



WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday April 14, 2015 Meeting Notes

Call to Order

The first planning meeting was called to order at 10:05 a.m. 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. Dale intends to work toward consensus on all decisions. 10 of 18 voting members attended this meeting plus 3 non-voting members and 1 WHPA staff for a total of 14 attendees.

P = Present at meeting				
A = Absent from meeting; if proxy has been assigned it will be noted below.				
Although Voting Members have been designated by Staff, this group acts primarily by consensus.				
CQM Maintenance Task Working Group Voting Members				
ACCA (Air Conditioning Contractors of America)	Donald	Prather	Contractor Association	P
AHRI	Warren	Lupson	HVAC Manufacturer Association	
Aire Rite AC & Refrigeration	Don	Langston	Contractor (Nonresidential)	P
BELIMO	Darryl	DeAngelis	Controls (Manufacturer or Distributor)	
BMI (BuildingMetrics, Inc.)	Pete	Jacobs	Energy Efficiency Program Consultant	
CLEARresult (formerly PECD)	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	P
Honeywell ECC, Commercial Buildings, Trade	Michael	Lawing	Controls (Manufacturer or Distributor)	
HSGS (Honeywell Smart Grid Solutions)	Shayne	Holderby	Energy Efficiency Program Consultant	
Marina Mechanical	Denny	Mann	Contractor (Nonresidential)	
National Comfort Institute	Jeff	Sturgeon	Educator, Trainer	P
Richard Danks Consulting - FacilityPro	Richard	Danks	Other Stakeholder	
SCE (Southern California Edison)	Steve	Clinton	California IOU	P
Charles Segerstrom, Energy Efficiency Consulting	Charles	Segerstrom	Energy Efficiency Program Consultant	
Tre' Laine Associates	Pepper	Hunziker	Energy Efficiency Program Consultant	P
UC Davis EEC (Energy Efficiency Center)	Kristin	Heinemeier	Research Organization	P
Western Allied Corporation	Mike	Gallagher	Contractor (Nonresidential)	P
CQM Maintenance Task Working Group Non-Voting Members				
CLEARresult	Mike	Withers	Energy Efficiency Program Consultant	P
Honeywell ECC, Commercial Buildings	Adrienne	Thomle	Controls (Manufacturer or Distributor)	P
HSGS (Honeywell Smart Grid Solutions)	Steve	Varnum	Energy Efficiency Program Consultant	P
CQM Maintenance Task Working Group Guests				
WHPA Staff (Non-Voting)				
BNB Consulting/WHPA Staff	Bob	Sundberg	Energy Efficiency Program Consultant	P (scribe)
Empowered Solutions/WHPA Staff (WHPA Co-Director)	Shea	Dibble	Energy Efficiency Organization	

*** Organization is Not a Member of the WHPA; + Individual is NOT Registered with the WHPA; ^(P) after last name = Member/Registrant is Pending Approval from the WHPA Executive Committee*

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

Dale asked everyone to introduce themselves. Attendees each introduced themselves and provided background information on their past and current work relevant to this working group.

