

March 23, 2021

VIA ELECTRONIC MAIL

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

RE: Docket 5098 - Proposed FY 2022 Electric Infrastructure, Safety, and Reliability Plan Responses to Record Requests

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a National Grid (“National Grid” or the “Company”), enclosed¹, please find the Company’s responses to the record requests issued at the Commission’s Evidentiary Hearing in the above-referenced matter.

Thank you for your attention to this transmittal. If you have any questions or concerns, please do not hesitate to contact me at 401-784-4263.

Sincerely,



Andrew S. Marcaccio

Enclosures

cc: Docket 5098 Service List
John Bell, Division
Greg Booth, Division
Tiffany Parenteau, Esq.
Al Contente, Division

¹ Per Commission counsel’s update on October 2, 2020, concerning the COVID-19 emergency period, the Company is submitting an electronic version of this filing followed by an original and five hard copies filed with the Clerk within 24 hours of the electronic filing.

Certificate of Service

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

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



Joanne M. Scanlon

March 23, 2021
Date

**Docket No. 5098 - National Grid's Electric ISR Plan FY 2022
Service List as of 1/28//2021**

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The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5098
In Re: Electric Infrastructure, Safety, and Reliability Plan FY2022
Responses to Record Requests
Issued at the Commission's Evidentiary Hearing
On March 16, 2021

Record Request No. 1

Request:

Referring to the Company's response to PUC 1-2, which projects are caused by thermal issues and which projects are caused by voltage issues?

Response:

The projects included in the Company's response to PUC 1-2 are in the tables below. The first table shows the largest scope and highest cost recommendation projects, the 72F3 and 72F5, and the second table shows smaller scope projects. The Company has identified which projects identified thermal issues versus voltage issues along with the cost splits where both voltage and thermal issues were identified on a specific feeder.

Of the proposed FY22 budget of \$2M for COVID scenario analysis related work, approximately \$152,000 is recommended to address voltage issues. However, all voltage issues identified were more than 2% below acceptable voltage limits. Therefore, the Company believes all of this work is required to address these voltage issues.

Station	Feeder Id	Scope	Capex	Opex	Removal	Total	Thermal or Voltage
Lincoln Avenue	72F5	Reconductor ~3200 feet of 1/0 and 4/0 AL to 477 AL	\$364,000.00	\$24,000.00	\$111,000.00	\$499,000.00	Thermal
Lincoln Avenue	72F3	Reconductor ~2050 feet of 1/0 CU, 2/0CU & 4/0ALto 477 AL	\$203,000.00	\$14,000.00	\$62,000.00	\$279,000.00	Thermal
Total			\$567,000.00	\$38,000.00	\$173,000.00	\$778,000.00	

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Station	Feeder Id	Scope	Estimated cost (totex)	Thermal or Voltage
Eldred	45J3	1,600 foot phase extension, 300 foot phase extension, load balancing, & upgrade 3 sets of fuses,	\$ 150,000.00	Thermal (~\$60,000) & Voltage (~\$90,000)
Peacedale	59F3	1600 circuit feet of recondutoring to 477	\$ 166,000.00	Thermal
Phillipsdale	20F2	Reconductor 1290 feet to Al-477 Bare	\$ 168,000.00	Thermal
Wompanaug	48F1	Reconductor 1000 feet to Al-477 Bare	\$ 125,000.00	Thermal
Geneva	71J5	1300 feet of recondutoring to Al-477 Bare	\$ 74,000.00	Thermal
Sprague Street	36J5	600 feet of recondutoring Al-477 Bare	\$ 43,000.00	Thermal
Westerly	16F1	3 regulator replacements	\$ 76,000.00	Thermal
Kenyon	68F2	Transformer/fuse replacements	\$ 57,000.00	Thermal
Clarkson St	13F5	Replace 3 fuses and one airbreak switch	\$ 27,239.38	Thermal
Coventry	54F1	Replace 3 fuses, load balancing, place capacitor back in service	\$ 28,195.73	Thermal (~\$26,000) & Voltage (~\$2,000)
Small scale work*	various	fuse replacements, load balancing, equipment replacement, small scale recondutoring or phase extensions	\$ 130,000.00	Thermal (~\$70,000) & Voltage (~\$60,000)
TOTAL small scale			\$ 1,044,435.11	
TOTAL 72F3 & 72F5			\$ 778,000.00	
Overall TOTAL			\$ 1,822,435.11	

Record Request No. 2

Request:

For the category of “customer request/public requirement,” please (a) provide the percentage and dollar amount of the total that is based on estimates and (b) provide the percentage and dollar amount of the total that is based on actual projects.

