

Call to Order

WHPA Compliance Committee Chair Bob Barks (CALBO) called the meeting to order at 8:33 a.m. PST. 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 a quorum (9 or more voting members or proxies) with 11 voting members or proxies in attendance and 27 participants (or proxies) overall based on attendance reporting documentation.

Organization	First Name	Last Name	WHPA Category	Attendance
Voting Members				
ACCA (Air Conditioning Contractors of America)	Todd	Washam	Contractor Association	P
ACCA (Air Conditioning Contractors of America) (standing proxy)	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 (emailed vote)
CEC (California Energy Commission)	Lea	Haro	Government (Other than CPUC)	P
CHEERS (ConSol)	Mike	Hodgson	Certifying Body	A (Proxy to Bob Johnson)
CHEERS (standing proxy)	Bob	Johnson	Certifying Body	P (Proxy)
CSE (Center for Sustainable Energy)	Lindsey	Hawes	Energy Efficiency Program Consultant	A (emailed vote)
Enalasys	Eric	Taylor	Third Party Quality Assurance Providers	P
Energuy CA LLC, The	Eric	Beriault	Third Party Quality Assurance Providers	A (emailed vote)
Goodman Manufacturing	Aniruddh	Roy	HVAC Manufacturer	Р
HARDI (Heating, Airconditioning & Refrigeration Distributors International)	Jon	Melchi	Distributor Association	P
HVACRedu.net	Scott	Oakley	Educator, Trainer	P
IHACI (Institute of Heating and Air Conditioning Industries)	Bob	Wiseman	Contractor Association	P (thru vote)
JCEEP (Joint Committee on Energy and Environmental Policy)	David	Dias	Organized Labor	P
SMUD (Sacramento Municipal Utility District)	Ravi	Patel	Public Owned Utility	A
SynergyNexGen	Barbara	Hernesman	Energy Efficiency Program Consultant	Р
Non-Voting Members			<u> </u>	1
Air Conditioning Guys	Louis	Fuentes	Contractor (Residential)	P
BPI (Building Performance Institute, Inc.)	Jeremy	O'Brien	Certifying Body	P
CALBO (California Building Officials)	Mark	Meyers	Codes & Standard Official (Association or Jurisdiction)	P
Charles F. Segerstrom, Energy Efficiency Consultant	Charles	Segerstrom	Energy Efficiency Program Consultant	P
CHF-CIRB (California Homebuilding Foundation, Construction Industry Research Board)	Allison	Paul	Research Organization	P (19 min)
Duct Testers	Dave	Hegarty	Other Stakeholder	P
Honeywell Smart Grid Systems	Steve	Varnum	Energy Efficiency Program Consultant	P
HVAC Excellence	Eugene	Silberstein	Certifying Body	P
Indio Cooling & Heating Supply	Tim	Mann	Distributor	P
PG&E (Pacific Gas and Electric Company)	Swapna	Nigalye	California IOU	P
SoCalGas (Southern California Gas Company)	Hackett	Barney	California IOU	P
SoCalGas (Southern California Gas Company)	Harvey	Bringas	California IOU	P
Guests				
BMA Mechanical ^(P)	Dustin	Lane ^(P)	Other Stakeholder	P
CSLB (Contractor State Licensing Board)	Cynthia	Moore	Government (Other than CPUC)	P
WHPA Staff				
CLEAResult	Paul	Kyllo	Other Stakeholder	P (Work Product)
InfoPlast ** Organization is Not a Mambay of the WHPA India	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:

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. February 9, 2017
- 3) ASHRAE's Technology Portal Chair (Bob Barks, CALBO) 3 min
- 4) **HVAC Compliance Definition Matrix Vote** Chair (Bob Barks, CALBO) 10 min
 - a. Clarification of Updates
 - b. Vote
- 5) 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 (Gaps 6, 7 not yet discussed)
- 6) Meeting Next Steps Overview Chair (Bob Barks, CALBO) 5 min
 - a. Next Meeting: Thursday, April 13, 2017 from 8:30am 9:30am PDT
 - b. Next Meeting Agenda (TBD):
- 7) Adjournment by 9:30am PDT Chair (Bob Barks, CALBO)

Approval of Prior Meeting Minutes

WHPA Staff email distributed the draft February 9, 2017 minutes to the roster prior to the meeting.

