

GROUP D

Custom Project Review Process Improvement Work Plan (DRAFT)

California Public Utilities Commission

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1 INTRODUCTION

Established in California Public Utilities Commission (CPUC) Decision (D.) 11-07-030, the Custom Project Review (CPR) process was designed to help mitigate issues with custom project applications before projects begin, ensure that proper due diligence is performed, and protect ratepayers from improper expenditure of program funds. This document represents the scope of work for a continuous CPR Process Improvement initiative. The overarching goals of this process are to increase the value of the CPR process to ratepayers and to better position the CPR process to continue to provide value in the future as programs continue to evolve.

1.1 Background

Since 2011, the CPR process has selected a sample of Custom projects for enhanced review before implementation. Currently, projects are selected based on three distinct categories:

- Automatic: The Automatic category covers projects with incentive greater than \$250,000.
- Priority: The Priority category includes measures with higher uncertainty, newer technologies, and certain types of projects requested by the PAs.
- Systematic: The Systematic category includes projects that have not had similar dispositions in the last three months which is based on similar project types, implementation teams, calculation types, or other metrics by the same PA.

More recently, the CPR process has been expanded to include NMEC (normalized metered energy consumption) and SEM (strategic energy management) programs. Each of these program types has unique attributes which affect the application of the CPR process.

NMEC projects are beholden to the current NMEC Rulebook. For NMEC projects, the Rulebook quotes the Administrative Law Judge ruling that "The objective of Commission staff review of NMEC custom projects is not to approve project savings claims, but to provide early feedback for implementation and to inform Commission staff -led evaluation" (Version 2.0, III.1.A.3). More generally, the performance-based nature of NMEC changes the focus of a project review from "Are the savings estimations valid?" to "Will performance-based estimates validly reflect project savings?" This review of the CPR process comes as a distinct NMEC project review process has begun and is adapting to ongoing findings in evaluations and other NMEC-related studies, such as the evaluability study. For NMEC, then, this review may not be a refinement of existing processes but a process of identifying and developing processes that will bring NMEC project review up to speed with the long-existing CPR.

Like NMEC, SEM projects are model-based and must abide by CA SEM design guide and the SEM M&V framework. As with NMEC, SEM CPR reviews are advisory only, and PAs are not required to follow CPUC recommendations. The rationale behind this is not to hold up the implementation of SEM projects and increase customer participation. Therefore, some of the initiatives described in this plan for SEM projects are more in line with NMEC in terms of developing processes to expedite the project reviews.

1.2 Objectives

The overarching objectives of this work plan are to increase the value of the CPR process to ratepayers and to position the CPR process to continue to provide value into the future as programs continue to evolve. A key measure of success for this continuous improvement initiative will be to increase the number of eligible projects being submitted and approved through the custom review process, which will lead to increased realization of energy efficiency savings in California.

¹ Ruling on Certain Measurement and Verification Issues, Including for Third Party Programs (01/31/2019). Page 8



Secondary goals include but are not limited to:

- 1. Assessing existing barriers and addressing them to speed up the CPR process.
- 2. Providing quick and timely feedback to PAs on projects.
- 3. Updating and expanding CPUC guidance where needed.
- 4. Updating tools and processes to review projects more efficiently and minimize the need for supplementary data requests.

These objectives will be the framework DNV will apply when carrying out each of the tasks in Section 2. DNV will work closely with the CPUC to implement improvements and complete the tasks in parallel, as much as is feasible, and will deliver as each task is complete.

1.3 Activities and implementation

DNV will work with CPUC and stakeholders (PAs, Cal TF, etc.) through interviews and brainstorming to evaluate the initiatives outlined in this work plan and identify actionable solutions. The general process will be to research and outline the issue, obtain feedback from interested parties, propose solutions, and, when appropriate, implement those solutions as a pilot test and reevaluate to determine the effectiveness of the solution. DNV understands that Cal TF is currently working on their own initiatives for streamlining the CPR process for the PAs, as such DNV will note where our own initiatives may overlap as to not duplicate efforts.

DNV will evaluate CPR processes and identify process improvements to reduce internal project review time and improve the quality of project review dispositions, with the overall goal to increase custom project and portfolio realization rates and net-to-gross (NTG) ratios. To that end, the overall approach to process improvements is designed to have both formative and summative components to allow the CPUC to understand how its current processes is working, as well as how it performed in achieving the desired outcomes overall. The CPR improvement evaluation therefore has the following key activities:

- DNV will review previous reports, PA processes, feedback from previous consultants, guidance documents, previous meeting minutes, monthly reports, and current and ongoing input from PAs, implementers, and others.
- DNV will identify potential solutions to improve efforts to develop, review, and implement ex ante values while maintaining the authority of Energy Division to review ex ante values.
- DNV will identify and characterize the points of and causes of delays or inefficiencies in the current process. Causes
 could be rooted in the systems and processes at the CPUC or with the PAs, and could include lack of resources,
 unclear understanding of the roles and responsibilities, miscommunication of protocols.
- In detailed meeting notes, DNV will summarize the issues discussed, date, time, meeting duration, attendees and follow-up action items.
- All ad-hoc meetings will be summarized with the issues identified, date, time, meeting duration, attendees, and follow-up action items. Themes will be qualitatively identified and recorded.
- Develop innovative solutions to develop, review, and estimate ex ante parameters/results while working closely with the CPUC manager and stakeholder.
- As potential solutions are identified, DNV will support the immediate implementation of those process improvements with strong stakeholder support, utilizing ex ante values.
- DNV will continue to focus on wider incremental improvements to the existing custom ex ante process as the CPR improvement process proceeds.
- Deliver custom projects review process internal assessment and improvement summary report to CPUC outlining the findings and recommendations of the previous analysis.

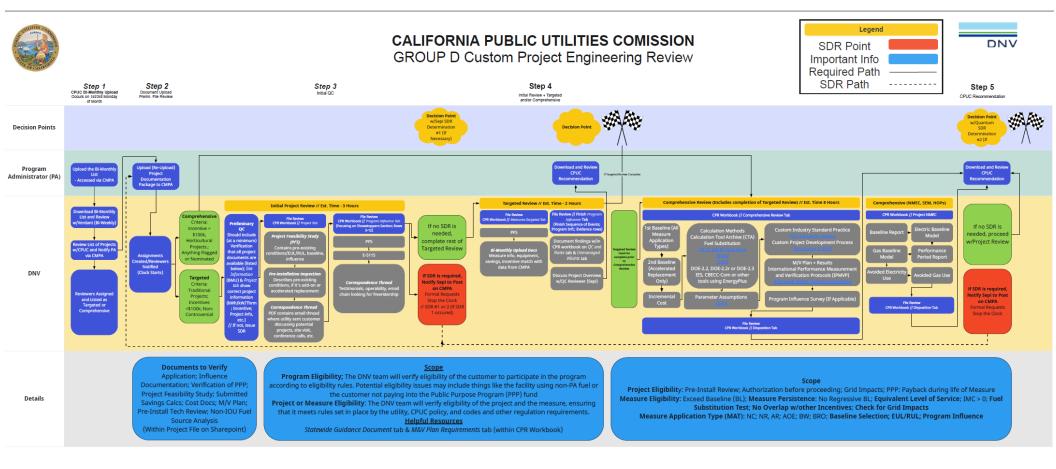


• The DNV team will summarize the results of the brainstorming sessions in a report to CPUC and will used the CPUC responses to evaluate the applicability of existing goals and the need to refine or expand those goals. The outcome of the exercise will be to narrate a clear, concise, and up-to-date purpose and scope of the custom review process.

