

RCM News for January 2017

A newsletter for Resource Conservation Managers in the Northwest

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Energy Efficiency

"Energy Efficiency" is a two-part article published in the December 2016 issue of *Building Operating Management*, written by Ian M. Shapiro. More permanent energy efficiency improvements can be made instead of swapping out, for example, a luminaire or piece of HVAC for a higher efficiency product. A drawback of a simple replacement is that a less-efficient item can later replace the efficient one. Examples of more permanent changes include reducing the number, and placement, of lighting fixtures, and reducing the stack effect in buildings. Carefully evaluating a building with an eye on current standards can determine the best load reduction opportunities. The article also contains a graphic on how to reduce stack effect.

Part 1: 3 High-Performance Energy Efficiency Strategies To Reduce Energy Permanently

Part 2: Reducing Stack Effect, Replacing Boilers With Ductless Heat Pumps

HVAC

"HVAC" is a three-part article published in the January 2017 issue of *Building Operating Management*, written by Conrad Kelso and Phil Lebrun. Determining the long-term costs of new HVAC equipment can encourage management to purchase before the old equipment fails. Reacting to equipment failure without a plan in place can lead to a less-energy efficient replacement. There are several ways to evaluate replacing or upgrading equipment, including simple payback, lifecycle cost analysis, and building energy modeling.

Part 1: How To Calculate Life-Cycle Costs and Justify Energy Efficient HVAC Upgrades

Part 2: Software Tools Help Forecast HVAC Operating Costs

Part 3: INFOGRAPHIC: FMs Report On The State of Their HVAC Equipment

LEED

"LEED" is a two-part article published in the December 2016 issue of *Building Operating Management*, written by Amanda Sawit. LEED v4 is the newest and currently only iteration for new LEED registration, and it includes an update to the LEED operations and existing buildings requirements. Version 4 includes more emphasis on demand response, advanced energy metering, and a stronger approach to water efficiency and materials.

Part 1: Performance-Based Approach, Flexibility Highlight Big Changes to LEED v4

Part 2: Changes To Advanced Energy Metering, Demand Response Prioritize Energy Effeciency in LEED v4

Lighting

"Suppliers Perspective: Lighting" is a three page article, written by Dave Lubach, Associate Editor, in the January 2017 issue of *Facility Maintenance Decisions*. LEDs have become the preferred lighting for many applications, including commercial buildings, education facilities, and healthcare facilities. The large number of LED options can provide security lighting, comfort lighting, more-controllable outdoor lighting, and better lighting for health concerns.

Part 1: LED Technology: Market Watch

Part 2: Lighting Needs for Education Facilities

Part 3: Matching Lighting Needs with Commercial Applications

Lighting Controls

"Lighting Controls" is a two-part article published in the December 2016 issue of *Building Operating Management*, written by Lindsay Audin. Cost-effectiveness and incentives can help when deciding which lighting controls to choose for a building. Newer controls may have additional benefits with color tuning and networked lighting systems. However, increased efficiency of luminaires makes energy effectiveness of controls less significant, yet new code regulations often require them. The article also takes a look at tubular LEDs.

Part 1: Lighting Controls Upgrades Done Right Mean Energy, Cost Savings

Part 2: How LEDs, TLEDs, and New Regulations Can Aid Lighting Control Upgrade Strategies

Upcoming Events & Training Opportunities

Better Buildings Webinars

- Made to Fit: How Paid-from-savings Projects can Work for Small Organizations Too Feb 7, 2017
- Zero Energy Buildings: From Dream to Reality in Public and Private Sectors March 7, 2017

Click here for more information

Better Buildings, U.S.DOE

Building Operator Certification Free Informational Web Cast

Feb 15, 2017

Click here for more information

Building Operators Certification

Building Operator Certification Technical Webinar Series

- New Technologies for Lighting Retrofits and Upgrades Feb 15, 2017
- Operational Improvements using Building Automation Systems Mar 22, 2017

Click here for more information

Building Operators Certification

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Portfolio Manager 101 Feb 21, 2017
- Portfolio Manager 201 Feb 22, 2017
- Portfolio Manager 301 Feb 23, 2017
- Ask the Expert Every Wednesday at 9:00 AM Pacific time

Click here for more webinars and information

US EPA

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
 - o Level I March 29, 2017 in Seattle
 - o Level I Sept 26, 2017 in Renton
 - o Level I Oct 24, 2017 in Olympia
 - o Level I Oct 25, 2017 in Everett
 - o Level II March 2, 2017 in Seattle

Click for BOC Washington State information

- Oregon
 - o Level I March 8, 2017 in Pendleton
 - Level I Sept 6, 2017 in Portland

Click for BOC Oregon information

Building Operators Certification

2016 Oregon APEM Winter Forum

"Internet of Things and Energy Efficiency"

March 17 in Clackamas, OR

Click here for more information

Oregon Association of Professional Energy Managers

Energy/Facilities Connections Conference

It's that time of year again! Registration for the 13th annual conference is now open! The theme of this year's conference is *Success through Synergy*.

May 2-4, 2017 in Leavenworth, WA

Click here for information

WSU Energy Program Plant Operations Support Consortium

Resources for You

Building Operator Certification Bulletin

The <u>BOC Bulletin</u> is a newsletter published for BOC graduates and their employers, yet it is available online for everyone. The newsletter is full of useful information on topics such as how to use the BetterBricks Building Symptom Diagnosis Tool, low wattage T8s, how to engage occupants, and lots more.

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 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

