

**STATE OF RHODE ISLAND
PUBLIC UTILITIES COMMISSION**

IN RE: THE NARRAGANSETT :
ELECTRIC COMPANY 2022 ANNUAL : **DOCKET NO. 5189**
ENERGY EFFICIENCY PLAN :

DIVISION OF PUBLIC UTILITIES RESPONSES
TO THE PUBLIC UTILITIES COMMISSION'S FIRST SET OF DATA REQUESTS
(Issued November 24, 2021)
(Responses due December 2, 2021)

Request:

- 1-1. National Grid has filed a Provisional Electric EEP with ~\$9 million dollars originally targeted at a CHP project now reallocated to other C&I New Construction projects and C&I Programs. Referencing National Grid's Provisional Plan and its response to PUC 2-17 (Please note that the Commission will refer to the Original Plan with the \$9,154,400 CHP component removed as the "**Alternative Base Plan**") and any other information relevant to this docket, please respond to the following: With respect to the \$9M of funding in the Provisional Plan that is incremental to the Alternative Base Plan, *and only those \$9M dollars within the Provisional Plan*, is National Grid's proposed use of these \$9M in the Provisional Plan
- a. Cost effective
 - b. Less than the cost of supply
 - c. Prudent
 - d. Reliable
 - e. Environmentally responsible
- For each individual response to parts a-e, please explain why or why not.

Response:

- 1-1 (a). According to the Company's response to PUC 1-20, the reallocated \$9M dollars within the Provisional Plan has a BCR of 0.99, which makes it not cost-effective without macroeconomic benefits. However, once macroeconomic benefits are accounted for, qualitatively, these measures should be deemed cost-effective because the macroeconomic benefits should be sufficient to ensure that the measures provide positive net benefits.
- 1-1 (b). The Division has not seen information on whether the reallocated \$9M within the Provisional Plan costs less than the cost of supply. In the absence of direct calculations from the Company, the Division, relying on the Company's responses to PUC 1-20 and 1-117, created the following Table 1. Based upon the calculations in Table 1, the Division concludes that the reallocated \$9M within the Provisional Plan costs more than the cost of supply in terms of dollars and dollars per kWh.

Table 1: EEP Costs vs. Cost of Supply for \$9M of Provisional Plan

Energy Efficiency Plan Costs

		\$9M of Provisional Plan
1	Implementation Costs	\$9,154,400
2	Customer Costs	\$3,007,500
3	EEP Costs in \$ (Sum of Rows 1 and 2)	\$12,161,900
4	Electric Energy Savings (Lifetime MWh)	59,665
5	EEP Costs in \$/kWh (Row 3 / (Row 4 * 1000))	\$0.20

Cost of Supply

		\$9M of Provisional Plan
1	Electric Energy Costs	\$3,816,000
2	Electric Generation Costs	\$463,000
3	Electric Transmission Capacity Costs	\$962,000
4	Electric Distribution Capacity Cost	\$953,000
5	Natural Gas Costs	(\$108,000)
6	Fuel Costs	\$0
7	Income Eligible Rate Discount	\$0
8	Arrearages	\$0
9	Price Effects	\$2,159,000
10	Non-embedded Greenhouse Gas Reduction Costs	\$2,698,000
11	Non-embedded Nitrous Oxide (NOx Costs)	\$31,000
12	Reliability Costs	\$8,000
13	Cost of Supply in \$ (Sum of Rows 1 through 12)	\$10,982,000
14	Electric Energy Savings (Lifetime MWh)	59,665
15	Cost of Supply in \$/kWh (Row 13 / (Row 14 * 1000))	\$0.18

EEP Costs Minus Cost of Supply in \$	\$1,179,900
EEP Costs Minus Cost of Supply in \$/kWh	\$0.02

1-1 (c). The Division is unsure if the definition of prudence found in the most recently revised Least-Cost Procurement Standards were meant to apply to a carved-out amount of allocated money instead of at the program and portfolio level. However, the Division, in the interest of being responsive to the PUC’s request, offers that the measures supported by the reallocated \$9M within the Provisional Plan are cost effective. However, according to the Division’s calculations in Table 1, above, the reallocated \$9M is more than the cost of supply. Therefore, the reallocated \$9M is not prudent.