1.4 Current CPR workflow

The figure below shows the current CPR process workflow, created in 2022. The improvement tasks laid out in section 2 are meant to standardize and streamline different steps in the process. An embedded PDF is also included below the figure for higher resolution.









2 CUSTOM PROJECT REVIEW IMPROVEMENT PLAN

2.1 Checklists and templates

CPUC has implemented many templates and checklists to assist with the submittal and review of custom projects. These documents have been developed in collaboration with statewide working groups and have been updated over the years to reflect policy and procedural changes.

As part of the CPR improvement plan, we have highlighted a few of the key template documents that we recommend for review and update. These documents are used consistently by both the CPUC and the PAs to standardize the format and content of the project information.

Because these templates often overlap in content and may be referred to at multiple points during the project review, it makes sense that, as we look to the updates of individual templates, we are also mindful as to how these templates may be automated so that the data may feed into multiple documents without manual transfer.

The key custom projects templates discussed below are:

Document	Submitter	Reviewer	Purpose	Notes
Project Feasibility Study (PFS)	Implementer	Program Administrator	Implementer submits to the PA as part of their internal review before submittal to the CPUC. This document is then used by the CPUC review team to assist in the pre-install review. This is a Word document that has a free format and not all fields are required.	Project reviewers have noted that often the PFS does not get updated consistently by the PAs as the project goes through the PAs internal review process. As such, the CPUC reviewer has found many inconsistencies with information in PFS and provided supporting documentation.
Bi-monthly Project Uploads (BMU)	Program Administrator	CPUC	Twice monthly communication on projects that are proposed for implementation. Summarizes key information about the project in tabular form.	Fields are not always filled out consistently and there are fields that are no longer used.
CPUC Ready for Review Checklist	Implementer	Program Administrator	Checklist to be used by PAs prior to submittal of the project to the BMU. Last updated in 2019.	Documents are used inconsistently.
Supplemental Data Requests (SDR)	CPUC	Program Administrator	CPUC reviewer form to submit request for additional data from the PA to complete the custom review.	Document is outdated and lacks clarity.
Custom Review Template	CPUC Reviewer	QC Reviewer	Document used by the project reviewer as they read through the project documents.	Document is outdated and many fields are no longer used.
Disposition Template	CPUC	Program Administrator	Document used by CPUC reviewer to communicate project findings.	Document is outdated and does not capture useful information such as baseline and MAT that could help clarify CPUC feedback.
Early Opinion Template (see section 2.2.4)	Program Administrator	CPUC	Document used by the PA to request early feedback from the CPUC to clarify policy. Typically used as it may apply to a project being considered for CPR.	Document formatting and instruction is unclear and leads to confusing comment and response procedure.



2.1.1 Project Feasibility Study template

2.1.1.1 Initiative description

Before the pre-installation review stage, custom project implementers/developers must submit a Project Feasibility Study (PFS) to the relevant PA for review and approval. The most recent version of the PFS was updated in September 2023.² Currently, a statewide PFS working group has convened to assure continued updates are in alignment with statewide policy moving forward. The working group collaborates on the Southern California Edison (SCE) SharePoint page.

The PFS was developed to standardize material submittal, centralize information, and put all important project information into a single document to aid in the project review. The PFS includes the M&V plan, which serves an important but differing function for NMEC projects.

The PFS for NMEC projects combines with the M&V plan to provide core information at the pre-installation phase. Some of NMEC's unique but necessary documentation, such as model specifications, is not consistently reported in these documents. A revised PFS for NMEC projects could subsume remaining M&V plan features and capture all necessary pre-implementation information in a single document.

The PFS update task aims to update the PFS template to improve its applicability to all project types, minimize duplicable sections and data requested, while also modifying the formatting to allow for better integration with the CPR review team processes through automation. This would speed up the review process for all projects.

Detailed research questions for this task are as follows:

- If this is a requirement for all custom projects, how adequately are PAs completing and submitting feasibility in their project data response?
- Is the template too onerous to fill out?
- Do revisions exist to be more user-friendly without sacrificing the requirements?
- How can the PFS format be modified to better integrate with CPR team reviews?

2.1.1.2 Proposed activities

DNV will complete the following activities as part of this task:

- Complete an in-depth assessment of the existing PFS template.
- Engage with the active PFS working group to incorporate feedback and solicit new feedback.
- Revise the existing PFS based on the results of the above activities.
 - May include developing tiered templates based on potential project size, incentives, and level of complexity.
 - Will include NMEC-specific additions that reflect current best PA practice.

2.1.1.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft updated PFS template (redline and clean versions)
- One round of CPUC review
- Second round of stakeholder feedback and associated revision³
- Final updated PFS template (redline and clean versions)

 $^{^2\} https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/custom-projects-review-guidance-documents$

³ Stakeholders have already provided one round of feedback on the PFS template.



2.1.2 Bimonthly uploads from the PAs

2.1.2.1 Initiative description

The bimonthly upload (BMU) process is the main mechanism for collecting project information for the CPR process and the entailed project selection (Section 2.2.3 of this work plan). This report is the first opportunity for PAs to submit project information considering current CPUC data submittal reports. The bimonthly reports are a combination of new project data and high-level descriptions submitted every two weeks. Bimonthly reports are compiled and analyzed in the project selection process, resulting in a certain portion of projects selected for a CPR. The information provided in the biweekly report assists future data request processes and sets a baseline for project expectations. Over the years, the submittal template has evolved, incorporating feedback from diverse working groups. The Custom Measure Project Archive (CMPA) serves as the repository for bimonthly uploads submitted by PAs and serves as the main platform for project file collaboration.

The bimonthly uploads update task intends to improve the template to provide necessary data needed in the new requirements of the updated CPR and project selection process. This update will emphasize clarity, ease of use, and the effective tracking of CPR touched projects.

