



California Statewide Deemed Measures

Statewide New Measure Development and Measure Update Process for Third-Parties

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VERSION 0.17

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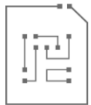


Overview

Historically the investor-owned utilities (IOUs) have developed measure workpapers to address utility-specific program needs; there was limited effort to coordinate workpaper development across all IOUs, or statewide. The lack of coordination has resulted in different input assumptions, savings calculations, and values for the same measure. Furthermore, third-parties (implementers and others) have not had the ability to get their measures and measure updates reviewed by the Commission unless they were able to convince an IOU to adopt the measure to develop and submit for Commission review. Finally, the current measure development review process is neither transparent nor collaborative, which contravenes Commission policy.

In 2016, the CPUC shifted the role of IOUs to that of program administrators and granted greater responsibility to third-party implementers by ordering that at least 60 percent of the IOU energy efficiency portfolios be designed, implemented and delivered by third-party implementers by the end of 2020.¹ Decision 18-01-004 clarified the IOU roles related to third-party workpapers by requiring the IOU program administrators to “*accept and review all third party workpapers before submission to the Commission.*”²

This Cal TF Staff proposal provides an avenue for third parties to seek review of their proposed measures and measure updates while also being compliant with Commission policy goals that the measure development process should be transparent and collaborative.



Objectives

The overarching objective of Cal TF’s proposed new measure process is to provide a process through which third-parties (program implementers and others) can propose and/or develop new measures that is consistent with CPUC policy directives and technical requirements. The proposed framework will better support the utilities’ role as program administrators and third parties’ role as program designers and implementers than the current structure.

The specific objectives of the proposed new measure process for third-parties are to:

Transparent Process that Allows Third Parties to Submit New and Updated Measures. The proposed framework will provide a channel for third-party program implementers and other non-IOU entities to propose new measures and measure updates for use in California’s energy efficiency portfolio. Under the proposed framework, any entity will be able to request a new measure for consideration; the request will be vetted by a Measure Committee with broad and balanced industry representation. This will be an essential ability for third-parties when they are expected to deliver 60% of the energy efficiency portfolio.

¹ D. 16-08-019, OP 10 and 12.

² D. 18-01-004 Section 3.10.4.

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Achieve Single Set of Statewide Measures. The proposed Cal TF process will result in the development of measures that are applicable across the entire state, including POU territories, not just a single IOU. This will fulfill the Commission directives for standardized, statewide measures.³ It will also provide for more effective collaboration among the IOUs, POUs, CEC, and the CPUC to achieve the State's climate goals⁴.

Allow for Transparency and Predictability. The process will be open to all stakeholders and conform to established guidelines. All implementers will have access to the same information, so they can effectively plan and run 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 program plans, as per the timeline established in Decision 15-10-028.

Measure and Quality Assurance/Quality Control (QA/QC) Standardization. Measures developed and updated through the new measure process for third-parties will adhere to the Cal TF 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.

Aligns with Commission Policies that Measure Development Should be Transparent and Collaborative. Through multiple decisions, the CPUC has established that the ex ante measure development process should be transparent⁵ and collaborative,⁶ leading to well-documented, high-quality statewide⁷ measures.

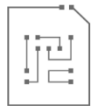
³ CPUC D.12-05-015. *Decision Providing Guidance on 2013-2014 Energy Efficiency Portfolios and 2012 Marketing, Education, and Outreach*, p. 54 and ALJ Ruling Regarding Non-DEER Measure Ex Ante Values, November 18, 2009, pp. 1-2.

⁴ CPUC D.05-01-055. Interim Opinion on the Administrative Structure for Energy Efficiency: Threshold Issues, p. 131. D.09-09-047. Decision Approving 2010 to 2012 Energy Efficiency Portfolios and Budgets, p. 305.

⁵ D. 15-10-028, pp. 97 – 98

⁶ D. 13-09-023, pp. 56-57.