The Chair asked for a motion to approve the February 9, 2017 summary meeting notes. Eric Taylor (Enalasys) so moved with a second from Jon Melchi (HARDI). There was unanimous approval based on voiced votes with no discussion.

ACTION: WHPA Staff to post the February 9, 2017 meeting minutes in final version on the WHPA Compliance Committee webpage.

ASHRAE's Technology Portal

The Chair reported that ASHRAE has a new technology portal and encouraged all to visit it at: https://technologyportal.ashrae.org/.

The Chair clarified that ASHRAE is the "gold standard" for technical and research information for HVAC. ASHRAE has decided to share the information to make it more accessible in this portal.

HVAC Compliance Definition Matrix Vote

The revised version of the HVAC Compliance Definition Matrix for Final Review dated March 8, 2017 was emailed to the roster prior to the meeting for review.

The Chair reminded that following the prior EC vote, request was made for clarification on ownership level definition so the Compliance Committee was asked to take one last look at their relevant market actor columns.

UPDATES

WHPA Staff reported the following edits (purple highlights) to the matrix since the last meeting on the residential tab, the nonresidential tabs, and the market actor glossary tabs:

- 1. Made the changes requested by CALBO, IOUs and CalCERTS. (CALBO and IOU changes reflected in last version.)
- 2. Deleted the following names from the Third Party Quality Assurance Provider row of the Market Actor Glossary tab:
 - a. USERA removal requested by CalCERTS since they were delisted by the CEC and they are not registered with the WHPA
 - b. Proctor Engineering they are registered with the WHPA as an "Other Stakeholder" so I removed them to be consistent with USERA
 - c. Energy Analysis Technologies they are registered with the WHPA and an "Educator/Trainer" so I removed them to be consistent with USERA
- 3. Highlighted all changes in purple so they stand out. We can change the colors back after we get approval. The key thing to look at for each cell is the actual description listed "Owner," "Shared," or "Factor." In some cases, an ownership classification was dropped so the cell is blank.

Those not registered with WHPA were removed from the Third Party Quality Assurance Provider category.

DISCUSSION

The Chair clarified that the current matrix is "only a snapshot". As such, he suggested that it remain a living document with periodic updates.



In reply to Eric Taylor's (Enalasys) inquiry, Paul Kyllo (WHPA Staff) clarified that USERA was dropped from the Third-Party Quality Assurance box as they are not active with CEC nor registered with WHPA. The category is based on the WHPA nomenclature and not specific nomenclature within CEC, etcetera.

The Chair clarified that it is based on membership of WHPA to be a broader representation. It is also a much broader view of what energy compliance is, including lien releases. It has no bearing on CEC or code.

Dave Hegarty (Duct Testers) asked if we are being too broad.

Louis Fuentes (Air Conditioning Guys) clarified that liens are a real-world issue that contractors regularly deal with for getting paid. It may not be a direct compliance issue, but contractors need to get paid to improve compliance.

Dave Hegarty (Duct Testers) appreciates the issue, but asked how this can be included in compliance.

Eric Taylor (Enalasys) reminded that each category was started with a look at all the market actors and request to encompass all concerns and parts of the process. The matrix built was the result.

Wendy Worrell (WHPA Staff) reminded that row 26 shows a Component of HVAC Installation Process for "contractor paid and liens released" as an important part of the process that should not be lost, but not as a mandatory "compliance item".

The Chair reminded that the primary focus is to get an overall picture of all the factors that influence compliance beyond just code so that each actor can develop understanding of each other's problems to solve the overall compliance problem.

