

RCM NEWS

RCM News for August 2015

A newsletter for Resource Conservation Managers in the Northwest

In this issue:

Building Controls
Energy Efficiency Upgrades
Energy Monitoring
Higher Education Survey
HVAC Systems
Maintenance Programs for Energy Efficiency
Thermostats – Smart or Connected?
Upcoming Events & Training Opportunities
Resources for You

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Building Controls

Human error is often the cause of building control problems, as discussed in "[Are Your HVAC Controls Helping or Hurting?](#)" written by Janelle Penny in the August 2015 issue of *Buildings* magazine. Tips are given to make sure that your building's controls are working optimally.

Energy Efficiency Upgrades

Three energy and building managers answer questions about energy improvements at their facilities in [Energy Upgrades Roundtable: Managers Discuss Energy Efficiency Challenges](#), written by Dan Hounsell, Editor, and appearing in the August 2015 issue of *Facility Maintenance Decisions*.

Energy Monitoring

"[How Real-Time Energy Monitoring Saves Energy](#)" is a case study of the San Mateo County Community College District in California, in the August 2015 issue of *Building Operating Management*. The District is upgrading their energy monitoring system to include real-time energy monitoring. This will allow them to conduct continuous commissioning.

Higher Education Survey

In a survey of higher education facility managers, commissioned by Schneider Electric and the Alliance to Save Energy, the majority responded that organizational barriers were the largest obstacle to achieving efficiency goals. "[School Organizational Barriers Inhibit Energy Efficiency Investments](#)", written by Linda Hardesty in the August 5, 2015 issue of *Energy Manager Today*, briefly summarizes the survey's results, and includes a link to a 39-slide presentation. Other issues addressed in the survey touch upon energy efficiency priorities, impact of an aging workforce and aging buildings, and energy training and education.

HVAC Systems

A three-part article on HVAC systems in the August 2015 edition of *Building Operating Management*, written by Dave Callan, describes all-air variable air volume (VAV) systems and five alternative options. VAV systems evolved during the 1970s as a way to reduce energy use. They continue to be the norm due to meeting most HVAC requirements such as cost, comfort, and indoor environmental quality. However, in part because of the need for better humidity management, alternative systems such as dedicated outdoor air systems and underfloor air distribution may offer better all around characteristics for your building.

Part 1: [Evolution of VAV Systems, and Dedicated Outdoor Air Systems as Alternative HVAC Strategy](#)

Part 2: [Understanding Displacement Ventilation, Underfloor Air Distribution as Alternative HVAC Strategies](#)

Part 3: [Understanding Radiant Heating/Cooling and Demand-Control Ventilation as Alternative HVAC Strategies](#)

Maintenance Programs for Energy Efficiency

The four-part “Ask An Expert” column in the August 2015 issue of *Building Operating Management* features John Lembo answering basic questions about improving energy efficiency through maintenance programs. He discusses four drivers for a successful program, how to deal with old equipment, and which building systems are the biggest energy hogs and thus need the best maintenance program.

Part 1: [Advice To Improve Maintenance Focused On Energy Efficiency](#)

Part 2: [Quality of Maintenance Programs and Their Effect on Energy Efficiency](#)

Part 3: [Best Approach To Take With Antiquated Equipment](#)

Part 4: [Building System With Most Negative Effect on Energy Efficiency](#)

Thermostats – Smart or Connected?

“[Smart Thermostats Not the Same as Connected Thermostats](#)”, written by Linda Hardesty for the August 24, 2015 issue of *Energy Manager Today*, briefly describes the confusing way that thermostats are labeled. In an IHS report, “smart” is used for thermostats that automatically make adjustments or sense human presence, and “connected” simply means connected to the internet.

Upcoming Events & Training Opportunities

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- What You Should Know About Financing Energy Efficiency Upgrades – Sept 1
- Benchmarking Water/Wastewater Treatment Facilities in Portfolio Manager – Sept 3
- Portfolio Manager 101 – Sept 23
- Portfolio Manager 201 – Sept 29
- Portfolio Manager 301 – Sept 30

[Click here for more webinars and information](#)

US EPA

E3T Showcase Webinars

- High Performance Manufactured Homes – Sept 10 online
- Mogul Base LED Lamps for Retrofits – Sept 24 online
- Easily commissioned lighting controls – Oct 22 online (registration not yet open)

[Check back here for registration information](#)

WSU Energy Program

Portland General Electric Seminars and Webinars

Portland General Electric offers online webinars and paid workshops open to everyone, and seminars and workshops free of charge to its commercial and industrial customers. All classes in Oregon or online.

