

RCM News for April 2008

A newsletter for Resource Conservation Managers in the Northwest

In this issue:

Efficiencies

HVAC

Ventilators

Water

New RCM

On-line Efficiency Course

Job Announcements

Upcoming Events

Resources for You

Efficiencies

Florida's Pinellas County School District has tried to rein in its \$26 million per year electricity charges with an energy management approach that educates and guides people to conserve energy to reduce the district's utility bills. The district uses energy expertise from a subsidiary of its power provider to accomplish its goals. If there is enough conservation among all its customers, it benefits the power provider which avoids the high cost of building new generation. For more information about how this cooperative effort works, see "Coaches' Bring Savings to the Energy Team," by Janis Keating, in *Distributed Energy*, January/February 2008, at http://www.distributedenergy.com/de_0801_coaches.html

A mix of funding from the public and private sectors will provide for the purchase and the installation of solar panels on the roof of the gymnasium at Portland's Lewis and Clark College. The solar panels will provide 15% of the gym's power requirements. The college has entered a Power Purchase Agreement with Honeywell whereby Honeywell will own the power generated by the panels and the college will pay for the power. Over the 20 years that the agreement is in place, the school is expected to save \$200,000 in energy bills, reduce its carbon footprint, and engage its students in green technology education. See the February 20, 2008, article, "Honeywell and Lewis & Clark College Team to Harness Solar Energy," from Honeywell International, in *FacilityWise*, February 2008, at <http://www.schoolfacilities.com/coreModules/content/contentDisplay.aspx?contentID=3060>.

HVAC (Heating, Ventilation, and Air Conditioning)

"Grade 'A' HVAC" was written by Amara Rozgus, Senior Editor, *Consulting-Specifying Engineer*. While new construction in two school districts, the Chicago Public Schools and the Prairie Crossing Charter School (Grayslake, Illinois) is the focus of this article, it has something else very interesting to offer. The author includes a discussion of how Chicago schools built around a hundred years ago would actually qualify for LEED certification because of their daylighting and HVAC designs and their wall insulation. Further, new Chicago schools, required by the city to earn LEED certification, are being modeled on the ones built in the early 1900s. The article includes two sidebars, "How Green Is Your School?" and "Warming Students' Soles." View this article in *Consulting-Specifying Engineer*, March 2008, at <http://www.csemag.com/article/CA6543133.html> – this may be just a bit slow to load.

"What a Water-Cooled HVAC System Can Do for Your Building" is an article by Jerry Ackerman, Marketing Director, Clearwater Systems Corp. According to the author, research indicates that air-cooled HVAC systems use a great deal more energy to operate than water-cooled ones. This means that air-cooled HVAC systems are also much higher emitters of greenhouse gases. And, although air-cooled systems have lower first costs, water-cooled systems are cheaper when life-cycle costs are factored into the equation. The author includes diagrams showing how each system works. Another consideration for a resource conservation manager is how much more water does a water-cooled system use than an air-cooled system. The author explains that the traditional answer does not include the volumes of water needed to generate the extra electricity that the air-cooled system requires. NREL (National Renewable

Energy Laboratory) has included this extra water consumption in its analysis resulting, as the author reports, in an answer quite different from the traditional one. View the article in *Buildings*, March 2008, at <http://www.buildings.com/articles/detail.aspx?contentID=5757> .

Ventilators

"The Modern Unit Ventilator," an article by Tom Durkin, P.E., and Brian Partington, PE, is an examination of the classroom unit ventilator (UV), invented in 1917 and still useful under certain circumstances. The authors review the history of the UV, the problems that reduced its use, and how it might be a successful ventilation solution in at least one building design. See it in *Engineered Systems (ES)*, March 2008, at http://www.esmagazine.com/Articles/Feature_Article/BNP_GUID_9-5-2006_A_1000000000000271409 .

Water

WaterSense is an EPA (Environmental Protection Agency) partnership program developed to conserve water. For government and school resource managers, some information on the WaterSense website (at <http://www.epa.gov/watersense/index.htm>) may be of interest. For example, landscaping presents challenges in water efficiency and conservation and this is one of several areas where WaterSense can offer useful information. There are certified water professional programs for individual designers and contractors in general irrigation and for auditors in golf irrigation and landscape irrigation. The WaterSense website lists all those individuals who have completed WaterSense-labeled certification programs. The list is ordered by state and includes the geographic areas served by each certified individual; see this list at

http://www.epa.gov/watersense/pp/lists/irr_partners.htm#WA .

