

RCM NEWSBRIEFS

RCM News for January 2011

A newsletter for Resource Conservation Managers in the Northwest

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Boilers

["Heat Transfer: Not What It Used To Be"](#) was written by Sanat Shetty Ph.D., Chemical Engineer and Director of Sales & Marketing, Kentube Engineered Products. It shows how engineering specifications for boiler equipment often do not reflect the newer, though well-enough-established, equipment designs. The newer equipment's ability to offer higher performance with a smaller footprint and a reduced weight goes unrecognized. As a result, energy and space savings go unrealized.

["Thomas C. Wilson, Inc. – Clean And Green,"](#) by Stephen Hanley, President and CEO, Thomas C. Wilson, Inc., makes the connection between good boiler maintenance and both improved indoor air quality for employees and reduced energy consumption. The author offers suggestions for creating a cleaner boiler environment such as regular cleanings, switching to cleaner fuels, and rotating tube cleaning systems.

Buildings

"Ten Ways to Retrofit Existing Buildings Green" is a two-part article by Lawrence W. Speck, AIA, Architect, Page Southerland Page; and Professor, School of Architecture, University of Texas at Austin. The article was published in the November 2010 issue of *Building Operating Management*.

Part 1 is [Always Consider Energy, the Envelope and Reuse What You Can](#). Part 1 shows the importance of retrofits to move the country toward greenhouse gas (GHG) reductions and how to get the most, in terms of sustainability, out of a retrofit. The first four of a total of ten points are covered, listed, and explained.

Part 2 is [Best Practices: Daylighting, IAQ, Green Cleaning and More](#). In Part 2, the author concludes with the remaining six of the ten points.

Codes

"[Next Generation Energy Codes Finalized](#)," by Ron Burton, Vice President for Codes, Standards & Regulatory, was published in the December 2010 issue of *Buildings*. The author describes the far reaching changes in the 2012 International Energy Conservation Code (IECC) that are expected to increase energy efficiencies by 25% - 30%.

Conservation

"[Peer Power: Conserving Energy by Keeping Up with the Joneses](#)," by Michelle Cordray, was posted on the Natural Resources Defense Council (NRDC) website on November 22, 2010. There are new companies that measure their success by how many utility customers reduce their energy use as a result of company campaigns to do so. Campaigns may include comparisons among targeted customers and their more energy-efficient and less energy-efficient neighbors (grouped, not identified as individuals).

Energy Savings

"Utilities Manager" is a two part article by Henry Molise, PE, HCM Energy Consulting, LLC, published in *Maintenance Technology* in the October and December 2010 issues:

Part I is [Making Energy Savings Happen Through People](#). It takes into consideration the need to have a culture in place at the plant that is imbued with the idea of saving energy. It may take several years to reach the point where energy management is really accepted, but it would be worth the effort. A team is developed to start the planning for the implementation of an organization-wide effort to save energy.

Part II is [Making Energy Savings Happen Through People - Implementation & Strategies For Success](#). The team begins the implementation process with staff meetings and other communications that explain what energy professionals refer to as the "low-lying fruit" – the inexpensive and easily accomplished energy-savings measures. Then, more measures that rely on training and expertise are identified and put into play.

Facilities Management

"[Energize Your Energy Purchases](#)," by Richard J. Costello, President, Acela Energy Group, was published in the December 2010 issue of *Buildings*. It lists and discusses six steps to help the facilities manager (not the accounting department) make the best decisions when buying energy whether from utilities or through power marketers.

Green Buildings

"Employee-Focused Interiors," by Karen Kroll, Contributing Editor, *Building Operating Management*, is a three-part article that was published in the December 2010 issue of that journal:

Part 1 is [Study Links Green Buildings and Employee Productivity](#). Anecdotal "evidence" aside, there are studies that have been able to show a connection between a sustainable building environment and worker productivity, which includes fewer days absent from work for health-related reasons.

Part 2 is [Rethinking Office Layouts and Space Planning](#). More access to more daylight for more employees underlies the current thinking about the design of office space.

Part 3 is [Daylighting and Acoustics are Concerns in Office Spaces](#). Full or partial glass for interior glass walls enable daylight to continue through enclosed office spaces and reduce the need for artificial lighting.

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

"[Cool Costs and Hot Savings](#)," by Dan Rafter, is a three-web-page article in the December 2010 issue of *Distributed Energy*. It describes the successful effort to make a university's chiller system more efficient by using software that accurately and continuously adjusts the running of a chiller station. It saves the university a half million energy dollars a year.

