



## WHPA Compliance Committee Teleconference Summary Notes

Thursday, June 22, 2017

Scheduled for 8:30am – 9:30am PDT

### Call to Order

WHPA Compliance Committee Chair Bob Barks (CALBO) called the meeting to order at 8:33 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 a quorum (9 or more voting members or proxies) with 10 voting members or proxies in attendance and the following 27 participants (or proxies) overall based on attendance reporting documentation.

Organization	First Name	Last Name	WHPA Category	Attendance
<b>Voting Members</b>				
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)	P
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 (first 47 min)
Enalays	Eric	Taylor	Third Party Quality Assurance Providers	P
Energy CA LLC, The	Eric	Beriault	Third Party Quality Assurance Providers	A
Goodman Manufacturing	Aniruddh	Roy	HVAC Manufacturer	P
HARDI (Heating, Airconditioning & Refrigeration Distributors International)	Jon	Melchi	Distributor Association	A (proxy by Aniruddh Roy)
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	P
SynergyNexGen	Barbara	Hernesman	Energy Efficiency Program Consultant	P (last 33 min)
<b>Non-Voting Members</b>				
AHRI	Garrett	McGuire	HVAC Manufacturer Association	P (first 33 min)
Benningfield Group	Roy+	Eads	Energy Efficiency Program Consultant	P (first 32 min)
BMA Mechanical+	Dustin	Lane	Other Stakeholder	P
CEC (California Energy Commission)	Judy	Roberson	Government (Other than CPUC)	P
CHF-CIRB (California Homebuilding Foundation, Construction Industry Research Board)	Allison	Paul	Research Organization	P
EnerGtech Experts	Brent	Locke	Energy Efficiency Program Consultant	P
Honeywell Smart Energy (HSE)	Steve	Varnum	Energy Efficiency Program Consultant	P
Indio Cooling & Heating Supply	Tim	Mann	Distributor	P
JCI (Johnson Controls Inc.)	Bryan	Rocky	HVAC Manufacturer	P
PHCC (Plumbing-Heating-Cooling Contractors National Association)	Charles	White	Contractor Association	P
SCE (Southern California Edison)	Gary	Shushnar	California IOU	P
SoCalGas (Southern California Gas Company)	Hackett	Barney	California IOU	P
SoCalGas (Southern California Gas Company)	Harvey	Bringas	California IOU	P
<b>Guests</b>				
CSLB (Contractor State Licensing Board)	Marvena+	Harris	Government (Other than CPUC)	P
Locke Air Conditioning**	Mary+	Locke	Contractor (Residential)	P
<b>WHPA Staff</b>				
CLEAResult	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.



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Jon Melchi (HARDI) notified WHPA Staff in writing that Aniruddh Roy (Goodman Manufacturing) was assigned HARDI's proxy for this meeting.

### AGENDA

The following agenda was distributed to the WHPA Compliance Committee roster by WHPA Staff 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) – 5 min
- 2) **Approval of Prior Meeting Minutes** – Chair (Bob Barks, CALBO) – 2 min
  - a. May 11, 2017
- 3) **HVAC Compliance Definition Matrix Status Update** – Chair (Bob Barks, CALBO) – 5 min
  - a. Compliance Committee Vote Result
  - b. Executive Committee Vote Result
- 4) **“Understanding the Residential HVAC Compliance Shortfall” DRAFT White Paper Vetting** – Chair (Bob Barks, CALBO) – 45 min
- 5) **Meeting Next Steps Overview** – Chair (Bob Barks, CALBO) - 3 min
  - a. Next Meeting: Thursday, July 13, 2017 from 8:30am – 9:30am PDT
  - b. Next Meeting Agenda (TBD):
- 6) **Adjournment** by 9:30am PDT – Chair (Bob Barks, CALBO)

### Approval of Prior Meeting Minutes

WHPA Staff email distributed the draft May 11, 2017 minutes to the roster prior to the meeting.

The Chair asked for a motion to approve the May 11, 2017 summary meeting notes. Eric Taylor (Enalaysys) so moved with a second from the Chair. The motion carried by unanimous approval with no discussion.

**ACTION:** WHPA Staff to post the May 11, 2017 meeting minutes in final version on the WHPA Compliance Committee webpage.

