Call to Order

The meeting was called to order at 10:08 am PDT by Dale Rossi, Chair of this working group and a representative of Field Diagnostic Services Inc. (FDSI).

Roll Call

The Chair considered one member of each organization to be a voting member for this working group. 9 of 16 voting members in attendance would constitute a quorum. 7 voting members, 1 non-voting members, 1 guests and 1 staff were present for a total of 10 attendees.

P = Present at meeting
A = Absent from meeting; if proxy has been assigned it will be noted below.
Although Voting Members have been designated by Staff, this group acts primarily by consensus.

CQM User Guide Working Group Voting Members				
ACCA (Air Conditioning Contractors of America)	Donald	Prather	Contractor Association	
Air Management Industries	April	Yungen	Contractor (Nonresidential)	
Aire Rite AC & Refrigeration	Don	Langston	Contractor (Nonresidential)	
AMS (American Mechanical Services)	Marc	Pickett	Contractor (Nonresidential)	P
Charles Segerstrom, Energy Efficiency Consulting	Charles	Segerstrom	Energy Efficiency Program Consultant	
CLEAResult (formerly PECI)	Todd	Van Osdol	California IOU	P
FDSI (Field Diagnostic Services Inc.)	Dale	Rossi	Third Party Quality Assurance Providers	P
GWP (Goodheart-Willcox Publisher)	Sandy	Clark	Educator, Trainer	P
Honeywell ECC, Commercial Buildings, Trade	Michael	Lawing	Controls (Manufacturer or Distributor)	P
HSGS (Honeywell Smart Grid Solutions)	Shayne	Holderby	Energy Efficiency Program Consultant	
National Comfort Institute	Jeff	Sturgeon	Educator, Trainer	P
Richard Danks Consulting - FacilityPro	Richard	Danks	Other Stakeholder	
SCE (Southern California Edison)	Scott	Higa	California IOU	
Tre' Laine Associates	Pepper	Hunziker	Energy Efficiency Program Consultant	P
Western Allied Corporation	Mike	Gallagher	Contractor (Nonresidential)	
Warren Lupson and Associates	Warren	Lupson	Other Stakeholder	
CQM User Guide Working Group Non-Voting Members				
BELIMO	Darryl	DeAngelis	Controls (Manufacturer or Distributor)	
BMI (BuildingMetrics, Inc.)	Pete	Jacobs	Energy Efficiency Program Consultant	
CLEAResult (formerly PECI)	Michael	Blazey	Energy Efficiency Program Consultant	
CLEAResult	Mike	Withers	Energy Efficiency Program Consultant	
HSGS (Honeywell Smart Grid Solutions)	Steve	Varnum	Energy Efficiency Program Consultant	
SCE (Southern California Edison)	Steve	Clinton	California IOU	P
UC Davis EEC (Energy Efficiency Center)	Kristin	Heinemeier	Research Organization	
CQM User Guide Working Group Guests (Non-Voting)				
Adrienne Thomle, Consulting**	Adrienne	Thomle+		P
Fresno Unified School District	Frank	DiLiddo		
Little Caesar's **	Wendy	Gallo+		
WHPA Staff (Non-Voting)				
BBI (Better Buildings Inc.)	Mark	Lowry	WHPA Executive Advisor/BBI COO	
BNB Consulting/WHPA Staff	Bob	Sundberg	Energy Efficiency Program Consultant	P (scribe)
Enpowered Solutions/WHPA Staff (WHPA Co-Director)	Shea	Dibble	Energy Efficiency Organization	

** 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
To avoid repetition, the name of the member organization will not be repeated in the body of the minutes past the first identification with the name of the representative participant.

Welcoming and Member Introductions

Attendees were welcomed. There were no new guests or members.

Approve Previous Meeting Draft Notes

The September 1 meeting draft notes were distributed September 7. Finalized meeting notes would be posted to the WHPA website by Bob Sundberg.

ACTION Items

September 1 ACTION: Dale Rossi and Pepper Hunziker would provide a draft of the WG work product prior to the next meeting. It would include content from WG discussions on the five selected topics and information collected in the VP Matrix. Completed.

August 11 ACTION: remaining meeting attendees concluded that schools and each of the MUSH market segments should probably be grouped but given their own rows as the group collected more detailed information on each. The VP Matrix should be revised to reflect these sub-segments. Completed.

July 18 ACTION: Todd van Osdol would talk with Scott Higa about how they thought the implementation of AB 802 might have an impact on their program and also about how they might consider addressing the energy use reduction sort of performance objective which Dale Rossi described. Ongoing.