Response:

The specific work performed for most of the projects within the Customer Request / Public Requirement spending rationale is generally not known more than a year ahead, so the budgets are proposed based on actual historical costs, adjusting for any known trends or one-time items. When work on a specific project has begun in the previous year and will be completed in the following year, a separate project with an estimate is included in the budget. An example of this is Project # C083870. The method for developing the historical costs has been consistently applied as in prior years and as noted in response to PUC 1-3 represents the historical Moving Annual Totals (MAT) from a 12-month period up to the time the ISR Plan is developed and used as the estimate. Please see the table below listing Customer Requests/Public Requirement projects based on estimates and known projects.

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Project #	Project Description	FY 2022 Proposed Capital Spending	Known Projects		Historical Spending and Future Expectations		Other	
			\$	%	\$	%	\$	%
COS0022	Ocean St-Dist-3rd Party Attch Blnkt	281			281	100%		
C051909	Distributed Generation	1,000					1,000	100%
COS0091	Land and Land Rights RI Elect	393			393	100%		
C083649	RI Landline Meter Replacement	400	400	100%				
C085793	RI Meter Reprogramming	200	200	100%				
CN04904	Narragansett Meter Purchases	1,975			1,975	100%		
COS0004	Ocean St-Dist-Meter Blanket	800			800	100%		
C046977	Reserve for New Business Commercial	2,850			2,850	100%		
C083870	NARBAYCOM_NewSvc_PawtucketRI	285	285	100%				
COS0011	Ocean St-Dist-New Bus-Comm Blanket.	5,931			5,931	100%		
C046978	Reserve for New Business Residentia	300			300	100%		
COS0010	Ocean St-Dist-New Bus-Resid Blankt	3,720			3,720	100%		
COS0012	Ocean St-Dist-St Light Blanket.	577			577	100%		
C046970	Reserve for Public Requirements Uni	1,760			1,760	100%		
COS0013	Ocean St-Dist-Public Require Blnkt	1,200			1,200	100%		
C085812	Covid Scenario Analysis Work RI	2,000	1,822	91%			178	9%
C085910	Strategic DER Invts	2,700	650	24%			2,050	76%
CN04920	Transformer Purchases	4,915			4,915	100%		0%
Total Spending		31,287	3,357	11%	24,702	79%	3,228	10%

Record Request No. 3

Request:

Please explain the method the Company utilized to prioritize 3V0 projects.

Response:

Stations are selected and prioritized based on the following criteria:

- a) The high side transformer configuration was identified for each station. Stations with a high side Wye-ground transformer configuration were excluded as this type of configuration does not have the risk of overvoltage conditions for transmission single line to ground faults.
- b) The stations were investigated for existing 3V0 protection. Substations equipped with a high side protection scheme capable of detecting line to ground faults and tripping the low side breaker were excluded from consideration.
- c) The substations were selected on the basis of DER to minimum load ratio. If the ratio of the nameplate distributed generation of a station to the minimum load exceeded 50%, the station was considered for 3V0 implementation.

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Record Request No. 4

Request:

Please update the Company's response to DIV R-III-2 and reconcile the budget line items with Attachment PUC 3-6-1.

Response:

The response to data request DIV R-III-2 was erroneously prepared using an FY 2021 working file that had not been updated. Both the December 21st FY 2022 Plan filed with the Commission and the October 2nd FY 2022 ISR Plan filed with the Division proposed 3V0 project spending totaling \$1.435 million. The most significant differences between R-III-2 and PUC-3-6 were the exclusion of the Mobile 3V0 Units from R-111-2 and the use of a preliminary estimate of \$123,000 for the Peacedale 3V0 project instead of a more refined estimate of \$400,000. Please see the table below.

<u>Funding Project #</u>	<u>Funding Project Description</u>	FY 2022 ISR Plan Filed 10/2/20		FY 2022 ISR Plan Filed 12/21/20
		R III 2	Attachment 2 Project Detail Bates P 53	PUC 3-6
C085038	Chopmist 3V0 D-Sub	\$67,000	\$81,000	\$81,000
C085276	Putnam Pike 3V0 D-Sub	44,000	43,000	43,000
C085540	Eldred 3V0 D-Sub	129,000	125,000	125,000
C08TBD1	Natick 3V0 D-Sub	500,000	500,000	500,000
C08TBD2	Wampanoag 3V0 D-Sub	80,000	80,000	80,000
C08TBD3	Highland Park 3V0 D-Sub	80,000	80,000	80,000
C079494	Peacedale 3V0 - D Sub	123,000	400,000	400,000
C085628	Mobile 3V0	-	125,000	125,000
		\$1,023,000	1,434,000	1,434,000
	rounding		1,000	1,000
	FY 2022 3V0 Capital Spending per Attachment 3		\$1,435,000	\$1,435,000

Record Request No. 5

Request:

Will the FY 2022 DER enabling investments that are allocated for the Chopmist Substation be used to address the items identified in the 2019 DG Impact Study or will they be in addition to those items.