Detailed research questions for this task are as follows:

- Does the current bimonthly update capture major characteristics of custom projects and contain sufficient information for reviewers to provide initial high-level recommendations while maintaining clarity and ease of use?
- How can the submittal template be standardized to include new data requirements for the updated project selection process, to include new data requirements for an initial high-level project review, and to inform supplemental data requests after CPR selections occurs?
- How can the template improve efforts to connect project tracking data throughout the CPUC data reporting process, including but not limited to the quarterly report, CEDARs claim system, and ex post review selection?

2.1.2.2 Proposed activities

DNV will complete the following activities as part of this task:

- Complete an in-depth assessment of the current submittal template.
- Interview PAs, stakeholders, and CPUC staff to gather diverse perspectives on the existing submittal process for CPR
- Coordinate with CEDARs support staff and ex post teams to establish needs to collect relevant data for tracking data connections and tracking projects through to ex post.
- · Revise the existing bimonthly upload template based on the results of the above activities.

2.1.2.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft updated bimonthly upload template (redline and clean versions)
- One round of CPUC review
- Final updated bimonthly upload template (redline and clean versions)



2.1.3 Data request checklists

2.1.3.1 Initiative description

PAs and implementers generally follow checklists to ensure that sufficient files are uploaded to CMPA once a project is selected for ex ante review. The Statewide Custom Project Review Guidance Document⁴ provides recommendations on the minimum required documentation to support project reviews. There are two checklists currently used to gather and request data from the PAs for CPR project submittal and review.

The CPUC Ready for Review Checklist is available for PAs as a tool to provide implementers for submittal of appropriate documentation for CPR. However, the PAs generally follow their own data submittal checklists based on the guidance document; in other words, there is no universal data submittal checklist mandated by the CPUC. The Ready for Review Checklist was last updated in 2019.

The Supplemental Data Request (SDR) template is a separate document that is used by the CPUC reviewer to request missing information from the PA. It aligns with the CPUC Ready for Review Checklist such that if the PA were to follow the checklist, no supplemental data request should be needed.

The data request checklists update task aims to help the PAs provide more timely and comprehensive data uploads on selected projects to avoid review delays.

Detailed research questions for this task are as follows:

- Are the existing data request checklists adequate for PAs and implementers to respond completely and accurately?
- Is a universal, mandated data checklist required to ensure compliance?
- Are separate checklists required to accommodate different program types (e.g., CIAC, NMEC, SEM)?
- Is there data that is missing at the ex post evaluation whether or not the project was selected for CPR?

2.1.3.2 Proposed activities

DNV will complete the following activities as part of this task:

- Complete an in-depth assessment of the existing checklists in use by PA and assess their applicability and adequacy across various programs, measures, and building types, such as custom, NMEC, SEM, and 3P programs; HVAC, lighting, and process measures; and commercial, industrial, and agricultural building types.
- Interview stakeholders such as PAs, the CPUC staff, program implementers, ex post evaluators, and the DNV CPR team.
- Revise the existing data request checklists based on the results of the above activities.

2.1.3.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft updated data request checklists (redline and clean versions)
- One round of CPUC review
- Final updated data request checklists (redline and clean versions)

⁴ "Statewide Custom Project Guidance Document Version 1.4", Chapter 3, https://file.ac/OEr-2p-bk3A/.



2.1.4 Custom review template

2.1.4.1 Initiative description

The CPR team populates the custom review workbook as part of each project review. The review workbook serves as the main hub of review information leading up to the disposition tab submitted to the PAs. It contains approximately six tabs required for each project review, spanning the full array of review topics across engineering, baseline, policy, program influence, and statistical modeling categories. The workbook also contains tabs related to supplemental data requests to be submitted to the PAs. As part of each project review, the assigned QC lead posts the review workbook to CMPA, where it is available for download by CPUC staff if desired. As currently configured, the custom review workbook requires significant manual translation by CPR team staff from the PFS.

The custom review template update task intends to speed up the CPR team review process with a more user-friendly review template that effectively captures project issues.

Detailed research questions for this task are as follows:

- Is the custom review template too burdensome for the review team?
- How are the review templates currently filled out? Are specific tabs or fields generally left blank?
- Which tabs and fields are most critical for a successful review?
- Is the template appropriately capturing and effective in bringing the project issues to the forefront?
- Are different review templates required for the different project types (e.g., CIAC, NMEC, SEM)?
- Is CPUC staff interested in reviewing a selection of workbooks as they are drafted? If so, which fields are most important to CPUC staff?

2.1.4.2 Proposed activities

DNV will complete the following activities as part of this task:

- Assessment of review template adherence to CPUC policies as stipulated through decisions, resolutions, etc., as well as how extensively the review template is currently filled out through aggregation and analysis of prior dispositions.
- Coordination with the ex post team to assess the alignment with ex post instruments.
- Interviews with the DNV CPR review team and CPUC staff.
- Revise the existing custom review template based on the results of the above activities.

2.1.4.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft updated custom review workbook (accompanied by explanations of changes made)
- One round of CPUC review
- Draft updated custom review workbook (accompanied by explanations of changes made)



2.1.5 Disposition template

2.1.5.1 Initiative description

The CPR team submits a disposition spreadsheet to CMPA for each reviewed project. The disposition notifies the PA and implementer of the review conclusion (e.g., application ready to proceed without exceptions, application ready to proceed with exceptions, or application rejected) and supports the review conclusion with categorical explanations of the review exceptions (observations that require action by the PA). The disposition sheet also includes important project information such as project ID, review timeline, saving claims, and proposed incentive amount.

The disposition template document is outdated and does not capture select key pieces of information such as baseline and measure application type (MAT) used in the project that could help clarify CPUC feedback. This information is often buried in the text of the feedback and could be presented in a more standardized format.

The disposition template update task aims to ensure that dispositions provide clear and actionable guidance and recommendations for PAs and implementers.

Detailed research questions for this task are as follows:

- Does the disposition template sufficiently and clearly communicate project issues to PAs and implementers?
- Do the disposition categories fully cover the relevant review topics?
- Are any relevant fields absent from the current disposition template?
- Are different disposition templates required for the different custom project types (e.g., CIAC, NMEC, SEM)?
- Are additional review conclusion categories needed beyond the five options included in the current template?

2.1.5.2 Proposed activities

DNV will complete the following activities as part of this task:

- Review the effectiveness of the disposition template at communicating project issues.
- Identify best practices for drafting review dispositions (e.g., supporting review outcomes with clear policy references as applicable).
- Conduct interviews with PAs, the CPUC, CPR team members, and other stakeholders to understand the effectiveness of the dispositions in communicating the outcomes.
- Coordinate with CEDARs support staff and ex post teams to develop system to track disposition guidance for projects from ex ante review to ex post. Revise the existing disposition template based on the results of the above activities.

