



WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday July 21, 2015 Meeting Notes

Call to Order

The first planning meeting was called to order at 10:02 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 new working group, He intends to work toward consensus on all decisions. 10 of 18 voting members in attendance would constitute a quorum. 8 voting members attended this meeting. In addition, 2 non-voting members, 0 guests and 1 staff were present for a total of 11 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 Maintenance Task Working Group Voting Members				
ACCA (Air Conditioning Contractors of America)	Donald	Prather	Contractor Association	P
AHRI	Warren	Lupson	HVAC Manufacturer Association	
Aire Rite AC & Refrigeration	Don	Langston	Contractor (Nonresidential)	P
BELIMO	Darryl	DeAngelis	Controls (Manufacturer or Distributor)	P
BMI (BuildingMetrics, Inc.)	Pete	Jacobs	Energy Efficiency Program Consultant	P
Charles Segerstrom, Energy Efficiency Consulting	Charles	Segerstrom	Energy Efficiency Program Consultant	P
CLEAResult (formerly PECEI)	Michael	Blazey	Energy Efficiency Program Consultant	
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)	
HSGS (Honeywell Smart Grid Solutions)	Shayne	Holderby	Energy Efficiency Program Consultant	
Marina Mechanical	Denny	Mann	Contractor (Nonresidential)	
National Comfort Institute	Jeff	Sturgeon	Educator, Trainer	
Richard Danks Consulting - FacilityPro	Richard	Danks	Other Stakeholder	
SCE (Southern California Edison)	Steve	Clinton	California IOU	
Tre' Laine Associates	Pepper	Hunziker	Energy Efficiency Program Consultant	P
UC Davis EEC (Energy Efficiency Center)	Kristin	Heinemeier	Research Organization	
Western Allied Corporation	Mike	Gallagher	Contractor (Nonresidential)	
CQM Maintenance Task Working Group Non-Voting Members				
CLEAResult	Mike	Withers	Energy Efficiency Program Consultant	P
HSGS (Honeywell Smart Grid Solutions)	Steve	Varnum	Energy Efficiency Program Consultant	
SCE (Southern California Edison)	Todd	Van Osdol	California IOU	P
SCE (Southern California Edison)	Scott	Higa	California IOU	
CQM Maintenance Task Working Group Guests				
Adrienne Thomle, Consulting**	Adrienne	Thomle+		
AMS (American Mechanical Services)	Marc	Pickett	Contractor (Nonresidential)	
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)
Empowered 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



WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday July 21, 2015 Meeting Notes

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

None.

New Business.

Dale Rossi, FDSI and Chair, recalled a question raised at the full CQM Committee meeting the previous week which he wanted the group to address. How could the efforts of this WG focused on communicating the value proposition be most effectively coordinated with the full committee goal of translating Standard 180 performance objectives into value propositions? He wanted this group to consider what suggestions it might make to the full committee for their August meeting. Don Langston agreed to make comments at the end of the meeting.

Todd van Osdol, CLEAResult, commented that Monica Thilges on his team was taking a new position within the firm. She was the primary representative from CLEAResult who presented updates for the SCE HVAC Optimization (CQM) program to the full CQM Committee. Her roll would be filled by Gretchen Egging, program manager and operations in LA, and Kim DiCello, regional field manager who also oversaw QC inspections and outreach, who had both been working on the program since 2012. Since Todd oversaw all contractor and end user relationships for Southern California commercial utility programs (SCE and SDG&E), he would continue as the team's primary participant on this working group.

Approve Previous Meeting Draft Notes

The July 14 meeting draft notes were distributed July 19. Finalized meeting notes would be posted to the WHPA website by Bob Sundberg.

ACTION Items

May 26 ACTION: Todd Van Osdol, SCE, agreed to get together with Scott Higa to locate and provide the group with examples of the reporting tools which the program provided customers and examples of reports delivered to customers. To be provided at WG meeting dealing with customer facing reporting, topic #5. Ongoing.

June 23 ACTION: Shayne Holderby, HSGS, would invite a school district energy manager to participate on a future WG conference call. He would also try to access that school districts Standard 180 based maintenance program documentation. Ongoing.

June 30 Key Decision: should the WG develop a second, parallel table of benefits to contracting firms that would result from their proposing maintenance based on Standard 180. Dale Rossi suggested they see if time permitted their addressing this additional market segment player.

STATUS: Not resolved.