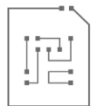
⁷ D.12-05-015, p. 54



Roles & Responsibilities

The following entities/organizations have roles in the measure development process:

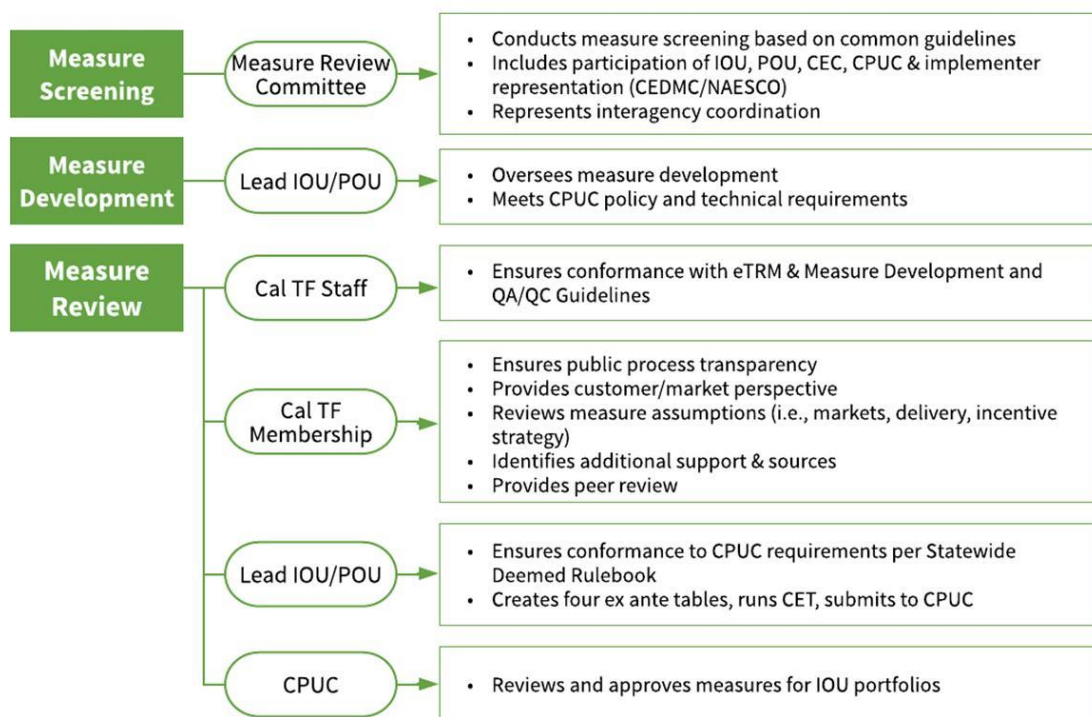
Organization	Roles & Responsibilities
Measure Review Committee Members.	<ul style="list-style-type: none"> Review proposed new measures and measure updates Recommend whether measure/measure update should proceed to full development Provide any guidance and/or additional data that should be considered in measure development/updating
IOUs	<ul style="list-style-type: none"> Participate in Measure Review Committee Oversee measure development/updates for which they are Sponsor Ensure measures/measure updates conform to CPUC rules in “Deemed Rulebook” Prepare 4 ex ante tables/CET analysis Submit measures for CPUC review/approval.
POUs	<ul style="list-style-type: none"> Participate in Measure Review Committee Oversee measure development/updates for which they are Sponsor
Third-Party Measure Requestors	<ul style="list-style-type: none"> Propose new measures/measure updates Develop proposed new measure/measure updates after approved by Measure Review Committee to move forward.
Cal TF Staff	<ul style="list-style-type: none"> Manage 3P New Measure review process to ensure information flow, deadlines met, organize Measure Review Committee and Cal TF meetings, etc. Review measures for compliance with eTRM Measure Development QA/QC Guidelines
Cal TF	<ul style="list-style-type: none"> Review measures and measure assumptions and measure delivery strategies; provide market/customer perspective; provide additional studies/data that should be considered Affirm measure when Cal TF comments addressed.
CPUC Ex Ante Review Consultants	<ul style="list-style-type: none"> Provide early feedback on approved measures at the time of the measure screening Conduct a final review and provides disposition, if necessary, as part of the CPUC Staff approval process
CPUC Staff / Ex Ante Review Consultants	<ul style="list-style-type: none"> Participate in Measure Review Committee to provide early input Review/approve measures for use in IOU portfolios In collaboration with CEC, review Measure Requester disputes over rejected measures
CEC Staff	<ul style="list-style-type: none"> Participate in Measure Screening Committee to provide early input In collaboration with CEC, review Measure Requester disputes over rejected measures



