



**California
Statewide
Deemed
Measures**

**Cal TF Technical Position Paper No. 11:
Statewide New Measure Development and
Measure Update Process**

VERSION 0.29

Last Updated February 28, 2020

Introduction

The process presented herein is intended to reflect the general process through which all new statewide deemed measures and updates to existing measures will be proposed, vetted, and reviewed beginning January 1, 2020.¹ This document outlines the pathway from the initial request through final affirmation by the California Technical Forum (Cal TF) and submission to the California Public Utilities Commission (CPUC or Commission) for review (unless the measure is intended only for the publicly-owned utility (POU) portfolios) and the roles and responsibilities of the various participants involved in the process. This process will be reviewed and updated as needed to ensure the needs of all stakeholders are met; the process complies with all regulatory policies, procedures, and requirements; and that high-quality, statewide consistent measures are developed in a timely manner and in a public, transparent way that affords notice and opportunity for all interested stakeholders to contribute to measure development and updating as desired.

In 2016, the CPUC shifted the role of the investor-owned utilities (IOUs) to that of program administrators and granted greater responsibility to third-party implementers (3Ps) by stipulating that at least 60 percent of the IOU energy efficiency portfolios be designed, implemented and delivered by 3Ps by the end of 2020.² Decision 18-01-004 clarified the IOU roles related to 3P measures, including the requirement “that the utilities accept and review third party workpapers for possible later review by the Commission.”³ If a measure is viable for the IOU energy efficiency portfolios, the IOUs will support submittal of the measure to the CPUC for review and approval.

This process also addresses POU-only measures, which are not subject to Commission directives, procedures, or approval. Accordingly, the path for “POU only” measures bypasses some of the steps required for the IOU portfolio measures. Such measures will, however, need to conform to the various statewide measure development templates and guidelines and are subject to thorough technical review, quality assurance/quality control (QA/QC), and affirmation by the Cal TF to ensure each measure is developed with technical rigor and demonstrates use of best available data.

¹ Except for new or updated measures that the CPUC staff create or update.

² California Public Utilities Commission (CPUC). 2016. Decision 16-08-019 in the Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues. August 18. OP 10 and 12.

³ California Public Utilities Commission (CPUC). 2018. Decision 18-01-004 in the Application of Southern California Edison Company (U338E) for Approval of Energy Efficiency Rolling Portfolio Business Plan. January 11. Page 52.

Objectives

The overarching objectives of the new measure development and measure update process are as follows:

Establish a Process that Allows 3Ps to Develop New and Updated Measures. The proposed framework will provide a path for 3Ps and other non-utility entities to propose new measures and measure updates for use in the California energy efficiency portfolio. Under the proposed framework, any entity will be able to request a new measure for consideration. All 3P measure requests will be vetted by a Measure Screening Committee and those advanced to development will be further reviewed and vetted through both the Cal TF and the CPUC's Ex Ante Review Consultants (EAR Consultants aka Workpaper Review Team).⁴ This will be an essential pathway for 3Ps, given they are expected to deliver 60% of the energy efficiency portfolio.

Facilitate Statewide Collaboration to Develop Statewide Measures. The process will result in the development of standardized measures that will be applicable statewide – not just for a single IOU and including the POU service areas. This will fulfill the CPUC directives for standardized, statewide measures.⁵ It will also provide for more effective collaboration among the IOUs, POUs, CEC, and the CPUC to achieve the State's climate goals.⁶

Allow for Transparency Predictability, and Collaboration. The process will be open to all stakeholders and will conform to established guidelines. All 3Ps will have access to the same information so they can effectively design their programs. Measure requests and measure development will conform to established timeframes so program designers and implementers can adequately plan to integrate new and updated measures into their program plans, as per the timeline established in Decision 15-10-028. Through multiple decisions, the CPUC has established that the ex ante measure development process should be transparent⁷ and collaborative,⁸ leading to well-documented, high-quality statewide⁹ measures.

⁴ If a measure is for the POUs only, the measure will not be submitted to the EAR Consultants for final review and approval.

⁵ California Public Utilities Commission (CPUC). 2012. *Decision 12-05-015* in the Order Instituting Rulemaking to Examine the Commission's Post-2008 Energy Efficiency Policies, Programs, Evaluation, Measurement, and Verification, and Related Issues. May 10. Page 54. and California Public Utilities Commission (CPUC). 2009. *Administrative Law Judge's Ruling Regarding Non-DEER Measure Ex Ante Values*. November 18. Pages 1-2.