1-1 (d). Yes, the measures supported by the reallocated \$9M within the Provisional Plan are reliable. The investments will produce verified and persistent electricity savings as well as other resource savings such as fuel and water savings.

1-1 (e). Yes, the measures supported by the reallocated \$9M within the Provisional Plan are environmentally responsible. The investments will produce greenhouse gas emission reductions that will help the state reach the goals in the Act on Climate.

Request:

1-2. Given your response to PUC 1-1, is National Grid's entire Provisional Electric EEP on a whole, including the \$9M reallocation, prudent? Why or why not?

Response:

1-2. Yes, on the whole, the entire Provisional Electric EEP is prudent. The entire Provisional Electric EEP is cost-effective, with a BCR that is greater than 1.0 using the RI Test without economic benefits and costs less than the cost of supply.¹

Request:

1-3. Given your responses to PUC 1-1 and 1-2 and National Grid's response to PUC 2-17 illustrating their calculations of the differences in costs and benefits of the Provisional Plan and Alternative Base Plan, please answer the following:

- a. Comparing the program expenses and benefits from the Provisional Plan and the Alternative Base Plan, please indicate which plan you recommend that the PUC approve for the 2022 Annual Plan.
- b. Please explain the reasons for your recommendation.

Response:

1.3 (a). Based on the Division's response to PUC 1-1 and 1-2 and National Grid's response to PUC 2-17, the Division recommends that the PUC approve the Alternative Base Plan.

1.3 (b). The measures supported by the reallocated \$9M within the Provisional Plan are not the most prudent use of this \$9M. The Company could have reallocated the \$9M to C&I measures that are more cost-effective than those chosen. The BCRs for the Large C&I New Construction, Large C&I Retrofit, and Small Business Direct Install programs in the Alternative Base Plan are 3.43, 2.20, and 1.16, respectively. These are all higher BCRs than the 1.40, 0.86, and 0.57 BCRs for the Large C&I New Construction, Large C&I Retrofit, and Small Business Direct Install programs in the reallocated \$9M. This suggests that reallocating these funds to other C&I measures would bring greater net benefits to customers.

The Division developed Table 2 below based on the plan filing and the Company's responses to PUC 1-20 and 2-17. Table 2 shows the RI Test BCRs for the C&I programs and the Residential, Income-Eligible, and C&I sectors without the economic benefits for the Alternative Base Plan, reallocated \$9M within the Provisional Plan, and Provisional Plan (representing the Alternative Base Plan and reallocated \$9M within the Provisional Plan combined). The table shows that spending in the C&I sector remains a very cost-effective use of ratepayer funds for energy efficiency. The table also shows that the reallocated \$9M within the Provisional Plan is significantly less cost-effective than the Alternative Base Plan. Therefore, the Alternative Base Plan is the more prudent investment for ratepayers.

¹ Please reference Tables 5 Primary, 5 Secondary, and 5A in the Provisional EE Plan filing of October 8, 2021, as well as, National Grid's response to PUC 1-117.

Table 2: RI Test BCRs without Macroeconomic Benefits for the Alternative Base Plan, Reallocated \$9M within the Provisional Plan, and Provisional Plan

Programs	Alternative Base Plan	Reallocated \$9M within Provisional Plan	Provisional Plan (Alternative Base + Reallocated \$9M)
Large C&I New Construction	3.43	1.40	1.86
Large C&I Retrofit	2.20	0.86	2.20
Small Business Direct Install	1.16	0.57	1.16
Connected Solutions	2.42	n/a	2.42
C&I Sector Total	1.97	0.99	1.76
Residential Sector Total	1.57	n/a	1.57
Income-Eligible Sector Total	2.03	n/a	2.03

Request:

1-4. Referencing National Grid’s response to PUC 2-18, please answer the following:

- a. Is it the view of the Division that the implementation of the 2022 Annual Energy Efficiency Plan would be impacted if the design payout rates were the same as in 2021? (Please answer yes or no.)
- b. If the answer to (a) is yes, please explain in detail how the implementation of the 2022 Annual Energy Efficiency Plan would be impacted if the design payout rates were the same as in 2021.
- c. If the answer to (a) is yes, please provide the design payout rates and total design level potential incentive and maximum potential incentive that you would recommend that the PUC approve for the 2022 Annual Plan. Please explain how you arrived at the recommended design payout rates and total design level potential incentive and maximum potential incentive.

