

PUBLIC UTILITIES COMMISSION

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Date: August 19, 2024

To: Southern California Edison Company (SCE)

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

Cc: R.13-11-005 Service Lists

Subject: MID-YEAR FEEDBACK - 2024 EX ANTE REVIEW (EAR) PERFORMANCE

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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 2024 Ex Ante Review (EAR) Performance Mid-year Feedback on the investor-owned utilities (IOUs) respective activities as of June 30, 2024. 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 2024 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 2024 Mid-year Achievements

This feedback is based on eight CPUC staff project review dispositions issued between January and June 2024. Seven of these projects were year-end SEM reviews and advisory only. The one custom project review disposition was ready to proceed with exception as noted. CPUC Staff's observations include:

- **Collaboration.** SCE initiated the discussion on updating the standard practice baseline (SPB) for the MLC tool and is working in house on making these updates. Additionally, SCE has submitted Early Opinion requests related to SEM and the MLC SPB analysis.

2. Summary of Areas Requiring Improvement

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

- **Gross Savings Impacts.** In the first half of 2024, there were twenty-three issues related to Gross Savings Impacts which comprised 70 percent of all issues noted. The majority of these issues were related to calculation methods. This is a significant increase from 2023 where 47% of issues were related to this category. SCE must ensure the correct calculation methods are used moving forward.
- **Documentation Issues.** In the first half of 2024, six issues (18% of all issues) occurred in the category of documentation issues. Most of these issues were related to insufficient documentation. This area continues to be an issue for SCE. SCE must take action to acquire and provide all relevant documentation with the project submittal.

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

B. Measure Packages Review Overview

1. Summary of 2024 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 on statewide tools like the updated Fuel Substitution and Refrigerated Avoided Cost calculators. SCE has also collaborated with CPUC on guidance documents like the Preponderance of Evidence guidance document, Title 24 guidance document, Building Vintage memo, and New Construction guidance document.
- **PA Responsiveness to Process and Program Improvements.** SCE has incorporated implementer feedback and provided big picture feedback to the Ex Ante Review Team for guidance and measure package eligibility language that will help standardize requirements and measure package narratives.

2. Summary of Areas of Improvement

CPUC Staff highlights the following direction for improvement:

- **Content and Completeness:** SCE should continue to emphasize internal QA/QC practices to ensure measure package submissions are void of minor typos and language confusion that requires minor edits. Another area of focus is to review the references in the measure package more closely. The Ex-Ante Review Team found several instances of references that should be updated to more recent documentation, such as the Refrigerant Avoided Cost Calculator.
- **Timeliness:** SCE submitted twenty measure packages within the last two weeks of December 2023 to become effective January 1, 2024. SCE should front-load more of the measure package development work to reach submission schedule goals. SCE has shown an improvement in this area for DEER2026 measure package updates.
- **Cover Sheet.** SCE should continue to conduct detailed review on the cover sheet prior to measure package submission within the eTRM. The cover sheet can provide aggregate changes to savings, NTGs, EULs, etc. that can be misrepresented. With the migration to EnergyPlus and future methodology updates, normalizing unit changes should also be considered for review.

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 eight CPUC staff project review dispositions issued between January and June 2024.

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 2024, 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

Out of the eight project dispositions issued in the first six months of 2024, seven were SEM year end reviews. The one custom project was a California Advanced Homes Program (CAHP) which is closed. CPUC will be waiving the review for the remaining two CAHP projects that are yet to be submitted.

Significantly more issues were identified in 2024 (70% of all issues) than in the previous year (47%) related to gross savings. CPUC staff noted twenty-three action items impacting gross savings. The deficiencies found were related to calculation methods for the SEM projects. These issues were attributed to insufficient trend data and calculations lacking clarity due to several values being hard coded. SCE must take greater care to improve in this area.

CPUC staff noted six action items (18%) related to documentation issues. Projects were found to lack essential documentation or had unclear project scope. SCE must ensure that future project submissions include adequate project documentation including clear defining the project scope, including essential project information like incentive calculations, cost estimates, EUL analysis, payback analysis etc.

Table 1 below summarizes the thirty-three action items identified across eight dispositions issued between January 1, 2024, and June 30, 2024.

