

IN THE MATTER OF THE IMPLEMENTATION OF P.L. 2018, C. 17, THE NEW JERSEY CLEAN ENERGY ACT OF 2018, REGARDING THE ESTABLISHMENT OF ENERGY EFFICIENCY AND PEAK DEMAND REDUCTION PROGRAMS, DOCKET NO. QO19010040

IN THE MATTER OF THE IMPLEMENTATION OF P.L. 2018, C. 17, THE NEW JERSEY CLEAN ENERGY ACT OF 2018, REGARDING THE SECOND TRIENNIUM OF ENERGY EFFICIENCY AND PEAK DEMAND REDUCTION PROGRAMS, DOCKET NO. QO23030150

IN THE MATTER OF ELECTRIC PUBLIC UTILITIES AND GAS PUBLIC UTILITIES OFFERING ENERGY EFFICIENCY AND CONSERVATION PROGRAMS, INVESTING IN CLASS I RENEWABLE ENERGY RESOURCES AND OFFERING CLASS I RENEWABLE ENERGY PROGRAMS IN THEIR RESPECTIVE SERVICE TERRITORIES ON A REGULATED BASIS, PURSUANT TO N.J.S.A. 48:3-98.1 AND N.J.S.A. 48:3-87.9 – MINIMUM FILING REQUIREMENTS, DOCKET NO. QO17091004

### **STAFF STRAW PROPOSAL**

Staff herein proposes a framework for implementation of the second triennium (“Triennium 2”) of New Jersey’s energy efficiency (“EE”) programs implemented pursuant to the Clean Energy Act of 2018 (“CEA”). This framework will supersede the EE program framework for the first triennium (“Triennium 1”) of programs as adopted by the Board on June 10, 2020.<sup>1</sup>

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## **VII. EVALUATION, MEASUREMENT, AND VERIFICATION**

The CEA directs the Board to establish the process for evaluating, measuring, and verifying energy usage reductions and peak demand reductions by the public utilities.<sup>2</sup>

### **A. EM&V Administrative Structure and Working Group**

In the June 10, 2020 Order, the Board called for establishment of an EM&V Working Group (“EM&V WG”). Facilitated by the Statewide Evaluator (“SWE”), the EM&V WG brings together Staff, Rate Counsel, and the Utilities – with technical evaluation contractors, program implementation contractors, and representatives from the other EE working groups as appropriate to provide guidance and input on relevant issues – to collaborate to develop a standard, transparent, and replicable approach for evaluating, measuring, and verifying the results of EE and PDR programs implemented pursuant to the CEA. As part of this standard statewide approach, the State and Utilities are held to the same accountability standards through collaboratively developed plans, schedules, procedures, guidelines, and requirements for program administrators. The EM&V WG share associated data, as appropriate, consider best practices from other jurisdictions, and facilitate the necessary stakeholder processes related to the State’s EM&V policies. The EM&V WG is highly deliberative and advisory regarding key EM&V plans and

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<sup>1</sup> In re the Implementation of P.L. 2018, c. 17 Regarding the Establishment of Energy Efficiency and Peak Demand Reduction Programs, BPU Docket No. QO19010040 (Order dated June 10, 2020) (“June 10, 2020 Order”).

<sup>2</sup> N.J.S.A. 48:3-87.9(f)(1).

recommendations, and provides recommendations to Staff, with the Board retaining ultimate decision-making authority.

The EM&V WG establishes committees as needed on targeted issues. The current committees are the Technical Reference Manual (“TRM”) Committee, New Jersey Cost Test (“NJCT”) Committee, and Guidelines Committee, with each comprising various members of the EM&V WG.

The SWE has led the development of a proposed “New Jersey Energy Efficiency Triennium 2 Evaluation Framework” (provided as a separate document) that describes roles and responsibilities of the entities participating in the EM&V of Triennium 2 programs; and outlines the activities, products, and processes that guide the EM&V of the programs.

