



## WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday July 28, 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. 10 voting members attended this meeting. In addition, 2 non-voting members, 3 guests and 1 staff were present for a total of 16 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.				
<b>CQM Maintenance Task Working Group Voting Members</b>				
ACCA (Air Conditioning Contractors of America)	Donald	Prather	Contractor Association	P
Aire Rite AC & Refrigeration	Don	Langston	Contractor (Nonresidential)	P
BELIMO	Darryl	DeAngelis	Controls (Manufacturer or Distributor)	
BMI (BuildingMetrics, Inc.)	Pete	Jacobs	Energy Efficiency Program Consultant	
Charles Segerstrom, Energy Efficiency Consulting	Charles	Segerstrom	Energy Efficiency Program Consultant	P
CLEAResult (formerly PECl)	Michael	Blazey	Energy Efficiency Program Consultant	P
FDSI (Field Diagnostic Services Inc.)	Dale	Rossi	Third Party Quality Assurance Providers	P
GWP (Goodheart-Willcox Publisher)	Sandy	Clark	Educator, Trainer	
Honeywell ECC, Commercial Buildings, Trade	Michael	Lawing	Controls (Manufacturer or Distributor)	P
HSGS (Honeywell Smart Grid Solutions)	Shayne	Holderby	Energy Efficiency Program Consultant	P
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	P
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)	
Warren Lupson and Associates	Warren	Lupson	Other Stakeholder	P
<b>CQM Maintenance Task Working Group Non-Voting Members</b>				
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	
<b>CQM Maintenance Task Working Group Guests</b>				
Adrienne Thomle, Consulting**	Adrienne	Thomle+		P
AMS (American Mechanical Services)	Marc	Pickett	Contractor (Nonresidential)	
<b>Little Caesar's **</b>	<b>Wendy</b>	<b>Gallo+</b>		P
<b>NADCA</b>	<b>April</b>	<b>Yungen+</b>		P
<b>WHPA Staff (Non-Voting)</b>				
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; <sup>(P)</sup> 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 28, 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

- Welcomed Wendy Gallo, Little Caesar's. Invited by Don Langston to help the group gain a better understanding of possible benefits and barriers to adopting a Standard 180 based approach to commercial HVAC maintenance from an end user's perspective. Wendy joined Little Caesar's about 2.5 months' prior as their first ever facilities manager. They'd never had a maintenance program. HVAC was addressed with the least possible effort at the lowest possible cost. Her challenge was how to change that mindset and was working with Don Langston to propose a better maintenance approach. She had a regional responsibility for a national account. If successful, more facility managers would be added.
- Welcome to April Yungen, NADCA board member. Invited to attend and participate on this WG by Dan Stradford, NADCA representative to WHPA. She indicated that the National Air Duct Cleaner Association was now a global organization which supported air duct cleaning firms. They supported many HVAC standards including Standard 180. Her firm, Air Management Industries, provided air duct cleaning as well as air balancing. She'd been in the HVAC industry for over 20 years.

<http://nadca.com/en/about-nadca/board-roster>

### Approve Previous Meeting Draft Notes

The July 21 meeting draft notes were distributed July 23. 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.

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

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

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.

Status: Michael reported that he'd spoken with two contractors who held opinions in line with the comments made by Don Langston at the previous meeting. The only new add was that each had different presentations for different situations. They would use a different approach, for example, when meeting with a hospital administrator that with the manager of a convenience store like 7-11.



**WHPA Goal 2: CQM Standard 180 User Guide Working Group  
Thursday July 28, 2015 Meeting Notes**

**New Business.**

- WG meeting resource status. As of July 21 the group had used 12 of 20 meeting resource hours which left 8 one hour meetings. 7 one hour meetings would remain after the July 28 meeting.
- WG suggestions as to how the full CQM Committee’s value proposition work could be best coordinated with that of the WG. The full committee’s goal was to translated Standard 180 performance objectives into customer value propositions. Don Langston was asked for his input. He requested more time to consider what might work best.

**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 7/21 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 – National Account end user input	Dale Rossi, Pepper Hunziker	Hold a discussion with Wendy Gallo of Little Caesar’s regarding an end user’s perspective on possible benefits and barriers to adopting a Standard 180 based approach to commercial maintenance.
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**

Dale Rossi, FDSI and Chair, suggested that one additional column be added which would include characteristics for each of the key market segments. Pepper Hunziker agreed to add this as column B immediately following the market segment in column A.

**ACTION:** Pepper Hunziker would revise the matrix by adding a new column immediately following key market segments in which the market segment characteristics could be provided. She would also follow the barriers/deterrents column with one for strategies to address barriers/deterrents.

National Account Chains segment – Wendy Gallo of Little Caesar’s provided her comments

**Decision-makers**

- No additions.

