

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-4939

October 11, 2018

R E S O L U T I O N

Resolution E-4939. Addressing Track 2 Working Group related energy efficiency issues pursuant to D.16-08-019 and Resolution E-4818.

PROPOSED OUTCOME:

- Adopts the proposed Track 2 Working Group (T2WG) standard practice baseline definition and baseline selection process with modifications and clarifications (Effective January 1, 2019).
- Adopts the T2WG proposal to use a single preponderance of evidence (POE) requirement process for all accelerated-replacement measure types with clarifications (Effective immediately).
- Task 4 Adopts a T2WG proposal to identify a small-sized business customer (Effective immediately).

SAFETY CONSIDERATIONS:

- There is no impact on safety.

ESTIMATED COST:

- Although some costs may increase as a result of this resolution potential cost increases are unknown at this time.

By Energy Division's own motion in Compliance with Resolution E-4818.

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1. SUMMARY

This Resolution adopts modifications and clarifications to the rules governing energy efficiency project review, primarily relating to custom project review. In response to CPUC Decision (D.) 16-08-019 and Resolution E-4818, the Track 2 Working Group (T2WG) developed information and recommendations to improve energy efficiency project review (T2WG Report).¹ This resolution is in response to their report.

a.) Task 1- The policy for how to determine the standard practice baseline: adopts the re-naming of the “code baseline” to the “standard practice baseline” and adopts the Proposed Standard Practice Baseline Definition shown in section 4.2.1.1 of the T2WG Report with modifications and clarifications. Effective January 1, 2019.

b.) Task 3- The qualification standards and documentation requirements to identify repair eligible (currently broken and not a functional equipment) and repair indefinitely (equipment that is currently functional but has a history of repairs when broken) measure types: The Resolution re-affirms Commission’s past direction in E-4818 to allow normal replacement for repair eligible equipment, clarifies that repair indefinitely category is allowed accelerated replacement. This resolution adopts the use of a single preponderance of evidence (POE) requirement determination process for all accelerated-replacement measure types with clarifications, reiterating that existing equipment age is not a limitation to qualifying for the accelerated-replacement measure type,² and that the default

¹ Track 2 Working Group Final Report on Tasks 1-4, September 7, 2017. This report and other Track 2 Working Group documents are found at <http://www.cpuc.ca.gov/General.aspx?id=6442457214>

² The accelerated replacement category includes replacements of existing equipment with nominally higher efficiency equipment and where the preponderance of evidence supports that a) the existing equipment would have remained in operation for at least the remaining life of the existing equipment, performing its

Database for Energy Efficient Resources (DEER) remaining useful life values may be replaced, thereby eliminating the need for the separate considerations or processes for the repair-eligible and repair-indefinitely measure types. Effective immediately.

c.) Task 4- Qualification standards and documentation requirements for a small-sized business customer: adopts one of the Track 2 Working Group proposals to identify a small-sized business customer, consistent with past CPUC direction in this area, based on either energy usage history or customer self-certification as a California microbusiness. Effective immediately.

Due to its complexity, the fourth issue, identified as “Task 2- Tiered Preponderance of Evidence requirements” in the Track 2 Working Group Report, will be addressed in a future resolution.

2. BACKGROUND

2.1 Overview of CPUC Decision 16-08-019 and Resolution E-4818

This Resolution is a result of direction in D. 16-08-019, issued on August 18, 2016 within the Energy Efficiency Rulemaking 13-11-005 and Resolution E-4818 issued on March 2, 2017. This Resolution adopts rule changes based on findings and recommendations resulting from working group activities, organized in accordance with D. 16-08-019. The working groups were assigned the task of presenting recommendations to address baseline treatment details that could not be fully addressed in D. 16-08-019, due to insufficient record and varying stakeholder opinion available at that time.

On October 30, 2015 via an Assigned Commissioner and Administrative Law Judge (ALJ) Ruling and Amended Scoping Memorandum Regarding

current service requirement and b) the energy efficiency program activity induced or accelerated the equipment replacement. The RUL must be at least one year to qualify as Accelerated Replacement.

Implementation of Energy Efficiency “Rolling Portfolios” (Amended Scoping Memo) of Rulemaking 13-11-005 called for the “Interpretation and implementation of Assembly Bill (AB) 802 generally and support for implementation of Senate Bill (SB) 350.” Among the related issues identified in the Amended Scoping Memo was the need to develop new policy for the determination of savings calculation baseline assignments for energy efficiency activities.

D.16-08-019 ordered that two working groups be convened to address issues related to the implementation of AB 802. D.16-08-019 ordered that the issues identified be segregated into two tracks and CPUC staff later designated the working groups as the “Track 1 Working Group” and the “Track 2 Working Group”. The Track 1 Working Group was assigned to address a) Identifying the measure-level treatment for baselines, and if these should vary within sectors or program savings determination categories; and b) The evidence and documentation required to show that a project or piece of equipment is “repair eligible” or an “accelerated replacement. The Track 2 Working Group was assigned to: a) Propose improvements for the streamlining of the ex-ante review processes; and b) Propose improvements to the process and requirements related to establishing industry standard practice (ISP) baseline assignments.

Resolution E-4818 resolved some but not all Track 1 issues and required the Track 2 Working Group to address four issues deferred from the Track 1 Working Group.³ This resolution addresses three of these four issues as directed in Resolution E-4818 and submitted in the T2WG Report. The fourth issue identified as “Task 2. Tiered Preponderance of Evidence requirements” in the Track 2 Working Group Report will be addressed in a future resolution.

³ See Resolution E-4818, OP 25.

2.2 Overview of the Track 2 Working Group

Pursuant to CPUC decision D.16-08-019 and Resolution E-4818 CPUC staff convened the Track 2 Working Group (T2WG). The four investor-owned utilities (IOUs) (SDG&E, SCE, SCG and PG&E) jointly funded the costs of the T2WG activities including a facilitation contractor, hosting some of the meetings, and the production of the final T2WG Report. Meeting participants included IOU staff and other program administrators, implementation contractors, IOU customers, CPUC staff, and CPUC contractors.

Eight in-person meetings were held in various locations between April 2017 and August 2017, and ten webinar meetings focused on specific issues were conducted. The T2WG facilitator also conducted several ad hoc meetings with individual stakeholder groups to clarify stakeholder perspectives.

The T2WG facilitation contractor, reviewed and commented on by the T2WG participants, prepared a T2WG Report. Southern California Gas Company submitted the final version to the CPUC and noticed to the service list of R.13-11-005 on September 7, 2017.⁴ The T2WG report includes a summary of stakeholder positions on each Task. The report identified 29 proposals across four Tasks for the CPUC's review and resolution.⁵

The four issues from the Track 1 Working Group that Resolution E-4818 deferred to the T2WG are described as "Tasks" in the T2WG Report as follows:

Task 1. Standard Practice Baseline Definition

"consider and recommend clarifying policy for how to determine code baseline while addressing issues related to ISP."

⁴ [T2WG Report at - http://cpuc.ca.gov/general.aspx?id=6442457214](http://cpuc.ca.gov/general.aspx?id=6442457214)

⁵ T2WG Final Report, Tables 17, 18, 19 and-20, page 122

Task 2. Tiered Preponderance of Evidence (POE) requirements

“develop recommendations for what should constitute Tier 1 and Tier 2 POE requirements.”

Task 3. Repair-Eligible/Repair-Indefinitely

“develop qualification standards and documentation requirements for identifying repair-eligible and repair-indefinitely measure types.”

Task 4. Small-Sized Business Customer Definition

“develop qualification standards and documentation requirements for identifying small-sized business customers.”

Due to its complexity, “Task 2 Tiered Preponderance of Evidence requirements” will be addressed in a future resolution.

The following section discusses Tasks 1, 3, and 4 separately.

3. DISCUSSION

3.1 Task 1. Standard Practice Baseline Definition

This resolution adopts the re-naming of the “code baseline” to the “standard practice baseline” and the Proposed Standard Practice Baseline Definition and Selection Process as described in sections 4.2.1.1 to 4.2.1.5 of the T2WG Report, reproduced below, with the modifications and clarifications contained herein, for custom projects and deemed measures workpapers.

4.2.1.1 T2WG Proposed Standard Practice Baseline Definition

4.2.1.2 Background

The Standard Practice Baseline is synonymous with a “code” baseline and is generally [endnote 1] used as the single baseline for Normal Replacement (including New Load and New Construction) measures as well as the second baseline [endnote 2] for Accelerated Replacement (AR) measures. This document only details the baseline selection process; it does not discuss measure eligibility or the review and verification of the selected baseline.

4.2.1.3 Definition

The Standard Practice Baseline is an estimate of the activity or installation that would take place absent the energy efficiency program, as required by code, regulation, or law, or as expected to occur as standard practice.

The Standard Practice Baseline activity or installation must meet the anticipated functional, technical, and economic needs of the customer, building, or process and provide a level of service comparable to that provided by the energy efficiency (EE) measure. Savings claims shall be generated based on equipment choices that operate at a level of service comparable to that provided by the EE measure. If there is not a viable and comparable baseline solution that offers a comparable level of service as the EE measure, the energy use of the baseline solution must be adjusted to provide a level of service comparable to that provided by the EE measure.

