



**CQM Standard 180 User Guide Customer Communications Working Group
Thursday July 18, 2017 Meeting Notes**

Call to Order

The meeting was called to order at 10:02 am PDT by Jan Peterson, XCSpec and Chair.

Roll Call

For this working group, 4 of 7 voting members in attendance would constitute a quorum. 4 voting members, 1 non-voting members, 0 guests and 1 staff were present for a total of 6 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				
Aire Rite AC & Refrigeration	Don	Langston	Contractor (Nonresidential)	P
AMS (American Mechanical Services)	Marc	Pickett	Contractor (Nonresidential)	P
Charles Segerstrom, Energy Efficiency Consulting	Charles	Segerstrom	Energy Efficiency Program Consultant	A
Richard Danks Consulting	Richard	Danks	Other Stakeholder	P
SDG&E (San Diego Gas and Electric Company)	Paul	Thomas	California IOU	A
Tre' Laine Associates	Pepper	Hunziker	Energy Efficiency Program Consultant	A
XCSpec	Janet	Peterson	Controls (Manufacturer or Distributor)	P
CQM User Guide Working Group Non-Voting Members				
Aire Rite AC & Refrigeration	Bruce	Coleman	Contractor (Nonresidential)	A
Aire Rite AC & Refrigeration	Lydia	Doll	Contractor (Nonresidential)	P
Aire Rite AC & Refrigeration	Darren	Whetstone	Contractor (Nonresidential)	A
CQM User Guide Working Group Non-Voting Guests				
B2B Sales Excellence**	James	Graening+		A
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
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

Lydia Doll, Aire Rite AC and Refrigeration joined the group at the request of Don Langston.

Approve Previous Meeting Draft Notes

June 15 meeting draft notes were distributed June 21 and reviewed by attendees. No revisions or corrections were submitted. The draft meeting notes would be finalized and posted to the WHPA website.

ACTION Items

June 15 ACTION: Jan Peterson offered to develop a first draft of the first meeting with a new client. Completed.



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Agreement

1. Jan Peterson to make an initial narrative draft for a first client meeting from all the feedback she'd received and run it by Marc Pickett for feedback the week of June 19.
2. Jan Peterson would bring her draft to the Standard 180 Committee meeting in Long Beach and see input from committee members and other observers
3. Have the whole WG review the draft at their next meeting and provide suggestions for revision
4. Have Pepper Hunziker review to see if there was sufficient mention and tie-in with program performance objectives and tracking metrics

New Business – Jan Peterson

None.

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.
WG Goal, milestones	Jan Peterson	WG members discuss and agree on 2017 goal and progress milestones
Review Overview document for Client Interview Process	Jan Peterson	Input for revision to document
Review draft narrative	Jan Peterson & Bob Sundberg	<ol style="list-style-type: none"> 1. Input for revision 2. Identify other market segments/client perspectives to consider additional narratives 3. Solicit member interest to sponsor authoring further narratives
Comparison of 2016 Client Interview work product to James Graening structured first meeting questions & sequence/process	Jan Peterson & James Graening	Determine where the committee work product & James Graening structured meeting topics/questions overlap
Confirm next meeting date/time, assign actions and proposed agenda and adjourn.	Jan Peterson, WHPA Staff	Clear understanding of member responsibilities for the next meeting. Next meeting date/time established.

Working Group Goal Statement and Roadmap – Jan Peterson

Jan Peterson, XCSpec and Chair – the purpose for this meeting and the WG work product so far was a focus on the first meetings between a client/customer and their service provider/contractor. The user guide effort was to develop a framework from which customers and a service provider could form a solid maintenance program. At some point in the future, this work product is intended to be merged with the work product of the STD 180 User Guide (Technical) WG into one Standard 180 User Guide.