## **B. Evaluation Studies**

In the June 10, 2020 Order, the Board directed Staff to ensure that the EM&V WG developed and recommended a timeline for EM&V studies for each triennium. As described in more detail in the proposed Evaluation Framework referenced above, the SWE has developed an “Evaluation Studies List and Plan for Triennium 2” (provided as a separate document). The Evaluation Studies List will be updated annually based on changing priorities and new study and topic needs and in accordance with the Evaluation Framework. Details contained in the Evaluation Studies List and Plan may be updated more frequently based on new information and continuing discussions with Staff and the EM&V WG.

## **C. Goal Setting Process**

Also as described in more detail in the Evaluation Framework, certain studies on the Evaluation Studies List support the development of new Utility and State goals for each triennium.

## **D. Evaluating Energy Savings**

The CEA calls for the Board to require each electric and gas public utility to reduce the use of electricity or natural gas, as appropriate, within its territory by its customers below what would have otherwise been used.<sup>3</sup> Also, Section 87.9(c) provides that a utility may apply all energy savings attributable to programs available to its customers, including demand side management programs, other measures implemented by the public utility, non-utility programs, including those available under EE programs in existence on the date of enactment, building codes, and other efficiency standards in effect, to achieve the targets.

### ***i. Technical Reference Manual (“TRM”)***

The TRM is the compendium of algorithms and parameter assumptions that is used to calculate resource savings – including electricity, natural gas, and other resource savings – and energy and capacity and peak demand savings for technologies and measures supported by the BPU and Utilities. It is updated as needed to reflect the

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<sup>3</sup> N.J.S.A. 48:3-87.9(a).

addition of new measures, modifications to existing measures, changes to codes and standards, and the results of evaluation studies. The TRM should be used consistently statewide to assess program impacts and calculate energy and peak demand savings consistent with BPU guidance. In particular, the TRM is used to estimate energy savings in EE program filings, evaluate compliance in meeting the energy savings goals in the CEA, and determine achievement of performance targets for the triennium.

In its October 12, 2022 Order updating and revising the Triennium 1 Framework, the Board approved Staff's recommendation for the SWE, EM&V WG, and TRM Committee to support the development of a comprehensive update of the TRM, including input and feedback through a public stakeholder process, for the Board's consideration ahead of the commencement of Triennium 2 EE programs.<sup>4</sup>

As proposed in the Evaluation Framework, a Triennial TRM will be established prior to the start of each triennium, and an Annual TRM Update will be completed in the intervening years. The TRM Committee has developed a proposed Triennial TRM for use in Utility and State filings and reports ("New Jersey 2023 Triennial Technical Reference Manual" provided as a separate document).

**ii. Net-to-Gross ("NTG") Factors**

NTG ratios estimate the savings attributable to specific programs or measures, not including free riders or spillover effects.

For Triennium 1, based on the CEA's call for all attributable energy savings to be calculated, as well as Staff's recommendation that using net savings to measure and evaluate energy savings is appropriate, the Board adopted Staff's recommendation that, in (1) calculating energy reductions resulting from EE and PDR programs and (2) applying other permissible savings, State and utility program administrators should report energy savings in both gross and net savings, and use net savings for all aspects of program review, including compliance and cost-effectiveness testing.

While the Board accepted a NTG value of 1.0 for all programs in Triennium 1, the Board also adopted Staff's recommendation to establish accurate NTG ratios to ensure that program administrators are incented to design programs that maximize savings attributable to those programs and account for free ridership and spillover effects. Based on Board guidance, Staff and the EM&V WG coordinated a study for recommended NTG ratios to calculate net savings and inform planning for Triennium 2 programs ("NTG study"). This NTG study, "New Jersey Recommended Net-to-Gross Ratios Overall Report," submitted by NMR Group, Inc., is available on the NJCEP website.<sup>5</sup>

The proposed Triennial TRM includes an appendix for NTG factors based on the NTG study. The proposed Triennial TRM also includes appendices on realization rates, in-

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<sup>4</sup> In re the Implementation of L. 2018, c. 17 Regarding the Establishment of Energy Efficiency and Peak Demand Reduction Programs, BPU Docket No. QO19010040 (Order dated October 12, 2022).

