

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



Date: March 4, 2026

To: Southern California Edison Company (SCE)

From: Lisa Paulo and Peter Biermayer, California Public Utilities Commission (CPUC)

Cc: R.25-04-010 Service Lists

Subject: MID-YEAR FEEDBACK - 2025 EX ANTE REVIEW (EAR) PERFORMANCE

Table of Contents

I.	CPUC Staff Findings 2025 Mid-year Activities Feedback	2
A.	Custom Projects Review Overview	2
B.	Measure Packages Review Overview	3
II.	Discussion	3
A.	Custom Projects Performance Review	3
B.	Measure Packages Performance Review	7
III.	Attachments	8
	Attachment A: Measure Package Feedback	9

Pursuant to Decision (D).13-09-023, D.15-10-028, D.16-08-019, and D.20-11-013, California Public Utilities Commission (CPUC) staff and consultants are providing the 2025 Ex Ante Review (EAR) Performance Mid-year Feedback on the investor-owned utilities (IOUs) respective activities as of June 30, 2025. D.20-11-013 placed a moratorium on EAR awards¹ but directed that EAR scoring and evaluation processes shall continue. The mid-year feedback focuses on specific accomplishments and issues or concerns identified as part of ongoing measure package and custom project reviews. This feedback will help the IOUs address these issues for the remaining year.

I. CPUC Staff Findings 2025 Mid-year Activities Feedback

The following sections of this memorandum provide a description of the findings, including areas of achievement and areas requiring improvement for both custom projects and measure packages review activities.

A. Custom Projects Review Overview

1. Summary of 2025 Mid-year Achievements

This feedback is based on three CPUC staff project review dispositions issued between January and June 2025. All three custom project review dispositions were for custom commercial, industrial/agriculture (CIAC) projects and ready to proceed with exception as noted.

SCE continues to demonstrate efforts to improve its performance. CPUC Staff's observations include:

- **Documentation Submission Timeline.** In the first half of 2025, SCE submitted all projects (100%) earlier than required by Senate Bill (SB) 1131.
- **Consistent Collaboration.** SCE proactively engages with CPUC staff on project and policy issues during its bi-monthly meetings with CPUC and at statewide custom projects collaboration meetings. SCE continued discussions on updating the Standard Practice Baseline (SPB) for the MLC tool and is currently working internally to implement these updates. In addition, SCE maintained the statewide external SharePoint site, led monthly statewide custom calls, and advanced collaboration on submitted Early Opinion requests. Efforts also included clarifying SEM cost reporting guidance and refining SEM M&V design guides.

2. Summary of Areas Requiring Improvement

Areas that were problematic, frequent, and/or need improvement include:

- **Gross Savings Impacts.** In the first half of 2025, there were four issues related to Gross Savings Impacts which comprised 67 percent of all issues noted. Most of these issues were related to M&V plans. SCE must ensure that M&V plans are rigorous, data-driven, and aligned with regulatory requirements moving forward. Issues affecting gross savings impacts continue to be an issue for SCE and must be addressed.

¹ The EAR awards were part of the Efficiency Savings and Performance Incentive (ESPI) awards.

- **Documentation Issues.** In the first half of 2025, two documentation issues related to insufficient information were identified, representing 33 percent of all issues noted. In comparison, documentation issues accounted for 14 percent of all identified issues in 2024. While the number of dispositions issued in 2025 is limited, documentation quality remains an area requiring attention. SCE must take action to acquire and provide all relevant documentation and required information with the project submittal.

B. Measure Packages Review Overview

1. Summary of 2025 Mid-Year Achievements

CPUC staff observed strengths in SCE's development and management of measure package submissions in the following area:

- **Collaboration.** SCE continues to collaborate effectively with CPUC staff and lead statewide initiatives.
- **Timeliness.** SCE has met expectations for timeliness.

2. Summary of Areas of Improvement

CPUC Staff highlights the following direction for improvement:

- **Content and Completeness:** SCE should continue to improve internal practices to ensure package submissions are complete and transparent (e.g., no hard coded values). SCE should focus on reviewing the references and sources in the measure packages more closely.
- **Due Diligence, QA/QC.** SCE should continue to conduct detailed QA/QC of their measure packages to avoid typos and errors.