VOTE

The Chair asked for a motion to approve the matrix and escalate it to the WHPA Executive Committee for adoption as a WHPA Work Product. Eric Taylor (Enalasys) motioned with a second from Barbara Hernesman (SynergyNexGen). The motion carried with aye votes cast by members present and via email in advance of the meeting. JCEEP (Dave Dias) and CEC (Lea Haro) abstained from voting.

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

REFERENCE DOCUMENT: 03-09-17 Ref: Compliance EBEE-AP 1-5-5 Solutions Worksheet 03-07-17 Draft

GAP 6 DISCUSSION

Reference Content: "Not understanding contractor motivation. Contractors listen to customers only and CSLB. Looking to put food on the table so will do exactly what their customer tells him to do. No demand on the part of the consumer. No neighborhood spot checks"

The Chair facilitated discussion of potential solutions to the reference document's Gap 6 content.

- The Chair commented that we need to get this down to the consumer level. He asked for ideas or comments to add to a list of possible solutions to the referenced issues.
- Todd Washam (ACCA) asked if there was consideration for fining property owners/homeowners who use noncompliant installers.
- Mark Meyers (CALBO) suggested that all you could do is create a situation for where a fine is possible because those who would need to enforce would not be able to collect if they do not know where the violation is occurring. Equipment tracking is needed to enable that level of compliance.
- Louis Fuentes (Air Conditioning Guys) replied that it is difficult. You could red tag something and have them go to city hall to remove the red tag. The issue is that supply houses without licenses are selling to consumers without licenses.
- Mark Meyers (CALBO) countered that focus should be on the 98% of equipment being installed by licensed contractors rather than the 2% of issues where they are not.
- Louis Fuentes (Air Conditioning Guys) clarified that based on their own surveying, 35% are attributed to unlicensed contractors.
- Dave Hegarty (Duct Testers) supported Mark Meyers' comments that focus should be on enforcing compliance in licensed contractors. He indicated that 48% of work is lost to big box stores who are also not complying with permits.
 SUGGESTION: Since Big Box stores put the permit responsibility on the contractors or installers they use, but they do not enforce it, Big Box stores should be forced to comply so contractors will have the correct competition.



