Raquel Webster
Senior Counsel

April 13, 2020

BY ELECTRONIC MAIL

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

RE: Docket 5023 - Energy Efficiency and Resource Management Council (EERMC) Proposed Energy Efficiency Savings Targets For 2021-2023
National Grid Comments

Dear Ms. Massaro:

On behalf of National Grid,[1] I have enclosed the Company's comments in response to EERMC's proposed Energy Efficiency Savings Targets for 2021-2023 in the above-referenced docket.

Thank you for your attention to this filing. If you have any questions, please contact me at 781-907-2121.

Sincerely,

Raquel J. Webster

cc: Docket 5023 Service List
Jon Hagopian, Esq.
John Bell, Division

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

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National Grid's Comments Regarding the Energy Efficiency Resource Management Council's Proposed Three-Year Savings Targets For 2021-2023

National Grid[1] submits these comments in response to the electric energy, electric passive demand reduction, electric active demand reduction, natural gas energy, delivered fuel energy, and CHP energy and demand reduction savings Targets (Targets) for 2021-2023 filed by the Energy Efficiency and Resource Management Council (EERMC).[2] For the reasons set forth herein, the Company does not support the current Targets as proposed by the EERMC.
As an initial matter, the Company would like to acknowledge and thank the team, including the EERMC, its Consultants, and Dunsky Energy Consulting (Dunsky) for their individual and collective contributions to the preparation of the Market Potential Study (also referred to as the Dunsky Potential Study or Study) that informed the Target setting efforts communicated in the Memorandum.

The Company's concerns stem from the application of the results of the Study as indicated in the Memorandum. Particularly, the EERMC's decision to apply the Study's Maximum Achievable Scenario represents a missed opportunity to advance the collective conversation around setting binding Goals and associated budgets that will ultimately be grounded in Least Cost Procurement's prudency and reliability requirements. In electing not to incorporate these constraints into their recommended Targets, the EERMC has given neither the Commission, the Company, nor other stakeholders any insight into their perspective on how the very real benefits associated with procuring energy efficiency resources should be balanced against the costs and other practical considerations that will need to be taken into account through the duration of the planning and goal-setting process.

In completing this Market Potential Study, Dunsky was explicitly charged with laying out three potential savings scenarios – a "Low" Scenario, a "Mid" Scenario and a "Maximum Achievable" Scenario. The savings Targets (and associated cost estimates) in each of these scenarios represent savings that are cost-effective and less than the cost of supply, while also providing insight into where savings may be possible. These scenarios vary based on the differential application of assumptions around customer incentive levels and program design as well as implementation-driven barrier reductions that result in varying levels of customer adoption for energy saving measures.[3] While the Market Potential Study results and analytical

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).
[2] RI PUC Docket 5023, EERMC's Proposed Three-Year Savings Targets for The Narragansett Electric Co. d/b/a National Grid's 2021-2023 Energy Efficiency Procurement Plan (Three-Year Plan) http://www.ripuc.ri.gov/eventsactions/docket/5023-EERMC-Targets-Yrs2021-2032Memo%20+%20Slides_2020_03_23.pdf
[3] The Final results presentation from the Market Potential Study are presented in Appendix A of the EERMC's Targets filing memorandum. Side-by-side comparisons of the savings from the three achievable scenarios appear on slides 65 (Electric EE), 66 (Gas EE), 69 (Active Demand Response), 39 (CHP). Cost estimates for the combined EE, CHP, and DR programs for the "Max" "Mid" and "Low" Scenarios appear on slide 68.

framework utilized to arrive at those results appear to be largely well-founded, the application of the Maximum Achievable Scenario results in the Target setting process fails to consider specific elements of the modeling approach used in the Study to arrive at the scenario results, including estimated budget requirements and assumed rate of growth in customer adoption of specific energy efficiency measures.

The Company believes that the Targets, as filed, did not sufficiently consider the prudency standards that will ultimately inform the binding savings goals that the Company will be held to meet through the completion of the energy efficiency planning process. As such, the Targets do not represent a reasonable basis from which savings goals can be derived in the plan development process based on the Company's experience with delivering on Targets in the past and observed and knowable go-forward constraints.

P.5 of the EERMC's Targets filing Memorandum states as follows:

> Further, to support consideration of the distinction between Targets and the goals associated with Three-Year EE Procurement Plans and Annual EE Plans, we acknowledge that while the 2021-2023 electric and natural gas savings Targets have been developed using the best information and data available at this time, additional relevant information is likely to be learned as time passes. Consequently, the annual savings Targets, including considerations such as their associated budgets as estimated during the planning process, should be reviewed each year during the development of the Annual Plans. Following this review, the plan goals should either be determined to remain identical to the Targets, **or revised in light of new information**, as described further in Section II of this memorandum and in the proposed Least Cost Procurement Standards for 2021-2023. The parties participating in the Annual Plan development should agree that revisions to the annual energy savings Targets should be based only on **clearly documented changes in cost-effective resource availability**, or **unforeseeable and/or unavoidable constraints** to their full pursuit and achievement.