4.2.1.4 Selection Process

The following describes the process that a project developer must step through to determine the Standard Practice Baseline for a given measure. While the project developer must substantiate each step of this process, the program administrator (PA) and/or CPUC may accept or contest any baseline selected through this process. Project developers are encouraged to collaborate with the PA on this selection process for larger projects.

Step 1. Consider and apply any applicable and current CPUC published Standard Practice documents relevant to the anticipated functional, technical, and economic needs of the customer, building, or process. Such documents, which may include ISP study reports, DEER baseline values, or CPUC-issued memoranda or dispositions, will be publicly available on a single website with a date of issuance, applicability, and

effective dates [endnote 3]. If applicable baseline information within these documents is found, apply it and stop here. If applicable information is not found, review and follow the ISP Guide document. When appropriate proceed to Step 2.

Step 2. Identify the options presented by the project developer, or that the customer considers functionally, technically, and economically feasible to implement, including any known options that are presently and commonly implemented. Options must comply with all codes, standards, and other requirements, with consideration for:

A. Applicable minimum building energy efficiency requirements (e.g., CA Building Energy Efficiency Standards (Title 24—Part 6) or ASHRAE Standard 90.1), and

B. Other applicable federal, state, and local regulations or requirements, e.g., Title 20, CARB Regulations, Federal Appliance Standards, and

C. Providing a comparable level of service as the EE measure for the EUL of the EE measure.

Functional, technical, and economic feasibility are perceived and defined by the customer but should take into account the need for performance and reliability, as well as any relevant operational, maintenance, and energy costs. The customer must consider any options considered under this step as reasonable to implement.

Step 3. If Step 2 yields only one feasible option, that option establishes the standard practice baseline. In this case, the measure is ineligible for Normal Replacement, and there is no second baseline savings for Accelerated Replacement. If Step 2 yields two or more feasible options, the option that is the lowest first-year cost to implement establishes the standard practice baseline.

Costs included in this process may be estimates, but their basis must be substantiated. Costs should include: "...the cost of any equipment or materials purchased, including sales tax and installation; any ongoing operation and maintenance costs; any removal costs (less salvage value); and the value of the customer's time in arranging for the installation of the measure, if significant." [endnote 4]

4.2.1.5 Endnotes

[1] For example, the baseline used for energy efficiency savings reporting and incentives shall not regress to a lower efficiency than the existing equipment.

[2] The second baseline applies to the time period from the end of the remaining useful life (RUL) of replaced equipment to the effective useful life (EUL) of the measure

[3] For example, the CPUC *Ex Ante* Review Custom Process Guidance Documents page at:
<http://www.cpuc.ca.gov/General.aspx?id=4133>

[4] California Standard Practice Manual, Economic Analysis of Demand-side Programs and Projects, October 2001, www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=7741

The adopted Standard Practice Definition and Baseline Selection Guidance document is provided in Attachment A to this Resolution. Staff is authorized to update this adopted document when clarification is necessary following the process outlined below.

3.1.1 Task 1 Background

Decision 16-08-019 noted that “prior to the passage of AB 802, our policy was essentially that the majority of energy efficiency projects given credit towards our energy efficiency goals had their savings estimated by comparing their energy use after project completion to what the customer would have used had they installed equipment that complied with current building codes and/or appliance standards. In other words, our default policy was essentially a baseline determined by the applicable building codes and/or appliance standards.”⁶ However, there are many cases when either no code or standard applies, or the existing code or standard is not an appropriate indication of typical market activity relative to energy efficiency.

Some Track 1 Working Group members suggested that current implementation of code baseline might be more accurately termed as an ISP baseline to reflect the fact that in some cases, standard practice falls short of or, alternatively, exceeds existing codes. The Track 1 Working Group’s proposed definition of code baseline applied Title 24 (part 6) building code, regardless of a standard practice that exceeded code.

Track 1 Working Group stakeholders had differing opinions about whether standard practice or code should apply where both are available, or whether code

⁶ See Decision 16-08-019 at page 12

baseline should reflect the minimum efficiency of the baseline installation or the minimum efficiency of the selected technology, in cases where these are different. Resolution E-4818 acknowledges that code baselines in DEER often exceed Title 24 requirements, due to evaluation results that indicated standard practices were higher efficiency than code.

Resolution E-4818 noted that establishing clarity on the application of code baseline was not within the assigned scope of the Track 1 Working Group and chose not to adopt the Track 1 Working Group's proposed definition. However, Ordering Paragraph 25 in Resolution E-4818 asked the Track 2 Working Group to recommend clarifying policy for how to determine code baseline.

3.1.2 Task 1 Discussion

In its deliberations, the T2WG stakeholders identified five proposals for discussion in Task 1. Table 17 of the T2WG Report summarizes the stakeholders' positions. The T2WG concluded that the term "code baseline" is confusing as a term for the broader baseline category since building or appliance code is only one of multiple baseline options within this category. The T2WG recommended the term "standard practice baseline" instead of "code baseline" to refer to the category of baseline that applies to normal replacement⁷ or the second baseline⁸ for projects with an accelerated replacement measure type. Adding clarity by renaming the term as recommended by the T2WG is a benefit to all stakeholders.

⁷ Energy Efficiency Policy Manual version 5 at 31 defines normal replacement as turnover or replacement due to normal retrofit and remodeling activities.

⁸ The second baseline applies to the time from the end of the remaining useful life (RUL- the estimated number of years remaining for an equipment to be able to perform) of the replaced equipment to the effective useful life (EUL- the estimated number of years in which 50% of the new equipment in the market will fail to perform) of the new installed equipment.

T2WG participants developed a new definition of the “Standard Practice Baseline” with a three-step baseline selection process. The baseline selection process identifies sequential steps to determine the proper baseline. The definition requires realistic baselines be used including baselines that reflect actual levels of service required. The baseline selection process was developed after several iterations and detailed discussions among the T2WG participants. The process is comprehensive and clear.

The T2WG participants agreed that the baseline used for energy efficiency savings reporting and incentives should not regress to a lower efficiency than the existing equipment. The use of regressive baselines has not previously been allowed and this agreement is simply an acknowledgement of that aspect of baseline selection.

The T2WG participants acknowledged that the proposed Standard Practice Baseline definition only details the baseline selection process and it does not discuss program influence, measure eligibility or the review and verification that the correct baseline has been selected. This clarification ensures that stakeholders understand that there are numerous factors that affect the viability of any project proposed for ratepayer support.

The T2WG participants requested that all published ISP study documents and CPUC-issued memoranda or dispositions be publicly available on a single website with a date of issuance, an effective date, and a description of the applicability of each document provided. Creating a single repository for this information will facilitate the dissemination of guidance documents and pertinent information to the stakeholders.

The T2WG requested that the CPUC provide guidance on the appropriate effective date or transition period for projects that trigger market-based ISP studies.

Providing clarity for this issue will help the stakeholders in the implementation of their programs.

The T2WG requested that the CPUC provide guidance on what the standard practice baseline should be if Step 2 of the proposed baseline selection process shown in Section 4.2.1.4⁹ of the T2WG Report yields more than two feasible baseline options. It is not unusual for a customer to have more than two baseline options¹⁰ and providing guidance in this area is appropriate.

Numerous revision requests to the proposed Standard Practice definition and baseline selection steps were submitted by working group participants in the draft final T2WG Report. The comments are provided in sections 4.2.1.6 through 4.2.1.16¹¹ the T2WG Report.

Some T2WG participants noted that revision of the ISP Guidance¹² document has not been completed. These participants recommended the removal of the reference to the ISP Guidance document.

CPUC staff stated that the Standard Practice Baseline definition and baseline selection process requires clarification regarding its applicability, how it fits into the required sequence of project development and the requirement for compliance with CPUC policy and Program Administrator rules.

One participant stated that the proposed Standard Practice Baseline definition is too restricted and appears to disengage customers resulting in a

⁹ T2WG Report at 18 and see “Step 2” of Section 3. Selection Process of Attachment A to this Resolution.

¹⁰ A customer may have more than one technology option available that are presently and commonly implemented.

¹¹ T2WG Report at 19.

¹² The purpose of this guidance document is to clarify the concepts and processes involved with establishing and implementing industry standard practices. The current Industry Standard Practice Guidance document is located at: <http://www.cpuc.ca.gov/General.aspx?id=4133>.

reduction in program participation. Some T2WG participants commented that it is unreasonably costly to collect the evidence to satisfy these requirements for small projects to simply substantiate a baseline. Other participants stated that the complexity of this process has grown to the point that they are concerned that it has become too burdensome and costly to be appropriate for selecting a baseline for each measure in each project. The T2WG participants who provided the comments above, do not propose what the baseline should be in the absence of having a process to follow in baseline selection and also do not acknowledge the baseline qualification requirements associated with Task 3 and Task 4. However, this Resolution identifies a simplified pathway for accelerated replacement under Task 3 and 4, as described in sections 3.2 and 3.3 of this document.

