RCM NEWS

RCM News for February 2017

A newsletter for Resource Conservation Managers in the Northwest

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While every URL in RCM News is checked for accuracy prior to distribution, URLs may change, and servers may temporarily fail to connect to working URLs.

Datacenters

"The Move to DC Power in the Datacenter", in the December 19, 2016 issue of Energy Manager Today, written by Carl Weinschenk, discusses possible future changes to the electricity used by datacenters. Converting between alternating current (AC) and direct current ((DC) creates waste of electricity. And this conversion can take place a few times, from when electricity is delivered to its use. The expense to convert equipment that makes AC/DC conversions unnecessary would be high, yet another advantage is the increase in data centers fueled by solar energy, which produce DC.

HVAC

"How Much Energy Is Your HVAC System Wasting?", written by Janelle Penny, appears in the 12/29/2016 issue of *Buildings* magazine. Your HVAC system may be wasting energy because of things that can be easily fixed, such as cleaning filters or coils, and making sure the ventilation rate is correct. Regular inspections are important. Review the four options for advanced ventilation controls to see which may work for your system.

Lighting

A four-part article in the February 2017 issue of *Building Operating Management*, written by Farhad Rahim and Gabe Guilliams, explores the non-energy benefits of LEDs that may be advantageous for facilities. LED technology is such that LED tape can fit nooks that previous lighting tape could not. Advanced LED controls have the ability to control the direction of beam angles, as well as controlling or changing color. Two case studies round off the last sections of the article.

Part 1: 4 Benefits of LED Lighting Beyond Energy Efficiency

Part 2: Further LED Benefits: Enhanced Color, Flexibility of LED Light Sheets

Part 3: Media Research Center Chooses LEDs For Flexibility, Simple Maintenance

Part 4: LEDs Illuminate Beautiful "Moving Room" At NYC Art Gallery

Water Conservation

"<u>Water Conservation: Managers Offer Insights and Strategies</u>", written by Dan Hounsell and appearing in the February 2017 issue of *Facility Maintenance Decisions*, is an interview with three managers who implemented water conservation upgrades in their agencies. Topics they answered include locating the sources of their facilities' water waste, developing the project, quantifying savings, types of problems, and lessons learned.

Upcoming Events & Training Opportunities

Better Buildings Webinars

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

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Fix a Leak with WaterSense March 8
- Portfolio Manager 101 March 28
- Portfolio Manager 201 March 29
- Portfolio Manager 301 March 30
- Ask the Expert Every Wednesday at 9:00 AM Pacific time

Click here for more webinars and information

US EPA

Improve Your Score Workshop

Assistance on improving your Portfolio Manager score. Free to PGE customers. Eligible customers od Pacific Power, NW Natural, Cascade Natural Gas, and Avista Gas may be sponsored by Energy Trust of Oregon

March 16, 2017 in Portland

Click here for more information

Portland General Electric

Leverage Big Energy Savings with Advances in LED Lighting

• March 16, 2017 live webinar

Click here for more information

Forester University

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

Building Operator Certification Technical Webinar Series

- Operational Improvements using Building Automation Systems March 22, 2017
- Building Envelope Leakage/Infiltration April 19, 2017

Click here for more information

Building Operators Certification

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
 - 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

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

NW Clean & Affordable Energy Conference

May 4-5, 2017 in Boise, ID

Click here for information

NW Energy Coalition

Better Buildings Summit

May 15-17, 2017 in Washington, D.C.

Click here for information

U.S. Department of Energy

Resources for You

Diagnostic Tools

The Smart Building Center's Tool Lending Library has some <u>new additions</u>. These include thermal imaging cameras, which can help inspect electric motor and conveyer belt bearings, gas leaks, insulation damage, and argon gas escaped from double pane windows, conductivity Meters for cooling towers, and tools to assess the performance of glazing systems are available for loan also. In addition to the tool list and information on how to borrow a tool, the lending library also has videos and application notes to get you up to speed on using the equipment.

VRF Basics

Do any of your buildings have a variable refrigerant flow (VRF) system or ductless heat pump? Might one be installed in the future? "Back to basics: VRF systems" has a very good explanation of VRF systems, including two-pipe and three-pipe diagrams, and pros and cons. While this article, written by Alex Jankovic in the 9/27/2016 issue of *Consulting-Specifying Engineer*, could be listed in the top section of RCM News, instead it is being considered a resource. Bookmark it or print it out for sharing and future use.

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

