

RCM News for September 2012

A newsletter for Resource Conservation Managers in the Northwest

In this issue:

Buildings HVAC Pumping Systems Water Upcoming Events & Training Opportunities Resources for You

Buildings

"University of Iowa Shapes New Dorm to Meet Student Expectations," by Diane Heldt, Reporter, KCRG-TV, was posted on that television station's website on July 5, 2012. It describes the design changes that accommodate energy efficiency and student expectations. The energy-related features are "green" electrical outlets that, when not in use, turn off the power, and occupancy sensors for both lighting and heating and cooling. While this dorm is a new building, some of the design changes are being incorporated into older dorms as they are updated and, in some cases, extensively remodeled.

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

The following two articles were published in the August 2012 issue of *HPAC Heating/Piping/AirConditioning Engineering*:

- 1. "<u>Enhancing Air-Cooled-Chiller Performance With VFDs</u>" was written by Eddie Rodriguez, Chiller Product Manager, Daikin McQuay. It describes how variable frequency drives reduce energy consumption during off-peak hours and, to a lesser but still signification degree, reduces the size of the power draw that compressors normally take to start up.
- "IEQ: What Building Owners Need to Know" was authored by Ron Burton, Codes and Standards Consultant for BOMA International and President of PTW Advisors LLC. It is a discussion of the intersection of indoor environmental quality (IEQ) and energy savings in HVAC/R and other facility systems.

Pumping Systems

"<u>Unlock Opportunities to Improve Oversized Pump Efficiency</u>" was written by Tony Simon, Energy Systems Engineer, Washington State University Energy Program; it was published in the August 2012 issue of *Pumps & Systems*. This informative case study tracks the effort to find opportunities to reduce energy consumption in a large pulp and paper mill's six pumping systems.

Water

"<u>King County Opens the Door for Heat Energy from Wastewater</u>", by staff, was published August 3, 2012, by KUOW Radio on the KUOW.org website. King County is engaged in an effort to harness the heat in its wastewater via public-private partnerships. The heat from wastewater, at 65 degrees Fahrenheit, could be transferred to cold water in buildings; the process is, essentially, a heat pump in action. Commonly used in other countries, it has been shown to dramatically reduce energy consumption – by 75% in one building in Vancouver, Washington.

Upcoming Events & Training Opportunities

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.

- LED vs. Everything Else Oct. 1, 2012
- CEM Preparatory Course for Energy Managers Oct. 3, 2012
- Life Cycle Costing for Energy Professionals Oct. 3, 2012
- Small-Scale Cogeneration Oct. 8, 2012
- Fundamentals of Lighting Efficiency Oct. 10, 2012
- Energy Auditing Fundamentals Oct. 11, 2012
- Saving Energy in HVAC Systems Oct. 15, 2012
- Converting Energy Audits to Business Plans Oct. 19, 2012

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

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 Demand Response Oct. 2, 2012 in Salem, OR
- Understanding Demand Response Oct. 3, 2012 in Portland, OR
- Understanding LEDs Oct. 9, 2012 online webinar
- Intro to Energy Monitoring for Energy Savings Oct. 10, 2012 online webinar
- HVAC, Building Tune-Up & Commissioning Oct. 11, 2012 in Portland
- Intro to Solar Thermal & Photovoltaic Systems Oct. 16, 2012 online webinar
- LED Lighting Changing all the Rules Oct. 17, 2012 in Salem
- LED Lighting Changing all the Rules Oct 18, 2012 in Portland
- Intro to Compressed Air Systems Oct 24, 2012 online webinar
- Electrical Safety Awareness Oct. 31, 2012 in Portland
- Compressed Air Systems Nov. 15 in Wilsonville

http://portlandgeneral.com/business/news_classes/classes/docs/class_schedule.pdf Portland General Electric, Energy Trust of Oregon, NEEA, Better Bricks

Energy Star Webinars

- Top Communication Strategies to Build Support for Your Energy Program Oct. 3, 2012
- Data Center Energy Efficiency Opportunities Oct. 11, 2012
- Beyond the Basics of Benchmarking-Advanced Features of Portfolio Manager Oct. 16, 2012

- Portfolio Manager and White House Recognition for Worship Facilities Oct. 18, 2012
- How to Apply for Energy Star Certification Oct. 18, 2012
- Computer Power Management with Energy Star Oct. 18, 2012
- The Basics of Benchmarking in Portfolio Manager Oct. 23, 2012
- How to Launch an Energy Star Energy Efficiency Competition Oct. 24, 2012
- Financing Energy Efficient Upgrades with Energy Star Oct. 30, 2012
- Energy Star and Green Building Rating Systems Nov. 8, 2012

Click here for information

US EPA

Adjustable Speed Drive Applications and Energy Efficiency

This course address the use of adjustable speed drives with electric motors, and demonstrates how they can promote energy cost savings and other benefits.

