

## RCM News for August 2009

A newsletter for Resource Conservation Managers in the Northwest

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### HVAC (Heating Ventilation, and Air Conditioning)

"Bucking the Trend: Microturbines push Branford High School into the ranks of the most energy-efficient schools in the country" was written by Dan Raftner, is about a combined heat and power system installed in a Connecticut school. The system is described along with its energy efficiencies and reliability. It is hoped that those in charge of other very energy-inefficient schools in the state may become interested in the microturbine technology that undergirds the system. See this four web-page article in *Distributed Energy*, July-August, 2009, at <http://www.distributedenergy.com/july-august-2009/bucking-the-trend.aspx> .

"Multi-Campus Makeover" was co-authored by Michael Chad Griffith P.E. CEM, CCP, LEED, and President, Griffith Engineering, Inc.; and by Ted Photakis, Regional Director, Energy Systems Group (ESG). A new central utility plant equipped with energy efficient features including a variable-primary flow chilled water system, Nebraska water-tube boilers with economizers, and more. See this article in *Engineered Systems (ES)*, May 2009, at [http://www.esmagazine.com/Articles/Feature\\_Article/BNP\\_GUID\\_9-5-2006\\_A\\_1000000000000600050](http://www.esmagazine.com/Articles/Feature_Article/BNP_GUID_9-5-2006_A_1000000000000600050) .

### Municipal Water

"Controlling Municipal Energy Costs," by Lyn Corum, describes how water districts in California have worked to decrease energy costs and emissions while increasing reliability. Solar, an excellent option in California, is supplying enough energy to sell extra power and to avoid relying on polluting diesel generators when the grid-supplied power is lost. Different districts are employing different technologies such as microturbines, a Stirling engine run on biogas from anaerobic digestion, and fuel cells. See this two web-page article, written nearly three years ago, but still relevant, in *Distributed Energy*, November-December, 2006, at <http://www.distributedenergy.com/november-december-2006/municipal-energy-costs-2.aspx> .

## Restrooms

"New Options for Restrooms" is a three-part article, by Brandon Lorenz, Senior Editor, *Building Operating Management*, in the July 2009 issue of the journal of the same name. It may be of particular value for the facilities or resource conservation manager in government buildings. Cost-effective technologies can be employed in major or minor restroom remodels:

- Part 1: What the Restroom Communicates About Your Building. This part of the article highlights faucet aerators which save energy, but may present a challenge or two in certain situations. The author explains how to overcome those challenges. See Part 1 at <http://www.facilitiesnet.com/plumbingrestrooms/article/What-the-Restroom-Communicates-About-Your-Building--10985> .
- Part 2: An Overview of New Toilet, Hand Dryer, and Sensor Technology. Here the focus is on the water and energy that can be saved given new and improved toilets, hand dryers, and sensors. See Part 2 at <http://www.facilitiesnet.com/plumbingrestrooms/article/An-Overview-of-New-Toilet-Hand-Dryer-and-Sensor-Technology--10986> .
- Part 3: Restrooms and Building Code Issues. This final piece of the article covers the challenges of working with code officials who are unfamiliar with some of the newer technologies and are wary of the possible risks they may pose. See Part 3 at <http://www.facilitiesnet.com/plumbingrestrooms/article/Restrooms-and-Building-Code-Issues--10987> .

## Solar

"Solar U," by Diane Mettler, describes the development and financing of a seven-acre solar panel project -- the largest of its kind on any U.S. campus -- which will supply 10% of the power needs of Rutgers University. See this article in *enerG: Alternative Sources Magazine*, May/June 2009, at [http://www.altenerg.com/back\\_issues/index.php?content\\_id=128](http://www.altenerg.com/back_issues/index.php?content_id=128) .

