

Commercial Maintenance Report "Operationalizes" Rooftop Unit (RTU) Tasks Executive Committee Sends Report to ANSI/ASHRAE/ACCA Standard 180 Committee

"Extraordinary dedication" is not too strong a term to apply to the [CQM Standard 180 Maintenance Task Working Group](#), which met almost every week for 13 months to dig deep into the details of RTU maintenance tasks. Twenty-nine WHPA organizations participated in the Working Group during this period, providing an extraordinary diversity of talent and perspective.

The Working Group, led by Dale Rossi of Field Diagnostics Services (FDSI), produced the 39-page report scrutinizing ANSI/ASHRAE/ACCA Standard 180 Table 5-22, which relates to DX packaged/rooftop equipment. The report also explains tasks identified in the Table and provides additional guidance for technicians performing maintenance related to these tasks.

[Click here](#) to view the report.

The report was presented to the WHPA Executive Committee on June 11 by Dale Rossi and Commercial Quality Maintenance (CQM) Committee Chair Don Langston of Air Conditioning Contractors of America (ACCA). The Executive Committee voted unanimously to adopt it as an official WHPA work product and send it to the ANSI/ASHRAE/ACCA Standard 180 Committee that is being re-activated. In addition to being the basis for additional revisions to the Standard, the report has triggered the development of an accompanying User Guide.

Don offered some perspective:

"Standard 180 had good generalized direction on tasking. However some tasks were redundant, so the Working Group combined them. We also provided more detailed instructions on tasks - such as lockout/tagout - and even proposed new tasks altogether. One of the biggest "ah ha" moments was when we realized that there was no language in Standard 180 on airflow!"

Dale identified two future activities of the Working Group:

- Table 5-22, Task n (Check Refrigerant System) - estimated completion in October, 2014
- Table 5-12, Tasks a-k (Economizers) - estimated completion in May, 2015



Don Langston, Chair of CQM Committee



Dale Rossi, Chair of CQM Std. 180 Maintenance Task Working Group



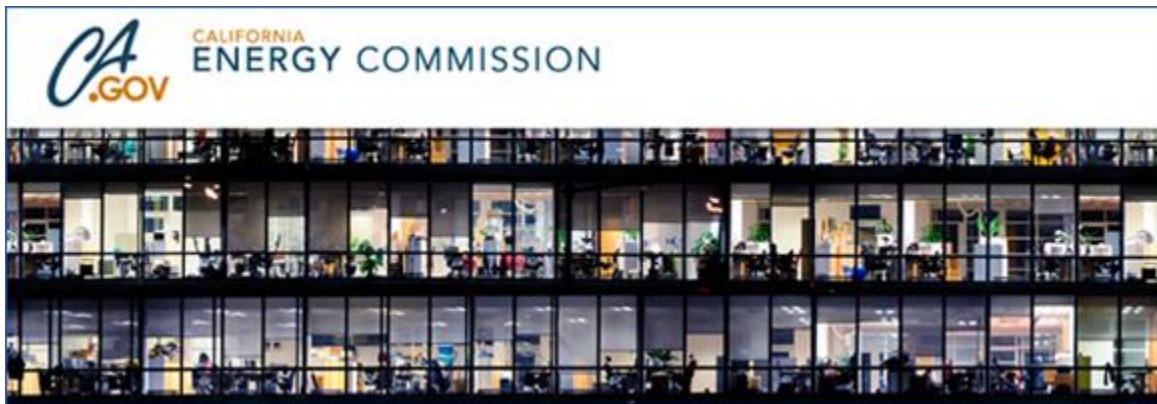
Bob Baker has a unique perspective on the [Maintenance Task Report](#), based on his dual roles as Co-Chair of the Executive Committee that received and adopted the report and also as a WHPA representative from ASHRAE. The "street-level" detail of the 39-page report will be used as input to both Table 5-22 of Standard 180 and also for a user guide to support the Standard.