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
	Analysis assumptions	2	4	6%

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	Calculation method	19	5	58%
	Calculation tool	2	0	6%
	M&V plan	0	0	0%
	Subtotals	23	9	70%
Process, Policy, Program Rules	Baseline	1	0	3%
	CPUC Policy	0	0	0%
	Did not follow previous CPUC guidance	0	0	0%
	Eligibility	0	0	0%
	ER preponderance of evidence	0	0	0%
	EUL/RUL	1	0	3%
	Incentive calculation	1	1	3%
	Measure cost	1	0	3%
	Measure type	0	0	0%
	PA program rules	0	0	0%
	Self generation	0	0	0%
	Subtotals	4	1	12%
Documentation Issues	Continue Document Upload	0	13	0%
	Missing Documents	4	0	12%
	Missing required information	1	0	3%
	Project scope unclear	1	0	3%
	Subtotals	6	13	18%
Issues Related to Net Impacts	Program influence	0	1	0%
	Subtotals	0	1	0%
Other Issues	Other 1 - Project delay	0	1	0%
	Other 2 - Unclear kWh savings in BMU	0	1	0%
	Subtotals	0	2	0%
Grand Total		33	26	100%

3. Proactive Initiative of Collaboration

SCE initiated the discussion on revising the MLC tool. The discussions led to an understanding that the priority was to update the MLC Standard Practice Baseline for the 2024 Program Year. SCE has been working to make these updates in house efficiently and cost effectively. Additionally, Commission staff found that ACE made efforts to clarify guidance related to SEM projects using

the Early Opinion² process. SCE has submitted three Early Opinions seeking clarification on fuel sub annualization of savings, project costs for SEM non-behavioral measures and aggregation of multiple building/sites into a single SEM M&V boundary in the first half of 2024.

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, process, policy, and program rules, and errors documentation issues in the first six months of 2024, demonstrating a need for SCE to improve the effectiveness of its QC processes. Additionally, the number of dispositions proceeding without exception was weighed against those approved with exceptions or resulting in rejections. Out of the eight dispositions issued between January and June 2024, one disposition issued was allowed to proceed with exceptions as noted and all the remaining seven dispositions were advisory only. SCE must increase its 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 2024.

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 dispositions issued were in the first 3 months of 2024 with all but one disposition being issued in February. Due to this, it has not been possible to identify a trend in terms of project performance over time (i.e., project submissions had fewer issues when submitted later in 2024). CPUC Staff will continue to monitor trends in issues identified and disposition outcomes through 2024 for this EAR metric.

B. Measure Packages Performance Review

SCE had thirty measure packages disposed in the first half of 2024 and have 42 measure packages under detailed review. Most of the disposed measure packages in the first half of 2024 were DEER2024 measure package updates.

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, the Measure Package Reviews table provides feedback on the four measure packages reviewed and disposed. The second table, the Measure Package Submissions table lists all measure packages submitted by SCE during the review period that are under current review.

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.

The Staff acknowledges that measure package development may have been supported by multiple PAs; however, at the time of this mid-year review, feedback is directed to the submitting PA, with the assumption that they have led the development.

1. **Timeliness of Submittals**

SCE submitted many DEER2024 measure packages that did not allow proper review time before January 1, 2024. SCE should prioritize submitting submission plans that can be met and front-load work to reach timelines. SCE submitted twenty measure packages effective January 1, 2024 in the last two weeks of December 2023 or later. SCE has improved on their submission process so far for the DEER2026 updates.

2. **Content, Completeness, and Quality of Submissions**

SCE measure package submissions have generally met CPUC staff requirements for completeness and quality over the first half of 2024. The new measure offerings for the Smart Controlled Thermostat measure package were well presented for CPUC staff reviewers. SCE had eight other measure packages that received high scores on content, completeness, and quality. There are still minor typo errors and old references being that necessitate in Ex Ante Review comments that can be prioritized in the second half of 2024.

3. **Proactive Initiative of Collaboration**

SCE has proactively engaged with CPUC staff during the development of new measure packages and additions to existing measure packages: Large Heat Pump Water Heater Fuel Substitution, Lighting Indoor Horticulture, and the other statewide lighting measure package and measure package plan submittals. They have submitted measure package plans for new measures and work with CPUC staff to complete the early feedback period. In addition, SCE has continued their collaborative role to work with the CPUC review team to develop statewide tools like the Fuel Substitution and Refrigerant Avoided Cost calculators. SCE has also collaborated with the Ex Ante Review Team on building vintage guidance and Title 24 guidance to ensure expectations are clear for the deemed measure package portfolio. Additionally, SCE has been an active participant in the Energy Plus commercial prototypes office hours for the development of the Frequently Asked Questions (FAQ) document.