### HVAC Compliance Definition Matrix Status Update

The Chair reported the following vote results related to the HVAC Compliance Definition Matrix:

- Except for abstentions from CEC, Goodman Manufacturing and SMUD, the WHPA Compliance Committee unanimously approved HVAC Compliance Definition Matrix Option B for escalation to the WHPA Executive Committee with request to approve as a WHPA Work Product. (As a reminder, Option B moved the Utilities under “Other Stakeholders” and added a new row at the bottom of the Matrix stating, “Implements Codes and Standards Programs (e.g. Energy Code Ace)” for which the Utilities are listed as a “factor.”)
- Except for abstentions from CEC and CPUC, and with IOU endorsement and thanks for the WHPA Compliance Committee efforts and great work, the WHPA Executive Committee unanimously approved the HVAC Compliance Definition Matrix with modification to remove the red texted language related to Third Party Quality Control Provider (TPQCP) content.

### “Understanding the Residential HVAC Compliance Shortfall” DRAFT White Paper Vetting

The REFERENCE DOCUMENT: *Understanding the Residential HVAC Compliance Shortfall “White Paper Draft 6-19-17”* was emailed to the roster prior to the meeting.

The Chair reported that the partial draft was sent to the roster for review a couple of weeks ago with request for comments and that the full draft was distributed a day ago. Additional comments have been received by email since distribution. The Chair opened the meeting for discussion.



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Based on an email suggestion received from Aniruddh Roy with Goodman Manufacturing, the Chair facilitated discussion about the idea of incentivizing customers by increasing home appraisal values for energy efficient upgrades.

- The Chair believes there is language in AB 820 that primarily relates to commercial and multi-family noting that a structure could be graded or scaled against what would be considered an efficient building and also against average or similar buildings. There was also discussion within the HVAC arena in the past about the HERS II Program developed by CEC a few years ago that would put an efficiency score on properties and compare them to a standard for energy efficiency and to average residences in the area, but noted that the HERS II Program is not discussed much lately. The Chair noted that the emailed suggestion of incentivizing through the home resale appraisal process would address some of the questions about how to let consumers know there is a difference between equipment purchased and installed and the effect on residents and their budgets. The Chair asked for Compliant Committee input on the idea of having a mechanism that would notify consumers that the equipment installed in their homes would have on the value of the home, the efficiency of the home, and ultimately on their budgets.
- Aniruddh Roy (Goodman Manufacturing) noted that he made the comment since the concept is being discussed at the Consortium for Energy Efficiency amongst other groups. If someone wants to use homeowner insurance, s/he is required to provide proof of maintenance to that point, yet there does not seem to be something similar in the appraisal process pertaining to home energy use. Suggestion was made for it to use a Home Energy Score or something similar to incentivize the homeowner for “taking the appropriate steps for what is required in California to increase energy savings percentages”.
- Lindsey Hawes (CSE) commented on real estate valuation and incorporating awareness of energy efficiency code and compliance. Her understanding is that there is currently no official, adopted process for appraisers to take note of efficient systems when appraising homes. There is a Green Addendum that the National Appraisal Institute has issued. A handful of appraisers are aware of the addendum, but it is not used as regular practice. Realtors are being broadly trained on “green” issues so they can become components of efficiency and renewable energy for their clients. Realtors can be certified in that area as well. She **suggested** that home inspectors are great candidates for making those involved in the sale aware of the energy efficiency of systems since they are already in the home and generating a report of the condition of the home that all the home resale players are seeing. There are a handful of home inspectors that are now certified by the EPA Home Energy Score. The Home Energy Score is on a scale of 1 to 10 which is simpler than the HERS II’s 0 to 250 scale. There are initiatives where Home Energy Score partners are promoting the idea of getting inspectors qualified to be Home Energy Score assessors. CSE is part of that effort. It does not require additional tools. Information is input into an assessor tool and provides the score. It includes efficiency of systems, but it does not address the compliance score specifically.
- Lea Haro (CEC) confirmed that there were HERS II pre-rulemaking workshops about 1 ½ years ago discussing how to revise and revamp the HERS II Program since there were some issues with it. As part of the rulemaking process, the CEC will clarify the distinction between energy assessments and residential asset ratings. CEC Staff is currently working to revise and relaunching that effort. Part of that discussion includes how to gain traction with the real estate industry to ensure support in the marketplace.
- The Chair noted that he sees opportunity for cooperation amongst the HVAC industry, the CEC, and the real estate industry to try to produce something that would benefit consumers by providing information on how equipment will impact their personal budgets, their comfort, and their life and safety. That might not be a compliance feature, but there is a path toward helping to improve compliance with increased consumer understanding.
- Dustin Lane (BMA Mechanical) commented that since the Energy Design Rating will be the metric being used for Net Zero, alignment with that for base appraisal of a property might be better received and recognized nationally. It is based on the 2006 International Energy Conservation Code and could provide the consumer with a real evaluation of how their existing home compares to modern homes being built. It could be done by a set of HERS II raters that assess existing building conditions. That information could then go to someone to generate an energy model and show the Energy Design Rating that could then go along with Title 24 compliance. This could solve all three issues in a fairly simple process.
- Theoretically, this is possible.