Bob praised the report, saying "User guides add significant value to Standards. This will be a powerful addition to the Standard." Baker continues, "The input in this Working Group came from the people on the streets doing this work every day. That is the level of work that does not often get into [ASHRAE] Standards. Standards are often criticized as overly academic."

The report is being forwarded to the Standard 180 Committee, which is re-forming.

New California Title 24 Standards Go Into Effect on July 1

WHPA Influences Requirement for Rooftop Unit Field Diagnostics



California's [Building Energy Efficiency Standards](#) (AKA Title 24) are updated on an approximately three-year cycle. The 2013 Standards update the current 2008 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

July 1, 2014 is the delayed implementation date for the 2013 standards that normally would have gone into effect January 1, 2014. There was a six-month delay due to software-related issues that delayed the implementation. The 2013 standards will be in effect until January 1, 2017.

In 2013, a major energy efficiency win came with the Title 24 adoption of economizer (provides cool outdoor air to reduce the time the HVAC compressor has to run) fault detection and diagnostics (FDD) requirements for nonresidential rooftop HVAC units 4.5 tons and larger.

The WHPA formed a 2013 Title 24 Rooftop Unit (RTU) Working Group, reporting to the [FDD Committee](#) (officially known as Onboard/In-Field Fault Detection and Diagnostics Committee). Dr. Kristin Heinemeier of the Western Cooling and Efficiency Center (WCEC) is the chair of both the Committee and the Working Group.

The WHPA FDD Committee helped develop the measure that was adopted by the CEC. The importance of this standard has been underscored through research sponsored by the CEC that found over 60% of economizers analyzed were either not working as intended or not working at all. Major HVAC manufacturers supported this measure.

Based on the California FDD requirement, the International Energy Conservation Code (IECC) of the International Code Council stepped up and adopted the Title 24 measure for its national nonresidential code that goes into effect in 2015. Previously, California was alone in requiring FDD for this equipment.

The adoption in California and by the IECC serves as a *de facto* national standard for all rooftop units, not just in California. This makes it easier for manufacturers to meet a uniform national requirement rather than supplying units

that might have different requirements for a given state.

Members of the WHPA FDD committee also proposed and organized a special ASHRAE project committee (SPC207) to review national ASHRAE standards for methods of testing to ensure credibility for the FDD technical requirements.

The 2016 Title 24 standards revision process is on its scheduled 3-year update cycle and is expected to become the new enforceable building standard January 1, 2017.

Proposals to add to 2016 Title 24 or revise existing parts of the standards are now being reviewed through public comments in a series of workshops and webinars. Information on the Title 24 revision process and opportunities for public participation can be found [here](#).

Tom Garcia Reflects on 5 Years with the Compliance Committee Retiring as Chair; Bob Barks Takes the Helm

By Judy Key Johnson

We sat down with Tom Garcia, a member of the [Compliance Committee](#) since it was established in 2009, and chair since fall 2010, as he reflected on accomplishments and future plans. Tom is a WHPA registrant representing CALBO (California Building Officials), an organization promoting public health and safety in building construction through responsible legislation, education, and building code development.



Tom Garcia, retiring Chair of Compliance Committee

INTERVIEWER: Looking at the big picture, what has the Compliance Committee accomplished?

TOM GARCIA: This committee has been able to establish a strong connection between all players in the HVAC industry including the California Energy Commission (CEC), the Contractors State License Board (CSLB), HVAC contractors' associations, HVAC equipment manufacturers and distributors, California building official organizations, utilities and others.

INTERVIEWER: What are some specific work products and actions from the Committee?

TOM GARCIA:

1. One of our first activities was to simplify some of the permitting forms that the CEC had developed, and create an alternate form that was much easier for contractors and building departments to use. These forms have been in use for several years now, and the feedback has been very positive.
2. Another early project was to gain the buy-in from CSLB to provide staff for sting operations to find contractors who were not pulling the required permits. This has helped make the contractors more aware that they do need to get permits.
3. A current project is providing input to a vendor that is developing software to make online permitting available for contractors. This software is now being piloted with several jurisdictions in California.

