



WHPA Compliance Committee Teleconference Summary Notes

Thursday, May 11, 2017

Scheduled for 8:30am – 9:30am PDT

Call to Order

WHPA Compliance Committee Chair Bob Barks (CALBO) called the meeting to order at 8:35 a.m. PDT. The meeting was recorded for note purposes.

Roll Call

WHPA Staff (Wendy Worrell) conducted roll call of the voting panel during the meeting. There was no quorum (9 or more voting members or proxies) with 8 voting members or proxies in attendance and the following 25 participants (or proxies) overall based on attendance reporting documentation.

P = Present at meeting A = Absent from meeting; if proxy has been assigned it will be noted below.				
Organization	First Name	Last Name	WHPA Category	Attendance
Voting Members				
ACCA (Air Conditioning Contractors of America)	Todd	Washam	Contractor Association	A
ACCA (Air Conditioning Contractors of America) <i>(standing proxy)</i>	Don	Prather	Contractor Association	A
Brody Pennell Heating, Air Conditioning and Electrical Contractors	Michael	Carson	Contractor (Residential)	A
CALBO (California Building Officials)	Bob	Barks	Codes & Standards Official (Association or Jurisdiction)	P (Chair)
CalCERTS, Inc.	Charlie	Bachand	Certifying Body	A
CEC (California Energy Commission)	Lea	Haro	Government (Other than CPUC)	P
CHEERS	Bob	Johnson	Certifying Body	A
CHEERS <i>(standing proxy)</i>	Mike	Hodgson	Certifying Body	A
CSE (Center for Sustainable Energy)	Lindsey	Hawes	Energy Efficiency Program Consultant	P
Enalays	Eric	Taylor	Third Party Quality Assurance Providers	P
Energy CA LLC, The	Eric	Berault	Third Party Quality Assurance Providers	P
Goodman Manufacturing	Aniruddh	Roy	HVAC Manufacturer	P
HARDI (Heating, Airconditioning & Refrigeration Distributors International)	Jon	Melchi	Distributor Association	A
HVACRedu.net	Scott	Oakley	Educator, Trainer	A
IHACI (Institute of Heating and Air Conditioning Industries)	Bob	Wiseman	Contractor Association	P
JCEEP (Joint Committee on Energy and Environmental Policy)	David	Dias	Organized Labor	A
SMUD (Sacramento Municipal Utility District)	Ravi	Patel	Public Owned Utility	A
SynergyNexGen	Barbara	Hernesman	Energy Efficiency Program Consultant	P (last 8 min)
Non-Voting Members				
AHRI	Garrett	McGuire	HVAC Manufacturer Association	P
Benningfield Group	Roy	Eads	Energy Efficiency Program Consultant	P
CALBO (California Building Officials)	Mark	Meyers	Codes & Standard Official (Association or Jurisdiction)	P
Charles F. Segerstrom, Energy Efficiency Consultant	Charles	Seegerstrom	Energy Efficiency Program Consultant	P
CSLB (Contractor State Licensing Board)	Cynthia	Moore	Government (Other than CPUC)	P
DNV GL-Energy	Amber	Watkins	Energy Efficiency Program Consultant	P
Duct Testers	Dave	Hegarty	Other Stakeholder	P
EnerGtech Experts	Brent	Locke	Energy Efficiency Program Consultant	P (last 8 min)
Honeywell Smart Energy (HSE)	Steve	Varnum	Energy Efficiency Program Consultant	P
HVAC Excellence	Eugene	Silberstein	Certifying Body	P
HVAC Rater Service	Greg	Davis	Third Party Quality Assurance Providers	P
Indio Cooling & Heating Supply	Tim	Mann	Distributor	P
PHCC (Plumbing-Heating-Cooling Contractors National Association)	Charles	White	Contractor Association	P
SCE (Southern California Edison)	Gary	Shushnar	California IOU	P
SDG&E (San Diego Gas & Electric)	Jeremy	Reefe	California IOU	P
WHPA Staff				
CLEARresult	Paul	Kyllo	Other Stakeholder	P (Work Product)
InfoPlast	Wendy	Worrell	Other Stakeholder	P (Host/Scribe)

** Organization is Not a Member of the WHPA; + Individual is NOT Registered with the WHPA; (P) = Member Organization is Pending Approval from the WHPA Executive Committee.

