

RCM NEWS

RCM News for April 2013

A newsletter for Resource Conservation Managers in the Northwest

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Boilers

"[Multiple Boiler Option: When and How to Use Hybrid Systems](#)," by Mark Norris, Academy Instructor, Viessmann, appeared in the March 2013 issue of *HPAC Heating, Plumbing, Air Conditioning Magazine*. In some situations where multiple boilers are needed, a hybrid boiler system may be the right choice. The author explains when it is advisable to rely on a non-condensing boiler, which is less expensive than a condensing boiler. He further describes how to properly pipe and establish controls for a hybrid system.

Facilities

"[How UC Irvine Redefines Efficiency in Laboratories](#)" was written by Michele Madia, Director of Sustainability Financing and Policy at Second Nature and posted on the *GreenBiz* website on March 7, 2013. Efficiency measures taken in recently constructed labs on the campus are described. The article also offers six steps to reduce a lab's energy use.

Control Systems

"[Taking Building Automation Back to the Basics](#)" was authored by J. Christopher Larry, PE, CXA, CEM, CEP, CIPE, LEED AP, and Director of Energy Engineering for exp; it was published in the February 2013 issue of *HPAC Heating/Piping/AirConditioning Engineering*. The author explains the basics of building automation, and why a team effort is important to design a successful system.

Geothermal

"[Geothermal Systems for Commercial Facilities](#)," by Christopher Qualls, PE and CEM, of Smith Seckman Reid Inc.; it was published in the February 2013 issue of *HPAC Heating/Piping/AirConditioning*

Engineering. The author explains the basics of geothermal technology and discusses many commercial applications.

Lighting

"[WSU Spokane Collects Lighting Efficiency Rebate from Avista](#)," by Doug Nadvornick, WSU Spokane, was published in the April 11, 2013 issue of *WSU News*. By outfitting the Innovate Washington building on the university's Spokane campus with new, efficient lighting, the university is saving on energy bills and received a \$20,000 rebate from its utility. More projects are planned.

Pumps

"[Pumps and Power](#)," by Paul Hull, is a three-Web-page article carried in the March 2013 issue of *Water Efficiency*. The author addresses the need for energy efficiency whether for temporary or permanent pumping operations and mentions that 95% of all the power used by water utilities is to run the pumps. He explains how the EUI (energy use index) is a helpful measure of consumption, suggests how to select the right pumps for the specific application, and considers the role motors play in pumping efficiencies.

Recycling

"[How to Recycle Carpet: From Demolition to Documentation, Take the Right Steps](#)" was written by Christopher Curtland, Assistant Editor of *Buildings*; it was published in the February 2013 issue of that journal. The author takes the reader through the entire process of recycling carpet with specific information and contacts to help the resources/facilities manager at large institutions and government buildings get the job done well.

Sustainability

"[What Can Business Learn about Sustainability from Higher Ed?](#)" was written by Georges Dyer, Strategic Advisor to Second Nature; it was published February 07, 2013, on the GreenBiz.com website. It may be of use for the RCM to know how an article written for businesses views the successes of the academic sector in the area of sustainability. The specific case of zero-waste at Arizona State University is cited and described.

Upcoming Events & Training Opportunities

9th Annual Energy/Facilities Connections Conference

"From Coveralls to the Corner Office" is the title of the 2013 conference, which is a 2½ day event bringing together experts and colleagues for workshops, hands-on training, networking and useful information related to facilities and energy.

- May 7-9 in Leavenworth, WA

[Click for registration information](#)

WSU Energy Program

Energy Data Management: Hands-on Workshop

Learn how to evaluate energy drivers and create statistically significant models to inform energy efficiency decisions.

- May 9 in Portland

[Click here for more information](#)

NEEA Industrial Training

Green Practices for Motors

In this one day class, learn how to estimate operating costs for electric motor systems and identify improvement in motor management practice.

- May 13, 14, 15, 16, and 17 in Billings, Bozeman, Great Falls, Helena and Missoula.

[Click here for more information](#)

Northwestern Energy

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 are usually one or two full days a month.

