



## Subcommittee Summary

### POU TRM Measure Review & DEER Documentation

Subcommittee	POU TRM Review	
<b>Subcommittee Members:</b> Cal TF Members	Bruce Harley Steven Long Spencer Lipp Christopher Rogers Tom Eckhart David Springer	<a href="mailto:Bruce.Harley@csgroup.com">Bruce.Harley@csgroup.com</a> <a href="mailto:Steven.Long@sce.com">Steven.Long@sce.com</a> <a href="mailto:Spencer.Lipp@lmco.com">Spencer.Lipp@lmco.com</a> <a href="mailto:Christopher.Rogers@clearesult.com">Christopher.Rogers@clearesult.com</a> <a href="mailto:Tom@UCONS.com">Tom@UCONS.com</a> <a href="mailto:Springer@davisenergy.com">Springer@davisenergy.com</a> <a href="mailto:Armen.Saiyan@ladwp.com">Armen.Saiyan@ladwp.com</a>
<b>Subcommittee Members:</b> non-TF Members	Christine Hanhart Greg Sullivan Travis Rhodes Eli Caudill	<a href="mailto:Christine@UCONS.com">Christine@UCONS.com</a> <a href="mailto:Sullivan@clearwire.net">Sullivan@clearwire.net</a> <a href="mailto:Travis.Rhodes@smud.org">Travis.Rhodes@smud.org</a> <a href="mailto:Eli.Caudill@csgroup.com">Eli.Caudill@csgroup.com</a>
<b>Final Deliverable(s)</b>	Document outlining improvement recommendations for POU TRM Measure including identification of relevant DEER requirements.	
<b>Commencement Date</b>	4/2/15	
<b>Conclusion Date</b>	December 2015	

#### I. Subcommittee Objective

The POU TRM Measure Review/ DEER Documentation subcommittee objectives are to:

1. Review 9 POU TRM measures (see Appendix) for accuracy, transparency and documentation,
2. Document in Cal TF Workpaper format 9 DEER measures (see Appendix), then review the measures  
for accuracy, transparency and documentation (the measures reviewed in numbers 1 & 2 may overlap)
3. Compare the POU TRM and DEER measures that are the same (values, documentation, transparency, etc.)
4. Based on 1 and 2 above, assess the feasibility and value of creating a common set of measure parameters that can be used statewide by IOUs, POUs and others, perhaps in the form of a "California Technical Reference Manual."

#### II. Subcommittee Process

For each high impact measure selected for review by the subcommittee, the objective will be to:

1. Identify which measure values and other parameters are supported by methods, data and assumptions
2. Vet the methods, data, and assumptions used to develop the measure

3. Compare the values, methods, data, and assumptions with those employed by other jurisdictions by comparing the information to values in other state Technical Reference Manuals<sup>1</sup>
4. Identify relevant DEER requirements (data, methods, assumptions, and guidance) and whether these requirements should be used for this measure taking into consideration the
  - a. Transparency and reproducibility of the DEER information for widespread use
  - b. Need to use best available information
  - c. Appropriate level of measure complexity consistent with Cal TF ex ante value development policy
5. Issue a recommendation on if and how to update the measure for use by both the POUs and IOUs

The final deliverable for each measure reviewed will be a document describing

1. Recommendations on if and how to update the measure for use by both the POUs and IOUs.
2. Methods, data, and assumptions supporting the recommendations to enable reproduction of values by an independent party.
3. DEER requirements (data, methods, assumptions, tools and guidance) that are relevant to the measure, in such detail that DEER values can be reproduced (or identification of methods, data, or assumptions that could not be found).
4. Reasons for including or excluding relevant DEER requirements from measure recommendations.

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<sup>1</sup> Cal TF staff has identified the following Technical Reference Manuals that can be used to compare California information and approaches:

- NREL National Residential Efficiency Measures database;
- Northwest Regional Technical Forum Unit Energy Savings;
- Mid-Atlantic TRM (ver. 4.0 – June 2014);
- Arkansas Technical Reference Manual;
- Connecticut Programs Savings Document, ver. 9 (2013);
- Hawaii Technical Reference Manual (2011);
- Illinois Technical Reference Manual ver. 4.0 (March 1, 2015);
- Indiana TRM;
- Maine Commercial and Residential Technical Reference Manuals (2014);
- Massachusetts Technical Reference Manual (2013 – 2015);
- Michigan Measures Database;
- Minnesota Technical Reference Manual ver. 1.0 (through December 31, 2014);
- Ameren MS web-based TRM (2013);
- NJ Clean Energy Program Protocols to Measure Energy Savings;
- New York Standard Approach for Estimateing Energy Savings from Energy Programs (October 2010);
- Ohio EE Technical Reference Manual (August 2010);
- Pennsylvania PUC TRM (December 2014);
- Texas Technical Reference Manual ver. 2.0;
- Vermont TRM (January 2012); Wisconsin TRM (January 2015).

