

RCM NEWS

RCM News for January 2014

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.

Building Automation Systems

“Controls: 6 Steps to Better BAS [building automation systems] Performance” is a four-part article by James Piper, PE, Contributing Editor for *Building Operating Management*. It appeared in the January 2014 issue of that publication. The author explains several of the practices that work against optimum BAS performance and how to accomplish changes in those practices:

- Part 1: [Proper BAS Installation, Operation Are Keys to Reaching System's Potential](#)
- Part 2: [Operator Training, Adequate Staffing Levels Help Reach Full Potential of BAS](#)
- Part 3: [To Maximize BAS Benefits, Focus on Overcoming Resistance to Change, Bad Habits](#)
- Part 4: [Retrocommissioning Keeps BAS Working at Peak Efficiency.](#)

Facilities Maintenance

The following two short articles were carried in the January 2014 issue of *Buildings*; they lend themselves to both institutional and commercial facilities:

1. “[Three Ways to Improve Winter IAQ](#)” was prepared by staff at Kimberly-Clark Professional Filtration. The three ways involve the proper maintenance of HVAC filters, attention to the ASHRAE 52.2 report to ensure filtering of sub-micron particles, and the suggestion that filters should be both mechanical and electrostatic to capture various types and sizes of particles.
2. “[Tips for Keeping Your Facility Clean in Winter](#)” includes suggestions from a representative from Crown Mats and Matting. Buildings need to be protected from soil that is mixed with snow or rain and is being brought indoors. This can be accomplished with a relatively inexpensive but reliable system of mats, one each just outside and inside entrances and a third mat a bit further inside. Proper care and maintenance are described.

Food Waste Management

“[Fresh Look at Zero Food Service Waste](#),” by Andrew Shakman, CEO of LeanPath, was published in the December 2013 issue of *BioCycle*. The author shares his knowledge of and experience in food waste diversion and, just as important, food waste prevention. He also discusses a counter intuitive development in food waste diversion efforts: often while more is diverted into non-landfill environments, more waste has been generated because of inattention to food waste prevention. He makes the case for using a percent (for example, 90% diversion rate) *and* the amount in weight of total waste diverted for a more accurate picture of what is actually happening. He adds that, in any case, 90% is not 100% so it cannot be said that a food waste diversion of 90% is zero food service waste.

Heating, Ventilation and Air Conditioning (HVAC)

“[HVAC and BAS Approach Peak Efficiency](#),” by David Engle, appeared in the November/December 2013 issue of *Business Energy*. This is a review of the HVAC (heating, ventilation, and air conditioning) systems and BAS (building automation systems) as they have become extremely efficient. There are, it is explained, more opportunities for efficiencies than might appear. These opportunities include building high pressure control, superheat control, continuous commissioning, and much more.

Retrocommissioning

“Energy Strategies” is a three-part article by Donn Young and Michael Berning, both of Heapy Engineering; it was published in the December 2013 issue of *Maintenance Solutions*. The authors provide practical advice on developing and executing a retrocommissioning project. This is an in-depth discussion of how institutional and commercial facilities managers can ensure excellent results:

Part 1: [Retrocommissioning: Teaming Up for Savings](#)

Part 2: [Combination of In-House and Agency Best Fit for Retrocommissioning Project](#)

Part 3: [Streamlining the Members of Your Retrocommissioning Team](#).

Variable Frequency Drives

“VFDs” is a two-part article by Edward Sullivan, Editor, which appeared in the January 2014 issue of *Building Operating Management*. VFDs work with reduced motor speeds which save energy, but VFDs also enable smoother operation and easy ramp-ups, and provide important system-related data:

Part 1: [Analyze VFD \(Variable Frequency Drive\) Retrofit Applications to Ensure Savings](#)

Part 2: [VFDs Offer Benefits Beyond Energy Savings](#).

Upcoming Events & Training Opportunities

Real-time Energy Management: Improving Energy Efficiency Every 15 Minutes

This webinar features presentations by Better Buildings Challenge partners who are employing real-time energy management to achieve energy reduction goals.

