentive (if applicable) and performance incentive, which are provided by the unit of participation (i.e., per device for the pathways in the Residential and Small Business track and per kW for pathways in the Commercial and Industrial Track). The Company divided the incentive per unit of participation by the estimate kW of peak demand reduction per unit of participation to convert to incentive unit cost (\$/kW). Please refer to Attachment PUC 1-4 for the results of this calculation.

Attack	nment PUC 1-	-4						
(A)	(B)	(C)	(D)	(E)	(F)		(G)
				kW per Unit	Incent	tive per	Ince	ntive Unit
			Unit of	of	Un	it of	Cost	(Incentive
	Track	Pathway	Participation	Participation	Partic	ipation	р	er kW)
(1)	Residential	BYOT repeat	device	0.65	\$	20.00	\$	30.77
(2)	Residential	BYOT first	device	0.65	\$	70.00	\$	107.69
(3)	Residential	EVDR repeat	device	0.32	\$	20.00	\$	62.50
(4)	Residential	EVDR first	device	0.32	\$	70.00	\$	218.75
(5)	Residential	Battery 200	kW	1.00	\$	200.00	\$	200.00
(6)	Residential	Battery 225	kW	1.00	\$	225.00	\$	225.00
(7)	Residential	Battery 400	kW	1.00	\$	400.00	\$	400.00
(8)	Commercial	TD	kW	1.00	\$	35.00	\$	35.00
(9)	Commercial	DD 275	kW	1.00	\$	275.00	\$	275.00
(10)	Commercial	DD 300	kW	1.00	\$	300.00	\$	300.00

<u>Notes</u>: The pathways in Schedules 1-2 through 1-5 refer to the following: BYOT is the Bring Your Own Thermostat pathway, which is disaggregated for first-time participations ("BYOT first") and repeat participants ("BYOT repeat"). EVDR is the Electric Vehicle Demand Response pathway, which is disaggregate in the same manner as BYOT. Battery refers to battery dispatch in the Residential and Small Business track, where the number (i.e., 200, 225, 400) indicates the amount of the incentive per kW. TD is the Targeted Dispatch pathway. DD is the Daily Dispatch pathway, where the number (i.e., 275, 300) indicates the amount of the incentive per kW. Please note that incentives are proposed to be the same each year in 2024-2026.

PUC 1-5 Administrative Cost Estimates

Request:

Please provide schedules showing how the financing unit cost was derived for each "pathway" where financing is applicable.

Response:

Financing is only applicable to the RSB pathway. The Company divided the annual financing cost by planned participation measured in kW (please refer to the Company's response to PUC 1-2 for an explanation of how the Company calculated planned supply (kW) of peak demand reduction per pathway).

Please refer to the table below for the results of these calculations.

	Table										
RSB I	Battery Pathway										
(A)	(B)	(C)		(D)	(E)						
	Program Year	Supply (kW)	Fin	ancing Cost	Fina	ncing Unit Cost					
(1)	2024	292	\$	137,850	\$	472.09					
(2)	2025	526	\$	24,475	\$	46.57					
(3)	2026	1,110	\$	24,475	\$	22.06					

<u>PUC 1-6, page 1</u> **More Granular Program Implementation Explanation**

Request:

For each of the "pathways" identified in the Residential and Small Business Track,

- a. please provide a more detailed explanation of the implementation details, including the process for program marketing and the installation of equipment/devices at each participant's location, and
- b. explain how the Company will determine compliance.

Response:

Responses to part a and part b are provided for each of the pathways identified in the Residential and Small Business Track below; responses are organized by pathway.

Residential and Small Business (RSB) Battery Pathway

a.

RSB Battery Marketing

RIE's customer-centric Bring Your Own Device/RSB Battery Pathway was developed so customers can receive a compelling incentive while benefiting from the choice of their preferred device. App-based notifications and easy enrollment contribute to the customer experience with a frictionless customer journey.

The program microsite/webpage includes:

- Program description and eligibility criteria
- Program incentive information
- Customer experience description
- Clear calls-to-action and enrollment instructions

<u>PUC 1-6, page 2</u> **More Granular Program Implementation Explanation**

Promotion of the program occurs via multiple channels including:

- Email marketing to battery implementers
- App notifications
- Point-of-sale
- During app setup flow
- Website rebate finder
- Cross-sell batteries to owned audiences
- Social Media

Marketing is done by the Rhode Island Energy team, the implementation vendor, and battery implementers. All marketing material using the utility logo must be reviewed by the implementation vendor and RIE for brand compliance.

Rhode Island Energy markets the ConnectedSolutions program but does not install battery energy storage systems at customer/participant locations.

RSB Battery Enrollment

Customer Eligibility

- Must be a Rhode Island Energy residential or small business electric customer¹
- Have a battery energy storage system controlled by an approved battery implementer
- Have a battery energy storage system that is behind-the-meter (BTM) asset. Customer agrees the battery will receive a signal and instruct the batteries to be used for customer's site use and send the extra stored power to the grid during peak energy events

Customers in the Pascoag Utility District and the Block Island Power Company service territory are not able to participate.

¹ Customer must be in rate classes A-16, A-60, or C-06. Customers in other rate classes are ineligible to participate. For more information on Electric Service Rates, please visit: <u>https://www.rienergy.com/RI-Business/Rates/Service-Rates</u>. Customers in the C-06 rate class may participate in either the Residential and Small Business (RSB) track or Commercial and Industrial (C&I) track, but they may not participate in both tracks at the same time or switch to a different track midseason.

<u>PUC 1-6, page 3</u> **More Granular Program Implementation Explanation**

Enrollment Process (Customer)

To enroll in the program, the customer must complete a ConnectedSolutions application. This form is available on the Rhode Island Energy <u>website</u>. The customer's battery manufacturer is responsible for submitting the customer's application to the customer's Program Administrator and registering the battery implementer into the battery control platform, if any.

