RCM NEWS

RCM News for October 2011

A newsletter for Resource Conservation Managers in the Northwest

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Building Science

"Green by Example," by Elaine Aye, IIDA, Principal, Green Building Services, Inc., was published in the July/August issue of *Interiors & Sources*. The new facility for Green Building Services was designed and constructed to achieve LEED-Platinum certification in the Commercial Interiors category. The author offers a clear, step-by-step narrative of how it was accomplished.

Energy Efficiency

"With Post-Its and Checklists, Schools Cut Their Energy Bills," by Winnie Hu, is an August 14, 2011, article in the New York Times. New York City's five boroughs have well over a thousand schools for its children. Many more schools are in the New York Metropolitan Area's other communities which include Long Island, Westchester County, and Yonkers. While touching on schools in other parts of the country, this article focuses on the dramatic efficiency improvements in schools that are in or very near New York City.

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

"7 Steps to Optimizing a Central Plant" was written by Dave Klee, LEED AP, Johnson Controls; it was published in the August 2011 issue of *HPAC Heating/Piping/AirConditioning Engineering*. It shows that modern chilled-water plants lose efficiencies because they are not maintained as a unit, but as separate parts of one. However, the modern chilled-water plant is a system. The author's seven steps optimize the plant not its individual components. Each of the seven is described in useful detail.

"HVAC Payback," by Don Talend, is a five-Web-page article published in the July/August issue of *Distributed Energy*. Upgrades described in this article are focused on incorporating variable-frequency drives (VFDs) into the HVAC systems given that VFDs give a reliable and quick payback. Case studies of HVAC upgrades at a call center, a university, a hospital, and a high school are included. All show, in detail, the differences in the various upgrades applied. For example, the high school upgrade included the use of alternative fuels.

Lighting

"Finding the Light" is a four-Web-page article by Lori Lovely; it was published in the September 2011 issue of *Distributed Energy*. The author offers a number of ways to improve lighting efficiencies such as employing Dimmable Controllable Lighting (DCL) technology for energy-efficient lamps, communicating the importance of energy conservation to staff, using appropriate reflectors to maximize illumination, and including a lighting expert in any lighting design or retrofit. Each of those is explained and financing options for the general lighting retrofit are described.

"How Can I Miss You If You Won't Go Away: The Truth about EISA 2007" was written by Eric Strandberg, LC, Senior Lighting Specialist, Lighting Design Lab; it was published in the Fall 2011 issue of the *Lighting Design Lab Newsletter*. There have been misunderstandings about when, whether, and which incandescents are to be phased out by law. A lighting expert sets the record straight.

"LED Streetlighting: Worth the Investment?" was written by William Atkinson; it was published in the July-August 2011 issue of *Public Power Magazine*. Lower energy use and less maintenance make them attractive, but LEDs have been quite expensive initially, relative to other outdoor lighting options. However, as LED technology improves and supplies are increased to meet demand, the initial cost comes down to the point that the energy and maintenance savings begin to make the first cost insignificant. The article chronicles the experience of Gillette, Wyoming, which embarked on two LED projects, one for street lighting, the other for the Gillette's utility building. The article includes the sidebar "Austin to Use Wireless Technology to Control Streetlights."

"The Future of Light Is the LED," by Dan Koeppel, appeared in the September 2011 issue of *Wired*. This article provides a history of efforts to make LEDs the replacement lighting for incandescents and CFLs. It focuses on difficulties encountered by pioneering developers, particularly on two vexing problems: heat dissipation and light shape. Additionally, there are good comparisons among different light bulbs for wattage, lumens, price, longevity, and color.

Pumps

"A Pump War Story: Back to Basics," by Gary Wamsley, Engineering Consultant, JoGar Energy Services, is a discussion of a training session for a plant's maintenance technicians – and the plant's new engineer – given by the author. It took place at a plant where water pumps were failing at an alarming rate; the cause was identified during the training.

Transportation

"Cars Not Welcome Here," by Allie Grasgreen, was published in the June 27, 2011, issue of *Inside Higher Ed.* It describes the various efforts by some campus administrators to reduce the driving to, from, and on campus to preserve the environment and halt the paving over of valuable campus land with parking lots. They emphasize alternatives including bicycling and public transportation.

Upcoming Events & Training Opportunities

Energy Star Benchmarking Workshop

November 7, 2011 in Seattle, WA

Free workshop for building owners, property managers, and service providers to support compliance with the City of Seattle's building energy benchmarking and disclosure ordinance.