Response:

The FY22 plan currently includes installing feeder monitors on the three Chopmist substation feeders for approximately \$150,000. Feeder monitors were not required or included in the 2019 DG impact study. In addition, the FY22 plan includes approximately \$50,000 to perform engineering of full implementation of advanced devices at Chopmist substation. As explained in the Company's response to PUC 3-10, there is approximately \$2.050M in the FY22 plan reserved for Strategic DER advanced devices if issues emerge on the system that require immediate mitigation.

If these issues arise at the Chopmist substation, the Company will rely on previous Chopmist analysis to determine where advanced devices would be required (see response to Division data request R-I-11).

The 2019 DG Impact study identified both System Modification and System Improvement work. System Modification work included multiple device setting changes, replacing two existing reclosers, install two new mid-line reclosers, approximately 3500' of reconductoring and other work associated the point of interconnection (metering, etc.). This work was charged to the interconnection customer.

The System Modifications, required for the benefit of the Interconnection Customer, were not part of the Chopmist analysis recommendations proposed in the FY 2022 ISR since they were identified in the DG impact study as needed to interconnect this specific DG customer. The Strategic DER advanced device recommendations proposed in the FY 2022 ISR would be in addition to the System Modifications identified in the DG impact study.

System Improvement work identified was replacing an older style existing capacitor bank with new voltage control and disconnecting an existing capacitor bank. These recommendations were taken into consideration in the Chopmist analysis done in conjunction with the FY 2022 ISR Plan and align with the recommendations developed. The small-scale System Improvements associated with improving the capacity or reliability of the Electric Power System (EPS) as identified in the 2019 DG impact were part of the Chopmist analysis recommendations.

Record Request No. 6

Request:

At what point does the Company consider a DG Project to be paid (i.e., at the end of payment schedule?; what does final payment mean/entail)? How does final payment impact the Company's timing relative to ISR planning?

Response:

"Final payment" is the last payment in the schedule included in a Customer's Interconnection Service Agreement (ISA). The Company considers a Distributed Generation (DG) project to be fully paid upon receipt of the final payment from the customer per the payment schedule in the ISA. However, in the event of a change predicated by the customer resulting in additional costs, the estimate being more than 60 days old, or other estimating changes that can occur in the design phase of the project, incremental costs could accrue, and may be reflected in the form of an amended ISA and be billed to the customer at that time.

DG customers can withdraw their application at any point in time, even after an executed ISA has been signed, and the Company would then be required to refund any monies not spent or contracted for after reconciling the project. Therefore, the Company cannot fully rely upon a DG project progressing to completion in distribution planning analyses until the project is fully constructed and the DG is in service.

The Company will consider large DG projects that may not have an executed ISA nor be fully constructed as alternatives in distribution planning area studies; however, the Company must prove that the project provides a solution to the technical drivers and that potentially delaying the required system upgrades to align with a Customer schedule does not pose an unacceptable risk to maintaining a safe and reliable system. If it is determined that a DG customer project alternative meets the technical driver and aligns with the need dates for area planning study issues, the Company would consider it as a viable alternative.

The Field Engineering team within Distribution Planning and Asset Management (DPAM) is responsible for all DG studies and the Central Planning team within DPAM performs all area planning studies. Both teams are within the DPAM group and are in constant communication and coordination regarding ongoing area planning studies and ongoing DG projects. Interconnected DG is included in all area planning study analysis, and large-scale DG that is still in progress is considered during alternative analysis.

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There are currently three active area planning studies where the Company is considering large DG customer projects in the alternative analysis. These studies are the Northwest Rhode Island, Central Rhode Island West and Tiverton area studies. The Company has already reviewed the Northwest Rhode Island study with the Division and has tentative plans to discuss the Central Rhode Island West and Tiverton area studies at the end of April where information about DG projects being considered in the alternative analysis is shared.

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Record Request No. 7

Request:

Using the items listed in Attachment 1 on Bates Page 94, please provide a Table that includes the following columns: Spending Rationale; Budget Classification; FY 2022 Budget; FY 2022 Budget Dollars Placed in Service in FY 2022; FY 2022 Rev Requirement; Anticipated Plant in Service Year (if not FY 2022); and Brief Notes.