2.1.5.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft updated disposition template (redline and clean versions)
- One round of CPUC review
- Final updated disposition template (redline and clean versions)



2.2 Guidance documents

2.2.1 Statewide Custom Guidance, ISP Guidance, and NMEC Rulebook

Review of custom projects relies heavily on three guidance documents: the Statewide Custom Project Guidance Document, the Industry Standard Practice (ISP) Guidance Document, and the NMEC Rulebook. These documents should be reviewed periodically and updated to align with new and revised CA statewide policy and guidelines.

2.2.1.1 Initiative description

The Statewide Custom Guidance Document "presents a compendium of the current CPUC directives for estimating expected energy savings claims for custom projects. This document is intended to communicate current custom projects rules and processes. This Guidance Document is not intended to restrict or impede program design, nor is it intended to supersede any Ruling or Decision from the CPUC." Since this document was last updated (June 2021), new and revised CPUC energy efficiency policy has been approved, including but not limited to DEER Resolutions, guidance memos, the NMEC Rulebook Update, the SEM M&V Guidebook, and the inclusion of Integrated Demand Side Management (IDSM) into the energy efficiency portfolio. As such, this document should be prioritized for update to ensure alignment with current policy.

Similarly, the Statewide Industry Standard Practice (ISP) Guidance Document version 3.1 was last updated in April 2021. ISP studies are used to determine the appropriate baseline for measures or processes for which a code or standard does not exist. The ISP Guidance Document informs how these studies are carried out. This document includes ISP guidance for program opportunities, workpaper (measure package) development, and custom project development. For the purposes of this CPR improvement process, this scope will be limited to the ISP guidance of custom project development. The ISP custom project guidance should be updated in conjunction with the Statewide Custom Guidance Document to assure consistency between the two documents.

The Normalized Metered Energy Consumption (NMEC) Rulebook summarizes CPUC requirements for NMEC projects, providing a list of the directives and policies that have been established by the CPUC for the administration and implementation of such programs. A second set of Rulebook revisions is currently in the comment process. Unlike the Custom Project Guidance Document, the NMEC Rulebook is not produced by the PAs and is not as focused on practical implementation details. As such, this task should consider modifying the NMEC rulebook to include more practical guidance on specific details that will facilitate a smooth review and evaluation process as well as general clarification and interpretation of Rulebook requirements. This would facilitate the implementation of NMEC projects in the near term and facilitate useful discussion between staff, PAs, and stakeholders regarding interpretation.

Detailed research questions for this task are as follows:

- Are the guidance documents up to date with current policies and custom review needs?
- How often do updates occur? How often should they occur?
- What would make the guidance documents more user-friendly for the PAs and implementers?
- Can we make different project scenarios and outcomes as illustrations based on previously reviewed projects?
- Would a limited NMEC-specific version of the Statewide Custom Project Guidance Document facilitate the implementation and review of NMEC projects?

2.2.1.2 Proposed activities

DNV will complete the following activities as part of this task:

⁵ https://file.ac/OEr-2p-bk3A/



- Review relevant CPUC decisions, resolutions, dispositions, and other relevant documentation.
- Co-ordinate with ex post team and develop various project scenarios and custom review best practices for these different scenarios.
- Identify conflicting policies or policies that generally cause confusion or are in need of clarification .
- Revise the existing guidance documents based on the results of the above activities.

2.2.1.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft and final updated Custom Guidance Document (redline and clean versions)
- Draft and final updated ISP Guidance Document (redline and clean versions)
- Draft and final updated NMEC Rulebook (redline and clean versions)
- One round of CPUC and stakeholder review for each document



2.2.2 M&V guidance

2.2.2.1 Initiative description

Currently, the Custom Guidance Document explains why custom projects need to have M&V plans and lists the minimum requirements of M&V documentation for custom projects. However, this document does not address whether ex post M&V is required for all custom projects, required M&V rigor levels, methods, or data collection duration by measure/project types. As a result, the CPR touched custom projects with M&V requirements go through multiple SDRs between the CPUC and the PAs before coming to an agreement on the appropriate M&V. This can cause delays in claiming the project savings due to incomplete M&V and the need for a final ex post M&V savings true-up calculation.

To address these challenges and minimize the savings claim delays, this task will provide recommendations to PAs with revised guidance on M&V plan requirements, rigor level, data collection needs and duration, and overall M&V best practices.

Detailed research questions for this task are as follows:

- Are the current M&V plan documentation requirements for the PAs too stringent?
- Do all custom projects need to have post-implementation M&V?
- How should the M&V rigor level vary as a function of measure type, project size, and incentive level?
- What are M&V best practices in terms of methods, timing, accuracy, and duration?

2.2.2.2 Proposed activities

DNV will complete the following activities as part of this task:

- Review the current M&V plan documentation requirements.
- Review regulatory framework related to post implementation M&V, CA evaluation protocols, and other M&V protocols such as the International Performance Measurement and Verification Protocol (IPMVP) and DOE's Uniform Methods Project (UMP).
- Review peer-reviewed white papers to address the value of post-implementation M&V at various rigor levels, methods timing, and duration.
- Interview M&V experts within DNV, the CPUC and stakeholders.
- Review site-specific impact evaluation to extract best practices of M&V.
- Provide recommendations to the PAs with revised guidance.

2.2.2.3 Deliverable(s)

DNV will provide the following deliverables as part of this task:

- Draft report outlining findings, key conclusions, and recommendations associated with task objectives listed above.
- · One round of CPUC review
- Final report
- Subsequently, these recommendations will be included in the Statewide Custom Guidance Document for the PAs and implementers as guidance for conducting M&V on various custom projects.



2.2.3 Project selection criteria

2.2.3.1 Initiative description

The CPUC selects projects to review from the PAs' biweekly project submittals (Section 2.1.2 of this work plan). Projects are selected based on a CPUC project selection plan, a living guidance document outlining the reasoning and approach to project selection. This includes selection criteria, including criteria that necessitates project selection (such as previous rejection, incentive amount, and the relative novelty of the project). Overall, 16% of the average of applications submitted per biweekly period over the previous three months are selected, including some that are randomly selected.

However, as both third-party implementation and the diversity of program types are likely to increase in future years (e.g., like SEM and NMEC have in recent years), including electrification, the current selection criteria may not result in an ideal mix of project types going forward. Improved project review selection criteria may cover a more diverse mix of programs and technology types, including focusing on project types that have historically shown poor M&V results.

Detailed research questions for this task are as follows:

Are the current CPR project selection criteria adequate to cover all programs and delivery types across new 3P programs, PAs, regional energy networks (RENs), and community choice aggregators (CCAs)?

2.2.3.2 Proposed activities

DNV will complete the following activities as part of this task:

- Review the selection criteria and update as needed.
- Complete interviews with PAs, stakeholders, and the CPUC staff.

