

## **RCM News for October 2012**

A newsletter for Resource Conservation Managers in the Northwest

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# **Buildings**

Appearing in the September 2012 issue of *GreenSource* "<u>Heading toward Net Zero</u>," by Ingrid Spencer, Contributing Editor, is a case study of the new, under-budget, LEED-Gold, Gloria Marshall Elementary School in Spring, Texas. The design of the building is strong on conserving energy, water, and materials.

## **Energy Management**

"New Era of Energy Efficiency: Occupant Involvement" by Naomi Millan, Senior Editor, appears in the October issue of Building Operating Management. This five-part article focuses on ways to educate, motivate, and involve building occupants to save energy. One highlight is the creative approach taken by the Olympia School District's RCM, Bonnie Meyer, to reduce use of space heaters by addressing the desire of occupants to wear cute shoes.

 Part 1: As Space Heaters Show, Facility Managers Often Have To Negotiate With Occupants To Avoid Energy Waste

 Part 2: Occupants Can Be Asset In Energy Efficiency Efforts

 Part 3: Many Occupant Issues Stem From Lack Of Individual Control Of Building Systems

 Part 4: Motivating Occupants Is Critical To Ensuring Cooperation On Energy Savings

 Part 5: Educate Occupants To Get Them To Save Energy

"<u>Biomass Reduces Environmental Impact and Energy Budget</u>," by Christopher Curtland, Assistant Editor, *Buildings*, was published in the August issue of that journal. This article explains the advantages of the displacement of coal with biomass and cites the University of Iowa's (UI) very successful biomass project. UI has partnered with the local Quaker Oats to co-fire waste oat hulls with coal. The savings are dramatic.

"Energy Star," by staff, is a four-part article published in the September 2012 issue of *Building Operating Management*. It features the role that Portfolio Manager, an interactive software tool from the U.S. Environmental Protection Agency, plays in consistently reducing energy and water use in commercial buildings:

Part 1: Energy Star Portfolio Manager Helps Reduce Energy Expenditures Part 2: How The New York City Department Of Education Uses Portfolio Manager Part 3: Energy Star, Portfolio Manager Can Help Make Capital Investment Decisions Part 4: Twenty Years Of Energy Star

# HVAC/R (Heating, Ventilation, Air Conditioning, and Refrigeration)

"Drive Your HVAC System to High Performance," by J. Robert Howard, Facility Manager Administrator, Certified Facility Manager, and LEED AP, was carried in the August 2012 issue of *Buildings*. The author elaborates on three actions that can bring an older HVAC system to a possibly higher level of efficiency than it met when it was first installed.

# Lighting

"<u>The Arrival of LED</u>," by Chad Bedwell, was published in the Fall 2012 issue of *High Performance Buildings*. It describes the \$950,000 lighting upgrade at the University of California Davis where all outdoor lighting was converted to LEDs that are networked to a wireless and smart control system. At an energy savings worth \$900,000 per year, the project will achieve payback in less than 10 years.

"<u>Seamless Switches for Lighting Controls</u>," by Janelle Penny, Associate Editor, *Buildings*, was published in the August 2012 issue of that journal. It lists and discusses eight strategies for the selection of the lighting control system most appropriate to a specific building.

# Roofing

The column "Ask an Expert: Ric Vitiello, Roofing" is a four-part document published in the August 2012 issue of *Building Operating Management*; each part answers a question posed to the columnist:

Part 1 is Most Important Roof Selection Criterion

Part 2 is How to Select the Right Roofing System

Part 3 is Proper Preventive Maintenance For Roofing

Part 4 is Roofing Resources for Facility Managers

"<u>Cost-Efficient Roofing Insulation for the Right Thermal Rating</u>," by Christopher Curtland, Assistant Editor of Buildings, appeared in the August 2012 issue of *Buildings*. It includes the sidebar "Aspects of Efficient Roofing Insulation" and a map of the U.S. showing the old and new thermal ratings for various climate regions.

# **Transportation**

"<u>EPA Awards \$30M for Clean Diesel Projects</u>" was authored by Thomas McMahon; it was carried in the October 11, 2012, issue of *School Bus Fleet*. A recent round of financial awards from the federal Diesel Emission Reduction Program (DERA) have paid for replacement or retrofitted school buses in school districts around the country.

## Water

"<u>Motivation and Education</u>," by Lyn Corum, is a three-Web-page article in the July/August issue of *Water Efficiency*. Advanced irrigation technologies are available, but installers and their customers need to know more about them and in what applications they are most appropriate. The article includes discussion of available rebates and other incentives, local and state codes, conservation efforts, and incentive contracts available to schools and governments as well as others.