AGENDA

Topic	Discussion Leader	Desired Outcome
Welcome, Roll Call, Member Introduction, Approve Past Meeting Notes, Review Action Items, New Business, Meeting Agenda	Chair, WHPA Staff	Record attendees, welcome any new members, approve previous meeting minutes, review status of any open Action items, planned agenda and bring up any new business items for the WG to consider addressing.
Review work product draft	Pepper Hunziker	All members would understand what was discussed and/or decided at the previous meeting and provide final revisions or corrections.
User Guide Topic – Customer Facing Reporting	Dale Rossi	Discuss what sorts of data, valuable evidence and documentation could be provided to clients in support of Standard 180 based maintenance. Frequency of reporting and client meetings.
Confirm last meeting date/time, assign actions and proposed agenda and adjourn.	Dale Rossi, WHPA Staff	Clear understanding of member responsibilities for the next meeting. Next meeting date/time established.

Working Group meeting resource status – Bob Sundberg

Bob reported that after this meeting there would be one remaining WG meeting. The final meeting would be focused on finalizing their 2016 work product and taking a vote for approval to elevate it to the full CQM Committee or to present the most recent draft at the upcoming October 11 CQM Committee meeting.

User Guide Topics – Dale Rossi

Dale Rossi, FDSI and Chair, explained that he understood that this WG's 2016 project was intended to produce a research document which would explore and propose what a Standard 180 User Guide should cover and include. They intended to tackle some of the non-technical aspects in sections one through four of the standard and try to better

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www.performancealliance.org
Submitted 10.13.2016 by Bob Sundberg, WHPA Staff
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understand the intent of the authors. They also intended to offer suggestions for revision of the standard. A follow-on WG could move ahead and try to provide content for a user guide. Time would need to be devoted to providing step-by-step instructions or templates that would provide more guidance and options for "how" to implement the standard.

This working group (WG) decided that it would explore the following five Standard 180 related topics. They planned to explore four topics and then devote the balance of their time to one topic in greater depth, They intended to pursue the other topics in greater depth in the future after the Standard 180 Committee provided greater clarification and as WHPA resources might provide.

1. Understanding performance objectives and condition indicators
2. Making a maintenance plan
3. Investigating unacceptable conditions and performance
4. **Communicating the value proposition – selected as primary deep dive topic for 2016**
5. Customer facing reporting

Review User Guide work product – Dale Rossi/Pepper Hunziker

Introduction
Read. No comments.

Objective
Read. No comments.

Background/Notes
Read. No comments.

Suggested Revisions to Standard 180
1. Definition for "performance objective." This suggestion needed to be stated more clearly. Essentially, the work being defined was used in the definition itself in the standard. The term itself seemed to be pretty well defined in Section 4.2.2.a.

Read. No comments.

The User Guide
Read. No comments.

Understanding Performance Objectives
The group discussed, again, whether there should be references to uses and limitations of the standard in utility programs in addition to addressing the standard itself. To what extent performance objectives were only at a building level or at a unit level and whether equipment could or could not be excluded from inventory and participation where they intended to be in compliance with the standard.

Bob Sundberg, WHPA staff, suggested the order reference be reversed. To start with a reference to utility programs based on Standard 180 but which would also make participation dependent on additional program requirements.

Dale Rossi thought that utility programs were "opt in" where nothing was included, no HVAC equipment, unless it was accepted by the program for participation. The reality of this situation must not have been considered when the standard was first developed. Utility programs found that it was desirable to allow maintenance program inventories to exclude certain units, basically to not accept certain units into the utility program for a variety of justifiable reasons.

Dale Rossi and Pepper Hunziker, Tre's Laine Associates, discussed the standard performance objectives generally being understood to be building level, not unit level, focused. Also, that there seemed to be legitimate reasons for the standard to be revised to allow exclusion of specific equipment under practical circumstances. The current 2012 version of the standard did not seem to allow exclusion. This issue would need to be taken up and resolved by the

Standard 180 Committee. Implementation of Standard 180 based maintenance programs by California IOUs provided some validity for the need to exclude equipment which didn't have a need or wasn't authorized to comply with required maintenance. Mark Pickett, AMS, suggested there should be a suggestion for a procedure to go through this exclusion consideration process something like what the IOUs currently used. Todd van Osdol, CLEAResult, concurred that the SCE program did require an explanation for why units would be excluded from the program. The unit was no longer needed to condition a space which was no longer being occupied, was going to be replaced very soon or something of that nature. No reason was required if a customer wanted to add new equipment to the program inventory and maintenance program.