- Tim Mann (Indio Cooling & Heating Supply) indicated the need to also get Amazon.com to comply, but Dave Hegarty (Duct Testers) felt that was a lower percentage of the population.
- Mark Meyers (CALBO) asked "why we can't talk about the larger percentage areas for compliance and then work on the fringe areas later."
- Eric Taylor (Enalasys) commented that the Commission came out with a card explaining responsibility for the contractor
 and the homeowner in both English and Spanish. SUGGESTION: When a contractor bids on a job, have the owner sign a
 disclosure document that clarifies compliance elements for permits. It might be a registered document at the time of quote
 so it could be tracked.
- Louis Fuentes (Air Conditioning Guy) supported the suggestion. He also suggested tying in Utility rebates to a compliance form that says they have complied with the law.
- The Chair, Mark Meyers (CALBO), and Dave Hegarty (Duct Testers) clarified that is already part of SB 1414. It was noted that the concept of tying a Utility rebate had already been tried in Northern California via PG&E and had not worked despite being heavily advertised as it was not cost effective.
- Swapna Nigalye (PG&E) clarified that PG&E has run a Pilot for the past 2 ½ years in the Fresno area in which a customer receives a \$200 rebate upon completion of permit submission for any HVAC change out. The customer has the option to sign the rebate over to the contractor. Outreach has been done to contractors to notify them that they can incorporate the discount when they are conducting initial customer discussions and have the owner sign the rebate to the contractor during initial disclosures. They are getting some Program response, but much less than expected.
- Dave Hegarty (Duct Testers) commented on the need to put bold letters that the "Contractor must get a permit" on the contract.
- The Chair agreed that the idea of having the owner sign an acknowledgement that they must have a permit and that the information will somehow be registered is a key concept. He asked key related questions for discussion:
 - O How do we get that down to the consumer level to inform them of the requirement?
 - What other than cash might get owners to want to commit to compliance?
 - o What negative impacts might there be to an owner to encourage more attention?
- Barbara Hernesman (SynergyNexGen) **SUGGESTION**: Since health and safety is important, tell stories about what happens when health and safety is not in compliance as part of a marketing campaign.
- Dave Hegarty (Duct Testers) commented that every registered compliance job has to go through a Registry, which "has all the data we need". If asked, they will confirm that rebates have only accounted for a "slight maybe" increase. Many cities will also report that many permits once registered "go uncompleted".
- Todd Washam (ACCA) **SUGGESTION**: Include a note in an advertising campaign to the homeowner on health and safety that they also may face a fine if a permit is not pulled and work is not done to code.
- Dave Hegarty (Duct Testers) clarified that there is already a potential fine incurred when an owner sells their home and it is discovered that a permit was not pulled. "It has to be completed at the current level of energy before they can sell it."
- Barbara Hernesman (SynergyNexGen) noted that another factor is that insurance repercussions will incur if home improvements are done improperly and cause a health and safety issue.
- The Chair reported that when properties are sold there is a declaration required by realtors about an unpermitted work. Quite often it does include uninformed or incorrect information property is purchased with unpermitted work since the buyer wants the property. Some jurisdictions do an inspection of what was done since the last sale and the last permits to find unpermitted work. Insurance companies are probably losing money on some policies because they are ensuring unpermitted work. It is blamed on the furnace but the insurance company still pays without much check to see if the equipment was correctly installed.
- Charles Segerstrom (Consultant) commented that his wife is a real estate litigator. If something goes wrong, the buyer sues the seller and the permitting issue does come into play there.
- Louis Fuentes (Air Conditioning Guys) asked if anyone has quantified utility company cost for one house that has an A/C system installed to code and one that is not. Upon clarification by Mark Meyers (CALBO) that it depends on a wide range of variables including size, age, and condition so it is difficult to determine the exact numbers. He added that there are also homes built in the late 1970's before energy code requirements and with very poorly designed systems, Louis **SUGGESTED** taking the average age of the home in California, quantifying that 10 years back, and then having a number to provide to the Utilities for understanding. Rather than provide a rebate to the consumer who does not understand as much about compliance and what contractors have to go through, provide a rebate to the contractors that do comply to enable those contractors to be more competitive in the marketplace.
- Paul Kyllo (WHPA Staff) commented that WHPA Residential Quality Installation Committee is actively discussing the
 topic of energy savings impacts. He suggested having someone from the RQI Committee report out to the Compliance
 Committee to determine overlap.



• The Chair clarified that CPUC did some research on the effects of compliant and noncompliant installations. He suggested that topic might be revisited as a future action item.

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) CPUC could provide updates on their research on the effects of compliant and noncompliant installations.

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 April 13, 2017 from 8:30am – 9:30am PDT. The agenda will be distributed prior to the meeting but is expected to include an update on the HVAC Compliance Definition Matrix status and continued discussion of potential solutions for the EBEE-AP Sub-Strategy 1.5.5 identified gaps potential solutions white paper.

Closing Comments/Adjournment

Eric Taylor (Enalasys) motioned to adjourn with a second from Aniruddh Roy (Goodman Manufacturing). The Chair adjourned the meeting at 9:33a.m. PST based in unanimous approval.

* * * * * *

Summary of Action Items and Key Decisions (from above)

ACTION ITEMS

- 1. **ACTION**: WHPA Staff to post the <u>February 9, 2017 meeting minutes in final version</u> on the WHPA Compliance Committee webpage. (DONE)
- 2. **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) CPUC could provide updates on their research on the effects of compliant and noncompliant installations.

DECISIONS

1. The HVAC Compliance Definition Matrix was approved for escalation to the WHPA Executive Committee for adoption as a WHPA Work Product. JCEEP (Dave Dias) and CEC (Lea Haro) abstained from voting.