AGENDA

The following agenda was distributed to the WHPA Compliance Committee roster by WHPA Staff prior to the meeting:



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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) – 5 min
- 2) **Approval of Prior Meeting Minutes** – Chair (Bob Barks, CALBO) – 2 min
 - a. April 13, 2017
- 3) **HVAC Compliance Definition Matrix Discussion and Vote** – Chair (Bob Barks, CALBO) – 15 min
- 4) **EBEE-AP Sub-Strategy 1.5.5 Potential Solutions White Paper Development** – Chair (Bob Barks, CALBO) – 35 min
 - a. Continued [Sub-Strategy 1.5.5 Solutions Worksheet Draft](#) Item Review (Gap 7 not yet discussed)
- 5) **Meeting Next Steps Overview** – Chair (Bob Barks, CALBO) - 3 min
 - a. **Next Meeting:** Thursday, June 8, 2017 from 8:30am – 9:30am PDT
 - b. **Next Meeting Agenda (TBD):**
- 6) **Adjournment** by 9:30am PDT – Chair (Bob Barks, CALBO)

As there was no quorum during the meeting, agenda items 2 and 3 were handled by post meeting email votes.

Approval of Prior Meeting Minutes

WHPA Staff email distributed the draft April 13, 2017 minutes to the roster prior to the meeting.

As there was no quorum, the Chair directed for email approval of the April 13, 2017 summary meeting notes.
(WHPA Staff Note: Unanimous email approval was obtained.)

ACTION: WHPA Staff to post the April 13, 2017 meeting minutes in final version on the WHPA Compliance Committee webpage following completion of the email vote.

HVAC Compliance Definition Matrix Discussion and Vote

As there was no quorum, the Chair directed for email approval of either Matrix Option A or Matrix Option B for escalation to the WHPA Executive Committee.

- **Option A:** Removes the Utilities completely from the Matrix. (This is the preferred approach for the IOUs.)
- **Option B** – Moves the Utilities under “Other Stakeholders” and adds a new row at the bottom of the Matrix that states “Implements Codes and Standards Programs (e.g. Energy Code Ace)” under which the Utilities are listed as a “factor.”

(WHPA Staff Note: The final email vote decision was for Option B to be escalated to the WHPA Executive Committee for approval as a WHPA Work Product.)

EBEE-AP Sub-Strategy 1.5.5 Potential Solutions White Paper Development

The REFERENCE DOCUMENT: [05-10-17 Ref: Compliance EBEE-AP 1-5-5 Solutions Worksheet 04-02-17 Draft](#) was emailed to the roster prior to the meeting.

The Chair reported that EBEE-AP Sub-Strategy 1.5.5 Gap 7: “Lack of value. No demonstration of value to customer. No behavior modification programs” still needed vetting. He opened discussion for how to provide a perception of value in the market.

There was discussion about the role of contractors and homeowners related to permits and perceived value.

- Eric Beriault (The Energy) commented that pulling and closing a permit shows that a permit was done with health and safety in mind. Having a permit ensures that what was paid for was received and done in an efficient manner.
- The Chair confirmed that the best estimates are that somewhere between 10% and 30% of installs are compliant based on the current rules. How can we get incentives to the greatest number of individuals for them to ensure permits are pulled and needed for health and safety, compliance, and efficiency?
- Eric Beriault (The Energy) noted that most of the time, HVAC contractor is the noncompliant party. How do we ensure homeowners are also educated?