- **Washington State**
 - Level I – May 14 through Sept. 17, 2013 in Redmond
 - Level I – Sept. 10, 2013 through Mar. 12, 2014 in Renton
 - Level I – Sept. 17, 2013 through Mar. 5, 2014 in Tri-Cities
 - Level I – Sept. 25, 2013 through Mar. 11, 2014 in Olympia
 - Level II – Oct. 2, 2013 through Feb. 12, 2014 in Lacey
 - Level II – Oct. 3, 2013 through Feb. 13, 2014 in Everett
- **Oregon**
 - Level I – Sept. 11 through Dec. 11, 2013 in Portland
 - Level I – Oct. 1, 2013 through Mar. 4, 2014 on the Oregon Coast (TBA)
 - Level I – Dec. 4, 2013 through Jun 4, 2014 in Clackamas

<http://www.theboc.info/wa/wa-schedule.html>

[Click for BOC Oregon information](#)

Building Operators Certification

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.

- Intro to Efficient Lighting & Controls – May 15 online webinar
- Owning & Operating Efficient Motors – May 21 in Wilsonville
- Variable Frequency Drives – May 22 in Wilsonville
- Air Handling Systems – May 23 in Wilsonville

[PGE Energy Education Center webpage](#)

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

Showcase for Emerging Technologies Webinar

Hour-long noon webinars featuring emerging technologies topics

- Low Emission Precision Application (LEPA) – May 22

[Click here for more information](#)

WSU Energy Program, BPA, WAPA

2013 Powerful Business Energy Conference

This conference is designed for commercial building owners and managers, building operations and engineering staff, architects, consulting engineers, property developers, and others interested in cost-effective opportunities in commercial energy efficiency. Essential energy-related ideas and operating tips will be taught in four tracks.

- May 23 in Bellevue WA

Conference information:

[Click here for information](#)

Electric League of the Pacific Northwest

Better Buildings Summit for State and Local Communities

State, local and K-12 education, nonprofit and private sector leaders have the opportunity to engage about saving energy in buildings, generating clean and reliable electricity, and promoting sustainable transportation.

- May 30-31 in Washington, DC

[Click here for information](#)

US Dept of Energy

Portland Lights Trade Show & Educational Classes

Learn about the latest in efficient lighting and controls, and attend various sessions about energy efficient lighting.

- June 5 in Portland, OR

[Click for registration information](#)

Illuminating Engineering Society, PGE

Energy Management Certification

Also known as the EMC Boot Camp, this is an advanced certification program which goes beyond fundamentals and teaches a broad spectrum of energy management principles and techniques. It requires the student to implement an energy-savings project and measure the results.

- July 8 - 19, 2013 in Eugene, OR

[Click for information and registration](#)

Northwest Water & Energy Education Institute (NWEI)

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.aeeprograms.com/realtime/> .

ENERGY STAR® training

ENERGY STAR® offers online trainings on a variety of topics including financing energy efficient upgrades, computer power management, and data center energy efficiency opportunities for managers.

- Various dates and times

[Click here for more information](#)

US EPA

Resources for You

[Indoor Air Quality \(IAQ\) Tools for Schools](#)

The U.S. EPA offers guidance documents and resources to help schools develop step-by-step actions to build effective IAQ management programs and create healthier, safer learning environments. Green energy efficient building practices contribute to improved IAQ. Visit the U.S. EPA's [Indoor Air Quality website](#) for more information.

State and Local Energy Efficiency Action Network (SEE Action)

SEE Action is a state- and local-led effort facilitated by the U.S. Department of Energy and the U.S. Environmental Protection Agency to take energy efficiency to scale and achieve cost effective energy efficiency by 2020. SEE Action offers publications, events, and technical assistance to state and local decision makers.

<http://www1.eere.energy.gov/seeaction/>

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.

RCM News is prepared by the Washington State University Energy Program

This activity is funded by the U.S. Department of Energy State Energy Program. Funds provided through the Washington Department of Commerce Energy Division.

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

