

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning
Energy Efficiency Rolling Portfolios, Policies,
Programs, Evaluation, and Related Issues.

Rulemaking 13-11-005
(Filed November 14, 2013)

**OPENING COMMENTS OF
THE CALIFORNIA EFFICIENCY + DEMAND MANAGEMENT COUNCIL ON
ADMINISTRATIVE LAW JUDGE'S RULING INVITING COMMENTS ON DRAFT
REVISED NORMALIZED METERED ENERGY CONSUMPTION RULEBOOK**

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Joseph Desmond
Executive Director
California Efficiency + Demand
Management Council
849 E. Stanley Blvd #264
Livermore, CA 94550
Telephone: 925-785-2878
E-mail: policy@cedmc.org

Luke Tougas
Consultant for
California Efficiency + Demand
Management Council
849 E. Stanley Blvd #264
Livermore, CA 94550
Telephone: 510-326-1931
E-mail: l.tougas@cleanenergyresearch.com

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The California Efficiency + Demand Management Council¹ (“The Council”) appreciates the opportunity to submit these Opening Comments on the Administrative Law Judge’s Ruling Inviting Comment on Draft Revised Normalized Metered Energy Consumption Rulebook, issued in this proceeding on November 17, 2023 (“ALJ Ruling”). These Opening Comments have been timely filed and served pursuant to the Commission’s Rules of Practice and Procedure and the instructions contained in the ALJ Ruling. Attachment 1 to the ALJ Ruling is the Draft Normalized Metered Energy Consumption (“NMEC”) Rulebook (“Draft Rulebook”). On November 2023, ALJ Kao issued an E-mail which extended Opening Comments to February 29, 2024 and Reply Comments to March 15, 2024.

I. BACKGROUND

The Council is a statewide trade association of non-utility businesses that provide energy efficiency, demand response, and data analytics services and products in California. Our member companies employ many thousands of Californians throughout the state. They include energy efficiency (“EE”), demand response (“DR”), and distributed energy resources (“DER”) service providers, implementation and evaluation experts, energy service companies, engineering and architecture firms, contractors, financing experts, workforce training entities, and energy efficient product manufacturers. The Council’s mission is to support appropriate EE and DR policies, programs, and technologies to create sustainable jobs, long-term economic growth, stable and reasonably priced energy infrastructures, and environmental improvement.

¹ The views expressed by the California Efficiency + Demand Management Council are not necessarily those of its individual members.

II. SUMMARY OF THE COUNCIL'S POSITION

The Council has five (5) main positions, four (4) of which are described below, and one (1) that is described in more detail in response to Question Number 2.

- Some proposed changes in the Draft Rulebook appear to be policy changes that should not be included within a document of technical updates.
- The Commission should wait to update the NMEC Rulebook.
- The Commission should keep NMEC simple.
- The Commission should ensure that any review process is predictable and transparent.
- The Council respectfully disagrees that “below-code” savings achieved through Normal Replacement measures under an NMEC project constitute free ridership. The new proposal within the Draft Rulebook is counter to the provisions of Assembly Bill (“AB”) 802, and affirmed in Resolution E-4818, that estimates savings using NMEC should be based on all estimated energy savings associated with an NMEC project (not just savings that exceed code).

The Draft Rulebook should not contain policy changes. As an initial point, the Council would like to express its concern that some of the proposed changes to the Draft Rulebook border on, or appear to be, policy changes rather than technical changes. For example, Section 1 of the Draft Rulebook specifies that “This Rulebook *reflects* existing CPUC policies to either Site-level NMEC, Population-level NMEC, or both [emphasis added].”² If the Draft Rulebook is intended to make policy changes, it should be approved by Commission Decision rather than Ruling.

The Council highlights the most problematic policy changes below. One example of such a policy change is in Program Level Requirements Sections II.1.D (Site-Level NMEC – Payments and Incentives) which states that:

Programs that use NMEC for savings determination and incentive payments should incorporate a pay-for-performance element that not only provides adequate motivation to pursue metered savings, but also provides such motivation to the market actors that have access to performance information and the ability to improve or affect performance as it evolves.³

² Draft Rulebook, at p. 4.