Enrollment Deadline (Customer)

For a customer to ensure they receive their full incentive for the summer season, the customer's application must be received by the customer's Program Administrator by 11:59 p.m. on May 31 of that year. Customers can still enroll after May 31 for the summer season. However, the customer's discharge performance will be set to zero (0 kW average) for any discharge events the customer missed.

Verifying and Accepting Customer Enrollments Process (RIE Program Manager)

The verification and acceptance of customer enrollments in the RSB ConnectedSolutions track is done through the Implementation Vendor's provided management site:

- Program Administrator logs into the Vendor Portal
- Reviews "Pending Battery Enrollments". This is done on a rolling basis throughout the year.
- Verifies the customer is a valid customer with RIE System (i.e. verifies email, name, service address, or service account number).
 - Accepts customers that can be verified or
 - Rejects customers that cannot be verified. Depending on enrollment, could request a revision to information submitted in application. (This is rare for RSB Battery).

RSB Battery – How to Participate

To participate in the program, the customer needs to have a battery energy storage system controlled by an approved battery implementer. The approved battery implementers are Enphase, EVERVOLT, Fortress Power, FranklinWH, Generac (formerly Pika Energy), Qcells, Outback Connected to Sonnen, Sol-Ark, SolarEdge, SunPower, Sunrun, and Tesla.

<u>PUC 1-6, page 4</u> **More Granular Program Implementation Explanation**

The battery implementers are responsible for communicating the need for a demand response event and sending the participants' battery energy storage systems discharge rate and state-ofcharge to the participants' Program Administrator Implementation Vendor (Energy Hub). During a demand response event, the battery will be remotely discharged without the participant's active participation. The discharge will be barely noticeable, if at all, by participants.

RSB Battery - Discharge Events

Discharge events are called to coincide not only with the ISO-NE (Independent System Operator of New England) peak hour, but also with the highest daily peaks in July and August. Events will only be called in June and September if the annual peak is forecasted to be in those months. Events will be called in July and August to try to mitigate the highest 40 daily peaks in those months. The Program Administrators will never call more than 60 events in a summer season.

Notification of Demand Response Events

Notification of discharge events will be sent directly to the customer's battery implementer which controls their battery energy storage system. The customer normally does not need to take any action for their battery system to respond to a discharge event.

Length and Time of Demand Response Events

Discharge events can last 2 to 3 hours. All events happen between 3pm and 8pm. Discharge events can be scheduled for any day of the week except for holidays.

Demand Response Event Holidays

Events will not be called on: Juneteenth, Independence Day, or Labor Day.

No Demand Response Events before Large Storms

We realize many customers purchase battery energy storage systems in part for backup power during power outages. We want to ensure that customers with solar batteries remain prepared if the lights go out. Most power outages in our region happen during the winter. The Program Administrator will not call a demand response event during an outage or for the 2 days preceding predicted severe outage events (Type 1 and Type 2 events as defined in the current Rhode Island Energy Emergency Response Plan).² The Program Administrator will also make reasonable

² National Grid Rhode Island Electric Emergency Response Plan, May

^{2020.} https://ripuc.ri.gov/sites/g/files/xkgbur841/files/utilityinfo/2020-RI-Electric-ERP-Redacted.pdf

<u>PUC 1-6, page 5</u> **More Granular Program Implementation Explanation**

attempts to avoid calling events if large scale storms are forecasted (e.g., if a storage resource discharges all of its stored energy for purposes of serving peak demand, it must have enough time to recharge before providing backup power should outage conditions arise). Rhode Island Energy cannot account for outages resulting from isolated and/or localized storms. Customers should discuss the ability to opt out of an event with their battery manufacturer in this scenario.

b.

RSB Battery - Performance

Performance is the average discharge from the battery system during the demand response event.

If a customer opts out of an event or has some communication or other issue that prevents them from discharging during an event, they will be given a 0 kW performance for that event. These will affect the customer's average performance and incentive. Approved battery implementers must provide 24x7, 15-minute interval, or more granular data, for the entire demand response season which performance is being calculated in order to receive fees or for their customers to receive performance-based incentives. This data is used to calculate performance and to evaluate the effectiveness of the baseline method.

Payment Process

Incentive payments for summer performance will be made by the end of each calendar year.

Incentive payments will be made to either the customer or other party depending on the selection made on the 'customer incentive payment options' section of the customer application. Some installers or other parties may offer their customers an upfront discount on the customer battery system in exchange for the customer selecting that their performance incentives are sent to that party. Such negotiations are between the customer and the installer or other party. For any customer that is provided an incentive directly and not through another party, RIE will send an incentive check via U.S. Postal service to the customer's address.

<u>PUC 1-6, page 6</u> **More Granular Program Implementation Explanation**

The income received for participation in the program is not subject to income tax. Participants will not receive a 1099 form from Rhode Island Energy.

Example of Incentive Rate and Average Performance (For Participants Who Enroll on or After June 1, 2024)

The performance incentive rate is \$225 per kW. The incentive rates refer to the average curtailment amount across all events of the dispatch season.

Performance per event is equal to the average discharge rate of the battery in kW-AC over the length of the event.

Performance for an event may not be increased by curtailing solar production to increase the battery discharge rate. For example, if the total production of the solar system and battery system is limited by the inverter size, the solar system cannot be limited during demand response events so that the battery can discharge more. Doing this would not decrease the load on the grid and would be against the goals of this program.

The table below shows the results of a fictional customer's curtailment performance over a summer that had four demand response events over the whole summer. There are many more events over the course of a summer.

