



**California  
Statewide  
Deemed  
Measures**

# eTRM Technical Guidelines

Version 1.0

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## 1. PURPOSE OF THE eTRM TECHNICAL GUIDELINES

The purposes of the eTRM Technical Guidelines are to:

- Define required (mandatory) and desirable (preferred but balances other considerations such as budget) software development practices, including testing, user acceptance, documentation, and allowable tools
- Define software maintenance practices – required and desirable
- Define the eTRM New Release process
- Describe allowable tools and software that may be connected to the eTRM through APIs
- Set forth process for ensuring compatibility with key stakeholder systems prior to release and standardized release process
- Define allowable content of eTRM, including Personally Identifiable Information
- Ensure compliance with all regulatory mandates
- Document eTRM hosting and security practices and processes
- Define Allowable Use of Proprietary and Third Party Code.

## 2. OVERVIEW AND BACKGROUND

The California electronic technical reference manual, eTRM, is a relational database that contains statewide measures approved by the California Public Utilities Commission (CPUC) Staff for use in the investor-owned utility (IOU) energy efficiency portfolios, as well as measures for use in publicly-owned utility (POU) programs.<sup>1</sup> The eTRM was funded by the four California investor-owned utilities (IOUs): Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SCG), the Southern California Edison Company (SCE) and the San Diego Gas & Electric Company (SDG&E) and the two largest publicly-owned utilities: Sacramento Municipal Utility District (SMUD) and Los Angeles Department of Water and Power (LADWP). The eTRM is jointly owned by these six utility “eTRM Funders”.

The eTRM was conceived and framed through the California Technical Forum (Cal TF).<sup>2</sup> The structure and development of the eTRM was overseen by eight “Core eTRM Stakeholders”, which includes the eTRM Funders listed above and two State regulatory agencies – the CPUC and the California Energy Commission (CEC).<sup>3</sup> Cal TF Staff provided day-to-day project

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<sup>1</sup> The statewide measures can be used by both IOUs and POUs. Some measures are not approved by the CPUC for the IOU portfolios but are approved for use by the POUs.

<sup>2</sup> California Technical Forum (Cal TF). 2015. *Cal TF Technical Position Paper No. 2: Electronic TRM Proposal*. November 12.

California Technical Forum (Cal TF). (n.d.). *Cal TF Technical Position Paper No. 6: Overlapping Measure Consolidation Process (Prior to eTRM Placement)*.

<sup>3</sup> The eight Core eTRM Stakeholders refined the business and technical requirements for the eTRM, reviewed the RFP issued to select an eTRM vendor, participated on the bid evaluation committee and final vendor selection, then participated in the eTRM development sprints, and testing and acceptance periods.

management of the eTRM development, and currently have administrator roles to administer the eTRM database.<sup>4</sup> The database code was developed by the subcontractor team of SBW Consulting and OMBU.

The California Public Utilities Commission determined that the eTRM is the “Data Source of Record” for all deemed measures (E-5152, Ordering P. 3). Given that the eTRM is used and relied upon for program development and claims review by California utilities, implementers, the regulatory agencies (both the California Public Utilities Commission and the California Energy Commission) and many publicly-owned utilities, technical guidelines for the eTRM are important to ensure continued eTRM functionality and performance.

### 3. eTRM TECHNICAL CORE STAKEHOLDERS

The core stakeholders for the eTRM Technical Guidelines are:

#### **State Regulatory Agencies**

- California Public Utilities Commission
- California Energy Commission

#### **Publicly-Owned Utilities**

- Los Angeles Department of Water and Power
- Sacramento Municipal Utility District

#### **Investor-Owned Utilities (IOUs)**

- Pacific Gas and Electric Company
- Southern California Edison Company
- Southern California Gas Company
- San Diego Gas & Electric Company

Each organization listed above shall provide one technical lead who is the designated contact and decision maker for eTRM technical issues.

### 4. eTRM TECHNICAL GUIDELINES ROLES AND RESPONSIBILITIES AND PROCESS FOR UPDATING

Primary oversight and updating the eTRM Technical Guidelines belongs to the core eTRM stakeholder technical leads.

However, the eTRM Technical Guidelines shall initially be approved by the eTRM Governance Committee.

*eTRM Governance Committee* is responsible for:

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<sup>4</sup> Cal TF Staff drafted the eTRM RFP, coordinated input and built consensus from the eight core stakeholders on the eTRM development, bidding, and development, and now serve as eTRM Administrators.

- Approving the initial eTRM Technical Guidelines

*eTRM Technical Core Stakeholders* are responsible for:

- Communicating their organizational needs for the eTRM in a timely fashion
- Suggesting, reviewing and affirming changes to the eTRM Technical Guidelines

*eTRM Administrator* is responsible for:

- Ensuring compliance with the eTRM Technical Guidelines in eTRM software development and maintenance activities
- Tracking suggested updates to the eTRM Technical Guidelines
- Updating the eTRM Technical Guidelines at least annually, and more often if necessary
- Ensuring affirmation of the changes by the eTRM Technical Core Stakeholders. The affirmation process may occur via e-mail or in a meeting. The eTRM administrator shall seek to secure agreement from all eTRM Technical Core Stakeholders if possible. However, if after a reasonable time the eTRM Technical Core Stakeholders cannot reach concurrence, the eTRM Administrator may change the eTRM Technical Guidelines based on a majority vote.
- Ensuring prior to each release that all Open Source code added to the eTRM during the development phase is documented in Exhibit 1, and that the necessary open source code license attributions are contained in the eTRM.

## 5. eTRM TECHNICAL GUIDELINES

Required Software Development Practices

Desirable, but not Mandatory, Software Development Practices

Required Software Maintenance Practices

Desirable, but not Mandatory, Software Maintenance Practices

eTRM New Release Process

Allowable Tools Connected to the eTRM

Compatibility with Key Stakeholder Systems

Allowable Content

Compliance with Regulatory Mandates

Hosting and Security

**eTRM Hosting:** eTRM is hosted on Amazon Web Services (AWS).

**eTRM Security:** Cal TF Staff will work with technical staff from the six funders and CPUC and CEC Staff to determine whether additional security features may be needed beyond the standard AWS security offering, as well as website analytics. In addition, as part of eTRM

administration, a host maintenance agreement is in place with the website developer to monitor unusual activity that could indicate a possible security breach.

## Use of Proprietary and Third Party Code in eTRM

The use of Third Party Code in the eTRM must meet the following requirements:

The code must be Open Source Initiatives Software.

1. All Open Source Code included in the eTRM must be designated in Exhibit 1, along with the name of the associated Open Source license.
2. Software Developer license requirements: All companies performing software development must sign a license prior to starting any software development that covers the portion of the eTRM developed and/or updated by the software developer.
  - The company performing software development must provide to all co-owners a worldwide, non-exclusive, irrevocable, perpetual, royalty-free license to publish, use, modify, copy, create derivative works of, and grant sublicenses with respect to, all current and all future versions of the eTRM Software that are provided by the software developer under the Agreement.
  - Third Party Licenses. The parties acknowledge that portions of the eTRM Software are comprised of Third Party Code, the use of which is subject to applicable third party licenses. Exhibit 1 documents a list of all Third Party Code used in the eTRM Software indicating the applicable third party licenses, while all attributions are included within the code. All third party licenses in Exhibit 1 are Open Source licenses approved by the Open Source Initiative.

## 6. ETRM GOVERNANCE COMMITTEE SIGNATORIES

This document shall become effective after all core eTRM Governance Committee members have executed it.

The undersigned co-owners of the eTRM hereby agree to the terms of this eTRM Governance Plan: