

RCM NEWS

RCM News for September 2017

A newsletter for Resource Conservation Managers in the Northwest

In this issue:

Boilers
Chillers
Fault Detection
Lighting
Net Zero Buildings
Technology
Upcoming Events & Training Opportunities
Resources for You

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.

Boilers

“[Fall is Boiler Tune-Up Time](#)” explains how a Combustion Analyzer works to diagnose a boiler’s efficiency, which is a good thing to do before the winter cold sets in. A program of the Northwest Energy Efficiency Council, the September 21, 2017 *Smart Buildings Center News* article highlights one of the analyzers that is available for loan from the Center.

Chillers

A three-part “Renovations and Retrofits” article in the September 2017 issue of *Facility Maintenance Decisions*, written by Jordan Ridgely, discusses ways to replace or maintain chillers to assure energy efficiency and reduce maintenance problems. When replacing a chiller, understand the building’s cooling load and consider options such as installing a different type of chiller, upgrading piping, and adding control capabilities. Reduce refrigerant leaks and maintain efficiency through careful monitoring and preventive maintenance – the U.S. Environmental Protection Agency has requirements if leaks reach a certain level.

Part 1 – [Chillers: Understanding System Selection](#)

Part 2 – [Chillers: Ensuring Energy Efficiency](#)

Part 3 – [Chillers: EPA Maintenance Requirements](#)

Fault Detection

Fault detection and diagnostics (FDD) is the subject of a two-part article written by Michael Brusic in the September 2017 issue of *Building Operating Management*. FDD systems do not fix problems – at their most basic, they point to where the problem is. The best FDD systems are those that help determine causes of a system problem, not just set off an alarm. Training facility staff is a crucial step in using an FDD.

Part 1 – [Fault Detection and Diagnostics: How To Find Energy-Wasting Problems](#)

Part 2 – [Understanding The Human Element of Fault Detection and Diagnostics](#)

Lighting

“[Enhancing Value of LED Commercial Lighting Investment with Tubular Daylighting Devices](#)” by Todd Maerowitz, published in *High Performing Buildings*, describes the use of tubular daylighting devices (TDD) to decrease energy use and increase occupant comfort. These “light tubes” allow daylight without UV rays, maintaining target light levels while increasing the lifetime of LEDs and allowing for some continued performance at times of power outages.

Net Zero Buildings

“[West Branch Library of the Berkeley Public Library--West Berkeley, Calif.](#)”, written by Sylvia Wallis, appears in *High Performing Buildings* magazine. A new library, certified net zero energy by the International Living Future Institute, was built by the City of Berkeley with early commitment from stakeholders such as the utility, and the design and construction teams. The integrated design took into account various hurdles, such as raising the roof of the one-story building high to minimize shading, and reconfiguring the fresh air circulation because of the library’s location on a busy street.

Technology

A two-part “Green Building Report” article, published in the September 2017 issue *Building Operating Management* and written by Jeff Julia, looks at software tools to cut energy costs. Appropriate software tools can manage energy and maintenance, create detailed energy reports and share data, and even search for energy rebates.

Part 1 – [5 Ways Technology Can Help Cut Energy Costs](#)

Part 2 – [USGBC Perspective: How Arc Uses Data And Measurement To Drive Green Performance](#)

Upcoming Events & Training Opportunities

Portland General Electric Education

Classes and workshops are free to PGE business customers, others may attend based for a fee.

- Choosing the Right Lighting Retrofit & Control System – Oct 3 in Salem
- Saving Energy through Operations & Maintenance – Oct 12 webinar
- Diagnosing Energy Waste – Oct 26 in Wilsonville

[Click here for more information](#)

PGE, Energy Trust of Oregon

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Portfolio Manager 101 – Oct 3
- Engaging tenants on recycling – Oct 10
- WaterSense Sanitary Fixtures and Equipment – Oct 11
- Portfolio Manager 201 – Oct 17
- Portfolio Manager 301 – Oct 24
- Ask the Expert – Every Wednesday at 9:00 AM Pacific time

[Click here for more webinars and information](#)

US EPA

Better Buildings Webinars

- New Tools for Leased Space Energy Efficiency – Oct 3 webinar
- Smart Energy Analytics Campaign – Oct 19 webinar

[Click here for information](#)

U.S. Department of Energy

Lighting Fundamentals Course

Choose from three Washington state locations and dates to attend *Light Sources and Luminaries* in the morning and/or *The Lighting Design Process* in the afternoon.

- Oct 4 in Lynnwood
- Oct 6 in Tacoma
- Oct 13 in Seattle

[Click here for information](#)

Lighting Design Lab

New Buildings Institute Webinar Series

Presented by the National Grid

- Benchmarking – A Practical Approach 102 – Oct 12 Webinar
Presented by National Grid, covers how to build on basic benchmarking covered in previous webinar.

[Click here for more information](#)

New Buildings Institute, National Grid

Building Operator Certification Technical Webinar Series

- Building Re-tuning without a Building Automation System – Oct 18, 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
 - Level I classes
 - Oct 24, 2017 in Olympia
 - Oct 25, 2017 in Everett
 - March 2018 in Seattle
 - Sept 2018 in Renton
- Oregon
 - Level I – Oct 10, 2017 in Portland area

[Click for BOC Washington State information](#)

[Click for BOC Oregon information](#)

Building Operators Certification

Empowering Smart Buildings: Improving Productivity and Reducing Operational Costs

Networking breakfast event at the Smart Buildings Center. Free though space is limited.

- Oct 26 in Seattle

[Click here for more information](#)

Northwest Energy Efficiency Council

NW Clean & Affordable Energy Conference

- Nov 2 in Seattle

[Click here for more information](#)

NW Energy Coalition

Washington's Energy Future Conference

Networking breakfast event at the Smart Buildings Center. Free though space is limited.

- Nov 6 in Tacoma

[Click here for more information](#)

Northwest Environmental Business Council

Resources for You

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 2017 enrollment at www.lanecc.edu/nweei. For more information, contact Roger Ebbage, Coordinator, Energy and Water Education Programs, Lane Community College, 541-463-6160, ebbager@lanecc.edu.

Tracking Electric Demand in Portfolio Manager

Energy Star® Portfolio Manager® now features a way to enter and track [electric demand](#) and demand cost for each electricity bill. A [two-page guide](#) walks you through the steps to enter the data and pull demand metrics into custom reports.

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.

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