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

SCE has shown increased attention to their due diligence, quality assurance, and quality control practices through their continued effort to support statewide policy and coordinating updated monthly meetings with the CPUC to align with organizational changes at SCE. SCE has also shown less typos in measure packages between early-2024 and mid-2024.

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 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 2024			
SW MP ID	Rev	Title	Comments
SWHC044	4	Ductless HVAC, Residential, Fuel Substitution	DEER2024 measure package update to aggregate building HVAC permutation values, removed upstream delivery type, and update data collection requirements. Measure package approved after one minor comment on Refrigerant Avoided Cost Calculator reference.
SWHC046	3	Packaged Heat Pump Air Conditioner, Commercial, Fuel Substitution	DEER2024 measure package update to update building vintage values in permutations, update data collection requirements, and update Refrigerant Avoided Cost Calculator section. Measure package approved after clarifying comments to reference the most recent version of the Refrigerant Avoided Cost Calculator and to cite E-5221 when documenting building vintage changes.
SWCR002	4	Low-Temperature Display Case Doors with No Anti-Sweat Heaters	DEER2024 measure package update to update building vintage values in permutations, update data collection requirements, and update eligible products section. Measure package approved after clarifying comment on building vintage eligibility, minor grammatical comments on acronym usage, and clarifying comment on code requirement effectiveness.
SWCR022	4	Efficient Adiabatic Condenser	DEER2024 measure package update to update building vintage values in permutations, remove upstream delivery, and updated TechType and TechGroup in permutations. Measure package approved after one clarifying comment on building vintage eligibility.
SWWH025	7	Heat Pump Water Heater, Residential, Fuel Substitution	DEER2024 measure package update to update data collection requirements, preponderance of evidence guidance documentation, add Title 24 code, eligibility requirements, and Refrigerant Avoided Cost Calculator update to version 2.2. Measure package approved after clarifying comments on measure application type eligibility, referencing the final version of the preponderance of evidence guidance document, and updating references to current version of the Refrigerant Avoided Cost Calculator.

Measure Package Review – All Disposed in 2024			
SW MP ID	Rev	Title	Comments
SWHC030	4	Whole House Fan, Residential	DEER2024 measure package update to update data collection requirements and minor characterization updates. Measure package approved without comment.
SWCR010	4	Bare Suction Line Insulation	DEER2024 measure package update to update data collection requirements, building vintage values in permutations, and effective useful life updates per E-5221. Measure package approved after one minor typo in the data collection requirements section and eligibility section.
SWHC041	5	Software-Controlled Switch Reluctance Motor	DEER2024 measure package update to update data collection requirements and add clarifications for measure eligibility. Measure package approved after building vintage eligibility clarifying comment.
SWWH014	5	Heat Pump Water Heater, Residential	DEER2024 measure package update to update data collection requirements, update building vintage, add Title 24 code requirements, add measure application type eligibility requirements, and updated Refrigerant Avoided Cost Calculator to version 2.2. Measure package approved after clarifying comments on updating Refrigerant Avoided Cost Calculator references to the most recent version, removal of survey language, and clarifying comments on eligibility criteria. SCE worked collaboratively with Ex Ante Review Team to review and include NC permutations.
SWCR014	4	Medium or Low-Temperature Display Case	DEER2024 measure package update to update building HVAC parameter and update data collection requirements. Measure package approved without comment.
SWCR008	4	Floating Suction Controls, Multiplex	DEER2024 measure package update to add Tech IDs, update data collection requirements, and remove 'Com' building type. Measure package approved without comment.
SWCR003	3	Fan Motor Retrofit for a Refrigerated Display Case	DEER2024 measure package update to remove 'Any' building vintage, add Tech IDs, and update data collection requirements. Measure package approved after one minor typo and one minor reference update.