**ACTION:** WHPA Staff to update the “Understanding the Residential HVAC Compliance Shortfall” White Paper Draft to reflect relevant meeting conversation about incentivizing homeowners through the real estate appraisal and inspection process.

The Chair facilitated discussion of specific sections of the White Paper Draft.

### GAP #1: INSUFFICIENT DATA

- The Chair asked if there was agreement that additional data would be needed to address the insufficient data gap.



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- Lea Haro (CEC) agreed additional data is needed if the focus is on determining the real level of compliance noting that historically, it has been difficult to acquire that data.
- The Chair asked if one reason for the lack of sufficient data is the expense of getting the data and if the data coming back is inconclusive. He asked if there is something that could be suggested to improve the quality of the data gathered that has not been previously discussed.
- Dustin Lane (BMA Mechanical) suggested aligning it with CEC's goal for existing buildings being net zero. There should be some language stating that we need to understand how buildings are behaving in the real world. Information gathering that would move toward what it takes to get the buildings toward Net Zero is needed. He asked if it was accurate that the statistic was for at least 40% of all existing residential buildings to be net zero by 2020.
- Lea Haro (CEC) was unsure about the reference of existing buildings being net zero by 2020. The CPUC's 2008 Strategic plan called for the reduction of energy consumption by 40% by 2020, and for all newly constructed residential buildings to be net zero by 2020 and all newly constructed commercial buildings to be net zero by 2030. Lea informed that CEC has several mandates via legislation, including SB 350, which mandates the doubling of energy efficiency in existing buildings by 2030. Perhaps the suggestion is that buildings do assessments to determine what they need to do to be more energy efficient.
- Dustin Lane (BMA Mechanical) suggested that using something similar to ASHRAE's BEQ (Building Energy Quotient) to establish a baseline for a building and then setting a goal to map a plan to meet a certain energy efficiency point would enable a potential owner to know how efficient the building they are buying is. He believes the industry is going to net zero, which will be a factor in new home sales versus resales.
- The Chair asked if there is a possibility that the home inspection or scoring programs could be used to enhance available permitting data information. He clarified that this identified gap focuses on insufficient information and lack of understanding of the actual permitting level. How can we tap into those systems to improve understanding of the actual permitting level? Is there another source that would provide the needed information?
- Eric Taylor (Enalays) indicated that there was a study done on this subject years ago by Steve Mohasci, which covered how many units are being delivered in California, and how many units at least had HERS done on it. He remembers it as being less than 10%. He is trying to find the actual document.
- Lea Haro (CEC) confirmed that the referenced study was the one that supported the low-end compliance rate.

**ACTION:** WHPA Staff to update the "Understanding the Residential HVAC Compliance Shortfall" White Paper Draft to reflect relevant meeting conversation about addressing the insufficient data gap, including citing Steve Mohasci's report, "Enforcement of T-24 Compliance Pertaining to Residential Alterations" dated 8/22/06 as appropriate for quoted rate references.