Response:

1.4 (a). Yes, the Division believes the implementation of the 2022 Annual Energy Efficiency Plan would be impacted if the design payout rates were the same as in 2021.

1.4 (b). Table 3 provides the Division’s estimates of how the EE performance incentive mechanism (PIM) for the electric EE portfolio would be affected if the design payout rates were the same as in 2021. As indicated in the table, the design payout rate for the C&I programs was 6.15% for the 2021 EE Plan. If this same payout rate was used for the 2022 EE Plan, it would reduce the design performance payout by roughly \$2.7 million (equal to \$5.5 million minus \$2.8 million). This occurs because the C&I design performance achievement for 2022 is much lower than that for 2021. A \$2.66 million reduction in the design performance payout would significantly reduce the Company’s financial incentive to achieve the 2022 C&I energy efficiency targets.

The design payout rates for the Residential and Income Eligible sectors have no bearing on the design performance payout for those sectors.

Table 3: Design Payout Rates Equal to Those for the 2021 EE Plan

	2021 Plan			2022 Provisional Plan w/ 2021 PO Rates		
	Design Performance Achievement	Design Performance Payout	Design Payout Rate	Design Performance Achievement	Design Performance Payout	Design Payout Rate
Residential	2,000,000	500,000	25%	2,000,000	500,000	25%
Inc. Eligible	2,000,000	500,000	25%	2,000,000	500,000	25%
C&I	89,419,367	5,500,000	6.15%	46,216,065	2,842,654	6.15%
			Reduction in payout:	2,657,346		

1.4 (c). Table 4 provides the Division’s recommendation for the design payout rates for the 2022 Provisional EE Plan. The C&I design payout rate is calculated by dividing the design performance payout by the design performance achievement.

The table presents the Division’s recommendation for the maximum performance payout amounts by sector. The Division is not aware of any reason to modify these amounts from the 2021 EE Plan.

Table 4. Division Recommendations for Design Payout Rates for the 2021 EE Plan

	2022 Plan - Provisional			
	Design Performance Achievement	Design Performance Payout	Design Payout Rate	Maximum Performance Payout
Residential	2,000,000	500,000	25%	625,000
Inc. Eligible	2,000,000	500,000	25%	625,000
C&I	46,216,065	5,500,000	11.9%	6,875,000

The Division does not have a position on the design payout rates for the Residential and Income Eligible sectors, because those have no bearing on the design payout for those sectors. The design payouts for the Residential and Income Eligible sectors for the 2021 EE Plan were set by the PUC.

Table 5 presents the “effective performance payout” that is provided by the EE PIM for the electric EE portfolio. This is the amount of incentive that the Company would earn if it achieves its design savings goals for each of the three sectors. The effective performance payout for the Residential and Income Eligible sectors is put into positive terms in order to be comparable to the positive C&I payout. The effective performance payout for these two sectors is equal to the downward adjustment that the Company can avoid if it meets the performance targets for these sectors. The “net” effective performance payout for the C&I sector is equal to the total performance payout minus the effective performance payouts for the Residential and Income Eligible sectors.

As indicated in Table 5, the effective performance payout percentages by sector for both the 2021 EE Plan and the 2022 Provisional Plan are roughly comparable with the percentage of net benefits provided by sector. (The net benefits presented in Table 5 are those based on the RI Test excluding the macroeconomic benefits, from Table E5-Primary from the 2022 Provisional EE Plan.) For this reason, the Division does not see any reason to modify the Residential or Income Eligible maximum downward adjustments from those set by the PUC in the 2021 EE Plan.

Table 5. Effective Performance Payouts Relative to Net Benefits

	2021 Plan			2022 Provisional Plan			Net Benefits	
	Max Downward Adjustment	Effective Performance Payout (\$)	Effective Performance Payout (%)	Max Downward Adjustment	Effective Performance Payout (\$)	Effective Performance Payout (%)		
Res	1,251,250	1,251,250	23%	1,251,250	1,251,250	23%	21,616,800	21%
Inc. eligible	715,000	715,000	13%	715,000	715,000	13%	17,325,000	16%
C&I - Net	---	3,533,750	64%	---	3,533,750	64%	66,123,200	63%
Total	---	5,500,000	100%	---	5,500,000	100%	105,065,000	100%