II. Discussion

The following sections of this memorandum provide a detailed description of the findings, including areas of achievement and areas requiring improvement for both custom projects and measure packages.

A. Custom Projects Performance Review

Each year, CPUC staff reviews a sample of custom project energy efficiency program applications. The review findings and directions to the IOUs are presented in documents referred to as "dispositions." This feedback is based on three CPUC staff project review dispositions issued between January and June 2025.

The comments below are organized by the five metric areas prescribed in D.16-08-019. No scores are provided for these metrics in the mid-year memo. All feedback provided at this time is qualitative.

1. Timeliness of Submittals

SCE complied with SB1131 guidelines for submitting documentation before the 15 business days required. For the first half of 2025, no projects were found to be late, and all projects submitted were uploaded 5 or more days earlier than required. This means SCE is complying with CPUC requirements under this metric and making attempts to upload submissions earlier than required.

2. Content, Completeness, and Quality of Submissions

All three scored dispositions issued in the first six months of 2025 were custom project reviews (CPR 983, 984, and 992).

CPUC staff identified action items in each disposition related to gross savings impacts (67% of the actions items identified fell into this category). Most issues identified were problems with the M&V plans and one project with incorrect analysis assumptions. Two projects had issues related to M&V plans (CPR 984 and 992) and one project (CPR 993) had an issue relating to analysis assumptions. SCE should work to prevent these issues related to gross savings impacts from occurring on future project submissions to avoid a significant loss of EAR points under this metric.

A similar number of action items were identified in 2025 (67% of all issues) and in the previous year (68%) related to gross savings indicating SCE should take greater care to improve this area. Most of these issues were related to M&V plans. SCE should ensure that the M&V plans are rigorous, data-driven, and aligned with regulatory requirements moving forward.

CPUC staff noted two action items (33%) related to documentation. Projects were found to lack sufficient information. SCE must ensure that future project submissions include adequate project information, including providing sufficient POE documentation and clearly defined project narratives.

Table 1 below summarizes the six action items identified across three dispositions issued between January 1, 2025, and June 30, 2025.

Table 1: Summary of Categorized Action Items for Custom Projects

Issue Area	Action Categories	Summary of CPUC Staff Required Action by the PA:	Summary of CPUC Staff Notes or Instructions:	Percent of Total Actions
Issues Related to Gross Savings Impacts	Analysis assumptions	1	0	17%
	Calculation method	0	0	0%
	Calculation tool	0	0	0%
	M&V plan	3	1	50%

Issue Area	Action Categories	Summary of CPUC Staff Required Action by the PA:	Summary of CPUC Staff Notes or Instructions:	Percent of Total Actions
	Subtotals	4	1	67%
Process, Policy, Program Rules	Baseline	0	1	0%
	CPUC Policy	0	0	0%
	Did not follow previous CPUC guidance	0	0	0%
	Eligibility	0	0	0%
	ER preponderance of evidence	0	1	0%
	EUL/RUL	0	3	0%
	Incentive calculation	0	0	0%
	Measure cost	0	1	0%
	Measure type	0	1	0%
	PA program rules	0	0	0%
	Self generation	0	0	0%
	Subtotals	0	9	0%
Documentation Issues	Continue Document Upload	0	0	0%
	Missing Documents	0	0	0%
	Missing required information	2	0	33%
	Project scope unclear	0	0	0%
	Subtotals	2	0	33%
Issues Related to Net Impacts	Program influence	0	0	0%
	Subtotals	0	0	0%
Other Issues	Other 1 - Incorrect BMU data	0	0	0%
	Other 2 - Inconsistent BMU data	0	0	0%
	Subtotals	0	0	0%
	Grand Total	6	10	100%

3. Proactive Initiative of Collaboration

SCE continued revising the MLC tool, focusing on efficient and cost-effective in-house updates. In 2025, these updates were completed, and the tool received CPUC approval for Program Administrator use. SCE also maintained its leadership role in monthly statewide custom calls and managed the SharePoint site to foster collaboration among IOUs and CPUC, aiming to improve the custom review process.

SCE actively engaged CPUC on SEM process improvements by reviewing and providing input on SEM M&V and Design Guides, emphasizing accurate project cost reporting for SEM projects to ensure proper Total Resource Cost (TRC) calculations, and supporting efforts to migrate measures

from SEM programs to custom programs. Commission staff noted SCE's efforts to clarify SEM and other project guidance through the Early Opinion² process.

