## **RCM News for August 2010**

A newsletter for Resource Conservation Managers in the Northwest

In this issue:
Audits
Buildings
Cogeneration
Energy Efficiency Strategies
Greening Buildings
Solar
Upcoming Events & Training Opportunities
Resources for You

#### **Audits**

"Efficiency Evaluations," by Carol Brzozowski, is a five-web-page article describing the auditing process including the different types of audits, the advantages, paybacks, and more. While designs for new buildings seem to be highlighted in the article title's tag line, the energy-efficiency potential of the country's existing building stock is what is primarily addressed. See this article in *Distributed Energy*, July/August 2010, at <a href="http://www.distributedenergy.com/july-august-2010/efficiency-evaluations-demandresponse-1.aspx">http://www.distributedenergy.com/july-august-2010/efficiency-evaluations-demandresponse-1.aspx</a>.

#### **Buildings**

"Energy Use Intensity (EUI)" was jointly written by Kent Peterson, P.E., Vice President and Chief Engineer, P2S Engineering, and Hugh Crowther, P. E., Senior Vice President of Engineering, McQuay International. This article begins with a general definition to explain and a formula to derive the EUI of a building. Then, the authors explain various considerations that must be made to determine the values used in the formula. See this in-depth article in *High Performing Buildings*, Summer 2010, at <a href="http://www.hpbmagazine.org/images/stories/articles/EUI.pdf">http://www.hpbmagazine.org/images/stories/articles/EUI.pdf</a>.

#### Cogeneration

"Closing the Cogeneration Gap" was written by Carl C. Schultz, P.E., Vice President, Advanced Engineering Consultants. It begins with a brief history of cogeneration, followed by clearly detailed explanations of the technology, applications, and economics of combined heat and power systems (CHP). The author includes a sidebar, "Cogeneration Economics: An Example" where he crunches the numbers for a CHP installation at a research center. See this article in *Engineered Systems* (*ES*), June 2010, at

http://www.esmagazine.com/Articles/Feature Article/BNP GUID 9-5-2006 A 100000000000000834933.

## **Energy Efficiency Strategies**

These two articles, by staff, were included in the Spring 2010 issue of *FEMP Focus*; both highlight various strategies that can easily be adapted to non-federal governmental buildings, academic institutions, and schools:

"U.S. Postal Service Implements Green Teams to Save Energy and Resources" is at <a href="http://www1.eere.energy.gov/femp/pdfs/fempfocus\_spring\_2010.pdf">http://www1.eere.energy.gov/femp/pdfs/fempfocus\_spring\_2010.pdf</a>; to see this article, scroll to the top of page four.

"VA's Green Routine Raises Environmental Awareness" is at <a href="http://www1.eere.energy.gov/femp/pdfs/fempfocus\_spring\_2010.pdf">http://www1.eere.energy.gov/femp/pdfs/fempfocus\_spring\_2010.pdf</a> : to see it, scroll to the top of page five.

**Greening Buildings - Operations, Cleaning, Fixtures** 

The following article was published in the July 2010 issue of Sustainable Facility:

"The Building Owner's and Operator's Sustainability Solution: July 2010" was written by Michael J. Berning, P.E., LEED AP, Director of Sustainable Design, Heapy Engineering. It is noted that Heapy's corporate headquarters was LEED-NC (Leadership in Energy Efficiency and Design - New Construction) Silver-certified when built several years ago. Heapy's is now aiming for LEED-EBOM (Existing Building Operation and Management) certification. The article focuses on how the building's O&M are continuing to be green when energy savings are already well in hand. The emphasis is on taking advantage of low-cost "low-hanging fruit," a strategy that would benefit all facilities whether LEED certified or not. The author identifies the specific low-cost measures taken including water savings and a reduction of harmful chemicals with green cleaning products and a water treatment system that includes a non-chemical cooling tower from. See this article at <a href="http://www.sustainablefacility.com/Articles/Column/BNP\_GUID\_9-5-2006\_A\_1000000000000853331">http://www.sustainablefacility.com/Articles/Column/BNP\_GUID\_9-5-2006\_A\_10000000000000853331</a>.

