

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Concerning  
Energy Efficiency Rolling Portfolios,  
Policies, Programs, Evaluation, and  
Related Issues.

Rulemaking 13-11-005  
(Filed November 14, 2013)

**CALIFORNIA TECHNICAL FORUM STAFF COMMENTS ON  
DRAFT RESOLUTION E-5082**

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DRAFT RESOLUTION E-5082**

**I. Introduction**

California Technical Forum (Cal TF) Staff appreciates the opportunity to provide the comments herein on the Draft Resolution E-5082. The Cal TF is a collaborative of experts who use independent professional judgement and transparent, technically robust processes to review and issue technical information related to the California integrated demand-side management portfolio. The Cal TF was created in 2014 by a broad collaborative of stakeholders and is funded by participating program administrators.

**NOTE:** The views expressed herein are those of Cal TF Staff and do not in any way represent the view of the Cal TF Policy Advisory Committee (PAC), either individually or collectively, or of the TF itself (the collaborative of technical experts), either individually or collectively.

The comments pertain to the following topics:

1. Timing of Phase 1 Completion
2. Phase 1 Requirements Cal TF Staff Recommends Moving a Phase 1 Enhancement Requirement to Phase 2
3. Timing of Phase 2 Completion
4. Phase 2 Requirements: Cal TF Staff Recommends Moving a Phase 2 Enhancement Requirement to Phase 1
5. Phase 2 Requirements: Phase 2 Requirements for Additional Fields
6. Adding Program Tracking and Evaluation Requirement to Deemed Workpaper Template
7. Minor Technical Corrections:
  - Conform Intellectual Property language so the draft Resolution is internally consistent and correct
  - Corrections to Appendix Tables (duplicate entries, etc.)
8. Proposed Modification to Finding of Fact Paragraph 10 to Address Both Phase 1 and Phase 2 Required Timelines

## **II. Timing of Phase 1 Completion**

Cal TF Staff recommends moving completion of Phase 1 software enhancement requirement from September 30, 2020 to December 1, 2020. With this adjustment, eTRM can still meet the Commission’s “Conditional Data Source of Record” requirement by January 1, 2021

Draft E-5082, page 10 requires the additional Phase 1 work to begin no later than July 2020. Table 2 titled “Summary of eTRM Transition” sets forth a completion date of final Phase 1 requirements by September 2020, such that the eTRM is available as the “Conditional Data Source of Record” effective January 1, 2021.

Based on conversations with SBW/OMBU, Cal TF Staff believes that the remaining Phase 1 enhancement items will be difficult for the software developers to complete by September 2020. Therefore, Cal TF Staff recommends moving the completion date to December 1, 2020. During and after the Phase 1 software enhancements, Cal TF Staff will need to update individual measures to reflect the new, remaining Phase 1 enhancements. Cal TF Staff believes

that if Phase 1 software enhancements are completed by December 1, 2020, Cal TF Staff will be able to make the necessary individual measure updates such that the eTRM can still be made available as the “Conditional Data Source of Record” effective January 1, 2021.

### **III. Phase 1 Requirements: Cal TF Staff Recommends Moving a Phase 1 Enhancement Requirement to Phase 2 (Item 6)**

Draft E-5082, Attachment A, Appendix 1, Table A-3 titled “eTRM Enhancement Planning” identifies six additional requirements for the eTRM to meet the Phase 1 “Data Source of Record” standard. Item 6 of Table A-3 reads:

*Creation of a CPUC-specific shared data library for DEER measures. This shared data library would support versioned parameters and value tables managed by the CPUC and available for the eTRM measures to import.*

Cal TF recommends moving Item 6 of the identified additional Phase 1 enhancements to a Phase 2 enhancement requirement. The reasons for this recommendation are:

- 1) *Timing:* Item 6 is a feature that is intended primarily for use by the ex ante consultants and CPUC Staff, thus Cal TF Staff believes that considerable planning and discussion should occur before the software developer programs this feature to ensure this feature meets the needs of CPUC Staff and ex ante consultants. Cal TF Staff believes that the discussion, socialization within the CPUC, and software programming would be difficult to accomplish given the timing of Phase 1 needed to meet the Phase 1 “Data Source of Record” completion date. Cal TF Staff notes that the other Phase 1 enhancements have already been extensively discussed.
- 2) *Sequencing:* Two Phase 1 Enhancements relate to updating shared tables, both parameter and value tables (Items 3 and 4). Updates to the parameter and value tables should occur before the shared data library is created in Item 6, as the shared data library will need to reference the updated, not current parameter and value tables. In addition, the software structure of the CPUC workspace will be built in the likeness

of the shared data library. Therefore, it will be better to complete Items 3 and 4 before starting the programming on the CPUC workspace.

- 3) *Item 6 is a Phase 2 Item:* Phase 1 enhancements are largely to fulfill user needs, whereas Phase 2 requirements are largely to meet CPUC Staff/ex ante consultant needs. As this feature will largely be designed and used by CPUC Staff/consultants, it logically belongs in Phase 2.

#### **IV. Timing of Phase 2 Completion: Conform draft DEER Resolution to Q3, 2021 Phase 2 Completion Date**

Cal TF Staff notes that the draft Resolution identifies two different dates for Phase 2 completion. Draft E-5082, page 7 states that Phase 2 “be completed by June 2021 to provide Energy Division adequate time to test and accept before final transition of DEER”. Draft E-5082, Ordering Paragraph (OP) 6, page 23 states that “The enhancements will begin in July 2020 and shall be completed no later than June 30, 2021...” Appendix 1, page A-1-48 states that Phase 2 “will be completed in June, 2021.”

Similarly, Draft E-5082, page 8 states “By July 1, 2021, the eTRM will be the definitive public access portal for active statewide measure data”. Table 2, page 9 cites Phase 2 completion by “Workpaper functionality – July 2021”. Appendix 1, page A-1-2 states that Phase 2 “will be completed by July 2021 to provide the CPUC Energy Division adequate time to test and accept before final transition of DEER.”

Given the considerable amount of work required in Phase 2, Cal TF Staff recommends that the date of Phase 2 completion be Q3, 2021 to allow for time to complete the Phase 2 software development, while still meeting the very important January 1, 2022 date for having eTRM be the Data Source of Record, with the “conditional” designation removed.

**V. Phase 2 Requirements: Cal TF Staff Recommends Moving a Phase 2 Enhancement Requirement to Phase 1 (Item 65)**

Draft E-5082, Attachment A, Appendix 1, Table A-3 titled “Required eTRM Enhancements” includes Item 65, which reads:

*Revisit enhancements to the measure characterization PDF, ensuring:*

*--Logical page breaks, where possible (not splitting up object/table names from its host object/table, etc.)*

*-- Maintain proportionality and consistency in text style levels (headings) and sizes (esp. static vs. dynamic table headings)*

*--Floated elements retain their size, instead of erroneously expanding to full width in the PDF*

*--All symbols in the measure characterization text and calculations will render correctly in the PDF*

The purpose of this enhancement is to enable the generation of a PDF of the measure characterization that can be downloaded by any eTRM user. The measure characterization PDF will serve the same purpose as the workpaper “text file” that is submitted via WPA for review today. Because the text file (created in MS Word) is independent of the measure characterization in eTRM, Cal TF Staff and the utilities need to maintain both to ensure alignment between what is submitted, reviewed, and ultimately approved and the measure characterization in eTRM.

This need to update and keep the eTRM measure characterization in alignment with the submitted text file will continue until the PDF enhancement is complete. When the enhancement is complete, the PDF of the measure characterization that is submitted to and reviewed by the Energy Division Staff and ex ante consultants will be generated from the eTRM and will thus be identical to the measure characterization tab in eTRM.

Because this enhancement will significantly reduce duplication of effort and ensure accuracy, Cal TF Staff recommends that Item 65 be designated as a Phase 1 enhancement in Table A-3.

## **VI. Phase 2 Requirements: Phase 2 Requirements for Additional Fields**

Cal TF Staff recommends that the Phase 2 Requirements for Additional Data Fields (Table A-5) are considered to be fulfilled if the eTRM already contains the requested information. Draft E-5082, Attachment A, Appendix 1, Table A-5 titled “eTRM data fields required to meet Phase 2 Standard.” Table A-5 contains several fields that are not currently in the eTRM data specification for each measure. However, even though the *fields* are not in the eTRM, the *information* that would be placed in the fields is, for the most part, already contained in the eTRM. If the information requested by the incremental fields is already contained in the eTRM, Cal TF Staff recommends that the requested field not be added. Adding a new field in the eTRM requires additional software development time, requires manually adding information for each measure, and might also involve linking the field to other parts of the database.

Cal TF Staff additionally recommends that some fields in Table A-5 be moved to Table A-6 titled “eTRM data fields under consideration for Phase 2 standard” because further consideration is required or because the information required for the requested fields is unclear. Each additional field added triggers extensive additional work beyond just software development time. Thus, Cal TF Staff recommends discussing additional Phase 2 fields that may not be necessary or that may be more efficiently addressed elsewhere in the eTRM.

The first three columns in the table below are directly from Table A-5 of Draft E-5082. The final column provides Cal TF comments for each item; we comment if the specified information is already included in the eTRM and/or if Cal TF Staff recommends the item be moved to Table A-6.

**Cal TF Staff Review of Table A-5**

<b>Field Description</b>	<b>PEAR/ExAnte Fieldname(s)</b>	<b>Requires Daily Synchronization</b>	<b>Cal TF Comment: How Addressed in eTRM</b>
DEER Measure ID	MeasureID	TRUE	Included in Data Spec - currently named "Energy Impact ID" but could be renamed to "Measure ID"  Recommend further discussion: (Move to Table A-6).
HVAC system type description	BldgHVACDesc		Included in parameter list.
Climate zone description	BldgLocDesc		Included in parameter list.
Building type description	BldgTypeDesc		Included in parameter list.
Building vintage bin description	BldgVintDesc		Included in parameter list.
Coincident demand factor	CDF		Included in Interactive Effect table; pulled into the measures when needed; described in the Measure Characterization.
Flag for values available for claims reporting	ClaimSpec	TRUE	To be included in the Shared Data table
Date record created	Created		To be included in the Shared Data table
Record creator	CreatedBy		To be included in the Shared Data table
Record documentation source	CreatedCitation		To be included in the Shared Data table
Default equivalent full-load hours	defEFLH		To be included in the Shared Data table
EUL category	defEULCode		Recommend further discussion; not clear what this field is (Move to Table A-6)
Delivery type description	DeliveryTypeDesc		Included in parameter list.



<b>Field Description</b>	<b>PEAR/ExAnte Fieldname(s)</b>	<b>Requires Daily Synchronization</b>	<b>Cal TF Comment: How Addressed in eTRM</b>
NTG ID description	Desc		Included in parameter list.
Energy Impact Profile	EnergyImpactProfile		Included in Data Spec
Interactive effects factor for kW savings	IE_kW		Included in Interactive Effect table; pulled into the measures when needed; described in the Measure Characterization.
Interactive effects factor for kWh savings	IE_kWh		Included in Interactive Effect table; pulled into the measures when needed; described in the Measure Characterization.
Interactive effects factor for therm savings	IE_therm		Included in Interactive Effect table; pulled into the measures when needed; described in the Measure Characterization.
Flag for values available for percent filing	FilingSpec	TRUE	To be included in the Shared Data table
Notice of planned studies	FutureComment		Recommend further discussion; Is this just for EUL-ID table; what is the purpose of it? (Move to Table A-6)
Gas impact profile	GasImpactProfile		Included in Data Spec
Gross savings & installation adjustment type	GSIAType		Recommend further discussion; it can be included in shared value table. (Move to Table A-6)
Gross savings & installation adjustment type description	GSIATypeDesc		Included in parameter list.
Gross savings & installation adjustment factor	GSIATypeValue		Included in Data Spec
Hours of use	HOU		Included in shared value table
Hours of use categories	HOU_cat		Included in shared value table