3.1.3 Task 1 Conclusion

To avoid confusing terms for the broader baseline category the CPUC adopts the T2WG recommendation that the term “standard practice baseline” be used instead of “code baseline” to refer to the category of baseline that applies to new construction, capacity expansion, and normal replacement measure types and the second baseline for projects with an accelerated replacement measure type.

Some T2WG participants commented that this definition and selection process framework should not be implemented now as the revision of the ISP Guidance document has not been completed. CPUC staff are scheduled to share the draft revised ISP Guidance document for review and comments in December 2018.¹³ Until the revised document is adopted the existing ISP Guidance document

¹³ R.13-11-005 Phase II Scoping Memorandum, 26 April 20-18, at 13.

shall provide meaningful guidance in many areas and must be utilized, as directed in D.16-08-019.¹⁴

The CPUC adopts the Proposed Standard Practice Baseline Definition shown in section 4.2.1.1¹⁵ of the T2WG Final Report with the following clarifications and modifications listed below.

This Resolution adopts Standard Practice Baseline as a tool/framework that would guide implementers and program administrators to facilitate energy efficiency activities in absence of an energy efficiency program. The tool allows them to follow existing code, regulation, or law, or standard practices for implementation. However, not all energy efficiency activities are covered by code, regulation, or law, and if there are no current industry standard practice study available, then the ISP Guidance document would clarify the concepts and processes involved with establishing and implementing industry standard practices for a project.

The final adopted Standard Practice Baseline definition and Baseline Selection guidance document is provided in Attachment A to this Resolution with an effective date of January 1, 2019.

Clarifications and Modifications:

- a.) Compliance with the baseline selection process does not automatically imply project approval. All projects must comply with CPUC policy, CPUC staff guidance and program administrator rules in that order of precedence.
- b.) When an individual project triggers the requirement for an ISP study to determine the proper baseline, the baseline determined by the study will apply to that project and other similar future projects.

¹⁴ D.16-08-019 at 40, and the current [ISP Guidance document](#).

¹⁵ T2WG Report at 17.

- c.) As recommended by stakeholders in the T2WG,¹⁶ when an individual recurring measure or group of measures identified in the portfolio triggers the requirement for an ISP study to determine the proper baseline, the baseline determined by the resultant study will be applied to that measure using a bi-annual “Bus Stop” approach. Every six months, all new rules from ISP studies will become part of the statewide program rules for projects going forward. CPUC staff is directed to work with the program administrators to formalize this “Bus Stop” process.
- d.) As recommended by stakeholders in the T2WG,¹⁷ the program administrators in consultation with CPUC staff shall examine their portfolios on an annual basis to identify the measures requiring an ISP study in the subsequent 12 months.
- e.) CPUC staff is directed to work with the program administrators to propose a budget and source of funding for the ISP study activity.
- f.) As the T2WG Report pointed out, a process must be available to rectify inconsistencies between documents and provide clarification for new circumstances.¹⁸ Any discrepancies, contradictions or lack of clarity identified in CPUC approved Standard Practice Baseline Definition and Baseline Selection guidance documents or studies shall be brought to, in writing with supporting rationale, to the attention of the assigned CPUC staff by July 1st. CPUC staff shall examine the issues and may provide an updated version of the document in Attachment A as appropriate in the form of clarifying language, added language to cover newly identified issues or problems, or added examples with outcomes by October 31th. The updates will be effective January 1st of the following year. The Standard Practice Baseline Definition and Baseline Selection guidance document may be updated no more than once annually. CPUC staff updates to document shall be adopted via the following process:

¹⁶ T2WG Report at 25 and 26.

¹⁷ T2WG Report at 26.

¹⁸ T2WG Report at 22 request 5.

1. A draft of any proposed updated version shall be provided to the service list of R.13-11-005 or its successor proceeding as well as posted on Public Documents Area website for comment by stakeholders and the public with a minimum comment period of three weeks;
 2. After consideration of comments received on the proposed updates CPUC staff shall update the proposed version as appropriate and post a new version of the definition and guidance document by October 31st which shall supersede the previous version(s) effective January 1st of the following year.
- g.) As recommended by stakeholders in the T2WG,¹⁹ CPUC staff is directed to create, organize, and manage a single repository for all CPUC staff approved ISP guidance documents and CPUC-issued or staff-updated memoranda or dispositions related to measure baselines, including those documents adopted by this Resolution. The documents should be publicly available on a website with a date of issuance, an effective date, and a description of the applicability of each document provided. The repository should be publicly accessible through the internet and available for use not later than January 1, 2019.
- h.) Consistent with existing policy,²⁰ when Step 2²¹ of the adopted baseline selection process yields more than two feasible options, the most commonly implemented feasible option shall be used as the baseline. In cases where there is more than one commonly implemented feasible option, an appropriate composite²² of the commonly implemented feasible options shall

¹⁹ T2WG Report Section 4.2.3 at 27.

²⁰ D.12-05-015 at 351: For purposes of establishing a baseline for energy savings, we interpret the standard practice case as a choice that represents the typical equipment or commonly-used practice, not necessarily predominantly used practice. We understand that the range of common practices may vary depending on many industry- and/or region-specific factors and that, as with other parameters, experts may provide a range of opinions on the interpretation of evidence for standard practice choice. Here again, we expect CPUC staff to use its ex ante review process to establish guidelines on how to determine a standard practice baseline.

²¹ See “Step 2” of Section 3. Selection Process of Attachment A to this Resolution.

²² An appropriate composite should weight together efficiency levels of the alternatives based on their current or expected rates of selection for new installations in comparable customer situations.

be used for the baseline determination. The various options can be weighted using available data such as sales fraction data or the relative cost of the options, or by the relative energy consumption of the options. A rationally developed and well documented assessment of the available data should be used to determine a reasonable baseline in these cases. For example, in the case of lighting measures there are usually numerous options with varying prices and efficiency levels available in the marketplace. Sales data obtained from lighting manufacturers and/or other industry sources can be used to weight the options to determine a composite baseline. When there is significant price differential between the proposed measure and the rest of the market, a sales weighted average of the lower cost measures may be appropriate to determine the baseline.

i.) In an Accelerated Replacement project or measure case the standard practice baseline assignment shall appropriately consider the practices expected for a normal replacement at the end of its Remaining Useful Life (RUL).

3.2 Task 3. Repair-Eligible/Repair-Indefinitely

This resolution adopts the use of a preponderance of evidence determination process for any accelerated-replacement measure type thereby eliminating need for separate considerations or processes for repair-eligible and repair-indefinitely measure types.

3.2.1 Task 3 Background

Resolution E-4818 adopted the T1WG proposal that accelerated replacement measure type is comprised of three sub-categories: early retirement, repair-eligible and repair-indefinitely, and shall use equivalent dual baseline savings and cost effectiveness calculations for deemed and calculated downstream program. However, this resolution did not provide any process or evidence requirements for how equipment could be qualified as repair indefinitely. Instead, the resolution directed the Track 2 working group to develop qualification standards and documentation requirements to identify repair-eligible and repair-indefinitely measure types.

3.2.2 Task 3 Discussion

In its deliberations, the T2WG stakeholders identified 9 discussion issues in Task 3. The stakeholders' positions are summarized in Table 19²³ of the T2WG Report. The T2WG stakeholders agreed on the following two recommendations:

- Replacement rather than repair for individual projects or measures may qualify as accelerated replacement measure type if the project or measure meets the Task 2 preponderance of evidence requirements.
- The CPUC staff may pre-qualify classes of equipment or measures for replacement rather than repair if the program administrators or

²³ T2WG Final Report p124.

investor-owned utilities provide the required preponderance of evidence.

However, the T2WG requested the CPUC to make a decision on the below 6 recommendations and stakeholder proposals²⁴ in the T2WG Final Report revolving around these 9 discussion issues:

3-1. Stakeholder Proposal 3-1, Repair-Eligible/Repair-Indefinitely Measure Types: “Eliminate the use of repair-eligible and repair-indefinitely as distinct measure categories with distinct policy results and, instead, create one simple measure category for accelerated replacement with a single set of policy rules.”

3-2. Stakeholder Proposal 3-2, Definition and Evidentiary Requirements for Repair-Indefinitely– “Requests the Commission adopt the definition and evidentiary requirements outlined above to qualify projects as repair-indefinitely.”

3-3. Stakeholder Proposal 3-3, Repair-Eligible/Repair-Indefinitely Qualification– “Requests confirmation that measures may qualify for accelerated replacement baseline (as repair-eligible or repair-indefinitely) through: pre-qualification for classes of equipment, or case-by-case qualification for measures or projects.”

3-4. Provide direction regarding the question in Stakeholder Proposal 3-4, Repair-Eligible and Broken Equipment– “Requests that the CPUC clarify whether “broken” equipment should be eligible for accelerated baseline (as repair-eligible or repair-indefinitely equipment) if it meets the POE requirements and determine whether to adopt the SoCalGas proposed definition:

²⁴ T2WG Final Report p71.

