WESTERN HVAC PERFORMANCE ALLIANCE

WHPA Goal 2: CQM Standard 180 User Guide Working Group
Thursday August 4, 2015 Meeting Notes

Call to Order

The first planning meeting was called to order at 10:05 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. 7 voting members attended this meeting. In addition, 2 non-voting members, 2 guests and 1 staff were present for a total of 12 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	
Aire Rite AC & Refrigeration	Don	Langston	Contractor (Nonresidential)	
AMS (American Mechanical Services)	Marc	Pickett	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 PECI)	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)	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	
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	
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+		
Little Caesar's **	**Wendy**	**Gallo+**		P
NADCA	**April**	**Yungen+**		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)
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

-

Approve Previous Meeting Draft Notes

The July 28 meeting draft notes were distributed July 31. 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.

New Business.

Dale Rossi requested an update on the remaining WG meeting resource. Following the August 4 meeting the WG would have resource for 6 remaining meetings including those needed to finalize the WG work product for 2016. Dale anticipated that 4 meetings would be work sessions with the final 2 meetings focused on finalizing the work product.

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 7/28 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 – Next Market Segment	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

No suggested revisions or corrections were offered by attendees.

Landlord and Property Management Market Segments – Pepper Hunziker

Pepper Hunziker, Tres' Laine Associates, asked for someone to help her understand the distinction between the landlord and the property management market segments. Dale Rossi initially stated that he thought of them as interchangeable terms. Dale thought the property management category was redundant, that it fit under several of the other categories. The group discussed this distinction.

Marc Pickett – some property managers were not owners. Others were owner/operators. Contracted property managers were implementing services the owner wanted within a budget established by the owner. Their perspective did not usually include the long term ownership of a building issues but it all depended upon what sort of contract terms were established.

Dale Rossi – he thought of shopping centers and REIT (real estate investment trusts) owners when he considered landlords. Property managers could be managing properties for two or more of the other market segments, so weren't a separate category in his thinking.

Shayne Holderby – property managers were third party services contracted by any number of owner types.

Wendy Gallo – in her experience, property managers simply managed property for an owner. They never owned the properties. Landlords could be owners as well as sometimes providing their own property management services.

Shayne Holderby – landlords and property managers were lumped together from what he'd seen in PG&E program participants. A small portion have in-house staff for all HVAC related service. The larger portion have lease agreement clauses which makes the tenant responsible for all HVAC maintenance and repairs. In this second situation the landlord or property manager isn't terribly concerned about what maintenance was delivered. At the end of every lease cycle they send people up to examine the units. If it doesn't meet agreed condition, the tenant is hit with all the charges for what it takes to return the unit to serviceable condition. Most of the interest in either case is driven by the program incentives to get them started. Without the incentives, this would be a hard sell.

Todd Osdol – mostly they've found contractors working with property managers, rarely with building owners at the REIT or managers of a limited property partnership. If there are multiple tenants at the site, usually a property manager is responsible for HVAC maintenance. Some of their larger property management firms had run into what Shayne described, equipment being left in poor condition and disrepair. In some cases, leaving the owner with the costs for returning the equipment to serviceable condition. Property managers put Standard 180 language into their lease agreements as a way to help enforce reasonable maintenance. That's a "best practice" which could catch on but isn't currently widespread. Property managers were implementing the landlord/owner's best interests. Also, he'd seen several recent situations where the tenant and their contractor had planned existing equipment upgrades as part of maintenance only to find the whole unit had been replaced as part of the owner's capital expense planning.

LANDLORD 1 Market Segment – NOT responsible for maintenance and repairs

Dale Rossi suggested they break this category into two segments. Landlords responsible for maintenance and landlords who were not responsible for maintenance.

Market segment characteristics – landlords NOT responsible for maintenance

- Properties included shopping centers, commercial office property, industrial parks, office complexes, class A office buildings and other properties owned by REITs.
- Non-resident owners (to be distinguished from owner occupied, landlords rented to tenants).
- Dale Rossi suggested the definition – people who rent or lease property space out except for the common areas where the tenants were normally responsible for all HVAC maintenance, repair and related costs. The landlord owned the HVAC equipment and was responsible should it need to be replaced. Landlords had an interest in the kind of HVAC equipment maintenance that was delivered in order to avoid the major expense for replacement.
    - Landlords were responsible for maintenance, repair and replacement of HVAC equipment that served common areas.
    - Maintenance delivered to the leased space HVAC equipment/systems varied and was a function of what was agreed to in the lease/space rental agreement.
    - There was a "tension" for landlords because of their equipment ownership but role of not being directly responsible for how maintenance was delivered or who delivered it.