Dale Rossi called for a vote of those present on whether they agreed that HVAC equipment should be able to be exempted from the maintenance plan for documented legitimate reasons. That equipment could be excluded from the building HVAC inventory, for instance because that part of the building was no longer occupied and didn't require heating/cooling. Dale agreed to revise this section for the group to review at their next meeting.

Understanding condition indicators
Read.
Dale Rossi summarized that condition indicators needed to be agreed to by the responsible party and their service provider. How each needed to be assessed or evaluated as well as the metric against which the current condition would be judged both needed to be established. Dale committed to re-writing this section to improve clarity.

Making a Maintenance Program
Read.
Dale Rossi would revise for correct use of maintenance "plan" and "program."

Making an Inventory
Read.
Dale Rossi noted the subject/issue about excluding HVAC equipment from inventory/maintenance was addressed again. He'd work on the whole draft to make the point, but not redundantly.

Making a Maintenance Plan
Read.

Investigating Unacceptable Conditions and Performance
Read.

Dale Rossi interpreted the current standard to allow repeated unacceptable conditions or unacceptable performance to be observed without any requirement to take corrective action. The standard only went so far as to require continued investigations to determine a cause. No action required. There were currently no "teeth" in the standard. He asked for comments on what would be the right thing for the standard to require.

Bob Sundberg, WHPA staff, suggested that there seemed to be a need to extend the requirement to either resolve the repeated unacceptable conditions or performance or a formal reason for a decision to opt-out of the resolution at that time. The responsible party might decide to not invest at that time in fixing that issue. Maybe the unit is planned for replacement or the repair budget has been spent. But, record of a decision not to proceed should be required if the issue was not authorized to be fixed or resolved.

The group was running up against the meeting scheduled end time. Several members agreed to stay on up to an additional ½ hour to try and complete review of the draft.

Value Propositions
Read.

Dale move on within Value Propositions to review each of the four identified large market segments.

1.Owner Occupied, Small
Dale read through each section:
- characteristics
- decision makers
- key deterrents, pain points, pushback resistance
- specific strategies to resolve pain points
- key benefits
- documentation and resources which support value propositions

Page 10: The range of personalities among small business owners is wide. Some will suck in as much detail as they can acquire, others are only interested in the concepts. **Flexibility and reading your prospect are key skills when engaging a customer** base as diverse as small business owners.

Bob Sundberg, WHPA staff, noticed that a number of "sales" terms were included in these descriptions. The user guide was intended for multiple parties use, the responsible party as well as the service provider. Shouldn't the wording be careful to not offend the responsible party that this was, indeed, just a guide on how to sell them something? Just another "sale" training guide? Wasn't this also a guide to help "educate" the responsible party in this shared dialogue which the standard required? Instead of stating "read your prospect" it could be worded "use your customer's responses to better understand their real priorities" or something more diplomatic along those lines. This dialogue was more about expanding a responsible party's perspective than forcing or selling them on anything, even Standard 180. Move from a "forced or fear based sales tactic" to an informed purchase goal.

Dale Rossi countered that he thought the guide was for the primary purpose of a sale. But, he asked Bob and any others to help with those wording revisions if the guide was to address all market actors.

ACTION: Dale Rossi requested help to revise work product wording to avoid sounding just like a sales training guide. To be of more value to all market actors, the customer/responsible party as well as the service provider.

2.Owner Occupied, Large
Dale read through each section:
- characteristics
- decision makers
- key deterrents, pain points, pushback resistance
- specific strategies to resolve pain points
- key benefits
- documentation and resources which support value propositions

3.National Accounts
Dale read through each section:
- characteristics
- decision makers
- key deterrents, pain points, pushback resistance
- specific strategies to resolve pain points
- key benefits
- documentation and resources which support value propositions

There was a brief discussion about national account multiple decision makers. Dale Rossi described the normal situate ion being "perverse incentives" for each silo decision maker. The energy manager was concerned most about energy costs and reduction/savings but had no authority over HVAC maintenance or other building management responsibilities. The facility manager was most concerned about up time, reliability, lowest first installed costs and maintenance almost never had responsibility for saving energy. Dale added that maintenance was rarely considered an energy savings measure or pathway.