Response:

Please see Attachment RR-7 for a table showing the requested information.

Column a	Spending Rationale
Column b	Budget Classification
Column e	FY 2022 Capital Spending Budget
Column f	FY 2022 Plant in Service Target
Column g	FY 2022 Budget Dollars Placed in Service in FY 2022
Column k	FY 2022 Estimated Revenue Requirement Impact
Column m	Anticipated Plant in Service Year
Column n	Notes

Attachment 1 - FY 2022 Capital Spending by Key Driver Category and Budget Classification, FY 2022 Revenue Requirement Impact

Line No.	(a)	(b)	(c)	(d)	(e) = (c) + (d)	(f)	(g)	(h)	(i)	(j) = (g) + (i)	(k) = (j) x Line 36	(l)	(m)	(n)
	Spending Rationale (in \$m's)	Budget Classification	FY 2022 Proposed Capital Spending	SC&P Reclass	REVISED FY 2022 Proposed Capital Spending	FY 2022 Plant in Service Target	FY 2022 Capital Spending Placed in Svc in FY22	Prior Year(s) Capital Spending Placed in Svc in FY22	FY 2022 Cost of Removal	CAPEX + COR	Estimated Revenue Requirement Impact	FY 2022 CAPEX \$ Placed in Service in FY 2023+	Anticipated PIS Year	Notes - FY22 Plant in Service is estimated based on...
1	Customer Requests/ Public Requirements	3rd Party Attachments	281		281	424	211	213	14	225	12	2023	75%/25% of the FY22/FY21 blanket project plus 50% of a specific project capital spending	
2		Distributed Generation	1,000		1,000	1,000	1,000	-	-	1,000	54	2023	50% of FY21 budgeted capital spending plus 50% of FY22 proposed budgeted capital spending	
3		Land and Land Rights	393		393	393	393	-	-	393	21	2023	100% of proposed FY22 spending	
4		Meters	3,375		3,375	3,171	2,875	296	34	2,909	158	2023	100% of FY22 proposed spending, 75%/25% of the FY22/FY21 blanket project, plus 50% of the specific project capital spending	
5		New Business - Commercial	9,066		9,066	8,604	6,016	2,588	772	6,788	369	2023	75%/25% of the FY22/FY21 blanket project and 50%/50% of the FY22/FY21 reserve plus 50% of the specific project capital spending	
6		New Business - Residential	4,020		4,020	3,437	2,940	497	1,146	4,086	222	2023	75%/25% of the FY22/FY21 blanket project and 50%/50% of the FY22/FY21 reserve	
7		Outdoor Lighting - Capital	577		577	507	433	74	87	520	28	2023	75%/25% of the FY22/FY21 blanket project	
8		Public Req (includes COVID work)	4,960		4,960	3,394	2,780	614	616	3,396	185	2023	75%/25% of the FY22/FY21 blanket project and 50%/50% of the FY22/FY21 reserve plus 50% of specific project spending plus 50%/50% of the FY22/FY21 COVID analysis work	
9		Strategic DER Investments	2,700		2,700	2,350	1,350	1,000	297	1,647	90	2023	50% of FY22/FY21 forecasted capital spending plus 50% of FY22 proposed capital spending	
10		Transformers & Related Equipmt	4,915		4,915	4,915	4,915	-	-	4,915	267	2023	100% of FY22 proposed spending	
11	Subtotal		31,287	-	31,287	28,195	22,912	5,282	2,966	25,878	1,408	8,375		
12	Damage/Failure	Damage/Failure	10,448		10,448	11,078	7,606	3,472	1,654	9,260	504	2023	75%/25% of the FY22/FY21 blanket projects and 50%/50% of the FY22/FY21 reserves plus 100% of a specific FY21 project	
13		Major Storms	1,750		1,750	3,760	875	2,885	288	1,163	63	2023	50%/50% of the FY22/FY21 Major Storm project capital spending	
14	Subtotal		12,198	-	12,198	14,838	8,481	6,357	1,942	10,423	567	3,717		
15	Asset Condition	Asset Replacement	35,401		35,401	34,740	19,124	15,616	3,222	22,347	1,216	2023	Specific review of Large Project spending, 50%/50% of capital spending for FY22/FY21 I&M, Battery Replacement, IRURD, UG Replacement, Recloser Replacement, Vent Blowers, and other programs	
16		Asset Repl - Southeast Sub	2,082		2,082	1,764	1,764	-	3,465	5,229	285	2023	Specific review	
17		Asset Repl - I&M	3,000		3,000	2,963	1,500	1,463	240	1,740	95	2023	50%/50% of the FY22/FY21 project capital spending	
18	Subtotal		40,483	-	40,483	39,468	22,389	17,079	6,927	29,316	1,595	18,093		
19	Non-Infrastructure	General Equipment	250		250	232	188	44	-	188	10	2023	75%/25% of the FY22/FY21 project	
20		Telecommunications	1,060		1,060	870	530	340	23	553	30	2023	50%/50% of the FY22/FY21 Telecom Small Capital and Verizon Copper to Fiber Conversion projects. As noted in Revised response to xxx-xxx, 2 projects were included in FY 2022 Capital Spending and Plant in Service that are not ISR related and will be removed.	
21	Subtotal		1,310	-	1,310	1,102	717	384	23	740	40	592		
22	System Capacity & Performance	Load Relief	9,643	(721)	8,922	7,277	6,365	911	2,079	8,445	460	2023	Specific review of Large Project capital spending to estimate FY22 in-service plant, 75%/25% of FY22/FY21 blanket projects, 50%/50% of FY22/FY21 Transformer Upgrades capital spending	
23		Reliability	8,729	721	9,450	8,633	4,671	3,963	662	5,333	290	2023	Specific review of Large Project capital spending, 75%/25% of FY22/FY21 blanket projects, 50%/50% of FY22/FY21 3VO, EMS, VVO capital spending and other small projects and programs.	
24	Subtotal		18,372	0	18,372	15,910	11,036	4,874	2,742	13,778	750	7,337		
25	Total		103,650	0	103,650	99,512	65,535	33,977	14,600	80,135	4,361	38,115		