### GAP #2: INSUFFICIENT TOOLS

- The Chair confirmed the WHPA Compliance Committee has previously discussed the lack of tools and the possibility of using disclosure tools during the residential property sale process. He asked for input on anything missed or that needs to be stated more effectively. The concept of consumer involvement and bringing permitting to their attention and to someone who can verify permits is also valid for addressing this gap. The Chair noted that when grading a residence, it might be time when permitting on equipment should be verified. If someone has a new HVAC unit in the house, does the home inspector verify that it was permitted, and is that information included in the report?
- Dustin Lane (BMA) commented that it is difficult to simplify energy code and the forms. He suggested that rather than taking it all on themselves, contractors use an energy consultant who knows the code and can help save time in the back and forth on plans, etcetera. "It could be common ground to tie it all together."
- The Chair agreed that increased coordination and cooperation of all parties involved in a changeout is needed. Are there specific tools that should be used? Does the paper properly address the use of tools? Regarding process simplification, the Chair reported that there are currently communications between jurisdictions and others. CEC is actively working to simplify the forms and reduce the number of pages. Speaking for CALBO, he reported that they are going to the CEC and encouraging them to work with CALBO to reduce the number of forms to a minimum level that is recognized by the jurisdictions around the State. Jurisdictions want to get back to inspecting construction rather than being a "forms" monitor for forms they do not have time to read." Jurisdictions believe plans are important, but that not all the forms currently being collected are needed. There is an ongoing effort to try to address the documentation issue, including what the right documents are that are needed for collection.
- Eric Taylor (Enalays) suggested that for streamlined, online permitting, perhaps a centralized systems tool for jobs registered at the state for HERS, etcetera could be an interface where realtors and others could gain public access by entering the homeowner address to see the permit history. It may be a market driver for that market.



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- The Chair confirmed that the Online Permitting Working Group is focusing on the idea of a streamlined, online permitting process.
- Lea Haro asked if the tools are meant to target the 10% who are compliant and make it easier for them, or to target the 90% who are not compliant to get them to be compliant.
- The Chair confirmed that focus should be on the 90% who are not compliant to get them into the process.
- Eric Taylor (Enalaysys) reminded of prior discussion about making an online proposal system and a required form that would be another process to educate the consumer about the law and the role of the homeowner and contractor.
- The Chair clarified that part of that prior discussion was that legislation would be required to enact that form. He thought it was also addressed in the current White Paper draft.
- Bob Wiseman (IHACI) supported the idea of notifying homeowners that permits are required and the legal requirements noting that, in practicality, it is not feasible for contractors to submit every bid into a system as suggested.

**ACTION:** WHPA Staff to update the “Understanding the Residential HVAC Compliance Shortfall” White Paper Draft to reflect relevant meeting conversation about addressing the insufficient tools’ gap.

The Chair confirmed that the Draft White Paper needs further vetting and finalization.

**ACTION:** Compliance Committee to review and provide input on the revised Draft White Paper reflective of this meeting’s conversation as preparation for the next meeting.

### 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 July 13, 2017 from 8:30am – 9:30am PDT. The agenda will be distributed prior to the meeting, but is expected to include continued vetting of the draft “Understanding the Residential HVAC Compliance Shortfall” White Paper.

### Closing Comments/Adjournment

The Chair asked for a motion to adjourn the meeting. Eric Taylor (Enalaysys) so motioned with a second from Aniruddh Roy (Goodman Manufacturing). The Chair adjourned the meeting at 9:33 a.m. PDT based on unanimous approval with no discussion.

\* \* \* \* \*

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

#### ACTION ITEMS

1. **ACTION:** WHPA Staff to post the May 11, 2017 meeting minutes in final version on the WHPA Compliance Committee webpage. (DONE)
2. **ACTION:** WHPA Staff to update the “Understanding the Residential HVAC Compliance Shortfall” White Paper Draft to reflect relevant meeting conversation about incentivizing homeowners through the real estate appraisal and inspection process. (DONE)
3. **ACTION:** WHPA Staff to update the “Understanding the Residential HVAC Compliance Shortfall” White Paper Draft to reflect relevant meeting conversation about addressing the insufficient data gap, including citing Steve Mohasci’s report, “Enforcement of T-24 Compliance Pertaining to Residential Alterations” dated 8/22/06 as appropriate for quoted rate references. (DONE)
4. **ACTION:** WHPA Staff to update the “Understanding the Residential HVAC Compliance Shortfall” White Paper Draft to reflect relevant meeting conversation about addressing the insufficient tools’ gap. (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)