## Zero-Energy Buildings

"UC Davis Wants New 'Village' to be Affordably Green," by Jim Downing, *Sacramento Bee*, reports on the pilot project of residential buildings on the university's campus that are being built to zero-energy standards. The project is taking place in stages so that, as buildings are occupied, corrections can be made in the design of the next group of buildings to be constructed. Building occupant energy use will be monitored to see what corrections are to be addressed and to see if this test case will yield the hoped-for results. See this article in the *Sacramento Bee*, August 11, 2009, at <http://www.sacbee.com/business/story/2098633.html> .

## Energy Efficiency Grant Program for Washington Schools

The Washington State Legislature in their 2009-2011 Capital Budget provided grant funds for energy efficiency improvements in public K-12 schools. Grant awards are for up to \$500,000 for qualifying energy efficiency projects in school instructional space.

These projects must be implemented through a performance contracting method. For details visit the Washington State Superintendent of Public Instruction Facilities Department website:

<http://www.k12.wa.us/SchFacilities/Programs/EnergyEfficiencyGrants.aspx>

### **Lake Washington School District RCM in the News**

Lake Washington School District's Resource Conservation Management program is featured in an article published August 20, 2009 on the *King 5 News* site. Highlights include the district's new technology to save money on disposing of mercury-filled fluorescent light bulbs and their use of solar panels for power. Visit the *King 5* website to view the video: <http://www.king5.com/video/environment-index.html?nvid=390838>

### **WSU Spokane Campus Computer Management Software**

*WSU Today online* for August 21, 2009 featured the WSU Spokane campus success with reducing energy use in computer systems. Larry Hoffman, Director of Information Technology at WSU Spokane estimates that the power management software will save more than \$5,000 annually. See the full article here:

<http://www.wsutoday.wsu.edu/Pages/Publications.asp?Action=Detail&PublicationID=15287&PageID>

### **Job Announcements**

Jobs Database at Energy Experts website:

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

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**

Light Design Lab Fall Workshops - "What's New in Lighting"

Bozeman, MT - September 9, 2009

Spokane, WA – September 16, 2009

Boise, ID – September 23, 2009

Portland, OR – September 30, 2009

Tacoma, WA – October 21, 2009

Seattle, WA – October 28, 2009

Advanced registration is required. For more details and registration visit the Lighting Design lab website: <http://lightingdesignlab.com/>

September 9, 2009 – 10-11am Pacific Time - Live BOC Webinar – Boiler Tune-up  
Register here at the BOC website:  
<http://quest.cvent.com/EVENTS/Info/Summary.aspx?e=adb596e9-5da0-402f-a537-be2bb9496b7d>

September 30 – October 1, 2009 – Columbia-Pacific Energy Expo 2009 – Seaside, Oregon  
For more details visit the Expo website: <http://www.nwenergyexpo.com/>

October 7-10, 2009 - The Power of Partnerships: Creative Leadership in Environmental Education - North American Association for Environmental Education 2009 Conference – Portland, Oregon  
<http://naaee.org/conference>

Energy Events Calendar  
<http://www.energyexperts.org/TrainingEducationandEmployment.aspx>

Building Operator Certification (BOC) – ongoing courses  
You can register to view previous BOC webinars for a very reasonable cost. Topics include demand control ventilation, lighting retrofits, and IAQ fixes. Sign up for courses with the BOC Program at their website: <http://www.theboc.info/index.html>

Ongoing - On-Line AEE Self Study Professional Training Courses  
Course titles such as “Basics of Energy Management” and “Fundamentals of HVAC Systems” are available in a home-study format.  
<http://www.aeecenter.org/training/>

## Resources for You

Washington Green Schools  
Starting August 17, both public and private K-12 schools across Washington State can sign up at [www.wagreenschools.org](http://www.wagreenschools.org) to participate in the new Washington Green Schools Program. This voluntary program provides on-line resources and tools that students, teachers, and staff can use to assess and take actions to ‘green up’ school campuses and operations. Schools can gain certification and awards such as a flag and public recognition.

US Department of Energy Recovery Act Clearinghouse  
Information and details on the Recovery Act funding opportunities.  
<https://recoveryclearinghouse.energy.gov/index.htm>

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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<http://www.energy.wsu.edu/rcmx/Meetings.aspx>

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