<sup>5</sup> The NTG study is available on the "Program Evaluations, Market Analysis and TRMs" page in the "Technical Reference Manuals" section at <https://www.njcleanenergy.com/main/public-reports-and-library/market-analysis-protocols/market-analysis-baseline-studies/market-an>

service rates, and other topics.

Staff continues to propose for Triennium 2 that, in (1) calculating energy reductions resulting from EE and PDR programs and (2) applying other permissible energy savings, State and utility program administrators report energy savings in both gross and net savings, and use net savings for all aspects of program review, including compliance and cost-effectiveness testing.

#### **E. Benefit-Cost Analyses ("BCA") / Cost-Effectiveness Testing**

Benefit-cost analyses of EE programs calculate the benefits (including avoided energy costs and various non-energy benefits) and costs (including incremental measure costs and program administration costs) of the programs.

The CEA at N.J.S.A. 48:3-87.9(d)(2) states that:

The energy efficiency programs and peak demand reduction programs shall have a benefit-to-cost ratio greater than or equal to 1.0 at the portfolio level, considering both economic and environmental factors, and shall be subject to review during the stakeholder process established by the board pursuant to subsection f. of this section. The methodology, assumptions, and data used to perform the benefit-to-cost analysis shall be based upon publicly available sources and shall be subject to stakeholder review and comment. A program may have a benefit-to-cost ratio of less than 1.0 but may be appropriate to include within the portfolio if implementation of the program is in the public interest, including, but not limited to, benefitting low-income customers or promoting emerging energy efficiency technologies.

##### ***i. New Jersey Cost Test ("NJCT")***

Staff notes the CEA's directive for EE and PDR programs to have a benefit-to-cost ratio greater than or equal to 1.0 at the portfolio level and the CEA's requirement that the test consider both economic and environmental factors.

Prior to Triennium 1, the BPU based its benefit-cost analyses ("BCA") of EE programs on the California Standard Practice Manual ("CSPM"), which defines five main cost tests<sup>6</sup> for the BCA to align with the various perspectives of key stakeholders.

For Triennium 1, the Board adopted a primary cost-effectiveness test for the evaluation of EE and PDR programs, which is called the interim New Jersey Cost Test. The Board also required program planners and administrators to continue to report the results of all five CSPM tests for information purposes during Triennium 1. When proposing the interim NJCT, Staff recognized that it might not include the full range of possible non-energy impact benefits and costs that could be included in a primary test.

The Board directed Staff to ensure that the EM&V WG evaluate relevant non-energy benefits and costs for inclusion in the NJCT, recommend third-party studies to further

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<sup>6</sup> These cost tests are the Participant Cost Test, Program Administrator Cost Test or Utility Test, Ratepayer Impact Measure Test, Total Resource Cost Test, and Societal Cost Test.

evaluate and quantify non-energy impacts as needed, and recommend on an ongoing basis additional non-energy benefits and costs to consider including in future updates to the NJCT.

Specifically regarding avoided costs, the Board directed Staff to ensure that the EM&V WG develop and recommend an approach to estimating avoided costs on a statewide basis, using Utility-specific inputs where appropriate, for consideration by Staff.

For Triennium 2 and beyond, as described in the proposed Evaluation Framework, Staff agrees with the SWE's recommendation that the NJCT be updated prior to each triennium through stakeholder input and Board approval.