"Fine-Tuning Fixture Specification" is a series of articles by Winston Huff, Contributing Writer, *Maintenance Solutions* in the May 2010 issue of that trade journal:

Part 1: Plumbing: Specification Tips for High-Efficiency Toilets, Urinals. This provides guidance for the facilities manager choosing among three options: meeting code minimums, aiming for LEED certification, or surpassing LEED. See Part 1 at <a href="http://www.facilitiesnet.com/plumbingrestrooms/article/Plumbing-Specification-Tips-for-HighEfficiency-Toilets-Urinals--11731">http://www.facilitiesnet.com/plumbingrestrooms/article/Plumbing-Specification-Tips-for-HighEfficiency-Toilets-Urinals--11731</a>.

Part 2: Plumbing Fixtures: WaterSense Label Provides Guidance. This discusses the U.S. Environmental Protection Agency's WaterSense program. See Part 2 at <a href="http://www.facilitiesnet.com/plumbingrestrooms/article/Plumbing-Fixtures-WaterSense-Label-Provides-Guidance--11732">http://www.facilitiesnet.com/plumbingrestrooms/article/Plumbing-Fixtures-WaterSense-Label-Provides-Guidance--11732</a>.

Part 3: High-Efficiency Toilets: Consider Drain-Line Carry. This is a briefly stated, but important caution. See Part 3 at <a href="http://www.facilitiesnet.com/plumbingrestrooms/article/HighEfficiency-Toilets-Consider-DrainLine-Carry--11733">http://www.facilitiesnet.com/plumbingrestrooms/article/HighEfficiency-Toilets-Consider-DrainLine-Carry--11733</a>.

Part 4: The Three Applications of Lavatory Faucets. The "three applications" refer to fixtures which supply different amounts of water for different washing needs. See Part 4 at <a href="http://www.facilitiesnet.com/plumbingrestrooms/article/The-Three-Applications-of-Lavatory-Faucets--11734">http://www.facilitiesnet.com/plumbingrestrooms/article/The-Three-Applications-of-Lavatory-Faucets--11734</a>.

#### Solar

"Colleges Add Solar Power," by staff, is a review of the academic institutions across the country and the solar technologies they are employing. Also, the author includes a number of useful informational links for the reader to follow. See this article in the *Environmental Leader*, August 17, 2010, at <a href="http://www.environmentalleader.com/2010/08/17/colleges-add-solar-power/">http://www.environmentalleader.com/2010/08/17/colleges-add-solar-power/</a>.

# **Upcoming Events & Training Opportunities**

New Trends in Lighting – LEDs vs. Incumbents
Sept. 8, 2010 in Portland, OR
Free to Portland General Electric customers
http://portlandgeneral.com/business/news\_classes/classes/default.aspx

## Advanced Technologies in Outdoor Lighting

Sept. 9, 2010 in Portland, OR

Free to Portland General Electric customers

http://portlandgeneral.com/business/news\_classes/classes/default.aspx

# Smart Metering, Load Profiling & Demand Response

Online live seminar -identical sessions below:

- Sept. 8-10, 2010
- Nov. 3-5, 2010
- Dec. 13-15, 2010

A series of three interactive live two-hour time modules, this seminar shows you how to analyze "smart meter" data to gain a clearer understanding of your electrical loads and to use the information to control and minimize peak demand and energy costs.