³ *Id.*, at p. 11.

Statements like these discourage the use of NMEC and have been used in solicitations to enforce payment structures that can create multi-year negative cash-flows for third-party implementers and place the entire risk on the implementers for projects. Incentive structures are part of the program design and do not belong in a technical document whose focus is on a savings calculation methodology.

Another example is in Section I.4 (Site-Level NMEC versus Custom Projects) which requires NMEC projects to meet but not exceed applicable building codes and standards, but it also states that “[i]n cases where there is no applicable code or standard, the project must exceed an Industry Standard Practice efficiency standard.”⁴ This conflicts with the information in Table 1 of the Draft Rulebook which requires that site-level NMEC projects be at least as efficient as applicable code or “if no code applicable, then at least equal to Industry Standard Practice.”⁵ Additionally, this statement appears to conflict with the AB 802 which only references Title 24 Code and not Industry Standard Practice.⁶ The inclusion of Industry Standard Practice is an additional policy outside of the law and should be stricken. These inconsistencies must be remedied prior to the issuance of a Final Rulebook.

The Commission should wait before making updates. The Commission should also consider the broader context of this effort to ensure an efficient process and account for the most current information possible. To that end, before proposing revisions to the Draft Rulebook, more evaluation results (both process and impact) are needed to inform additional changes to the rulebook. This will be important to understand the cost-effectiveness of these programs, and the level of participation as we suspect that the programs are not cost-effective as they are currently run, and are too complicated for customers to participate in. Given the Commission's goals to increase participation in Site-Level and Population NMEC, it would be reasonable to conduct a process evaluation to identify the pain points and determine how to overcome them.

NMEC should be kept simple. As a general principle, the Commission should avoid overburdening the Site-Level NMEC process by adding unnecessary complexity, when one of its

⁴ Draft Rulebook, at p. 6.

⁵ *Id.*, at p. 7.

⁶ “Those programs shall include energy usage reductions resulting from the adoption of a measure or installation of equipment required for modifications to existing buildings to bring them into conformity with, or exceed, the requirements of Title 24 of the California Code of Regulations, as well as operational, behavioral, and retrocommissioning activities reasonably expected to produce multiyear savings.”

strengths is its comparative simplicity. It would be counterproductive and cause delays if additional upfront requirements are added to the NMEC process which will increase customer costs, thereby depressing participation. This would be an especially detrimental outcome given the Commission's apparent readiness to utilize NMEC more broadly.⁷ The Commission should avoid the temptation to seek perfection when doing so risks a negative impact on NMEC.

Processes must be predictable and transparent. The Council also recommends that, per the recommendation made by the Common Spark workgroup, there should be predictable and transparent timelines for the modified Custom Project Review ("CPR") process in the NMEC Working Group Draft Report, dated April 2022 ("NMEC Working Group Draft Report"). Advisory reviews in particular have been treated inconsistently by different investor-owned utilities ("IOUs"). This often results in having no or vague timelines which minimize the opportunity to move projects forward with any sense of consistency and further risk stranding even more savings. The Commission should consider that when a customer participates in a project, it imposes a burden, so at a minimum, it would be extremely helpful to have a specific timeframe that should be followed.

Finally, from a process standpoint, it is not clear what happens to party recommendations that the Commission decides not to investigate. The Commission should provide guidance on whether rejected proposals would potentially be considered in the future.