During Triennium 1, the NJCT Committee evaluated and discussed potential priority updates to the interim NJCT. For Triennium 2, the SWE provides a memo outlining SWE's recommended updates to the NJCT, including 22 recommendations for updates to the design, content, methodologies, and sources used to calculate values contained in the NJCT. The "NJCT Recommendations Summary" is provided as a separate document. As part of this summary document, SWE recommended a review of Utility submissions of avoided cost values and their derivation to illustrate the values associated with the methodologies contained in SWE's NJCT recommendations. The Utilities provided a spreadsheet of "NJ Sample Avoided Costs – April 2023" toward this end, which is provided separately. Staff is particularly interested in stakeholder feedback on avoided costs methodologies, including whether Staff should consider an alternative avoided costs approach in which an adder would stand in place of avoided costs that are more difficult to quantify with certainty.

Also during Triennium 1, SWE provided a memo entitled "Non-Energy Benefits / Non-Energy Impacts (NEBs/NEIs): Analysis of Alternatives for Updates for the State of New Jersey," which is available on the NJCEP website.<sup>7</sup>

In addition, during Triennium 1, the EM&V WG through the Rutgers Center for Green Building ("RCGB") coordinated a study by DNV Energy Insights USA Inc. about incremental measure costs ("IMCs"), which represent the difference in price to install EE equipment compared to baseline equipment. The IMC study resulted in recommended IMCs for all measures in the proposed Triennial TRM and prioritized measures for future primary research. As noted in the "NJCT Recommendations Summary," the NJCT Committee recommends incorporation of the IMC values into the NJCT. The recommended IMC values and an accompanying memo are available on the NJCEP website, with the full report forthcoming.<sup>8</sup>

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<sup>7</sup> The NEBs memo is available on the "Program Evaluations, Market Analysis and TRMs" page in the "Cost Effectiveness Analysis & Avoided Cost" section at <https://www.njcleanenergy.com/main/public-reports-and-library/market-analysis-protocols/market-analysis-baseline-studies/market-an>

<sup>8</sup> The IMC values and memo are available on the "Program Evaluations, Market Analysis and TRMs" page in the "Cost Effectiveness Analysis & Avoided Cost" section at [https://www.njcleanenergy.com/main/public-reports-and-library/market-analysis-protocols/market-an](https://www.njcleanenergy.com/main/public-reports-and-library/market-analysis-protocols/market-analysis-baseline-studies/market-an)

## X. STAKEHOLDER GROUPS

### Utility Working Group (“UWG”)

Staff plans on utilizing the ongoing Utility Working Group (which is comprised of members from each of the Utilities and Rate Counsel) meetings to further refine program design details. There will also be ongoing stakeholder opportunities for the public to provide feedback coordinated by Staff.

Staff also proposes continuing to utilize the following working groups and committees.

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***Evaluation, Measurement, and Verification Working Group (“EM&V WG”):*** As described in Section VII(A) above, as facilitated by the SWE, the EM&V WG brings together Staff, the State program administrator, Rate Counsel, and the Utilities – with technical evaluation contractors, program implementation contractors, and representatives from the other EE working groups as appropriate to provide guidance and input on relevant issues – to collaborate to develop a standard, transparent, and replicable approach for evaluating, measuring, and verifying the results of EE and PDR programs implemented pursuant to the CEA. As part of this standard statewide approach, the State and Utilities are held to the same accountability standards through collaboratively developed plans, schedules, procedures, guidelines, and requirements for program administrators. The EM&V WG share associated data, as appropriate, consider best practices from other jurisdictions, and facilitate the necessary stakeholder processes related to the State’s EM&V policies. The EM&V WG is highly deliberative and advisory regarding key EM&V plans and recommendations, and provides recommendations to Staff, with the Board retaining ultimate decision-making authority.

The EM&V WG establishes committees as needed on targeted issues. The current committees are the TRM Committee, NJCT Committee, and Guidelines Committee, with each comprising various members of the EM&V WG. Please see Sections VII(D) and VII(E) above for more detail.