2.2.3.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft updated project selection criteria (redline and clean versions)
- One round of CPUC review
- Final updated project selection criteria (redline and clean versions)



2.2.4 Early opinions and statewide memos

2.2.4.1 Initiative description

For custom projects in the development stage that require CPUC guidance on specific issues or areas of uncertainty, PAs can request Early Opinion (EO) review. Topics vary widely but may include measure eligibility or how to implement specific CPUC guidance or policy. The PA submits an EO request form, which includes its own opinion on the specific issue. The CPR team attempts to issue a response within 15 business days. This process may be repeated if there are open questions from the CPUC that the PAs needs to clarify.

Current best practice is for EOs to be redacted and placed on the CA Energy Guidance website. However, this practice is not always followed, so the guidance provided in EOs often does not become available statewide. Further, there is no process for converting the project-specific EO guidance into more generalizable technology- or measure-specific guidance and then clearly communicating this guidance statewide. Providing these "guidance memos" would give all PAs access to this information and would help developers and implementers build projects quicker.

The current EO template and formatting will be reviewed and updated as part of this initiative pending the findings of communication of statewide guidance and clarification of policy initiated as part of the CPR process.

Detailed research questions for this task are as follows:

- How can early opinions and memos be used to provide more overarching guidance?
- How can the formatting of EO requests and decisions be made more actionable?

2.2.4.2 Proposed activities

DNV will complete the following activities as part of this task:

- Inventory and consolidate past dispositions and EO findings to develop more technology- and policy-specific guidance.
- Brainstorm with the CPUC, PAs, and Cal TF to optimize the structure of EO decisions to make them more actionable.

2.2.4.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft report outlining findings, key conclusions, and recommendations associated with task objectives listed above.
- Draft and final revised EO template
- One round of CPUC review
- Final report
- Develop pathway by which EO findings can be communicated to the statewide group

⁶ CAEnergyGuidance.com



2.3 Attribution

2.3.1 Program influence

2.3.1.1 Initiative description

To ensure ratepayer funds are being effectively spent, PAs and program implementers must demonstrate before a disposition is made that the program caused the customer to implement a more energy efficient project than they otherwise would have, absent the program intervention (which may include technical, financial support, or both). Documentation of this program influence (PI), including what the customer was planning and how the program enabled the customer to adopt an alternative, is submitted as one component of the overall project documentation. The CPR team reviews this documentation for completeness and quality of evidence, identifying projects that appear to be full free-riders (participants who would have installed and/or implemented the measure or equipment in the absence of the program).

This task aims to streamline PI requirements for custom projects to improve the inflow of projects, speed up the review process, and reduce the incidence of SDRs.

Detailed research questions for this task are as follows:

- Are the documentation requirements for demonstrating PI in line with the CPUC's policy directive in the absence of energy savings performance incentive (ESPI)⁷?
- Are all custom projects required to demonstrate the same level of PI documentation irrespective of project size, incentive, and complexity?
- How does the NMEC context affect PI determination, especially given proposed Rulebook revisions?
- How is PI for custom projects assessed in other jurisdictions in the US?

2.3.1.2 Proposed activities

DNV will complete the following activities as part of this task:

- · Review decisions, resolutions, and dispositions to assess the requirements of PI for custom projects.
- Conduct literature reviews, secondary research, and interviews of non-California PAs to compare how other jurisdictions handle PI during the ex ante process.
- Develop recommendations to update the requirements based on the findings.

2.3.1.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft report outlining findings, key conclusions, and recommendations associated with task objectives listed above
- One round of CPUC review
- Final report

⁷ The Energy Savings Performance Incentive (ESPI) mechanism allows the investor-owned utilities (IOUs) to earn financial incentives based on the performance of their administered energy efficiency programs. The CPUC has instituted a moratorium on earnings associated with ESPI until the CPUC resolves the policy issues associated with energy efficiency potential and goal setting. This moratorium would stay in effect during the transition period, currently underway, to a greater percentage of statewide and third-party programs as part of the energy efficiency portfolios administered by the IOUs.



2.3.2 Preponderance of Evidence documentation requirements for AR measures (E-5115)

2.3.2.1 Initiative description

PAs and implementers may identify custom projects as accelerated replacement (AR), which includes documenting through Preponderance of Evidence (POE) that the existing equipment would have continued to be viable for its remaining useful life. This requires all evidence, both in favor and against, be documented and then assessed by the CPR team based on its probable accuracy. A POE guidance document, developed through the Track 1 Working Group, provides a framework for weighing the evidence.

A process for operationalizing CPUC Resolution E5115 was initiated in 2021. At that time, the CPUC release a series of documents outlining the various POE tiers and requested feedback from the PAs. The consolidated questions and feedback from the PAs were released in September 2023.

This task intends to streamline the POE document requirement process, minimize SDRs for AR projects, and speed up the project review process as a result.

Detailed research questions for this task are as follows:

- Are the PAs following the requirements for various POE tiers as intended?
- Are the preponderance of evidence requirements for AR measures at various tiers too burdensome for PAs and project developers?
- Can the POE requirements be updated to include practical guidance for other project types (e.g., NMEC)?

2.3.2.2 Proposed activities

DNV will complete the following activities as part of this task:

- Review decisions, resolutions, and dispositions related to POE requirements.
- Interview PAs and CPUC staff using the POE operationalization pilot documents as guideline.
- Assess if the CPR's POE documentation requirements for various tiers align with the CPUC's directives and modify as necessary for all five tiers.

2.3.2.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft memo outlining findings, key conclusions, and recommendations associated with task objectives listed above.
- One round of CPUC review
- Final memo

⁸ The Preponderance of Evidence standard used here is based on the more convincing evidence ("more likely than not") and its probable truth and accuracy, and not simply on the amount of evidence.

⁹ https://file.ac/Zzi2PcFlsJs/



2.3.3 Net-to-gross and free-ridership

2.3.3.1 Initiative description

Every custom project, including those not touched by CPR, is subject to an ex post evaluation to determine net-to-gross (NTG) and free-ridership (FR). This is done in an ex post fashion through participant surveys with a representative sample of custom projects. The standard NTG battery of questions within these participant surveys, which has remained the same for roughly 15 years, is stringent, burdensome on respondents, and converges towards a result of 50% FR.

Since the introduction of the currently used standard NTG survey instrument, several different program designs have been developed. Additionally, energy efficiency programs are moving toward third party, and fuel substitution (via electrification) will become more prevalent in the future. The team will look to streamline the NTG methodology, make it less burdensome on respondents, and optimize it to better align with both current and future program design and delivery, all while maintaining policy goals.

Detailed research questions for this task are as follows:

- How is FR defined in California, and how does it compare to other states?
- How do other jurisdictions in the US handle net-to-gross evaluations for custom projects?
- Can the CPUC re-assess FR and NTG methodologies that do not negatively impact customers?
- How to vet the current NTG instrument for revision?
- Does the NTG methodology need to account for total system benefits (TSB)?

