

IOU Preliminary Review of Common Sector Metrics: Codes & Standards and Emerging Technologies Programs

June 23, 2017

Introduction	1
Codes and Standards.....	3
Emerging Technologies Program.....	5

Introduction

In addition to a discussion by the Program Administrators on implementation of the CPUC-suggested common metrics for Codes & Standards (C&S) and the Emerging Technologies Programs (ETP), the respective C&S and ETP IOU teams held additional technical discussions with Energy Division Staff to clarify needs and data availability.

Similar to the PA meeting, the objective of these IOU meetings were to:

- 1) Clarify wording of the CPUC-suggested common metrics,
- 2) Document whether and how common metrics could be operationalized consistently across all PAs, and
- 3) Identify metrics that need additional data and/or discussion.
- 4) Draft preliminary alternative metrics for further discussion at the Ad Hoc Metrics Meeting on June 30th 2017.

To support the CPUC's needs for common metrics, the following tables summarize the IOUs' preliminary review and initial discussions with Commission Staff on how to operationalize the common C&S and ETP metrics. **Note that these preliminary comments on the CPUC-suggested ETP common metrics were developed by the IOUs after discussion with ED, but do not reflect agreement across the PAs or by ED. These are shared in order to facilitate discussion at the June 30th CAEECC meeting, and likely will evolve as a result of that discussion.**

This review did not address any PA-specific sector-level metrics. Each PA is expected to review their own reporting and management needs, and consider whether their revised PA Business Plan metrics should include any additional sector-level metrics. The final set of revised metrics are expected to include:

- 1) A set of common sector-level metrics to support the CPUC's need to report on sector-level achievements, and

- 2) Any additional PA-specific sector-level metrics to support the PA's needs to manage and report on Business Plan achievements.

The metrics language in these tables is to be considered draft only, to facilitate discussion with stakeholders through CAEECC and other workshops. All comments and suggestions are welcomed.

Codes and Standards

CPUC Common Problems and Metrics	C&S Clarifications and Comments
<p>Capturing energy savings</p> <p>Annual gas, electric, and demand savings</p>	<p>Updated proposed metric with clarifications/revisions:</p> <ul style="list-style-type: none"> • Net GWH, MW, MMTherms reported savings <p>Comments:</p> <ul style="list-style-type: none"> • In addition to the absolute energy savings metrics and targets, the C&S team plans to report savings values in the context of % of net portfolio and % of SB350 to give context to the numbers. • SoCalGas savings values will be reported net negative therm interactive effects per the commission reporting protocols.
<p>Advocacy- CA</p> <p>Annual number of CASE studies</p> <p>Annual number of CASE studies used to implement adopted codes and standards</p>	<p>Alternative metrics:</p> <p>% of codes and standards proposals adopted that were supported by IOU case studies and other work products</p> <p>Comments:</p> <ul style="list-style-type: none"> • The PAs are presenting the alternative metric above. The PAs feel that this is a more meaningful metrics for this area. The PAs cannot directly control the number of proposals considered or adopted, but they can show responsiveness to the policy activity that is occurring at the state level.
<p>Advocacy – Federal</p> <p>Annual number of federal standards adopted for which a utility advocated</p>	<p>Alternative metrics:</p> <ul style="list-style-type: none"> • % of DOE appliances added to federal register supported by IOUs (# IOU supported/ # DOE adopted = 90%) <p>Comments:</p> <ul style="list-style-type: none"> • The PAs are presenting the alternative metric above. The PAs feel that this is a more meaningful metric for this area. The PAs cannot directly control the number of proposals considered or adopted, but they can show responsiveness to the policy activity that is occurring at the federal level.

CPUC Common Problems and Metrics	C&S Clarifications and Comments
<p>Reach Codes</p> <p>Annual number of local government Reach Codes implemented (joint utility and regional energy network effort)</p>	<p>Alternative metrics:</p> <ul style="list-style-type: none"> • # reach codes implemented <p>Comments:</p> <ul style="list-style-type: none"> • The numbers will be reported for REN and non-REN areas. The mid- and long-term targets will be dependent on the State C&S efforts that impact those periods, hence the mid-term and long-term targets may have to be adjusted as the new T-24 codes are implemented.

