

Call to Order

The meeting was called to order at 9:06 am PDT by Jan Peterson, XCSpec and Chair.

Roll Call

A quorum exists when 3 of 5 voting members attend. 4 voting members, 0 non-voting member, 1 guests and 1 staff were present for a total of 5 attendees.

P = Present at meeting				
A = Absent from meeting; if proxy has been assigned				
Although Voting Members have been designated by	Staff, this group acts p	primarily by consensus.		
CQM User Guide Working Group Voting	Members			
Aire Rite AC & Refrigeration	Don	Langston	Contractor (Nonresidential)	P
AMS (American Mechanical Services)	Marc	Pickett	Contractor (Nonresidential)	A
Charles Segerstrom, Energy Efficiency Consulting	Charles	Segerstrom	Energy Efficiency Program Consultant	P
Tre' Laine Associates	Pepper	Hunziker	Energy Efficiency Program Consultant	P
XCSpec	Janet	Peterson	Controls (Manufacturer or Distributor)	P
CQM User Guide Working Group Non-V	oting Members			
Richard Danks Consulting	Richard	Danks	Other Stakeholder	A
CQM User Guide Working Group Non-V	oting Guests			
B2B Sales Excellence**	James	Graening+		P
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)

^{**} 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

Welcoming and Member Introductions

James Graening, B2B Sales Excellence, was invited to join this working group and attend this planning meeting. He is in the process of registering with the WHPS.

Approve Previous Meeting Draft Notes

This was the first working group meeting with core members. Previously, Jan Peterson, Don Langston and Bob Sundberg had held planning conference calls.

ACTION Items

None.

New Business - Jan Peterson

None.

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.



AGENDA				
Торіс	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.		
WG goals, and objectives	Don Langston, Jan Peterson	Members discuss what they thought would be reasonable goals for 2017. Decide on overall strategic goal and seek input on more specific objectives. Complete a "goal statement" for the WG.		
Timeline, roadmap for 2017 meeting topics	Don Langston, Jan Peterson	Establish a timeline, roadmap for WG meetings		
Working Group membership and demographics	Don Langston, Jan Peterson	Identify key member categories for recruitment		
WG 2017 work product	Don Langston, Jan Peterson	Establish a target work product for 2017		
Confirm next meeting date/time, assign actions and proposed agenda and adjourn	Don Langston, WHPA Staff	Clear understanding of member responsibilities for the next meeting. Next meeting date/time established.		

Working Group (WG) Goal Statement and WG Demographics/Participants – Jan Peterson

Jan Peterson, XCSpec and WG Chair – Jan asked the group to start with a review the PURPOSE section of the 2016 CQM Committee's Interview Process work product. She suggested that they next discuss what would constitute the right group of people for this WG and when the participation of guests would be most helpful. She thought it was critical to have facility managers, owners, the responsible parties participate on the WG since they were the ones who had a stake in how well their facility and HVAC system operated.

Jan asked Don Langston to help the group better understand one aspect of the proposed work product scope. Standard 180 was considered by its authors as a minimum standard for commercial HVAC maintenance. Customers might well consider that filter replacement, only, or run-to-fail was more commonly considered the "minimum" within the industry. She wondered to what degree this user guide should address maintenance planning development below what Standard 180 described as a minimum and within a budget which an owner/responsible party was willing to work? Did the WG need to start with a Standard 180 level or was there some flexibility to work with clients to establish an initial, improved approach that would mesh with their current budget with the intent to work towards a Standard 180 level of maintenance or beyond? Some clients currently operated well below this minimum standard. Should that be incorporated or addressed in this user guide, that is, to consider starting with something below this minimum standard?

Don Langston, Aire Rite AC & Refrigeration – the user guide should start the interview process, not assuming where there were at or how comprehensive a program they might consider:

- First, start with establishing what were the customer's pain points.
- Then, help educate a customer to understand the general benefits of a maintenance program which was more proactive than their current approach. Improving indoor comfort, avoiding equipment breakdowns, increasing equipment reliability and efficiency and other key general benefits.
- Next, the service provider/contractor would help guide a customer to rank those potential benefits and concerns (pain points) to determine which they valued more and why.

Jan Peterson – asked whether it wouldn't be wise to start with a Section 5 maintenance task table and run through the required tasks to tie each to a benefit, why it was considered a minimum level task? Like, it contributed to reduced



downtime. Even mentioning how much each of the tasks, quarterly or semi-annually completed, cost to build a value proposition? They could start at a table, the granular level, and work up or from the top down with the general benefits of the Standard 180 approach to maintenance stated in the Purpose of the standard, like Rick Danks had suggested?