"[Integrate Your Plans for Energy and Maintenance](#)" was authored by Patrick O'Donnell, President, Enviro Team Group Inc., and was published in the December 2010 issue of *Buildings*. It shows how to ensure that proper maintenance of HVAC systems not only prolongs the life of the equipment, but, also, saves as many energy dollars as possible. This is a Continuing Education opportunity, but, also, is a valuable article on its own.

Job Opportunities

Resource Conservation Specialist opening with Edmonds School District. Application deadline February 7, 2011.

<https://www2.edmonds.wa-k12.net/scripts/cgiip.exe/WService=wedmonds71/rappljoblst050.w>

Click on "Search", then double click on the "Professional-Technical" "Resource Conservation Spec" position.

Controls System Purchase Assistance Requested

A school district RCM would appreciate hearing from someone with experience upgrading a proprietary HVAC controls system in Washington. They are especially interested in use of a sole-source resolution with their board/commission. Please contact David Cone by email: david.cone@evergreenps.org or phone:360-604-4042.

Upcoming Events & Training Opportunities

Lighting Solutions for IEQ and Energy Performance: 2011 BOC Technical Webinar Series

- New Lighting Standards
Feb 9, 2011 – 10-11 a.m.
- Lighting Controls for IEQ and Cost Savings
March 16, 2011
- New Lighting Technology: A showcase of products and applications
July 21, 2011
- Low Cost/No Cost Lighting Strategies for Cost Savings
Sept 8, 2011

Live instructional webinars. Open to all, BOC graduates receive CEUs.

Building Operator Certification

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

Building Operator's Certification – Oregon

- BOC Level I

- Feb 22, 2011 through June 7, 2011 in Pendleton/La Grande OR
- Sept 2011 through Mar 2012 in Portland OR

One day a month of training and project work in building systems maintenance.

• BOC Level II

- Oct 2011 through Mar 2012 in Portland OR

One day a month of training and elective coursework in equipment troubleshooting and maintenance.

Northwest Energy Education Institute

<http://www.nweei.org/boc.html>

AEE (Association of Energy Engineers) Realtime Online Seminars

Live interactive courses you can complete from your computer. Internet and telephone needed. Programs are generally two to three hours long, but may cover a couple days or more. Many of the following courses begin in early February. Check the schedule for more great courses.

- Quality Lighting for High Performance Buildings
- Fast Track CEM Preparatory Course for Energy Managers
- Converting Energy Audits to Business Plans
- Advanced Lighting Retrofit Options
- Commercial HVAC Fundamentals: System Basics & Energy Efficiency Opportunities
- Life Cycle Costing for Energy Professionals
- Fast Track CRM Preparatory Course for Carbon & GHG Reduction Managers
- Energy Auditing Fundamentals
- Boiler & Steam System Cost Control: 100 Ways to Save Boiler Fuel
- LEDs for Interior Lighting: Applications, New Developments & Comparative Assessment
- Fundamentals of Lighting Efficiency (CLEP Certification Prep)
- Developing an Energy Management Master Plan
- Motors: Operation, Efficiency & Economics

<http://www.aeeprogams.com/realtime/>

Building Operator's Certification – Washington state

• BOC Level I

- March 23, 2011, ending Sept 21, 2011 in Renton, WA
- October 13, 2011, ending Mar 29, 2012 in Silverdale, WA

One day a month of training and project work in building systems maintenance.

• BOC Level II

- Oct 18, 2011, ending Mar 6, 2012 in Renton, WA

One day a month of training and elective coursework in equipment troubleshooting and maintenance.

<http://www.theboc.info/wa/wa-schedule.html>

Energy/Facilities Connections Conference

- May 11-13, 2011 in Leavenworth, WA

Facility experts provide information and resources for handling fiscal and operational restraints.

Plant Operations Support Consortium, WSU Extension Energy Program

<http://www.energy.wsu.edu/PublicFacilitiesSupport/PlantOperations/Conferences.aspx>

Energy Management Certification (EMC)

- July 11-22, 2011 in Eugene, OR

This is an advanced certification program that requires the student to implement an energy-saving project and measure the results. This program teaches a broad spectrum of energy management principles and techniques.

Northwest Energy Education Institute

<http://www.nweei.org/emc.html>

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

Plant Operations Support Consortium Orientation Video

Provides information on member advantages, and on the services that members of the Plant Operations Support Consortium receive.

<http://www.energy.wsu.edu/PublicFacilitiesSupport/PlantOperations/OnlineTrainings.aspx>

Green Wire Newsletter

Olympia School District Resource Conservation Newsletter – February 2011 Issue.

http://osd.wednet.edu/schools/resource_conservation/green_wire_newsletter

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>

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

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 EXTENSION ENERGY PROGRAM

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