2.3.3.2 Proposed activities

DNV will complete the following activities as part of this task:

- Perform literature reviews and interviews with utilities outside California to understand their free-ridership determinations and assess their NTG methods.
- Provide a comparative analysis between California and other states for free-ridership and NTG assessments.
- Provide recommendations to revise and update NTG instruments that align with California policies and recent changes in PA EE programs to more local third-party implementers and federal Inflation Reduction Act (IRA) funding.

2.3.3.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft report outlining findings, key conclusions, and recommendations associated with task objectives listed above.
- One round of CPUC review
- Final report



2.4 Other initiatives

2.4.1 Treatment of CPR touched projects in ex post evaluation

2.4.1.1 Initiative description

Custom projects selected for CPR go through a rigorous review process that is aligned with statewide custom project guidance. These reviews are performed by the CPUC CPR team, adhering to CPUC's energy efficiency rules and policy guidance in terms of assessing program influence, evaluating measure application types, baseline determination, M&V and calculation methods, operating conditions, and all other relevant parameters. Custom projects not selected for review receive a default ex ante gross realization rate (GRR) of 0.9.

Currently, the CPR-reviewed projects receive the same full evaluation treatment as custom projects not selected for CPR when they are selected as part of the ex post evaluation process. Acknowledging some parameters such as operating conditions are dynamic and could change between CPR evaluation and ex post assessment, most project parameters are static and do not change. Conducting a full-blown evaluation on CPR reviewed projects (at least those that have achieved an ex ante GRR of 1.0) during the ex post evaluation add significant cost to the custom development process and custom project program oversight without adding sufficient additional value.

This task aims to investigate whether complete re-review of CPR touched projects during the ex post evaluation process is avoidable and whether it may be possible to only focus on parameters impacted by differing ex-post conditions.

Detailed research questions for this task are as follows:

- Could ex post review of CPR touched projects limit the evaluation rigor to the parameters that potentially change between the CPR review and ex post evaluation time frame?
- For projects that have been through CPR, which aspects should ex post evaluation focus on?
- How do those aspects impact both net and gross savings estimate of projects?

2.4.1.2 Proposed activities

DNV will complete the following activities as part of this task:

- Review CPR touched projects in ex post evaluation to assess which parameters have impacted the GRRs and NTG ratios, and by how much they have been affected.
- Develop a framework for performing M&V for CPR touched projects.

2.4.1.3 Deliverables

DNV will provide the following deliverables as part of this task:

- Draft memo outlining findings, key conclusions, and guidance on a framework for ex post evaluation of custom projects reviewed as part of the CPR process.
- · One round of CPUC review
- Final memo



2.4.2 Industry standard practice studies

2.4.2.1 Initiative description

For many types of technologies installed through PA programs (including custom measures), industry standard practice (ISP) baselines are used for calculating energy savings. Inputs to ISP include current equipment purchasing trends, product market penetration, and current equipment maintenance practices. ISP studies, which are routinely created and updated, are needed because baselines are constantly changing. As such, ISP studies expire after a set period of time, and need to be updated periodically.

The ISP Guidance Document prescribes when PAs should complete an ISP study based on custom project requirements, and the CPUC can direct the PAs to conduct specific ISP studies. However, to date, no comprehensive tracking of ISP study expiration dates, nor a prioritization process, has been established. Additionally, not all ISP studies have been uploaded to a centralized location that all stakeholders freely access. This makes it difficult for all parties to know what ISP studies have been done and, crucially, whether any relevant ISP studies exist for a given measure or project type.

This task intends to build upon the effort currently underway under the PAs' contract with Cal TF. Having up-to-date ISP studies for more prevalent technologies would reduce project development time and CPR team review time and minimize the frequent back and forth between the review team and PAs.

Please note that this initiative is separate from updating the ISP Guidance Document, which is part of another task within this scope of work (Section 2.2.1).

Detailed research questions for this task are as follows:

- Do we have ISP studies for more prevalent technologies and are they up to date for use?
- Are studies available to PAs, stakeholders, and implementers?
- What platform is available for PAs, stakeholders, and implementors to access ISP studies?

2.4.2.2 Proposed activities

DNV will complete the following activities as part of this task:

- Leverage ongoing Cal TF cataloguing of ISP studies, identify which ISP studies need updates and identify where study
 gaps exist for opportunities to conduct future studies.
- Provide recommendations to Cal TF to make the catalogue/platform for ISP studies as user-friendly as possible.
- Interview CPR internal team, the CPUC, stakeholders, PAs, and the Emerging Technology Coordinating Council (ETCC) to assess the need of ISP studies.
- Perform secondary research and review the last three years of tracking data to understand the trends of various measures to inform the need for various ISP studies specifically for emerging technologies and electrification technologies.

2.4.2.3 Deliverables

DNV will provide the following deliverables:

- Draft memo outlining, for specific technologies or sectors, the need for new ISP studies and existing studies that need updates.
- One round of CPUC review
- Final memo



2.4.3 Coordination with PAs and Cal TF

2.4.3.1 Initiative description

Often, when the CPR team requests project data from PAs or implementers, incomplete data are returned, leading to supplementary data requests (SDRs). Each additional request negatively impacts customers by extending project timelines through the CPR process. The prevalence of SDRs and the inconsistent quality and completeness of data make it appear that PAs currently do not have formal processes or standardized protocols for responding to data requests during the CPR review process that are incorporated into their internal training plan.

This initiative will aim to help the PAs develop (or revise) CPR operations protocols and manuals, ensuring that a step-by-step process for fully complying with the CPR process is well-documented. As the liaison representing the PAs in the CPR process, Cal TF can play an important coordinating role. This will help the PAs avoid reinventing the wheel when staff turnover, reorganization, or personnel changes occur across all organizations, and in turn, minimize delays in the CPR process.

Detailed research questions for this task are as follows:

- Do the PAs have standard, formalized processes in place to support the CPR process (including responding to data requests)?
- If not, can the PAs develop a process and operations manual to support the CPR process?

2.4.3.2 Proposed activities

DNV will complete the following activities as part of this task:

- · Complete interviews with PAs and implementers to assess whether standard protocols are in place and used.
- Review existing protocols and provide feedback
- Assist in coordination for the PAs, Cal TF, and the CPUC team to develop an external PA developed CPR operations
 manual (note: This distinct from the CPR Policy Guidance described above as part of section 2.2.1)

2.4.3.3 Deliverables

DNV will provide the following deliverables as part of this task:

- If there are protocols in place, a memo with findings and recommendations to improve the PAs' CPR review process.
- If no protocols, DNV will request that Cal TF, the PAs, and CPUC to develop CPR operations manual.



