New Cal TF Member Orientation



ANNETTE BEITEL JENNIFER BARNES TIM MELLOCH OCTOBER 15, 2019

Welcome to the Cal TF





- Cal TF staff is thrilled to welcome you to the Technical Forum (TF)!
- EE industry in CA is at a key inflection point:
 - CPUC has shifted greater responsibility to 3P implementers
 - 60% of EE portfolios delivered by 3Ps by end of 2020
- Cal TF is in a strategic position to positively influence the EE industry



The California Technical Forum (Cal TF)





A group of in-state and out-of-state technical experts that work in a collaborative and transparent way to review new and updated energy efficiency measures and other technical information related to California's integrated demand-side management portfolio.

Vision

A respected source of California energy efficiency savings estimates and other technical information related to California's integrated demand-side management (IDSM) portfolio.

Mission

To support the growth and success of energy efficiency and IDSM through a technically **rigorous, independent, transparent** peer review of California's energy efficiency values and other related technical information.

The Cal TF A Broad Collaborative













CPUC Public Advocates
Office























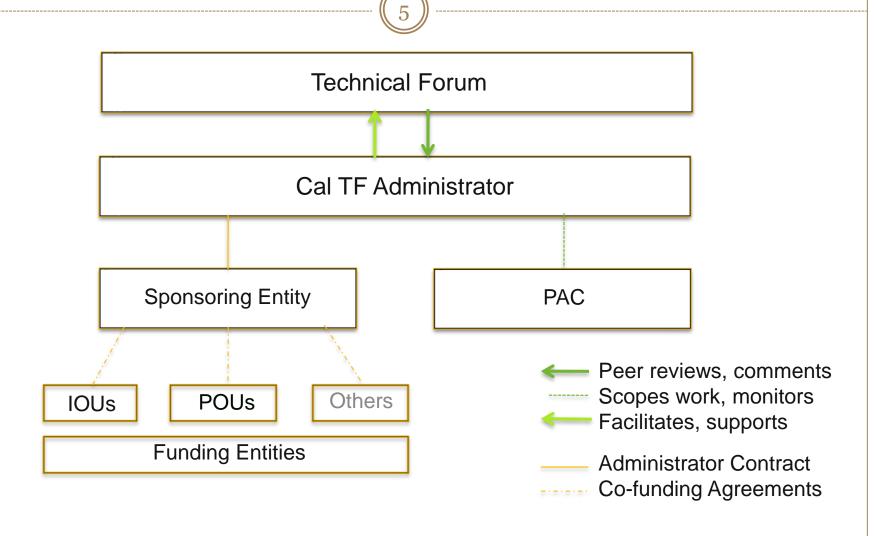






The Cal TF The Collaborative Supports the Technical Experts





TF Members





- Collaborative body of independent technical experts
 - TF members DO NOT represent their organizations' interests
- New members bring the TF membership up to 35
- Relies on consensus-based decision making
 - Non-consensus items noted
- Responsibilities include:
 - Render technical judgments on matters set forth in approved business plan. To date:
 - ▼ Deemed measures
 - Technical policy issues

Summary of New Member Qualifications





- New members are highly qualified with diverse experience evaluating energy & demand impacts of deemed measures and/or custom projects
 - Spanning all building & customer types
- Represent a broad range of organizations, including:
 - Energy consulting/technical engineering firms (10)
 - National lab (NREL) (1)
 - Independent consultant (2)
 - □ IOU/POU (2)

Candidate Experience	Number
Modeling	13/15
EM&V (traditional)	4/15
NMEC	7/15
Codes & Standards	11/15

12	5	17
Advanced	Professional	Avg. Years'
Degrees	Engineers	Experience

New TF Members



8

- Jeffrey Seto, AESC
- Lacey Tan, Frontier Energy
- Alfredo Gutierrez, Lime Energy
- Abhijeet Pande, TRC
- Richard Ma, Ecology Action
- Eric Noller, Energy Resources Integration, LLC
- Jonathan Pera, Willdan Energy Solutions
- Mudit Saxena, Vistar Energy

- Charles Ehrlich, Independent Consultant/PG&E
- Akhilesh Endurthy, Solaris Technical
- Vrushali Mendon, Resource Refocus
- Dave Hanna, Independent Consultant
- Andrew Parker, NREL
- Randy Kwok, PG&E
- Scott Blunk, SMUD