Event	Performed Curtailment Amount
Event 1	2 kW
Event 2	3 kW
Event 3	3 kW
Event 4	0 kW

<u>PUC 1-6, page 7</u> **More Granular Program Implementation Explanation**

The customers average performance over the summer would be:

 $Average\ Season\ Performance = rac{2kW+3kW+3kW+0kW}{4\ Events} = 2.\ 0kW$

The total incentive amount to be paid for this fictional customer would be:

$$2.0kW * \frac{\$225}{kW} = \$450$$

Residential and Small Business (RSB) Bring Your Own Thermostat (BYOT) Pathway

a.

RSB BYOT Marketing

RIE's customer-centric Bring Your Own Device/Thermostat Pathway was developed so customers can receive an incentive while benefiting from the choice of their preferred device. App-based notifications and easy enrollment contribute to the customer experience with a frictionless customer journey.

The program microsite/webpage includes:

- Program description and eligibility criteria
- Program incentive information
- Customer experience description
- Clear calls-to-action and enrollment instructions

Promotion of the program occurs via multiple channels including:

- Email marketing
- App notifications
- Point-of-sale
- During app setup flow
- Website rebate finder
- Social Media

<u>PUC 1-6, page 8</u> **More Granular Program Implementation Explanation**

Marketing is done by the Rhode Island Energy team, the implementation vendor, and thermostat partners. All marketing material using the utility logo must be reviewed by the implementation vendor and RIE for brand compliance. Some examples are provided below.

- Rhode Island Energy sends targeted emails to customers to promote Black Friday or Labor Day Marketplace deals on energy saving products. Smart thermostats are highlighted, and customers are encouraged to join ConnectedSolutions. Energy-saving product emails are sent over a few days around a promotion date.
- Thermostat partners also market to their customers throughout the year. This is done typically through email and in-app channels. RIE receives partner marketing updates quarterly.

Rhode Island Energy markets the ConnectedSolutions program and customers can purchase eligible thermostats on RIE's Marketplace but does not install thermostats at customer/participant locations.

RSB BYOT Enrollment

Customer Eligibility

- Must be a Rhode Island Energy residential or small business electric customer³
- Own an approved smart thermostat to control central air conditioning
- Have an installed, eligible wi-fi connected thermostat connected to control central air conditioning
- Participant agrees to allow Rhode Island Energy to make short, low impact thermostat adjustments during peak energy events

Customers in the Pascoag Utility District and the Block Island Power Company service territory are not able to participate.

³ Customer must be in rate classes A-16, A-60, or C-06. Customers in other rate classes are ineligible to participate. For more information on Electric Service Rates, please visit: <u>https://www.rienergy.com/RI-Business/Rates/Service-Rates</u>. Customers in the C-06 rate class may participate in either the Residential and Small Business (RSB) track or Commercial and Industrial (C&I) track, but they may not participate in both tracks at the same time or switch to a different track midseason.

<u>PUC 1-6, page 9</u> **More Granular Program Implementation Explanation**

Enrollment Process (Customer)

To enroll in the program, the customer must enroll their thermostat in the **Connected**Solutions program. The enrollment form is available on the Rhode Island Energy <u>website</u>. Customer must certify that they are eligible to enroll by answering yes to the eligibility requirements. Customer will then complete information about their wi-fi enabled thermostat.

If a customer already has an existing wi-fi enabled thermostat, they will be directed during the enrollment process to choose their thermostat and click "enroll".



When a customer clicks "enroll" it will direct them to the thermostat's enrollment site, where they will follow a series of simple steps to enroll.

Enrollment Deadline (Customer)

Customers can enroll at any time. Customers must be enrolled on or before August 15 to receive an incentive for the current season.

Verifying and Accepting Customer Enrollments Process (RIE Program Manager)

The verification and acceptance of customer enrollments in the RSB ConnectedSolutions track is done through the Implementation Vendor's provided management site:

- Program Administrator logs into the Vendor Portal
- Reviews "Pending BYOT Enrollments". This is done on a rolling basis throughout the year.

<u>PUC 1-6, page 10</u> More Granular Program Implementation Explanation

- Verifies customer is a valid customer with RIE System (i.e. verifies email, name, service address, or service account number).
 - Accepts customers that can be verified or
 - Rejects customers that cannot be verified. Depending on enrollment, could request a revision to information submitted in application.

RSB BYOT- How to Participate

After enrolling a qualified smart thermostat and during a peak event, Rhode Island Energy will automatically send a signal to the participants smart thermostat to make small, automatic adjustments only during peak times. This allows for the impact on the power grid to be reduced. If an event occurs on a day or time that is inconvenient for the participant, the participant has the option to opt out at any time.

RSB BYOT- Discharge Events

Discharge events are called during the summer months in June through September. There are typically 15 peak events every summer. Peak events can last 3 hours. All events happen between 3pm and 8pm. The maximum number of hours allowed is capped at 80 hours for the summer. Peak events can be scheduled for any day of the week except for holidays.

Depending on the customer's thermostat provider, notification of peak event will appear on the thermostat or in a web/mobile application.

b.

RSB BYOT – Performance

The customer will receive an instant incentive (\$50) virtual prepaid MasterCard per thermostat after being accepted into the ConnectedSolutions program. Process time is typically four to six weeks.

The customer will receive a (\$20) virtual prepaid MasterCard at the end of the summer season for participating.

<u>PUC 1-6, page 11</u> More Granular Program Implementation Explanation

Customer will receive multiple emails to claim their virtual prepaid MasterCard. If the virtual MasterCard is not redeemed after 7 days, a physical MasterCard will be mailed to the customer at no cost.

<u>Note</u>: Customers must be enrolled on or before August 15 to receive an incentive for the current summer season.