- i. Projects that receive the repair-eligible designation are repair projects occurring to equipment that is functional and currently operating at or above standard practice as defined in Task 1. These projects are eligible for Custom Incentive Program funding as an accelerated replacement project and have the same POE requirements as other projects of a similar POE level.
- ii. Repair projects to equipment that are operating below standard practice are not eligible for the repair-eligible designation within the Custom Incentive Program. These projects would not qualify for incentive using the Task 1 definition developed by the T2WG. We recommend that these projects be transferred to the applicable Behavioral, Retro-Commissioning, and Operations (BRO) delivery channel.
- iii. Repair projects to broken equipment do not qualify for incentive funding."

3-5. Provide direction regarding the question in Stakeholder Proposal 3-5, Repair-Eligible/Repair-Indefinitely as Standard Practice Baseline– "Requests Commission guidance on the following issue: For repair-indefinitely scenarios for which the customer would continue to repair equipment beyond the RUL and EUL of the equipment, can the RUL for the existing conditions be extended to match the EUL, or can existing conditions serve as the second baseline for a repair-indefinitely measure if evidence demonstrates that the existing condition is the standard practice baseline?"

3-6. Regarding the statement in E-4818 at 31 that "Replacement of equipment that is ... poorly performing ... must apply a normal replacement baseline," clarify whether "poorly

performing” equipment should be eligible for accelerated baseline (as repair-eligible or repair-indefinitely equipment) if it meets the POE requirements.

The T2WG also requested CPUC clarification on two aspects of eligibility: (1) whether broken equipment may qualify as repair-eligible, and (2) whether existing condition can qualify as the standard practice second baseline, or whether the remaining useful life of the existing condition can be extended.

Proposal 3-1 eliminate repair-eligible/repair-indefinitely as distinct measure categories, and Proposal 3-2 definition and evidentiary requirements for repair indefinitely discussions: Some working group participants agreed with CPUC staff’s recommendation eliminating the use of repair-eligible and repairing indefinitely as distinct measure categories with distinct policy results and, instead, creating one simple measure category for accelerated replacement with a single set of policy rules. However, SoCalGas staff disagreed with the staff’s interpretation of E-4818. SoCalGas proposed in Proposal 3-2 that the repair-indefinitely designation is intended to allow functional equipment with EUL greater than 20 years to be considered for accelerated replacement measure category. SoCalGas believes that it could alter the EUL and remaining useful life (RUL) values to predetermined values to allow for dual-baseline consideration. Other stakeholders proposed to process repair-eligible and repair-indefinitely through both the standard practice and preponderance of evidence requirements.

Additionally, CPUC staff clarified²⁵ that there are no existing limitations on applying accelerated replacement for equipment older than expected useful life. E-4818 states that equipment older than its EUL may qualify for accelerated replacement baseline treatment if it is determined to be repair-eligible or repair indefinitely. With this clarification, the T2WG questioned whether the three

²⁵ T2WG Meeting No. 4 held on May 24, 2017.

distinct sub-types for accelerated replacement measure types are necessary since all equipment regardless of age is eligible for consideration for early retirement treatment provided the applicable POE requirements for equipment viability (can the customer repair the equipment) and influence (would the customer have repaired the equipment in absence of the program?) are met.

Proposal 3-3 repair-eligible/repair-indefinitely qualification for accelerated replacement discussion: The T2WG indicated a preference for a qualification approach that encourages pre-qualification of equipment types as eligible for repairs while allowing simplified site-specific criteria. Some stakeholders encouraged the concept of market studies to inform which measures were appropriate for repair baselines. CPUC staff expressed a concern that a case-by-case classification might cause project delays.

Proposal 3-4, does repair-eligible category allow broken equipment discussion:

The working group requested CPUC clarification on whether “broken” equipment should be eligible for accelerated baseline as repair-eligible or repair-indefinitely equipment. SoCalGas staff further proposed that the repair-eligible designation is for repair projects occurring to equipment that is functional and currently operating at or above standard practice, and that repair projects to equipment that are operating below standard practice are not eligible for the repair-eligible designation. Some T2WG stakeholders wanted clarity on E-4818 Finding 17, in that it states that replacement of broken equipment, poorly performing equipment, or equipment not able to meet its load requirement must apply a normal replacement baseline. The resolution does not allow accelerated replacement of repair-indefinitely measure type for the broken but repair-eligible equipment.²⁶ Stakeholders argued that repair-eligible designation was meant to address

²⁶ T2WG Report p.69 referring to Resolution E-4818 OP 4, “We direct the Program Administrators to apply a normal replacement baseline where the existing equipment is not operational or not meeting the existing service requirements. This applies to all types of equipment, including add-on equipment.”

customers that would choose to repair the broken equipment and qualify for dual baseline as an accelerated replacement scenario. T2WG recommends that replacement rather than repair for individual projects or measures may qualify as accelerated replacement if the project or measure meets the Task 2 preponderance of evidence requirements and that CPUC staff may pre-qualify classes of equipment or measures for replacement rather than repair if the PAs provide the required POE.

Proposal 3-5, repair-eligible/repair-indefinitely as standard practice baseline discussion:

The working group requested CPUC guidance on the scenario for which the customer would continue to repair equipment beyond the remaining useful life and effective useful life of the equipment. They wanted clarity whether remaining useful life for the existing conditions be extended to match the effective useful life or existing conditions can serve as the second baseline. Some stakeholders argued that for customer who would have continued to repair the existing equipment, the standard practice may be the existing conditions. Some stakeholders suggested that for the repair-indefinitely scenario, in which the customer would have continued to repair the existing equipment, the standard practice may be the repaired, brought back to original specifications, existing condition. The remaining useful life in this scenario should not be limited to the default valuation of 1/3 of the effective useful life. T2WG proposes instead that the remaining useful life for the existing conditions be extended to match the effective useful life, or equivalently the repaired existing condition serve as the second baseline for a repair-indefinitely measure if evidence demonstrates that the repaired existing condition is the standard practice baseline.

3.2.3 Task 3 Conclusions

This Resolution adopts the use of a preponderance of evidence determination process for any accelerated replacement measure type thereby eliminating need for separate considerations or processes for repair-eligible and repair-indefinitely measure types. Until Task 2 is resolved in an upcoming

resolution, the current POE requirements will apply.²⁷ The Resolution also adopts a qualification approach that encourages pre-qualification of equipment types as eligible for repairs while allowing simplified site-specific criteria.

Task 3 addressed the issue on broken equipment non-operational versus operational equipment that are typically repaired when broken, and a common misconception of automatically disqualifying equipment that was older than its EUL under the accelerated replacement treatment case.

The CPUC clarifies that there is a difference between equipment that is actually broken, non-functional, or unable to provide the intended service versus operating equipment that when broken, non-functional, or unable to provide the intended service is typically repaired. Equipment that is broken, non-functional, or unable to provide the intended service is not eligible for energy efficiency programs support except in some pre-approved cases in retro-commissioning programs. We address Proposals 3-3 and 3-4 by affirming E-4818 that replacement of equipment that is broken, poorly performing or not able to meet its load servicing requirement must apply a normal replacement baseline following the process in [Attachment A](#). This includes replacement of add-on equipment that is broken, poorly performing or not able to meet its load servicing requirement.²⁸ The only exception is equipment that is approved to be considered for support of repairs within an approved retro-commissioning program activity. We encourage the energy efficiency activities to seek out the accelerated replacement of operating equipment that are typically repaired when it is broken non-functional, or unable to provide the intended service.

²⁷ The “Project basis as Early Retirement (ER)/Replace-on-burnout (ROB)/Normal Replacement (NR)/New Construction (NC)/Add-on Retrofit (Ret) and remaining/Effective useful Life (RUL/EUL), and Preponderance of evidence” guidance document is available at the webpage: <http://www.cpuc.ca.gov/General.aspx?id=4133>.

²⁸ E-4818 at 31.

In addressing Proposal 3-5, the CPUC recognizes the scenario where the customer would have continued to repair the existing equipment. The current policy on accelerated replacement option fully enables customers that typically repair rather than replace equipment without the added complexity of a new process. CPUC Decision (D.) 12-05-015 adequately supports these customers with no limitation on the age of existing equipment to be considered for accelerated replacement treatment.²⁹ Per that decision, program administrators may submit proposed alternative remaining useful life values for review and approval by CPUC staff.³⁰ The program administrator may request this approval with a pre-qualification for classes of equipment or on a case-by-case basis for measures or projects. The existing condition baseline will be used for the 1st baseline period of this approved remaining useful life with the standard practice baseline for remainder period (the effective useful life minus the remaining useful life).