⁶ California Public Utilities Commission (CPUC). 2005. *Decision 05-01-055* in the Order Instituting Rulemaking to Examine the Commission's Future Energy Efficiency Policies, Administration, and Programs. January 27. Page 131. and California Public Utilities Commission (CPUC). 2009. *Decision 09-09-047* in the Application of Southern California Edison Company (U338E) for Approval of its 2009-2011 Energy Efficiency Program Plans and Associated Public Goods Charge (PCG) and Procurement Funding Requests. September 24. Page 305.

⁷ California Public Utilities Commission (CPUC). 2015. *Decision 15-10-028* in the Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues. October 22. Pages 97-98.

⁸ California Public Utilities Commission (CPUC). 2013. *Decision 13-09-023* in the Order Instituting Rulemaking to Reform the Commission's Energy Efficiency Risk/Reward Incentive Mechanism. September 5. Pages 56-57.

⁹ CPUC Decision 12-05-015. Page 54.

Ensure Measure and QA/QC Standardization. Measures developed and updated through the new measure process will adhere to the Cal TF Statewide Measure Development and QA/QC Guidelines. These guidelines will ensure measures are standardized and there is a consistent, agreed-upon process for measure QA/QC prior to submission to Commission Staff to facilitate review and promote measure quality.

Applicability

This process will be used to assess the viability of all proposed new measures and updates to existing measures that are intended for the IOU or POU portfolios, or both.

A 3P may submit a request to the utilities via the Cal TF for the Measure Screening Committee to provide feedback on a new measure and/or a measure update that they intend to develop themselves or that they would like the utilities to consider funding. Third parties are free to fund the development of measures they propose. However, for these measures to be accepted by the IOUs for submittal to the CPUC, they must 1) be reviewed by the Measure Screening Committee, 2) be developed in the Statewide Data Specification and the Statewide Measure Characterization templates, 3) follow the development process laid out in the QA/QC Guidelines, 4) undergo a final detailed review by the Lead Utility and Cal TF Staff, and 5) be presented to the Cal TF for affirmation. Third parties should be aware that measures passed through the Measure Screening Committee, and subsequently developed and submitted to the CPUC EAR Consultant, may not ultimately be approved. The CPUC EAR Consultant has the exclusive and ultimate authority for approving new measures and measure updates.

This process was developed for new measure and measure update requests submitted outside of the IOU request for abstract/request for proposal (RFA/RFP) process for third-party program implementation.¹⁰ However, third party bidders may choose whether they submit their measures through this process or through their RFA/RFP submissions.

This process is not applicable for measure updates required by annual DEER update resolutions.

¹⁰ Note that the handling of new measures through each IOU's RFP/RFA process is different and may not allow for the submission of new measures.

Measure Development and Measure Update Process

Figure 1 provides an overview of the new measure development and measure update process. As shown, the process is comprised of three phases: Measure Screening, Measure Development, and Measure Review and Submission. Each phase is comprised of several steps, some of which are stage gates at which point a decision will be made whether to advance a measure to the next step or return it to the requester or developer to address identified issues or gaps. Third parties should be aware that these processes may be iterative and require collaboration between the third-party requester and the utilities.

This figure indicates differences in the measure screening, development, and review, depending on the “point of origin” of a measure. Notably, *measures initiated and developed by the IOUs or POU’s bypass most steps in the Measure Screening phase* during which a measure request is submitted and reviewed. However, an IOU or POU may elect to submit their new measures and measure updates through the Measure Screening process if they want to receive Measure Screening Committee’s input and feedback. As shown by the gray column headings in Figure 1, the proposed statewide deemed measures (or proposed measure updates) enter the process as either a 3P-requested measure, an IOU-initiated measure, or a POU-initiated measure. After the 3P measure request is advanced to the Measure Development phase, a 3P-requested measure can be developed by a 3P, an IOU, or a POU.

The Measure Development phase specifies critical early review and feedback of Measure Development/Update Plans (aka Workpaper Plan) by both the EAR Consultants and the Cal TF. As indicated in Figure 1 measures developed by a POU would not receive early feedback from the EAR Consultants but would be reviewed by the Cal TF.

Finally, the Measure Review and Submission phase involves the final detailed review by the Lead Utility and Cal TF Staff before the measure is presented to the Cal TF for affirmation. *Any measure that is affirmed by the Cal TF is available to be included in a POU program/portfolio. However, all measures to be included in an IOU portfolio must be submitted by an IOU to the Commission for review and approval.*