Emerging Technologies Program

CPUC Common Problems and Metrics	Emerging Technologies Program Clarifications and Comments
<p>Savings are not being tracked</p> <p>Annual number of technologies that have moved from the ET program:</p> <ul style="list-style-type: none"> -into the portfolio, with associated dates and kW and kWh (estimated and achieved) net and gross savings. -directly into code, with associated dates and kW and kWh (estimated and achieved) net and gross savings. first into the portfolio, then into code, with associated dates and kW and kWh (estimated and achieved) net and gross savings. 	<p>Updated proposed metric with clarifications/revisions:</p> <ul style="list-style-type: none"> • ETP-1: Prior year: % of new measures added to the portfolio that were previously ETP technologies • ETP-2: Prior year: % of new codes or standards that were previously ETP technologies • ETP-3: Annual savings of measures currently in the portfolio that were supported by ETP, added since 2009 <ul style="list-style-type: none"> ○ Note: The question of whether to use ex-ante or ex-post values, net or gross values, or a combination of these is still being discussed, with the primary concerns relating to the balance of receiving timely results (ex-ante and gross) and accurate figures (ex-post and net). <p>Comments:</p> <ul style="list-style-type: none"> • ETP has always tracked technologies that were adopted into the portfolio, but not dates. Date on which a Measure ID is assigned can be tracked, going forward. • ETP is a non-resource program and thus does not have savings goals. Only if a program has savings goals is it appropriate for it to have savings-related metrics. We propose that this be tracked for informational purposes and that biennial Effectiveness Evaluations be conducted by Energy Division so that this information can be assessed on a regular cadence.

CPUC Common Problems and Metrics	Emerging Technologies Program Clarifications and Comments
<p>Input from other groups is not being tracked</p> <p>Annual number of recommendations received from/recommendations implemented from:</p> <ul style="list-style-type: none"> -C&S/code readiness -industry groups - architect/implementer/builders groups -other ET programs -zero net energy implementation teams 	<p>Updated proposed metric with clarifications/revisions:</p> <ul style="list-style-type: none"> • ETP-4: Number and source of ETCC project ideas submitted outside of TPM process. [Note: Categories of sources (e.g. PA, national lab, manufacturer, technology incubator, etc.) will be developed collaboratively, and self-reported by submitter.] • ETP-5: Number and source of TPM project ideas, if available [Note: Categories of sources (e.g. PA, national lab, manufacturer, technology incubator, etc.) will be developed collaboratively, and attributed by ETP based on ETP's expert judgment.] <p>Comments:</p> <ul style="list-style-type: none"> • These metrics appear to be best suited as tracking metrics • Ad hoc conversations will be considered substantive conversations if they result in a project idea submission. • The problem statement doesn't reflect recent evaluation findings. This issue has been raised by ED in the past so it was investigated in an evaluation study (Study of the California Utility Internal Measure Development Process, Evergreen Economics, 2015, CALMAC ID SCE0380.01). Evaluators found the need does not exist: "Only a few IOU staff saw some value in systematically tracking information sources (e.g., to educate new staff), while others do not see the value of detailed tracking. Many interviewees noted that new measure ideas can emerge and be refined over several years with multiple "touch points," and that attempts to comprehensively track this information would probably not be completely accurate (i.e., some contributing information sources would be inadvertently omitted, or receive too much/little attribution)." (p. iv). • ETP does track entities that formally submit ideas through the ETCC-CA.com website, but this is done for the purposes of responding to the ideas. ETP welcomes input from all groups and sources, and does not have any goals or quotas on how many recommendations should come from each group. Number of recommendations from other groups is outside of ETP's control, no targets can be set for the source of input.

CPUC Common Problems and Metrics	Emerging Technologies Program Clarifications and Comments
<p>Output from ET is not explicitly aligned with long- term goals</p> <p>Annual number of ET projects and technologies aligned with specific statewide goals</p> <p>List of ET projects and their statewide goal alignment</p>	<p>Updated proposed metric with clarifications/revisions:</p> <ul style="list-style-type: none"> • None <p>Comments:</p> <ul style="list-style-type: none"> • This problem statement doesn't reflect recent evaluation findings: both the 2010-2012 and the 2013-2014 ETP evaluations have found that ETP's projects are in alignment with goals in the 2008 California Long Term Energy Efficiency Strategic Plan. • <i>"A review of end-use areas and market segments covered through ETP activities, indicates support of the CEESP and related solutions. Approximately three-quarters of the projects fell within the key "Big Bold Strategy" areas outlined in the CEESP."</i> p.5, PY2010-2012 California Statewide Emerging Technologies program Phase II Program Effects Report Volume 1. CALMAC ID #CPU0066.03 • <i>"The ETP activities align with CEESP end-uses, with 86% of 2013-2014 adopted projects aligning with the Research & Technology Framework to support California's Big Bold Strategies" p. 2, PY2013-2014 ETP Targeted Effectiveness Evaluation Volume 1 Final. CALMAC ID CPU0112.01</i> • Statewide goals change, so targets from one year to the next are difficult to set. This metric does not have longevity. There is also an element of subjectivity in determining what "alignment" means, suggesting it may have different interpretations from year to year depending on the evaluation team. • This metric may be unnecessary because the TPM process will be built around the statewide goals that are being supported by the resource programs. The degree of this alignment would be best addressed through an evaluation study, not a metric.