EERMC Targets Filing, p. 5 (emphasis added).

The Company believes that the Dunsky Potential Study has already identified information, namely estimated budget requirements and significant measure scalability issues, that will lead to the goals in subsequent plans deviating from the Targets. While the energy efficiency resources identified by the Dunsky Potential Study in the Maximum Achievable Scenario are cost effective and less than the cost of supply, the Company does not believe they are achievable by the programs during the term of the next Three-Year EE Plan due to other significant factors associated with the Maximum Achievable Scenario and identified by the EERMC in its filing Memorandum. As such, the statement at p.5 of the Memorandum that states, "revisions to the annual energy savings Targets should be based only on clearly documented changes in cost-effective resource

availability, or unforeseeable and/or unavoidable constraints to their full pursuit and achievement." does not set a reasonable standard for adjusting Targets during the planning process and will lead to the Three-Year Plan Goals deviating from the Targets. In light of these factors, the Company wishes to highlight to the PUC several specific areas of concern with the Targets as filed.

1) The Targets do not appear to have considered the likely cost and surcharge impacts to customers of achieving these Targets, including recognition of the budget impacts resulting from the 100% incentive levels used in the Market Potential Study to arrive at the Maximum Achievable Scenario.
2) The Targets do not appear to fully account for the program design and implementation changes necessary to reduce market adoption barriers and increase customer adoption to the levels assumed in the Maximum Achievable Scenario.
3) The Targets make numerous assumptions of near-term growth rates in customer adoption of specific measures that do not appear to align with any reasonable standard of reliability and achievability, and which would need to be explored more deeply during the planning process.

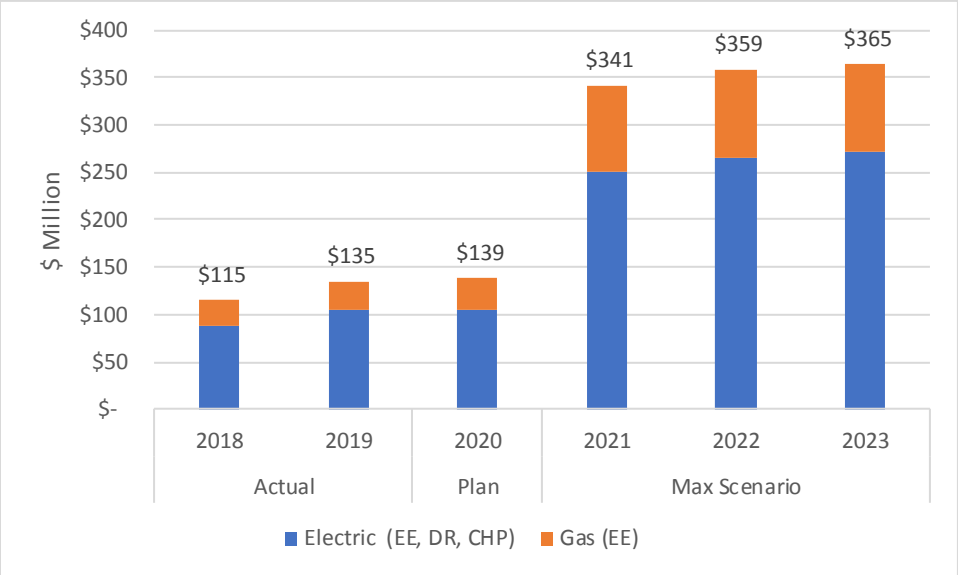
Each of these concerns is discussed in more detail in the following sections.

1) Required Budget and Surcharge Impacts of Proposed 2021 – 2023 Savings Targets

While the Market Potential Study included estimates of costs required to achieve Target savings in each scenario, the EERMC appears to have not considered these cost estimates in its Target setting process. As included in the Market Potential Study, the budget estimates associated with the Maximum Achievable Scenario would require a nearly 2.5X increase over 2020 plan budget levels in 2021.The Company does not see a scenario where the resulting required increases in customer EE surcharges could come close to achieving a prudency standard that includes a mindfulness of customer bill impacts. Specifically, in 2021, the first year of the Maximum Achievable Scenario results, the total budget estimated by Dunsky required to support those savings Targets was projected to be $341 million. This represents a 246% increase over the planned 2020 portfolio budget and higher increases in years 2022 and 2023 are projected (See Figure 1).[4]

[4] 2018, 2019, and 2020 budgets reflect energy efficiency plan expenditures less actual or planned performance incentive in order to align with the Maximum Scenario results.