WHPA Goal 2: CQM Standard 180 User Guide Working Group
Thursday July 21, 2015 Meeting Notes

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 7/14 VP Matrix	Pepper Hunziker	All members would understand what was discussed and/or decided at the previous meeting and provide final revisions or corrections.
VP Matrix – MUSH market segment	Pepper Hunziker	Brainstorm value proposition for key stakeholders and discuss which should be included in a user guide.
Set next meeting date/time, assign actions and proposed agenda and adjourn.	Chair, WHPA Staff	Clear understanding of member responsibilities for the next meeting. Next meeting date/time established.

User Guide Summary Outline – Dale Rossi

This working group (WG) decided that it would explore the following Standard 180 related topics. The WG intended to select one highest priority topic to focus on for most of 2016. When completed, they would select a next highest priority topic to pursue during the balance of 2016 or into 2017 dependent on WHPA allocated resources.

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 Previous WG Meeting focused on National Accounts – Pepper Hunziker

No suggested revisions or corrections were offered by attendees.

VP for Municipals, Universities, Schools, Hospitals (MUSH) Public Market Segment – Pepper Hunziker

Decision-makers

- Schools: facility manager, school board which reviews/approves proposals
- Municipalities: bldg. ops department or facility manager; purchasing department; mayor, city manager, city council/board that manages budgeting
- Hospitals: facility manager; board of directors
- Public Universities; facility management/maintenance department head; housing; purchasing department for contracts

Don Langston had found that there was a first level point of contact followed by an approval body that had to review the details of a proposal against their budget. The first level could be someone in maintenance, facilities or purchasing, someone responsible for the assets.

Key benefits of adopting Standard 180 maintenance approach

- Improve comfort
- Reduce energy costs
- Improve IAQ

- Multi-location accounts, even school districts would establish an equipment inventory to use in planning maintenance as well as targeted replacement/upgrade of equipment, establish basic scheduled maintenance to avoid/minimize downtime and premature equipment failure

Key barriers which deter adopting Standard 180 approach

- Price was always a consideration
- Cost vs. current maintenance budget, not to exceed limit per year (Dale R.)
- Timeframe yet to run with existing maintenance contracts, timing must correspond and be coordinated with current contract commitment (Todd O.)
- Budget can be a mixture of both maintenance and repair, equipment replacement usually was a separate capital replacement budget
- Some larger municipalities have worker restrictions, require “union” firms only to deliver services (Don L.)
- Schools normally have a lot of deferred maintenance due to relatively tight budgets and often the need for a referendum approval for building repairs and maintenance related proposed work
- Some schools were forced to finance equipment replacement through the maintenance budget, payments made monthly charged to that budget, unlike business budgets
- Proposition 39 related complications, many schools do not know how to use/apply funds they’ve secured, don’t know what the funds could or could not be used for – maintenance budgets, recommissioning equipment, equipment replacement or early retirement (Todd O and Don L)
- Difficulty coming up with tangible, credible, savings calculations for use of Proposition 39 funds, difficulty coming up with the required 5% savings to investment ratio payback calculation needed, for example, for HVAC repair. He hadn’t seen any districts use Prop 39 funding for maintenance (Todd)
- Most decision-makers are not directed impacted by poor IAQ or comfort issues, need to get polling or other data/evidence from occupants, end users of space that an issue/problem even exists (Don L)
- Some school districts had energy managers who might be involved in higher level maintenance proposals, the energy manager and facilities managers had different budgets and operated on different wave lengths, final approval was at a higher level, often no action taken, many staff lacked the skill set for planned/targeted equipment replacement planning
- It was difficult for any MUSH or even private customers to quantify benefits or savings for maintenance, (Don L)
- Unless there is an established matrix which customers felt comfortable with, they might just suspect projects are “sales” tactics (Don L)

Key strategies to address barriers

- Schools could use Standard 180 establishment of performance objectives with credible data collection and [re-defined metrics to help determine whether they were meeting their performance objectives (Dale Rossi building on comments from Todd van Osdol)
 - ID performance objectives
 - Pre-defining metrics to determine status
 - Reviewing results based on metrics at defined intervals
- Promote compliance with Williams standard (resulted from a lawsuit) – public schools required to provide a safe, healthy, comfortable environment for students and staff (Todd)
- If decision-makers are unaware of their primary issues or have not prioritized them, provide a pre-defined list of issues, questions, walk them through to see which ones resonate
- Critical to establish a floor, gain access to and evaluate energy bills to determine energy costs per square foot (Don L)
- Need savings projection tools and procedures which are thoroughly vetted by regulators and/or utilities that outline standard metrics approved for use, get the dialogue with customers beyond just the price
- Use of vetted tools to disaggregate HVAC energy use from total electrical billing (tools evaluation study recently conducted by SCE)

WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday July 21, 2015 Meeting Notes

- Often need to conduct occupant poll to uncover issues or how big a problem something is (Don L)
- Dale Rossi's suggested sale sequence:
 - Decide on your market niche, focused type of customer/building type
 - Make calls to determine who is responsible for the facilities
 - Tue-Wed-Thu from 9 to 11 am, call and ask for the person by name
 - Qualify party, are actually responsible for facility maintenance and equipment costs
 - Offer short scripted pitch to get them to accept a mailing from you on your services and a lot more information
 - Send out company line card and brochure outlining offered services
 - 14 days after mailing, call prospect back, confirm receipt of mailing and review services briefly, call goal of scheduling a meeting, determine whether by phone or in person
 - At meeting, start the process of answering their questions and collecting information for a later sales presentation
 - Need to determine whether their interest is with an approach comparable to current one, possibly with small improvements OR considering STD 180 based one, which is really a premium one compared to current standard market practices even though self-described as a minimum standard
 - If interested in STD 180 approach, begin exploring performance objectives, how they could help achieve those goals
 - Propose a process prior to pricing services, taking an initial inventory and basic assessment. Firm sells, determines price based on a formula, not just a fixed price per building or HVAC unit. An agreement proposal would depend on the inventory data collected.

Don Langston's quick list of questions help customers understand what they don't know and are not considering:

- Where are you hurting the most? What's your greatest pain where we could help? If they don't know, ask -
- Do you get a lot of reactive repairs?
- Do you know how old all of your equipment is?
- Do you know what you're spending on energy costs?
- Do you have a lot of guest or employee complaints? Any comfort complaints?
- What is your current maintenance program?

Documentation & resources/tools to support sale

- SCE electrical disaggregation study
- Expect them to want to hear your firm's story, who are your other clients. They want to know that you have experience and what you've done for others. How you've helped them be successful. Could lead into case studies. Provide a list of reference properties currently benefiting from a Standard 180+ maintenance approach, anticipate the question "who else is doing this?", know that most decision-makers would prefer to follow an establish path, not a new one with unknown results and higher risk for their organization and themselves (Dale R)
- Schools really want to know what other schools are utilizing that approach. References and a case study really helps. (Todd O)
- Plot comfort/energy related data to discuss with customers like kWh vs. wet bulb temperature to help define temperature dependent electrical use (Dale R)
 - Reveals a baseline electrical use without cooling/air conditioning
 - Reveals the balance point, outside air point where temperature dependent cooling begins, if low, could mean economizers aren't working
 - Provides the slope which helps diagnose the cause for excessive cooling – if steep, mechanical cooling systems could be operating inefficiently or excessive outside air/ventilation is occurring when it's hot outside
 - This approach could be used as a screening or EM&V tool
- If available, analyze building management system time series data



WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday July 21, 2015 Meeting Notes

Closing Comments/Adjournment

Michael Withers, CLEAResult, offered to have SDG&E Premium Cooling program participating contractors review the updated VP Matrix to see if they had any additional ideas to add that hasn't been brought up yet.

July 21 ACTION ITEM: Michael Withers, CLEAResult, would contact SDG&E Premium Cooling participating contractors, have them review the latest VP Matrix and solicit their input for additional content.

Pepper Hunziker would update the VP Matrix and distribute to all members and guests.

Dale Rossi requested Bob Sundberg conduct a tally to determine the number of remaining meetings the group had support for.

The next meeting was scheduled for Thursday July 28 at 10 am PDT. The agenda would be to focus on the Value Proposition Matrix for the next market segment.

The Chair adjourned the meeting at 11:01 am PDT.

* * * * *

Action Items and Key Decisions

July 21 ACTION ITEM: Pepper Hunziker would update the VP Matrix and provide to Bob Sundberg for distribution out to the WG.

July 21 ACTION ITEM: Bob Sundberg would determine how many remaining meetings the WG had support resource for and report this to Dale Rossi.

July 21 ACTION ITEM: Michael Withers, CLEAResult, would contact SDG&E Premium Cooling participating contractors, have them review the latest VP Matrix and solicit their input for additional content.