The CPUC also clarifies that there is no rule or policy that prohibits functioning equipment that meets service requirements from being considered for the accelerated replacement treatment case. Stakeholder Proposal 3-1,³¹ which suggests that three distinct sub-types of accelerated replacement are not necessary since equipment, regardless of age, is eligible for consideration for accelerated replacement treatment provided it meets the POE requirements for equipment viability and influence is reasonable. The equipment viability requirements include

²⁹ D.12-05-015 at 347, "Once it is established that the program caused the existing equipment to be replaced early, we need to establish the period of accelerated retirement. In our discussion of DEER updates above, we note that DEER contains values for the effective useful life for many technologies and recommend using one-third of the effective useful life as the remaining useful life until further study results are available to establish more accurate values. For the case of program induced early retirement, the remaining useful life of the existing equipment should be used as the starting assumption for the period of accelerated retirement."

³⁰ D.12-05-015, at 348, "The use of a DEER remaining useful life starting point for the acceleration period may be replaced. However, this should be allowed only if credible evidence is available to support an alternative value and that evidence leads CPUC staff to deem it more credible than of the adopted DEER values"

³¹ T2WG Report p65.

that the equipment will meet service requirements for its established RUL³². We eliminate the use of repair-eligible and repair-indefinitely as distinct measure sub-categories of accelerated replacement. Hence, there is no need to adopt Proposal 3-2 on a definition of repair-eligible. However, as to the proposal's evidentiary requirements³³ for demonstration of equipment viability and program influence, the POE requirement to demonstrate equipment viability and program influence for accelerated replacements shall meet the requirements in Task 2 to be addressed in a future resolution.

³² When considering evidence for accelerated replacement the evidence must support the assertion that the existing equipment will meet service requirements expected during the RUL being utilized for the equipment. D.11-07-030 at 23 notes that the RUL assignment denotes "the later date, when the pre-existing equipment would have been replaced due to normal turnover for reasons such as imminent failure or remodeling"

³³ T2WG Report p67.

3.3 Task 4. Small-Sized Business Customer Definition

This resolution adopts the T2WG Report Proposal 4A – California Small Business Tariff Definition³⁴ and defaults all custom measures, except for new construction and capacity expansion measure types, for IOU customers meeting these criteria to an accelerated replacement measure type with an existing equipment baseline subject to the following minimum preponderance of evidence requirement. The minimum requirement for project-level preponderance of evidence must include evidence of customer eligibility for program participation based on meeting the small-sized business criteria and evidence of equipment viability for the remaining useful life claimed for the first period savings. The IOUs may use their existing self-certification forms, or jointly develop a single form to be used statewide for self-certification for meeting the small-sized business criteria.

3.3.1 Task 4 Background

Ordering paragraph 25 in Resolution E-4818 directed the Track 2 working group to recommend a statewide definition of a small-sized business and associated evidentiary requirements to verify this classification.

The purpose of developing a definition of a small-sized business customer is described in Section 1.5.5 of Resolution E-4818³⁵. Resolution E-4818 noted that there is not agreement across Program Administrators on how to identify and verify a small business customer. This standard is required to qualify programs for

³⁴ Decision 10-10-032 (as corrected by Decision 10-11-037) - Decision Revising Tariff Rules for Small Business Customers.

³⁵ Resolution E-4818 at 46 provides guidelines for the approval of direct-to-default accelerated replacement treatment of small business. Then at 46 “We are aware that there is not agreement across Program Administrators in how to identify and verify a small business customer. This standard would be needed to qualify programs for a direct-to-decision treatment where customer eligibility includes a small business designation.”

a direct-to-decision treatment where customer eligibility includes a small business designation.

The purpose of developing the small-sized business customer definition is to pre-define a criterion that may be used to qualify a class of customers with a “Direct-to-Decision” accelerated replacement treatment. The “Direct-to-Decision” treatment means that a qualified measure or project would default to an accelerated replacement measure type with an existing conditions first baseline without any further preponderance of evidence requirement. This definition is intended to be used “.... to qualify programs for a direct-to-decision treatment where customer eligibility includes a small business designation.”³⁶ A retrofit type of measure may also qualify as a “normal replacement” measure type that would use the “Standard Practice” baseline described in Task 1 of this document. New construction and capacity expansion measure types must use the “Standard Practice” baseline.

It is evident that the intention of pre-defining a small business customer is to provide an approval of one criterion that may be used in the design of a program. The only other requirements for this class of customer described in Section 1.5.5 of E-4818 are that “...the project-level preponderance of evidence requirement can be limited to include evidence of customer eligibility for program participation and evidence of equipment viability.”³⁷

Defaulting a qualified measure or project to an accelerated replacement measure type with a first period existing conditions baseline without any further preponderance of evidence requirement has the potential to increase the energy savings claim and the incentives paid to the program participant. The potential

³⁶ Resolution E-4818 at 47

³⁷ Resolution E-4818 at 46

savings claim and incentive may increase since the existing conditions baseline associated with the first period savings of the accelerated replacement measure type is usually less efficient than the standard practice as described in Task 1 above.

Three proposals are presented in the T2WG Report:

1. Utilize the existing California Small Business Tariff Definition
2. Utilize a Commercial/Industrial Definition developed by the T2WG
3. Utilize a hybrid definition combining aspects of the California Small Business Tariff Definition and the Commercial/Industrial Definition developed by the T2WG.

3.3.2 Task 4 Discussion

The T2WG was not able to reach an agreement among stakeholders on how to identify and verify a small business customer. Stakeholder perspectives differed on whether the small-sized business pathway was intended to apply to small customers, small projects, or both. The T2WG Report offers 3 proposals summarized below and described in detail in Section 7³⁸ of the report and requested that the CPUC select one of the proposals – 4A, 4B, or 4C – or otherwise provide guidance based on the goals of the simplified POE pathway for small business customers.³⁹

3.3.2.1 Proposal 4A – California Small Business Tariff Definition

One recommendation in the T2WG Report is that a customer would qualify as a small business customer if it meets the definition of small business adopted by the CPUC for use in IOU tariffs⁴⁰:

³⁸ T2WG Report p77.

³⁹ T2WG Report Section 7.3 p.84.

⁴⁰ See Footnote 27

“A small business customer is defined as a non-residential customer with an annual electric usage of 40,000 kilowatt hours (kWh) or less, or an energy demand of 20 kilowatt (kW) or less, or annual consumption of 10,000 therms of gas or less. Alternatively, a small business customer is a customer who meets the definition of “micro-business” in California Government Code Section 14837 (Section 14837). Section 14837 defines a micro-business as a business, together with affiliates, that has average annual gross receipts of \$3,500,000 or less over the previous three years, or is a manufacturer, as defined in Section 14837 subdivision (c), with 25 or fewer employees. The California Department of General Services is authorized to amend the gross receipt amount. In January 2010 DGS increased the gross receipt amount from \$2,750,000 to the current amount of \$3,500,000. (see, California Office of Administrative Law, Regulatory Action Number 2000-1110-01S.) This definition does not include fixed usage or unmetered rate schedule customers.”

During the Track 2 Working Group meetings CPUC staff expressed that the goal of Task 4 was to create a simple process to support a category of customers who have not been served because they are too small, and staff suggested that the small-sized business definition was not intended to apply to all small business customers. Staff clarified that the CPUC’s interest is to provide a small-sized business definition and default accelerated replacement designation to allow higher incentives and get new participation from that class of customer that previously has not participated because the offerings do not provide enough incentive to change their decisions. The new baseline policies are intended to get added participation, not to pay more for the current participation. CPUC staff also clarified that the small business definition should not “in any way be restricted to

‘hard-to-reach’ customers,” and emphasized that “the intent was to recruit into the programs customers who were not currently participating or undertaking energy efficiency projects due to financial constraints that could be eased by the possibility of higher incentives offered via accelerated replacement savings treatment.”⁴¹

The definition of small business adopted by the CPUC for use in IOU tariffs is based on data specifically developed for the California market, the definition has already been litigated and adopted by the CPUC, and the definition is already in use by all four IOUs in their tariffs. All four IOUs already have self-certification forms for this purpose.⁴²

This definition is further supported by the PUC code definition of a “Small commercial customer” as meaning a customer that has a maximum peak demand of less than 20 kilowatts⁴³.

3.3.2.2 Proposal 4B – T2WG Commercial/Industrial Definition

A T2WG participant proposed criteria based on the types of customers and projects served in the programs. The participant explained that the energy thresholds for qualifying customers are based on the size of projects that can occur at those customers’ facilities. Energy usage thresholds for qualification under this proposal were provided for commercial and industrial customers and are summarized in the following Table.

⁴¹ T2WG Final Report at 78.

⁴² PG&E: https://www.pge.com/tariffs/tm2/pdf/ELEC_FORMS_79-1128.pdf
SCG: <https://www.socalgas.com/regulatory/tariffs/tm2/pdf/MicroBusClaim.pdf>
SDG&E: http://regarchive.sdge.com/tm2/pdf/ELEC_ELEC-SF_132-122010.pdf
SCE: <https://www.sce.com/NR/sc3/tm2/PDF/14-904.pdf>

⁴³ PUC code Section 331

Proposal 4B Criterion by Customer Class

Criteria	Commercial Customers	Industrial Customers
Low Energy User	< 250 kW of average demand < 1.5 million kWh/year < 50,000 therms/year	< 400 kW of average demand < 2.5 million kWh/year < 100,000 therms/year
Facility Size	< 50,000 sq. ft.	n/a
Number of Employees	n/a	< 10
Registered or Certified Small Business in California ⁴⁴	Yes	Yes

The proposal is that a commercial or industrial customer is only required to meet one of the criterion listed to be qualified. This includes meeting any one of the three listed energy usage criterion. This proposal was developed by focusing on project size instead of customer size.