Pepper Hunziker, Tre' Laine Associates – She liked the idea of tying individual maintenance tasks to the purposes/goals for Standard 180. She wondered whether it would be more strategic to re-organize the tasks under a general benefit X, Y or Z. She suggested they might produce a grid with checkoffs and tasks related to a given Standard 180 purpose (comfort, IAQ, energy efficiency) listed under certain qualifiers or categories and maybe by task frequency with that general benefit to each rather than dealing with each task individually. That could be expanded to include additional benefits and maintenance practices which went above and beyond the standards list of minimum tasks. Also, she liked the idea of the user guide going above and beyond the standard to refer to the FOREWARD and APPENDICES of the standard as well as industry best practices and/or new technologies not referred to directly in the standard. There could be an asterisk to indicate items which clearly exceeded Standard 180.

Charles Segerstrom, Energy Efficiency Consulting – he agreed completely with Pepper's questioning the value of trying to tease out any exact benefit of all the individual maintenance task items listed in Section 5. He thought it was far more valuable to get a customer involved with Standard 180 based maintenance and to have a firm understanding of the general benefits of that approach. Was the program going to be able to deliver improved comfort, safety and system reliability as well as energy efficiency.

Jan Peterson – she stressed that there had to be a tie in to what would get done for what the customer was paying for. The customer would need to understand how comprehensive the program was – at least be exposed to a complete list of all the maintenance tasks which would be performed. It might be good to bring in a facility manager or owner to help us understand better how they need the high-level benefits but also to what degree they need to understand the nuts and bolts of the actual maintenance to be delivered. They'd need to understand that each proposed task is tied to at least one of the overall goals to deliver its benefits. Maybe, the tasks could be organized by frequency and then a checkoff to benefits they contributed to as well.

Bob Sundberg, WPA staff – those tasks were the granular goals of a maintenance plan in detail. That isn't the same as addressing the goals and benefits of the overall maintenance program. The working group Dale Rossi previously led struggled with separating these two different levels of goals – one level to address the overall program and the other to address the delivered service detailed maintenance tasking. Program performance or outcome vs. equipment and HVAC system performance with condition indicators as markers. Rick Danks and the Standard 180 Committee was addressing this confusing use of the term "performance" in their Standard 180 revisions. Rick had indicated they would probably change the standard to terminology from program performance to program outcomes and leave "performance" tied to the HVAC system and equipment. Don Langston had reminded groups on several occasions how difficult it was to get customers to move from maintenance task lists and bid pricing to establish overall program goals or outcomes.

Jan Peterson – this could be approached from the top down or from bottom up. The main issue is owners don't know what value they are getting for the work that's performed. Our task is to take something which is fairly complex, in generalized language, and decide how it can be presented to explain how it is of value to that building owner. So, the goal for this user guide has to be delivering a "bridging" document to translate all that detailed maintenance tasking into goals that the owner values or that solves problems and issues they have in their facility. The service provider needs to assess and confirm what the owner is worried about or should be worried about and help them develop a maintenance program to address those needs.

Charles Segerstrom – the IOU programs "value proposition" was to offer a rebate to offset costs for doing this more comprehensive maintenance that would likely revert to former practices after the rebates expire. A full Standard 180 approach would include concentrating on establishing goals, metrics, tracking and review to establish evidence of



value – a value proposition for the approach – so that the practice would continue with or without any utility program relates.

Bob Sundberg, WHPA staff – IOU CQM programs have just recently begun struggling with this delivering proof or evidence of value to owners and building facility managers is a part of their programs. Standard 180 describes but doesn't detail "how" this could or should be implemented but does describe program evaluation and revision as a requirement. Tracking program and system performance to provide evidence of improvement, proof of the value of this approach should be incorporated into the CQM programs as Don Langston and others have suggested many times. But, IOU program developers and implementers have needed to concentrate first on delivering the amount of energy savings they'd claimed. Only since a fair percentage of program participants have not chosen to continue the approach without IOU rebates/incentives has the issue of market transformation and continuation of a Standard 180 based maintenance approach become more fully realized. As Don Langston has indicated and some IOU program implementers have confirmed, unless you provide the proof, evidence of value which Charles alluded to, program participants tend to revert to a minimal or filter only approach once the rebates expire.

Working Group User Guide Orientation - Don Langston and Jan Peterson

Don Langston oriented James Graening, WG guest, to where this working groups effort fit into the evolution of the utility Standard 180/quality maintenance program efforts. He'd worked with the development of this program in SCE's territory. Since the beginning, he'd advocated that the program support and require contractors to meet with their customers, establish maintenance programs goals, as required by Standard 180, develop metrics for tracking goal progress as well as a review/evaluation method to deliver feedback and revise/improve their programs. The IOUs had not yet established this process to establish goals and establish simple feedback and reporting methods. Don understood that James delivered training to contractors on how to develop commercial maintenance value propositions and how to successfully sell maintenance agreements. This was a new working group of the full CQM Committee and its efforts was intended to support and provide input to the ASHRAE/ACCA Standard 180 Committee and their efforts to develop a comprehensive user manual over time. He asked James for his thoughts about the previous discussion.

