



**WHPA Existing Buildings Energy Efficiency (EBEE) Action Plan Committee
Teleconference Summary Minutes
Thursday, April 20, 2017 (Scheduled for 9:00 – 10:00am PDT)**

Call to Order

Per Co-Chair request, WHPA Staff (Wendy Worrell) started the audio recording and called the meeting to order at 9:01 am PDT.

Roll Call

The following 16 participants attended the meeting with a quorum (6+) of voting Exploratory Working Group (EWG) members.

P = Present at meeting A = Absent from meeting; if proxy has been assigned it will be noted below. The EWG is the voting panel of the Existing Buildings Energy Efficiency Action Planning Committee.				
CEC Advisors (Non-Voting)				
CEC (California Energy Commission)	Brian	Samuelson+	Government (Other than CPUC)	P
Exploratory Working Group Members (Voting)				
Air-Tro	Robert	Helbing	Contractor (Nonresidential)	P
CalCERTS, Inc.	Susan	Davison	Certifying Body	P
Charles Segerstrom Consultant	Charles	Segerstrom	Industry Consultants	P
IHACI (Institute of Heating and Air Conditioning Industries)	Bob	Wiseman	Contractor Association	P
Indio Cooling & Heating Supply	Tim	Mann	Distributor	P (Co-Chair)
SynergyNexGen	Barbara	Hernesman	Certifying Body	P (Co-Chair)
Tre'Laine Associates	Pepper	Hunziker	Energy Efficiency Program Consultant	P
Valley Contractors Exchange	Kate	Leyden	Contractor Association	P
EBEE Guests (Non-Voting)				
AMS (American Mechanical Services)	Marc	Pickett	Contractor (Nonresidential)	P
Amy Beley Consulting	Amy	Beley	Energy Efficiency Program Consultant	P (last 44 min)
CalCERTS	Janell	Jacks	Certifying Body	P (last 7 min)
EGIA	Andre	Christian	Contractor Association	P
PG&E (Pacific Gas and Electric Company)	Alina	Zohrabian	California IOU	P (Speaker)
SDG&E (San Diego Gas & Electric)	Paul	Thomas	California IOU	P (first 44 min)
WHPA Staff				
InfoPlast	Wendy	Worrell	Other Stakeholder	P (Host/Scribe)

*** Organization is Not a Member of the WHPA; + Individual is NOT Registered with the WHPA; ^(P) after last name = Member/Registrant is Pending Approval from the WHPA Executive Committee*

AGENDA

WHPA Staff email distributed the following agenda to the WHPA EBEE roster prior to the meeting.

GENERAL REMINDERS

- Adherence to the WHPA **Code of Conduct** is required.
- Disclose any potential conflicts of interest as it relates to meeting content, particularly prior to any votes that may occur.
- Identify yourself prior to speaking, clarifying the organization on whose behalf you are speaking, or if you are making a personal comment.
- Mute yourself when not speaking. (*6 will take you on and off mute.)

AGENDA ITEMS

- 1) **Roll Call of Voting Members** – WHPA Staff (Wendy Worrell) – 3 min
- 2) **Co-Chairs' Opening Comments** – Co-Chair (Barbara Hernesman) – 5 min
 - a. Agenda Overview
 - b. Alina Zohrabian Introduction
- 3) **Presentation: Cal TF Overview** – Alina Zohrabian (PG&E) – 30 min
 - a. Presentation
 - b. Q&A
- 4) **Discussion: Proposed WPIII Sole Focus on EBEE-AP Strategy 1.9** – Co-Chairs (Barbara Hernesman and Tim Mann) – 20 min
 - a. Concept Decision
 - b. Sub-Strategy Prioritization (1.9.1, 1.9.2, 1.9.3, 1.9.5, 1.9.6)
- 5) **Scheduling** – WHPA Staff (Wendy Worrell) – 2 min
 - a. EWG only – May 4th from 9-10am PDT
 - i. Facilitated Discussion - SB 350 Responsible Contractor – Ellen Steiner (confirmed)
 - ii. HVAC Performance Presentation – Guest Speaker (tentative)
 - b. EBEE (all) – May 18th from 9-10am PDT



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6) **Adjournment** by 10:00am PDT – Co-Chair (Barbara Hernesman)

Opening Comments

Co-Chair Barbara Hernesman (SynergyNexGen) overviewed the agenda and welcomed guest speaker Alina Zohrabian with PG&E. Alina was asked to speak about Cal TF as part of the EBEE-AP Strategy 1.9 discussion “so that we can continue to synthesize that information and determine what the regulatory agencies are asking of the Committee”.