**Key benefits of adopting Standard 180 maintenance approach**

- A vendor cleaned the HVAC equipment (condenser coils) and the space temperature dropped 8 degrees – much improved cooling was immediately apparent. That was an important point for selling a maintenance program. Comfort in stores was key, then other costs like energy and service costs. At 95 degrees F, they have to close the stores – lost revenue, customers turned away. When too hot, customers do not want to wait for a custom pizza.
- Benefits ranked - #3 reduced energy costs, #4 reduced service/repair costs, #1 increased comfort (from ops – best case - employee comfort keeping 85 F or under AND at minimum, keeping the store open), #2 increased equipment lifespan.
- Hot working conditions, employees slow down, take more breaks. Greater comfort = more productive employees. Friendlier, could attend to store cleanliness, other priorities.
- HVAC issues are 90% of her day, reacting to results of no preventive maintenance program. If there were fewer maintenance/repair issues, she’d have much more time to devote to other priorities.
- For finance, it was critical to provide evidence of a great return on their investment (ROI). Their equipment, on average, would last X months/years longer.

**Key barriers which deter adopting Standard 180 approach**

- Wendy had a director who recognized that there was a need for maintenance and who had eased the tension between operations (ops) and finance by indicating this need and working to balance what they think should be done with what they were willing to spend.
- Her ops team hasn’t liked any of the maintenance service providers (vendors) she/they had proposed to date. She was trying to make locations comfortable with this program by pairing up an acceptable service provider with each location rather than just force a vendor on a location.
- Locations had previously thought that the cost for what they were getting wasn’t beneficial to the store. Previously, service providers had just stated all the things which needed to be fixed and went ahead with repairs rather than running the proposed work and cost by them. More of an integrity issue rather than proposed work not being done correctly.
- A huge proposal would be perceived as an obstacle unless preliminary efforts prepared decision makers for about what PM would cost.
- Proof. Evidence that improved maintenance would result in a great return on their investment (ROI), that HVAC equipment would last much longer and postpone expensive capital investments.
- Any huge new maintenance program cost compared to current spending, any large differential, would be a barrier to change. Wendy said she’d have to take “baby steps” with a new program.

**Key strategies to address barriers – what could you take to your boss to support a proposal**

- Dale proposed that establishing performance objectives with metrics might help make this process more objective. Wendy agreed.
- Don Langston suggested that since maintenance work was not in the “line of sight” that additional documentation around tasks and needed repairs would be very beneficial for those who thought maintenance was little more than a glorified filter service.
- There should be a “not to exceed” limit in place which would allow the contractor to fix smaller items without unnecessary delay, additional trip cost charges or formal proposals. The limit amount, \$250 or \$300, would still be an issue. Proposed work above that level would get an additional trip charge, if approved, when the service provider had to return to the site to do the work. Ops didn’t seem to ever be happy.
- Wendy agreed that often when they had to call out a contractor, they felt taken advantage of.
- Wendy stated that the list of strategies was in line with her thinking and how she intended to move forward.



## WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday July 28, 2015 Meeting Notes

- Wendy would prefer to look at maintenance and energy from a portfolio perspective rather than being reactive at a store by store level. As Dale Rossi suggested, at energy cost per store square foot over the entire portfolio to zero in on more extreme situations.
- Standard 180 based maintenance would be a large increase over current “maintenance” spending. Wendy said they’d have to take “baby steps.” Get the HVAC equipment cleaned, show management the benefit. Propose the next step up in maintenance with expectation for even greater benefits. For Little Caesar’s, an incremental approach would be critical.
- Start with a basic scope of work since Standard 180 defines a minimum level of maintenance. Nothing to something. Then looking in more detail at the energy component with performance objectives and energy bill analysis. Then tackle other goals like employee productivity based on improved comfort. Quantifying those goal metrics and tracking performance. (Wendy and Don)
- Dale Rossi suggested identifying those “baby steps” and incremental improvements and developing those into a roadmap of how to go from nothing to a fully developed Standard 180 based approach. Wendy thought she’d have to think about that a little bit more.

### Documentation & resources/tools to support sale

- Pictures and evidence of work the service provider proposed needed to be done would be good.
- Show how you could cut utility costs simply by implementing PM (preventive maintenance).
- Show equipment increased longevity.
- Financial impact of improved employee productivity or reduced energy consumption or extended equipment life. Put in terms that firm management easily would understand. Percentage and count of how many pizza units, gross revenue/net profit dollars are forced to be generated just to cover wasted energy, lower productivity, excessive repairs, premature equipment failure and forced replacement. How many of those dollars could be freed up to drop to the bottom line as clear profit. Example of format – cleaned equipment delivered \$180 energy savings per quarter. That equated to the profit from 250 pizza’s per quarter that went just to cover that wasted energy cost. Those dollars could now drop to the bottom line as profit. This could also be considered – savings = generated sales without any additional effort. Wendy agreed, that would be a good approach.
- Translate reduced energy costs or repair costs to a direct increase in op profit. (Michael Lawing)

### Closing Comments/Adjournment

The next meeting would normally be scheduled for Thursday August 4 at 10 am PDT. The agenda would be to focus on the Value Proposition Matrix for the next market segment or gain additional end user input.

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

\* \* \* \* \*

### Action Items and Key Decisions

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.



## WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday July 28, 2015 Meeting Notes

STATUS: Not resolved.

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.

July 28 ACTION: Pepper Hunziker would revise the matrix by adding a new column immediately following key market segments in which the market segment characteristics could be provided. She would also follow the barriers/deterrents column with one for strategies to address barriers/deterrents.