During the first half of 2025, SCE built on 2024 Early Opinions to address SEM non-behavioral measure costs and aggregation of multiple buildings/sites into a single SEM M&V boundary. SCE submitted three new Early Opinions seeking guidance on EUL for BRO-Retro-commissioning, Add-On-Equipment Measure Application Type for a tunnel project, and transferring projects from legacy third-party programs to new ones. Additionally, SCE used the EO process to submit seven projects utilizing the new RP2.1 tool developed by PG&E.

4. PA's Due Diligence, Quality Assurance, and Quality Control (QA/QC)

Project and measure level disposition performance results reviewed under Metric 2 are used as a proxy for the level of QA/QC occurring by the PA. As noted above, staff found several deficiencies related to gross savings impacts and errors documentation issues in the first six months of 2025, demonstrating a need for SCE to improve the effectiveness of its peer review QA and QC processes. Additionally, the number of dispositions proceeding without exception was weighed against those approved with exceptions or resulting in rejections.

All three dispositions were allowed to proceed with exceptions as noted. SCE must increase its QA and QC processes to ensure that issues such as those identified under Metric 2 are corrected in future submissions to avoid a loss of EAR points under this metric at the end of 2025.

5. PA's Responsiveness

When reviewed at a portfolio level, CPUC staff assesses the time series of rejections and exceptions, the alignment of program policy and procedures with the number of actual rejections and exceptions based on eligibility and attribution, and the adaption to changes in rules over time.

All three dispositions were issued in June of 2025. As such, it has not been possible to identify a trend in terms of project performance over time (i.e., project submissions had a varying number of issues when submitted in the first six months of 2025). CPUC Staff will continue to monitor trends in issues identified and disposition outcomes through 2025 for this EAR metric.

However, SCE demonstrated responsiveness to need for process and program improvements by engaging with third-party implementers through weekly meetings to clarify compliance issues, providing training on application systems and E-5115 requirements, collaborating with the CPUC to improve GRR for NMEC and SEM projects and using the RP2.1 tool to improve the NTG, boosting TRC and TSB, and participating in CPUC-led continuous improvement efforts.

These actions reflect SCE's proactive approach to contributing feedback for evolving rules and process improvements. Commission staff will observe the trend of any issues over the next six months for reporting and scoring on the year-end memo.

² Early Opinion reviews allow the PAs to request clarification from CPUC staff of custom project related CPUC policies or rules before submitting a project.

B. Measure Packages Performance Review

During the first part of 2025, measure package updates were limited to EUL revisions based on the new EUL study published by CPUC. As a result, PAs were required to complete a mid-cycle update and make any related updates tied to the new EULs, including updates to refrigerant impacts. Because the scope of PA updates was limited, the review scope was also narrow, resulting in relatively few findings. SCE had nine measure packages disposed in the first half of 2025 and twenty-one measure packages in the second half of 2025 that are either already approved or under review.

The comments below are organized by the five scoring metric areas created in D.16-08-019. The narrative includes observations common to multiple measure packages and feedback related to the measure package development process as well as direction for future measure packages.

Specific measure package feedback is provided in tables in Attachment A at the end of this document. The first table, Measure Package Reviews, provides feedback on the measure packages that were reviewed and disposed of during the review period. The second table, Measure Package Submissions, lists all measure packages submitted by SCE in 2025 and their review status. CPUC staff acknowledges that measure package development may have been supported by multiple PAs; however, for the purpose of this mid-year review, feedback is directed to the submitting PA that led the development effort.

1. Timeliness of Submittals

SCE has been timely with measure package submissions and responses to comments.

Given that this review period reflected a mid-cycle update to accommodate EUL revisions, CPUC staff generally scored all PA submissions as meeting applicable deadlines.

2. Content, Completeness, and Quality of Submissions

Five out of nine SCE measure package submissions met or exceeded CPUC staff requirements for completeness and quality over the first half of the year. However, four measure packages did not meet expectations due to content and quality issues.

CPUC staff identified several errors across these measure packages, including incorrect measure life values in permutations, incorrect or hard-coded inputs in the RACC-FSC or other supporting analysis, incorrect or outdated EUL IDs, duplicated measures or entries, and inconsistent or inaccurate text in the measure characterization. In several cases, key measure assumptions were derived from outdated or incorrect sources.

