

# RCM NEWS

## RCM News for November 2012

A newsletter for Resource Conservation Managers in the Northwest

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### Buildings

"[Building a New Port](#)" by Elianne Halbersberg, in the September 2012 issue of *Interiors & Sources*, showcases the new headquarters for the Port of Portland (Oregon). It was designed to achieve LEED Platinum certification and employs a ground-source heating and cooling system unlike any other in the country.

"[A Zero-Sum Game](#)," by Penelope B. Grenoble, is a three-Web-page article on zero net energy buildings published in the September/October 2012 issue of *Distributed Energy*. Net-zero energy facilities include Richardsville Elementary School in Warren County, Kentucky, and an office building at NREL's Research Support Facilities (RSF) in Golden, Colorado. The same elementary school in Warren County is covered in more depth in "[Achieving Net Zero](#)," by Kenneth L. Seibert, PE, LEED AP, and President, CMTA Consulting Engineers, published in the fall 2012 issue of *High Performing Buildings*. This article describes the new Richardsville Elementary School built to replace the original Richardsville school. The new school has on-site photovoltaics; further, it benefits from the creative design of the building and other systems (kitchen and IT), which maximize energy efficiency.

### Lighting

"Lighting" is a four-part article by Hayden McKay, AIA, FIALD, FIES, Principal of Horton Lees Brogden Lighting Design (HLB), and published in the September 2012 issue of *Building Operating Management*. The author stresses the planning and preparation required before a successful lighting upgrade can get underway. Interestingly, a daylighting strategy can be implemented in many existing buildings and controls can be used to maximize daylighting's potential to save energy and increase the comfort of building occupants:

[Part 1: 10 Questions To Ask Before A Lighting Upgrade Begins](#)

[Part 2: Determining Goals Of Lighting Upgrade Can Lead To Different Solution](#)

[Part 3: Lighting Upgrade Mock-Ups Help Make Options Clear](#)

[Part 4: Daylighting and Controls Can Be Part Of Lighting Upgrades](#)

"[Easy LED Replacement](#)," by Janelle Penny, Associate Editor, *Buildings*, was published in the September 2012 issue of that journal. This article tells how the Zhaga Consortium of lighting manufacturers and professionals is proceeding with its mission to develop LED interchangeability standards for the following properties: mechanical, photometrical, thermal electrical and control.

["Engineering a Successful Lighting Retrofit,"](#) by Michael Chow, PE, LEED AP BD+C, Metro CD Engineering LLC, was published in the September 2012 issue of *Consulting-Specifying Engineer*. This article includes discussion of the interchangeability (or not) of different lamps in original lamp holders and maintaining UL listings after the original lamp is replaced by a different one, such as when a T-12 is replaced by a T-8 or when a T-12/T-8 lamp/ballast is replaced by a tubular LED. Other types of replacements are covered as well, and the author includes discussion of lamp recycling, lifecycle costs, color and dimmability.

["Illuminating Center Stage,"](#) by Ed Ritchie, is a three-Web-page article published in the September/October 2012 issue of *Distributed Energy*. It tells the story of how efficient lighting has become a staple of energy-saving efforts in the building industry for new construction and retrofits. New, reliable technologies, together with supportive code and legislative changes as well as financial incentives, are major influences. The author references several examples of projects involving new lighting technologies.

## Water

"Green Building Report," published in the September 2012 issue of *Building Operating Management*, is a four-part article, but the first two parts by Jim Newman, LEED AP, Linnean Solutions, may be of particular interest to the resource conservation manager with responsibilities at educational institutions or government buildings:

[Part 1 - How Office Park Landscapes Can Reduce Water Use](#)

[Part 2 - Smart Irrigation Systems, Rainwater Collection Are Cost-Effective](#)

[Part 3 - Proposed Legionella Standard Undergoing Further Revisions](#)

[Part 4 - USGBC Perspective: Greenbuild 2012 Celebrates Sustainable Building Management](#)

["Moving Water, Saving Energy: Pump Management, Maintenance, and Efficiency"](#) by Carol Brzozowski, is a four-Web-page article published in the September/October 2012 issue of *Water Efficiency*. It includes a number of valuable tips and cautions about technical matters and how to finance new equipment for the manager of water or wastewater facilities. It also covers some of the more important issues in depth.