Bob Sundberg, staff – shared the conclusions section of the STD 180 User Guide WG (Technical) 2016 final report. Stated that Dale Rossi and the 2016 final report positioned a section of a Standard 180 User Guide with a section, a chapter 2, which focused on what he/they termed the “sales process” for client initial meetings and formulation of



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program performance objectives as well as preliminary discussions intended to lead to a Standard 180 based maintenance plan and program.

Conclusion

This document was made to think through some key parts of Standard 180 and to document the experience of various stakeholders when selling and implementing Standard 180-based maintenance. The next step is to start producing the User Guide. The story arc of the proposed User Guide might be:

1. Introduction to and overview of Standard 180
2. Selling Standard 180-based maintenance
 - a. The value proposition
 - b. Qualifying the customer
 - c. The sales process
3. Making a maintenance program
4. Implementing a maintenance program
5. Measurement, data collection, and report making
6. Validating Standard 180-based maintenance
7. Conclusion

Given the fact that this is all volunteer work and the effort required to produce the content envisioned in the document, the Working Group makes two requests:

1. The envisioned work will need as much time to work as possible. Please allow this work to start early in the next year.
2. Because of the effort involved and skills needed to produce the content, the Working Group proposes that the effort be divided into three tasks that could be worked in parallel to produce a distributable version 1 User Guide at the end of 2017. The three tasks are:
 - a. The sales aspects of the guide, including part of the validation step
 - b. The technical aspects of the guide, the Standard, implementing, reporting, part of the validation step
 - c. The tasks of putting together a distributable document, formatting, editing, pictures and graphs, and producing the finished document.

Bob Sundberg, WHPA staff – although Dale Rossi and the other User Guide WG had termed this section or chapter two “selling Standard 180-based maintenance,” the whole user guide was intended to be read by and address the concerns of owners/facility managers as well as their service providers, staff and/or contractors. It was never intended to be a “sales manual” for contractor sales staff.

Client Interview Overview Process – Jan Peterson

Jan Peterson, Chair – she requested feedback from attendees on the overview draft document.



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Standard 180 Background

Jan Peterson – this section would stress that the final responsibility for any facility maintenance program fell on the owner or their “responsible party” representative, not their staff or a contractor. Ultimately, the owner/responsible party had to determine the goals and processes to follow for implementing their maintenance program, whatever form it took. She also stressed that Standard 180 not only encouraged but required that both parties be involved in development of that maintenance program and plan. It was intended to be a collaborative effort both in program development as well as implementation.

Work Product Background

Purpose of Work Product

High Level Overview of the Process to Scope a Maintenance Agreement

Jan Peterson – she read through the 8 step process or stages in the maintenance agreement development process largely influenced by the contractor training materials introduced by James Graening at a previous meeting. She asked Marc Pickett, AMS (Anderson AC), and other attendees to comment on step five which she had added – Recommendations outside of Standard 180. She wondered whether addressing services and goals outside of Standard 180 was germane and necessary to closing maintenance agreement sales and whether the user guide should include those other options.

Mark Pickett, AMS (Anderson AC) – fixed price maintenance agreements were task and time oriented documents. Whether it was following Standard 180 or not, the agreement for a fixed price was based on specific tasks which the owner agreed should be in their maintenance program.

Jan Peterson – the reason she brought up her question was that during discussions by the previous User Guide WG, their chair, Dale Rossi, had stated that he believed the WG work product should be restricted to just what was stated in the most recent, current version of the standard in order to retain a reasonable scope of work.

Marc Pickett – in his work, he does not limit what is discussed or considered to what is stated in the current standard. He brings up some of the options, others are brought up by the owner or raised because of the specific facility and HVAC system.

Rick Danks, Richard Danks Consulting – there was nothing in the standard which prevented anyone from exceeding the standard’s requirements. The standard was developed as a minimum level of maintenance to achieve the stated purposes. The owner might also have additional concerns such as equipment reliability which were not directly addressed in the standard. The standard was silent on how to address those additional concerns and goals.

Jan Peterson – the group agreed to keep step 5 listed and developed, that it was germane to the maintenance program development process.