Decision-makers

- Landlord in-house staff
- Property management firm contracted with landlord for facility/tenant management within an established budget for the common served areas only

GOAL: 1) how to influence the landlord who is NOT responsible for leased space HVAC equipment maintenance to want that tenant managed space to be maintained to a Standard 180 level or higher – how to get that requirement to be accepted in the lease agreement; 2) how to convince landlords to maintain common area space to a Standard 180 level or higher.

Key benefits of adopting Standard 180 maintenance approach

-

Key barriers which deter adopting Standard 180 approach

- Landlords and their in-house or property management staffs have limited influence over exactly what maintenance actually gets delivered or how, which firms would service the HVAC equipment/systems (Dale)
- Tenants would, naturally, resist the additional cost of more comprehensive maintenance without substantial justification
- Confusion for landlords regarding capital replacement plans and contractors who might have made existing equipment upgrades – equipment might have been replaced with neither the tenant (who agreed to controls/other upgrades) nor the contractor had been informed (Todd)
- Repeatedly, some property managers actually make a profit on the HVAC repair or replacement of damaged equipment – it's not in their best interest to maintain and service the equipment – the get a markup on top of what the contractor charges

Key strategies to address barriers

- Additional Standard 180 based maintenance costs – find ways to justify related to avoidance of system untimely failure and downtime
- Property managers put Standard 180 language into their lease agreements as a way to help enforce reasonable maintenance.

Documentation & resources/tools to support sale

-

LANDLORD 2 Market Segment – IS responsible for maintenance and repairs

Dale Rossi suggested they break this category into two segments. Landlords responsible for maintenance and those who were not responsible for maintenance.

Market segment characteristics – landlords ARE responsible for maintenance

- Properties included shopping centers, commercial office property, industrial parks, office complexes, class A office buildings and other properties owned by REITs.
- Landlords were non-resident owners (to be distinguished from owner occupied, landlords rented to tenants).
- Landlords were responsible not only for "common" areas but also for all leased space
- Landlords had a strong interest in the kind of HVAC equipment maintenance that was delivered in order to reduce repair costs and avoid the major expense for replacement

Decision-makers

- Landlords in office parks were often responsible for HVAC maintenance and also sell energy to tenants with a mark-up for additional profit so if tenants use more energy, landlords make more money
- Landlords who were responsible for HVAC maintenance cared about comfort since they stood to lose tenants who are uncomfortable – turnover caused additional sales expense and often lost revenue & profit

Key benefits of adopting Standard 180 maintenance approach

-

Key barriers which deter adopting Standard 180 approach

- Repeatedly, some property managers actually make a profit on the HVAC repair or replacement of damaged equipment – it's not in their best interest to maintain and service the equipment – the get a markup on top of what the contractor charges (Shayne?)
- Cost of more comprehensive maintenance, don't want to commit to spend the extra money

Key strategies to address barriers

- Additional Standard 180 based maintenance costs – find ways to justify related to avoidance of equipment premature failure.
- Property managers could put Standard 180 language into their lease agreements as a way to help enforce reasonable maintenance.
- For REITs, whether through use of in-house staff or contracted out services, if they could reduce energy use and costs, that savings goes right to their bottom line. The value of their stock was a multiple of their free cash flow. Every dollar of energy cost savings converted to a ten-dollar increase on the value of their asset because of a 10% capitalization rate. The value of their asset directly influenced the value of their stock price. (Dale R.)
- When the landlord is responsible for maintenance, they have a direct impact on occupant comfort. Lack of comfort was the primary reason tenants left and didn't renew their lease. He'd heard this BOMA statistic from one of their studies years before. (Dale R.)

Additional information located by staff. It might be of benefit for the group to capture key learnings from other BOMA research studies. I've located two which two via a Google search suggested by Michael Lawing.

1.
http://www.boma.org/sustainability/info-resources/documents/workingtogetherforsustainability.pdf
BOMA 2011 17-page study titled
"Working Together for Sustainability: The RMI-BOMA Guide for Landlords and Tenants"

Introduction:
One of the main barriers is the "split incentive" issue, which results from the structure of many commercial leases. Net leases and modified gross leases, the most common types of leases, typically make the building owner responsible for bearing the cost of all capital upgrades. Energy costs, being a routine operating expense, are paid by the tenants. In other words, the owner makes the capital investment to improve the building and the tenant is the sole beneficiary of the reward of reduced operating expenses. The result is that commercial real estate owners have little direct financial incentive to upgrade their buildings to save energy. To further complicate the issue, unless the tenant space is separately metered or sub-metered[1], all of the tenants pay a pro rata share of the building's energy costs. Therefore, tenants have little incentive to modify their behavior or implement any energy-reduction strategies because they must share the reward of their improved behavior while also sharing the costs of other tenants' wasteful behavior.