III. THE COUNCIL'S RESPONSES TO QUESTIONS IN THE ALJ RULING

1. **What (if anything) is missing from the draft revised Rulebook? What are the most important elements to add or modify? Please be specific and provide your rationale for each recommended addition or modification.**

The Draft Rulebook lacks specificity with regard to how the rules governing Custom projects apply. Any discussion on how Custom rules do not apply is less helpful because it risks creating doubt over whether there may be an omission in the NMEC Rulebook. Instead, the Draft Rulebook should be drafted in such a way that it clearly specifies what rules that apply to NMEC projects only. For example, on page 6, Section 4 of the Draft Rulebook provides

⁷ See, Section 6.2 of D.23-06-055, which requires residential and commercial resource acquisition programs "to use NMEC, randomized control trials, strategic energy management, or another meter-based method, as appropriate, to measure and report energy savings, unless using these methods is not feasible and/or cost-effective."

exceptions to custom rules that are in place for Site-level NMEC. Instead, the Draft Rulebook should simply specify what is required of Site-level NMEC projects.

Draft Rulebook Section I.4 states, “NMEC projects are required to meet but not exceed applicable building codes and standards. In cases where there is no applicable code or standard, the project must exceed an Industry Standard Practice efficiency standard.”⁸ However, Table 1 contradicts this requirement. As such, this exception is unclear and should be clarified.⁹ The Council recommends that the Draft Rulebook be revised to delete all reference to ISP.

In addition, at the beginning of NMEC there was a custom platform; there was a component to weigh savings for Efficiency Savings & Performance Incentive (“ESPI”) which focused on custom.¹⁰ This is a policy decision and outside of the Energy Division’s purview.

The Draft Rulebook should create greater distinction and separation between the Site-Level and CPR process. The Draft Rulebook currently treats Site-Level as part of the CPR process, but both processes take a different approach that warrants separation. For example, the current CPR rules apply significantly more upfront scrutiny compared to the Site-Level process. Site-Level projects come with more performance risk to customers so they should not also be burdened with the comparatively rigorous upfront requirements of the CPR process.

2. **Normal replacement measures: NMEC counts savings from an existing conditions baseline, and therefore often includes savings associated with bringing equipment into compliance with applicable building or appliance code. These ‘below code’ savings constitute free ridership for “Normal replacement” measures, where normal replace is defined by Resolution E-4818 as follows:**

“The Normal Replacement (NR) type includes measures installations where the existing equipment has failed or no longer meets current or anticipated needs or is being replaced due to normal remodeling or upgrading or replacement activities that are expected and undertaken in the normal course of life or business.”

The draft revised Rulebook requires adjustments to project savings claims to avoid claiming savings that would have occurred without the program, such as for normal replacement measures described above. Is such an adjustment the optimal way to avoid free ridership claims? If not, what is the optimal way the Rulebook could ensure below-code savings for normal replacement measures are treated appropriately in NMEC project savings claims, and why?

⁸ Draft Rulebook, at p. 6.

⁹ *Id.*, at p. 7.

¹⁰ D.16-08-019, at p. 88.

The Council respectfully disagrees with the question's premise that savings achieved through Normal Replacement measures under an NMEC project constitutes free ridership. This proposed revision is a significant policy issue that should not be addressed through a Staff-level effort to revise the NMEC Guidelines. Furthermore, this proposal is counter to the provisions of AB 802, and affirmed in Resolution E-4818, that estimated savings using NMEC should be based on all estimated energy savings associated with an NMEC project. Section 6 of AB 802 clearly authorizes the following:

[E]lectrical corporations or gas corporations to provide financial incentives, rebates, technical assistance, and support to their customers to increase the energy efficiency of existing buildings based on *all* estimated energy savings and energy usage reductions, taking into consideration the overall reduction in normalized metered energy consumption as a measure of energy savings. *Those programs shall include energy usage reductions resulting from the adoption of a measure or installation of equipment required for modifications to existing buildings to bring them into conformity with, or exceed, the requirements of Title 24 of the California Code of Regulations, as well as operational, behavioral, and retrocommissioning activities reasonably expected to produce multiyear savings.* [emphasis added]

The essence of AB 802 is that NMEC savings are counted against existing conditions and the NMEC Guidelines should continue to reflect this. Maintaining this standard is critical because the NMEC project is often the catalyst for any equipment replacement. Furthermore, excluding savings from Normal Replacement measures will reduce or even eliminate any motivation for implementers to capture all of the stranded savings that AB 802 was intended to deliver and could discourage projects.