DECISION – the WG decided that the maintenance development process needed to include step 5, exploration of concerns and possible goals, such as equipment reliability, which were outside of the current standard.

Rick Danks – there were options to what had been described earlier as fixed price maintenance contracts. He suggested there should be some mention in the user guide about the various options available to both parties beyond simply the conventional fixed price contract. Standard 180 includes a requirement to address and establish procedures for what to do if task frequency or other options needed to be changed. The challenge within a fixed price contract would be to find a way to make those changes without a whole lot of paperwork and expense to either party.

Don Langston, Aire Rite AC and Refrigeration – not that every agreement needed to be totally customized but each customer circumstance did vary. But, Standard 180 could function as the base on which to build out a maintenance



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program. The California utility programs have developed programs, like SCE's HVAC Optimization, which reached far beyond a minimum Standard 180 based program. But, from a customer perspective, when they had no formal approach, a Standard 180 based program really amounted to a "premium" approach. The challenge here in implementing the intent of Standard 180 was to insure they were holding conversations with their customer to understand their pain and concerns sufficiently to address them in a program to meet those goals and to also determine whether they were serious about want to address those issues and concerns or just dialing someone to get another bid.

Step 1 Preparation for the Structured Meeting

Jan Peterson – completed a description of each of the steps in the maintenance agreement development process. She indicated that at the previous two meetings, there was group agreement as to the importance and need around having this development be a collaborative process. Confirmation that the customer does or does not want to work with the contractor in development of a maintenance program to meet their needs. Some customers might not want to share information and just are looking for a quick price/bid. It was critical to try and determine commitment to quality maintenance, their operational priorities/concerns, financial responsibilities and budgets and how they might apply metrics to measure program success. She reviewed the document sections regarding preparing for that first meeting and actions to take prior to that first meeting. James Graening had also stressed talking in the same language as the customer. Understanding the facility and its use, the business or operation going on within the facility and what market segment did they represent.

Market Segments/Facility Types & Use

There would be different dialogues depending on which market segment/facility type the customer represented. Jan review an initial list of market segment descriptions. Restaurants and professional offices might share some common concerns but would probably also have some which were unique to their utilization and approach to facility use.

Proposed market segments:

- MS-A : Office, Professional – Owner Occupied / Non –Owner Occupied
- MS- B: Manufacturing – Industrial, distribution, warehousing, research
- MS-C: Healthcare facilities/hospitals, housing, medical, clinics, nursing homes
- MS-D: Schools, Universities, Campuses
- MS-D: Houses of Worship, not for profit.
- MS-E Government, institution
- MS-F: Retail, Malls
- MS-G: Restaurants and Fast Food

Customer Collaboration Factor

Jan also reviewed some descriptions for classifying a level of customer interest in collaboration. From minimal to very interested in collaborating.

Proposed customer collaboration factor distinctions:

- CF- 1: Minimal Collaboration – likely seeking response to RFP. Not providing useful information.
- CF-2: Neutral – Offers limited information. Reluctant to spend too much time discussing collaboration.
- CF-3: Fairly Collaborative – With further education and case studies is a strong potential to collaborate. Shares information when specifically asked.
- CF-4: Very Collaborative – Open to preventative maintenance ideas. Shares information freely.

Financial Responsibilities of Decision-Maker(s)

Next, she reviewed the section which addressed who they were meeting with, that parties range and limits of responsibilities and budget control or influence. She'd assigned some initial names and descriptions for each category.

Proposed decision-maker categories:

- FB-I: Asset Manager – Owner or corporate office. Will perform a cost analysis on the contract.

- FB-II: Productivity driven. Executive Management. Most like to be interested in a productivity analysis of the maintenance contract.
- FB-III: Task Driven. Lower Management or Property manager. Task driven analysis of HVAC maintenance contract.