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- Dave Hegarty (Duct Testers) questioned if there was proof that there is something close to 30% of compliance. He has never seen more than 10% in his 20+ year.
- The Chair clarified that he put the range based on conversation that has occurred over the past few years in the Compliance Committee.
- Eric Taylor (Enalaysys) agreed that the HVAC professional needs to be informing the customer of the requirement rather than “looking for a quick buck”. He suggested use of an informational form with a checkbox and signature.
- Lea Haro (CEC) reported that the real estate industry has pushed back on anything that would delay the sale of a home. “Having adequate installation does not necessarily relate to the value of the property the way granite countertops do.” The importance of the reasons for compliance needs to be relayed. There is an issue when contractors often offer two quotes, one with the compliance items and one without, so customers typically go with the cheaper, noncompliant option.
- Bob Wiseman (IHACI) clarified that when a contractor goes out, the owner typically has multiple bids. As a result, they ask why there is such a big difference. The cost of the permit and compliance is not incidental. While it may be happening, it is not standard practice for contractors to present two quotes as mentioned above. There is also nothing in the contract that clearly states you must pull a permit. Legal contractors don’t pull permits because of the economic cost difference. It is cheaper for the homeowner not to pull a permit so they put pressure on the contractors. Contractors want to pull permits, but also want to be competitive. Until it is mandatory that contractors lose their licenses for not pulling permits or there is penalty to the homeowner for hiring a contractor not pulling the permit to level the playing field, noncompliance will continue.
- Mark Meyers (CALBO) clarified that pulling a permit is not optional as it is California state law. The problem is that contractors treat permit pulling as though it is optional and homeowners see it as having no value. Until there are enforcement tools, there is no reason to compel people to follow the rules.
- Charles Segerstrom (Consultant) noted that because it is the law, in real estate transactions there is a disclosure requirement to disclose any work done without permit. In real estate litigation, you can lose more than the differential cost of the permit. There is also a cost-benefit analysis to consider. The value of safety, energy, and efficiency is not that great relative to the cost. He suggested that messaging needs to be extended about the value of proper installation for health, safety, comfort and durability, while the cost of compliance and “the hassle factor” of compliance are also reduced. Increase the value proposition and decrease the transaction cost while clarifying that it is against the law to sell a home without proper permits.
- Mark Meyers (CALBO) reported that his wife and sister in law are real estate brokers and that they have done hundreds of transactions with affidavits stating all is done with proper permitting, and yet when they go back and find situations where they were not properly permitted, the agent is not considered responsible, nor is the owner responsible in many cases because the work was done by a prior owner, etcetera. In many transactions, especially those involving the government, the Federal agreement clarifies there is no recourse for any work done on the property through the act of the sale regardless of the condition.
- Charles Segerstrom (Consultant) confirmed that he was referring to situations that end up in court based on his wife’s experience as a real estate attorney.
- Dave Hegarty (Duct Testers) agreed with Bob Wiseman (IHACI) that it is “more or less” on the contractor. He feels there is a thread coming through that more input is needed from CSLB about what might be done to “get us to higher enforcement”.
- Cynthia Moore (CSLB) reported that they do have laws in place and can revoke a license for failure to pull a permit. They do not do it the first time, but they do have dedicated inspectors focused on permit compliance.
- Mark Meyers (CALBO) gave “kudos” to CSLB. He has used their complaint form for noncompliant issues and received results. The issue is that the building departments must be aware there was a violation first. “In 98% of cases, the jurisdiction has no idea there is a violation unless they stumble on it.” They have no tools available to them to find the violations.
- Dave Hegarty (Duct Testers) asked if it is a possibility for the residential side to track for enforcement in the Registry.
- Cynthia Moore (CSLB) replied that “we do not want to go back down the serial number tracking road.”
- The Chair summarized that there is a substantial cost to pulling permits in compliant fashion. Contractors cannot get the needed income to offset the cost of the permit. It costs more to do the job right since there might be duct problems, the need to remove a wall, etc. Customers are always looking for the best value for their money so there is an incentive to cut costs based on what customers see as value to them. How do we address that conflict? There is a real and high expense to doing the job right. There is little incentive and a low perception of gain to the end user in paying that extra money. We need a method of modifying the perception that there is no value to the permit while conveying that there is a real cost to cover it, but in a way that is worthwhile to the customer. We need to focus on behavior modification.



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- CONSIDERATIONS for BEHAVIOR MODIFICATION: Does it require a program done locally as a test and then rolled out statewide to educate customers and somehow address the cost issues? Will it take legal action with a law passed for higher enforcement? Does it involve working with banks for zero interest loans on a properly installed job or some other financial incentive?

There was discussion about the role of technology in creating behavior change.

- Eric Taylor (Enalaysys) believes technology is the answer and that streamlined processes are needed. Through Enalaysys, he is “actively trying to figure it all out” by working to “tie all the pieces together”. The biggest expense he has seen is for coordination of the inspector, etcetera for all the costs associated with the paper process. He suggested a “stair step” approach for a self-policing process that would submit a form to the homeowner clarifying that they must pull a number for a proposal from a database regardless of the contractor. The first player in the process puts information in the database for the CFIR, etc. The proposal number stays with the customer who would make other contractors aware they already have a proposal number. The next contractor permitting would also pull from the system for the same customer. It would allow tracking of all contractors bidding on a job for a customer so the building department could check the system through an app to see which was awarded the job. Instead of giving Utility codes and compliance budget to distributors, Eric suggests giving it to HERS Raters and/or building departments, thus incentivizing the right people. Although he hasn’t been testing that part of it, Eric reported that he has been testing the online permitting concept in a small market and is scheduled to update the WHPA Online Permitting Working Group (on May 22nd) for how the streamlined process has worked in the Imperial Valley area in the past three years. He reported that Imperial Valley has the same issue of no one using the system since compliance is not being enforced. They have to figure out how to get contractors to police themselves and get stimulus money in the right places.
- The Chair asked Aniruddh Roy (Goodman Manufacturing) if there was anything new related to SMART devices coming from manufacturers. For example, “is there anything coming that would allow onboard diagnostics from the machine to indicate when a service technician is needed? Is there a movement in the manufacturing community to incorporate SMART technology for diagnostics to homeowners?”
- Aniruddh Roy (Goodman Manufacturing) confirmed there is work being done, particularly with premium products. Under Title 24 code change language, there was discussion about FDD and FID, or at least providing credits for adding those features. Appendix JA6 also addresses the types of features being presented in HVAC products. There is a SMART Committee under AHRI working on standards for residential HVAC and heat pumps including ductless products to capture some of the features. Under AHRI, they are also looking to address how the communication will occur between Utility signals and the equipment itself for things such as demand response. From a controls level, each manufacturer is determining at what level to approach it. The HVAC industry is not equivalent to SMART Refrigerators in the current market, but they are working toward that level of functionality.
- The Chair noted that technology within Amazon, Google, Microsoft, etcetera using home AI that talks with the homeowner and links lighting, appliances, thermostats, and the like is moving rapidly into the market. He suggested that SMART features put into HVAC equipment would similarly help to change market behavior if they give appropriate communication to the homeowner and otherwise proved valuable.
- Aniruddh Roy (Goodman Manufacturing) was unaware if there is technology that conveys pricing cost to the homeowner for a system not set up correctly, but reported that under the EnergyStar Most Efficient Program, they have higher metrics for energy efficiency specified, as well as systems status and messaging criteria. Manufacturers have to qualify for inclusion in that Program. To a certain degree there are manufacturers that eventually run a diagnostics test while the manufacturer sets up the equipment. Once the test is positive, it gives the contractor positive feedback. There currently are manufacturers listed as energy efficient.