2.4.4 Gray areas

2.4.4.1 Initiative description

The CPR process often spurs discussion on correct application of CPUC policies or rules as it relates to implementation and evaluation of custom projects. There are elements of CPUC policies or rules that may not be clear to program administrators or implementors and as such, we identify these elements as policy gray areas. These gray areas can create points of confusion that may hold up project reviews and frustrate CPUC reviewers and stakeholders.

Policy documents direct PAs to treat projects in specific ways, typically regarding application of baselines, measure application type, and program influence. However, due to their custom nature, not all projects fit explicitly into such categories. As part of the bi-weekly meetings with the PAs, the CPR review team takes notes to identify where there is a need for clarification. Examples of these gray areas have included:

- Applicability of measure application types (MAT)
- Correct documentation of program influence
- · Determination of standard practice

DNV has documented these conversations as part of the weekly meeting notes and summarizes policy interpretation implications in a monthly report. Often, the interpretation may be clarified within the meeting or in an email; however, the outcomes may never be captured at a statewide level where CPUC may issue clarifying guidance or update existing policy documents.

This task aims to lessen contentious project reviews with a clearer pathway to policy interpretation and outcomes, and to identify "showstopper" projects for correction or rejection in a more efficient manner.

Detailed research questions for this task are as follows:

- Where is there leniency for PAs to interpret policy differently from the CPUC?
- Where are there policies or rules that may not reflect newer technologies within evolving systemic environments that impede desired custom project technology advancements?
- How to update applicable policies or rules?

2.4.4.2 Proposed activities

DNV will complete the following activities as part of this task:

- Perform review of PA meeting notes, CPUC decisions, resolutions, dispositions, and relevant documentations.
- Interview CPR internal team, the CPUC, stakeholders, PAs to assess the extent to which this is an issue.
- Note where there have been differing interpretations on policies or rules and outline the actions and outcomes.
- Outline where there are barriers to successful implementation of projects.

2.4.4.3 Deliverables

DNV will provide the following deliverables as part of this task:

- A framework to facilitate interpretations when project policy gray areas exist
- Proposed recommendations for clarifications



APPENDIX A: GLOSSARY OF TERMS

Term	Definition
Accelerated replacement (AR)	Replacement of existing equipment with nominally higher efficiency equipment in which, absent the energy efficiency program, the existing equipment would have remained in operation for at least its remaining useful life.
Aggregation	Method of quantifying meter-based savings claims by comparing pre/post normalized meter data from a population of participants with pre/post normalized meter data from a population of non-participants. Claims are made at the program or population level.
California Energy Data and Reporting System (CEDARS)	Refers to the database that securely manages California Energy Efficiency Program data reported to the CPUC by IOUs, Regional Energy Networks (RENs), and certain Community Choice Aggregators (CCAs).
California Public Utilities Commission (CPUC)	Regulates investor-owned electric and natural gas utilities operating in California.
CIAC	Custom industrial, agricultural, and commercial
Community choice aggregator (CCA)	Cities, counties, or other qualifying governmental entities, operating within the service areas of investor-owned utilities, that aggregate electricity demand within their jurisdictions in order to procure electricity for customers.
Custom Measure Project Archive (CMPA)	Online archive serving as the repository for bimonthly uploads submitted by PAs and as the main platform for project file collaboration.
Customer	An account holder who receives delivered energy from one of the investor-owned utilities (IOUs).
Database for Energy Efficiency Resources (DEER)	This database contains information on energy efficient technologies and measures. DEER provides estimates of the energy-savings potential for these technologies in residential and non-residential applications. DEER is used by California Energy Efficiency (EE) Program Administrators (PAs), private sector implementers, and the EE industry across the country to develop and design energy efficiency programs.
Early opinion (EO)	Process allowing PAs to request clarification from of custom project related CPUC policies or rules before submitting a project.
Emerging technologies (ET)	New energy efficiency technologies, systems, or practices that have significant energy savings potential but have not yet achieved sufficient market share (for a variety of reasons) to be considered self-sustaining or commercially viable. Emerging technologies include late-stage prototypes or under-utilized but commercially available hardware, software, design tools or energy services that if implemented appropriately should result in energy savings.
Emerging Technology Coordinating Council (ETCC)	A collaborative forum consisting of California's investor-owned utilities, the Sacramento Utility District, the California Energy Commission, focused on identifying, assessing, and supporting the commercialization of emerging energy-reducing technologies.
Energy efficiency (EE)	Activities or programs that influence customers to reduce energy use by making investments in more efficient equipment or controls, which reduce energy use while maintaining a comparable level of service.
Energy efficiency measure or Measure	Energy using equipment, control system, or practice whose installation and/or implementation results in a reduction of energy purchased from the distribution utility (while maintaining a comparable or higher level of a specific service or to accomplish a specific amount of work).
Energy efficiency savings	Energy efficiency measures may result in both energy savings (measured in kilowatt hours or therms) and demand (measured in kilowatts). The term "energy savings" may be used to refer to both energy and demand reductions.
Energy efficiency project	Implementation of an EE measure or group of measures at essentially one time, through a single incentive application.
Evaluability	An assessment of the probability that sufficient evaluation information will be available when evaluations are actually undertaken.
Ex ante review (EAR) or Custom Project Review	Process that estimates the potential energy savings and the customer financial incentive for an energy efficiency measure before it is installed and/or implemented based on predictions of typical operating conditions and baseline usage.