This guide outlines five actionable steps that building owners and tenants can take to partner in the shared goal of energy efficiency. While the steps are not necessarily sequential, they can build on each other in order to achieve greater energy savings. Each of these five sections offer simple solutions and ways to push for deeper and more aggressive energy saving:
1. Make energy use and Costs More Transparent
2. Engage Building Occupants in Saving energy
3. Incorporate energy efficiency in Tenant Fit-Outs
4. Plan Ahead for Deep Energy Retrofits
5. Structure Agreements to Benefit Both Parties

2.
https://www.wm.com/enterprise/boma/BOMA%20Global%20Tenant%20Study%20Executive%20Summary.pdf
BOMA 2013 Global Tenant Survey

- Tenants cycled out because they didn't want to be involved in HVAC maintenance and other upkeep. They retain the lease for a limited period of time. They decide to move when it becomes apparent that there will be increasing maintenance and repair work. It is not driven by comfort but by financial considerations. (Shayne H.)
- Same tenants, different strategy. They defer maintenance and some repairs anticipating equipment will be replaced as part of a lease renewal. (Dale R.)

Dale Rossi suggest that they might want to decide to reduce the scope of their 2016 VP Matrix effort. The landlord/property management one was pretty complex with several versions which depended on who was responsible for what. The group already had three key market segments (owner occupied, national accounts, MUSH/institutional). Landlords responsible for maintenance was very similar to owner occupied circumstances. In the other version, tenants were responsible for maintenance.

Owner Operator Market Segment
Shayne Holderby agreed and in his experience with their PG&E program, about 90% of the landlord/property management circumstances the tenants were responsible for HVAC maintenance. The exceptions involved "owner operator" where the landlord, like Irvine Company, provided its own in-house staff for maintenance.

Charles Segerstrom, Energy Efficiency Consulting, said that in his support of the SDG&E and SoCalGas programs, the owner operator situation was considered to be a very small market segment and one they didn't concentrate on or seek out.

Dale Rossi indicated that since the owner operator managed their own facility maintenance, not through contractors, it depended on firms like his, FDSI, to introduce owner operator key decision-makers to Standard 180. Energy efficiency consultants would be seeking out firms in that space to participate in this sort of QM program. Dale said their typical strategy was to work with a particular facility manager to take the QM program opportunity to their board. FDSI promoted this QM approach through analysis of the potential impact and benefit and FDSI negotiated to get a piece of that savings benefit. FDSI did the energy analytics, developed the business case for the maintenance strategy and other upgrades and did some of the early project management once it was approved. The in-house staff did the maintenance and upgrade work and FDSI functioned as an energy efficiency consultant which was what a more sophisticated contractor would also provide plus maintenance/repair/replacement services when a facility manager, REIT or other entity would be responsible for maintenance.

Dale Rossi clarified that with some very large owner operator firms like the Irvine Companies, they were introduced to the QM/Standard 180 opportunity by utility business development representatives. Another example he was aware of was Macy's which became aware of the utility program the same way.

Closing Comments/Adjournment

Dale Rossi suggested they consider truncating the group's effort down to a focus on the three market segments they'd already made good progress on and defer the others for a future effort.

Charles Segerstrom agreed that reducing the scope of their 2016 effort would make completing the effort more manageable. It made sense to give their initial focus on the 80% and address the smaller, more complex market segments as future time allowed. Sandy Clark and Pepper Hunziker agreed with a decision to focus their effort. No one was certain whether these three represented 80% but that the group was more likely to accomplish a more modest goal by limiting their focus to those three segments.

Key Decision: the working group reached consensus that they would limit their 2016 effort by focusing on three key market segments (owner occupied, national accounts, MUSH/institutional) and develop others only as future time allowed.

Bob Sundberg, WHPA staff, asked Dale and the remaining attendees whether they thought it would be helpful to host one or two additional end users for some direct input in their few remaining meetings.

Dale thought it would, especially for school districts which fell into the MUSH/institutional category. If there was an owner occupied representative, like a car dealership, or national account, the group would benefit from meeting with them too.

Shayne Holderby committed to reaching out again for the school district energy manager he'd attempted to invite to a WG meeting.

The next meeting would normally be scheduled for Thursday August 11 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 with the exception of common spaces which were the landlord's responsibility in almost every instance.

The Chair adjourned the meeting at 11:07 am PDT.

Action Items on following page.

* * * * * *

Action Items and Key Decisions

August 11 Key Decision: the working group reached consensus that they would limit their 2016 effort by focusing on three key market segments (owner occupied, national accounts, MUSH/institutional) and develop others only as future time allowed.

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.
STATUS: Shayne committed to reaching out to this school district energy manager again to invite him to meet with the working group. COMPLETED.

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.