Measure Package Review – All Disposed in 2024			
SW MP ID	Rev	Title	Comments
SWFS012	3	Exhaust Hood Demand Controlled Ventilation, Commercial	DEER 2024 measure package update to include new permutation fields and update data collection requirements. Measure package approved without comment.
SWHC039	7	Smart Thermostat, Residential	DEER2024 measure package update to remove 'Any' building vintage, update data collection requirements, and updated HVAC system requirements. Measure package approved after clarifying comment on eligible building vintages and clarifying comment on heat pump code application.
SWWH031	3	Heat Pump Water Heater, Commercial	DEER2024 measure package update to update data collection requirements, update building vintage to 'Ex' for NR, update tech IDs, updated Refrigerant Avoided Cost Calculator to v2.2, and removing 'Com' building type from downstream delivery types. Measure package approved after comment to reference current version of the Refrigerant Avoided Cost Calculator, comment to update data collection requirements section footnote, minor grammar correction, and clarifying comments on the building vintage eligibility.
SWHC038	4	Brushless Fan Motor Replacement, Residential	DEER2024 measure package update to update data collection requirements, update technology type, and update technology group. Measure package approved after minor clarifying comment on building vintage eligibility.
SWWH027	4	Heat Pump Water Heater, Commercial, Fuel Substitution	DEER2024 measure package update to update data collection requirements, removing 'Any' building vintage, updated Tech IDs, added eligibility clarifications, updated Refrigerant Avoided Cost Calculator to use v2.2, and removing 'Com' building type from downstream delivery types. Measure package approved after clarifying commercial versus residential code language, updating preponderance of evidence reference to use final guidance, and data collection requirement clarifications.
SWWH028	3	Large Heat Pump Water Heater, Commercial & Multifamily, Fuel Substitution	DEER2024 measure package update to update data collection requirements, removing 'Any' building vintage, updated eligibility, updating Refrigerant Avoided Cost Calculator to use v2.2, removing 'Com' building type from downstream delivery types, updating reference for preponderance of evidence, and updating eligibility requirements. Measure package approved after comments to reference the final preponderance of evidence guidance memo, minor text edits, reference v2.2 of the Refrigerant Avoided Cost Calculator and clarifying comment on the kBtu/hr limit.
SWCA001	4	VFD Retrofit for Air Compressor	DEER2024 measure package update to update data collection requirements and removing 'Any' building vintage. Measure package approved after clarifying applicability of NR, NC, and AOE permutations, comment to remove the eligibility survey, and clarifying comments on the newly listed data collection requirements.

Measure Package Review – All Disposed in 2024			
SW MP ID	Rev	Title	Comments
SWFS023	3	Contact Conveyor Toaster, Commercial	DEER2024 measure package update to update NTG ID from Emerging Tech Default to sector defaults, removing 'Any' building vintage, and updated data collection requirements. Measure package approved after several typo comments, comment to fix units in calculations, removal of duplicate calculation line items, and clarifying comment on measure package eligibility and title since it is close to Radiant Conveyor Toaster measure package.
SWHC024	4	Cogged V-Belt for HVAC Fan, Commercial	DEER2024 measure package update to update building vintage to use 'Ex', updated data collection requirements, and updating eligible building HVAC types. Measure package approved after comment to update building vintage eligibility reference.
SWFS016	3	Refrigerated Chef Base	DEER2024 measure package update to remove 'Any' building vintage, updated Tech IDs, and updated data collection requirements. Measure package approved after minor clarifying comment on building vintage eligibility.
SWHC012	3	HVAC Occupancy Sensor, Classroom	DEER2024 measure package update to update building vintage parameter to 'Ex', updated Tech IDs, and updated data collection requirements. Measure package approved after clarifying rounding differences between calculations and permutations, correcting old references, and clarifying upstream data collection requirements.
SWHC042	4	Evaporative Pre-Cooler System and Controls for Packaged HVAC Unit	DEER2024 measure package update to remove 'Any' building vintage, updated Tech IDs, and updated data collection requirements. Measure package approved after clarifying comment on rounding differences between calculations and permutations and DEER Measure IDs in the permutations.
SWHC008	2	Variable Speed Drive for a Central Plant System	DEER2024 measure package update to add upstream delivery type, revise program requirements, updated costs, updated data collection requirements, and updated building HVAC values in permutations. Measure package approved after comment to update reference to current version of document, update the UseCategory in the permutations, and clarifying comment on the cost data source.
SWHC039	8	Smart Thermostat, Residential	Mid-cycle measure package update to add new offerings for gas furnaces with no cooling. Measure package approved after comment to track as new measure package version.