- Feb. 4 live webinar

[Click for information](#)

U.S.DOE EERE Better Buildings

2014 BOC Technical Webinar Series

- Operating and Maintaining a Net Zero Building – Feb. 12
- Solar Thermal Systems in Commercial Buildings – March 5

[Click here for more information](#)

BOC

Smart Roofs: Portfolio-Based Roof Asset and Energy Management

Through a case study, this webinar demonstrates how roofs can impact energy consumption and carbon footprint.

- Feb. 12 online webinar

[Click here for more information](#)

EPA Green Power Partnership

Portland General Electric Seminars and Webinars

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

- Electrical Safety Awareness – Feb. 12 in Wilsonville
- Strategic Energy Management Workshop: An Overview & Training Plan – Feb. 26 in Portland
- Understanding LEDs – Feb. 20 online webinar

[PGE Energy Education Center webpage](#)

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

ENERGY STAR® Portfolio Manager Trainings

All are online webinars.

- Get Ready for the 2014 EPA National Building Competition! – Feb. 18
- Portfolio Manager 101 – Feb. 18
- Portfolio Manager 201 – Feb. 19
- Portfolio Manager Office Hours, Focus Topic: Campuses – Feb. 20
- ENERGY STAR and Green Building Rating Systems – Feb. 20

[Click here for more information](#)

US EPA

Oregon APEM 2014 Spring Forum – Keepin' It Cool, How to Get the Most Out of Your Chilled Water Plant

The spring forum of the Oregon Association of Professional Energy Managers covers chiller basics, controls and best practices, new technology and equipment. Continuing Education Units are available.

- March 7 in Tualatin, OR

[Information and registration](#)

Oregon APEM

Northwest Facilities Expo / Managing Green Buildings Conference

The expo features the latest technology, equipment, and trends, while the conference offers sessions from industry experts. Free admission to both expo and conference.

- March 19-20 in Portland, OR

[Information and registration](#)

NEEA's BetterBricks, Portland General Electric

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 – Spring 2014 in Everett
- Level I – April 1, 2014 in Seattle
- Level 1 – Fall 2014 in Longview
- Level II – Sept. 24, 2014 in Seattle
- Level II – Sept. 25, 2014 in Olympia
- Level II – Oct. 1, 2014 in Everett
- Level II – Fall 2014 in Spokane

[Click for BOC Washington state information](#)

- **Oregon**

- Level II – Feb. 26, 2014 in Portland, OR
- Level I – March 6, 2014 in the Columbia Gorge area
- Level I – March 11, 2014 in Salem
- Level I – April 15, 2014 in Bend

[Click for BOC Oregon information](#)

Building Operators Certification

Energy/Facilities Connections Conference 2014

Registration is now open for the 10th annual Energy/Facilities conference sponsored by WSU's Plant Operations Support Consortium. The conference features workshops on plant operations, facilities management and efficiency.

- May 6-8, 2014 in Leavenworth, WA

[Click for registration information](#)

WSU Energy Program

Better Buildings Summit

A national summit to catalyze investment in energy efficiency across the public, private, commercial and other sectors.

- May 7-9, 2014 in Washington, D.C.

[Click for registration information](#)

U.S.DOE EERE Better Buildings

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.aeeprogams.com/realtime/> .

Resources for You

[Washington State Energy Efficiency Grants for K-12 School Facilities](#)

Nine million dollars, \$500,000 per school district, is available through the Office of Superintendent of Public Instruction (OSPI) for [2013-2015 Washington State energy grant awards](#). Projects must use the energy savings performance contracting method or an alternate method, and must submit an "Intent to Apply". Grant applications are due February 18, 2014.

ShopTalk

The latest edition of [ShopTalk](#), the WSU Energy Program Plant Operations Support Consortium newsletter, is available for viewing. Articles include Portland Public Schools' sustainability success and information on the Hazard Communication Standard developed to prevent hazardous chemical exposure in the workplace. Check out other great resources for public facilities in the [Consortium Toolbox](#).

Automatic Irrigation Systems

Summer is around the corner (well, almost...) and it's not too early start thinking about increased irrigation efficiency. [Saving Water Partnership](#) has information on maintaining and creating efficient irrigation systems, including overview of products and services, designing systems, and programming irrigation schedules. Financial incentives may be available for commercial customers in the Seattle region. In addition, [Irrigation Water Management Services](#) for the Seattle region has tools to develop watering runtime schedules and adjust irrigation for more efficiency.

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

