

RCM NEWS

RCM News for February 2016

A newsletter for Resource Conservation Managers in the Northwest

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Boilers and Water Heaters

“Product Focus: Boilers and Water Heaters”, written by Dale Kondik for the February 2016 issue of *Facility Maintenance Decisions*, highlights worthwhile maintenance practices and energy conservation measures for boilers and water heaters. Various strategies are necessary for boiler optimization, including continuous monitoring of fuel-air mixture and modulating the burner at a lower level. Although burner replacement is expensive, improved technology offers lower payback periods.

Part 1: [Maintenance Strategies for Boilers and Water Heaters](#)

Part 2: [Boiler Optimization to Improve Energy Efficiency](#)

Part 3: [New HVAC Equipment and Technologies Improve Energy Efficiency](#)

Part 4: [Sidebar: Fine-Tuning the Energy-Efficiency Process in HVAC Equipment](#)

The Bullitt Center

An article in *High Performance Building* magazine written by Jim Hanford, Marc Brune, Christopher Meek, and Michael Gilbride, titled “[Bullitt Center: Seattle, Wash](#)”, examines the success of the Bullitt Center office building, two years after opening its doors to operations. Energy use intensity is running below original estimates, and the solar photovoltaic array provides enough energy to make the building net positive energy. This success stems from energy efficient lighting and controls system, mechanical systems, water-to-water heat pumps, and stringent control of plug loads, to name a few.

Daylighting

A three-part article in the February 2016 issue of *Building Operating Management*, written by Greg Zimmerman, Executive Editor of the magazine, discusses implementing a daylight controls strategy. Daylight controls can be simple, such as a stand-alone system that dims electric lights in proportion to daylight entering the space. Complex systems can include zones, can finely tune and adjust light levels

according to set protocols, and be integrated with other building systems. Placement of sensors must be carefully thought out for the system to work well.

Part 1: [Using Daylighting to Maximum Effect](#)

Part 2: [Daylighting System Can Range from Very Simple to Complex](#)

Part 3: [Tips for Optimizing Controls to Make the Most of Daylight](#)

Parking Garage HVAC

There is a lot of low hanging fruit to be picked to reduce energy costs at parking garages, according to "[Parking Garage HVAC Upgrades Can Drive Big Savings](#)", written by Carl Weinschenk for the February 16, 2016 online edition of *Energy Manager Today*. In addition to lighting retrofits, changing HVAC fans to variable speed drive can reduce energy use and cost. This can make a large difference under new regulations for ventilation in parking structures in West Coast states.

Planned Maintenance

In "Management Insight: Andrew Gager", a two-part article in the February 2016 issue of *Facility Maintenance Decisions*, Mr. Gager discusses reevaluating your facility's preventive maintenance plan in order to maximize benefits such as reduced down time for systems and using the most appropriate maintenance staff for the job. Assessment of the current maintenance system is critical, and can lead to cost-effective changes such as shifting timing of planned maintenance, removing redundant maintenance procedures, and adding procedures where it counts.

Part 1: [Maximizing Maintenance: Assessing Non-Value Added Activities](#)

Part 2: [Reassessing of Preventive Maintenance Responsibilities Produces Huge Savings](#)

Window Films

"[Guest Commentary: Can Your Windows Do This?](#)", written by Steve DeBusk, appears in the January-February 2016 issue of *Business Energy Magazine* (note that you need a subscription account to access the article, but it is free). Installing certain high-performance low-e window films can not only reduce glare and control solar heat gain, it can also add to the insulating capabilities of the existing windows. Window films can also allow more daylight in than blinds or curtains.

RCM Webinar

Thank you to all who completed the RCM newsletter survey to identify the next topic for an RCM webinar. The majority of respondents indicated interest in building envelope, leaks and heat loss. The webinar will focus on these issues, and also touch upon diagnosing problems with thermographic cameras, and occupant comfort and indoor air quality. The webinar will be scheduled for mid-late May – keep a watch for the exact date in the next monthly RCM News.

Upcoming Events & Training Opportunities

IFMA Seattle Education Symposium

The Seattle branch of the International Facilities Management Association offers an education symposium on trends and practices in facility management. Event includes a trade show and a session featuring the Smart Buildings Center Tool Lending Library.

- March 10 at the Lynnwood Convention Center, WA

[Click here for information](#)

Northwest Energy Efficiency Council

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Benchmarking Water/Wastewater Treatment Facilities – Mar 3
- Financing Energy Efficiency Upgrades – Mar 8
- Energy Star and Green Building Rating Systems – Mar 10
- Portfolio Manager 101 – Mar 22
- Portfolio Manager 201 – Mar 23
- Portfolio Manager 301 – Mar 24
- Tackling WaterSense – Outdoor Systems – Mar 30
- Ask the Expert – an open Q&A session every Wednesday at 9:00 AM Pacific time

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

US EPA

E3T Showcase Webinar

- Demand Response Needs You! BPA and Distributed Energy Resources – March 9 online

[Click here for information and registration](#)

WSU Energy Program, BPA

Building Operators Certification Technical Webinars

- Building Tool Diagnostics #2: Managing your Plug Loads – Mar 16

[Click here for more information](#)

Building Operator Certification

Energy Management Information Systems (EMIS): Enabling Whole-Building Approaches to Energy Efficiency

Oregon APEM 2016 Spring Forum

- March 18, 2016 in Portland

[Click here for information](#)

Oregon Association of Professional Energy Managers

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 – March 30, 2016 in Seattle
 - Level I – May 23, 2016 in Silverdale
 - Level I – Sept 28, 2016 in Renton
 - Level I – Fall 2016 in Moses Lake
 - Level II – Fall 2016 in Tacoma
- Oregon
 - Level I – April 7, 2016 in Portland
 - Level II – March 2, 2016 in Portland

[Click for BOC Washington State information](#)

[Click for BOC Oregon information](#)

Building Operators Certification

Northwest Facilities Expo

Broad-based facilities event with an emphasis on green buildings.

- April 13-14 in Tacoma

[Click here for information](#)

Energy Facilities Connections Conference

Registration for the 12th annual conference is now open! Spend 2 ½ days in hands-on workshops, classroom presentations, and networking.

➔ Check out the agenda preview – click on the “Agenda” link on the conference website.

- May 3-5, 2016 in Leavenworth, WA

[Conference website and registration](#)

WSU Energy Program Plant Operations Support Consortium

Resources for You

Energy Efficiency Meets Realty TV

Promoting energy efficiency improvements in commercial and industrial buildings has just been made more exciting through the U.S. Department of Energy’s innovative [Better Buildings Challenge SWAP](#). Filmed in reality show fashion, season one pits Whole Foods versus the Hilton Hotel in San Francisco. Watch teams from each company walk through the other’s facility looking for energy savings opportunities in HVAC, kitchen refrigeration, cooling towers, and lighting. Read some of their [recommendations here](#). Who would believe there is a reality show you could watch at work?

Battle of the Buildings Bootcamp 2016

EPA’s ENERGY STAR Program is once again holding a nationwide building competition to help agencies save energy and water in their buildings. This year, organizations who enter the [ENERGY STAR National Building Competition: BOOTCAMP](#) will have just 90 days to cut energy use and prove themselves the winning competitor. Up to five buildings may be selected, and energy data must be benchmarked in Portfolio Manager prior to the 90 days. Registration is open from May 17 to July 17. BOOTCAMP runs from September 1 through November 30.

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!

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