Measure Package Review – All Disposed in 2024			
SW MP ID	Rev	Title	Comments
SWFS007	4	Insulated Hot Food Holding Cabinet	DEER2024 measure package update to remove 'Any' building vintage, update data collection requirements, update costs, add clarity for NC vs NR MAT, and updated technology group. Measure package approved after clarifying comment on hours per day assumption. Extra collaboration occurred to clarify the application of new construction.
SWFS009	3	Deck Oven, Electric, Commercial	DEER2024 measure package update to remove 'Any' building vintage, update data collection requirements, and add clarity for NC vs NR MAT. Measure package approved after clarifying comment building vintage eligibility, clarifying comment on new construction versus normal replacement eligibility, and removal of reference to a gas deck oven. Extra collaboration occurred to clarify the application of new construction.
SWFS010	3	Commercial Hand-Wrap Machine, Electric	DEER2024 measure package update to remove 'Any' building vintage, update data collection requirements, and add clarity for NC vs NR MAT. Measure package approved after clarifying comment building vintage eligibility and clarifying comment on new construction versus normal replacement eligibility. Extra collaboration occurred to clarify the application of new construction.
SWWH028	4	Large Heat Pump Water Heater, Commercial & Multifamily, Fuel Substitution	DEER2024 measure package correction to update savings for multifamily DEER energy savings. Added language and addendum for rebates greater than IMC. Measure package approved after minor clarifying comments on the rebate greater than IMC addendum and DEER version for the savings records.
SWWH025	6	Heat Pump Water Heater, Residential, Fuel Substitution	New measure offerings added to existing measure package that were approved with two minor comments on clearly stating the first-rated-hour update and building vintage values in the permutations.

Measure Package Submittals – All Submitted in 2024		
SW MP ID	Title	Comments
SWHC044-04	Ductless HVAC, Residential, Fuel Substitution	Interim approval.
SWHC046-03	Packaged Heat Pump Air Conditioner, Commercial, Fuel Substitution	Interim approval.
SWCR002-04	Low-Temperature Display Case Doors with No Anti-Sweat Heaters	Interim approval.
SWCR022-04	Efficient Adiabatic Condenser	Interim approval.
SWWH025-07	Heat Pump Water Heater, Residential, Fuel Substitution	Interim approval.
SWHC030-04	Whole House Fan, Residential	Interim approval.
SWCR010-04	Bare Suction Line Insulation	Interim approval.
SWHC041-05	Software-Controlled Switch Reluctance Motor	Interim approval.
SWWH014-05	Heat Pump Water Heater, Residential	Interim approval.
SWCR014-04	Medium or Low-Temperature Display Case	Interim approval.
SWCR008-04	Floating Suction Controls, Multiplex	Interim approval.
SWCR003-03	Fan Motor Retrofit for a Refrigerated Display Case	Interim approval.
SWFS012-03	Exhaust Hood Demand Controlled Ventilation, Commercial	Interim approval.
SWHC039-07	Smart Thermostat, Residential	Interim approval.
SWWH031-03	Heat Pump Water Heater, Commercial	Interim approval.
SWHC038-04	Brushless Fan Motor Replacement, Residential	Interim approval.
SWWH027-04	Heat Pump Water Heater, Commercial, Fuel Substitution	Interim approval.

Measure Package Submittals – All Submitted in 2024		
SW MP ID	Title	Comments
SWWH028-03	Large Heat Pump Water Heater, Commercial & Multifamily, Fuel Substitution	Interim approval.
SWCA001-04	VFD Retrofit for Air Compressor	Interim approval.
SWFS023-03	Contact Conveyor Toaster, Commercial	Interim approval.
SWHC024-04	Cogged V-Belt for HVAC Fan, Commercial	Interim approval.
SWFS016-03	Refrigerated Chef Base	Interim approval.
SWHC012-03	HVAC Occupancy Sensor, Classroom	Interim approval.
SWHC042-04	Evaporative Pre-Cooler System and Controls for Packaged HVAC Unit	Interim approval.
SWHC008-02	Variable Speed Drive for a Central Plant System	Interim approval.
SWHC039-08	Smart Thermostat, Residential	Interim approval.
SWFS007-04	Insulated Hot Food Holding Cabinet	Interim approval.
SWFS009-03	Deck Oven, Electric, Commercial	Interim approval.
SWFS010-03	Commercial Hand-Wrap Machine, Electric	Interim approval.
SWWH028-04	Large Heat Pump Water Heater, Commercial & Multifamily, Fuel Substitution	Interim approval.
SWFS021-05	Fryer, Commercial, Fuel Substitution	Detailed review in progress.
SWFS022-04	Convection Oven, Commercial, Fuel Substitution	Detailed review in progress.
SWCR010-05	Bare Suction Line Insulation	Detailed review in progress.
SWAP011-05	Vending and Beverage Merchandise Controller	Detailed review in progress.