		3P Measure Request			IOU Initiates & Develops Measure	POU Initiates & Develops Measure
		3P Develops Measure	IOU Develops Measure	POU Develops Measure		
Measure Screening	1. 3P Completes & Submits Measure Submission Form	✓	✓	✓		
	2. Cal TF Staff Checks Measure Submission Form	✓	✓	✓		
	3. Cal TF Staff hosts Monthly Measure Screening Meeting & Measure Screening Committee Makes Pass/No Pass Determination	✓	✓	✓		
	4. Cal TF Staff Documents Result of Measure Screening Committee and Communicates to Requester	✓	✓	✓		
	5. Cal TF Staff Collaborates with IOUs & POUs to determine Lead Utility	✓	✓	✓		
	6. Cal TF Staff Updates Statewide Deemed Measure List (post to Cal TF website)	✓	✓	✓	✓	✓
Measure Development	7. Measure Developer Completes Measure Development/Update Plan and Submits to Lead IOU/POU	✓	✓	✓	✓	✓
	8. Cal TF Provides Early Feedback	✓	✓	✓	✓	✓
	9. EAR Team Provides Early Feedback	✓	✓		✓	
	10. IOU, 3P, or POU Develops Measure as per Applicable Established Guidelines	✓	✓	✓	✓	✓
Measure Review and Submission	11. Lead Utility Reviews for Conformance to Deemed Rulebook, EAR Consultant Early Feedback, As Applicable	✓	✓		✓	
	12. Cal TF Staff Reviews for Accuracy, Completeness, and Conformance to Style Guide, QA/QC Guidelines, and Cal TF Early Feedback	✓	✓	✓	✓	✓
	13. Cal TF Reviews and Affirms	✓	✓	✓	✓	✓
	14. Lead Utility (IOU) Prepares Four Ex Ante Tables and Measure Submission Package	✓	✓		✓	
	15. Cal TF Staff Conducts Final Review of Measure Submission Package	✓	✓		✓	
	16. Lead Utility (IOU) Submits to CPUC for Approval	✓	✓		✓	

Figure 1. New Measure and Measure Update Process Overview

Measure Screening Committee

Cal TF Staff will organize monthly Measure Screening Committee meetings, which may be held via teleconference. Measure proposers may participate to answer committee questions but will not be allowed to participate during committee deliberations.

If a proposed measure is determined to be a new measure type at the time that Cal TF Staff is checking the Measure Submission Form, a Whitepaper will need to be developed before the measure request can proceed to the Measure Screening Committee.

The named organizations who are authorized to participate in the Measure Screening Committee will each appoint their own members. However, the appointed members must have qualifications equal to or greater than Cal TF member requirements. Members will be expected to regularly attend meetings for consistency. If any member does not participate regularly, Cal TF Staff will notify the organization and seek another member.

During the Measure Screening Meeting, the Measure Screening Committee will determine whether the measure should proceed to the Measure Development stage. Each Measure Screening Committee member will cast a single pass/no pass vote. Measures must receive a “pass” from a simple majority of the Measure Review Committee members to advance to the Measure Development stage. Cal TF Staff will document the number of “pass” and “no pass” votes, and will record how each organization votes, and will also document the committee’s reasons for determining that a measure is not appropriate for deemed measure development at the time of the committee meeting.

If the measure is accepted for development as a deemed measure, Cal TF Staff will work with the utilities to determine who will be the Lead Utility. If the committee determines that the measure is not appropriate for deemed measure development, Cal TF Staff will work with the committee to identify the reason(s) that the measure was not selected for further review, which may include:

- Insufficient information/unanswered questions;
- Low potential for the measure;
- The measure belongs in either the emerging technologies or custom program; or
- The measure has potential health, safety or performance risks.

Cal TF Staff will notify measure requesters of the meeting outcome via e-mail, which will be one of three outcomes:

1. Measure passes and a utility has offered to pay for measure development;
2. Measure passes but no utility has offered to pay for measure development; the measure requester can proceed with measure development and a utility will likely submit the completed measure to the CPUC for approval; or
3. Measure does not pass and rationale for committee decision provided. Measure requester can choose to develop measure at their own risk but is notified that the utilities are unlikely to submit the measure to the CPUC for approval once the measure is completed, as a broad committee of technical experts has already rendered its judgment that the measure is not an appropriate deemed measure.

Measure Development Requirements and Resources

The new measure development process will adhere to the following guidelines and templates to ensure clarity, technical rigor, regulatory compliance, consistency, completeness, and transparency, and that all reviews and approvals are adequately documented. All measure development resources are posted on the Cal TF website.

Statewide Deemed Measure Template. The Statewide Measure Template consists of the forms required to be completed for each new deemed measure or measure update, as follows:

- **Statewide Measure Characterization.** The Statewide Measure Characterization (Measure Characterization) is a Word template that contains all Measure Characterization fields. This template includes “boilerplate” text and tables for some fields that can be customized to ensure standardization and consistency across measures. The Measure Characterization template is updated and maintained by Cal TF Staff.
- **Statewide Data Specification.** The Statewide Data Specification (Data Spec) is a template in Excel that contains all of the measure parameters required to determine ex ante savings and calculate cost effectiveness. The Data Spec template is updated and maintained by Cal TF Staff.
- **Four Ex Ante Tables.** The Four Ex Ante Tables are required by the CPUC for each deemed measure submitted for approval and contains four tables: EnergyImpact, Implementation, Measure, and MeasureCost. These tables contain all of the measure parameters required to claim ex ante savings and calculate cost effectiveness.