- Dale Rossi, Field Diagnostic Services Inc (FDSI). His firm focused on refrigeration analytics and produced refrigeration fault detection and diagnostics instruments and tools. They worked mostly with large chain multi-location companies who utilized mostly packaged rooftop HVAC equipment. This would be the fourth CQM Committee working group he'd chaired.
- Donald Prather, ACCA, a contractor trade association. He'd working on standards, codes, contractor training and keeping their members informed.
- Steve Clinton, SCE. He worked at the SCE energy education center in Tulare. He was in charge of all the HVAC and refrigeration training and had been at the center for about five years. Prior to that he'd been a tech in the field working mostly on commercial and industrial systems for over 20 years.
- Steve Varnum, HSGS. His business unit implements utility HVAC programs. About 25 years in the field on commercial and residential HVAC systems. About 10 years inside supporting utility programs
- Sandy Clark, Goodheart-Willcox Publisher. She was editorial director at G-W with a focus on technical HVAC and refrigeration education and publications. She thought that she could help provide some assistance in learning and design of instructional materials.
- Michael Blazey, CLEARresult. He worked about 40 years in the trade as a contractor, installer, service tech and in sales. He was currently helping technicians work through a maintenance planning system which was part of the SCE HVAC Optimization program. He supported technicians both in the classroom and up on the roof.
- Jeff Sturgeon, National Comfort Institute (NCI). He currently served as a technical resource manager, field coach and senior systems trainer to support the SCE HVAC Optimization program. Previously he'd been a technician who worked on large commercial and heavy industrial HVAC and refrigeration systems for about 30 years. He'd also worked as a regulatory compliance auditor and field verifier for federal HVAC related standards.
- Kristin Heinemeier, UC Davis Energy Efficiency Center. She was currently a research at the EEC of UC Davis. She'd worked for over 30 years in the industry. She'd researched the difference between how we often thought things worked and how they really worked. That included utility programs, end user and service provider perceptions in areas related to energy efficiency. HVAC was one of those areas where complex systems were expected to always work the way they should but often didn't. Understanding and closing that gap between perception and reality had been a focus at her center.
- Pepper Hunziker, Tre' Laine Associates. She supports SCE efforts to integrate WE&T into the HVAC portfolio, both commercial and residential.
- Charles Segerstrom, Charles Segerstrom Energy Efficiency Consulting. He had managed PG&E's training centers for about 30 years. Since he left PG&E about 2 ½ years before, he'd been retained by SDG&E to support their HVAC sector strategy efforts. One piece of that puzzle was sales training, a soft skills component. Effective sales efforts required knowing the product value proposition inside and out which was why he was interested in the details which this working group might uncover. He was very interested in gaining a better understanding of the Standard 180 value proposition to help others be better prepared to point out the difference between a Standard 180 based approach and standard maintenance practices.
- Adrienne Thomle, Honeywell ECC Senior Product Manager for commercial rooftop controls and airside economizer systems. She'd been with Honeywell for 26.5 years and planned to retire the end of May. ASHRAE member for 20 plus years. Very involved on several ASHRAE committees including the Standard 180 Committee.
- Don Langston, President and CEO of Aire Rite AC and Refrigeration. He'd been in the HVAC trades over 40 years. Was currently ACCA Senior Vice-Chairman. He represented ACCA on the ASHRAE/ACCA joint Standard 180 Committee. Chair of the Standard 180 User Manual Subcommittee. WHPA Executive Committee member and ACCA representative. CQM Committee Chair.

WHPA Goal 2: CQM Standard 180 User Guide Working Group
Thursday April 14, 2015 Meeting Notes

- Mike Withers, CLEARResult. He'd been a training manager in SDG&E territory for commercial programs with CSG previously and now with CLEARResult.

New Business

None.

Approve Previous Meeting Draft Notes

None.

ACTION Items

None.

AGENDA

Topic	Discussion Leader	Desired Outcome
Welcome, Roll Call, Member Introduction, Past Meeting Notes, 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.
Hold initial discussions to begin determining working group goals	Dale Rossi	Gather member input on suggestion content areas/topics in order to begin establishing goals and scope of 2016 work product. .
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 Objectives, Scope and Target Audience – Dale Rossi and Don Langston

Dale Rossi started the meeting wanting to differentiate between efforts of the ASHRAE Standard 180 User Manual Subcommittee and this WHPA CQM Committee User Guide Working Group's intended effort. He believed that this working group's effort was intended to primarily help California and other utility program implementers better understand Standard 180. The output of this group could also be provided to the ASHRAE Standard 180 Committee and their User Manual Subcommittee as informative suggestions for their consideration. He'd understood from Don Langston that Don wanted the output of this group to be immediately useful, practical and not in code language. It would include templates and examples and other illustrations which could be followed step by step to achieve items referenced in the standard. There was still a lot of controversy over what the standard intended and many subtleties within the standard which many people overlooked.

Don Langston, CQM Chair, indicated that one of the challenges which the Standard 180 based maintenance programs faced was how to quantify the value of at least delivering this level of maintenance or higher compared with standard industry practices. The goals of the standard encompassed delivery of improved energy efficiency, indoor air quality, occupant comfort and system reliability. It was also a challenge to read a standard written in code language and then to try and design a program based on it, to operationalize it for implementers in addition to participants. Programs based on this standard had to address regulatory agencies and program evaluation as well as participants. And, since the word "quality" was interpreted so differently by many people, he wanted this group to focus on system optimization and improved performance and terms that would lend themselves to establishing system operation baselines for quantification and metrics.