Jan thought that these combined categories (facility details and use, market segment, collaboration factor, decision-maker responsibilities/budgets) would be a helpful way to frame up different scenarios for simulated discussions, narratives. She also wanted to get some feedback from Pepper Hunziker regarding the market segment descriptions for this WG and those developed by the Standard 180 User Guide WG in 2016 to help tie the two works together.

Step 2 – Preparing for the First Meeting

The Interview objectives are broken out into four groups of related questions in order to:

- 1) Assess the customer's view and commitment to quality maintenance,
- 2) Determine customer's operational priorities,
- 3) Scope the customer financial budget/limitations, responsibilities, decision-making process, and commitment, and
- 4) Discuss how to apply metrics that allow the customer to "measure" maintenance quality success

Most initial meetings should only last 30 to 60 minutes maximum. So, parties should come prepared with a suggested agenda to be agreed upon and intended to lead toward developing a maintenance program. James Graening had stressed the critical importance of spending most of the meeting time with a customer listening and asking questions, not of talking. Questions should address topics in all three groups collected into the three flow charts. Early on, the discussion should also address some key benefits of co-development, collaboration of this program development process encouraged by Standard 180. Jan provided four basic benefits in the document (pages 6/7).

Jan indicated that the overview document touched on metrics but she didn't think the initial phase customer meetings could go into great detail on this topic. She completed the overview by walking the group through the three flow charts of topics, the final one being performance metrics to address customer issues/goals and to measure program success. She asked for feedback on any issues or topics which were overlooked and her approach to categorization.

WG Discussion

Charles Segerstrom, Segerstrom Consulting – he thought the work completed so far was just great. He was interested to drill down more into goal metrics part of the document. Try to identify suggested metrics which were measurable. Ways to monitor energy use and costs.

Jan Peterson – she referred back to a metrics related document supplied earlier by Rick Danks she thought would be very valuable to pursue that point. That might be a good topic to address at the next meeting.

ACTION: Distribute the April 26 presentation on metrics provided by Rick Danks for the August 2017 meeting.

Rick Danks – quoted Edwards Deming – “if you can't measure it, you can't manage it.”

https://en.wikipedia.org/wiki/W._Edwards_Deming

<https://deming.org/>

<https://deming.org/management-system/fourteenpoints>

<http://www.skymark.com/resources/leaders/deming.asp>

<https://www.youtube.com/watch?v=tsF-8u-V4j4>

youtube.com recording – The 14 Points – excerpts from The

Deming library Collection

<http://www.nytimes.com/1993/12/21/obituaries/w-edwards-deming-expert-on-business-management-dies-at-93.html?pagewanted=all&mcubz=1>



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https://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html

Quotes:

A bad system will beat a good person every time. ... Quality is pride of workmanship. ... If you can't describe what you are doing as a process, you don't know what you're doing

http://www.azquotes.com/author/3858-W_Edwards_Deming

Rick Danks – So, you keep track of key indicators and primarily follow their trend.

1. The goal being to continuously improve the content and delivery of your maintenance service. More detail could be provided at the next meeting.
2. The standard was silent on the process of starting up a maintenance contract. There might be no incumbent contract in place. If the contractor is initiating a new agreement/contract, it might be wise to negotiate a “grace period” to come to terms with whatever condition the departing has left the system/equipment and to remedy/address major repair/service situations.
3. The term and approach described as “preventive maintenance” was kind of stone age in the 21st century. It used to be the ultimate strategy for maximum cost savings and operational efficiency. Used to be. He cautioned against implying or stating this strategy was still the ultimate any more in any user guide. It could well be a limiting factor. Advanced technologies for continuous condition and/or performance assessment were now closer to being the current ultimate approach.

Don Langston – he agreed that PM used to be considered the pinnacle of facility management. Now, working toward more of a predictive approach was where the industry needed to go rather than the current practice of time based/scheduled tasking. Back to what was shared on the Webex screen, he also agreed that the James Graening training presentation had outlined the stages or phases in program development. There was always a discovery stage which might take one or more meetings to complete. In his opinion, somewhere between steps 1 and 3 there was a “qualifying” effort needed. It might even precede step one. He’d want to qualify the customer prior to committing time from one of his sales/service staff.