Measure Development and QA/QC Guidelines. The Measure Development and QA/QC Guidelines (QA/QC Guidelines) include a definition and explanation of each Measure Characterization and Data Spec field for statewide measures and provides QA/QC guidance for measure developers.

A standardized QA/QC process will ensure that each measure has been developed as a statewide measure with: an appropriate level of technical rigor; appropriate due diligence to identify all relevant studies; adequate market research and data collection of key parameters; includes appropriate documentation; and allows full transparency into how all values were calculated and the sources of all inputs. The QA/QC Guidelines are updated and maintained by Cal TF Staff.

Statewide Deemed Rulebook. The Statewide Deemed Rulebook (Deemed Rulebook) is a single volume summarizing key CPUC regulatory requirements established by the CPUC for developing ex ante estimates for new measures and for updating measures. The Deemed Rulebook describes the regulatory and technical requirements for developing deemed ex ante measure estimates of measures included in the IOU portfolios. Specifically, the Deemed Rulebook includes 1) the Commission technical requirements for deemed ex ante measure development (culled from Commission decisions and other Commission-adopted documents), and 2) CPUC Staff guidelines, organized by technology category and specific measures (culled

from dispositions and other sources of CPUC Staff guidance). The Deemed Rulebook is updated quarterly by Cal TF Staff with input from the IOUs.

Statewide Measure Style Guide. The Statewide Measure Style Guide (Style Guide) provides guidelines for writing conventions, such as word and number usage, expressions of common units of measurement, and citation style. The Style Guide is updated and maintained by Cal TF Staff.

Roles & Responsibilities

The entities/organizations and their roles in the measure development and review process are presented below.

Organization	Roles & Responsibilities
Measure Screening Committee – Representatives of 4 IOUs, 2 POUs, CEDMC, and NAESCO CEC, CPUC Staff and EAR Consultants as non-voting representatives As needed, independent technical experts (for example, from national labs and/or California universities)	Review 3P proposed new measures and measure updates Recommend whether measure/measure update should proceed to full development as a deemed measure If measure not ready for deemed measure, provide rationale Provide any guidance and/or additional data that should be considered in measure development/updating
Independent Technical Experts	Provide unbiased, highly specialized technical expertise on an as-needed basis
Program Administrators – IOUs & POUs	Participate in Measure Screening Committee Participate in monthly Statewide Measure Coordination Meetings to update Statewide Deemed Measure List and to ensure statewide coordination of measure development Facilitate decisions to adopt/lead measures Collaborate with other IOUs and POUs throughout measure development process to ensure input from all program administrators

Organization	Roles & Responsibilities
Lead Utility	<p>Oversee measure development/updates for which they are the Lead Utility</p> <p>Collaborate with Cal TF Staff and other utilities throughout measure development process to ensure input from all</p> <p>Work with 3Ps (as applicable) to ensure measures/measure updates conform to early Cal TF guidance</p> <p>Present measure to Cal TF for review & affirmation</p> <p>Track measure development time/hours in the eTRM</p> <p>For IOU Lead Utilities only:</p> <p>Work with 3Ps (as applicable) to ensure that measures/measure updates conform to CPUC rules in Deemed Rulebook and early EAR Consultant guidance</p> <p>Prepare 4 ex ante tables and preliminary CET analysis</p> <p>Submit measures for CPUC review/approval</p>
3P Measure Requesters	<p>Propose new measures/measure updates via Measure Submission Form,¹¹ including preliminary CET analysis</p> <p>Develop proposed new measure/measure updates (when the 3P measure requester proposes to fund the measure/measure update themselves)</p> <p>Prepare for and participate in Measure Screening Committee and Cal TF meetings during measure development and Cal TF affirmation processes, if applicable and as requested</p>
3P Measure Developers	<p>Be trained by the Cal TF Staff on the statewide measure development requirements</p> <p>Develop new measures and measure updates in the Statewide Deemed Measure Template and in adhere to the QA/QC Guidelines and Deemed Rulebook, as applicable</p> <p>Participate in Cal TF meetings, as needed</p>

¹¹ The Measure Submission form, along with instructions for its submission, will be available on the Cal TF website.

