RCM NEWS

RCM News for January 2018

A newsletter for Resource Conservation Managers in the Northwest

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Building Automation Heat Pumps New Lamp Efficacy Standard Upcoming Events & Training Opportunities Resources for You

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Building Automation

A four part article on building automation, written by Rita Tatum for the January 2018 issue of Building Operating Management, discusses building automation systems (BAS) and their reduced performance over time. Optimizing the BAS system periodically (building commissioning) can have a return on investment of less than one year. Optimization can include advanced analysis of the system, or visual inspection by staff. Ten common corrections for BAS optimization are listed at the end of the article.

- Part 1 How To Optimize a BAS To Improve Efficiency
- Part 2 Existing Building Commissioning: Analyzing and Improving BAS Performance
- Part 3 BAS Optimization Combines Human Expertise, Automation
- Part 4 <u>10 Ways BAS Optimization Improves Performance, Efficiency</u>

Heat Pumps

The HVAC article in the January 2018 issue of Building Operating Management, written by Ian Shapiro, is a three-part look at the increased use of air source heat pumps (ASHPs) and variable refrigerant flow (VRF) heat pumps, which use electricity and not fossil fuels. Their use is increasing in all types of buildings, including high-performance, with incentives coming from many state and utility energy programs. Benefits include room-by-room temperature control and no more heat loss from boilers and piping. (WSU note: Heat Pumps using carbon dioxide as the refrigerant are available though uncommon.)

Part 1 – Are Air Source Heat Pumps Worth A Closer Look?

- Part 2 Know The Pros and Cons of VRFs and Air Source Heat Pumps
- Part 3 How To Achieve High Efficiency With Air Source Heat Pumps

New Lamp Efficacy Standard

As of January 26, 2018, a new DOE standard will take effect that mandates increased efficacy requirements for linear fluorescent T8 lamps manufactured on or after that date. This change will have the largest impact on four-foot 32-watt T8 lamps. Nearly 70% of the 32W lamps sold last year in the Northwest will not comply with the new standard. This is an opportunity to switch to energy-efficient low wattage T8 lamps, which are standard compliant and come in 28-watt and 25-watt versions. You can immediately cut costs by up to 23 percent, reduce maintenance trips up the ladder, and enjoy longer lamp lifetimes at prices comparable to 32-watt T8s without sacrificing light quality. Use this simple <u>savings calculator</u> from BetterBricks to see how much money you can save per year when you replace 32-watt T8 lamps with low-wattage versions.

Upcoming Events & Training Opportunities

Building Operator Certification Technical Webinar Series

- My Facility is Too Humid How can I solve this problem? February 22 online
- The Autonomous Driving Building: What's in the Future for Building Control Systems March 15

Click here for more information

Building Operators Certification

Integrated Design: Tools and Methods

This course is intended for those who understand high performance building concepts. The course provides technical training to bring quantitative analysis into design practice, using design tools such as EQuest, Revit, and custom Excel spreadsheets.

• February 22, 2018 in Seattle

Click here for more information

Smart Building Center, University of Washington Integrated Design Lab

What Is an RCM and Why Do I Need One?

A free webinar from your WSU Energy RCM Program

For those who do not have an RCM – attend this webinar to learn about the benefits of RCM programs and how RCMs perform to provide persistent savings for your organization. We will discuss how to get started with a program, such as what to look for when hiring an RCM, using part-time RCM services, or how existing staff may fulfill some crucial RCM functions.

• February 28, 2018 online webinar

Click here to register

WSU Energy Program

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

Ask the Expert – Most Wednesdays at 9:00 AM Pacific time

Click here for more webinars and information US EPA

Spring 2018 Lighting Fundamentals

- Light and Human Perception 101
- Introduction to Codes and Standards 107

Offered by the Lighting Design Lab, classes are taught one after the other on the same afternoon. Register for one or both. These classes tend to sell out.

- March 14, 2018 in Tacoma
- March 16 in Seattle
- March 20 in Everett

Click here for more information

Lighting Design Lab

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 classes
 - March 28, 2018 in Seattle
 - Sept 25, 2018 in Renton

Click for BOC Washington State information

- Oregon
 - Level I classes
 - Fall 2018 in Portland area
 - Level II classes
 - Summer 2018 in Portland area

Click for BOC Oregon information

Building Operators Certification

Northwest Facilities Expo and Conference

Conference sessions include Tunable LED Lighting for Better Morale and Productivity, Rainwater Harvesting and Water Reuse for Facilities, and Building Tune-ups and Commissioning

• April 18 & 19 in Portland

<u>Click here for more information</u> NW Energy Coalition

Energy/Facilities Connections Conference

It's not too early to start planning to attend the 14th annual Energy/Facilities Connections conference. Registration is open!

• May 8-10, 2017 in Leavenworth, WA

Click here for information

WSU Energy Program Plant Operations Support Consortium

Resources

Washington State Green Ribbon Awards

You still have time! If your PreK-12 Washington state school reduces environmental impacts and costs, improves the health and wellness of students and staff, and provides effective environmental and sustainability education, a Green Ribbon Award may be in your future. <u>Applications are due by February 15, 2018</u> to the Washington State Office of Superintendent of Public Instruction. Those selected as finalists (notification on March 31, 2018) are submitted to the U.S. Department of Education as a national award applicant.

Two-year College Degree

Lane Community College (LCC) Energy Management Technician Program, which is the national model for energy efficiency education, is now offering an online degree. The two-year degree program includes online courses in addition to providing hands-on skills with "real world" field projects and cultivating employment opportunities with regional employers. Applications for the expanded online Energy Management Technician Program are currently being accepted for Fall 2018 enrollment at <u>https://www.lanecc.edu/sustainability/nweei</u>. For more information, contact Roger Ebbage, Coordinator, Energy and Water Education Programs, Lane Community College, 541-463-6160, ebbager@lanecc.edu.

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. <u>Email Karen</u> to share and ask!

Washington RCM Support

The Washington State University Energy Program provides RCM support. Check out the "RCMx" website: <u>http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx</u>. 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.

Energy Program

WASHINGTON STATE UNIVERSITY

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Previous issues of RCM News may be viewed at <u>http://www.energy.wsu.edu/PublicationsandTools.aspx</u> (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