The purpose of this group was to start working on clarifying the customer communication described in the standard and how that communication could help define the value of this approach. That was critical for contractors working

WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday April 14, 2015 Meeting Notes

with building owners and facility managers when they needed to explain why the Standard 180 based approach would deliver greater value than most current maintenance approaches.

Dale Rossi asked Don to paint a picture for what he saw the end product of this group would look like.

Don thought that the output for 2016 would be for this group to produce an outline of what a user guide would include. To be used by program implementers, contractors and their customers. What does maintenance look like? The prompts for a discussion about what contributed to energy efficiency, how this standard based maintenance would have impact on their HVAC systems and how that could be measured. What were some best practices which could be recommended based on Standard 180? It would be helpful to have some proto-types by year end which could be rolled out for testing. What common points of measurement could be determined which they could design the program around.

Dale Rossi asked Don what he meant by the differentiation between a user guide and a user manual.

Don Langston responded that he was looking at this product as a “guide” which wouldn’t need to be as thick or comprehensive as an entire manual. This utility guide would be a subset and could eventually become part of a Standard 180 complete user manual. The manual would address all stakeholders and probably have sections for contractors, building owners, utility implementers and program designers.

Pepper Hunziker, Tre’ Laine Associates, asked Don whether this guide would address Section 4.

Don responded that it would since Section 4 provided the greatest information regarding the type of customer communications intended by the standard. He also mentioned that Kristin Heinemeier was the chair for the ASHRAE Standard 180 Section 4 Subcommittee. Information like the performance objectives and condition indicators needed to be fleshed out in this user guide.

Dale Rossi added that there had been considerable effort on the part of several of the committee working groups which address Section 5, the maintenance task tables, especially regarding rooftop units and economizer systems. He proposed that this working group should focus primarily on Section 4.

User Guide Objectives, Scope and Target Audience – Member input

Dale Rossi asked Pepper Hunziker what sort of an end product would be useful for her work.

She thought a user guide would be very useful to use in the field to help technicians operationalize Standard 180. Help them communicate the value proposition for the work they were doing.

Bob Sundberg, WHPA staff, asked if Don Langston could address one question before Pepper’s idea was discussed further. Whether Don envisioned this user guide addressing all of the stakeholders which a manual would probably address or a smaller subset of key stakeholders?

Don Langston responded that it was usually contractors working with end users unless the facility managed some in-house maintenance staff for some or all of the HVAC required work. Because it was the technician who most often discovered necessary repair work and communicated the need for those repairs with decision makers, they needed a clear understanding of the value which their service delivered. What impact on electrical consumption and demand (kW) had for that building owner and across the grid. There was a big education piece there for technicians. But, when a technician discovers a problem, there has to be a communication process established to guide how he handles that problem. Was it a maintenance covered issue or a repair which required a separate proposal. What would be the impact for that customer? Don pictured a hub & spoke which provided this communication flow for each of the stakeholders.

WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday April 14, 2015 Meeting Notes

Pepper Hunziker added that she could see this user guide providing great value where it addressed the standard more holistically, not just the technical tasks outlined in Section 5. The whole was greater than the sum of the maintenance task parts. The SCE program was developed in part as a reaction to the individual energy efficiency measures and RCA that preceded it. Mel Johnson, then program manager who she had worked for, wanted to look at all the things which should be routinely done to a rooftop unit and gain their cumulative impact. Addressing indoor air comfort should also result in energy savings, she thought.

Adrienne Thomle asked Don to remind the group what the stated purpose was for this standard. (The following excerpt is provided from the 2012 revised ANSI/ASHRAE/ACCA Standard 180)

1. PURPOSE

The purpose of this standard is to establish minimum HVAC inspection and maintenance requirements that preserve a system's ability to achieve acceptable thermal comfort, energy efficiency, and indoor air quality in *commercial buildings*.

ANSI/ASHRAE/ACCA Standard 180-2012

Adrienne Thomle suggested they might look at all of the major stakeholders to determine which benefits they considered most important from implementing maintenance based on this standard. Energy efficiency might be of interest to many. But, other benefits of the standard might be even more important for certain stakeholders. Don Langston agreed and that for many end users, energy efficiency and savings was not even their top priority.