3.3.2.3 Proposal 4C – T2WG Hybrid Definition

A T2WG participant offered a “hybrid” proposal, which pairs Proposal 4A with higher energy thresholds based on the threshold definitions of small businesses they claimed are used in other States. The proposal included theoretical incentives calculated based on estimated individual project savings. It is unclear how thresholds used in other States should be applied to California and no compelling data or analysis was provided to demonstrate how this proposal would affect the current portfolio.

3.3.3 Task 4 Conclusion

We adopt the small business definition currently approved by the CPUC for use in IOU tariffs⁴⁵. Additionally, we find it reasonable that customers meeting the criterion are provided a simplified pathway to an accelerated replacement measure

⁴⁴ Weblink: <http://www.dgs.ca.gov/pd/programs/osds/sbeligibilitybenefits.aspx>

⁴⁵ See Footnote 27.

type with a dual-baseline treatment for custom measures other than new construction and capacity expansion under the following conditions: 1) minimum requirement for project-level preponderance of evidence must include evidence of customer eligibility for program participation based on meeting the small-sized business criteria, and 2) evidence of equipment viability for the remaining useful life claimed for the first period savings. Equipment viability means that the equipment could and would have stayed in operation. The IOUs may use their existing small business self-certification forms, or jointly develop a single form to be used statewide for self-certification for meeting the small-sized business criteria.

CPUC staff clarified that the small-sized business pathway was meant for small customers and not small projects, indicating that the intent was to allow a pathway for small customers to participate in the programs utilizing an accelerated replacement treatment. The intent of a less burdensome pathway was to increase participation for a class of customers that traditionally have not participated by providing higher incentive levels to procure the stranded savings. At this time, it is appropriate to use the current adopted net-to-gross values to the small-size business customer accelerated replacement treatment. However, the Database for Energy Efficient Resources (DEER), the non-DEER deemed workpapers, and the net-to-gross value shall be updated based on CPUC staff's ex post evaluation results at the next appropriate EM&V bus stop to reflect the dual-baselines and net-to-gross values for the small-size business customer accelerated replacement treatment.

Some stakeholders noted that the definition should provide a simplified pathway for small projects to balance the cost of review with the value of the project. We agree that small projects should have different requirements than large projects. However, we observe that small projects have an opportunity for

simplified POE pathways through other “direct-to-default” program designs or through the “low rigor” POE pathway. The T2WG Report Proposals 4B and 4C described in the T2WG Report and summarized above are not supported by data that demonstrate that the proposed criterion would exclusively target small business customers which is the intention of Resolution E-4818.

The T2WG Report Proposal 4A – California Small Business Tariff Definition as quoted above is adopted and all energy efficiency program participants meeting these criterion may use an accelerated replacement measure type with an existing equipment baseline for custom measures except in the case of new construction and capacity expansion. The minimum requirement for project-level preponderance of evidence must include evidence of customer eligibility for program participation and evidence of equipment viability for the remaining useful life claimed for the first period savings. The IOUs may use their existing small business self-certification forms, or jointly develop a single form to be used statewide for self-certification.

4. COMMENTS

Public Utilities Code section 311(g) (1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the CPUC. Section 311(g) (2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on September 7, 2018. On October 1, 2018, the California Efficiency + Demand Management Council (Council), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), and San Diego Gas & Electric Company (SDG&E) submitted comments on the draft resolution. A summary of the comments and responses to comments are provided below.

Overarching Comments

The Council commented that this draft resolution should be held to allow stakeholders and incoming ex ante review consultants to prepare proposal to resolve all 6 tasks by June 2019 as this draft resolution addresses only three of the six tasks that were outlined in D.16-08-019 and Resolution E-4818. The Council stated that the industry needs a clear set of rules for the custom project review process that reflects all the issues that were teed up for this working group effort. The Council further commented that if the CPUC moves forward with this resolution, the Council recommends modifications to the draft resolution as provided in its comments.

We agree that a clear set of rules are necessary; however, we disagree that this draft resolution should be held further. This resolution resolves three of the four tasks directed in Resolution E-4818, adopting a Standard Practice Baseline as a

tool/framework that would guide implementers and program administrators to facilitate energy efficiency activities in absence of an energy efficiency program. The tool allows them to follow existing code, regulation, or law, or standard practices for implementation. The current Preponderance Of Evidence (POE) Guidance and Industry Standard Practice (ISP) Guidance Documents will be used until Task 2 and Task 5 are completed.

SCE commented that a) the CPUC expeditiously resolve Tasks 2, 5 and 6, b) it is not sufficient to conclude the working group without revising the ISP guidance document or clearly defining the tiered POE requirements, and c) the draft resolution should be modified to adopt the custom projects review timing protocol that was developed and accepted by all stakeholders under Task 6 (custom projects review process streamlining).

We agree with SCE that Tasks 2 and 5 should be expeditiously resolved. Task 2, due to its complexity, will be resolved in a separate resolution. On Task 5, ISP Guidance Document updates, Pacific Gas and Electric Company staff has taken the lead role to draft the updates to this guidance document. The draft document is expected to be released in draft form by end of 2018. ⁴⁶ As to SCE's comment that this resolution should adopt the custom projects review timing protocol that was developed and accepted by stakeholders, we cannot adopt that timing protocol. We must comply with the Senate Bill 1131⁴⁷ mandated timeline for which CPUC must complete the custom projects reviews.

SDG&E commented that the CPUC staff must ensure that all its systems and databases are updated accordingly to allow for seamless ex ante implementation

⁴⁶ April 26, 2018 Assigned Commissioner Ruling in R.13-11-005.

⁴⁷ SB 1131 was signed into law on September 19, 2018.

and reporting. We agree with SDG&E's comment; however, it is not within the scope of this resolution. We expect CPUC staff and utility program administrator staff will collaborate to ensure for a seamless ex ante implementation and reporting.

Task 1 Comments:

The Council commented that the draft resolution's appropriate adoption of the Standard Practice Baseline Definition and Selection Process supported by stakeholders and renaming the code baseline will go a long way to increase transparency and certainty. The Council's comments also suggested that this will simplify the process and ensure that projects are not delayed unnecessarily while waiting for the completion of studies or updates to guidance documents. The Council further commented that a) if the Commission does not hold the Draft Resolution, the Interim ISP direction in the Standard Practice Baseline Definition and Baseline Selection Guidance document should be utilized.

The Council proposes a modification for Step 2 of the Baseline Selection Process that when there are more than two feasible options, it must first consider what the customer will implement; or alternatively, that if Step 2 yields two or more options, the option that is the lowest first-year cost to implement establishes the standard practice baseline. We do not agree with the Council. What a customer will implement or what may be the lowest cost may not necessarily be representative of the appropriate standard practice baseline assignment.

SCE commented that the draft resolution be modified to retain the term "code baseline" instead of "standard practice baseline" until the final ISP Guidance document is issued and adopted. SCE is concerned that the term 'standard practice baseline' might cause confusion. SCE further commented that a) an annual 'bus

stop' approach, rather than an semi-annual approach, be used when the baseline determined for a recurring measure or group of measures triggers the requirement for an ISP study because the annual approach is consistent with the approach outlined in D.15-10-028, and b) the resolution clarify the ISP study approach applies to custom projects only.

We disagree with SCE. First, we believe that the definition that the working group arrived at and adopted in this resolution is clear. Second, it is not appropriate that ratepayer funds support custom projects or deemed measures with known incorrect baselines for 2 year prior to a correction. Lastly, we clarify in this resolution that the Standard Practice Baseline Definition and Baseline Selection Guidance applies to both custom projects and deemed measures workpapers.

SoCalGas commented that OP 5a be clarified to apply to the project selected and future projects only, not other projects in the pipeline. We clarify here that Decision 15-10-028⁴⁸ directs program administrators to allow for any similar projects where staff has issued a disposition to be grandfathered and use prior energy savings estimates if a project application or agreement is completed and signed within 60 days of the staff disposition. Task 1 - Standard Practice Baseline definition will be effective January 1, 2019, which gives the program administrators over 60 days to incorporate required changes to the projects without mutually signed customer applications or agreements that are under development or review. Appropriate baseline determination should be identified, and issues resolved early in a project's developmental phase prior to any customer expectation are set.

Task 3 Comments:

⁴⁸ D.15-10-028 Ordering Paragraph 20.

The Council commented that it agrees with the elimination of the use of “repair-eligible” and “repair indefinitely”, adopting the use of a single Preponderance of Evidence Requirement Determination Process for any accelerated replacement measure type; however, “poorly performing” is a very subjective term and is not clear how this term differs from “not able to meet its load servicing requirement.” Lastly, the Council reiterates its strong preference for the draft resolution to be held as Task 3 hinges on Task 2 and that the entire custom process hinges on the POE. The Council recommends that the Commission modify the draft resolution to indicate the timing and process for issuing the Task 2 Resolution.