26	Forecasted Revenue Requirement on FY 2022 Incremental Capital included in ISR Rate Base (Bates 167, Line 9)	\$3,644,310
27		
28	FY22 Property tax associated with FY22 investment (Bates 193, Line 52)	\$2,566,000
29	Total FY22 revenue requirement associated with FY22 Investment	\$6,210,310
30		
31	Total FY22 Capital Placed into Service plus Cost of Removal (Bates 93)	\$114,112,000
32		
33	Ratio of Revenue Requirement for Depreciation, Return & Taxes	3.19% Line 33 / Line 37
34	Ratio of Revenue Requirement for Property Taxes	2.25% Line 34 / Line 37
35	Total Ratio	5.44% Line 39 + Line 40
36		
37		

	Apportionment of Bates Page 167 Line 9 between FY 2022 plan approved spending and prior years plans:				
	FY 2022 Plan	FY 2021 or Earlier	FY 2022 COR	Total	
39	FY 2022 Plan forecasted Plant in Service and COR	65,535,022	\$33,976,646	\$14,599,715	114,112,000
40	Ratio of Revenue Requirement for Depreciation, Return & Taxes	3.19%	3.19%	3.19%	3.19%
41	Portion of Bates Page 167 Line 9	\$2,092,943	\$1,085,087	\$466,260	\$3,644,310
42					

Record Request No. 8

Request:

Which portions of the budget line items in the Plan do not relate to known projects?

Response:

The FY 2022 Electric ISR proposed capital spending of the \$103.7 million is broken down on Attachment RR-8 between the following categories:

- \$57.2 million of proposed capital spending relates to known projects.
- \$40.7 million of proposed capital spending relates to blanket projects (small scope work) and reserves for projects that emerge during the year. Specific work performed is generally not known more than a year ahead, so the budget is proposed based on actual historical costs, adjusting for any known trends or one-time items. As also noted in the response to RR-1, the method for developing the historical costs has been consistently applied as in prior years and represents the historical Moving Annual Totals (MAT) from a 12-month period up to the time the ISR Plan is developed and used as the estimate.
- \$5.8 million of proposed capital spending is based on other information, such as program placeholders to manage to program total budgets or general estimates. The DER investments are the second funding category budgeted at \$2,050,000 is reserved should the Company need to advance grid modernization related projects at Chopmist in FY 2022 based on system performance results. Ideally, the improvements would not be implemented until the GMP Plan is fully vetted, but the Company would have the latitude to take necessary action to maintain reliability.