The Implementation Vendor can provide RIE with 100% guarantee incentive delivery either digitally or physically to customers based on the information provided upon enrollment; data to track individual payment instance level, confirm the date the physical prepaid MasterCard was issued and shipped; verification that an email was sent, opened, and the link to redeem was clicked.

Process to Guarantee BYOT Participation

Operation Reconnect is an automated email campaign designed to notify customers whose devices have been offline for more than 14 consecutive days. By creating an outreach campaign that provides more timely communication for devices that remain offline for an extended period of time, the reconnect rate will increase and the number of devices that need to be removed before the DR season begins will be reduced. Operation Reconnect can be done as many times as RIE desires to achieve results. In 2023, Operation Reconnect achieved desired results after being conducted two times.

Residential and Small Business (RSB) EVDR Pathway

a.

RSB EVDR Marketing, Enrollment, How to Participate, Discharge Events, and Performance

The EVDR Pathway program implementation is under development. The Company is working with our vendor to add the new EVDR statement of work to our service agreement. It will likely replicate what is done for the RSB BYOT Pathway.

b.

Please see response to part (a) for the RSB EVDR Pathway.

<u>PUC 1-7, page 1</u> **More Granular Program Implementation Explanation**

Request:

For each of the "pathways" identified in the Commercial and Industrial Track,

- a. please provide a more detailed explanation of the implementation details, including the process for program marketing, and
- b. explain how the Company will determine compliance.

Response:

Commercial and Industrial (C&I) Daily Dispatch, Targeted Dispatch, and Dual-Enrolled Pathways

Since the C&I pathways follow similar implementation processes, the response provided combines both the Daily Dispatch and Targeted Dispatch pathways. The Dual-Enrolled pathway mirrors the program implementation of both pathway options. Any differences will be explained further within each section.

a.

Marketing

The Company's C&I pathways were developed so customers can receive a compelling incentive while benefiting from the choice of their preferred method of load management. E-Mail notifications of events, participation management by Curtailment Service Providers (CSPs), and the pay-for-performance incentive structure contribute to the customer experience.

The program microsite/webpage includes:

- Program description and eligibility criteria
- Program incentive information
- Customer experience description
- CSP contact information for enrollment

<u>PUC 1-7, page 2</u> **More Granular Program Implementation Explanation**

Promotion of the program occurs via multiple channels including:

- Account Manager contact with potential customers
- CSP marketing to obtain new enrollees using their services
- ConnectedSolutions webpage
- C&I Program Materials
- Program flyers

Marketing is done by the Rhode Island Energy team and the Curtailment Service Providers. All marketing material using the utility logo must be reviewed by the implementation vendor and Rhode Island Energy for brand compliance.

Rhode Island Energy markets the ConnectedSolutions program but does not install the technologies used for customer/site participation.

Enrollment

Customer Eligibility

- Must be a Rhode Island Energy commercial or industrial electric customer.¹
- The storage system must be considered a behind-the-meter (BTM) asset. BTM means a facility that serves an on-site load other than parasitic load or station load utilized to operate the facility.
- For both Daily Dispatch and Targeted Dispatch, customers participating with fossil fuelbased generation, such as natural gas or diesel backup generators, standby generators, cogen, or fuel cells not using green hydrogen:
 - Participants must have an active Operating Permit or Minor Source/Preconstruction Permit from the Rhode Island Department of Environmental Management ("RIDEM") for the 2024-2026 program years.
 - The eligibility requirements will be updated to further limit fossil fuel-based generating emissions during the 2027-2029 program years.

¹ Customer must be in rate classes C-06, G-02, or G-32. Customers in other rate classes are ineligible to participate. For more information on Electric Service Rates, please visit: <u>https://www.rienergy.com/RI-Business/Rates/Service-Rates</u>. Customers in the C-06 rate class may participate in either the Residential and Small Business (RSB) track or Commercial and Industrial (C&I) track, but they may not participate in both tracks at the same time or switch to a different track midseason.

<u>PUC 1-7, page 3</u> **More Granular Program Implementation Explanation**

Customers in the Pascoag Utility District and the Block Island Power Company service territory are not able to participate.

Enrollment Process (Customer)

Typically, customers enroll through an approved Curtailment Service Provider. There are five approved CSPs: CPower, Enel-X, Parsons, Leap, and Voltus. CSPs provide many services that make it easier for customers to maximize their curtailment performance and incentive payment. However, enrolling through an approved CSP is not a requirement of the program. Customers may use any CSP they choose, or not use a CSP at all. Note that Dual-Enrolled customers may elect to enroll with different CSPs for Daily Dispatch and Targeted Dispatch participation. "Direct Participation" refers to a customer enrolling without a CSP. In this case, customers should reach out to their Program Administrator (PA), Rhode Island Energy, for guidance. More information on this process is available on the Rhode Island Energy <u>website</u>.

Enrollment Deadline (Customer)

For a customer to ensure they receive their full incentive for the summer season, the customer's application must be received by the customer's Program Administrator by 11:59 p.m. on May 31 of that year. Customers can still enroll after May 31 for the summer season. However, the customer's discharge performance will be set to zero (0 kW average) for any discharge events the customer missed.

Customers enrolled in the Daily Dispatch pathway before June 1, 2024, are eligible to receive the \$300/kW multiyear incentive rate for the first five consecutive seasons of program participation. Customers enrolled in the Daily Dispatch pathway on or after June 1, 2024, will receive the \$275/kW multiyear incentive rate for the first five consecutive seasons of program participation.²

² The multiyear incentive rate represents Rhode Island Energy's intentions; it is not a guarantee of incentive levels. Incentive levels are subject to change pending regulatory review and approval. Incentives for all customers will be set in three-year periods "2024-2026".

