

RCM News for November 2010

A newsletter for Resource Conservation Managers in the Northwest

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WANTED – Information on Modular Classroom Buildings

Bonneville Power Administration is developing incentives for web-enabled programmable thermostats for Modular Classroom Buildings and would appreciate the following information:

- 1) Approximately, how many Modular Classroom Buildings do you have in your school district?
- 2) Do any of your Modular Classroom Buildings already have web-enabled programmable thermostats?
- 3) Are any of your Modular Classroom Buildings heated with mini-split heat pumps (such as the Mitsubishi Mr. Slim, or another manufacturer)?

Please send your responses to: Mira Vowles at mkvowles@bpa.gov by January 14, 2011. Thank you.

Audits

"[Efficiency Evaluations](#)," by Carol Brzozowski, is a five-web-page article describing the auditing process including different types of audits, advantages, paybacks, and more. While designs for new buildings seem to be highlighted in the article's tag line, the energy-efficiency potential of the country's existing building stock is what is primarily addressed. Facility managers of school, academic, state, and municipal buildings may benefit from reading this article. This article was published in the July/August 2010 issue of *Distributed Energy*.

Data Centers

"[Taming the Energy Hogs](#)," by Dan Rafter, is a six-web-page article in the September-October 2010 issue of *Distributed Energy*. It explains the basic conundrum for designers and managers of data centers: maintaining high reliability with reduced power consumption. An additional issue for them is the ever-increasing power density in data centers. Some ways to contribute toward helping data centers safely reduce energy use are discussed including more efficient equipment, onsite power generation, and more.

District Energy

"[Energy Independence](#)," by Justin Moresco, features the Seattle Steam Company as an example of a utility engaged in district heating (DH), a valuable technology for business, academic, and government campuses as well as in urban areas. Seattle Steam has been heating buildings in Seattle's downtown since 1893 using DH technology. In 2009, it switched fuels in one of its boilers to urban waste wood. It plans to install a CHP (combined heat and power) system, which will capture waste heat for use in the system. Other district energy examples are cited from the University of Texas to the Hawaiian Islands to a residential development in Alberta, Canada. This article was published in *Sustainable Industries*, the July 2010 issue.

"Leased Space or Owner Occupied? Look to Energy Star," written by Alyssa Quarforth and identified as a report prepared by Energy Star, is a three-part article appearing in the September 2009, issue of *Building Operating Management*. While written with the commercial sector in mind, it is applicable to government buildings as well:

- [Part 1](#) - The Value of Energy Star to Green Buildings. Whoever is paying for the utilities in a commercial (or government) building stands to gain from occupying a building that is Energy Star rated. The rating gives a PR advantage and, further, indicates lower energy use that results in reductions in emissions and energy costs.
- [Part 2](#) - Incorporating Energy Efficiency into Leases. This offers plenty of guidance on how to get the language right in leasing agreements.
- [Part 3](#) - Building Out Space for Energy Efficiency. This offers suggestions for getting the most energy efficiencies with a building renovation or addition.

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

"[An EMS Solution for Pneumatic HVAC Systems](#)," by Jack Sine, was published in the September/October 2010 issue of *Sustainable Facility*. A new energy management system (EMS) has been developed by the Lawrence Berkeley National Lab in cooperation with the California Energy Commission that can be used in buildings with pneumatic thermostats without having to make the expensive and time-consuming switch from pneumatics to an EMS-friendly DDC (direct digital control) system.

Toxicity

"[Seattle School, Contractor Get Chemistry Lesson](#)," Richard Korman, is a brief article explaining how moist, concrete flooring and the glue from a carpeting installation worked together to make a new school unfit for occupation. This article appeared in the June/July 2010 issue of *Northwest Construction*.

Water, Storm Water

"[Capturing Condensate](#)" was co-authored by Tom Lawrence, PH.D., P.E., Public Service Associate, Faculty of Engineering, and Jason Perry, Research Engineer, Engineering Outreach Service; both of the University of Georgia. It appeared in the September 2010 issue of *High Performing Buildings*. The article describes the collecting and reuse of condensate from air conditioning systems. Both existing buildings and new construction are considered for collection design and economics.

"[Strategies for Stormwater](#)" was co-written by Robert Benazzi, Consultant, Jaros Baum & Bolles, and Chris Olson, Chief Content Director, *Buildings*; it was published in that journal in July 2010. The authors discuss various aspects of both water detention (capture) and water retention (for reuse) designs. The emphasis is on low-impact systems that yield excellent results in terms of energy savings.

Holiday Scheduling Reminder

One of the easiest ways to save energy is to turn off equipment when it's not needed. Make sure that your building takes a holiday by checking to see if your building management system is set for a holiday schedule on **Christmas and New Year's**. Most systems let you designate holidays for the entire year, saving staff time and ensuring holiday weekdays are in unoccupied mode. Remember to check your lighting system too, since it may have separate controls.

Find out more about building scheduling at

<http://betterbricks.com/DetailPage.aspx?ID=492#EquipmentScheduling>

Upcoming Events & Training Opportunities

School Environmental Health & Safety Workshop - WA State Dept of Health

Dec. 2 in Tumwater, WA
Dec. 7 in Redmond, WA
Dec. 8 at Padilla Bay (Mt. Vernon), WA
Dec. 14 in Bremerton, WA

Current information on Washington State school environmental health and safety issues, including Indoor Air Quality.

<http://www.doh.wa.gov/ehp/ts/School/agenda.pdf>

HVAC Energy Efficiency: Air Conditioning and Refrigeration

December 9, 2010 in Seattle

Learn how to maintain peak efficiencies or your systems to keep costs down.

<http://neea.org/downloadfile.ashx?ID=IO2nByPIEOk%3d>

Smart Metering, Load Profiling & Demand Response

Realtime distance learning for energy-involved professionals

Dec. 13-15, 2010
Feb. 23-25, 2011
Apr. 18-20, 2011

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/>

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/>

Building Operator Certification (BOC) – Recorded Technical Webinars

Technical webinars that offer practical maintenance solutions for your facility. Includes “Energy Tune-up Opportunities”, “IAQ”, “Lighting Retrofits”, and “Using Data Loggers”. For a list of webinars go to

<http://www.theboc.info/m-prerecorded-webinars.html>.

BEEP Energy Program

This six-course series offers the information, strategies, technologies, how-to guides, and resources you need to reduce energy and costs...all without leaving your office.

<http://www.boma.org/TrainingAndEducation/BEEP/Pages/curriculum.aspx>

Energy Events Calendar

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

Resources for You

Energy Education Toolkit from EPA

A downloadable toolkit to help you educate employees about energy use, its impact on the environment, and what they can do about it.

<http://www.energystar.gov/index.cfm?fuseaction=bygtw.showBrownbag>

Operations & Maintenance Best Practices: A Guide to Achieving *Operational Efficiency*

Developed by the U.S. Department of Energy's Federal Energy Management Program (FEMP), this guide provides information about O&M management, technologies, energy and water efficiency, and cost-reduction approaches.

http://www1.eere.energy.gov/femp/pdfs/omguide_complete.pdf

Building Symptom Diagnosis Tool

BetterBricks has a new online tool that helps you find the underlying cause of poor energy performance in your building. Select the appropriate equipment (including air distribution, chillers, and sensors) on the website to see a list of specific symptoms. Each symptom has a list of possible causes.

<http://www.betterbricks.com/DetailPage.aspx?ID=493> .

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

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

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

<http://www.energy.wsu.edu/PublicationsandTools.aspx>

Send comments or ideas for articles to Karen Janowitz - janowitzk@energy.wsu.edu