



Notes

California Technical Forum (Cal TF) Meeting #29: Technical Forum (TF) eTRM Measure Consolidation Subcommittee Kick-Off

April 27, 2017

9:30 am – 3:30 pm

Pacific Energy Center
851 Howard Street
San Francisco, California

<https://global.gotomeeting.com/join/830612989>

Time	Agenda Item	Discussion Leader(s)
9:30 am – 10:00 am	Opening <ul style="list-style-type: none">• Agenda• Purpose of Day• Cal TF Updates	Annette Beitel, Cal TF Facilitator
10:00 – 11:00	Overview of Subcommittee Process ACT: Cal TF Feedback on Analysis/Approach	Ayad Al-Shaikh and Annette Beitel, Cal TF
11:00 – 11:15	Stretch Break	
11:15 – 12:00	Commercial Refrigeration Subcommittee ACT: Cal TF input/recommendations on category issues and measure-specific issues that subcommittee must address (same items for subcommittees below)	Chris Rogers, CLEAResult Ayad Al-Shaikh, Cal TF
12:00 – 12:30	Lunch	
12:30 – 1:15	Water Heating Subcommittee	Chan Paek, SoCalGas and Ayad Al-Shaikh
1:15 – 2:00	Agriculture/Pumping Subcommittee	Ayad Al-Shaikh
2:00 – 2:15	Stretch Break	



2:15 – 3:00	Food Service Subcommittee	Charlene Spoor, PG&E and Ayad Al-Shaikh
3:00 – 3:30	Close and Next Steps	Annette Beitel

Meeting Materials

Presentations:

- Overview Subcommittee
- Commercial Refrigeration Subcommittee
- Water Heating Subcommittee
- Agriculture/Pumping Subcommittee
- Food Service Subcommittee



I. Attendees

In Person Attendees

Annette Beitel, Cal TF Facilitator
Paul Pruschki, SDG&E
Ron Ishii, TF Member
Chan Paek, So Cal Gas
Steven Long, TF Member
Bing Tso, TF Member
Ryan Hoest, TF Member
George Beeler, TF Member
Doug Mahone, TF Member
David Pruitt, TF Member
Mike Casey, TF Member
Pierre Landry, TF Member
Chris Rogers, TF Member
Gary Fernstrom, TF Member
Alina Zohrabian, TF Member
Charlene Spoor, PG&E
Scott Mitchell, SCE
Armen Saiyan, TF Member
Mark Modera, TF Member
Ed Reynoso, TF Member
David Springer, TF Member
Spencer Lipp, TF Member

Phone Attendees

Ayad Al-Shaikh, Cal TF Staff
Roger Baker
Martin Vu, TF Member
Bryan Pena, CPUC
Tom Eckhart, TF Member
Bryan Ward, Grid Solutions
David Springer, TF Member
Joe Priyanonda, Applied Energy Group
Owen Howlett, SMUD



II. Key Decisions and Action Items

1. **ACT:** Cal TF Facilitation to follow up on following subcommittee issues: 1. Reviewing relevant dispositions; 2. Ensuring EM&V expertise; 3. Approach to assessing; 4. When to collapse permutations.
2. **ACT:** Cal TF Facilitation to follow up - EM&V expert from CA to look at list of EM&V measures and assess what percent (roughly) have measured EM&V data.
3. **ACT:** In future presentations, include what the units are for each measure.

III. Presentations

Overview

Doug Mahone: How do you get at issues that are not in data/WP?

Annette Beitel: Rely on subcommittee members with historical and general expertise to spot.

Steven Long: Important to also review dispositions and current EM&V to get list of measure-specific issues.

Pierre Landry: Each subcommittee needs to have EM&V expertise.

Steven Long: If you are going to collapse permutations...

Bing Tso: Shouldn't cost be a consideration (cost-effectiveness)

ACT: Cal TF Facilitation to follow up on following subcommittee issues: 1. Reviewing relevant dispositions; 2. Ensuring EM&V expertise; 3. Approach to assessing; 4. When to collapse permutations.

Mark Modera: What is our approach to get regulatory review/approval?

Annette Beitel: We discussed with PAC yesterday. My recommendation is to seek initial regulatory approval once we have initial 75 measures and an actual tool. We can discuss TF ideas in a small group call but ultimately decision will be made by PAC.

Mark Modera: How can we reconcile actual data (from EM&V Studies) with modeled data?



Annette Beitel: In California, not too much CA EM&V data that collects data on actual savings in field.

Mark Modera: Really?

Annette Beitel: I will ask an EM&V expert from CA to look at list of EM&V measures and assess what percent (roughly) have measured EM&V data.

ACT: Cal TF Facilitation to follow up.

Commercial Refrigeration Subcommittee

Other Measures – Ask Chris

- Efficient condensing Units
- EC Motor for condensing fans

Mark Modera: Are you capturing water and using on condenser

Chris Rogers: No.

Gary Fernstrom: No attention given to modifying blades to make them more aerodynamic.

Chris Rogers: This is being worked on.

Steven Long: Comment re: data

Spencer Lipp: Bro measures – gaskets. Did it have NTG? Behavior Retro-commissioning operation.

Ron Ishii: WP older, I assume. If committee looking at consolidation. What about ISP issues if WP are old?

Armen Saiyan: Lot is code?

Annette Beitel: Where do we get data? Developmental EM&V

Ryan Hoest: Look at simulation data from VACOMM: 2003 – 2010 for SBD.



Scott Mitchell: Adding doors to refrigeration: Custom savings 2 – 3 times allowable deemed savings.

Armen Saiyan: When we added doors to refrigeration – we saw that custom savings matched WP.

Water Heating Subcommittee

Gary Fernstrom: Aren't low-flow showerheads code, and they have been for a decade?

Chan Paek: Yes, we have, but we offer showerhead that have flow lower than code.

Gary Fernstrom: Why is there no negative electric for more efficient WH?

Chan Paek: We took values from DEER.

Mark Modera: **ACT:** In future presentations, include what the units are for each measure.

Gary Fernstrom: What about California Solar Thermal Initiative.

Should include measures

Ag and Pump:

Spencer Lipp: CPUC calculator to calculate savings from non-well water sources

Mike Casey: Are pumps only Ag applications?

Ayad Al-Shaikh: Yes

George Beeler: Any measures that capture methane

Food Services:

Scott Mitchell: Include Commercial Reach-In Refrigerators/Freezers be included in the Category.



Steven Long: Need to look at kW savings.

Martin Vu: Cold water savings also captured in embedded energy savings (water district measures). Need to look at hot and cold water.

Scott Long: Should all the WP include water – energy nexus where appropriate.