Bob Sundberg referred to that situation as an organization with conflicting objectives, set up by the organization. Only a higher level decision maker could balance the two or attempt to coordinate a win-win plan for both departments. Bob recommended that the work product come right out and state that common situation so that those who would make use of this user guide have that circumstance pointed out directly in print. Did that describe their situation? If so, here would be some suggestions on how to address managers incentivized for mutually exclusive objectives.

Dale Rossi would make revisions to reflect this issue. He found a reference to the issue noted a little later in the document. He also read through the Decision Maker section and thought of a number of points which needed to be clarified, especially around the specific process currently noted. A specific national account might be organized differently from how described in this section. Pepper had pulled a very specific comment from the Value Proposition Matrix spreadsheet, not the entire comment. It wasn't clear who had provided this comment.

ACTION: Dale Ross invited members to try and propose a more general revision to the National Accounts – Decision Maker section.

4.Municipal, University, School, Hospital (MUSH – institutional segments)
Dale read through each section:
- characteristics
- decision makers
- key deterrents, pain points, pushback resistance
- specific strategies to resolve pain points
- key benefits
- documentation and resources which support value propositions

Dale Rossi and Pepper Hunziker observed that many of the specific strategies to resolve pain points were common to most or all segments/customer types. They considered producing a group of general strategies and then having a much shorter list of strategies specific to that one market segment listed in that section.

ACTION: Dale Rossi would review the specific strategies for all 4 investigated market segments to produce a listing common to all. Then, the group would help identify those few strategies which applied to that one specific segment to list in this section.

Todd van Osdol suggested that references to the Williams Standard, like stated earlier regarding the abbreviated Prop 39, should probably be spelled out with a short explanation. Many within California and most everyone outside of California would not understand that reference.

Dale agreed to look into producing a more generalized statement and/or include a California explanation to help users put the reference in context.

ACTION: Dale Rossi would look into revising the reference to the Williams Standard to provide an explanation and see if he could generalize the reference so that it would be more applicable nationally.

In the Documents and Resources section, Dale wondered whether they should refer to any other market segments considered by the group. The group discussed whether there should be any reference to other segments, specifically

REITs commercial investment trusts or not. Pepper Hunziker thought that some reference should be made so that those who read or used this document would realize that it was not overlooked but was not dealt with in depth for some stated reason. Bob Sundberg, WHPA staff, agreed and thought that it would be understandable that they considered this segment but were unable to address it because of limited time resource. It could be explored further in future efforts, or some similar explanation. Dale Rossi agreed to include reference to it in the work product.

Customer Facing Reporting
Dale summarized that this reporting should go well beyond the maintenance tasking delivered. It should address status and progress against performance objectives. A major issue with reporting was that many contractors didn't believe the necessary data was or could be made readily available.

Closing Comments/Adjournment

Dale Rossi asked for members to review this first draft and provided him with any suggestions for revision. There would be only one remaining meeting before the document would need to be distributed to voting members for a vote for approval and to escalate it to the full CQM Committee for their consideration. He asked Bob Sundberg to walk them through timeframe options. When would be the latest this group could get back together and still complete their work product.

Bob Sundberg, WHPA staff, indicated that they would certainly not have a finalized work product in time for the full CQM Committee meeting October 11, the following Tuesday. The draft could be presented at that meeting to inform committee members of its status and anticipated timing for when it would be delivered to committee voting members for approval later in October, early November or at the full committee's November meeting. This group could get back together almost any time prior to November 8, allowing time to finalize and conduct an email vote on approval. The really important date to keep in mind would be December 14, the Executive Committee's (EC) December meeting. The WG and the full CQM Committee would have to have approved the work product and delivered it to staff to distribute to EC members at least a full week in advance of that EC meeting.

Dale suggested he'd call Bob Sundberg Friday to go over timing for completing a work product for 2016.

The meeting was adjourned at 11:39 am PDT.

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Action Items and Key Decisions

October 6 ACTION: Dale Rossi requested help to revise work product wording to avoid sounding just like a sales training guide. To be of more value to all market actors, the customer/responsible party as well as the service provider.
October 6 ACTION: Dale Ross invited members to try and propose a more general revision to the National Accounts – Decision Maker section.

October 6 ACTION: Dale Rossi would review the specific strategies for all 4 investigated market segments to produce a listing common to all. Then, the group would help identify those few strategies which applied to that one specific segment to list in this section.

October 6 ACTION: Dale Rossi would look into revising the reference to the Williams Standard to provide an explanation and see if he could generalize the reference so that it would be more applicable nationally.