The final deliverable for the process will be a white paper on the feasibility and value of creating a common set of measure parameters that can be used statewide by IOUs, POU's and others, perhaps in the form of a "California Technical Reference Manual." This process deliverable will be reviewed by the full Cal TF for approval.

### **III. Description of Issues**

The POU's have asked the Cal TF to review a select subset of POU TRM measures. This work objective is described in Goal 4 of the Cal TF Business Plan, which commits the Cal TF to reviewing and updating at least eight measures in the POU TRM for technical accuracy and adequate documentation. Because many of the POU TRM measures overlap with the measures offered by the IOUs, the Cal TF will focus on measures offered by both the POU's and IOUs. Measures to be reviewed will be selected by the POU TRM Measure Selection subcommittee.

Additionally, the POU TRM draws heavily from DEER. This will require vetting of DEER information used for selected POU TRM measures. Consequently, the work to review selected POU TRM measures aligns with Goal 1 of the Cal TF Business Plan, to "clearly memorialized DEER, other ex- ante requirements, methods, and assumptions for select high impact measures." Cal TF staff will work to identify and document DEER requirements (data, methods, assumptions, tools and guidance) relevant to the POU TRM measures under review.

### **IV. Background information**

The POU TRM documents ex ante values for energy efficiency programs offered by many POU's in California. The TRM addresses the following types of energy efficiency measures: deemed unit energy savings (UES), semi-custom, and custom. Two prominent sources for UES measures in the TRM are the CPUC's Database for Energy Efficient Resources (DEER) and California IOU workpapers. These sources are the sole means for documenting ex ante savings estimates by California IOUs. Given the mutual use of these sources by the POU's and IOUs for the same measures, a vetting of POU TRM high-impact measures by the Cal TF would benefit both the POU's and IOUs.

Due to POU TRM's reliance on DEER for many measures, a review of relevant DEER requirements (data, methods, assumptions, tools and guidance) will likely be necessary during the course of POU TRM measure review. TF Members will be asked to identify whether measure parameters based on DEER should be updated or modified if they don't represent values based on "Best Available Information," consistent with CPUC direction for IOU workpapers.<sup>2</sup> More thorough and specific documentation at the measure level is needed than currently exists in DEER for Cal TF members to fulfill these objectives.

<sup>2</sup> In D.10-12-054, the Commission wrote, “it is our expectation that DEER values be updated and set using the best available information.”<sup>2</sup> Most recently, in 2011, the Commission wrote that the “use of best available information” was one of three concepts that guided their entire decision on freezing ex ante values for the program cycle. D.01-11-06, November 29, 2001 at 20.

## V. Schedule

### Proposed Schedule

DATE	TOPIC
7-May	Clothes Washers
21-May	Appliance Recycling
18-Jun	Low Flow Showerheads & Faucet Aerators
16-Jul	LEDs
24-Jul	In person meeting (San Francisco)
30-Jul	EC Motors for refrigeration
August	No Meetings
3-Sep	Commercial Air Conditioners
17-Sep	Commercial Air Conditioners
1-Oct	Whole House Fans
15-Oct	VFDs on Pumps and Fans
23-Oct	In person meeting (San Francisco)
5-Nov	Review draft process report
26-Nov	Presentation to TF
December	No Meetings

## VI. Attachments

[CMUA California Technical Reference Manual](#)  
[Database for Energy Efficient Resources \(DEER\)](#)

## VII. Appendix

List of Technical Reference Manual measures selected:

1. Clothes Washers
2. Appliance Recycling
3. Commercial Air Conditioners
4. Residential LEDs
5. Commercial LEDs

6. Low Flow Showerheads
7. Faucet Aerators
8. VFDs on Pumps and Fans
9. ECM Motors for refrigeration

List of DEER measures selected:

1. Clothes Washers
2. Appliance Recycling
3. Commercial Air Conditioners
4. Commercial LEDs
5. Low Flow Showerheads
6. Faucet Aerators
7. VFDs on Pumps and Fans
8. ECM Motors for refrigeration
9. Whole House Fan