Notes

California Technical Forum (Cal TF) Meeting #27: Technical Forum (TF) "Best in Class" eTRM

January 26, 2017

9:30 am – 3:30 pm Pacific Energy Center 851 Howard Street

San Francisco, California

Webinar Information: https://attendee.gotowebinar.com/register/715515268325300227

Time	Agenda Item	Discussion Leader(s)
9:30 am – 9:45 am	**Opening** • Agenda • Purpose of Day	Annette Beitel, Cal TF Facilitator
9:45 – 11:00	**eTRM Work Plan** • General Roles and Responsibilities • Timeline • Budget • Contracting Structure/Tool Ownership/Licensing • eTRM "Repository" Solicitation and Population • Critical Path Questions/Responses from "Next Steps" Memo **ACT:** Cal TF Questions, Comments, Feedback, Recommended Implementation Plan Modifications or Additions	Annette Beitel, Cal TF Facilitator
11:00 – 11:10	**Stretch Break**	

11:10 – 12:00	**eTRM Opportunities for Integration**	Steve Kromer, Energy Efficiency Consultant Larry Brackney, NREL
12:00 – 12:30	**Lunch**	
12:30 – 1:45	**eTRM Repository Functionality and Data Specification**	Tim Melloch, Cal TF Staff

	• Desired functionality
	• Data Specification
	    o Considerations
	    o Process
	    o Data specification
	ACT: Cal TF Questions, Comments, Feedback, Recommended Implementation Plan Modifications or Additions	

1:45 - 2:00	Break	
2:00 – 3:15	**Key Technical Work for 2017** • **Consolidation/Cal TF Review of 75 Measures** o Strategic Measure Consolidation Plan **ACT:** Cal TF input on approach to getting Cal TF review of 75 measures.	Tim Melloch, Cal TF Staff
3:15 – 3:30	**Closing** • Upcoming Meetings • Upcoming solicitation for new members • Upcoming Cal TF Deliverables	Annette Beitel

Meeting Materials

• Presentations

CALIFORNIA
TECHNICAL FORUM

I.   **Attendees**

<u>In Person Attendees</u>
Annette Beitel, Cal TF Facilitator
Tim Melloch, Cal TF Staff
Ayad Al-Shaikh, Cal TF Staff

Steven Long, TF Member
Larry Kotewa, TF Member
Spencer Lipp, TF Member
Alina Zohrabian, TF Member
Mary Matteson Bryan, TF Member
Chris Rogers, TF Member
Gary Fernstrom, TF Member
Mike Casey, TF Member
Larry Brackney, TF Member
Steve Kromer, Consultant
George Beeler, TF Member
Doug Mahone, TF Member
Ryan Hoest, TF Member
Bing Tso, TF Member
Martin Vu, TF Member
Pierre Landry, TF Member
Gay Powell, PG&E
Ed Reynoso, TF Member
Ahmad Ganji
Tom Eckhart, TF Member
Jarred Metoyer
Armen Saiyan, TF Member
Yeshpal Gupta, TF Member
Breesa Collyer, PG&E

<u>Phone Attendees</u>
David Springer, Davis Energy
David Shallenberger, Synergy Companies
Roger Baker, ComEd

Owen Howlett, SMUD
Pete Jacobs, Building Metrics
Ron Ishii, AESC
Ramin Faramarzi, NREL
Mike Myser, Energy Platforms

II.   Key Decisions and Action Items

1. **ACT:** For eTRM, ensure measures plus data uploadable in .xls, .csv, WORD and .pdf

III.   Presentations

eTRM Work Plan

Tom Eckhart: Who will be evaluating the RFP replies?

Annette Beitel: One person from each IOU (4), one person from each POU (2), one CEC person and one CPUC person, eight total.

Doug Mahone: Is there a binding agreement among the partners (funders)? One slow moving partner could impact the schedule for all?

Annette Beitel: We are on a schedule with the understanding "you snooze you lose," otherwise we couldn't keep things on the needed schedule.

Gary Fernstrom: It can be used by others? What does open source mean?

Annette Beitel: it will be approved for CA measures and controls will be in place to maintain system integrity. Other users could use to try and extend current measures or vet other applications/measures for consideration.