<b>Field Description</b>	<b>PEAR/ExAnte Fieldname(s)</b>	<b>Requires Daily Synchronization</b>	<b>Cal TF Comment: How Addressed in eTRM</b>
Flag indicating DEER building type	IsDEERBldg		Included in shared value table
Proposed content flag (not yet approved)	IsProposed		Included in shared value table
Date of last modification to record	LastMod		Included in shared value table
Party last modified record	LastModBy		Included in shared value table
Supporting documentation for last modification to record	LastModCitation		Included in shared value table
Comment regarding last modification to record	LastModComment		Included in shared value table
Lighting category	LightingType		Included in Data Spec
Measure Application type (MAT) description	MeasAppTypeDesc		Included in parameter list.
Measure impact calculation Type description for DEER measures	MeasImpactCalcDesc	TRUE	Included in parameter list.
Measure technology ID	MeasTechID		Recommend further discussion; how is this used. (Move to Table A-6)
Normalizing unit description	NormUnitDesc		Included in parameter list.
NTG ratio for electric savings	NTG_Elec	TRUE	Included in Data Spec
NTG ratio for gas savings	NTG_Gas	TRUE	Included in Data Spec

<b>Field Description</b>	<b>PEAR/ExAnte Fieldname(s)</b>	<b>Requires Daily Synchronization</b>	<b>Cal TF Comment: How Addressed in eTRM</b>
Flag for building type parent	ParentType		Included in shared value table
First-baseline technology ID	PreTechID		Recommend further discussion; how is this used. (Move to Table A-6)
Workpaper revision number	revision		Included in Data Spec
Remaining useful life value, years	RUL_Yrs	TRUE	Included in Data Spec
Sector description	SectorDesc		Included in parameter list.
Second-baseline technology ID	StdTechID		Recommend further discussion; how is this used. (Move to Table A-6)
End-use sub-category	SubUseCategory	TRUE	Included in Data Spec
Technology group description	TechGroupDesc		Included in parameter list.
Technology type description	TechTypeDesc		Included in parameter list.
Technology type ID	TechTypeID	TRUE	Recommend further discussion; how is this used. (Move to Table A-6)
Technology type name	TechTypeName		Recommend further discussion; how is this different than Technology Type (that is part of Data Spec)(Move to Table A-6)
End-use category description	UseCategoryDesc		Included in parameter list.
End-use sub-category description	UseSubCategoryDesc		Included in parameter list.

## **VII. Adding Program Tracking Data and Evaluation Requirements to Deemed Workpaper Template**

Draft E-5082, Attachment A, Appendix 1, page A-1-14 requires adding program tracking and data requirements to the deemed workpaper template. Cal TF Staff very much supports additional data tracking and evaluation needs, as tracking additional data needs and evaluation requirements is integral to refining measure analysis and requirements over time. However, Cal TF notes that the statewide measure characterization template already includes a field for evaluation requirements titled “Data Collection Requirements,” which is viewable on the characterization tab of each measure in the eTRM. The instructions on how to complete the statewide measure template, the *Statewide Measure Development and QA/QC Guidelines* provides guidance for the “Data Collection Requirements” field (downloadable from [www.CalTF.org/tools](http://www.CalTF.org/tools) under heading “Statewide Deemed Measure Development Tools & Templates”). Additionally, Cal TF Staff and subcommittees of TF members and interested stakeholders have developed draft guidelines for estimating measure savings and costs, a few of which relate to implementation data collection requirements to support EM&V:

- Savings Guideline 3: Document influential parameters for sensitivity analysis
- Savings Guideline 7: Identify inputs that should be collected through programs
- Cost Guideline 11: Define data to be collected during implementation
- Cost Recommendation: Integrate Data Needs into eTRM / Leverage eTRM to Support Measure Update Planning / EM&V

Cal TF Staff would welcome working with the CPUC Staff and their ex ante consultants to make any revisions to the “Statewide Measure Development and QA/QC Guidelines” so that the additional information that EM&V would like to see is clearly specified.

## **VIII. Minor Technical Corrections**

### **Intellectual Property Language**

Draft Resolution E-5082, page 11 states:

*The CPUC may consider the option of assuming the IOU ownership portion of the eTRM in a future resolution ...*

OP 11 describes the option for future CPUC ownership somewhat differently:

*11. The Commission reserves the right to exert ownership of the IOU funded portions of the eTRM with agreement from the IOU funders.*

The six eTRM funders (that are identified in Draft Resolution E-5082) funded the entire project jointly, so the eTRM is owned jointly. In other words, the IOUs did not fund some portions, and the POU's did not fund other portions. When the CPUC exerts ownership rights, it will have rights to the entire eTRM, but will own jointly with the POU's.

Cal TF Staff recommends the language in OP 11 be revised to conform to the language on page 11 of the draft Resolution, and to correctly describe the CPUC possible future ownership rights, should the CPUC choose to assert ownership, as follows:

*11. The Commission reserves the right to require transfer of the IOU ownership interests in the eTRM on or after January 1, 2022, assuming satisfactory completion and Commission Staff acceptance of the Phase 1 and Phase 2 enhancements set forth in this Resolution..*

### **Minor Technical Corrections to the Appendices**

In addition to the changes to the appendices described above, Cal TF recommends additional modifications to the appendices to correct items that are duplicated in the tables, as follows:

- Draft E-5082, Attachment A, Appendix 1, Table A-3 “eTRM Enhancement Planning”
  - Row 6, Row 7, Row 21, and Row 78 are duplicative.

Cal TF Staff Recommendation: Remove rows 7, 21, and 78 from Table A-3.

- Draft E-5082, Attachment A, Appendix 1, Table A-4 “eTRM data fields required to meet Phase 1 standard”
  - Measure Impact Type field appears twice (pages A-1-61 and A-1-63).
  - Energy Impact Calculation Type field is a duplicate of Measure Impact Calculation Type for DEER measures (pages A-1-62 and A-1-63).

Cal TF Staff Recommendation: Remove duplicative fields as indicated.

## **IX. Correction to and Extension of Finding of Fact 10**

Draft Resolution E-5082, Finding of Fact 10 reads:

*The eTRM will be under development from July 2020 to ensure that it meets the Energy Division Deemed Data Standard by January 1, 2021.*

Because the Draft Resolution E-5082 has established two phases to the “Data Source of Record,” Phase 1 for user needs and Phase 2 for CPUC system integration issues, Cal TF Staff recommends that Finding of Fact 10 address both Phase 1 and Phase 2 timelines, as follows:

*The eTRM will be under development from July 2020 to ensure that it meets the Energy Division Deemed Data Standard Phase 1 by January 1, 2021. Phase 2 covers CPUC system integration issues. Phase 2 enhancements must be completed by Q3, 2021 to provide the CPUC Energy Division adequate time to test prior to January 1, 2022.*

### **III. Conclusion**

Cal TF Staff appreciates the CPUC Staff and ex ante consultant's leadership and tremendous efforts, progress, and participation to date. We look forward to further collaboration with the CPUC Staff, ex ante consultants, and the PAs in the future to achieve the Commission's objectives set forth in the draft Resolution E-5082.

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Respectfully submitted,

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