CPUC Common Problems and Metrics	Emerging Technologies Program Clarifications and Comments
<p>ET project results are not always aligned with work paper requirements</p> <p>Percentage of ET-originated work papers requiring additional information before submission</p>	<p>Updated proposed metric with clarifications/revisions:</p> <ul style="list-style-type: none"> TDB <p>Comments:</p> <ul style="list-style-type: none"> Note: ETP currently engages with the workpaper development teams to identify data needs and will continue to do so. However, it must be understood that new data needs are often identified during a project, which may result in rescoping or in follow-on data collection project requests. This problem statement doesn't reflect ETP's scope. While ETP projects can help provide data for workpapers, workpapers are developed outside of the Emerging Technologies Program and contain information and data from a wide variety of sources beyond ETP and often beyond the IOUs. Data collection plans also need to be defined in advance of project budgeting. When workpaper data needs are unknown, or later changed, it is often too late for ETP to alter the project design. This has been documented in a recent ETP evaluation study, "Study of the California Utility Internal Measure Development Process" p. 10, CALMAC ID SCE0380.01 For these reasons, we suggest that metrics on workpapers are not appropriate as an ETP sector-level metric.
<p>ET event success is not tracked</p> <p>Metric measuring either the knowledge acquisition or increased activity of participants after events</p>	<p>Updated proposed metric with clarifications/revisions:</p> <ul style="list-style-type: none"> Per ED's recommendation, IOUs will put this metric on the backburner. <p>Comments:</p> <ul style="list-style-type: none"> The problem statement is not correct: self-reported knowledge acquisition is always tracked for ETP TRIO and other events, and has been reported via PPMs in the past. Event success will continue to be assessed within the relevant Implementation Plan, as part of quality assurance. This metric may be more appropriate as an Implementation Plan metric, for those IPs that include events.

CPUC Common Problems and Metrics	Emerging Technologies Program Clarifications and Comments
<p>ET has not increased the focus on market studies as recommended by evaluation results</p> <p>Percent of ET projects that include a market and barrier identification study</p>	<p>Updated proposed metric with clarifications/revisions:</p> <ul style="list-style-type: none"> • Per discussion with ED, in lieu of this metric, ETP will collaboratively conduct a technology-focused pilot by devoting one TPM* to <ul style="list-style-type: none"> ○ 1) collaboratively and strategically identifying a high priority area of focus, and ○ 2) identify market and technical barriers in this area, and tactics that might address these barriers, and ○ 3) identify which entities or organizations may be best suited to implement each of these tactics. <p>Comments:</p> <ul style="list-style-type: none"> • The problem statement doesn't seem to reflect ETP's activities. ETP already does market studies but, because ETP is not a customer-facing program, ETP only addresses a limited set of market barriers, as documented in the 2010-2012 ETP evaluation. • In the Rolling Portfolio, the TPM development process will determine whether market and barrier identification studies are needed. • It is not appropriate to include market studies for every project because, in many cases, multiple projects involve the same technology or solution. • This metric may not be necessary because the TPM process will include market studies, if ETP determines that there is a need for market information that is not available from existing sources. <p>* Please see SCE's Business Plan, p. 254, Section 6a: "Strategies"</p>
<p>ET is not utilizing other programs to confront barriers to market penetration</p> <p>Annual number of WE&T programs created around ET projects</p> <p>Annual number of marketing, education, and outreach programs created around ET projects</p>	<p>Updated proposed metric with clarifications/revisions:</p> <ul style="list-style-type: none"> • Per discussion with ED, in lieu of this metric, the above technology-focused pilot and TPM will also be able to address this issue. • <p>Comments:</p> <ul style="list-style-type: none"> • This problem statement doesn't reflect ETP's scope or activities. ETP does not generally confront market barriers because it is not a customer-facing program. ETP's role is to support other programs in the EE portfolio. Those other, customer-facing programs use interventions to address market barriers. • While ETP does help create WE&T training content for the Energy Centers, it is the quality and not the quantity of these courses that matter. • The SW ME&O program is administered by a third party, not by the IOUs. The third party administrator decides upon the content of those marketing campaigns. • This metric would be more appropriate as a WE&T program-level metric.