Organization	Roles & Responsibilities
Cal TF Staff	<p>Manage 3P measure request process to ensure information flow, and that deadlines are met</p> <p>Organize Measure Screening Meetings, Statewide Measure Coordination meetings, Cal TF meetings, subcommittee meetings, etc.</p> <p>Update and post Statewide Deemed Measure List monthly to Cal TF website</p> <p>Secure independent technical experts, as needed</p> <p>Conduct preliminary check of Measure Submission Forms submitted by 3Ps</p> <p>Documents results of Measure Screening Committee and communicates to measure requesters</p> <p>Review measures for compliance with Data Spec, Measure Characterization, and the QA/QC Guidelines</p> <p>Facilitate Cal TF subcommittees and affirmation</p> <p>Train measure developers on forms and requirements</p> <p>Maintain and update:</p> <ul style="list-style-type: none"> • QA/QC Guidelines • Statewide Deemed Measure Template • Deemed Rulebook • Style Guide <p>Offer regular trainings for prospective measure developers</p>
Cal TF	<p>Provide early feedback on measures</p> <p>Review measures and key measure assumptions and measure delivery strategies; provide market/customer values and perspective; provide additional studies/data that should be considered</p> <p>Consider affirmation of measure after final Lead Utility review and (for IOU-led measures) prior EAR Consultant and Cal TF comments addressed</p>
EAR Consultants	<p>Participate in Measure Screening Committee (as a non-voting observer)</p> <p>Provide early feedback on measures by reviewing Measure Development/Update Plans and Measure Submission Forms</p> <p>Conduct a final review and issue disposition, if necessary, as part of the CPUC Staff approval process</p>
CPUC Staff	<p>Participate in Measure Screening Committee (as non-voting observer)</p> <p>Review and approve measures for use in IOU portfolios</p>
CEC Staff	<p>Participate in Measure Screening Committee (as non-voting observer)</p>

Timeline

The process is designed and intended to work within the rolling portfolio cycle schedule established in D15-10-028.¹²

The measure review process will follow a monthly cycle. The last business day of each month will be the last day to submit requests to be considered in the following month's Measure Screening Meeting. The monthly Measure Screening Meetings will be held on the third Thursday of each month and the measures will be presented to the Cal TF for Early Feedback at the following month's Cal TF meeting. Therefore, the Measure Screening process must be complete and the measures advancing to Measure Development must be added to the Cal TF agenda five business days before the scheduled Cal TF meeting.

Figure 2 below indicates the durations for key functions in the process.

¹² California Public Utilities Commission (CPUC). 2015. Decision 15-10-028 in the Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues. October 22.

		Duration
Measure Screening	1. 3P Completes & Submits Measure Submission Form	Varies
	2. Cal TF Staff Checks Measure Submission Form	<3 business days
	3. Cal TF Staff hosts Monthly Measure Screening Meeting & Measure Screening Committee Makes Pass/No Pass Determination	Monthly
	4. Cal TF Staff Documents Result of Measure Screening Committee and Communicates to Requester	<3 business days
	5. Cal TF Staff Collaborates with IOUs & POUs to determine Lead Utility	<5 business days
	6. Cal TF Staff Updates Statewide Deemed Measure List (post to Cal TF website)	Monthly
Measure Development	7. Measure Developer Completes Measure Development/Update Plan and Submits to Lead IOU/POU	10 business days
	8. Cal TF Provides Early Feedback	Monthly, at Cal TF meetings
	9. EAR Team Provides Early Feedback	Varies
	10. IOU, 3P, or POU Develops Measure as per Applicable Established Guidelines	Varies
Measure Review and Submission	11. Lead Utility Reviews for Conformance to Deemed Rulebook, EAR Consultant Early Feedback, As Applicable	5 business days
	12. Cal TF Staff Reviews for Accuracy, Completeness, and Conformance to Style Guide, QA/QC Guidelines, and Cal TF Early Feedback	5 business days
	13. Cal TF Reviews and Affirms	Monthly, at Cal TF meetings
	14. Lead Utility (IOU) Prepares Measure Submission Package	5 business days
	15. Cal TF Staff Conducts Final Review of Measure Submission Package	<3 business days
	16. Lead Utility (IOU) Submits to CPUC for Approval	<1 business day

Figure 2. Measure Development Timeframes

Attachments

Attachment A: IOU Sector Leads and Statewide Program Leads

Attachment B: Alignment with Commission Policy Attachment

Attachment C: Measure Submission Form

Attachment D: Measure Screening Form

Attachment E: Measure Development/Update Plan

Attachment F: Measure Development/Update Process Flow Chart

Incorporated by Reference

Deemed Rulebook

QA/QC Guidelines

Statewide Deemed Measure Template (Measure Characterization, Data Spec, Four Ex Ante Tables)