James Graening, B2B Sales Excellence – he'd started in the industry selling commercial maintenance for Honeywell Commercial Buildings Group in the mid-1980s and later delivered commercial sales training for several large contractor organizations until about 2001 (Excellence Alliance, Comfort Systems USA) when he transitioned to delivering that training independently. He offered to contribute information from his training curricula, especially information related to soft skills of qualifying customers and working with them to develop maintenance program goals and processes. The skills of questioning and listening were imperative but not well understood or mastered by many in the industry. Besides any building or HVAC equipment survey, developing a "building assessment" was at the core of what he taught. A building assessment like finding out what were the financial objectives of the business and facility, did they have problems with capital expense planning and did they think their service and repair costs were excessive. Also, what kinds of business justification information was required for them to make decisions. Would be need to only use simple benchmarking comparisons or would be need to develop full blown financial analysis and justification? All of that was part of the qualification process as well as working with at least two levels of decision-makers – both financial as well as technical. Some organizations had four or more levels and divisions of decision-makers. His educational focus was on teaching those soft skills. The current common industry practice of selling test, check and inspect as maintenance was certainly not true planned preventive maintenance which he understood that Standard 180 advocated. Much of his contractor training was geared for getting into a negotiated mode so that they could propose comprehensive contracts rather than feeling forced to just responding to requests for proposal specifications (RFPs) that would boil down to a "lowest price wins" outcome. The goal there was to provide recommendations and options to an RFP and not discuss maintenance just based on a price but on what it addressed and delivered. What were their issues or pain, how long did they intend to keep the building, what were their business objectives or constraints, all had to be explored and addressed in the qualifying stage. As of this was well beyond the physical maintenance tasking.



Don Langston – he asked James about starting with Standard 180 and a dialogue with a customer about that as a minimum, how could you develop some sample narratives or scripts for how the Q&A dialogue needed to be guided to determine those who were really interested in value, not just price. But, many had only followed a pathway of securing some sort of maintenance agreement/program based on price. How to hold discussions with customers to encourage their movement from very minimal practices or even a "minimum standard" like Standard 180 to one of higher quality.

James Graening – he committed to reviewing the work products this committee and the working groups had already produced as well as to study Standard 180 in further detail. Again, he offered to provide an online overview of the contractor training he taught at a future meeting. He invited members to visit his website at: www.jamesgraening.com to view the services he offered.

Don Langston – cautioned the group to focus because there were so many options they could work on. He suggested they focus on examples of a couple of sample customers. One that was really tight, another that could be swayed or encouraged to look beyond the minimum and another that was interested in a more comprehensive and sophisticated approach to maintenance. All three models would have the same opening script. They could work through information gathering with each of the role-playing scenarios - all were packaged units and what the capacities and ages of the units were, for example. Collect and explore the concerns like increased complaints in parts of the building. Units seemed to be breaking down more frequently. He thought that exercise could help them develop the customer narratives.

Jan Peterson – the WG was missing building owner or facility manager participants for developing those scenarios and represent that important perspective.

James Graening – mentioned that he had a number of very capable and experienced facilities managers and owners who might be willing to participate in developing realistic narratives. He also mentioned that he was most often available on Tuesdays and was trying to travel fewer weeks this year. He'd try to make himself available for when the WG would next be meeting.

The group discussed that they hadn't accomplished their goal for this meeting of establishing a clear goal statement for their WG. Jan Peterson thought that should be the primary task for their next meeting. Jan, Pepper, and Charles all could meet again May 2.

The remaining members then discussed their understandings of what was meant by a goal, a strategy and objectives to insure they had a common understanding of what the goal statement should address. Jan Peterson brought up Don Langston's interest that the WG produce a "questionnaire." Bob Sundberg reminded the group of Don's strong interest that the WG develop a narrative which demonstrated how a service provider and customer could collaborate on developing maintenance program goals, metrics, a process for tracking status and progress and program review and revision methods as Section 4 of the standard required. That whole process was intended to develop and collect data to provide evidence and proof that the benefits of the approach delivered the benefits the customer wanted.

Jan Peterson – she added that she understood that this user guide could recommend practices which were beyond the minimum spelled out in Standard 180.

Charles Segerstrom – he agreed and offered that there were other benefits beyond energy savings which could trump that one benefit, like productivity or reduced capital expenditures.

Closing Comments/Adjournment

Jan Peterson Chair – asked all members to bring two goal statements and two objectives for each to the next meeting.

The next meeting was scheduled for Tuesday May 2 at 9:00 am PDT.



The meeting was adjourned at 11:13 am PDT.

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Action Items and Key Decisions

April 26 Action Item - Jan Peterson asked each WG member to bring two goal statements and two objectives for each to the next meeting. She offered to email a draft statement to all members to help them get started.