We agree that equipment that might be “poorly performing” could also be interpreted that the equipment is “not able to meet its load servicing requirement.” Therefore, we removed references to “poorly performing” in this resolution's Findings and Ordering Paragraphs. We recognize the importance of Task 2 in the custom projects review process. Due to its complexity, Task 2 will be addressed in a future resolution. The current POE Guidance will be used until Task 2 is resolved.

Task 4 Comments:

The Council commented that the small-sized business customer definition be removed and resolved in the Energy Efficiency Business Plan Proceeding; that the resolution's criteria is too limiting and would result in zero added participation. SoCalGas commented that the 'direct to decision' category be extended to commercial customers consuming 50,000 therms or less annually and 100,000 or less for industrial customers; that the draft resolution’s 10,000 therms or less criteria will have no impact due to lack of participation for customers of that

size. We disagree with the Council and SoCalGas and reiterate that small projects have an opportunity for simplified POE pathways through an approved program design or through the “low rigor” POE pathway⁴⁹.

⁴⁹ See Resolution E-4818 p.26 and 46 and OP 18.

5. FINDINGS

1. D.16-08-019 ordered that two working groups be convened to address issues related to the implementation of AB 802.
2. Track 2 Working Group (T2WG) participants submitted a report, identifying issues and recommending changes to Commission rules, on September 7, 2017.
3. Renaming the term “Code Baseline” to the “Standard Practice Baseline”, adds clarity to the description of the baseline category that applies to the new construction, capacity expansion, replace on burnout, and normal replacement measure types or the second baseline for project with an accelerated replacement measure type.
4. Track 2 Working Group (T2WG) participants developed a new definition of the “Standard Practice Baseline” with a three-step baseline selection process. The baseline selection process identifies sequential steps to determine the proper baseline for custom projects and deemed measures workpapers.
5. It is reasonable that the Standard Practice Baseline definition and Baseline Selection Guidance is effective January 1, 2019 which gives the program administrators over 60 days to incorporate required changes to the projects without mutually signed customer applications or agreements that are under development or review.
6. The T2WG participants agreed that the baseline used for energy efficiency savings reporting and incentives should not regress to a lower efficiency than the existing equipment.
7. The T2WG participants acknowledged that the proposed Standard Practice Baseline definition only details the baseline selection process and it does not

- discuss program influence, measure eligibility or the review and verification that the correct baseline has been selected.
8. It is reasonable to utilize the existing ISP Guidance document until a revised document is issued by Staff as directed in D.16-08-019.
 9. It is reasonable that program administrators examine their portfolios on an annual basis to identify the measures requiring an ISP study in the subsequent 12 months.
 10. It is reasonable that CPUC staff is authorized to update annually Standard Practice Baseline Definition and Baseline Selection document as appropriate for any discrepancies, contradictions or lack of clarity.
 11. Repair-eligible and repair-indefinitely as distinct measure sub-categories of accelerated replacement is not necessary.
 12. It is reasonable that all equipment older than its effective useful life may qualify for an accelerated replacement baseline treatment and use the equivalent dual baseline savings and cost effectiveness calculations for deemed and calculated downstream programs.
 13. CPUC policy allows that the default RUL (set to 1/3 the EUL of the replaced equipment) may be replaced with CPUC staff approval if documentation supports the justification.
 14. The replacement of equipment that is broken or not able to meet its load requirement must apply a normal replacement baseline. This includes replacement of broken add-on equipment.
 15. The purpose of developing the “small-sized business” customer definition is to pre-define a criterion that may be used to qualify a class of customers with a “Direct-to-Decision” baseline assignment.

16. The “small-sized business” customer definition is intended to be used to qualify a class of customers at a Program level, not at a project level.

17. Resolution E-4818 states that the project-level preponderance of evidence requirement for the Small Business Customer Program can be limited to include evidence of customer eligibility for program participation and evidence of equipment viability.

18. The “Direct-to-Decision” baseline assignment means that the baseline would default to accelerated replacement measure type with the dual-baseline treatment. This definition is intended to be used to qualify programs for a direct-to-decision treatment where customer eligibility includes a small business designation.

19. Simplifying the requirements for program participation and increasing the available incentive by defaulting the baseline to existing conditions is expected to encourage and increase program participation by a class of customers with a historically low participation rate. Simply paying more ratepayer money to the same customer classes for implementing measures similar to those as they have implemented in the past is not in the ratepayer’s interest.

20. A definition of a “Small Business Customer” was previously adopted by CPUC Decision 10-10-032 (as corrected by Decision 10-11-037).

21. It is reasonable to adopt the current Small Business Definition described in by CPUC Decision 10-10-032 (as corrected by Decision 10-11-037) allows customers to self-certify that they meet these criteria.

22. It is reasonable to provide a small-sized business definition, and energy efficiency program participants meeting these criterion may use an accelerated replacement measure type designation to allow higher incentives and get new

participation from that class of customer that previously have not participated because the offerings do not provide enough incentive to change their decisions.

23. It is reasonable to require that project level documentation for energy efficiency program participants meeting the small-sized business definition who use the accelerated replacement measure type include evidence of eligibility for program participation and evidence of equipment viability for the remaining useful life claimed for the first period savings. Evidence of equipment viability means evidence that the equipment could and would have stayed in operation for the remaining life claimed for the first period savings.

24. It is reasonable that the current adopted appropriate net-to-gross values be applied for the small-business size customers accelerated replacement treatment.

25. It is reasonable that the Database for Energy Efficient Resources (DEER), the non-DEER deemed workpapers, and the net-to-gross value be updated based on CPUC staff's ex post evaluation results at the next appropriate EM&V bus stop to reflect the dual-baselines and net-to-gross values for the small-size business customer accelerated replacement treatment.

THEREFORE IT IS ORDERED THAT:

1. The “**Standard Practice Baseline Definition and Baseline Selection Guidance**” included as Attachment A to this Resolution is adopted for custom projects and deemed measures workpapers and is effective January 1, 2019.
2. The term “standard practice baseline” will be used instead of “code baseline” to refer to the category of baseline that applies to new construction, capacity expansion, replace-on-burnout, and normal replacement or the second baseline for projects with an accelerated replacement measure type.
3. The baseline used for energy efficiency savings reporting and incentives should not regress to a lower efficiency than the existing equipment.
4. CPUC staff is directed to create, organize, and manage a single repository for all CPUC staff approved Industry Standard Practice guidance documents and CPUC-issued or CPUC staff updated memoranda or dispositions related to measure baselines, including those documents adopted by this Resolution. The documents should be publicly available on a website with a date of issuance, an effective date, and a description of the applicability of each document provided.
5. The existing ISP Guidance document must be utilized until a revised document is issued by Staff as directed in D. 16-08-019⁵⁰. The ISP process shall include the following guidance:
 - a.) When an individual project triggers the requirement for an ISP study to determine the proper baseline, the baseline determined by the study will apply to that project and other similar future projects.

⁵⁰ Cite reference here.

- b.) When an individual recurring measure or group of measures identified in the portfolio triggers the requirement for an ISP study to determine the proper baseline, the baseline determined by the study will be applied to that measure using a bi-annual “Bus Stop” approach. Every six months, all new rules from ISP studies will become part of the statewide program rules for projects going forward. CPUC Staff is directed to work with the program administrators to formalize this “Bus Stop” process.
 - c.) The program administrators in consultation with CPUC staff should examine their portfolios on an annual basis to identify the measures requiring an ISP study in the subsequent 12 months.
 - d.) When there are more than two feasible baseline options, the most commonly implemented feasible option shall be used as the baseline. In cases where there is more than one commonly implemented feasible option, an appropriate composite⁵¹ of the commonly implemented feasible options shall be used for the baseline determination. The various options can be weighted using available data such as sales fraction data or the relative cost of the options, or by the relative energy consumption of the options. A rationally developed and well documented assessment of the available data should be used to determine a reasonable baseline in these cases.
6. CPUC staff is authorized to update no more than once annually the living Standard Practice Baseline Definition and Baseline Selection guidance document as appropriate. Any discrepancies, contradictions or lack of clarity identified in the baseline guidance document shall be brought to, in writing with supporting rationale, the attention of the assigned CPUC staff by July 1st. CPUC staff shall

⁵¹ An appropriate composite should weight together efficiency levels of the alternatives based on their current or expected rates of selection for new installations in comparable customer situations.

examine the issues and provide an updated version of this document as appropriate in the form of clarifying language, added language to cover newly identified issues or problems, or added examples with outcomes by October 31st to be effective January 1st in the following year. CPUC staff's updates to this living document shall be adopted via the following process:

- a) A draft of any proposed updated version shall be provided to the service list of R.13-11-005 or its successor proceeding as well as posted on a publicly available website for comment by stakeholders and the public with a minimum comment period of three weeks;
 - b) After consideration of comments received on the proposed updates CPUC staff shall update the proposed version and post a new version of the definition and guidance document which shall supersede the previous version(s).
7. The use of repair-eligible and repair-indefinitely as distinct measure sub-categories of accelerated replacement is eliminated.
 8. All equipment independent of its age may qualify for an accelerated replacement treatment using the dual baseline savings and cost effectiveness calculation approach if the applicable preponderance of evidence requirements are met.
 9. Equipment that are broken or not able to meet its load requirement are not eligible for accelerated replacement. This includes broken add-on equipment.
 10. The following definition of a small-sized business, as described below is adopted for use in energy efficiency activities to specify a class of customers that are eligible for a simplified or "Direct-to-Decision" accelerated replacement treatment is adopted.