Attachment A

IOU Sector Leads and Statewide Program Leads

IOU	Sector	Statewide Programs
PG&E	Public	Institutional Government Partnerships — State of California and Department of Corrections
	Agriculture	Indoor Agriculture Program (downstream pilot)
	Codes & Standards	Building Codes Advocacy and Appliance Standards Advocacy Programs
	Workforce Education and Training	K-12 Connections Program Career & Workforce Readiness (downstream pilot)
SCE	Emerging Technologies	Electric Emerging Technologies Program
	Lighting	Primary Lighting, Lighting Innovation and Lighting Market Transformation
	Commercial	Savings by Design
	Public	Institutional Government Partnership — University of California and California State University Water/Wastewater Pumping Program for non-residential Public sector (downstream pilot)
SCG	Residential	New Construction
	Emerging Technologies	Gas Emerging Technologies Program
SDG&E	Commercial	Upstream Heating, Ventilation, and Air Conditioning (HVAC)
	Residential	Upstream Heating, Ventilation, and Air Conditioning (HVAC) Midstream Plug Load Appliance (PLA) HVAC Quality Installation/Quality Maintenance (QI/QM) (downstream pilot)

Attachment B

Alignment with Current Commission Policy

The following table summarizes Commission policy related to ex ante values and the points of alignment with the Cal TF measure development and measure update process.

Area of Alignment	Commission Directive	How the Proposed Process Meets This Directive
Equal access to all parties	Decision 16-08-019 ¹³ requires that 60% of the energy efficiency portfolio funding is to be designed and implemented by 3Ps by 2020.	Any program administrator or implementer, not just the IOUs, will be able to submit a new or updated measure for consideration.
Statewide Measures	The Commission has given directives for statewide measures in Decision 12-05-015 ¹⁴ : “We agree that similar measures delivered by similar activities should have single statewide values unless recent evaluations show that a significant variation between utilities and that difference is supported by a historical trend of evaluation results.”	The measures will be developed to have a single, statewide value and be applicable to the entire state.
Measure Standardization	The Commission has given direction for standardized measures in an ALJ Ruling ¹⁵ : “The Utilities’ non-DEER measure naming and classification process lacks uniformity and the workpaper standards of content, methodological approach, documentation conventions and formatting vary widely in quality and completeness.”	This process will ensure a consistent approach to measure naming and classification. Measures will be developed using the Deemed Rulebook and Development and QA/QC Guidelines that ensure rigorous and consistent methodological approaches, documentation, formatting, and quality.
Collaboration Between Agencies	Commission has established its intent to coordinate with the CEC and other affected agencies in its Policy Oversight and Research Analysis responsibilities in Decision 05-01-055 ¹⁶ : “We will also explore creating a more formal arrangement with the CEC for collaboration in this area and in EM&V, building on the working relationship we have established in this proceeding.”	The Measure Screening Committee would include representation from the CPUC and the CEC. Rejected measure requests would be reviewed by a joint team from the CPUC and CEC.

¹³ CPUC D. 16-08-019. Decision Providing Guidance For Initial Energy Efficiency Rolling Portfolio Business Plan Filings, OP 12.

¹⁴ CPUC D.12-05-015. Decision Providing Guidance on 2013-2014 Energy Efficiency Portfolios and 2012 Marketing, Education, and Outreach, p. 54

¹⁵ Administrative Law Judge’s Ruling Regarding Non-DEER Measure Ex Ante Values, November 18, 2009, Attachment, pp. 1-2.

¹⁶ CPUC D. 05-01-055. Interim Opinion on the Administrative Structure for Energy Efficiency: Threshold Issues. P. 129.

Attachment C

Measure Submission Form

Disclaimer: Completion of this form and/or a “pass” vote by the Measure Screening Committee does not represent or guarantee that the measure will be subsequently submitted by an investor-owned utility (IOU) to the California Public Utilities Commission (CPUC) for review.

This form is to be used for submitting requests for new measures or updates to existing measures to be included in California’s energy efficiency portfolio. To qualify for consideration, the proposed appliance, equipment, control system, or practice must meet the definition of an energy efficiency measure, as defined by the California Public Utilities Commission (CPUC) in the Energy Efficiency Policy Manual:¹⁷

An energy using appliance, equipment, control system, or practice whose installation or implementation results in reduced energy use (purchased from the distribution utility) while maintaining a comparable or higher level of energy service as perceived by the customer. In all cases energy efficiency measures decrease the amount of energy used to provide a specific service or to accomplish a specific amount of work (e.g., kWh per cubic foot of a refrigerator held at a specific temperature, therms per gallon of hot water at a specific temperature, etc.)

The measure requester should attempt to complete all the fields on this form. However, yellow fields are required for the utilities to be able to assess the request and evaluate preliminary measure cost effectiveness. In order for a utility to review or fund the development of a third party submitted measure, the utility needs to be able to perform a preliminary cost effectiveness assessment. Generally, utilities are seeking measures with a TRC greater than 1.0.