Figure 1. Dunsky Estimated Annual Costs Associated with EERMC Filed Savings Targets Compared to Recent History[5]



The Consulting team to the EERMC correctly points out that these cost estimates do not represent a detailed analysis of opportunities for programmatic cost reductions, and they do assume that current customer incentives are increased to levels necessary to completely eliminate current customer contributed share of the costs required to implement those measures driving achievement of savings levels reached in the Maximum Achievable Scenario.[6] In reality, and assuming away other non-economic constraints that would limit near-term achievement of savings Targets, there would likely be opportunities to reduce specific incentive levels. There is no evidence, however, to suggest that any analysis of the scale and nature of these opportunities has been performed. Nor, in the absence of this analysis, is there any reason to believe that these potential cost reductions are enough to significantly alter the trajectory of the Market Potential Study's estimated cost analysis, or the fundamental imprudence of the resulting budget (and implied surcharge increases) that the Market Potential Study suggests would be required in order to support its Maximum Achievable scenario.

[5] 2019 actuals represent the most up to date information at the time of this letter's drafting, noting that the final 2019 Report is scheduled to be filed with the RI PUC in May 2020. 2018, 2019, 2020 values do not include actual or planned performance incentive earning to align with the Market Potential Study results.
[6] Refer to Slide 6 in Appendix A of the EERMC's Target Filing Memorandum for a summary of the EE Scenarios.

2) Undefined program design and implementation changes necessary to reduce market adoption barriers

Another of the key distinctions between the three "Achievable" Scenarios in the Market Potential Study, beyond differences in the incentive provided to customers as detailed in the previous section, is the assumed reduction in market barriers and resulting associated increases in customer adoption rates of specific measures and technologies. The modeling in the Low Achievable Scenario attempts to align market barriers and incentive levels with current circumstances. By modeling reductions in barrier levels above the current state of the programs, the customer adoption of measures in the Mid and Maximum Achievable Scenarios increases. However, the results of the Market Potential Study do not detail what those modeled barrier reductions represent, what steps should be taken to achieve the savings levels in the Maximum Achievable Scenario, or how quickly required changes to program designs and go-to-market strategies could be achieved. While the Market Potential Study is not intended to fully detail how the savings potential can be translated into actionable program strategies, in aligning even Year 1 Targets with the Maximum Achievable Scenario, these Targets imply that all assumed barrier reductions can and would be designed and planned across all measures in all market segments in the next several months, and implemented in the period of weeks between assumed approval of the 2021 Annual Plan and the ensuing period during which those savings would be achieved. Further, when the EERMC last utilized a recently-conducted potential study in setting Targets for the 2012 – 2014 period[7], that potential study (2010 KEMA study) similarly identified the technical, economic, and achievable savings potential within Rhode Island. With respect to the output of the 2010 KEMA study and how it was used to set Targets for the 2012 – 2014 period, the EERMC's Target filing letter states on p.3[8] [**emphasis added**]:

> "The Phase II Opportunity Report (Attachment B) identified an average annual technical potential of 3.4% of load, an economic potential of 2.9%, and an average annual **achievable potential of 2.7% of load for electric efficiency resources in the state**. As a result of this potential identified by KEMA's Phase II Opportunity Report and in accordance with R.I.G.L.§ 39-1-27.7.1(f), which refers to the EERMC's use of the report for this purpose, **the Council recommends annual efficiency savings Targets that will achieve a steady increase to this identified potential, recommending Targets in 2012, 2013, and 2014 that are 1.7%, 2.1%, and 2.5% of load**, respectively. These Targets are needed to build groundwork for the procurement and programmatic strategies

[7] Refer to RI PUC Docket 4202, where the EERMC's Target Filing for years 2012 – 2014 used results of a 2010 Market Potential Study conducted by KEMA Inc. "the Opportunity for Energy Efficiency that is Cheaper than Supply in Rhode Island- Phase II Report". http://www.ripuc.ri.gov/eventsactions/docket/4202page.html
[8] EERMC's Filing Letter with Recommended Targets in RI PUC Docket 4202.
http://www.ripuc.ri.gov/eventsactions/docket/4202-EERMC-EST-Filing(9-1-10).pdf

that will enable the investment in the amount of efficiency identified in Phase II Opportunity Report by 2015."