<u>PUC 1-7, page 4</u> **More Granular Program Implementation Explanation**

Verifying and Accepting Customer Enrollments Process (RIE Program Manager)

The verification and acceptance of customer enrollments in the C&I ConnectedSolutions track is done through the Implementation Vendor's provided management site:

- Program Administrator logs into the Vendor Portal
- Reviews "Pending Enrollments". Enrollment for C&I track opens April 1st and approval of enrollments is done on a rolling basis.
- Verifies the customer is a valid customer with RIE System (i.e. verifies email, name, service address, or service account number).
 - Accepts customers that can be verified or
 - Rejects customers that cannot be verified. (This is rare for C&I due to CSP's enrolling customers)
- Depending on enrollment, could request a revision to information submitted in application.

How to Participate

To participate in the Daily Dispatch program, the participant will reduce their site's energy consumption using any technology and methodology available during demand response events. Daily Dispatch customers participating with battery storage assets will discharge their battery during demand response events. Targeted Dispatch customers participating with generators will switch to generator power during demand response events.

The Daily Dispatch pathway aims to reduce the load on the electrical grid at the one peak hour of the year and other high and medium peak days in June, July, August, and September for a total of no more than 60 events per summer.

The Targeted Dispatch pathway aims to reduce the load on the electrical grid at the one peak hour of the year and other high peak days in June, July, August, and September for a total of no more than eight events per summer.

Dual Enrollment option allows the customer to participate in both the Daily Dispatch and Targeted Dispatch pathways.

<u>PUC 1-7, page 5</u> **More Granular Program Implementation Explanation**

Discharge Events

Discharge events are called to coincide not only with the ISO-NE (Independent System Operator of New England) peak hour, but also with the highest daily peaks in July and August. Events will only be called in June and September if the annual peak is forecasted to be in those months. Events will be called in July and August to try to mitigate the highest 40 daily peaks in those months. Rhode Island Energy will never call more than 60 events in a summer season.

Notification of Demand Response Events

Notification of demand response events is given the day before a Peak Energy Event takes place. For customers who sign up through a pre-approved CSP, these notifications will be sent to the customer's CSP. The CSP is then responsible for notifying the customers. Notification emails will be sent directly to Direct Participants using the email address given in the customer's application.

Length and Time of Demand Response Events

Targeted Dispatch events last three hours. Daily Dispatch events can last two or three hours. All events happen between 3:00 p.m. and 8:00 p.m., and all events start and end at the beginning of the hour. Daily Dispatch events are called on both weekdays and weekends and can include holidays. Targeted Dispatch events will only be called on a weekend day if the ISO-NE peak hour is predicted to occur on that day. Targeted Dispatch events will not be called on holidays.

Demand Response Event Holidays

Events will not be called on: Juneteenth, Independence Day, or Labor Day.

b.

Performance

Performance in Targeted Dispatch is calculated using a "last 10-of-10 baseline method" with a same-day adjustment, two hours before the start of the event. For non-battery resources, performance in Daily Dispatch is calculated using the same last 10-of-10 baseline method and same-day adjustment. Performance is calculated by subtracting the event day load during the demand response event from the sum of the customer's baseline and baseline adjustment.

<u>PUC 1-7, page 6</u> **More Granular Program Implementation Explanation**

For battery resources, performance in Daily Dispatch is calculated without either a baseline or a same-day adjustment. Customer performance for batteries is calculated based on the average discharge rate in kW-AC over the length of the event.

Customers in this program will never be charged a fee for poor performance. However, since this is a pay-for-performance program, poor performance on any or all events will decrease the incentive amount paid. Not participating in an event may count as a zero or negative performance for that event in the customer's seasonal average performance calculation.

Example of a baseline set by loads in the 10 similar days before a DR event:

Time Interval	10 Similar Days Before Event	•••	2 Similar Days Before Event	Holiday	Weekend	Weekend	Day of another DR Event	1 Similar Day Before Event	Customer's Baseline
Noon – 1 pm	500kW		500kW	Not counted in everyon				500kW	500kW
2 pm – 5 pm	500kW		500kW	Not counted in average 500kW 55				500kW	

Example of a same day baseline adjustment:

Time Interval	Customer's Baseline	Event Day Load	Baseline Adjustment		
Noon – 1 pm	500kW	600kW	100kW		

Example of an event day performance:

Time Interval	Customer's Baseline	Event Day Load	Baseline Adjustment	Event Day Performance
Noon – 1 pm	500kW	600kW	100kW	Performance = Baseline + Adjustment – Event Day
2 pm – 5 pm	500kW	400kW		500kW + 100 kW - 400kW = 200kW

<u>PUC 1-7, page 7</u> **More Granular Program Implementation Explanation**

Payment Process

Incentive payments for summer performance will be made by the end of each calendar year.

If a customer enrolls through a CSP, the customer's seasonal performance incentive will be sent directly to that CSP at the end of the season. This allows the CSP to remove their shared savings portion of the customer incentive and pass the remainder through to the customer. This is also common practice for customers who participate in ISO-NE's demand resource programs through a CSP.

If a customer does not enroll through a CSP, the full incentive will be paid directly to the customer. In this case, please mark NONE (DIRECT PARTICIPANT) on the customer application and provide the customer tax ID number, company type, and who the check should be made out to.

Example of Incentive Rate and Average Performance (For Participants Who Enroll on or After June 1, 2024):

The performance incentive rate is \$275 per kW for Daily Dispatch and \$35 per kW for Targeted Dispatch.

The incentive rates refer to the average curtailment amount across all events of the dispatch season. If a customer chooses not to participate in an event, the baseline method and performance calculation will be done as if the customer had participated in the event. This would likely result in a low calculated performance for that event, which would lower the customer's average performance for the season and lower their incentive for the season.

For customers with batteries, performance per event is equal to the average discharge rate of the battery in kW-AC over the length of the event.

Performance for an event may not be increased by curtailing solar production to increase the battery discharge rate. For example, if the total production of the solar system and battery system is limited by the inverter size, the solar system cannot be limited during demand response events so that the battery can discharge more. Doing this would not decrease the load on the grid and would be against the goals of this program.

<u>PUC 1-7, page 8</u> **More Granular Program Implementation Explanation**

It is important to note the establishment of a \$1M incentive cap per participant per program year. No one customer is eligible to receive more than \$1M for their overall performance settlement. For Dual Enrollment, this incentive cap includes the sum of the participant's Daily Dispatch and Targeted Dispatch settlements.

The table below shows the results of a fictional customer's curtailment performance over a Targeted Dispatch season that had four demand response events over the whole summer.

Event	Performed Curtailment Amount
Event 1	-100 kW
Event 2	200 kW
Event 3	300 kW
Event 4	0 kW

The customers average performance over the summer would be:

Average Season Performance =
$$\frac{-100kW + 200kW + 300kW + 0kW}{4} = 100W$$

The total incentive amount to be paid for this fictional customer would be:

$$100kW * \frac{\$35}{kW} = \$3500$$

The performance calculation for a non-battery Daily Dispatch participant would be the same, but the average season performance would be multiplied by the \$275/kW incentive rate instead.

The performance calculation for Dual Enrollment first calculates the participant's performance in Daily Dispatch, then in Targeted Dispatch. For overlapping Daily Dispatch and Targeted Dispatch event hours, the Daily Dispatch performance is reconstituted into the customer's interval data before their Targeted Dispatch performance is calculated to ensure that participants are not receiving double the performance for a single event hour.

<u>PUC 1-8</u> Performance Incentive

Request:

Please explain the Company's rationale for proposing a performance incentive that allows the Company to retain 20% of the value.

Response:

The Company's rationale for proposing a performance incentive that allows the Company to retain 20% of the value is to align with:

- The prior system efficiency performance incentive mechanism as approved within Docket No. 4770;
- (2) The system reliability procurement incentive mechanism proposed in Docket No. 23-47-EE; See Bates 23-24 of the Proposal in Docket No. 23-47-EE¹; and
- (3) The system reliability procurement incentive mechanism proposed as a Settlement among the Company, Acadia Center, the Energy Efficiency and Resource Management Council ("EERMC"), the Green Energy Consumers Alliance (formerly People's Power & Light), the Rhode Island Office of Energy Resources ("OER"), the Rhode Island Division of Public Utilities and Carriers ("Division"), and the Northeast Clean Energy Council ("NECEC") within Docket No. 5080 whereby "[t]he net benefits of the DERs will be shared by allocating 20% to the Company and 80% to customers..." See Bates 40 of the Proposal in Docket No. 5080.²

Specifically, the Amended Settlement Agreement in Docket No. 4770 adopted by Order No. 23823 states, "[t]he potential earnings from the System Efficiency metric are calculated as 45% of the Quantified Net Benefits of achieving the metrics... The metric for this performance incentive mechanism will be the mega-watts (MW) of annual peak capacity savings. This metric is intended to reflect avoided capacity coincident with the ISO-NE peak hour." The table below shows the annual MW capacity savings target and maximum, and earnings at maximum from the Amended Settlement Agreement.

² https://ripuc.ri.gov/sites/g/files/xkgbur841/files/eventsactions/docket/5080-NGrid-SRP-2021-2023-Three-Year-

¹ <u>https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2023-11/2347-RIE-SRP-3-YrPlan_11-17-23-bates_1.pdf</u>

<u>PUC 1-8, page 2</u> **Performance Incentive**

	2019	2020	2021
Minimum (MW)	14	17	21
Target (MW)	17	21	24
Maximum (MW)	20	25	29
Earnings at Maximum (\$000)	\$362.09	\$622.37	\$944.14
Earnings at Maximum per kW (\$/kW)	\$18.10	\$24.89	\$32.56

<u>PUC 1-9</u> Performance Incentive

Request:

The testimony on Bates page 71 states "that 1 kW of peak demand avoids about \$120 of distribution infrastructure cost." It goes on to state that "[t]he Company's allowed rate of return, 9.275 percent, would net about \$10-\$11 in earnings."

- a. Please explain why the witnesses assume that if an incremental distribution project costs \$120, that the Company would earn 9.275 percent on the total cost of distribution infrastructure. In answering this question, please also explain why they are not taking into account the Company's capital structure and the Company's typical revenue requirement calculation that currently applies the weighted average cost of capital rate of 6.97% (with a common equity component of 4.73%) to determine the return on a capital investment. (See Bates page 273, line 26, of the Company's electric ISR filing in Docket No. 23-48-EL.)
- b. Please provide an illustrative revenue requirement schedule showing a full year's revenue requirement that would be charged to ratepayers for a capital project placed in service at an original cost of \$120, using the ratemaking methodology that is consistent with the Company's revenue requirement calculations in electric ISR filings.
- c. Please identify the total dollar amount of the equity component of the return included in the calculation within (b) above.