Marc Pickett – he saw this as a process to get owners to want to implement proper maintenance rather than just a sales process. If this was to be a more comprehensive sales process, there would be a number of intermediary steps including several types of qualification. He asked for the group to decide whether this work product was intended to be a sales process or, rather, one intended both for the service provider as well as the owner/facility manager?

Don Langston – he understood their effort was to describe in more detail “how” to implement development of a Standard 180 based approach to maintenance, to establish those owner goals and condition indicators to track, as well, as Rick had pointed out earlier. That first structured meeting needed to have an agenda, flesh out some specific goals and a maintenance plan and finally to put it all together into some kind of agreement.

Jan Peterson – she agreed that this work product was intended to be far more than outlining a sales process for a contractor firm. But, it would outline a framework and process which both parties could follow together to go about developing that maintenance program. The outline she’d provided could certainly be expanded and suggested options for how to confirm owner/manager commitment, to qualify whether there was a fit with the service provider.

Jan then asked the group about use of those terms – quality maintenance, predictive maintenance, preventive maintenance and others so that this wouldn’t sound so much like a limited or dated proposition.

Rick Danks – he suggested eliminating the modifier/adjective like “preventive” or “predictive” maintenance. Just call it the maintenance program to allow the contractor the maximum flexibility and avoid unintended limitations.



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Especially, to allow them to learn more about the client's real needs. He also suggested they think of this as more of a customer/contractor alignment process rather than a sales process.

Client/Service Provider Initial Meeting Narrative Example – Bob Sundberg/staff

Bob Sundberg, WHPA staff – he briefly presented a document which 1) outlined one approach to developing multiple client/contractor initial discussions – narratives as well as 2) the start of one specific client/contractor discussion.

The overview suggested providing a brief explanation of Standard 180, especially Section 4 as well as considering combinations of three key variables to frame up any narrative.

- Building type/market segment (there are certainly others but we'll address these four large segments for starters)
 - a. owner occupied/smaller businesses with limited locations,
 - b. owner occupied/larger businesses and facilities
 - c. national accounts,
 - d. MUSH (municipals, universities, schools, hospital/health facilities – mostly public and/or non-profit organizations)
- Client/customer perspective on maintenance and level of HVAC expertise
 - a. reluctant/skeptical/minimal maintenance and primarily price driven
 - b. open to explore maintenance program goals/metrics/tracking
 - c. motivated to establish better, more comprehensive program
 - d. sophisticated (currently using or interested in preventive/predictive maintenance, expanding building automation to address HVAC system maintenance/performance, program goals/metrics based management, looking for tracking and advanced technologies and program refinement/improvement)
- Budgets/financial responsibilities and planning for
 - a. Maintenance contracts and agreements
 - b. Major repairs/service
 - c. Capital expenditures (HVAC equipment replacement/installations)

The document provided a grid with market segment columns and customer maintenance perspective rows from which the WG consider from which to choose which narratives to add to their work product. They might be able to enlist a real world end user to help roll play and also critique the discussion. These categories had been developed in the 2016 CQM STD 180 User Guide WG's work product final report.