RI Electric

FY 2022 ISR - Project Detail - RR8 - Which portions of the budget line items in the Plan do not relate to known projects

5098 - RR-8-1 - FY 2022 Electric ISR Capital Spending

Spending Rationale	Project #	Project Description	FY 2022	Historical		Other	Notes
			Proposed Capital Spending	Known Projects	Spending and Future Expectations		
Customer Request/Public Requirement	COS0022	Ocean St-Dist-3rd Party Attch Blnkt	281		281		
	C051909	Distributed Generation	1,000			1,000	
	COS0091	Land and Land Rights RI Elect	393		393		
	C083649	RI Landline Meter Replacement	400	400			
	C085793	RI Meter Reprogramming	200	200			
	CN04904	Narragansett Meter Purchases	1,975		1,975		
	COS0004	Ocean St-Dist-Meter Blanket	800		800		
	C046977	Reserve for New Business Commercial	2,850		2,850		
	C083870	NARBAYCOM_NewSvc_PawtucketRI	285	285			
	COS0011	Ocean St-Dist-New Bus-Comm Blanket.	5,931		5,931		
	C046978	Reserve for New Business Residentia	300		300		
	COS0010	Ocean St-Dist-New Bus-Resid Blankt	3,720		3,720		
	COS0012	Ocean St-Dist-St Light Blanket.	577		577		
	C046970	Reserve for Public Requirements Uni	1,760		1,760		
	COS0013	Ocean St-Dist-Public Require Blnkt	1,200		1,200		
	C085812	Covid Scenario Analysis Work RI	2,000	1,822			178
	C085910	Strategic DER Advancement - Advanced Devices	2,700	650			2,050
CN04920	Narragansett Transformer Purchases	4,915		4,915			
Customer Request / Public Requirements Spending Total			31,287	3,357	24,702	3,228	
Damage/Failure	COS0014	Ocean St-Dist-Damage&Failure Blnkt	8,925		8,925		
	COS0002	Ocean St-Dist-Subs Blanket.	603		603		
	C046986	Reserve for Damage/Failure Unidenti	160		160		
	C051608	Reserve for Damage/Failure Substati	760		760		
	C022433	OSD Storm Cap Confirm Progrm Proj	1,750				1,750
Damage/Failure Total			12,198	-	10,448	1,750	
Asset Condition	C032019	Batts/Chargers NE South OS RI	150	150			
	C036527	Westerly Flood Restoration (D-Sub)	(2)	(2)			
	C047378	IRURD Willowbrook	363	363			
	C047394	IRURD Tanglewood	650	650			
	C047829	IRURD High Hawk	17	17			
	C049356	IRURD Silver Maple Phase 2	151	151			
	C049462	"IRURD SIGNAL RIDGE, EAST GREENWICH	738	738			
	C050070	IRURD Placeholder RI	(212)				(212) (B)
	C050299	IRURD Eastward Look	168		168		
	C051205	Dyer St replace indoor subst D-SUB	4,432	4,432			
	C051211	Dyer St replace indoor subst D-LINE	5,285	5,285			
	C051212	South St repl indoor subst D-SUB	300	300			
	C051213	South St repl indoor subst D-LINE	(3)	(3)			
	C055215	Westerly Flood Restoration (D-Line)	(2)	(2)			
	C055343	RI UG Cable Placeholder	895				895 (B)
	C055359	RI UG Cable Repl Program - Fdr 79F1	220	220			
	C055364	RI UG Cable Repl Program - Fdr 13F6	338	338			
	C055370	RI UG Cable Repl Prog Fdr 1144/1109	460	460			
	C055371	RI UG Cable Repl Prog Fdr 1142/1105	427	427			
	C055392	RI UG Cable Repl Program - Secondar	500	500			
	C056947	IRURD Juniper Hills WWarwick	374	374			
	C057882	IRURD Chateau Apts URD Rehab	166	166			
	C057903	IRURD Western Hills Village URD-	(2)	(2)			
	C057906	IRURD Woodvale Estates URD-	15	15			
	C058045	IRURD-Tockwotton Farm_TF Road.	170	170			
	C058046	IRURD-Tockwotton Farm_RM Way.	(3)	(3)			
	C065830	Recloser Replacement Program RI	200	200			
	C069166	Pawtucket 1 Breaker Replacement	25	25			
	C074307	RI UG 79F1 duct Charles & Orms Sts	729	729			
	C076289	IRURD Pequaw Honk URD RI-L Compton	234	234			
	C078474	Franklin Sq Sub_1105 & 1109 NW	440	440			
	C078488	RI DFP100 Relay Replacement Project	40	40			