Response:

- a. The Company assumed the \$120/kW was entirely capital, with no portion being operational expense. When responding to this question, the Company recognizes this assumption is not realistic because it does not reflect the Company's capital structure that would be used in an electric ISR revenue requirement model.
- b. For a more realistic estimation, the Company assumes \$120 is comprised of \$75.60 capital and \$4.20 cost of removal. Using the FY 2025 electric ISR revenue requirement model, an incremental investment of \$79.8 (capital and cost of removal) would result in a revenue requirement to be collected from ratepayers of \$4 in the first year (half year convention) and \$8 in the second year (the first full year's revenue requirement). Please see Attachment PUC 1-9 for the supporting illustrative revenue requirement schedule

<u>PUC 1-9, page 2</u> **Performance Incentive**

using the ratemaking methodology that is consistent with the Company's FY 2025 electric ISR revenue requirement model.

c. The components of the \$4 and \$8 total revenue requirement on Page 1, columns (a) and (b), respectively, are broken down on Page 1, Lines 28 through 30. The pre-tax equity component of the return is on Page 1, Line 28.

The Narragansett Electric Company d/b/a National Grid Electric Infrastructure, Safety, and Reliability (ISR) Plan Fiscal Year 2025 Revenue Requirement on FY 2025 Actual Incremental Capital Investment

Line <u>No.</u>			Year 1	Year 2
			(a)	(b)
1	Capital Investment Allowance		\$76	\$0
1	Total Allowed Capital Included in Rate Base (non-intangible)		\$70	20
	Depreciable Net Capital Included in Rate Base			
2	Total Allowed Capital Included in Rate Base in Current Year	Line 1	\$76	\$0
3	Retirements	-	\$0	\$0
4	Net Depreciable Capital Included in Rate Base		\$76	\$76
	Change in Net Capital Included in Rate Base			
5	Incremental Capital Amount	Line 1	\$76	\$76
6	Cost of Removal		\$4	\$4
7	Total Net Plant in Service	Line 5 + Line 6	\$80	\$80
	Deferred Tax Calculation:			
8	Composite Book Depreciation Rate	Note 1	3.16%	3.16%
9	Vintage Year Tax Depreciation:		5.1070	5.1070
	Thrage Four Fux Depresation.	Year 1 = Page 2 of 3, Line 27, Column (a), Then = Line Page 2 of		
10	Tax Depreciation and Year 1 Basis Adjustments	3, Column (d)	\$24	\$4
11	Cumulative Tax Depreciation-PPL	Prior Year Line 11 + Current Year Line 10	\$24	\$28
••			φ21	\$20
12	Book Depreciation	year 1 = Line 4 * Line 8 * 50%; Then = Line 4 * Line 8	\$1	\$2
13	Cumulative Book Depreciation	Prior Year Line 13 + Current Year Line 12	\$1	\$4
	-			
14	Cumulative Book / Tax Timer	Line 11 - Line 13	\$23	\$25
15	Effective Tax Rate	-	21.00%	21.00%
16	Deferred Tax Reserve	Line 14 * Line 15	\$5	\$5
17	Add: CY 2025 Federal NOL (Generation) / Utilization	Company's Record	\$0	\$0
18	Net Deferred Tax Reserve before Proration Adjustment	Sum of Lines 16 through 17	\$5	\$5
	Rate Base Calculation:			
19	Cumulative Incremental Capital Included in Rate Base	Line 7	\$80	\$80
20	Accumulated Depreciation	-Line 13	(\$1)	(\$4)
21	Deferred Tax Reserve	-Line 18	(\$5)	(\$5)
22	Year End Rate Base before Deferred Tax Proration	Sum of Lines 19 through 21	\$74	\$71
	Revenue Requirement Calculation:			
		Year 1 = Current Year, Line 22 * 50%; Then = (Prior Year Line		
23	Average Rate Base before Deferred Tax Proration Adjustment	22 + Current Year Line 22) ÷ 2	\$37	\$73
24	Proration Adjustment	-	\$0	\$0
25	Average ISR Rate Base after Deferred Tax Proration	Line $24 + \text{Line } 25$	\$37	\$73
26 27	Pre-Tax ROR - Equity Pre-Tax ROR - Debt	Page 3, Line 6, column e	5.99% 2.24%	5.99% 2.24%
21	Pre-1ax KOR - Debi	Page 3, Lines 3 -5, column e	2.2470	2.24%
28	Return and Taxes - Equity	Line 25 * Line 26	\$2	\$4
29	Return and Taxes - Debt	Line 25 * Line 27	\$1	\$2
30	Book Depreciation	Line 12	\$1	\$2
31	Annual Revenue Requirement	Line 28 through Line 30	\$4	\$8

Note 1 3.16% = Composite Book Depreciation Rate for ISR plant per RIPUC Docket No. 4770 (Page 31 of 38, Line 3, Col (e))

The Narragansett Electric Company d/b/a Rhode Island Energy Calculation of Tax Depreciation on Incremental Capital Investments