3. Custom projects vs. site-level NMEC: The draft revised Rulebook confirms that custom rules apply to NMEC except where specifically noted otherwise in the Rulebook. Are there additional exceptions to custom rules that should be made for NMEC? Please describe and provide your rationale for any recommended exceptions.

The Council is concerned by the open-ended statement that Custom rules apply to Site-Level NMEC when not otherwise noted in the Draft Rulebook.¹¹ This creates a risk of future changes to Custom rules that could have negative and unintended outcomes for Site-Level NMEC. The only rules that apply to Site-Level should specifically apply to Site-Level NMEC. For example, these custom rules should not be applied to Site-Level NMEC:

¹¹ Draft Rulebook, at p. 7.

1. Demonstration of influence should accommodate a customer's decision to participate in a pay for performance approach.
2. Prescreening of a building's sustainability should be optional.
3. Rigorous savings estimations should not be required prior to installation.
4. Implementation of no-cost measures prior to application approval should not be prohibited.

To the extent any custom rules are explicitly adopted for NMEC, the guidance for customer review should reflect the same language to ensure consistency and clarity. Reading the Draft Rulebook, many conclusions in the NMEC Working Group Draft Report were not included. At their core, the suggestions made by the Working Group serve to further streamline NMEC's implementation applications in line with AB 802. Although the NMEC Working Group Draft Report is not a consensus document, topics considered by the working group are worthy of further discussion for inclusion. While the Draft Rulebook revisions do include some suggestions made by the Working Group, opening the door to more conversation on proposed strategies stands to enhance the NMEC offering while providing implementers with tools to successfully implement projects at a diverse range of sites, including those within disadvantaged communities ("DAC") and hard-to-reach ("HTR") communities.

Section I.4 of the Draft Rulebook (Site-level NMEC versus Custom Projects) does provide context for differences between NMEC and Custom Projects, however the Council urges that the Commission address key elements from the NMEC Working Group Draft Report. The elements that warrant further discussion are:

- NMEC Working Group Draft Report Issue #2: Permissible Project Types.¹² Rather than exclude potential projects, the Council proposes that language should be added to the Draft Rulebook that states: "Buildings that contain processes are eligible if the process can be excluded by a submeter. Savings resulting from industrial process measures would not be counted towards incentive and energy savings would be claimed as indirect savings."
- NMEC Working Group Draft Report Issue #3: Project Approval Timelines.¹³ The Council has found that a key to project success is being able to quickly move behavioral,

¹² NMEC Working Group Draft Report, at pp. 9-14.

¹³ *Id.*, at pp. 14-16.

retrocommissioning, and operational (“BRO”)/operations and maintenance (“O&M”) measures forward with customers, to capitalize on their motivation to reduce energy usage. If review is to take place, having estimated timelines to share with customers is a huge asset to ensure that they hold on potential measures until approved. When the review process has an undetermined timeline, it can be a losing conversation with the customer to request that they continue to have patience and potentially extinguish their desire to participate in future projects. The Council proposes that the Common Spark guidelines are further reviewed for adoption on review timeline.

4. **Program influence: The draft revised Rulebook requires program influence documentation for site-level NMEC similar to custom projects, and for the Accelerated Replacement measure type. However, unlike custom project requirements, the Rulebook does not require demonstration of continued equipment viability.**

a. **Is this a reasonable approach to ensuring appropriate savings claim?**

No, because it adds additional time and effort up front. NMEC is about streamlining upfront processes for customers to avoid creating speed bumps. This is also contrary to a pay for performance model. In addition, financial influence for low-cost BRO measures is often insignificant whereas technical influence is essential. Unlike custom projects, implementation of low and no-cost measures prior to project approval is not an indication of a lack of program influence and should be permitted within NMEC guidelines. For example, implementing a simple setpoint change identified by the program implementor during project development may impact customer finances via energy bills far more than any incentive payment.