Dale Rossi asked that they get agreement on a key point. His understanding was that this working group was funded by the IOUs. And, that the IOUs and the Standard 180 based programs were evaluated exclusively on the energy savings which the programs delivered vs. what was claimed. He was hearing Don and Pepper stating that energy efficiency might not be the top priority or even one of the top priorities. He asked Don to explain his comments.

Don Langston responded that this group did need to look at this user guide through the lens of the IOUs and their focus on energy efficiency and energy savings being what they were judged on. Energy efficiency should be the top or one of the top priorities and an outgrowth of good maintenance practices. He also thought that improved thermal comfort and indoor air quality should be natural byproducts of running HVAC systems more efficiently.

Kristin Heinemeier, UC Davis EEC, wanted to share several thoughts.

- She thought the group needed to determine the purpose for this document.
- Was it being developed for program planners, someone out in the field or others?
- Who out there had a gap this document could fill?
- Was it to have information for some stakeholder at their fingertips?

Dale Rossi answered that his understanding was that this document would be developed primarily around needs of program planners. Planners primarily, implementers secondarily and finally for those in the field delivering maintenance.

Kristin Heinemeier thought that represented a very limited scope. She thought there was a need to specify what was required by the standard. If a utility program was to claim it would be based on this standard, this document should state what was required. This is what was required for a maintenance plan. For measurement and verification, these are the specific measurements which need to be taken and a defined vocabulary describing the requirements.



WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday April 14, 2015 Meeting Notes

Dale Rossi responded that he believed that most program planners and implementers lacked a basic understanding of what the standard was even about.

Pepper Hunziker stated that she thought this guide was going to be developed for technicians, not for program planners or implementers. The activities which were required so their efforts would be integrated with the program evaluation side.

Dale Rossi thought Pepper was giving too much attention to technicians. Technicians did what they were told. The point of the standard at its core was to establish better communication between the owner/responsible party and those who would deliver the maintenance services. Reading the standard carefully, you find that the responsible party is the one actually responsible for having a maintenance plan. That plan goes well beyond an inventory or equipment and list of maintenance tasks for that equipment. The plan is all about developing maintenance program goals. Then, about establishing performance objectives and how will they determine whether the plan was achieving their stated goals. What was needed here was providing people with a way to discuss what their goals were, getting them documented and then determining how they were going to measure when the systems were or were not meeting those goals. They need to establish and define system condition indicators, observed conditions which indicate some part of the system was not operating as it should and needs further investigation, repair or replacement if it had failed. And, determining whether the failure could have been avoided. Then, circling back to revise and improve the maintenance plan process, revising the task or goals, or resources and time allocated to that part of the plan, as warranted. Ultimately, the communication should come around full circle. The plan should also establish intervals at which the service provider, if contracted, or staff would have to meet with the responsible party to evaluate the degree to which the goals were being met. That communication was the real heart of this standard, not the task list. Dale thought that communication process with those elements was the primary point of the standard which was described in Section 4.

The technician's role was to implement the plan and to provide feedback on current conditions of the system. It was somebody else's role to develop those goals with the responsible party and determine whether those goals were being met.

Adrienne Thomle, Honeywell ECC, pointed out reference to additional ASHRAE standards which were referenced in the Standard 180 Foreword.

“This document describes the minimum acceptable level of maintenance for commercial building HVAC systems. Other standards or guidance documents may establish more specific or rigorous requirements that apply to certain building..... This document is not intended to limit the level of service provided or recommendations made by a service provider. Those delivering HVAC maintenance are encouraged to consider and recommend energy conservation measures or technology improvements that would help maintain or increase thermal comfort, the energy efficiency of the HVAC system, and indoor air quality.”

“Much of the information that will be required to prepare the maintenance program that is mandated by this standard can most conveniently be obtained from the building commissioning (recommissioning or retro commissioning) documents. Although recommissioning is not a requirement of this standard, it should be considered where the commissioning data is either unavailable or outdated. Additionally,
ASHRAE Guideline 4, Preparation of Operating and Maintenance Documentation for Building Systems, and ASHRAE

Guideline 32, Sustainable, High-Performance Operations and Maintenance, may be helpful to practitioners seeking to develop or expand maintenance programs.”