Additional issues included incorrect offering descriptions, missing sectors, missing building types, missing measure application types, missing references, failed permutations that should not have failed, and incorrect savings calculations. In one measure package, savings were corrected to remove dehumidification interactive effects; however, CPUC staff was unable to reproduce all calculations due to the use of hard-coded values. While SCE made updates and improvements to address these issues, CPUC staff notes that the prevalence of errors indicates a need for improved quality control. SCE should continue to focus on improving the content, documentation, and internal review of measure package submissions to minimize these issues. Detailed, measure-specific findings are

provided in Attachment A.

3. Proactive Initiative of Collaboration

SCE has proactively engaged with CPUC staff during the development of their measure packages. In addition, SCE has led the Commercial Heat Pump Water Heater Technical Advisory Group, developed the DEER Scorecards and has been working to establish Heat Pump Water Heater best practices.

4. PA's Due Diligence, Quality Assurance, and Quality Control(QA/QC)

Five out of nine SCE measure package submissions met or exceeded CPUC staff requirements for their due diligence, quality assurance, and quality control practices. However, four measure packages did not meet expectations due to the number of typos and errors found during the measure package review. SCE should increase due diligence and internal review to minimize these issues.

5. PA's Responsiveness

SCE has been responsive to comments and feedback from CPUC staff on measure package reviews. They engage with CPUC staff to assure measure updates are in alignment with policy and applicable standards as appropriate. SCE is proactive with getting clarity on measure package comments and guidance documents when needed.

III. Attachments

Attachment A: Measure Package Feedback contains the Measure Package Summary tables showing the qualitative components for each.

Questions or comments about the feedback should be directed to Lisa Paulo (lisa.paulo@cpuc.gov) or Peter Biermayer (peter.biermayer@cpuc.ca.gov). Note that pursuant to D.13-09-023, CPUC Staff will schedule a meeting with SCE staff to discuss this memorandum.

Attachment A: Measure Package Feedback

The table below lists the ID numbers associated with each measure package submission or disposition. The PA may refer to the individual dispositions for more detailed descriptions of the specific actions staff required for each measure package. The qualitative feedbacks are designated as follows:

Measure Package Review – All Disposed in first half 2025			
SW MP ID	Rev	Title	Comments
SWHC045	4	Heat Pump HVAC, Residential, Fuel Substitution	Updates to EUL, permutations, RACC-FSC and characterization based on 2025 values. CPUC identified several errors, including incorrect measure life values in the permutations, incorrect inputs used for RACC-FSC, outdated or incorrect text in the measure characterization, duplicated measures in the permutations, incorrect EUL IDs, and inaccurate code descriptions.
SWLG019	1	LED, Indoor Horticulture	Corrected the measure savings with the removal of dehumidification interactive effects for Offering ID E through L. CPUC could not reproduce all calculations - many values were hard-coded. Additionally, many of the key measure assumptions came from outdated or incorrect sources. Some tables excluded necessary information.
SWWH025	9	Heat Pump Water Heater, Residential, Fuel Substitution	Updates to EUL, permutations, and RACC-FSC and characterization based on 2025 values. Also updated characterization language for data collection, rebate addendum, RACC-FSC, and minor changes to eligibility text. Measure updates and responses were made in a timely manner. Limited QC / adjustments were necessary - minor questions regarding wording and clarifying eligibility requirements.
SWWH014	7	Heat Pump Water Heater, Residential	EUL, permutations, RACC-FSC, and characterization were updated based on 2025 values. CPUC identified several issues, including incorrect text in the measure characterization, modifications to offerings to allow for upsizing, and incorrect RACC-FSC inputs. All responses to CPUC comments were provided in a timely manner.
SWRE005	5	Heat Pump Pool Heater, Residential, Fuel Substitution	Updates to EUL, permutations, RACC and characterization based on 2025 values. All responses to CPUC comments were made in a timely manner.