New RCM

Puget Sound Energy (PSE) has hired a RCM for their utility facilities. David Brugman has started to work on resource efficiency projects for PSE facilities located throughout Washington State. David's e-mail address is David.Brugman@pse.com .

On-line Efficiency Course

A new, online certificate program developed by the University of California, Davis, Extension is training professionals to implement resource energy efficiency strategies. The Certificate Program in Energy Resource Management is for professional engineers, construction planners and designers, facility or plant managers, energy analysts, architects, agency managers and others who wish to expand their expertise in this critical area. The curriculum addresses the entire range of issues involved in understanding and managing energy in any industry, from heavy to light energy users.

To enroll or find out more information, contact UC Davis Extension, toll free, at 800-752-0881. For details visit the Extension website: http://extension.ucdavis.edu/unit/business_and_management/certificate/energy_resource_management/

Job Announcements

Waste Prevention and Recycling Program Specialist – City of Seattle

<http://wald1.seattle.gov/personnel/employmentsystem/>

[PostingDetails.aspx?postingID=94b2fa22-91d2-4ec7-beee-f66cf7edceb4](http://wald1.seattle.gov/personnel/employmentsystem/PostingDetails.aspx?postingID=94b2fa22-91d2-4ec7-beee-f66cf7edceb4)

Energy Jobs Links

The EnergyIdeas Clearinghouse has a long list of links that might lead you to a new energy related job.

<http://www.energyideas.org/news/default.cfm?o=h.n.ns&c=z.z.104>

Energy Jobs Website

This site provides a search for energy jobs by state, company type, or job category.

<http://www.energyjobsportal.com/>

Another Energy Jobs Website

Energyvortex.com provides a search tool for jobs.

<http://www.energyvortex.com/careercenter/>

Upcoming Events

April and May 2008 - Lighting Design Lab 2008 Spring Classes, several NW locations

Seminars on energy efficient lighting controls and office lighting in Spokane, Boise, Portland, Bozeman and Seattle. Register: <http://www.lightingdesignlab.com/calendar/classes.html>

May 14-15, 2008 - West Coast Energy Management Congress, Seattle, Washington

Washington State Convention & Trade Center

<http://www.aeecenter.org/emc/>

May 18-21, 2008 – 28th Annual Recycling Conference and Trade Show, Pasco, Washington

<http://www.wsra.net/Conference/>

May 21-23, 2008 - Energy-Facilities Connections 2008, Leavenworth, Washington

<http://www.ga.wa.gov/plant/EFC.HTM>

This conference will be a comprehensive training opportunity and applicable for energy, facilities, safety, operations and business-related professionals. The event provides public and non-profit professionals unique opportunities to discuss best practice approaches to vexing issues. Participants will also have ample opportunities to network, further enhancing the 2 ½ day experience.

May 22-23, 2008 – Triple Bottom Line Reporting: Measuring Environmental, Social and Economic Performance, Seattle, Washington

http://www.nwetc.org/sust-404_05-08_seattle.htm

July 14-July 25, 2008 – Energy Management Certification, Eugene, Oregon

This two week on-campus course offers an in-depth and powerful curriculum for working professionals or those seeking to enter the energy management job market.

http://www.nweei.org/pages/?page_id=10

BetterBricks Professional Education, locations in NW States

A number of courses in Idaho, Oregon and Washington covering topics such as design, building performance, modeling, and facility management.

http://emailer.emailroi.com/r.pl?aDYHILHvZxLLg6hR_6443763f53c921c0

November 4-5, 2008 - 2008 GA Training Conference and Tradeshow, Seattle, Washington

Watch for web address in future editions of RCM News

Resources for You

Washington RCM Support

Washington State University Energy Program RCM Support

Check out the new “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

<http://oregon.gov/ENERGY/CONS/RCM/rcmh.m.shtml>

EnergyIdeas Clearinghouse

Information on energy technologies, programs and practices.

<http://www.energyideas.org/>

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 Community Trade and Economic Development Energy Division.

Previous issues of RCM News may be viewed at the WSU Energy Program RCM support page:

<http://www.energy.wsu.edu/projects/rem/rcm.cfm>

Send comments or ideas for articles to Karen Messmer - messmerk@energy.wsu.edu