Cal TF Proposal for a New Measure Development and Measure Update Process

This section describes the major steps in the proposed new measure development and measure update process as illustrated in **Error! Reference source not found.** below; a more detailed process diagram is provided in Attachment A. The process will be managed by the Cal TF Staff and tracked in the eTRM. The process is triggered when a third-party program implementer or other stakeholder identifies a need/opportunity for a new measure and submits a measure request. New measure requests can be submitted at any time throughout the year, but measure update requests must be submitted before July 1st to take effect the following year.⁸ The proposed process is intended to work within the rolling portfolio cycle schedule established in Decision 15-10-028.

Overview of New Measure and Measure Update Process for Third-Parties



⁸ The timing for measure update requests aligns with the CPUC timeline for measure updates. The CPUC issues a resolution for measure updates in the August/September timeframe. Third-party measure updates will be identified by the end of July; the July 1st submission deadline provides four weeks for the Measure Review Committee to review the measure update request.

Measure Screening

The measure screening process will begin when a new or updated measure request is made. Any entity can complete and submit a measure request for consideration by the Measure Committee. Approved requests will advance to measure development. The measure requester can appeal to the CPUC/CEC if their measure requests are not approved.

Measure Review Committee. The Measure Review Committee will review the measure requests to determine which proposed measures/updates will be developed and submitted to the CPUC for approval. A key objective of measure screening process will be to identify issues that would prevent a measure from being approved before the resources are expended to develop it. The Measure Review Committee will consist of a broad range of industry representatives: IOUs, POU's, third-party implementers (via their industry associations), and state agency staff (both the CPUC and CEC

Measure Screening Criteria. The measure screening will use a consistent set of criteria to identify common issues that might prevent a measure from being approved by the EAR Team (such as the measure is not likely to be cost effective, or the key savings parameters are not supported by data) or factors that would make a measure less worthwhile to develop (such as low potential for energy savings or market demand or whether there is a delivery channel/program for the measure). Since a key aspect of the process is that any stakeholder can submit a request, the measure request form will be structured to capture information adequate to support the measure screening and prioritization but will not be so onerous as to make submitting a request prohibitive.

Early EAR Team Feedback. The EAR Team will provide early input on the measures selected for development during the measure screening stage. As part of their participation on the Measure Committee, the EAR Team will review the measure submission materials and produce a bulleted list of items that the measure development team should address and/or guidance for the measure development team.

Disputes Over Measure Requests. If the Measure Committee rejects a measure request, the Measure Requester has the option to appeal to a CPUC and CEC Staff on the Measure Review Committee.

Measure Development

Measure development includes creating the measure in the eTRM, documenting all sources, assumptions, methods, calculations, and complying with the Cal TF Development and QA/QC Guidelines and Statewide Deemed Rulebook.⁹ Creating the measure and populating the eTRM entails all necessary data collection, secondary research, and the development of all calculation input values and assumptions, and per-unit measure savings and demand impacts (if applicable).¹⁰

⁹ The Statewide Deemed Rulebook will be a single, definitive volume of all the technical and regulatory requirements established related to developing ex ante estimates for new measures and for updating measures. Currently, this guidance is located throughout a number of sources.

¹⁰ It is important to note that before starting the development of a measure, that measure developers, as well as other program administrator staff (portfolio managers, program managers, product developers) to understand the market for the measure including the current (baseline) practices, market barriers, customer awareness, and market potential, to inform measure development and program design.

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Measure development will be the responsibility of the lead IOU as determined by their designations as SW program leads (Attachment B). The Lead IOU will oversee development of requested Measure to ensure it complies with CPUC rules and guidelines.

Measure Review

Upon completion of the measure development process, the measure will undergo a rigorous review process by Cal TF Staff, the full Cal TF membership, and the lead IOU before being submitted to the CPUC Staff.

Cal TF Staff Review. Cal TF Staff will review the measure to ensure it complies with the eTRM QA/QC Guidelines and manage the Cal TF review process. Cal TF will also be available during measure development to assist with using the eTRM to upload the measure. Cal TF Staff will summarize the Cal TF questions and discussions around the measure and ensure any questions are addressed.