Term	Definition
	The review process that occurs before savings for a measure or project savings claim is "frozen" and undertaken to verify that the expected savings values used to calculate the reported savings are reasonable and based on best available information.
Ex ante values or Expected savings	Estimated savings, cost, incentive, effective useful life, net-to-gross ratio, and other values that are the basis of the savings claim. The expected savings values are the values prior to the evaluation of the portfolio cycle. These values reflect the IOU reported savings, which may be revised with an impact evaluation.
Ex post values	Estimated savings, cost, effective useful life, net-to-gross ratio, and other values that are determined by the CPUC through the Evaluation, Measurement and Verification process for energy efficiency measures, programs, and portfolios. Ex post evaluations serve the fundamental purpose of developing estimates of reliable load impacts delivered through ratepayer-funded efficiency efforts.
Free rider	Program participants who would have installed and/or implemented the measure or equipment in the absence of the program.
Fuel substitution or Fuel switching	Programs which are intended to substitute energy using equipment of one energy source with a competing energy source (e.g. switch from electric resistance heating to gas furnaces).
Gross realization rate	Also known as realization rate. The ratio of achieved energy savings to predicted energy savings that considers the likelihood that not all Commission-approved projects undertaken by IOUs will come to fruition.
Gross savings	Gross savings count the energy savings from energy efficiency measures installed by program participants irrespective of whether or not those savings are from free riders. Gross savings are adjusted by a net-to-gross ratio to produce net savings (that is, to remove the savings associated with free riders).
Implementer	Commercial entity involved in designing and/or implementing an energy efficiency program. An Implementer may be a separate commercial entity or a department within the IOU or program administrator. A separate entity, contracted by a program administrator, to design and deliver an energy efficiency program is also referred to as a third-party implementer.
Incentive	Payments for pre-approved projects that retrofit or install new equipment to save energy and are typically much larger in scope than those that qualify for a rebate; typically, the term "incentives" (as opposed to "rebates") applies to custom projects.
Industry standard practice (ISP)	A measure or practice that represents the typical current equipment purchased, or a commonly used, currently trending practice in the applicable markets absent the program. ISP represents today's market trend, i.e., whether a technology would be commonly purchased by customers today (not in situ or saturation), with consideration of key factors or barriers driving the technology adoption. In addition, an ISP can be a method or technique that has been generally accepted as superior to any alternatives because it produces results that are superior to those achieved by other means or because it has become a customer's standard way of doing things (e.g., a standard way of complying with legal or ethical requirements, or a customer's preference for the best product with superior efficiency in customized design). This is generally applicable to custom measures and projects.
Integrated Demand Side Management (IDSM)	An integrated solution supporting energy and carbon reduction goals, including energy efficiency, demand response, and distributed generation, among others.
International Performance Measurement and Verification Protocol (IPMVP)	The IPMVP provides an overview of current best practice techniques available for verifying results of energy efficiency in commercial and industrial facilities. It may also be used by facility operators to assess and improve facility performance. The IPMVP is the leading international standard in M&V protocols.
Investor-owned utility (IOU)	A business organization providing a product or service regarded as a utility (such as natural gas or electricity) to a service area and managed as a private enterprise rather than as a function of government or a utility cooperative.
Measurement and verification (M&V)	The process of quantifying measure- or project-level energy and cost savings resulting from improvements in energy-consuming systems. The effort required and rigor achieved from M&V should be commensurate with the project capital investment and savings risk.



Term	Definition
Measure application type (MAT)	A categorization of energy efficiency measures based on measure attributes. Each MAT has its own baseline treatment, cost basis, eligibility, and documentation requirements. There are six approved measure application types: Accelerated Replacement, Add-On Equipment, Behavioral, Retro-commissioning and Operational, New Construction/New Capacity, Normal Replacement, and Weatherization.
Net savings	The savings attributable to a program realized when free ridership is accounted for. The savings is calculated by multiplying the gross savings by the net to gross ratio.
Net-to-gross (NTG) ratio	A ratio or percentage of net program impacts divided by gross or total impacts. Net-to gross ratios are used to estimate and describe the free-ridership that may be occurring among energy efficiency program participants.
Normalized metered energy consumption (NMEC)	A method used to measure gross energy savings using metered energy consumption data to compare baseline and reporting period consumption under normal operating conditions. Normalization of energy consumption is achieved using adjustment models that account for routine events, and other adjustments to account for non-routine events so that consumption in baseline and reporting periods can be directly compared, as if all relevant variables were the same in the two periods. Normalized baseline period and/or reporting period energy consumption are calculated using one or more adjustment models.
Portfolio	A composition of energy efficiency programs, such as all IOU and non-IOU energy efficiency programs funded by ratepayers that are implemented during a program year or cycle. May also refer to a group of programs sponsored, managed, and contracted for by a particular IOU.
Preponderance of evidence (POE)	The preponderance of evidence standard requires that evidence for two opposing conditions be considered – in this case Accelerated Replacement and Normal Replacement baselines – and the condition more likely to be true (greater than 50% probability) be chosen.
Program	 A collection of defined activities and measures that: are carried out by the administrator and/or their subcontractors and implementers, target a specific market segment, customer class, a defined end use, or a defined set of market actors (e.g. designers, architects, homeowners), are designed to achieve specific efficiency related changes in behavior, investment practices or maintenance practice in the energy market, and are guided by a specific budget and implementation plan.
Program administrator (PA)	A person, company, partnership, corporation, association or other entity selected by the CPUC and any subcontractor that is retained by an aforesaid entity to contract for and administer energy efficiency programs funded in whole or in part from electric or gas Public Goods Charge funds. PAs currently include investor-owned utilities, community choice aggregators, and regional energy networks.
Program influence	The program services, such as technical or financial assistance, provided during a customer's decision—making process that motivate a customer to implement the more efficient, more costly energy efficiency measure than they otherwise would have.
Project feasibility study (PFS)	A Project Feasibility Study (PFS) is required to be submitted to a PA for review and approval at the Pre-Installation Review stage. The PFS was developed to include all required project information in one document and improve custom project review process by standardizing materials and centralizing information.
Ratepayer	Those customers who pay for gas or electric service under regulated rates and conditions of service.
Regional energy network (REN) Remaining useful life (RUL)	A network of local governments partnering to promote efficiency of resource usage, including energy, at the regional level. An estimate of the median number of years that a measure being replaced under the program would remain in place and operable had the program intervention not caused the replacement.
Sector	Customer group sharing common characteristics.
Site specific	Method of quantifying meter-based savings claims by analyzing pre/post normalized meter data for a particular site. Claims are made at the site or project level.
Standard practice baseline	A measure or practice used as the baseline for a specific measure that represents what the customer would implement in the absence of program influence or intervention.



Term	Definition
	A standard practice can be established from an ISP study, from similar and recent typical activity, or from an analysis of the current viable options applicable to the customer and the customer's typical decision-making process. Where a standard practice is identified that exceeds the minimum efficiency established by a code or regulation, the standard practice is the appropriate baseline.
Strategic energy management (SEM)	Programs that take a holistic approach to energy efficiency, and can include retro- commissioning and upgrading equipment, working with industrial facility employees to pursue energy savings, and providing planning resources for future energy needs. These programs are expected to yield energy savings by implementing energy management practices at customer facilities and changing the way operations teams think about energy use.
Supplemental data request (SDR)	CPUC project reviewer form to submit a request for additional data from the PA to complete a custom review.
Total system benefits (TSB)	A metric to measure the utility system benefits, including energy, demand, transmission and distribution savings, and greenhouse gas reductions, of energy efficiency activities. Beginning in 2024, the CPUC requires certain programs to set TSB-related goals and track TSB achievements.
Uniform Methods Project (UMP)	A U.S. Department of Energy project to develop measurement and verification protocols for determining energy savings for commonly implemented program measures. UMP collaborates with energy-efficiency program administrators, stakeholders, and EM&V consultants, with a goal to strengthen the credibility of energy efficiency programs by improving the consistency and transparency of how energy savings are determined.
Workpaper	Documentation prepared by the program administrators or program implementers that documents the data, methodologies, and rationale used to develop ex-ante estimates that are not in already fully contained in the Database for Energy Efficiency Resources (DEER).