5098 - RR-8-1 - FY 2022 Electric ISR Capital Spending

<u>Spending Rationale</u>	<u>Project #</u>	<u>Project Description</u>	<u>FY 2022</u>	<u>Historical</u>		<u>Other</u>	<u>Notes</u>
			<u>Proposed</u> <u>Capital</u> <u>Spending</u>	<u>Known</u> <u>Projects</u>	<u>Spending and</u> <u>Future</u> <u>Expectations</u>		
	C078734	Ph 1A - ProvStudy Admiral St 4&11kV Convert	3,743	3,743			
	C078735	Ph1B - ProvStudy New Admiral St 12kV D-Sub	1,438	1,438			
	C078796	Ph1B - ProvStudy Admiral St-Rochamb D-Line	210	210			
	C078797	Ph1B - ProvStudy Admiral St-Rochamb D-Sub	501	501			
	C078800	Ph 1A - ProvStudy Clarkson-Lippit12kV DLine	1,223	1,223			
	C078802	Ph 1B - ProvStudy Olneyville 4kV D-Line	204	204			
	C078803	Ph 1B - ProvStudy Admiral St 12kV MH&Duct	272	272			
	C078804	Ph 1B - ProvStudy Admiral St 12kV Cables	271	271			
	C078805	Ph 4 - ProvStudy Knightsville 4kV Convert	220	220			
	C078806	Ph 4 - ProvStudy Knightsville 4kV D-Sub	275	275			
	C078921	RI UG Cable Repl Program - Fdr 1158	13	13			
	C078923	RI UG Cable Repl Program - Fdr 1160	300	300			
	C078926	RI UG Cable Repl Program - Fdr 1162	280	280			
	C078928	RI UG Cable Repl Program - Fdr 1164	13	13			
	C078931	RI UG Cable Repl Program - Fdr 1166	418	418			
	C079331	Viper Recloser Replacement Pgm 1-RI	165	165			
	C081006	Franklin Sq Breaker Replacement	1,804	1,804			
	C081341	IRURD Woodland Manor-Coventry	481	481			
	C082439	Franklin Sq-Replace 11kV Sub Equip	49	49			
	C086514	RI GE Type U Bushing Replacement	275	275			
	C083782	Replace 12.47 Breakers Drumrock 14	196	196			
	C084172	IRURD Jencks Hill, Lincoln RI	270	270			
	C084377	IRURD Governor's Hills, RI	403	403			
	C084378	IRURD Frenchtown Green, RI	254	254			
	C084965	IRURD Sandy Point Farms Phase 2	463	463			
	C085005	RI UG Cable Repl Program - Fdr 1139	409	409			
	C085553	RI Repl ACNW Vault Vent Blowers	400	400			
	COS0017	Ocean St-Dist-Asset Replace Blank	3,399		3,399		
	COS0026	OS-Dist-Substation Asset Repl Blnk	193		193		
	C026281	I&M - OS D-Line OH Work From Insp.	2,875	2,875			
	C080076	I&M - OS Sub-T OH Work From Insp	125	125			
	C053657	Southeast Substation (D-Sub)	787	787			
	C053658	Southeast Substation (D-Line)	1,060	1,060			
	C055683	Pawtucket No 1 (D-Sub)	235	235			
Asset Condition Total			40,483	36,208	3,592	683	