- Intro to HVAC Systems – Sept 15 in Wilsonville
- Advanced HVAC Systems – Sept 16 in Wilsonville
- Variable Frequency Drives – Sept 17 in Wilsonville
- The New Lighting Revolution – LEDs & Controls
 - Sept 22 in Salem
 - Sept 23 in Portland
- High Bay & Outdoor Lighting – Sept 24 in Portland (morning)
- Lighting Trends Lunch and Learn – Sept 24 in Portland (lunchtime)
- Saving Energy through Operations & Maintenance – Sept 29 live webinar

[PGE Energy Education Classes](#)

Portland General Electric, Energy Trust of Oregon, NEEA, BetterBricks

BOC Diagnostic Tools Series

- Diagnostic Tools 1: Tool Kit Stories from BOC Graduates – Sept 17 online
- Diagnostic Tools 2: What's Your Favorite Diagnostic Tool? – Oct 22 online

[Click here for information](#)

BOC

APEM 2015 Fall Forum:

“Tuning, Tracking and Troubleshooting: Digital Controls for Modern Buildings” looks at what you need to know about building and lighting controls.

- Sept 18, 2015 in Wilsonville, OR

[Click here for more information](#)

APEM

Building Operators Certification

BOC Level I certification is 74 hours of training and project work in building systems maintenance. Level II certification is 61 hours of training and elective coursework in equipment troubleshooting and maintenance. Classes usually meet one or two full days a month over a period of four to six months.

All dates below are for the first class.

- Washington State
 - Level I – Sept. 23 in Renton (register now!)
 - Level II – Oct. 21 in Renton (register now!)

[Click for BOC Washington State information](#)

- Oregon
 - Level I – Sept 24, 2015 in Portland
 - Level II class coming in winter 2015/2016

[Click for BOC Oregon information](#)

Building Operators Certification

AEE (Association of Energy Engineers) Real-time Online Seminars

Webinars and live interactive courses you can take from your computer. Programs are generally two to three hours long, over a period of days. Topics include energy auditing, lighting controls, HVAC systems and much more. Visit their website for a complete list:

<http://www.aeeprograms.com/realtime/>.

Resources for You

Better Buildings Workforce Guidelines (BBWG)

In order to achieve a more consistent and comparable high-quality workforce for four commercial building energy-related jobs (Building Energy Auditor, Building Commissioning Professional, Energy Manager, and Building Operations Professional), the National Institute of Building Sciences Commercial Workforce Credentialing Council (CWCC) developed voluntary national guidelines for each position. The guidelines identify job tasks, required and optional knowledge and skills, as well as examination outlines for potential credentials. A two-page [fact sheet](#) describes the reasoning and the process for the endeavor. To view the detailed guidelines, called [Job Task Analyses](#), you must register with the CWCC.

Do you have newsletters, websites and links to share? Do you have RCM questions?

RCM News is always looking for interesting information, tips and resources to share with other resource conservation managers. Our goal is to increase your success by sharing what you and your colleagues are doing – with energy efficiency measures, problem-solving, communication, data tracking, presentations, and more. In addition, WSU Energy Program can help find solutions to your RCM program's technical and programmatic questions. [Email Karen J](#) to share and ask!

Energy Events Calendar

<http://www.energyexperts.org/TrainingEducationandEmployment/EventsCalendar.aspx>

Washington RCM Support

The Washington State University Energy Program provides RCM support. Check out the “RCMx” website: <http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx>. We appreciate any feedback on this site and would also appreciate items to add to our resources, such as tools, examples of policies and job descriptions.

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Previous issues of RCM News may be viewed at <http://www.energy.wsu.edu/PublicationsandTools.aspx> (click on Resource Conservation in the right hand column).

We welcome comments or ideas for articles. Please send to Karen Janowitz - janowitzk@energy.wsu.edu