- a) For customers not on a fixed usage or unmetered rate schedules, a small-sized business customer is defined as a non-residential customer with an annual electric usage of 40,000 kilowatt hours (kWh) or less, or an energy demand of 20 kilowatt (kW) or less, or annual consumption of 10,000 therms of natural gas or less. Alternatively, a small-sized business customer is a customer who meets the definition of “micro-business” in California Government Code Section 14837 (Section 14837). Section 14837 currently defines a micro-business as a business, together with affiliates, that has average annual gross receipts of \$3,500,000 or less over the previous three years, or is a manufacturer, as defined in Section 14837 subdivision (c), with 25 or fewer employees. Per Section 14837, commencing January 1, 2019, the average annual gross receipts threshold shall be \$5,000,000. The California Department of General Services is the authority to amend the gross receipt amount and any such amendment shall constitute an amendment to this definition.
 - b) Customers may self-certify that they meet the “micro-business” criterion in a). The program administrators shall either use their existing “micro-business” certification forms or develop a uniform “Small Business” self-certification form to be used statewide and submit it to CPUC Staff for review and approval within 90 days of the effective date of this resolution.
11. Energy efficiency program participants meeting the requirements of a small-sized business may use an accelerated replacement measure type with an existing equipment baseline for custom measures except new construction and capacity expansion. The minimum requirement for project-level preponderance of evidence must include evidence of customer eligibility for program participation based on meeting the small-sized business criteria and evidence of

equipment viability for the remaining life claimed for the first period savings.

Evidence of equipment viability means evidence that the equipment could and would have stayed in operation for the remaining life claimed for the first period savings.

12. The current adopted appropriate net-to-gross values shall be applied to the small-business size customers accelerated replacement treatment.

13. The Database for Energy Efficient Resources (DEER), the non-DEER deemed workpapers, and the net-to-gross value shall be updated based on CPUC staff's ex post evaluation results at the next appropriate EM&V bus stop to reflect the dual-baselines and net-to-gross values for the small-size business customer accelerated replacement treatment.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on October 11, 2018; the following Commissioners voting favorably thereon:

/s/ALICE STEBBINS
ALICE STEBBINS
Executive Director

MICHAEL PICKER
President

CARLA J. PETERMAN
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
Commissioners

ATTACHMENT A

Standard Practice Baseline Definition and Baseline Selection Guidance

1. Background

The Standard Practice Baseline is synonymous with a “code” baseline and is generally [endnote 1] used as the single baseline for Normal Replacement (including Capacity Expansion and New Construction) measures as well as the second baseline [endnote 2] for Accelerated Replacement (AR) measures. This document only details the baseline selection process for custom projects and deemed measures workpapers; it does not discuss measure eligibility or the review and verification of the selected baseline.

2. Definition

The Standard Practice Baseline is an estimate of the activity or installation that would take place absent the energy efficiency program, as required by code, regulation, or law, or as expected to occur as standard practice.

The Standard Practice Baseline activity or installation must meet the anticipated functional, technical, and economic needs of the customer, building, or process and provide a level of service comparable to that provided by the energy efficiency (EE) measure. Savings claims shall be generated based on equipment choices that operate at a level of service comparable to that provided by the EE measure. If there is not a viable and comparable baseline solution that offers a comparable level of service as the EE measure, the energy use of the baseline solution must be adjusted to provide a level of service comparable to that provided by the EE measure.

3. Selection Process

The following describes the process that a project developer must step through to determine the Standard Practice Baseline for a given measure. While the project developer must substantiate each step of this process, the program administrator (PA) and/or CPUC may accept or contest any baseline selected through this

process. Project developers are encouraged to collaborate with the PA on this selection process for larger projects.

Compliance with the Baseline selection process contained herein does not automatically imply project approval. All projects must comply with CPUC policy, CPUC staff guidance and program administrator rules in that order of precedence.

In an Accelerated Replacement (AR) project or measure case the standard practice baseline assignment shall appropriately consider the practices expected for a normal replacement of the existing equipment at the end of its Remaining Useful Life (RUL).

Step 1. Consider and apply any applicable and current CPUC published Standard Practice documents relevant to the anticipated functional, technical, and economic needs of the customer, building, or process. Such documents, which may include ISP study reports, DEER baseline values, or CPUC-issued memoranda or dispositions, will be publicly available on a single website with a date of issuance, applicability, and effective dates [endnote 3]. If applicable baseline information within these documents is found, apply it and stop here. If applicable information is not found, review and follow the Industry Standard Practice Guidance document and the guidance in Section 4 below. When appropriate proceed to Step 2.

Step 2. Identify the options presented by the project developer, or that the customer considers functionally, technically, and economically feasible to implement, including any known options that are presently and commonly implemented. Options must comply with all codes, standards, and other requirements, with consideration for:

- A. Applicable minimum building energy efficiency requirements (e.g., CA Building Energy Efficiency Standards (Title 24—Part 6) or ASHRAE Standard 90.1), and
- B. Other applicable federal, state, and local regulations or requirements, e.g., Title 20, CARB Regulations, Federal Appliance Standards, and

C. Providing a comparable level of service as the EE measure for the EUL of the EE measure.

Functional, technical, and economic feasibility are perceived and defined by the customer but should take into account the need for performance and reliability, as well as any relevant operational, maintenance, and energy costs. The customer must consider any options considered under this step as reasonable to implement.

Step 3. If Step 2 yields only one feasible option, that option establishes the standard practice baseline. In this case, the measure is ineligible for Normal Replacement, and there is no second baseline savings for Accelerated Replacement. If Step 2 yields two or more feasible options, the most commonly implemented feasible option shall be used as the baseline. In cases where there is more than one commonly implemented feasible option, an appropriate composite of the commonly implemented feasible options shall be used for the baseline determination. An appropriate composite should weight together efficiency levels of the alternatives based on their current or expected rates of selection for new installations in comparable customer situations.

Costs included in this process may be estimates, but their basis must be substantiated. Costs should include: "...the cost of any equipment or materials purchased, including sales tax and installation; any ongoing operation and maintenance costs; any removal costs (less salvage value); and the value of the customer's time in arranging for the installation of the measure, if significant."
[endnote 4]

4. Updates

Any discrepancies, contradictions or lack of clarity identified in this baseline guidance document shall be brought to the attention of the assigned CPUC staff lead. CPUC staff shall examine the issues and provide an updated version of this document as required or needed in the form of clarifying language, added language to cover newly identified issues or problems, or added examples with

outcomes. CPUC staff updates to this document shall be adopted via the following process:

1. A draft of any proposed updated version shall be provided to the service list of R.13-11-005 or its successor proceeding as well as posted on a publicly available website for comment by stakeholders and the public with a minimum comment period of three weeks;
2. After consideration of comments received on the proposed updates CPUC staff shall update the proposed version and post a new version of the definition and guidance document which shall immediately supersede the previous version. However, if the new version contains any added language covering newly identified issues or problems the new version shall have an effective date no less than sixty days after its public posting.

5. Interim ISP direction

An updated ISP guidance document update is under development by CPUC staff as directed by D.16-0-019. Until that update is completed and effective the following guidance regarding the development, use and application of ISP determinations shall be followed.

- When an individual project triggers the requirement for an ISP study to determine the proper baseline, the baseline determined by the study will apply to that project and other similar future projects. CPUC staff may, at its sole discretion direct that the project proceed using an approved alternate baseline without waiting for the result of the ISP study.
- When an individual recurring measure or group of measures identified in the portfolio triggers the requirement for an ISP study to determine the proper baseline, the baseline determined by the study will be applied to that measure using a bi-annual “Bus Stop” approach. Every six months, all new rules from ISP studies will become part of the statewide program rules for projects going forward. CPUC Staff is directed to work with the program

administrators to formalize this “Bus Stop” process and to identify the budget and source of funding for the ISP study activity.

6. Endnotes

[1] For example, the baseline used for energy efficiency savings reporting and incentives shall not regress to a lower efficiency than the existing equipment.

[2] The second baseline applies to the time period from the end of the remaining useful life (RUL) of replaced equipment to the effective useful life (EUL) of the measure

[3] For example, the CPUC *Ex Ante* Review Custom Process Guidance Documents page at: (CPUC staff shall update to provide the current public post page URL)

[4] California Standard Practice Manual, Economic Analysis of Demand-side Programs and Projects, October 2001, (CPUC staff shall update to provide the current public post page URL and download link.