5098 - RR-8-1 - FY 2022 Electric ISR Capital Spending

Spending Rationale	Project #	Project Description	FY 2022		Historical	Other	Notes
			Proposed Capital Spending	Known Projects	Spending and Future Expectations		
Non-Infrastructure	COS0006	Ocean St-Dist-Genl Equip Blanket	250		250		
	C086391	Verizon Copper to Fiber Conversions	800	800			
	C040644	Telecom Small Capital Work - RI	260	260			
Non-Infrastructure Total			1,310	1,060	250	-	
System Capacity & Performance	C028628	Newport SubTrans & Dist Conversion	5,040	5,040			
	C046726	East Providence Substation (D-Sub)	407	407			
	C046727	East Providence Substation (D-Line)	325	325			
	C054054	Jepson Substation (D-Line)	24	24			
	C058310	Harrison Sub Improvements (D-Sub)	205	205			
	C058401	Merton Sub Improvements (D-Sub)	190	190			
	C058404	Kingston Sub Improvements (D-Sub)	325	325			
	C065166	Warren Sub Expansion (D-Sub)	100	100			
	C065187	Warren Sub Expansion (D-Line)	521	521			
	CD00656	Jepson Substation (D-Sub)	650	650			
	C081675	New Lafayette 115/12kV (D-Sub)	1,627	1,627			
	C081683	New Lafayette 115/12kV (D-Line)	230	230			
	COS0016	Ocean St-Dist-Load Relief Blanket.	335		335		
	C005505	IE - OS Dist Transformer Upgrades	700	700			
	C013967	PS&I Activity - Rhode Island	100				100
	C054090	"Reconductor Anthony Road, Foster R	59	59			
	C059663	Cutout Mnted Recloser Program_RI	133	133			
	C059882	Flood Contingency Plan NECO - D	45	45			
	C074427	EMS Expansion - Phillipsdale 20	87	87			
	C074428	EMS Expansion - Wampanoag 48	109	109			
	C074430	EMS Expansion - Wood River 85	301	301			
	C074431	EMS Expansion - Bonnet 42	99	99			
	C074433	Bristol 51 - EMS and breaker rplmt	604	604			
	C074438	EMS Expansion - Merton 51	104	104			
	C075546	Farnum 105 EMS intallation	(2)	(2)			
	C079494	Peacedale 3V0 D-Sub	400	400			
	C080894	RI VVO Exp - Farnum Pike 123 Dist	936	936			
	C080897	RI VVO Exp - Pontiac 27 Dist	695	695			
	C080898	RI VVO Exp - Farnum Pike 23 Dist	400	400			
	C080901	RI VVO Exp - Pontiac 27 Sub	575	575			
	C084731	RI VVO Expansion - Woonsocket 26	15	15			
	C085038	CHOPMIST 3V0 D-SUB	81	81			
	C085276	PUTNAM PIKE 3V0 D-SUB	43	43			
	C08TBD1	Natick 3V0 D-SUB	500	500			
	C08TBD2	WAMPANOAG 3V0 D-SUB	80	80			
C08TBD3	Highland Park 3V0 D-SUB	80	80				
C085540	ELDRED 3V0 D-SUB	125	125				
C085628	RI Mobile 3V0 Units	125	125				
C085688	RI- VVO Putnam Pike	562	562				
C085689	RI VVO Putnam Pike	45	45				
COS0015	Ocean St-Dist-Reliability Blanket.	1,262		1,262			
COS0025	OS-Dist-Substation LR/Rel Blnkt	133		133			
System Capacity & Performance Total			18,372	16,542	1,730	100	
FY 2022 Capital Spending Total			103,650	57,167	40,722	5,761	

NOTES:

- (A) This represent a reserve for costs to advance remaining Grid Mod at Chopmist in FY 2022 based on system performance results. We have agreed to hold off on formally proposing this work until the Grid Mod Plan is fully vetted but we will do the work if we believe it is needed for system reliability.
- (B) We manage the Underground Cable replacement program (UG) and the Underground Residential Development Cable replacement program (URD) to a total budget. These are amounts that are the current difference between specific projects and the total budget. We expect to have projects identified that will equal the total program budget as we proceed throughout FY 2022.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 5098
In Re: Electric Infrastructure, Safety, and Reliability Plan FY2022
Responses to Record Requests
Issued at the Commission's Evidentiary Hearing
On March 16, 2021

Record Request No. 9

Request:

Referencing Bates 167, please identify the portion of Capital Investment in Lines 5-9 that relates to spending approved in the FY 2022 ISR plan separate from spending approved in prior year ISR plans. (i.e., what is going into service in FY 2022 but was approved in previous years.)

Response:

Referencing Bates 167, Lines 5-8 relate to spending approved in prior year ISR plans. Only Line 9 has spending related to the FY 2022 Plan. Line 9 is summarized as follows:

Summarized from PUC 1-2, Page 3 of 3:

FY22 Depreciation, Return and Taxes associated with FY22 investment	\$3,644,310
FY22 Property tax associated with FY22 investment	<u>\$2,566,000</u>
Total FY22 revenue requirement associated with FY22 Investment	<u><u>\$6,210,310</u></u>

Total FY22 Capital Placed into Service plus Cost of Removal	<u><u>\$114,112,000</u></u>
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Ratio of Revenue Requirement for Depreciation, Return, Taxes	3.19%	Line 33 / Line 37
Ratio of Revenue Requirement for Property Taxes	<u>2.25%</u>	Line 34 / Line 37
Total Ratio	<u><u>5.44%</u></u>	Line 39 + Line 40

Apportionment of Bates Page 167 Line 9 between FY 2022 plan approved spending and prior years plans:

	<u>FY 2022 Plan</u>	<u>FY 2021 or Earlier</u>	<u>Total</u>
FY 2022 Plan approved spending	\$80,134,736	\$33,977,264	\$114,112,000
Ratio of Revenue Requirement for Depreciation, Return, Taxes	3.19%	3.19%	
Portion of Bates Page 167 Line 9	<u>\$2,559,203</u>	<u>\$1,085,107</u>	\$3,644,310