Cal TF Review. The Cal TF will conduct a technical peer review of the measure. The Cal TF process is transparent and public and results in a more credible measure by virtue of the broad review by technical experts a more balanced perspective since it includes program and market perspectives. The Cal TF will review the following elements:

- **Technical Rigor:** Does the analysis adhere to commonly acceptable/proven principles and approaches?
- **Measure Application Type:** Is the proposed measure application type (such as replace on burnout, early replacement, direct install, etc.) a sound and optimal approach for introducing the measure into the market.
- **Measure Parameters:** Was the approach to developing key measure parameters analytically sound? Should an alternative approach have been considered?
- **Supporting Data and Studies:** Do the data/studies support values for the key parameters? Are they applicable? Is there alternative or better data that should be considered?
- **Further Data Collection:** What additional data should be considered during program implementation, early EM&V, or regular EM&V that can make the measure parameters more robust?
- **Program Restrictions:** For the measure to produce the expected savings, should there be program requirements or restrictions, such as who can install the measure, specific measure installation requirements, etc.
- **Implementation Strategy:** Provide review and comment of proposed delivery approaches and incentive structure.

The Cal TF will either affirmation the measure or send it back to the measure development team with comments or questions for clarification. The measure will be available for use by the POUs and other non-IOU program administrators after Cal TF affirmation, but POUs will be encouraged to wait to use the measure until CPUC Staff provides feedback to strive for as much statewide consistency in measures as possible.

Lead IOU Review & Submission. The lead IOU will conduct a final measure review prior to submitting it to the CPUC for approval to ensure that the measure has been developed in accordance with the Statewide Deemed Rulebook and submit to the CPUC for review. The measure submission will include developing the CPUC's currently-required four ex ante tables.

CPUC Staff Review. Once the measure has been reviewed by the Cal TF and the lead IOU, the Commission Staff will review the measure according to current practices, guidelines and timeframes.

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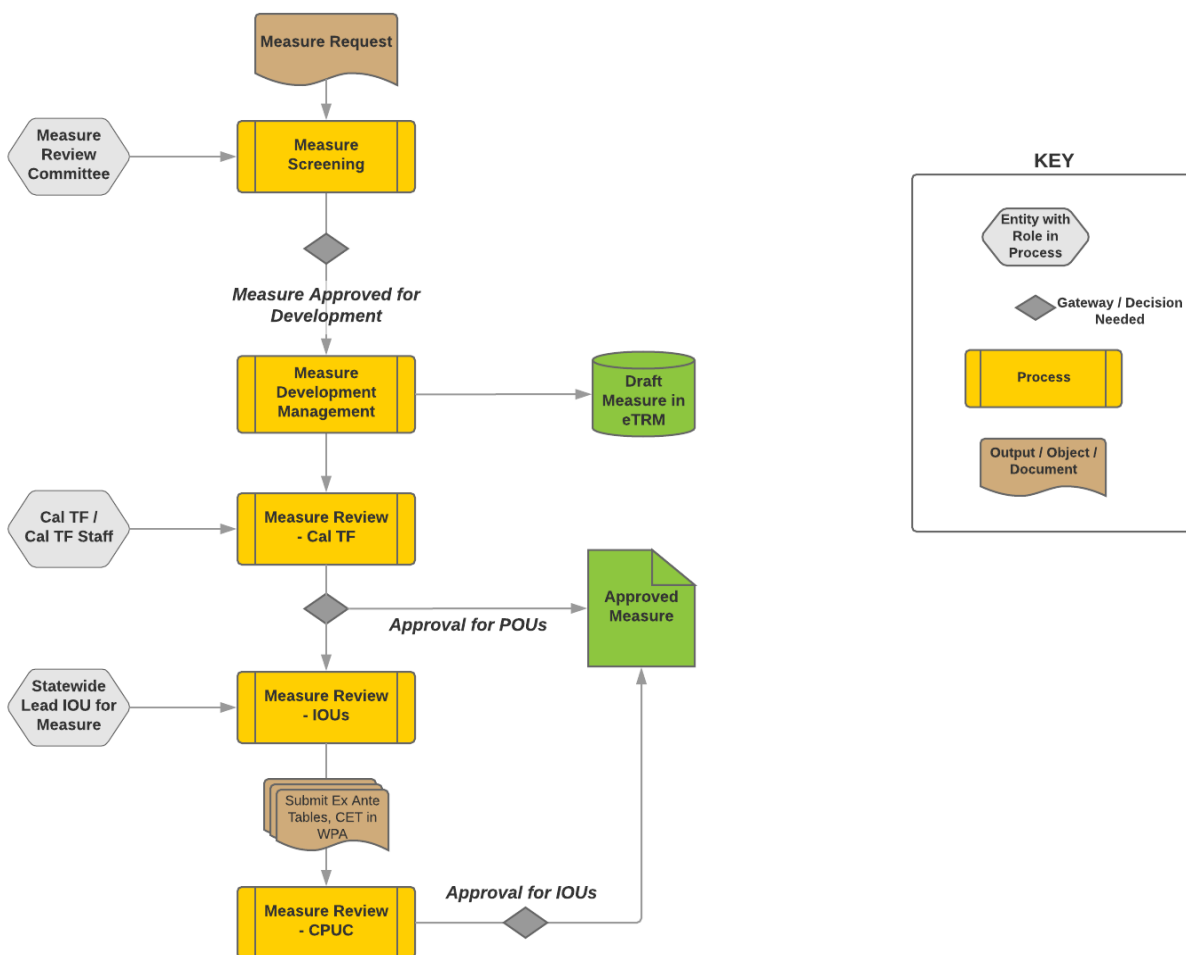
Conclusion