City of Seattle, BetterBricks

http://esbworkshops.eventbrite.com/

Portland General Electric Seminars and Webinars

Seminars free of charge to PGE customers:

- Keeping it Green with Energy Efficiency November 8, 2011 Portland OR
- Chilled Water systems November 9, 2011 in Wilsonville, OR
- Energy Monitoring for Energy Savings November 10, 2011 in Salem, OR
- Fundamentals of Energy & Managing Costs November 15, 2011 in Gresham, OR See website for additional seminars.

One-hour free webinars provide highlights from PGE's seminars.

Intro to Compressed Air Systems – Nov. 10, 2011

Portland General Electric, Energy Trust of Oregon, NEEA, Better Bricks http://portlandgeneral.com/business/news classes/classes/default.aspx

Existing Building Renewal

Overview and a few strategies to pursue energy savings in existing buildings.

• November 10, 2011 in Boise, ID

Boise Integrated Design Lab

http://www.eventbrite.com/event/2185663378

AEE (Association of Energy Engineers) Realtime Online Seminars

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. Refer to website for more classes.

- Developing an Energy Management Master Plan Nov. 14, 2011
- Pitfalls & Profits in Performance Contracting Nov. 14, 2011
- Converting Energy Audits to Business Plans Nov. 18, 2011
- Boiler & Steam System Cost Control Nov. 29, 2011
- Interior Lighting: LED vs. Traditional Dec. 1, 2011
- Justifying Energy Efficiency as a Business Investment Dec. 9, 2011
- Advanced Lighting Retrofit Options Dec. 12, 2011
- Energy Auditing Fundamentals Dec. 12, 2011
- Mechanical Engineering Fundamentals for Non-Mech. Engineers Dec. 12, 2011

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

American Society of Healthcare Engineers (ASHE) - E2C Peer Technical Forums

Online series specific to hospital energy savings. Free and open to ASHE members and their staff.

Case Study of Energy Management: Kadlec Medical Center – Nov. 17, 2011

ASHE, BetterBricks and Energy Star

http://asheregion10e2c.betterbricks.com/calendar

Energy Management: Introduction to Best Practices

Gain basic tools needed to manage energy as a controllable cost.

November 30, 2011 in Vancouver, WA

Northwest Regional Industrial Training, NEAA

http://neea.org/downloadfile.ashx?ID=FGHs3H6WK%2bk%3d

Fundamentals of Pumping System Assessments

This awareness webinar gives an overview of the ASME Energy Assessment for Pumping Systems Standard.

• December 8, 2011 webinar

Hydraulic Institute

https://pumpsevents.webex.com/mw0305l/mywebex/default.do?siteurl=pumpsevents

Building Operator's Certification

Mark your calendars now for BOC Level I certification courses beginning in Spring 2012. Tentative locations are Everett and Lacey, WA. For more information, and to sign up for notification, go to: http://www.theboc.info/wa/wa-schedule.html

Resources for You

Green Wire News

The November 2011 Vampire edition of the <u>Green Wire</u> news is available. This newsletter is brought to you by the Resource Conservation Manager at the Olympia School District. Articles and information include vampire and phantom loads, carbon footprint reports from the Olympia School District, and ways to prepare for winter.

The 2012 Better Bricks Awards

BetterBricks is now accepting nominations for champions of energy efficiency. Awards are offered for standout professionals in the categories of advocate, architect, design engineer, facility manager/operator, owner/developer, service contractor, and property manager/broker. Submissions for nomination are due by January 4, 2012. Awards ceremonies for Oregon and SW Washington are February 9, 2012 in Portland, and February 16, 2012 in Seattle for Puget Sound. Contact BetterBricks for more information and nomination forms.

The Building Operator's Energy Efficiency Tool Kit

The <u>BetterBricks Tools and Technical Advice website</u> offers ways to identify opportunities to save 5-30% of energy use by improving your building's operating performance. The website offers a guided tour of the top four common energy-performance problems, performance indicators, symptom-diagnosis tool, best practices for major equipment and other resources.

Conduit

Conduit is a new, web-based resource that facilitates information sharing, coordination and collaboration among energy efficiency professionals in the Northwest. As a Conduit member, you can share resources with your peers, join a group, begin discussions, learn about trainings and other opportunities, and follow groups or people that are of interest. Information can be filtered by sector, function (e.g. training, implementation or evaluation), topic and/or group. Conduit is implemented by Northwest Energy Efficiency Alliance (NEEA) with support from Bonneville Power Administration (BPA). https://conduitnw.org/Pages/Welcome.aspx

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

Oregon RCM Support

Oregon Department of Energy RCM Support http://oregon.gov/ENERGY/CONS/RCM/rcmhm.shtml

RCM News is prepared by the Washington State University Extension 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 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



www.energy.wsu.edu