Submitter Background	
Submitter Name	
Company Name	
Contact Information (e-mail, phone number)	
Measure Description	
Measure Name	
Proposed funding for development?	<input type="checkbox"/> IOU <input type="checkbox"/> POU <input type="checkbox"/> Third Party (requester)
Technology Summary	
Measure Case Description: Describe proposed efficient technology specification	

¹⁷ California Public Utilities Commission (CPUC), Energy Division. 2013. *Energy Efficiency Policy Manual Version 5*. Page 52.

<p>Base Case Description: Describe baseline technology specification (what is the customer currently using?)</p>	
<p>Code Requirements: Applicable state and federal codes or industry standard practice (ISP) information (i.e. Title 20/24, dispositions, etc.)</p>	
Resources	
<p>Any Workpapers, DEER measures, Emerging Technology studies, or use of this technology previously in a Custom project, etc. that could inform measure values for the requested measure? List here and attach with submission</p>	
Market Potential Evaluation	
<p>How much interest will there be and from whom? Include: Target Markets Annual Uptake/demand Anticipated Savings Competing Technologies Barriers to Adoption Include any applicable supporting resources (i.e. Potential & Goals study and/or similar studies/analysis)</p>	
Measure Considerations	
<p>Is the given technology restricted to a single manufacturer? Explain, including approximate number current manufacturers</p>	
<p>Describe typical manufacturers warranty on product including duration (as applicable)</p>	
<p>Is the given technology mass produced and ready for mass market distribution? Explain</p>	

Potential impacts to other measures (Could this impact currently approved measures? If so, how? Will this/these measure(s) replace an existing measure(s)?)	
Non-Energy Impacts: Any potential non-energy benefits: Health Benefits Water Savings Environmental Benefits	
Any health, savings or performance risks identified?	
Data Collection Requirements: Does the measure as proposed require any additional data collection to validate the measure attributes (e.g. if targeted at hard-to-reach customers)?	
If a fuel substitution measure, did it pass the fuel substitution test? ¹⁸	
Comments	

Measure Values ¹⁹									
Measure	Savings Unit of Measure	Est. Savings kWh	Est. Savings kW	Est. Savings Therms	NTG	Load Shape	Est. Full Measure Cost	Est. Incremental Measure Cost	Effective Useful Life
Describe savings calculation methodology and how this measure saves energy (i.e. engineering calculations, energy modeling, study results, etc.)									

¹⁸ California Public Utilities Commission (CPUC). 2019. Decision 19-08-009 in the Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues. August 1.

¹⁹ Southern California Edison maintains a CET Training video on their EE Programs Solicitations Information & Resources webpage located here: <https://www.pepma-ca.com/Public/PublicEvents.aspx?type=1>

Describe the source and methodology used to determine the base case and measure case cost values that were used to estimate the full and incremental measure costs provided above	
Life Cycle: EUL/RUL ID; value (years), source	
Net-To-Gross: Proposed net-to-gross ratio; source	
Measure Load Shape; source	
Proposed Delivery Type(s) (downstream, upstream, direct install)	
Projected Rebate and Normalizing Units	
Applicable Sector	<input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Agricultural <input type="checkbox"/> Industrial <input type="checkbox"/> Public
Applicable Sub Sector(s) (multi-family, food service, biotech, new home construction, etc.)	
Use Category & Sub-Use Category	[This will be a dropdown menu with selectable options]
Technology Group & Technology Type	[This will be a dropdown menu with selectable options]
Proposed Measure Application Type	<input type="checkbox"/> New Construction (NC) <input type="checkbox"/> Normal Replacement (NR) <input type="checkbox"/> Accelerated Replacement (AR) <input type="checkbox"/> Add-on Equipment (AOE) <input type="checkbox"/> Behavioral, Retro-commissioning & Operational (BRO) <input type="checkbox"/> Weatherization
Eligible Climate Zones: List all applicable CA climate zones for which this measure may apply	
Eligible DEER Building Types and Vintages: List those for which this measure may apply	

Any applicable CPUC requirements or restrictions?	
Estimate TRC (attach input/output files) Assume zero admin/marketing/DINI costs in Program Costs file while running CETs	
Comments	

Notes

Attachment D

Measure Screening Form

This form serves as documentation of the review by the Measure Screening Committee of a request for measure development.

Prior to being presented to the Measure Screening Committee, the Measure Submission Form was reviewed by the Cal TF Staff to determine if enough information was provided to support a preliminary cost effectiveness calculation. In order for an IOU to sponsor a third party submitted measure, or to be in a position to recommend a third party invest in development, the IOU needs to be able to perform a preliminary cost effectiveness assessment. Generally, IOUs are seeking measures with a TRC greater than 1.0.

