



STATE OF RHODE ISLAND

DIVISION OF PUBLIC UTILITIES & CARRIERS

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December 31, 2021

VIA ELECTRONIC MAIL

Luly Massaro, Commission Clerk

Rhode Island Public Utilities Commission

89 Jefferson Boulevard

Warwick, RI 02888

**RE: Docket 5189 – The Narragansett Electric Company d/b/a National Grid
Annual Energy Efficiency Plan for 2022**

Dear Ms. Massaro:

Attached hereto is the Division's Supplemental answer to the Commission's 1st set of data requests, in the form of an Attachment.

Thank you and the Commission for your consideration attention to this matter.

Best Wishes to all for a Happy New Year!

Very Truly Yours,

A handwritten signature in blue ink, appearing to read "Margaret L. Hogan".

Margaret L. Hogan

cc: Service List



Memorandum

TO: JOEL MUNOZ, MARGARET HOGAN, JOHN BELL, AND LINDA GEORGE,
DIVISION OF PUBLIC UTILITIES AND CARRIERS

FROM: TIM WOOLF AND JENN KALLAY, SYNAPSE ENERGY ECONOMICS

DATE: DECEMBER 31, 2021

RE: DETERMINING TARGET INCENTIVE LEVELS FOR EE PIMS

1. Introduction

The Public Utilities Commission (the Commission) issued several data requests to the Division of Public Utilities and Carriers (the Division) regarding the energy efficiency (EE) performance incentive mechanism (PIM) for the 2022 EE Plan.¹ National Grid (the Company) also issued several data requests regarding the EE PIM. In addition, at the December 8 hearings in Docket 5189, Chair Gerwatowski noted that he was looking for a “metric” to use to set the magnitude of the target incentive provided by the EE PIM.² Further, at the Commission’s December 21 Open Meeting, the Commissioners expressed additional questions about the EE PIM target incentives.

The purpose of this memo is to address some of these questions regarding the application of the EE PIM. We propose a framework for reviewing the PIM target incentive levels each year. We then propose target incentive levels for the EE PIM for the 2022 EE Plan based on this framework. Our recommendations are informed by the Commission’s guidance on PIMs, including the five key principals for developing PIMs, as well as its Order No. 24225, in Docket 5076.³

2. Framework for How to Determine PIM Target Incentive Levels

First, we recommend that the target incentive levels for the EE PIM be revisited each year. Many aspects of an EE Plan can change from year-to-year, requiring reconsideration of the amount of the target incentive and the allocation of incentives by customer sector.

Second, we recommend that the concept of “capital bias” be considered when determining the target incentive level each year. All regulated utilities have a bias to invest in capital, as opposed to labor, O&M, and other pass-through costs, because they can put capital costs into rate base

¹ Throughout this memo, the term “target” incentive shall refer to the amount of incentive that the Company can earn if it achieves its design level (target) EE goals.

² Throughout this memo, the term “EE PIM” shall refer to the PIM established by the Rhode Island Public Service Commission for the 2021 EE Plan in Report and Order No. 24225 in Docket 5076.hlkGB

³ Public Utilities Commission’s Guidance on Principles for the Development and Review of Performance Incentive Mechanisms adopted on May 8, 2020.



and earn a return on them.⁴ One of the explicit purposes of PIMs in general is to partially offset this bias.⁵ Accounting for the capital bias effect in determining the target incentives helps to keep the EE PIMs in context and can provide a useful floor for setting the target incentive. This concept is discussed further below.

Third, we recommend that multiple metrics be considered to determine the EE PIM target incentive. We conclude that there is no single metric that can be used each year to identify the optimal target incentive, and that using multiple metrics will help balance multiple goals of the EE PIM. We, therefore, suggest using the following metrics in concert with one another to define an appropriate target incentive each year:

a) **Percent of eligible net benefits**

This metric reflects both the eligible costs and the eligible benefits of the energy efficiency programs. At the December 21 Open Meeting, the Commission provided a table of historical and proposed percent of eligible net benefits for the electric and gas EE PIM target incentives.

b) **Basis points**

This is a concrete metric that helps to put the Company EE PIM earnings in context relative to the other Company earnings. At the December 21 Open Meeting, the Commission provided a table of historical and proposed basis points for the electric and gas EE PIM target incentives.

c) **Return on avoided capital costs**

When the Company implements EE programs it avoids capital investments on which it would have otherwise earned a return. We recommend that the potential return on avoided capacity costs be used as a floor for determining the target incentives. If the target incentive were below this level, then the Company would experience a financial disincentive from successful energy efficiency programs. (Note that this financial disincentive is different from the financial disincentive associated with lost revenues, which are addressed with decoupling.) We believe that the EE PIM, in conjunction with other cost recovery mechanisms, should (a) eliminate all financial disincentives, and (b) provide the Company a modest positive incentive to design and implement successful EE programs. We present some examples of this metric in Tables 1 and 2 below.