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

## Monitoring Load Shape for Energy Savings

Sept. 15, 2010 in Portland, OR

Free to Portland General Electric customers

http://portlandgeneral.com/business/news\_classes/classes/default.aspx

## What's New in Lighting 2010, 10:00am - 12:00pm

Revisiting the Retrofit Process for Offices, 1:00pm – 3:00pm

(Attend both or just one class)

- Sept. 8, 2010 in Bozeman, MT
- Sept. 15, 2010 in Boise, ID
- Sept. 22, 2010 in Spokane, WA
- Sept. 29, 2010 in Portland, OR
- Oct. 7, 2010 in Tacoma, WA
- Oct. 13, 2010 in Everett, WA
- Oct. 21, 2010 in Bellevue, WA
- Oct. 28, 2010 in Seattle, WA

### Lighting Design Lab

http://www.lightingdesignlab.com/calendar/classes.html

#### Building Operator Certification (BOC) – Live Technical Webinars

Sept. 16, 2010 – Energy Tune Up – Measurement Tools for Building Energy Diagnostics See website for other pre-recorded webinars.

http://www.theboc.info/webinars/index.html

# Building Operator Certification (BOC) - Level I and Level II Certification course schedule

Ideal for operations and maintenance staff working in public and private commercial buildings. Classes meet one day a month.

#### Level I courses

Lacey – Sept. 14, 2010 to Mar. 1, 2011\* (new location) Seattle – Oct. 19, 2010 to Apr. 12, 2011

#### Level II Courses

Renton - Sept. 14, 2010 to Feb. 3, 2011\*

## Free Informational Web Cast

Sept. 9, 2010

http://www.theboc.info/wa/schedule\_wa.html

<sup>\*</sup> dates subject to change

For BOC courses in Oregon, go to <a href="http://www.nweei.org/boc.html">http://www.nweei.org/boc.html</a>

# Energy Efficiency of Chillers and Chilled Water Systems: Hands-On Workshop

- Sept. 22-23, 2010 in Longview, WA
- Sept. 28, 2010 in Nampa, ID
- Sept. 30, 2010 in Pocatello, ID

Northwest Energy Efficiency Alliance sponsored event

http://www.nwalliance.org/participate/calendar.aspx?eventID=2397

## Adaptive Lighting Symposium

- Sept. 24, 2010 in Portland, OR
- Sept. 30, 2010 in Seattle, WA

http://www.regonline.com/builder/site/Default.aspx?eventid=890536

## Energy & Water Efficiency - Double Your Savings

Sept. 30, 2010 in Gresham, OR

Free to Portland General Electric customers

http://portlandgeneral.com/business/news\_classes/classes/default.aspx

## Future Energy Conference

Nov. 9-10, 2010 in Seattle, WA

www.futureenergyconference.com

# On-Line AEE Self Study Professional Training Courses

Course titles such as "Basics of Energy Management", "Fundamentals of HVAC Systems" and "Finance & Accounting for Engineers & Technicians" (new) are available in a home-study format. http://www.aeecenter.org/training/

#### **Energy Events Calendar**

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

#### **Resources for You**

# **ENERGYsmart Library for Your Business**

Information on energy efficient heating, cooling, lighting and other by equipment type. This is a Puget Sound Energy website.

http://www.energyguide.com/audit/webauditframeset.asp?referid=73&bid=pse&sid=178&pageid=25&prd=

#### Washington State Energy Marketplace Directory

Directory of Renewable Energy, Energy Efficiency, & Sustainable Products Companies. Produced July 2010 by the State of Washington Department of Commerce Energy Policy Division.

http://www.commerce.wa.gov/DesktopModules/CTEDPublications/CTEDPublicationsView.aspx?tabID=0 &ItemID=5008&MId=863&wversion=Staging

### Washington RCM Support

Washington State University Energy Program RCM Support

Check out the "RCMx" where we have moved the RCM Guidebook into web format. 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/projects/rem/rcm.cfm

## Oregon RCM Support

# Oregon Department of Energy RCM Support <a href="http://oregon.gov/ENERGY/CONS/RCM/rcmhm.shtml">http://oregon.gov/ENERGY/CONS/RCM/rcmhm.shtml</a>

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Send comments or ideas for articles to Karen Janowitz - <a href="mailto:janowitz">janowitz</a> @energy.wsu.edu