Measure Package Submittals – All Submitted in 2024		
SW MP ID	Title	Comments
SWFS012-04	Exhaust Hood Demand Controlled Ventilation, Commercial	Detailed review in progress.
SWCA001-05	VFD Retrofit for Air Compressor	Detailed review in progress.
SWCR014-05	Medium or Low-Temperature Display Case	Detailed review in progress.
SWWH031-04	Heat Pump Water Heater, Commercial	Detailed review in progress.
SWAP013-04	Cooking Appliances, Residential, Fuel Substitution	Detailed review in progress.
SWFS016-04	Refrigerated Chef Base	Detailed review in progress.
SWFS023-04	Contact Conveyor Toaster, Commercial	Detailed review in progress.
SWPR004-05	Circulating Block Heater	Detailed review in progress.
SWRE005-04	Heat Pump Pool Heater, Residential, Fuel Substitution	Detailed review in progress.
SWLG020-03	UL Type B LED Screw-in Lamp HID Retrofits	Detailed review in progress.
SWWH027-05	Heat Pump Water Heater, Commercial, Fuel Substitution	Detailed review in progress.
SWHC039-09	Smart Thermostat, Residential	Detailed review in progress.
SWHC044-05	Ductless HVAC, Residential, Fuel Substitution	Detailed review in progress.
SWHC045-04	Heat Pump HVAC, Residential, Fuel Substitution	Detailed review in progress.
SWHC038-05	Brushless Fan Motor Replacement, Residential	Detailed review in progress.
SWFS007-05	Insulated Hot Food Holding Cabinet	Detailed review in progress.
SWFS010-04	Commercial Hand-Wrap Machine, Electric	Detailed review in progress.

Measure Package Submittals – All Submitted in 2024		
SW MP ID	Title	Comments
SWBE011-01	High Efficiency Window, Residential	Detailed review in progress.
SWFS009-04	Deck Oven, Electric, Commercial	Detailed review in progress.
SWWH028-05	Large Heat Pump Water Heater, Commercial & Multifamily, Fuel Substitution	Detailed review in progress.
SWHC046-04	Packaged Heat Pump Air Conditioner, Commercial, Fuel Substitution	Detailed review in progress.
SWHC041-06	Software-Controlled Switch Reluctance Motor	Detailed review in progress.
SWCR001-05	Anti-Sweat Heater Controls	Detailed review in progress.
SWCR002-05	Low-Temperature Display Case Doors with No Anti-Sweat Heaters	Detailed review in progress.
SWCR003-04	Fan Motor Retrofit for a Refrigerated Display Case	Detailed review in progress.
SWHC012-04	HVAC Occupancy Sensor, Classroom	Detailed review in progress.
SWHC024-05	Drive Belt for HVAC Fan, Commercial	Detailed review in progress.
SWCR008-05	Floating Suction Controls, Multiplex	Detailed review in progress.
SWWH025-08	Heat Pump Water Heater, Residential, Fuel Substitution	Detailed review in progress.
SWWH014-06	Heat Pump Water Heater, Residential	Detailed review in progress.
SWHC008-03	Variable Speed Drive for a Central Plant System	Detailed review in progress.
SWLG031-01	LED, Fixture and Retrofit Replacement, Statewide Lighting Offering - Exterior Lighting	Detailed review in progress.
SWLG041-01	LED, Fixture and Retrofit Replacement, Statewide Lighting Offering - Parking Garage	Detailed review in progress.
SWLG051-01	LED, Fixture and Retrofit Replacement, Statewide Lighting Offering - High/Low Bay	Detailed review in progress.

Measure Package Submittals – All Submitted in 2024		
SW MP ID	Title	Comments
SWLG061-01	LED, Fixture and Retrofit Replacement, Statewide Lighting Offering - TLEDS	Detailed review in progress.
SWLG071-01	LED, Fixture and Retrofit Replacement, Statewide Lighting Offering - Interior Retrofits	Detailed review in progress.
SWLG081-01	LED, Fixture and Retrofit Replacement, Statewide Lighting Offering - Interior Ambient	Detailed review in progress.
SWLG091-01	LED, Fixture and Retrofit Replacement, Statewide Lighting Offering - ENERGY STAR	Detailed review in progress.