Adrienne Thomle also pointed out ASHRAE Standard 100 Energy Efficiency for Existing Buildings. That standard also included directions on how to develop a maintenance program. She didn't believe that Standard 180 provided any detailed directions on how to establish a maintenance program and wondered whether trying to accomplish that goal in this working group didn't go beyond the scope of Standard 180. She suggested that these additional standards and guidelines might be referenced or accessed to help provide a more comprehensive understanding of the intent of Standard 180.

Dale Rossi pointed out that those comments were in the foreword to the standard and were not part of the standard itself.

Kristin Heinemeier, UC Davis EEC, added that from her comparison of her understanding of the IOU programs to the standard, net to gross, the program evaluations were focused only on the energy efficiency portion of the standard's goals, not on the whole standard and how a maintenance program should be developed and implemented. The IOU claimed savings work paper could outline what was required for how a plan needed to be developed and implemented. Then, the program evaluation should study how well the implementation followed how the plan should be executed. And, even though many decision-makers didn't state that energy efficiency was a top priority, codes and standards were the way that society encouraged those goals and helped communicate the benefits which could be achieved. It would be very helpful if the user guide made a strong case for why Standard 180 based maintenance would help achieve the three primary goals of the standard for the end users.

Pepper Hunziker wanted to confirm her understanding that the purpose for the user guide would be to inform how a standard 180 based program should be going forward.

Dale's understanding was that the standard was commonly misunderstood. The main purpose for a user guide was to explain what the standard was and how it was intended to be used.

Jeff Sturgeon, NCI, stated that most of the questions they get in their program training sessions regarding Standard 180 aren't from the implementers within the companies. Most questions came from technicians who wanted more guidance on what to do in certain situations. He thought the user guide ideally would need to meet the needs of both the maintenance program developers and implementers and technicians in the field who delivered the maintenance.

Charles Segerstrom, Segerstrom Energy Efficiency Consulting, wondered whether it was an over simplification to say that the guide needed to address soft skills, sales skills and the value proposition and management end of things, and the hard skills delivering the services with a wrench in hand. There was a tremendous amount that could be done pointing out the non-energy related benefits as well as energy savings, maybe more so. There were ways to present and sell this program as long as energy efficiency was along for the ride. Improved productivity, comfort and system reliability were all not directly energy related. He asked whether they were going to address the soft skills as well as the hard skills. If both, how should they proceed?

Dale Rossi reminded the group that Don Langston had already stated that those "hard skills" of delivering maintenance tasks had already been covered adequately by previous working groups. The effort for this group should be focused on the value proposition for Standard 180 and communication with the customer.

Kristin Heinemeier indicated that she chaired the Standard 180 Section 4 Subcommittee. Dale had indicated the user guide was needed because the standard was confusing. Maybe her group's effort could focus on how to make the standard less confusing. She thought much more emphasis needed to be placed on Section 4. If she had her way she'd have all of Section 5 repositioned as an annex or appendix to the standard. She stated her understanding that not all of the tasks in Section 5, maintenance tasks, was required. What was required was spelled out in Section 5

WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday April 14, 2015 Meeting Notes

Implementation. Her subcommittee was scheduled to meet April 15. She invited all members of this working group to attend and join her subcommittee effort.

Dale Rossi summarized what he understood Don Langston expected the user guide would provide.

- How to establish a maintenance program and plan
- How to establish performance objectives and condition indicators
- How to conduct the investigation required when unacceptable performance was uncovered or condition indicators identified unacceptable operation
- How should they report to the customer and the need for modification of the maintenance plan in order to meet the goals established in the plan

Kristin Heinemeier agreed and thought the user guide could include examples and templates like one for the structure and elements which should be addressed when producing a maintenance plan and statements which could be considered for performance objectives. She suggested a check-off list be provided for objectives and an expanded one for condition indicators.

Dale Rossi suggested that everyone put their ideas about user guide goals in writing and send those to himself and to Bob Sundberg so they could be reviewed at the next meeting.

Donald Prather, ACCA, suggested the structure for a user guide follow the flow and sequence of the guide itself. In Section 4, for instance, simply follow the numbered topics it covered with an explanation and examples. You could address different stakeholders when covering each topic, what their particular responsibilities were, why it was good for them.

Sandy Clark, GW Publishers, agreed and saw a lot of value with following the sequence within each section. Ideally, they could provide explanations for the role of each primary stakeholder which this user guide was intended to serve. That way each stakeholder could read an explanation for what each parties role and responsibilities were. If done right, you could have transparent language addressing all key stakeholder groups focused on overarching common goals.