Presentation: Cal TF Overview

The reference document, “04-20-17 Ref: Cal TF Electronic TRM Proposal Slides”, was emailed to the roster for review prior to the meeting.

Alina Zohrabian (PG&E) introduced herself. She mostly works on lighting and some swimming pool measures with PG&E. She is also a member of Cal TF. To ensure consistent messaging, she used presentation slides that Cal TF created for the roadshow they were doing for the Investor Owned Utilities (IOUs) since not all within the IOUs are aware of Cal TF and what they plan to do in the next two years.

PRESENTATION

On behalf of the California Technical Forum (Cal TF), Alina Zohrabian (PG&E) presented a high level overview of the “eTRM: Electronic Technical Reference Manual”. Key information beyond slide content follows:

Slide 2: Executive Summary

TRM refers to the Technical Reference Manual. Electronic TRM is also referred to as eTRM.

Slide 3: The California Technical Forum (Cal TF)

Cal TF is a group of technical, not policy, experts. The goal is for all in the state to use one set of numbers which is not currently the case. There are currently three full time Cal TF Staff members. They have about 30 technical experts that review measures. Cal TF also has a group of “PAC” members who deal mostly with policies and on the direction for which Cal TF should focus. That group is mostly comprised of director and senior level managers at Utilities and other entities.

Alina Zohrabian (PG&E) is in the group of Cal TF members that are mostly engineers and utility groups or consulting groups with a lot of technical experience.

Slide 4: Cal TF: A Broad Collaborative

Some of those listed also funded Cal TF.

Slide 5: EE Measure Development: Commission Goals Compared to Status Quo

The goal is for a collaborative process between the Utilities and CPUC staff involved in measure development. More data availability is desired, but there is a trade off in balancing the costs, etcetera for achieving that.

Slide 6: EE Measure Development: State Policy Goals Compared to Status Quo

Because the current process is slow, the 2030 energy savings goals are not expected to be achievable without change.

Slide 7: TRM Research

They are incorporating best practices they found for measure development and measure repositories from jurisdictions and from interviews with developers and users with strong TRMs across the country.

Slide 8: TRM Best Practices - Process

A lot of DEER measures are old and not updated as often as they should be.



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Slide 9: TRM Best Practices - Structure

There is currently no consistent format in DEER nor clear links to key parameters which are housed on different pages.

Slide 10: TRM Best Practices - Content

There are currently no written guidelines or documentation that “anyone can follow”. While modeling is expensive and not always expected, if modeling is done, the desire is to make sure it is justified and that it is validated with real data.

Slide 12: Proposed Implementation Plan

The slide graphic shows the proposed implementation process for how to handle the existing DEER California Ex Ante Measures.

Slide 13: Conclusion: Benefits of the Electronic TRM

Open source tools are used to make sure any analysis is incorporated.

Slide 14: Questions

The following questions posed by the WHPA EBEE Committee Co-Chairs prior to the meeting were addressed:

1. How does Cal TF relate to existing buildings for residential and multifamily?

ANSWER: As new measures are being offered to residential and multifamily, they will be available by the electronic TRM.

2. Are there gaps and barriers to be aware of?

ANSWER: Because of the timeline, the goal is to populate by the end of 2018. As that is quickly approaching, there is a stall with new measures as very few will be reviewed. Those that would be reviewed would come from Utility program managers, product managers, and engineers, and all the statewide Utilities would need to approve it as a unified top priority. Alina Zohrabian (PG&E) expressed her hope that there will be an easier path to new measures in the future.

3. What would you like from this Stakeholder group and/or expectation for market actor participation?

ANSWER: Engage with program and implementation managers to help ensure they have accurate information as they proceed and ensure they are aware of when presence is needed at subcommittees for input on measures.