The Measure Screening Committee members should review the Measure Submission Form and any other accompanying material provided and consider the following in their assessment of whether the proposed measure should be developed into a statewide deemed measure. Committee members should use the measure review categories listed below to summarize their review and include any questions they want to address at the Measure Screening Committee meeting.

Measure Review	Notes
Does the third-party requester provide complete proposed technology and baseline technology descriptions?	
Proposed kW, kWh and/or therm savings and supporting evidence (i.e. how will the measure save energy)	
Quality of cost data. Source and methodology used to determine the base case and measure case cost estimates.	
Proposed CET and supporting evidence?	
Proposed NTG, Load Shape, EUL/RUL ID and values and supporting evidence?	
Does the market potential have supporting resources (i.e. Potential & Goals study and/or similar studies/analysis)	
Any applicable codes or ISP studies identified in the workpaper?	
Any applicable CPUC requirements/restrictions?	

Measure Review	Notes
If a fuel substitution measure, did it pass the fuel substitution test?	
Any potential non-energy benefits? Health Benefits Water savings Environmental	
Any possible health, savings or performance risks?	
Does the technology lend itself to be developed by multiple manufacturers?	
Does the measure as proposed require any additional data collection to validate the measure attributes (e.g. if targeted at hard-to-reach)?	
Warranty information provided?	
Rebate and Units indicated?	
Delivery Type(s) identified?	

Measure Screening Committee recommendation on whether measure warrants further development as a statewide deemed measure at this time? (Majority Rules): Pass/No Pass

If no pass, indicate reason for no pass and provide additional explanation (if desired), which may be:

1. Insufficient data supporting key values
2. Not sufficient evidence for market potential/cost effectiveness
3. Measure more appropriate for Emerging Technology program
4. Measure more appropriate for Custom program
5. Other (explain)

Summary of Measure Screening Committee screening:

Attachment E

Measure Development/Update Plan

Technology Name

New Statewide Workpaper Development Plan

Prepared for:

Prepared by:

Date:

Background

Technology Summary (Brief description of technology)

Baseline Case Description

Measure Case Description

Energy Savings Calculation Methodology

Sources to determine baseline and measure case

DEER/Non-DEER Measure

List of proposed measures

Measure application types (Sample below)

Measure Application Type	Delivery Type	Sector
Add-on Equipment	DnDeemDI	Com
Add-on Equipment	DnDeemed	Com

Effective Useful Life (EUL) (Sample below)

Parameter	Value	Source
EUL (Years)	12	California Public Utilities Commission (CPUC), Energy Division. 2013. <i>Energy Efficiency Policy Manual Version 5</i> .
RUL (Years)	4	RUL = 1/3 EUL HOST capped at EUL of control based on 2015 SCE Ex Ante Adjustments

Net-to-Gross (NTG) (Sample below)

Parameter	Value	Source
NTG - Commercial	0.60	Itron, Inc. 2011. <i>DEER Database 2011 Update Documentation</i> . Prepared for the California Public Utilities Commission. Page 15-4 Table 15-3.

Existing code / requirements (Sample below)

Code	Code Reference	Effective Date
CA Appliance Efficiency Regulations – Title 20	None.	n/a
CA Building Energy Efficiency Standards – Title 24	Section 120.6(b)	1/1/2014
Federal Standards	None.	n/a

Cost Calculation Methodology

Describe proposed methodology to establish cost for base case and measure case. Include any data sources to be referenced in the workpaper.

Measure Implementation

TRC Analysis

Market Potential

Recommendation on Program Implementation (Eligible Building Types, Climate Zones, Vintages, Delivery Types, Eligibility Restrictions / Program Exclusions)

CPUC/ED Feedback Incorporated

Note any past CPUC/ED discussion or feedback to this measure plan and how such feedback was addressed.

Tentative Measure Development Schedule*

Task	Description	Estimated Complete Date
Submission of Measure Development Plan	Measure Development Plan submission date	XX/XX/XXXX
Initial Communication with CPUC on Review / Feedback	Conference call between Consultant, SCE, and CPUC staff to discuss workpaper plan.	XX/XX/XXXX
Midpoint Check-In / Coordination Meeting I	Date proposed for a midpoint check-in with CPUC with list of anticipated topics to be discussed.	XX/XX/XXXX
Coordination Meeting II (If Needed)	Optional meeting if additional follow-up is needed.	XX/XX/XXXX
Measure Submission	Measure draft and attachments to be reviewed internally, and then feedback will be incorporated into the final draft for CPUC submission.	XX/XX/XXXX

*Lead engineers are responsible in updating commission staff with changes to the schedule.

Attachment/References

Attach any relevant attachment/references supporting this workpaper plan. List all attachments here.

Attachment F

Measure Development Process