Kristin Heinemeier felt very strongly that the user guide should have a “fill-in-the-blanks” approach. Check-off which of these you were interested in or choosing to include. She thought this would make the user guide far more useful.

Dale Rossi thought that implementing this standard within a utility program was easier than outside of a program because the program bound the end user to certain requirements and performance objectives in a contract. Performance objectives for energy efficiency and/or energy savings could be set as program requirements. The owner/responsible party could agree or choose to not participate in the program. Outside of a utility program, the responsible party was free to define whatever performance objectives it chose.

Mike Withers completely agreed with Dale’s statements. Within a utility program if spun correctly to the responsible party, by going with the program guidelines, the other comfort and health goals would follow as a natural outcome of the focus on energy efficiency and HVAC system operational improvement goals.

Dale Rossi added that one major element of the standard that was completely missing from current programs was reporting back to owners about what energy efficiency was being achieved through program participation. He was convinced that Don Langston wanted this group to address how service providers were going to report back to the responsible party. That reporting would provide a sales tool of the benefits of the program.

Kristin Heinemeier liked that approach but thought that obtaining data to report on energy efficiency improvement and energy savings was fairly complex. She thought it was a huge step change to gauge program success on meter readings and improvement. How could they ease people into this more advanced approach? She thought they should have



WHPA Goal 2: CQM Standard 180 User Guide Working Group Thursday April 14, 2015 Meeting Notes

people first introduced and become comfortable with a process and grade them on process outcomes. She preferred an approach that would list what they intended to deliver and whether that objective was delivered or not. Being grade against a checklist of the program requirements.

Dale Rossi disagreed. He believed people were signing up on the program for an outcome. They needed to be informed about whether it had been achieved or not rather than a simple list of tasks and whether they'd been done or not. You had to take into account recent legislative directives like AB802, SB350 and AB758 which were driving programs to deliver data and proof of their improved energy efficiency and results from improved HVAC operation. His understanding was that in the future these HVAC programs were going to be evaluated more around measured outcomes rather than deemed savings claims. A performance objective, the heart of the standard in his opinion, could list a goal for reduction in overall building kW usage by 5% or something similar. For thermal comfort goals could be set to not exceed occupied space setpoints by no more than X degrees a limited number of times in a year. Indoor air quality goals might state that CO2 levels were not to exceed some limit for so many hours or so many times in a year. Examples like those could provide measurable goals against which outcomes could be compared and maintenance program performance could be graded. He thought that the standard purposely avoided stating exactly how one must design a maintenance plan to achieve energy efficiency because every situation needed to accommodate specific buildings, locations and uses. Energy efficiency as a goal needed to be included but how it would be achieved was intended to be left to whoever developed the plan to determine how it would be achieved for that building and situation.

Pepper Hunziker wanted to be sure they were not prescribing what a utility programs should be doing but making sure the program was implementing Standard 180 the way that it was intended to be implemented.

Dale Rossi didn't think their task was limited to how current utility programs were designed. Rather, they should be addressing how Standard 180 should be implemented in utility programs. Not just how to improve current programs. One of the issues they needed to keep in mind was that utility programs needed to state clear goals and requirements. Standard 180 required a process for establishing goals around the three stated in its purpose. It did not state building specific detailed goals which were required for compliance with this standard. The standard allowed the responsible party to establish any goals they wanted. A utility program created a contract with the responsible party in order to achieve specific outcomes. Right now utility program goals were not being stated clearly, there was no feedback loop or reporting that would lead to program modifications.

Adrienne Thomle stated that she'd sent Dale Rossi the annex from Standard 100 which was related to developing a maintenance plan and which also called our Standard 180 as a reference.

Closing Comments/Adjournment

Dale Rossi encouraged all members to send in their working group goal statements and any other comments to himself and to Bob Sundberg for review, discussion and decision-making at the next meeting.

Dale Rossi suggested the next planning 1.5-hour meeting for Thursday April 21. Due to a work conflict of the chair, the meeting was later rescheduled for Thursday April 28.

The Chair adjourned the meeting at 11:35 am PDT.

* * * * *

ACTION Items listed on following page.

Action Items and Key Decisions (not referenced above)