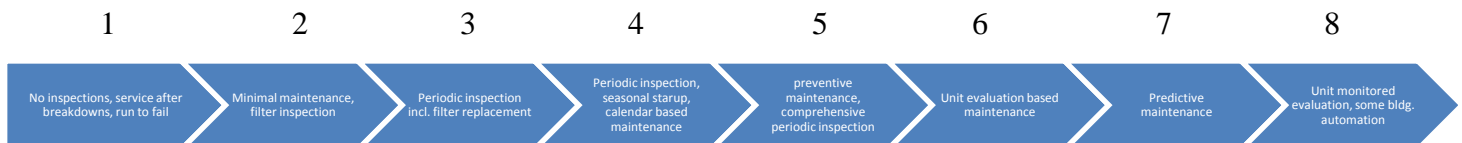


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		A	B	C	D
		Owner Occupied/Small	Owner Occupied/Large	National Account	MUSH (municipals, universities, schools, hospitals)
1	Skeptical, minimal maintenance, contract price approach				
2	Open to considering establishing maintenance program goals/metrics				
3	Motivated to developing a more comprehensive maintenance program with goals/metrics with reviews, revision and improvement				
4	Sophisticated approach to facility monitoring and management – utilize advanced technologies for preventive/predictive maintenance				

Bob Sundberg – he indicated that he and Jan had not yet coordinated the selection and naming of key categories which would describe potential customer/client perspectives and experience. But, he thought they were similar enough in nature to look at both and have the group refine how they’d like these descriptions to be designated in the work product.

During initial client discussions, he suggested the owner/responsible party be asked what they considered their current perspective and approach to maintenance was on a continuum like the following which ran from a “run to fail” and service only after breakdown approach to facilities already using some advanced technologies and some form of monitoring or building automation control.



Using this approach, a contractor isn’t limited by labels for any particular or single strategy but was free to discuss a variety of approaches to mechanical maintenance and system evaluation.

Bob’s draft narrative involved an owner occupied/owned smaller business comprised of five franchised hardware stores in different city locations. Only one member indicated having read through the narrative before the meeting. Bob suggested the let all members read through the narrative and consider how others might be developed by members and re-visit the draft narrative at the next or a future meeting.

Jan Peterson, Chair – she thought their work product might have a section, like an appendix, with a collection of contrasting narratives to provide examples for how these initial discussions might proceed. She asked everyone to review the narrative and be prepared to walk through it in more detail at the next meeting. She also suggested



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members consider developing more narratives from their own experience with clients from different market segments and perspectives.

Closing Comments/Adjournment

Bob Sundberg, WHPA staff, indicated that the group had support for about 5 meetings yet in 2017 and asked the group to decide how frequently they intended to meet. The group decided to meet monthly for the August, September and October to allow meeting time to finalize their work product.

Jan Peterson Chair – she proposed the group meet next on August 18 at 10 am PDT. Several members indicated that date would work for them, also. The meeting could address:

1. Discuss revisions to the overview document from member feedback, including approaches to categorization
2. Review and discuss approaches to metrics Rick Danks had previously presented
3. Review Bob's draft narrative in more detail to see how the service provider approached this customer's perspective. The group would also try to identify several additional narratives and see if members would be willing to adopt and develop one each for the work product.
- 4.

Don Langston asked Bob Sundberg to locate and distribute a research study on end contractor/service provider and end user facility managers/owners perspectives and priorities conducted by EMI for SCE around 2014. The study identified a lot of customer pain points and what they wanted to get out of a maintenance program. He recalled that energy savings was, surprisingly, a lower priority. The study participants valued not getting problem phone calls late at night and equipment up time much higher. The study also had them rank those possible goals. He thought it would be very helpful for this working group. Bob agreed to locate and distribute the study.

ACTION: Don Langston asked Bob Sundberg to locate and distribute a research study on end user perspectives and priorities conducted by EMI for SCE around 2010.

The meeting was adjourned at 11:15 am PDT.

* * * * *

Action Items and Key Decisions

July 18 Meeting **DECISION:** the WG decided that the maintenance development process needed to include exploration of concerns and possible goals, such as equipment reliability, which were outside of the current standard.

July 18 Meeting **ACTION:** Distribute the April 26 presentation on metrics provided by Rick Danks for the August 2017 meeting.

July 18 Meeting **ACTION:** Don Langston asked Bob Sundberg to locate and distribute a research study on end user perspectives and priorities conducted by EMI for SCE around 2014.