Measure Package Review – All Disposed in first half 2025

SW MP ID	Rev	Title	Comments
SWWH031	5	Heat Pump Water Heater, Commercial	Updates to EUL, permutations, and RACC and characterization based on 2025 values. All responses to CPUC comments were made in a timely manner.
SWHC041	7	Software-Controlled Switch Reluctance Motor	Updates to EUL, permutations, and RACC and characterization based on 2025 values. CPUC did not find any issues.
SWWH027	6	Package Terminal Air Conditioner or Heat Pump, Under 24 kBtu/hr	EUL, permutations, RACC-FSC, and characterization were updated based on 2025 values. CPUC identified several issues, including inconsistent or inaccurate text in the measure characterization, numerous errors in the RACC-FSC (such as incorrect offering descriptions, duplicated entries, missing sectors, missing building types, and missing measure application types), missing references, and modifications to offerings to allow for upsizing.
SWHC044	5	Ductless HVAC, Residential, Fuel Substitution	EUL, permutations, RACC-FSC, and characterization were updated based on 2025 values. CPUC identified several issues, including inconsistent or inaccurate text in the measure characterization and multiple errors in the RACC-FSC—such as failed permutations that should not have failed, incorrect offering descriptions, missing measure application types, and incorrect savings calculations.

Measure Package Submittals – All Submitted in 2025		
SW MP ID	Title	Comments
SWHC045-04	Heat Pump HVAC, Residential, Fuel Substitution	Approved
SWLG019-01	LED, Indoor Horticulture	Approved

Measure Package Submittals – All Submitted in 2025		
SW MP ID	Title	Comments
SWWH025-09	Heat Pump Water Heater, Residential, Fuel Substitution	Approved
SWWH014-07	Heat Pump Water Heater, Residential	Approved
SWRE005-05	Heat Pump Pool Heater, Residential, Fuel Substitution	Approved
SWWH031-05	Heat Pump Water Heater, Commercial	Approved
SWHC041-07	Software-Controlled Switch Reluctance Motor	Approved
SWWH027-06	Package Terminal Air Conditioner or Heat Pump, Under 24 kBtu/hr	Approved
SWHC044-05	Ductless HVAC, Residential, Fuel Substitution	Approved
SWHC045-05	Heat Pump HVAC, Residential, Fuel Substitution	Approved
SWHC046-05	Packaged Heat Pump Air Conditioner, Commercial, Fuel Substitution	Approved
SWWH028-07	Large Heat Pump Water Heater, Commercial & Multifamily, Fuel Substitution	Approved
SWAP014-04	Heat Pump Clothes Dryer, Residential, Fuel Substitution	Approved
SWWP004-04	Water Pump Upgrade	Approved
SWHC041-08	Software-Controlled Switch Reluctance Motor	Approved
SWHC008-03	Variable Speed Drive for a Central Plant System	Under review (by CPUC staff or the PA)
SWBE011-01	High Efficiency Window, Residential	Under review (by CPUC staff or the PA)
SWBE012-01	High Efficiency Window, Commercial	Under review (by CPUC staff or the PA)

Measure Package Submittals – All Submitted in 2025		
SW MP ID	Title	Comments
SWHC012-05	HVAC Occupancy Sensor, Classroom	Under review (by CPUC staff or the PA)
SWHC024-06	Drive Belt for HVAC Fan, Commercial	Under review (by CPUC staff or the PA)
SWFS034-01	Cooktop, Commercial, Fuel Substitution	Under review (by CPUC staff or the PA)
SWWH025-10	Heat Pump Water Heater, Residential, Fuel Substitution	Under review (by CPUC staff or the PA)
SWWH031-06	Heat Pump Water Heater, Commercial	Under review (by CPUC staff or the PA)
SWHC046-06	Packaged Heat Pump Air Conditioner, Commercial, Fuel Substitution	Under review (by CPUC staff or the PA)
SWLG019-02	LED, Indoor Horticulture	Under review (by CPUC staff or the PA)
SWWH027-07	Heat Pump Water Heater, Commercial, Fuel Substitution	Under review (by CPUC staff or the PA)
SWWH028-08	Large Heat Pump Water Heater, Commercial & Multifamily, Fuel Substitution	Under review (by CPUC staff or the PA)
SWHC044-07	Ductless HVAC, Residential, Fuel Substitution	Under review (by CPUC staff or the PA)
SWHC045-06	Heat Pump HVAC, Residential, Fuel Substitution	Under review (by CPUC staff or the PA)
SWWH014-08	Heat Pump Water Heater, Residential	Under review (by CPUC staff or the PA)