The following two articles appeared in two successive issues of *Water Tap: Washington's Drinking Water Newsletter*.

1. ["Bremerton Ranks 1st in State for Conservation Challenge"](#) (**scroll to the middle of page six**) is a brief article published in the June 2012 issue discussing the results of the National Mayor's Conservation Challenge. See the [rankings](#) for the top ten in each of three population-size categories for the West, with options to view the same for the Midwest, the South and the Northeast.
2. ["Funding Water Projects with Energy Incentives"](#) (**scroll to the top of page three**) was published in the September 2012 issue. The article provides enough information to get facilities and resource managers going in the right direction for project funding. It includes the valuable sidebar "Incentive Funding for a Hypothetical Leak Repair Project."

## Upcoming Events & Training Opportunities

### ENERGY STAR® Webinars

- Benchmark Energy Performance – for Energy Efficiency Program Sponsors – Dec. 3, 2012
- The Basics of Benchmarking in Portfolio Manager – Dec. 4, 2012
- Energy Management Lessons from Industry – Dec. 5, 2012

- IT Energy Savings for Non-Techies – Dec. 5, 2012
- Financing Energy Efficient Upgrades with ENERGY STAR® – Dec. 6, 2012
- IT Energy Savings for Non-Techies: Getting to Yes – Dec. 7, 2012
- Setting Energy Use Targets with ENERGY STAR® – Dec. 12, 2012
- Data Center Energy Efficiency Opportunities – Dec. 13, 2012
- Benchmarking Water/Wastewater Treatment Facilities in Portfolio Manager – Dec. 13, 2012
- Computer Power Management with ENERGY STAR® – Dec. 18, 2012
- The Federal Guiding Principles Checklist in ENERGY STAR® – Dec. 20, 2012
- Designing and Implementing Successful Data Center Efficiency Programs – Jan. 3, 2013

[Click here for information](#)

US EPA

### AEE (Association of Energy Engineers) Realtime 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. Dates following course names below are start dates.

Below is a sampling of courses – refer to website for a complete list.

- Smart Metering, Load Profiling & Demand Response – Dec. 5, 2012
- Understanding, Making & Using Energy Metrics – Dec. 10, 2012
- CEM Preparatory Course for Energy Managers – Dec. 12, 2012
- LED vs. Everything Else: Interior & Exterior – Dec. 17, 2012

<http://www.aeeprograms.com/realtime/>

### Energy Benchmarking Using ENERGY STAR® Portfolio Manager

This workshop provides an introduction to using Energy Star Portfolio Manager, including how to establish energy and water baselines, assessing your building's energy performance, and setting targets for improving performance over time. Free for Kilowatt Crackdown participants.

- Dec. 4, 2012 in Portland, OR
- Jan. 10, 2013 in Boise, ID
- Feb. 6, 2013 – webinar

[Click here for registration information](#)

*BOMA, NEEA, BetterBricks, City of Portland, Idaho Power*

### Portland General Electric Seminars and Webinars

Portland General Electric offers educational seminars and webinars free of charge to its commercial, industrial and institutional customers. Similar customers of other utilities are welcome to attend for a small fee.

- Better Lighting, Lower Costs – Dec. 5, 2012 in Hillsboro
- Calculating Energy Costs – online webinar

[Click here for registration and information](#)

[Click here for complete course schedule](#)

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

### Motor Systems Management Best Practices

Learn how to identify inefficient and oversized motors, use an integrated motor management tool, calculate projected savings, and more.

- Dec. 6, 2012 in Lebanon, OR

[Click for registration information](#) **(NOTE – must register ASAP)**

*NEEA, Pacific Power, Energy Trust of Oregon, PGE, BPA, NW Food Processors, WSU Energy Program*

**Energy Management: Introduction to Best Practices**

Gain basic tools that every company needs to manage energy as a controllable cost. You will be given information to help you effectively implement an energy management system at your company.

- Dec. 11, 2012 in Moses Lake, WA
- Dec. 13, 2012 in Twin Falls, ID

[Click for registration information](#)

*NEEA, Grant County PUD, Inland Power, Pacific Power, Chelan PUD, Avista, BPA, WSU, NWFPA*

**Optimizing Pumping Systems: A Measurement-Based Approach**

This course focuses on measurements that are required for any pumping system performance assessment, such as flow rate, pressure, and electrical data.