Ed Reynoso: How will RFP evaluation be handled? Who will receive?

Annette Beitel: Cal TF has already canvassed the market to develop a qualified bidders list.

Steven Long: Concerned with the proposed timeline. If policy changes need to be made, it can take a long time to get those type of changes through.

Doug Mahone: What will ex-ante team have to do with eTRM?

Annette Beitel: Cal TF staff will engage CPUC staff overseeing WP development through: briefing and soliciting them on measure consolidation process and subcommittee plan, invite them to attend subcommittee and full Cal TF meetings where consolidated measures will be reviewed and approved. In addition, staff will be invited to be bid evaluator and review draft contract. Cal TF staff will strive to keep CPUC staff engaged in all stages of process to extent they are willing and able. CPUC will also need to review and approve eTRM.

Gary Fernstrom: Frustrated many measures losing cost effectiveness. We will need a new platform of measures for the future portfolio.

Annette Beitel: In current situation there is still a "gatekeeper" on new measures. Today we are focusing on eTRM and existing measure consolidation. We will also be proposing new measure review process; part of 2017 Cal TF Busines sPlan.

Doug Mahone: Is CPUC going to have to approve IOU expenditures for the eTRM?

Annette Beitel: CPUC approval will be sought for Phase 1 of eTRM development.

Gary Fernstrom: what happens at the NWRTF, do they also develop measures?

Annette Beitel: Yes they do, they have a staff that handles

Doug Mahone: Who is your contract with?

Annette Beitel: PG&E, which holds co-funding agreement with four IOUs and two POUs (LADWP and SMUD)

Martin Vu: This will be a transition period moving from DEER to the eTRM (timing, how will it work?)

Annette Beitel: We will cover the proposed transition at a future meeting. In brief, plan is to develop and upload initial 75 measures into eTRM, then seek CPUC approval of Phase 1.

Pierre Landry: Staffing concern, are you going to staff up for this? Does the new person you hired have experience managing IT contracts?

Annette Beitel: No, he will be responsible for measure consolidation.

Pierre Landry: Recommends hiring an IT consultant to assist

Pierre Landry: Section identifying IOU/POU leads, are you getting commitment from PAC for tech resources from IOU/POU's?

Annette Beitel: Subject matter experts from IOUs/POUs are very engaged and have committed to providing input on bid, bid evaluation, revising measure inconsistencies that can be addressed prior to subcommittee review and ongoing engagement during eTRM development. Their involvement critical as they will ultimately be key users of eTRM so need to be involved in development from early stages to ensure it will meet their needs.

Steven Long: Also please recognize, it's not just technical people, this can have a huge impact on programs.

Annette Beitel: Absolutely, we are requesting input from Programs/Products teams. However, we need to rely on SMEs to identify the correct people to engage within their respective organizations from programs/products and engage them at key points where they should or would like to provide input. In addition, under the new regulatory framework for EE, 60% of programs must be designed and implemented by 3-P, programs will not all be driven by IOU's, so the New Measure Review process needs to meaningful way for 3-P to recommend and solicit review of measures they are interested in including in their programs/portfolios.

Pierre Landry: Lots of change management required here, need a concerted effort to identify what needs to change at utilities, CPUC, etc.

Annette Beitel: CPUC posted late fall for position in their organization to handle the eTRM from their end.

Opportunities for Integration

Cal Ratepayer Funded
1. Efficiency proceedings
   a. 13-11-005
   b. Diablo Canyon – EE included, look at the plan.
2. Distributed Resource Plans (DRP) - Locational pricing
3. Open EE Meter – per Gary Fernstrom, it's a company, they do whole building analysis
4. Cal Track – Residential Modeling of buildings – Suite of Tools – residential metered data. How do you account for changes in the building and interactive effects? Just because you have metered data doesn't mean you don't need simulation models.
5. PG&E Commercial Building Pilot – Compare results from simulation and metered data.
6. CEDARs – Data Transfer – how IOU's dump data into the reporting system
7. EM&V
8. EDAPT- Energy Design Assistance Program Tracker, tracking systems, developed for Xcel
9. COFEEE- originally built for national Grid, generates specific model about a customer, includes publicly available data to identify what bundle of measures fall out for that building. Could also include feeder impact assessment capability.