This new measure process for third parties proposed herein will provide a channel for non-IOU program implementers to propose new and updated deemed measures that conforms to current and past Commission policy directives for an open, transparent, and collaborative forum for public input. It will ensure workpaper quality, consistency, and standardization and supports the Commission's policy direction that 60% of the portfolio should be designed and implemented by third parties by placing implementers on equal footing in the measure development and updating process. The alignment between the proposed processes and Commission policy is summarized Attachment D. Attachments E acknowledges outstanding items to address as the processes and non-consensus items are refined.



Attachments

Attachment A: Process Diagram for New Measure Development



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Attachment B: IOU Leads for SW Programs

The following table lists the IOU Lead for each statewide program; the IOU Lead for third-party measure development will be based on this assignment. If a particular measure does not align neatly with a single program; the IOU Lead for the measure will be negotiated between the IOUs on a case by case basis.

IOU Lead	Statewide Program
PG&E	<p>Public Sector</p> <ul style="list-style-type: none"> Institutional Government Partnerships — State of California and Department of Corrections <p>Agricultural Sector</p> <ul style="list-style-type: none"> Indoor Agriculture Program (downstream pilot) <p>Codes and Standards</p> <ul style="list-style-type: none"> Building Codes Advocacy and Appliance Standards Advocacy Programs <p>Workforce Education and Training</p> <ul style="list-style-type: none"> K-12 Connections Programs <p>Workforce Education and Training: Career & Workforce Readiness (downstream pilot)</p>
SCE	<p>Emerging Technologies</p> <ul style="list-style-type: none"> Electric Emerging Technologies Program <p>Lighting</p> <ul style="list-style-type: none"> Primary Lighting, Lighting Innovation and Lighting Market Transformation <p>Commercial</p> <ul style="list-style-type: none"> Savings by Design <p>Public</p> <ul style="list-style-type: none"> Institutional Government Partnership — University of California and California State University <p>Public</p> <ul style="list-style-type: none"> Water/Wastewater Pumping Program for non-residential Public sector (<i>downstream pilot</i>)
SCG	<p>Residential</p> <ul style="list-style-type: none"> New Construction <p>Emerging Technologies</p> <ul style="list-style-type: none"> Gas Emerging Technologies Program
SDG&E	<p>Residential and Commercial</p> <ul style="list-style-type: none"> Upstream Heating, Ventilation, and Air Conditioning (HVAC) <p>Residential</p> <ul style="list-style-type: none"> Midstream Plug Load Appliance (PLA) <p>Residential</p> <ul style="list-style-type: none"> HVAC Quality Installation/Quality Maintenance (QI/QM) (<i>downstream pilot</i>)

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Attachment C: eTRM Deemed Measure Requirements, Guidelines and Templates

The new measure process for third-parties would adhere to the guidelines and templates provided by the Cal TF to ensure clarity, consistency, completeness, and transparency, and that all reviews and approvals are adequately documented. All measure development resources will be posted on the [Cal TF website](#) and are available in the eTRM by clicking on the [User Guide](#) link.

[Cal TF Measure Development and QA/QC Guidelines.](#) A 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. These Guidelines include a definition and explanation of each characterization and data field in the eTRM and provides guidance for measure developers, QA/QC peer reviewers, and internal managers.

The [eTRM Style Guide](#) provides guidelines for writing conventions, such as word and number usage, expressions of common units of measurement, and citation style.

[Statewide Deemed Rulebook.](#) The Statewide Deemed Rulebook is a set of guidelines/manual that describes regulatory and technical requirements for developing deemed ex ante measure estimates. Specifically, the Rulebook includes 1) the Commission's technical requirements for deemed ex ante measure development (from Commission decisions and other Commission-adopted documents), and 2) Commission Staff Guidelines, organized by technology category and specific measures (from dispositions and other sources of staff guidance).

[Modeled Measure Guidelines.](#) These guidelines will contain the requirements for using computer models, including the following:

- Statutory (Public Utilities Code Sec. 1821 – 1822).
- Rules of Practice and Procedures (Rule 10.3: Computer model documentation).
- Staff technical requirements for seeking approval of new computer models.
- List of acceptable energy simulation models.
- Requirements for California Building Prototypes, including:
 - List and description of acceptable building prototypes such that a modeler could import the prototype into alternative energy simulation models.
 - Sources for all building prototype characteristics and assumptions.
 - Allowable process for altering building prototypes when modeling specific measures, and for documenting changes made to building prototypes.
- Requirements for new modeled measures (including base and measure case)
- Requirements for measure description, validation and documentation.
- List of acceptable “Tools” that can or should be used for deemed measures (such as custom tools that can or should be used for deemed).
- Definitions and derivations/appropriate uses of common elements used in multiple measures and measure categories, such as:
 - Load Shapes
 - Coincident Demand Factors

[Measure Request Template.](#) The format and requirements for measure requests will be established in advance.

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Measure Review Committee Checklist. The Measure Review Committee will use a consistent set of criteria to assess the measures requests.

The Peer Review Checklist and Approval and the Manager Review Checklist and Approval forms should be used by the peer reviewer and manager reviewer, respectively, to document their reviews and approval for a measure to advance to the next stage of development.

Measure Review and Response Log. The review and response log is a structured table that will document comments of Cal TF and other comments and the respective responses.

Cal TF “Affirmation” The Cal TF Affirmation will clearly and fully describe the measure that was reviewed and capture the votes by the TF members, including any abstentions, concerns or issues raised by the TF members, and any suggestions for future measure updates and enhancements.

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Attachment D: 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 ¹¹ requires that 60% of the energy efficiency portfolio funding is to be designed and implemented by third parties by 2020.	Any program administrator or implementer, not just the IOUs, will be able to submit a new and updated measure for consideration.
Statewide Measures	The Commission has given directives for statewide measures in Decision 12-05-015 ¹² : “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 ¹³ : “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 Statewide 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 ¹⁴ : “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 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.

¹¹ CPUC D. 16-08-019. Decision Providing Guidance For Initial Energy Efficiency Rolling Portfolio Business Plan Filings, Ordering Paragraph 12.

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

¹³ Administrative Law Judge's Ruling Regarding Non-DEER Measure Ex Ante Values, November 18, 2009, Attachment, pp. 1-2.

¹⁴ CPUC D. 05-01-055. Interim Opinion on the Administrative Structure for Energy Efficiency: Threshold Issues. P. 129.

Attachment E: Outstanding Issues

The table below summarizes areas that require additional discussion and resolution prior to finalizing the new measure and measure update process.

Process Area	Outstanding Issue
Measure Committee	What entities should be serve on the Measure Review Committee?
Measure Screening Criteria	What criteria would be used to determine if a measure is “in or out?”
Leveraging Emerging Technology (ET)	How could the process leverage and coordinate with ET process?