- Dec. 11-12, 2012 in Boise, ID

[Click for registration information](#)

*NEEA*

**Economizer Diagnostics Using Data Loggers**

This course discusses how economizers should work, what happens when they don't work and how to identify failures that are not apparent.

- Dec. 12, 2012 – online course

[Click for registration information](#)

*Onset*

**Oregon APEM Winter Forum – How Much of Your Heat is “Going up the Chimney?”**

The Oregon Association of Professional Energy Manager's winter forum focuses on heat recovery, looking at real-world performance and efficiency, opportunities, and challenges. Includes an afternoon tour.

- Dec. 14, 2012 in Portland

[Click for information](#)

*Oregon APEM*

**Emerging Technologies Showcase – Residential Smart Thermostats**

At this December Showcase, experts will discuss technology options of smart thermostats, application overviews and case studies. There will be a live question and answer session.

- Dec. 19, 2012 – webinar

<https://www3.gotomeeting.com/register/417947358>

*WSU Energy Program, BPA, WAPA*

**5<sup>th</sup> Annual NW Industrial Energy Efficiency Summit**

The focus of this summit is industry sharing knowledge with industry. Educational sessions include “Great Industrial Energy Efficiency Projects” and “Combined Heat and Power & Waste-Heat Recovery Landscape.”

- Jan. 16, 2013 in Portland

[Click for information](#)

*NWFPA, BPA, NEEA, Energy Trust of Oregon*

## Building Operator's Certification

74 hours of training and project work in building systems maintenance.

- **Washington State**

- **2013 tentative schedule**

- Level I beginning April 2013 in Spokane
    - Level I beginning May 2013 in Renton
    - Level I beginning Sept. 2013 in Tri-Cities
    - Level II beginning Oct. 2013 in Everett
    - Level II beginning Oct. 2013 in Lacey

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

- **Oregon**

- Level I – Dec. 4, 2012 through June 5, 2013 in Portland, OR

- [http://www.nweei.org/images/pdf\\_files/current\\_master\\_oregon\\_sched.doc](http://www.nweei.org/images/pdf_files/current_master_oregon_sched.doc)

*Building Operator Certification*

## 9<sup>th</sup> Annual Energy/Facilities Connections Conference

This 2½ day event brings together experts and colleagues for workshops, hands-on training, networking and useful information related to facilities and energy.

- May 7-9, 2013 in Leavenworth, WA

[Click for registration information](#)

*WSU Energy Program*

## Resources for You

### Energy Efficiency Grant Opportunities in Washington State

Public higher education institutions and local governments are eligible to apply for 2012 energy efficiency grants from the Washington State Department of Commerce. **Deadline for round two applications has been extended to January 15, 2013.**

<http://www.commerce.wa.gov/Programs/services/CapitalFacilities/Pages/EnergyEfficiencyGrants.aspx> .

K-12 school districts are also eligible for energy grants, specifically for energy operational cost savings, through the Office of Superintendent of Public Instruction. Applications are due February 15, 2013 for round two. School districts must conduct an investment-grade audit and use either Energy Savings Performance Contracting or traditional design-bid-build contracting method.

<http://www.k12.wa.us/SchFacilities/Programs/EnergyImprovement/EnergyGrantProgram.aspx>.

### Plant Operations Support Consortium

The purpose of the [WSU Plant Operations Support Consortium](#) is to increase the efficiency and sustainability of facility operations by providing timely and creative technical assistance, education and consultation to support facility construction, operation and maintenance. Eligible members include state and local governments, tribal governments, and nonprofit organizations. Visit the [Consortium Toolbox](#) for links to pre-recorded webinars such as Managing Motor Driven Systems, information on building preventive maintenance and project management resource lists, and more.

### Conduit

[Conduit](#) is a web-based resource that facilitates information sharing, coordination and collaboration among energy efficiency professionals in the Northwest. Conduit is brought to you by Northwest Energy

Efficiency Alliance (NEEA) with support from BPA. The website is intended to help stakeholders meet their aggressive energy efficiency goals.

### Energy Experts eNews

You can now get energy-related news from EnergyExperts.org and other energy-related organizations on Facebook and Twitter. <http://www.energyexperts.org/NewsFeeds.aspx>

### 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](mailto:janowitzk@energy.wsu.edu)