All relevant Cal TF meeting materials are available at <http://www.caltf.org/tf-meeting-materials/>.

Consultants present the measure being entered. The Commission has final approval so even if Cal TF approves, it may not always be accepted by the Commission.

Q&A

In reply to Paul Thomas’ (SDG&E) request for further clarification regarding the Proposed Implementation Process slide, Alina Zohrabian (PG&E) explained that DEER currently has a lot of different permutations and measure variations by building type, climate zone, etcetera. Cal TF Staff did a high-level review and found that there were 187 unique California Ex Ante Measures. In DEER, there are thousands of line items, but they are all a variation of the 187 measures based on climate types, unit types, etcetera. The measures include Utility work papers, as well as DEER unique measures that have been developed by the Ex Ante team and do not include work papers.

- Paul Thomas (SDG&E) noted the importance of understanding the above clarification for measure level data. He noted that from an HVAC standpoint, a new unit in a coastal climate can claim different energy savings as opposed to a warmer climate, but that all that data is embedded into one measure.



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In reply to Bob Helbing’s (Air-Tro) question about the timeframe for DEER to be replaced with eTRM, Alina Zohrabian (PG&E) said that the timeline is to have it populated by the end of 2018, but cautioned that it will not be perfect by then.

In reply to Co-Chair Barbara Hernesman’s (SynergyNexGen) question about opportunities for community education, Alina Zohrabian (PG&E) confirmed that much of the education will be handled through the IOUs. She is not sure if the goal is to hand it to the Commission as the Commission currently owns DEER. Once efforts are done, training is needed with CPUC personnel and the public as well as internally within the IOUs.

ACTION: WHPA EBEE Committee members to email [Alina Zohrabian \(PG&E\)](#) with questions about Cal TF.

Co-Chair Barbara Hernesman (SynergyNexGen) clarified that when thinking about Cal TF from the HVAC lens, consideration should be given to how this open source modeling software that increases transparency and reduces the cost of model savings estimates is applicable.

Discussion: Proposed Work Product III Sole Focus on EBEE-AP Strategy 1.9

The reference document, “[EBEE-AP Strategy 1.9](#)”, was emailed to the roster for review prior to the meeting.

Co-Chair Barbara Hernesman (SynergyNexGen) clarified that prior meetings focused on EBEE-AP Strategy 1.9. She opened the discussion to how to prioritize the strategies of 1.9 and its Sub-Strategies. Discussion topics have included CAEEC and now Cal TF, plus the importance of Existing Buildings Multifamily, plus some of the conversations with CEC (Bill Dietrich and Brian Samuelson). Having this good foundation to start prioritization, the group was asked for input on their thoughts for Strategy 1.9, particularly in terms of Sub-Strategies they are passionate about for prioritization.

CONCEPT DECISION

Following WHPA Staff inquiry, Co-Chair Barbara Hernesman (SynergyNexGen) confirmed that the EWG had been asked to consider sole focus on EBEE-AP Strategy 1.9 for WPIII. No communications to the contrary have been received.

Kate Leyden (Valley Contractor Exchange) noted that she is overwhelmed by the 1.9 Sub-Strategies which is why she has not voiced much comment for prioritization.

ACTION: WHPA Staff to conduct an email vote with the motion to use EBEE-AP Strategy 1.9 as the sole focus for WPIII with emphasis on Sub-Strategies 1.9.2, 1.9.6. plus 1.9.4 (if WE&T does not handle it.), plus the option for input on other areas members deem appropriate.

ACTION: Co-Chair Barbara Hernesman (SynergyNexGen) to follow up with the WHPA WE&T Co-Chairs on the status of that Committee.

ACTION: WHPA Staff and WHPA EBEE Co-Chairs to discuss how to have draft WPIII development information available thru the WHPA EBEE webpage for easy link access.

SUB-STRATEGY PRIORITIZATION

The Co-Chairs asked for input on the following EBEE-AP Strategy 1.9 Sub-Strategies for prioritization.

(NOTE: As Sub-Strategy 1.9.4: SB 350 Energy Efficiency Targets was expected to be a focus of the WHPA WE&T Committee, those efforts will not be duplicated in the WHPA EBEE Committee.)

Sub-Strategy	Title	Description
1.9.1	2030 Target Scoping Plan Update	“Engage stakeholders and sister agencies in planning processes to publish goals, objectives and strategies to reduce GHG (Green House Gas) emissions to 40 percent below 1990 levels by 2030.”



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1.9.2	California Energy Efficiency Coordinating Committee	<i>“Provide guidance to CPUC energy efficiency program administrators on 2017 business plans; review and discuss ultimate Implementation plans consistent with approved business plans.”</i>
1.9.3	California Technical Forum	<i>“Develop, pilot, deploy, and maintain an electronic technical manual for use by California utilities and other efficiency program administrators to estimate savings from efficiency efforts.”</i>
1.9.5	Long-Term Energy Resource Planning	<i>“Work across agencies to ensure the long-term demand forecast incorporates the complementary impacts of procurement, codes and standards, and market transformation programs as they relate to existing buildings; develop and/or advance analytics using consumption data for forecasting and related program evaluation.”</i>
1.9.6	Energy Efficiency Collaborative – Statewide Agency Leadership	<i>“Form the Existing Building Efficiency Collaborative (EBEC) to lead and coordinate progress toward energy efficiency across the energy agencies.”</i>

ACTION: Pepper Hunziker to provide WHPA Staff with a suggested feedback loop framework to enable association to existing groups (such as CAEECC, CalTF, etc.) that are focused on the HVAC end of the Sub-Strategies. This would include clarifying key points to know what is being tracked so specific questions can be asked for consolidation into WPIII.

Sub-Strategy 1.9.1:

There was no specific discussion of this Sub-Strategy.

Sub-Strategy 1.9.2:

Susan Davison (CalCERTS) and Brian Samuelson (CEC) reported that they are already part of CAEECC (California Energy Efficiency Coordinating Committee) and could be the liaison for those activities rather than making it a separate subgroup.

ACTION: For Sub-Strategy 1.9.2, Susan Davison (CalCERTS) and Brian Samuelson (CEC) to provide a 15-minute overview of the CAEECC goals and actions thru the HVAC lens clarifying how our stakeholders have feedback opportunities to make it applicable to the real world “boots on the ground”.

Sub-Strategy 1.9.3:

There was no specific discussion of this Sub-Strategy.

Sub-Strategy 1.9.5:

There was no specific discussion of this Sub-Strategy.

Sub-Strategy 1.9.6:

Pepper Hunziker (Tre’Laine Associates) commented that the November 2016 In-Person breakout group she facilitated found it difficult to determine how Sub-Strategy 1.9.6 directly related to HVAC.

Co-Chair Barbara Hernesman (SynergyNexGen) agreed that it is difficult to narrow down to just HVAC, but noted that it is a good discussion topic.

Scheduling

For a future meeting topic, Co-Chair Barbara Hernesman (SynergyNexGen) noted that she is working to secure someone to talk about HVAC specifically related to whole house buildings and how they are doing performance measuring on residential and small commercial in the real world. This also looks at the whole house as a system and seeing how to shift people’s minds for how they should be thinking.

The following future meetings were confirmed:



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- EWG only on Thursday, May 4th from 9:00am – 10:00am PDT with the following agenda items:
 - Facilitated Discussion - SB 350 Responsible Contractor – Ellen Steiner
 - HVAC Performance Presentation – Guest Speaker (to be determined)
- EBEE on Thursday, April 20th from 9:00am – 10:00am PDT with the agenda to be determined.

Adjournment

Co-Chair Barbara Hernesman (SynergyNexGen) adjourned the meeting at 10:01 am PDT.

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Summary of Action Items and Key Decisions (from above discussion)

ACTION ITEMS

- **ACTION:** WHPA EBEE Committee members to email Alina Zohrabian (PG&E) with questions about Cal TF.
- **ACTION:** WHPA Staff to conduct an email vote with the motion to use EBEE-AP Strategy 1.9 as the sole focus for WPIII with emphasis on Sub-Strategies 1.9.2, 1.9.6. plus 1.9.4 (if WE&T does not handle it.), plus the option for input on other areas members deem appropriate.
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