Line			Year 1				
<u>No.</u>			(a)	(b)	(c)	(d)	(e)
	Capital Repairs Deduction						
1	Plant Additions	Page 1 of 3, Line 1	\$76	20 Year MACRS	Depreciation		
2	Capital Repairs Deduction Rate	Per Tax Department 1/	24.33%				
3	Capital Repairs Deduction	Line 1 * Line 2	\$18	MACRS basis:	Line 20	\$58	
4						Annual	Cumulative
5	Bonus Depreciation			Calendar Year			
6	Plant Additions	Line 1	\$76	Year 1	3.750%	\$2	\$24
7	Plant Additions		\$0	Year 2	7.219%	\$4	\$28
8	Less Capital Repairs Deduction	Line 3	\$18	Year 3	6.677%	\$4	\$32
9	Plant Additions Net of Capital Repairs Deduction	Line 6 + Line 7 - Line 8	\$58	Year 4	6.177%	\$4	\$36
10	Percent of Plant Eligible for Bonus Depreciation	Per Tax Department	0.00%	Year 5	5.713%	\$3	\$39
11	Plant Eligible for Bonus Depreciation	Line 9 * Line 10	\$0	Year 6	5.285%	\$3	\$42
12	Bonus Depreciation Rate	at 0%	0.00%	Year 7	4.888%	\$3	\$45
13	Total Bonus Depreciation Rate	Line 12	0.00%	Year 8	4.522%	\$3	\$48
14	Bonus Depreciation	Line 11 * Line 13	\$0	Year 9	4.462%	\$3	\$50
15				Year 10	4.461%	\$3	\$53
16	Remaining Tax Depreciation			Year 11	4.462%	\$3	\$55
17	Plant Additions	Line 1	\$76	Year 12	4.461%	\$3	\$58
18	Less Capital Repairs Deduction	Line 3	\$18	Year 13	4.462%	\$3	\$60
19	Less Bonus Depreciation	Line 14	\$0	Year 14	4.461%	\$3	\$63
	Remaining Plant Additions Subject to 20 YR MACRS Tax						
20	Depreciation	Line 17 - Line 18 - Line 19	\$58	Year 15	4.462%	\$3	\$66
21	20 YR MACRS Tax Depreciation Rates	Per IRS Publication 946	3.750%	Year 16	4.461%	\$3	\$68
22	Remaining Tax Depreciation	Line 20 * Line 21	\$2	Year 17	4.462%	\$3	\$71
23				Year 18	4.461%	\$3	\$73
24	FY25 (Gain)/Loss incurred due to retirements	Per Tax Department 2/	\$0	Year 19	4.462%	\$3	\$76
25	Cost of Removal	Page 1 of 3, Line 6	\$4	Year 20	4.461%	\$3	\$78
26				Year 21	2.231%	\$1	\$80
		Sum of Lines 3, 14, 22, 24, and					
27	Total Tax Depreciation and Repairs Deduction	25	\$24		100.00%	\$58	

1/ Per Tax Department

2/ Per Tax Department

The Narragansett Electric Company d/b/a Rhode Island Energy Calculation of Weighted Average Cost of Capital

<u>Line No.</u> (a) (b) (c) (d) (e)

1 Weighted Average Cost of Capital as approved in RIPUC Docket No. 4770 effective September 1, 2018

2		Ratio	Rate	Weighted Rate	Taxes	Return
3	Long Term Debt	48.35%	4.62%	2.23%		2.23%
4	Short Term Debt	0.60%	1.76%	0.01%		0.01%
5	Preferred Stock	0.10%	4.50%	0.00%		0.00%
6	Common Equity	50.95%	9.28%	4.73%	1.26%	5.99%
7		100.00%		6.97%	1.26%	8.23%
0						

8

9 (d) - Column (c) x 21% divided by (1 - 21%)

PUC 1-10 Performance Incentives

Request:

The testimony on Bates page 69 states: "The Company intends to earmark this shareholder incentive for further reinvestment into the electric distribution system."

- a. Please explain how this "earmarking" will be implemented,
- b. Will the Company exclude or include the incentive earned as revenue in its annual earnings reports to the Commission for purposes of determining the Company's earned return on equity in the year in which the incentive was recorded?
- c. When the "earmarked" funds are "reinvested" does the Company expect to earn a return on those "earmarked" reinvested funds in the Company's system, or will the reinvested funds be used to displace funds that would otherwise have been invested by shareholders and, therefore, serve as an offset to what would otherwise have been an increase in rate base?

Response:

- a. In practice, the Company will "earmark" its earned performance incentive by accounting for the earnings under a distinct accounting code so that it may be tracked.
- b. The Company will include the incentive earned as revenue earned in its annual earnings reports to the Commission for purposes of determining the Company's earned return on equity in the year in which the incentive was recorded.
- c. At this time, the Company is still considering the nature of the reinvestment and each possibility referenced in the question.

Please note that, by intending to reinvest the funds, the Company is not seeking or expecting any less of a rigorous performance incentive mechanism review and approval process than if the funds were to be provided directly to shareholders and that use or proposed use of the earned incentive remains at the discretion of the Company provided that any treatment of reinvestment will be in accordance with all applicable state and federal laws and regulations and in accordance with any regulatory directives and accepted ratemaking principles.

PUC 1-11 Budget Breakdown by Components

Request:

The testimony on Bates page 69 states that "the SRP Factor includes the proposed performance incentive." Please provide a schedule which shows the calculation of the proposed SRP factors for 2024, 2025, and 2026, including a breakdown by component of cost within the budget, including in the breakdown the estimated performance incentive as well as the other components of the budget.

Response:

The table below shows the SRP Factor disaggregated by cost category, before and after accounting for uncollectible debt.

		(A)	(B)	(C)
		2024	2025	2026
(1)	Administration	\$0.00027	\$0.00019	\$0.00022
(2)	Incentives	\$0.00176	\$0.00108	\$0.00117
(3)	Finance	\$0.00003	\$0.00000	\$0.00000
(4)	Regulatory allocation	\$0.00006	\$0.00004	\$0.00004
(5)	PIM	\$0.00011	\$0.00010	\$0.00014
	TOTAL SRP FACTOR			
(6)	(Excluding Uncollectible Recovery)	\$0.00222	\$0.00142	\$0.00157
	TOTAL SRP FACTOR			
(7)	(Including Uncollectible Recovery)*	\$0.00224	\$0.00143	\$0.00159

* Uncollectible rate as approved in the Company's general rate case in R.I.P.U.C. Docket No. 4770, the current allowed uncollectible. Rate of 1.30% became effective on September 1, 2018.

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

<u>March 4, 2024</u> Date

Joanne M. Scanlon

Docket No. 24-06-EE – Rhode Island Energy System Reliability Procurement ("SRP") Investment Proposal for Electric Demand Response 2024-2026 – ConnectedSolutions Service list 2/26/2024

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