Oct. 4, 2012 – Roseburg, OR

Click for registration information

NEEA

Engaging Building Occupants in Energy Efficiency Practices

A forum featuring building owners and managers who are educating and motivating tenants on energy efficiency, followed by a facilitated peer exchange between speakers and participants.

BOC graduates may receive 2.0 CEU for attending.

• Oct. 9, 2012 in Seattle

<u>Click here for more information</u> Seattle 2030 District

Solar Energy for Water and Wastewater Utilities - webinar

This webcast provides an understanding of how solar energy can be used effectively at water and wastewater utilities.

• Oct. 11, 2012

<u>Click here for more information</u> U.S. Environmental Protection Agency

Optimize Your Maintenance Budget - Pumps and Systems

Learn about best practices for implementing a variety of pump maintenance strategies.

• Oct. 11, 2012 live webinar

<u>Click here for more information</u> *Pumps & Systems*

Community Renewable Energy Deployment

This webinar features two communities striving for net zero energy development.

• Oct. 16, 2012 – webinar

Click for registration information

Office of Energy Efficiency & Renewable Energy, U.S. Dept of Energy

Efficiency Connections Northwest

This conference provides opportunities for attendees to collaborate and learn from each other, encouraging innovation and advancing the performance of energy efficiency programs throughout the region.

• Oct. 17-18, 2012 – Spokane, WA

Click for registration information

NEEA

Building Operator's Certification

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

- Washington State
 - Level I Oct. 18, 2012 through Apr. 18, 2013 in Seattle
 - Level II Oct. 31, 2012 through Feb. 12, 2012 in Renton
 - Tri-Cities and Spokane courses are planned for 2013 http://www.theboc.info/wa/wa-schedule.html
- Oregon
 - Level I Oct. 30, 2012 through Apr. 2013 in Medford, OR
 - Level I Dec. 4, 2012 through June 5, 2013 in Portland, OR
 - Level II Oct. 3, 2012 through Mar. 2013 in Wilsonville, OR

http://www.nweei.org/images/pdf_files/current_master_oregon_sched.doc

Building Operator Certification

Tune Up Your Portfolio Manager Account - for Seattle 2030 District Members

This free workshop provides District members with a checklist of common account accuracy issues found in buildings shared in the District's Master Account.

Oct. 24, 2012 in Seattle

http://2030districtesbworkshop-eorgf.eventbrite.com/

NEAA, BetterBricks, and City of Seattle

Energy Management: Introduction to Best Practices

This workshop will provide you an understanding of energy management as a systematic approach to monitor, control, and conserver energy.

Oct. 23, 2012 – Moses Lake, WA

Click for registration information

NEEA

Industrial Refrigeration Systems Energy Management

This workshop focuses on industrial refrigeration systems that use ammonia as refrigerant, and provides knowledge and tools to reduce energy usage and operating costs.

- Oct. 23, 2012 Hermiston, OR
- Oct. 24, 2012 Caldwell, ID

Click for registration information NEEA

Emerging Technologies Showcase – National Energy Efficiency Technology Roadmapping Summit

Information about BPA's energy efficiency technology roadmapping effort, including a sample of promising emerging technologies.

• Oct. 24, 2012 – webinar

Click for information

NW Ductless Heat Pump Project Contractor Orientation

This course provides you information about project objectives, participation requirements, and the growing market.

• Oct. 31, 2012 – webinar Click for registration information

Resources for You

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.

Advanced Lighting Guidelines Online

Developed by the New Buildings Institute, <u>Advanced Lighting Guidelines</u> (ALG) Online is web based and provides a comprehensive, one-stop resource for advanced lighting theory, design guidance, real-life applications, lighting technologies and more. It is written and updated by expert lighting industry professionals for practicing professionals, and also provides basic information free to the public.

Energy Efficiency Grant Opportunities

Public higher education institutions and local governments are eligible to apply for 2012 energy efficiency grants from the Washington State Department of Commerce. Round one is now closed. Round two applications are due December 31, 2012. <u>http://www.commerce.wa.gov/site/1403/default.aspx</u>.

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.

Facilities Web Resources

WSU Energy Program Plant Operations Support Consortium 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

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.

This project is funded in whole or in part by funds made available through the American Recovery and Reinvestment Act (ARRA). This funding was awarded by the US Department of Energy through the Energy Policy Division of the Washington State Department of Commerce under Energy Efficiency and Conservation Block Grant No.DE-EE0000849

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>

WASHINGTON STATE UNIVERSITY

www.energy.wsu.edu