The Company notes that in the last instance of Target setting based upon a recently-completed potential study, the EERMC used discretion in setting Targets below the identified maximum achievable potential, in order to allow for the programs to "build groundwork." While this was a different era in the history of the energy efficiency programs, the present 2021 – 2023 Targets represent a time where many programs will likely also undergo significant change, as lighting opportunities diminish and more expensive and difficult to install measures are required to achieve higher market penetration rates in order to achieve savings. Additionally, as many of the other measures and market opportunities identified in the Market Potential Study have been offered for many years, through existing program designs that have repeatedly been recognized as nation-leading[9], these measures are presumably at a more mature stage of their development, implying reduced opportunities to dramatically increase near-term market adoption rates. This would be true in any macro-economic environment and is likely to be even more true in the early stages of what appears to be a developing, and potentially significant, economic downturn. By proposing that the 2021 – 2023 Targets be set at the Maximum Achievable level, the EERMC has made assumptions about the potential for and efficacy of program adjustments that are not supported by near term realities.

3) Measure Scalability and Near-Term Growth Rates

The Company additionally has concerns about the feasibility of achieving savings for some of the top measures contributing to savings in the first year of the Targets. The Dunsky team provided a detailed measure-level file output from the Market Potential Study to core study stakeholders, including representatives from the Company. Included in these outputs were underlying details that quantified the savings level for measure and market segments in each of the achievable scenarios.

While the format of the potential study results do not allow for like-on-like comparison of measures in each case, the Company has undertaken a preliminary analysis of the measure-market level results. The Company has identified several cases in which measures that are top anticipated contributors to savings in the Maximum Achievable Scenario would require significant and unrealistic scaling from planned 2020 savings levels in order to arrive at even the 2021 Targets.

[9] See ACEEE 2019 State Energy Efficiency Scorecard, where Rhode Island ranked third among states and achieved perfect 20 out of 20 scores on the "Utilities" metric for the sixth year in a row.
https://www.aceee.org/sites/default/files/pdf/state-sheet/2019/rhode-island.pdf

For example, in the Maximum Achievable Scenario, gas boilers are projected as the measure category with the highest savings in the commercial and industrial category. For this group of measures, annual savings are projected at 70,304 MMBtu. This compares to annual savings of 6,992 MMBtu in the 2020 Annual Energy Efficiency plan for a comparable set of measures, equating to a 1,006% year-on-year increase. In the electric savings, heat pumps are projected as the measure category with the fifth highest savings in the commercial and industrial category. For this group of measures, Maximum Achievable annual savings are projected at 6,340,041 kWh in 2021, compared to 35,784 kWh of annual savings for comparable measures planned in the upstream HVAC program for 2020. This represents a projected 17,718% year-on-year increase.

These examples illustrate that the composition of the Maximum Achievable Scenario Targets are likely unrealistic, relying upon in many cases heroic assumptions around measure growth rates within very short time periods. As one illustration of the likelihood of these growth rates being achievable, they can be contrasted to the recent history of consumer products or services that have exhibited dramatic growth. One such examples is the observed growth rate in the user base of the popular and free social media platform Facebook. Over the period from 2008 – 2019, the highest year-over-year growth rate in monthly active users during that period (from 2008 to 2009), was 176%.[10] With no cost to the user and no physical barriers to customer adoption, the growth rate of Facebook during a period of significant growth is still lower than some of the most influential measures contributing to the Maximum Achievable Scenario results presented as the Targets for the next three-year term. When considering the financial and physical barriers that must be overcome to achieve the Maximum Achievable Scenario Targets, the Company does not believe that the savings levels selected in the Targets represent a realistic or plausible base from which to derive binding goals in upcoming phases of the energy efficiency planning process.

4) Conclusion: Alternative Targets

In considering the EERMC's filing of proposed Targets, the Company respectfully requests that the Public Utilities Commission consider recent program history, likely costs to achieve, and the range of achievable scenarios identified by the Market Potential Study. [11] The Company appreciates the rigorous and methodical process that the EERMC undertook to contract with an outside consultancy to conduct a Market Potential Study that developed several bottom-up scenarios in order to inform the Target setting process, and the included estimated costs associated with achieving each scenario. However, the choice of the study's Maximum Achievable Scenario as the basis for filed Targets represents an unfortunate departure from past practice, and one that limits the value of these Targets as an input into the next steps in the

[10] Calculated from publicly accessible data available here: https://ourworldindata.org/rise-of-social-media
[11] "Low" and "Mid" Scenarios are shown in the Appendix to the EERMC's Targets Filing Memorandum

planning process. A more realistic set of Targets, grounded in the realities identified in this letter, represent a more constructive path to advancing the planning process and ultimately arriving at a set of binding savings goals and budgets that are better aligned with current market conditions and the requirements of Least Cost Procurement law and the LCP Standards governing Energy Efficiency.