**Upcoming Events & Training Opportunities** 

# Energy Auditing and Troubleshooting - webinar

How to estimate energy consumption by end use without need for submetering, focusing on refrigeration, compressed air end uses, HVAC, lighting, and office equipment.

• Nov. 6, 2012 – webinar

Click for registration information NEEA

# **Energy Efficiency and Data Centers**

Gain a fundamental understanding of how energy is consumed, industry best practices, and opportunities for improving energy efficiency in data centers.

Nov. 7, 2012 – Boise, ID

Click for registration information NEEA

# Calibrated Energy Modeling Using Measurement and Verification

This course explains how data loggers are used to adjust energy model input values, and how to calibrate energy model outputs to utility bill data.

• Nov. 7, 2012 – online course

<u>Click for registration information</u> Onset

## **Energy Star Webinars**

- Overflowing Value: Best Practices to Save Water and Money Nov. 7, 2012
- Data Center Energy Efficiency Opportunities Nov. 8, 2012
- Energy Star and Green Building Rating Systems Nov. 8, 2012
- Computer Power Management with Energy Star Nov. 13, 2012
- The Federal Guiding Principles Checklist in Energy Star Nov. 15, 2012
- The Basics of Benchmarking in Portfolio Manager Dec. 4, 2012

## Click here for information

US EPA

## 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.

- Understanding LEDs Nov. 8, 2012 online webinar
- Chilled Water Systems Nov. 13, 2012 in Wilsonville
- Ammonia Refrigeration Systems Nov. 14, 2012 in Wilsonville
- Compressed Air Systems Nov. 15, 2012 in Wilsonville

http://portlandgeneral.com/business/news\_classes/classes/docs/class\_schedule.pdf Portland General Electric, Energy Trust of Oregon, NEEA, Better Bricks

## 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 complete list.

• Justifying Energy Efficiency as a Business Investment – Nov. 9, 2012

- Lighting Retrofit Options Nov. 9, 2012
- Developing an Energy Management Master Plan Nov. 12, 2012
- Understanding Electricity Tariffs Nov. 15, 2012
- Electrical Engineering Fundamentals for Non-Electrical Engineers Nov. 27, 2012
- Designing and Maintaining an Energy Manager Position Nov. 30, 2012
- Smart Metering, Load Profiling \* Demand Response Dec. 5, 2012
- Important Criteria to Specify and Purchase LED Products Dec. 7, 2012

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

# Emerging Technologies Showcase - Variable Refrigerant Flow (VRF)

Highlighting the energy efficient Variable Refrigerant Flow technology, this live webinar focuses on technology overview, applications, and case studies.

Nov. 14, 2012 – webinar

<u>Click for registration information</u> WSU Energy Program, BPA, WAPA

# Adjustable Speed Drive Applications and Energy Efficiency

Gain a fundamental understanding of how energy is consumed, industry best practices, and opportunities for improving energy efficiency in data centers.

• Nov. 15, 2012 – Yakima, WA

<u>Click for registration information</u> NEEA

# **Pumping System Optimization**

Learn about variable speed drives and energy efficiency.

• Nov. 27, 2012 – Bellevue, WA

Click for registration information NEEA

# **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

<u>http://www.nweei.org/images/pdf\_files/current\_master\_oregon\_sched.doc</u> Building Operator Certification

**Resources for You** 

## Energy Efficiency Grant Opportunities in Washington State

# Please note: the Washington State Department of Commerce grants website has changed. The link below is correct:

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 due November 9, 2012 for round one, and 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.

#### Children's Environmental Health Website

The U.S. Environmental Protection Agency Region 10, covering the Pacific Northwest, has launched a new <u>Children's Environmental Health website</u>, with articles, links and other information intended to protect children's health. Some of the information is related to energy efficiency in schools and indoor air quality.

#### Conduit

<u>Conduit</u> 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.

#### Facilities Web Resources

<u>WSU Energy Program Plant Operations Support Consortium</u> staff selects web resources to best assist you in maintaining and operating your facility.

#### **Energy Experts eNews**

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

#### **Energy Events Calendar**

http://www.energyexperts.org/TrainingEducationandEmployment/EventsCalendar.aspx

#### Washington RCM Support

Washington State University Energy Program RCM Support Check out the "RCMx". 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. http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx

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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 - <u>janowitzk@energy.wsu.edu</u>



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