There was discussion about how jurisdictions, state agencies, and utilities may foster behavior change.

- The Chair suggested that there might be an opportunity to tie the equipment and feedback mechanism to the customer into the permitting system for behavior modification, but qualified that the jurisdictions, state agencies, and utilities would need to evaluate if that was a possibility.
- Mark Meyers (CALBO) noted that the cost of the permit is being discussed, but that the issue is more the cost of compliance for proper installation. The cost of compliance versus non-compliance is the issue and not the cost of the permit itself. “The idea of using technology is great, but the solution is also at hand in the CFIR, but there is refusal to use it.” He suggested making the CFIR mandatory so there is awareness of where the equipment is.
- The Chair agreed with Mark Meyers’ (CALBO) comments, but added that we are looking for a way to modify customer behavior in seeing value.
- Eric Taylor (Enalaysys) suggested that financing education is needed to help advise customers on how to afford a system. He suggested using the Public Benefit Tax Fund, the HERO Program, Utility Rebates, etcetera for homeowner education.



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“Give contractors the needed tools to help the customer understand why it is expensive and the value they will get from it, plus the incentives they can take advantage of. Keep the admin dollars down for program implementation.”

- Jeremy Reefer (SDG&E) countered that there are a lot of statewide initiatives through IOU programs mandated through legislation and that many of the EM&V and WE&T reports have proven that education is at the forefront. There are many channels heading in the right direction. It is best to understand the “big picture”.
- Eric Taylor (Enalaysys) clarified that he was referring to the codes and compliance programs that were shown as not functioning well as the ones that might have funds put elsewhere. What is the IOU position on codes and standards and what are they rolling out? In his opinion, those questions get “brushed under the carpet”.
- Dave Hegarty (Duct Testers) noted that since Utilities “got on the side of the bandwagon” of suggesting strongly that programs don’t work without permits, things have been much better on the permit side. He asked where SCE is going with their codes and compliance programs as he has had a difficult time getting the requested information.
- Bob Wiseman (IHACI) agreed that Dave Hegarty’s question is a valid one, but noted that it would take a while to answer. He commented that there are no simple answers. He clarified that improved energy efficiency is a harder sell when sitting at the table with the customer. He suggested the possibility of tying compliance to homeowner insurance, following the example of many states that have laws clarifying that improperly permitted jobs will be penalized by lack of homeowner insurance coverage.

Meeting Next Steps

The Chair confirmed that per the recurring schedule (the second Thursday of each month), the next Compliance Committee meeting is planned for June 8, 2017 from 8:30am – 9:30am PDT. The agenda will be distributed prior to the meeting but is expected to include discussion of the draft EBEE-AP Sub-Strategy 1.5.5 Identified Gaps Potential Solutions White Paper.

(WHPA Staff Note: The June 8th meeting was pushed back to June 22nd to allow more time for White Paper Draft development.)

Closing Comments/Adjournment

The Chair asked for a motion to adjourn the meeting. Eric Taylor (Enalaysys) so motioned with a second from the Chair. The Chair adjourned the meeting at 9:32 a.m. PDT based on unanimous approval with no discussion.

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Summary of Action Items and Key Decisions (from above)

ACTION ITEMS

1. **ACTION:** WHPA Staff to post the April 13, 2017 meeting minutes in final version on the WHPA Compliance Committee webpage following completion of the email vote. (DONE)

FROM PRIOR MEETINGS

1. **ACTION:** The Compliance Committee Chair and WHPA Staff to further discuss when/if representatives from the: (1) WHPA Residential Quality Installation Committee should provide clarification on possibly aligning discussion focused on energy savings impacts, and (2) if CPUC could provide updates on their research on the effects of compliant and noncompliant installations. (IN PROCESS)