TF Member Responsibilities





- Agree to abide by:
 - Code of Independence
 - Code of Conduct
- Attend TF meetings
 - Currently scheduled the fourth Thursday of each month; 10:00 a.m. to 4:00 p.m.
 - Exceptions: August, November, December
 - Post-2019 meetings <u>may</u> be bi-monthly with more emphasis on subcommittee work
- In-person attendance:
 - California based = 80%
 - Outside California = 50%
- Advance review of meeting materials
- Full & active participation in TF meetings
- Peer review of @least 1 workpaper, TPP, or equivalent
 - NOTE: May modify this requirement
- Participation on @least 1 subcommittee

Cal TF PAC





- Policy Advisory Committee (PAC)
 - PAC members DO represent their organizations' interests
- Responsibilities:
 - Sets strategic direction for Cal TF
 - Approves TF Members
 - Approves annual Business Plan & reviews progress (quarterly)
 - Funds Cal TF (IOUs & POUs)
 - Does not participate in the review of technical documents & savings estimates, but reviews & may approve TPPs

PG&E	Center for Sustainable Energy	LBNL
SCG	SCPPA	CPUC Public Advocates Office
SDG&E	NCPA	CEDMC
LADWP	NAESCO	NRDC
SMUD	UC Davis	CAISO
Marin Clean Energy	CEC	

Cal TF Administrator & Staff





- TF Lead Facilitator
 - Annette Beitel
- TF Staff
 - Technical: Tim Melloch & Ayad Al-Shaik
 - Support engineers
 - Policy: Jennifer Holmes & Jennifer Barnes
 - eTRM: Roger Baker
- Responsibilities include:
 - Drafting documents for PAC review
 - Developing (some) technical work product for Cal TF affirmation
 - Developed
 - Statewide Deemed Measures
 - Technical Position Papers (TPPs)
 - Guidelines and Process Improvement documents e.g. Measure QA/QC Guidelines
 - Meetings: Scheduling, logistics, facilitation, agendas, materials & notes
 - Website: Memorialize Cal TF work (transparency) & provide industry resources

Reminder: Expectations for Oct 23rd Meeting





- Review meeting materials in advance:
 - eTRM Overview and Future Vision Slide Deck
 - DRAFT 2020 Measure Development Plan & Forms
 - DRAFT 2020 Cal TF Business Plan
 - DRAFT Modeling TPP
- Engage in full & active participation during the meeting
- Prepare & deliver a 60 second introduction covering:
 - Your name, affiliation & years working in EE industry
 - The type of work you are engaged in currently & any highlights from your career
 - Your near-term (1–2 year) vision for the EE industry & how your Cal
 TF participation supports this vision

Key Cal TF Milestones





Created in 2014 by a broad group of EE stakeholders

2016: "Next Steps" Memo with CPUC Staff October
2019: eTRM
Populated
with 2020
Measures;
Public
Launch











2015: TPP2 eTRM Proposal January 2019: eTRM ver. 1.0 completed

Current Key Initiatives





Measure Consolidation

Aligned over 400 IOU & POU measures statewide

CPUC EAR team provided expedited review & approval over 2018/2019

Paved the way for eTRM

eTRM

eTRM ver. 1.0 completed January 2019

Populated with CPUC-approved 2020 measures October 2019

Phased launch over 2020

Strive for "Database of Record" starting Jan 1, 2020

Modeling Charrette & TPP

Charrette drew industry leaders to development recommendations to improve California modeling ecosystem

TPP 11 identifies short, medium, long term recommendations; any implementation will be coordinated with SCE

New Measure Screening (2020)

Beginning in 2020, new & updated measures will be screened through Cal TF-led process

Will apply to both 3P & Utility requests

DRAFT 2020 Business Plan





1. eTRM - "Best in Class"

- Administer the eTRM ver. 1.0
- Implement the eTRM Launch Plan so the eTRM will be the "Database of Record" Effective January 1, 2021

2. Cal TF Review of New/Updated Measures

- Review New & Updated Measures
- Manage "Statewide Deemed Measure List"
- Update & Maintain Stage 2 Issues List

DRAFT 2020 Business Plan





3. Help Improve CA Modeling Ecosystem (SCE SW Lead)

- CA EnergyPlus Building Prototype Model Analysis & Documentation
- Document Deemed Modeled Measures in a Consistent/Transparent Way

4. Help Improve Custom Process

- Support Custom Process Project Improvement Process
- Develop Guidelines & Process for Hybrid Measures

5. Technology Position Papers (TBD)

- Reviewing EE Technical Potential Approaches
- Harmonizing cost methodologies and measure-level load shapes
- PAC Test vs. TRC in screening and valuing measures.

Closing





- Thank you again for volunteering your time as a Cal TF Member!
- Cal TF's role & influence will continue to evolve & grow in 2020 & beyond
- Your contribution as TF members will help shape the California clean energy industry to be more technically robust, transparent & collaborative