INTERVIEWER: What is the Committee working on in 2014?

TOM GARCIA: We are working on WHPA SMART Goal 4, providing input to the CEC on the research plan to quantify the number of units being installed with and without permits, and determining the energy savings with and without permits.

The Committee will also be developing a white paper analyzing the pros and cons of serial number tracking as a means to improve compliance this year.

Bob Barks (CALBO) is incoming Chair of the Compliance Committee, and is also representing CALBO in the WHPA. Bob is employed by Interwest Consulting Group.



Bob Barks, incoming Chair of Compliance Committee

INTERVIEWER: What background are you bringing to this position, Bob?

BOB BARKS: I have 30 years of experience in industrial refrigeration and commercial HVAC as a project designer and/or project manager. I spent 15 years on the board of the Central Valley Chapter of RETA (Refrigeration Engineers and Technicians Association), four years on the National Board of RETA, was the founding editor of the RETA Technical Report, and chaired the RETA Technical Committee for the national board.

For the past seven and a half years I worked as a certified plans examiner for the County of Madera and have recently joined Interwest Consulting Group as a plans examiner in their Fresno, CA office. I have been on the CALBO energy committee for the past year and am representing CALBO in the position of Chair of the Compliance Committee.

INTERVIEWER: What are your thoughts on compliance?

BOB BARKS: My background is working with some of the largest energy users in California, people spending hundreds of thousands of dollars a month on energy. The motivation of these building owners was to control energy costs, which resulted in saving energy. Now I am seeing this emphasis on getting energy costs under control coming to residential and commercial. My view is that compliance has a close tie to business interests, in saving the homeowner or business owner money by reducing energy usage. The more we can make energy conservation a benefit to consumers and industry, the more willing they will be to listen and comply with energy requirements.

Most Popular Committee/ Working Group Webpages

Webpage	Visits	Visitors
Commercial QM Committee	841	131
Fault Detection and Diagnostics Group	758	93
Compliance	448	123
Executive Committee	329	98
Plan Revision Working Group	191	59
Council of Advisors	186	65
Workforce Education & Training Committee	149	56
Residential QI	148	56
Climate Optimized	146	52
Whole Building Education Committee	98	31

March 2014 - May 2014



Three Chairs Named

The [Commercial Quality Installation \(CQI\) Committee](#) is back in action, after a hiatus of a couple years. Robert (Rob) Falke, President of National Comfort Institute (NCI), was recently named as Chair.

A new Working Group, [Regulatory/IOU Notification & Feedback](#), is starting up to address 2014 SMART Goal 5. Mike Halloran of AHRI is the Chair.

As reported in the above article on the [Compliance Committee](#), Robert (Bob) Barks (Interwest Consulting Group) is replacing Tom Garcia as Chair of the Compliance Committee.

The Committee and Working Group pages of the WHPA website are widely viewed, with more than 750 unique visitors in the past three months to the 10 most popular pages. All pages are easily accessible from the Home page. [Click here](#) to view.

Committee and Working Group Chairs can learn more about the resources available to them, including posting information on the website, from the [Tools and Templates](#) page of the website.

A list of [California Utility HVAC Incentive Programs](#) has been added to the WHPA website. Links are provided to residential and commercial programs offered by Pacific Gas & Electric, Southern California Edison, San Diego Gas & Electric, and SoCal Gas.

The Western HVAC Performance Alliance was established in 2009. About 200 organizations in 21 stakeholder categories are working together to help transform from the residential and small commercial HVAC industry to ensure that technology, equipment, installation and maintenance are of the highest quality to promote energy efficiency and peak load reduction. In this role the WHPA provides input to California Investor-Owned Utilities. For more information, contact info@performancealliance.org.