Also many DOE funded opportunities for integration (e.g. BEDES, Energy Plus, Open Studio, CityBES, CBES, Building Score Manager, Open Efficiency Initiative, BRICR, etc)
- What is project?
- Who is lead?
- Who is involved?
- Who is funding?
- What is relevance to eTRM?

- Priority of funding

Larry Brackney: common platform activities listed on slide 3 starting at EDAPT and on down. These represent some of the common platforms.

Pierre Landry: You're listing a lot of databases that we could connect with, how will this be prioritized?

Pierre Landry: "Can Integrate," when you hear language like that alarm bells should be going off!!

Pierre Landry: Concerned about how the additional tools could/should be used in development of the new eTRM.

Armen Saiyan: All these items are very interesting. Could some of them wait till later to be used?

Dou Mahone: Excited about using population of actual buildings in the future analysis

Steven Long: Prototypes, think about end state, are we replacing what we're doing now?

Pierre Landry: The Commission told us to use "best available data", we just saw lots of "best available data" sources we won't be using.

Larry Brackney: Prototype, use DEER2.0 database to start.

Pierre Landry: Nobody in this room believes that's the best available data (DEER2.0)

Tom Eckhart: 13 months ago Jeff Hirsch was here, and he said he hadn't benchmarked DEER2.0 recently

Annette Beitel: The Cal TF needs to do a TPP on how to validate measures that are developed through building simulation so there is a consistent approach.

Doug Mahone: EE Potential Study, DEER used.

eTRM Repository Functionality and Data Specification

Mike Casey: List of all the measures that it is filtering down to. Make sure if a parameter is linked to a set of measures, should be able to download list of measures that it is linked to.

E3 Calculator needs to be CET (recently changed from E3 to CET).

Steven Long: TRC – This can vary by IOU.

Breesa Collyer: Look at quick and dirty approach to TRC estimate.

Steven Long: Maybe call to CET.

Alina Zohrabian: (TRC) Maybe what is calculated in READi, which is not what is in CET.

Steven Long: Search by DEER version. Setting it up, ten entities will want customization – Specific Fields, Specific Order, Specific time. Each field formatted a particular way.

Mary Matteson Bryan: User ability to "build my dump" – Which fields, in what order.

Armen Saiyan: Want exporting capability, flat file.

Steven Long: Graphical – Be able to plot variability across climate zones and vintages.

Steven Long: Take different parameters to plot. Can you sort which measures are most productive in which climate zones?

Martin Vu: Automation. New DEER 2017

Steven Long: Use it to model different scenarios. What if Title 24 changes in the following ways, how does this change the measures savings?

Martin Vu: What about seeing changes to portfolio?

Armen Saiyan: Need to have ability to distinguish between need vs. "nice to have."

Steven Long: Identifying individuals or groups who may be involved in measure.

Steven Long: Want to have ability to trace history of development of measure – who authored, who worked on? Who approved?

Tom Eckhart: Add fields for categories of measures. Ability to Undo, to copy or data. Ability to revise measures.

Governance: Specify the ability to work with different browsers

Upload: Make sure you can upload into Excel.

ACT: For eTRM, ensure measures plus data uploadable in .xls, .csv, WORD and .pdf

Measure Consolidation

Test machinery in process with 90.1 prototypes

Rooftop HVAC Need to work parallel path. California prototypes in next 3 – 6 months.

Gary Fernstrom: Some consideration.

Refrigeration
- Low impact
- Modeled
- Some of them have extremely low deemed savings. Tested some of these measures.

Strip curtain – tend to get ripped off and not replaced

Evaporator Fan Motors
- Some will still be modeled. DOE 2.R,

Breesa Collyer: Lacking in current system how much time

PROCESS:
- Fly though utilities
- Consider which ones easier to address? Which ones more difficult to address?
- Start with providers to get target measure list
- Asked each IOU/POU to go back, review and give feedback/recommendations for target measures to consolidate in 2017 based on strawman list in presentation.