⁴ See: The Rhode Island Division of Public Utilities, the Rhode Island Office of Energy Resources, and the Rhode Island Public Utility Commission, *Rhode Island Power Sector Transformation, Phase One Report to Governor Raimondo, November 2017*, page 16.

⁵ See: *Direct Testimony of Tim Woolf and Melissa Whited*, proceeding on the National Grid proposed tariff changes, Docket No. 4770, on behalf of the Division, April 6, 2018, pages 11-12. *Comments of the Rhode Island Office of Energy Resources*, Re: National Grid's Proposed Power Sector Transformation Vision and Implementation Plan, Docket No. 4780, page 1. *Direct Testimony of Ronald Binz*, Re: National Grid Application to Change Electric and Gas Distribution Revenue Requirements and Associated Rates, Docket No. 4780, on behalf of the New England Clean Energy Council and the Conservation Law Foundation, April 25, 2018, page 18.



d) **Comparison with other PIMs.**

National Grid is subject to a variety of PIMs. It is useful to compare the EE PIM target incentive level with those of the other PIMs (See Company's Response to Division Data Request 5-1). This helps to put the EE PIMs in context and provides a holistic view of all the incentives being earned by the Company.

3. Recommendations for PIM Target Incentives for 2022 EE Plan

Electric Portfolio

We recommend that the target incentive for the 2022 EE Plan be equal to 15% of the eligible net benefits, based on the following considerations:

- A lower target incentive is appropriate because the proposed eligible net benefits of the 2022 plan is substantially lower than the eligible net benefits for 2021. We note that to some degree, the year over year reduction in eligible net benefits is the result of the implementation of the 2021 Avoided Energy Supply Components (AESC) study.⁶ 15% of eligible net benefits is significantly lower than the 25% of eligible net benefits that the Company seeks and higher than the 7% of eligible net benefits that was the target incentive for the 2021 electric EE programs. Due to the effect of the implementation of the AESC 2021 Study results, 15% represents a reasonable balance between these two points.
- 15% of eligible net benefits results in a roughly \$3.3 million target incentive. This is significantly less than what the Company has earned in recent years and is appropriate because of the decreased level of eligible benefits.
- A target incentive of \$3.3 million provides the Company with roughly 70 basis points for achieving the target level of eligible net benefits. The ability to earn this many basis points *for a program of this size* should be sufficient to encourage the Company to plan for and implement successful EE programs.⁷
- A target incentive of \$3.3 million is a reasonable level, above the return on avoided capital costs. The Company will be eligible to earn roughly \$1.0 to \$1.17 million above the 2022 electric EE PIM floor of \$2.2 million or \$2.3 million, depending upon which plan, the Alternative Base Plan or the Provisional Plan, is implemented.

Table 1 presents a comparison of three target incentive metrics for the electric EE portfolio alongside the Company's requested incentive.

⁶ AESC 2021 Study: https://www.synapse-energy.com/sites/default/files/AESC%202021_20-068.pdf.

⁷ Pursuant to C.21.b of the Amended Settlement Agreement (ASA) in Docket 4770 the Division and National Grid have extended the ASA, and the Company continues to operate under the existing terms and conditions of the current Rate Plan.



Note that our recommendation for setting the target incentive at 15% of net eligible benefits is relevant for the 2022 EE Plan but might need to be modified for future EE plans if the eligible net benefits change significantly.

Table 1: Summary of 2022 EE Plan PIMs: Electric Portfolio

Metric	National Grid		Synapse	
	ABP	Provisional	ABP	Provisional
Target incentive (\$)	5,500,000	5,500,000	3,390,165	3,263,710
Percent of Eligible Net Benefits	24%	25%	15%	15%
Basis Points of Target Incentive	117	117	72	69
Return on Avoided Capital Costs (\$) ⁸	---	---	2,212,273	2,389,889

The National Grid Proposal is from the Commission's handout at the December 21 open meeting. The Division proposal uses the same information, plus the avoided capacity costs from the 2022 EE Plan.

Gas Portfolio

The gas portfolio eligible net benefits for the 2022 EE Plan are negative. This makes it difficult to use the eligible net benefits metric to set the target incentive. Therefore, we recommend that eligible net benefits not be used for setting the gas portfolio target incentive for 2022. Instead, we recommend choosing a target incentive level on other metrics, including basis points, return on avoided capacity, and comparison to previous years.

We recommend a target incentive of \$1 million, based on the following considerations:

- A target incentive of \$1 million is significantly less than the \$1.7 million requested by the Company and is significantly less than what the Company has earned in recent years.
- This target incentive will provide the Company the ability to earn 21 basis points. The ability to earn this many basis points *for a program of this size* should be sufficient to encourage the Company to plan for and implement successful gas EE programs.
- A target incentive of \$1 million is reasonable because it exceeds the return on avoided capital costs. The Company will be able to earn 0.22 million above our recommended 2022 gas EE PIM floor of \$0.78 million.

⁸ We assume the avoided electric capacity costs are equal to the sum of avoided transmission and distribution costs. For the ABP the sum of avoided transmission and distribution costs is 23,852,000, and for the Provisional Plan the sum is \$25,767,000 (from Attachment 5, Table of each plan). We then multiply these avoided capital costs by the Company's allowed rate of return of 9.275% to get the return on avoided capacity provided above.



Table 2 presents a comparison of three target incentive metrics for the gas EE portfolio alongside the Company's requested incentive.

Note that our recommendation for setting the target incentive at \$1 million is relevant for the 2022 EE Plan but might need to be modified for future EE plans if key elements of the EE programs change significantly.

Table 2: Summary of 2022 EE Plan PIMs: Gas Portfolio

Metric	National Grid	Synapse
Target incentive (\$)	1,700,000	1,000,000
Percent of Eligible Net Benefits	-292%	-172%
Basis Points of Target Incentive	34	21
Return on Avoided Capital Costs (\$) ⁹	---	784,340

The National Grid Proposal is from the Commission's handout at the December 21 Open Meeting. The Division proposal uses the same information, plus the avoided capital costs from the 2022 EE Plan

4. Allocation of Incentives Across the Three Customer Sectors

The Commission's Data Request 1-4 to the Division asks several questions about the design payout rates of the 2022 EE PIM, especially about whether the design payout rates should be changed from 2021 to 2022. The Division's response, in general, was that the design payout rates should change from 2020 to 2022 to reflect the changes to the costs and benefits of the EE programs. This section of this memo is intended to elaborate upon the Division's response to PUC 1-4 considering our recommendations above regarding the PIM target incentive framework.

It is important to set target incentives for each of the three customer sectors, Residential, Income-Eligible, and C&I; in addition to the target incentive for the entire portfolio (discussed in the previous sections). The Commission should consider revisiting sector target incentives for each new annual EE Plan.

The target incentives cannot be allocated across the customer sectors using eligible net benefits because these are negative for the Residential and Income Eligible sectors, and we are not aware of a method for allocating target incentives when some sectors have eligible benefits that are negative and others are positive. Therefore, we assert that allocating the incentives across sectors

⁹ We assume the avoided gas capacity costs are roughly half of the total gas avoided costs, based on information from the 2021 AESC indicating that roughly half of the avoided gas costs are for transportation and distribution costs and the remaining half is for gas commodity costs. For the 2022 gas plan, the avoided gas costs are 8,456,500, and half of these equals 4,228,250. We then multiply these costs by the Company's allowed rate of return of 9.275% to get the return on avoided capacity provided above.



using the percentage of eligible benefits for each sector is the next best approach for this allocation. While this approach does not reflect the eligible costs of the programs, we nonetheless think this is a reasonable option for making this allocation.

Table 3 presents the portions of eligible benefits that are experienced in the three customer sectors, for the Alternative Base Plan and the Provisional Plan of the electric portfolio. The percentages of eligible net benefits across the three customer sectors do not change much between the plans. Table 3 also presents our recommendation for how the target incentive should be allocated across the three sectors.

Table 3: Allocation of Target Incentives Across Customer Sectors: Electric Portfolio

Customer Sector	Alternative Base Plan		Provisional Plan		Synapse
	Eligible Benefits (\$)	Eligible Benefits (% of total)	Eligible Benefits (\$)	Eligible Benefits (% of total)	Allocation of Target Incentive
Non-Income-Eligible	32,168	26%	32,169	24%	26%
Income-Eligible	10,835	9%	10,833	8%	9%
C&I	80,703	65%	89,014	67%	65%

Table 4 presents the portions of eligible benefits that are experienced in the three customer sectors, for the gas portfolio. Table 4 also presents our recommendation for how the target incentive should be allocated across the three sectors, based upon the eligible benefits.

Table 4: Allocation of Target Incentives Across Customer Sectors: Gas Portfolio

Customer Sector	2022 EE Plan		Synapse
	Eligible Benefits (\$)	Eligible Benefits (% of total)	Allocation of Target Incentive
Non-Income-Eligible	11,306	33%	33%
Income-Eligible	4,670	14%	14%
C&I	18,514	54%	54%

Note that our recommendation for the allocation of the target incentive across customer sectors is relevant for the 2022 EE Plan but should be modified for future EE plans to reflect the percentage of sector eligible benefits of those plans.

Note that other factors could be considered in allocating the target incentives across customer sectors. For example, more of the incentive could be allocated to the Income-Eligible sector because it is more challenging to reach and serve those customers, while less of the incentive could be allocated to the C&I sector because those customers are easier to reach and to serve.



5. Important Caveat

Our recommendations above are based on the data that we have available at this time. Some of this data might need to be double-checked or updated before making final decisions.