b. **Please provide suggestions for practical and feasible ways the CPUC can confirm projects are accelerated (for projects with measures that are not behavioral, retrocommissioning and operational).**

This question is not relevant because, as the Council explained in its response to Question 2, AB 802 specified that NMEC energy savings must be measured against existing conditions, so the Commission should not disqualify savings because doing so is inconsistent with the law. Normal replacement is not relevant therefore, neither is program influence. The Council also notes that Resolution E-4952, Section 5.5 already requires that a 0.95 Net-to-Gross multiplier be

applied to the existing conditions baseline. This value was selected to comply with the AB 802 Law to “count all the savings” when the 5% spillover established in D.12-11-015 is added.¹⁴

Like the proposal to introduce Normal Replacement into the NMEC process, this will also add additional and unnecessary complexity to the NMEC project which will partially defeat the purpose of the approach. Also, customers usually install projects in phases, rather than all at once; consequently, this will extend the time frame during which time you would collect data.

NMEC projects often require multiple measures on different systems to achieve the required level of savings to be able to see the savings within the natural variation in the meter data. Additionally, this is not a typical installation pattern for many customers. They often will only do single projects at once. So, a project that follows NMEC already has a natural tendency toward a more likely than not influential component.

Also, it is unclear whether the program influence requirements that were adopted in Resolution E-5115 have been effective. Its preponderance of evidence standard is subjective and often serves to cause confusion and slow down progress at the PA stage. No evaluations have been performed to determine their effectiveness. So, even if it was appropriate to require program influence documentation, it may or may not be conclusive.

5. Fractional Savings Uncertainty (FSU) improvements: The draft revised Rulebook clarifies that meeting FSU thresholds is sufficient to meet modeling goodness-of-fit eligibility criteria. At the same time, FSU for hourly models is a continuing challenge for gas and kilowatt (kW) models. Please provide feedback and recommendations on the proposed use of FSU to assess model goodness-of-fit.

The Council supports this approach but there are issues with ASHRAE’s FSU approach. A Lawrence Berkeley National Laboratory (“LBNL”) study has shown it to be unreliable the shorter the time interval of the data (such as hourly) used in the models, typically underestimating uncertainty – which would enable some poor models to pass this criterion.¹⁵

¹⁴ Resolution E-4952, at p. A-45.

¹⁵ LBNL – “Evaluation of Methods to Assess the Uncertainty in Estimated Energy Savings” which can be found here: <https://eta.lbl.gov/publications/evaluation-methods-assess-uncertainty>

6. **Timing of baseline model documentation: A key aspect of NMEC is that baseline model specification is fixed prior to the performance period. This ensures that models are designed for accuracy and not influenced by the amount of performance period savings they yield. Currently documentation regarding baseline models is not always made available to the CPUC until after the performance period.**

Provide any recommendation(s) regarding how final baseline models can be verified by the CPUC to have been fixed by a date that is prior to the performance period. For example, would a time-stamped document uploaded to the Custom Measure and Project Archive be appropriate and feasible?

It is critical to have baseline information to support project and program evaluation and there are legitimate scenarios when baselines need to be adjusted, but this should not be a hard line. There is existing documentation which can be used to evidence original vs. revised baselines in these scenarios. It is not necessarily a problem that models are updated in the course of an application process - it does not mean that gaming is occurring. There can be a significant delay before an application is signed and there is also an 18-month limit on the installation period. So, between these two factors, a lot can change during this time period.

IV. CONCLUSION

The Council appreciates the opportunity to provide these Opening Comments.

Respectfully submitted,

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/s/ JOSEPH DESMOND
Joseph Desmond
Executive Director
California Efficiency + Demand
Management Council
849 E. Stanley Blvd #294
Livermore, CA 94550
Telephone: (925) 785-2878
E-mail: policy@cedmc.org