RCM NEWS

RCM News for September 2013

A newsletter for Resource Conservation Managers in the Northwest

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Appliances

"<u>Smart Plug-Load Control Offers Safety, Convenience, Efficiency</u>" was written by Steve Montgomery, PE, CEO, 2D2C Inc. and appeared in the August 2013 issue of NEMA's *electroindustry*. The article discusses the importance of plug-load control and how effective energy management can be achieved via radio-frequency identification (RFID) tagging.

Building Science

"<u>New Solutions for Old Problems</u>," by Matt M. Casey, is a four-Web-page article in the July/August issue of Distributed Energy. Much can be done to make existing buildings, even quite old ones, more energy efficient and less damaging to the environment. The author suggests taking advantage of new technologies that can save money, even in the short run.

"A Baker's Dozen Energy Saving Ideas" is a two-part article by Alan R. Mulak, PE and William A. Turner, MS, PE and published in Shop Talk:

<u>Part One of Two</u> (scroll to page 4) appeared in the Winter/Spring 2013 issue. It offers tips on lighting, occupancy sensors, electric motors, and more.

<u>Part Two of Two</u> (also, scroll to page 4) was carried in the Fall 2013 issue. It includes suggestions about building operators training, CMMS, air filters, energy-efficient equipment, and assessments, among others.

The following four articles were carried in the September 2013 issue of *HPAC Heating/Piping/AirConditioning Engineering*:

- 1. "<u>Analyzing Building Energy Use</u>" by Kenneth M. Elovitz, PE, with Energy Economics Inc., takes a careful look at how best to calculate heating and cooling loads.
- 2. "<u>Building Measurement & Analytics</u>" was written by Charles Rechtsteiner, Autodesk Inc. Autodesk set out to build its own new headquarters expecting certain efficiencies that were not fully realized because of a number of unanticipated problems and issues. This is an excellent lessons-learned article that could prevent others from making the same miscalculations.
- "<u>Displacement Has Its Place</u>" was authored by Mark Costello of Titus. He discusses those applications that are right for displaced ventilation, beginning with large, high-ceilinged, open spaces.
- 4. "<u>Report: Advanced Occupancy Sensors Could Save Thousands in Energy Costs</u>" was written by Scott Arnold, Executive Editor, *HPAC Heating/Piping/AirConditioning Engineering*. This article is about a 76-page, January 2013, report that was prepared by PNNL for DOE: "<u>Energy Savings for</u> Occupancy-Based Control (OBC) of Variable-Air-Volume (VAV) Systems"

Green Buildings

The following two articles were carried in the August 2013 issue of *Building Operating Management*, both of them focus on green renovations of existing buildings:

1. "Close-Up: Energy Efficiency" was written by Greg Zimmerman, Executive Editor of *Building Operating Management*; it appeared in the August 2013 issue of that journal; it explains how to line up the intent to save resources with greening a building and achieving actual results:

Part 1: How to Realize Actual Savings from Green Renovation Projects

Part 2: Commissioning, Retrocommissioning Are Critical Elements of Green Renovations

2. <u>Tenant Engagement, Energy Efficiency Lead to LEED Gold for 255 Alhambra Circle</u>," by staff, suggests that it may be a mistake to think that greening existing buildings would be too costly. In this case, a 13-story office building in Coral Gables, Florida, was re-designed to save energy and water. A sustainable approach for cleaning the building was also incorporated. The result was a reduction in the use of resources, an improvement in the interior environment, and a LEED-Gold for Existing Buildings certification. All of this was accomplished without a large capital investment.

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

"2013 Engineering Design Awards: Taking Innovative HVAC Design to School," by Ron Rajecki, is an article in the July 2013 issue of *HPAC Heating/Piping/AirConditioning Engineering*. It describes the HVAC installations at the existing Chief Sealth International High School and the new Denny Middle School, both in Seattle.

Lighting

"Quality of Light and Overcoming Barriers to LED Adoption" was authored by Clifton Lemon, Marketing Communications Manager, Soraa and appears in the August 2013 issue of NEMA *electroindustry*. The article recounts the challenges to LED adoption that should be overcome as the technology matures.

Pumping

"<u>Seal Support Systems</u>," by Jason Ferris, appeared in the August 2013 issue of *Pumps & Systems*. highlights the open- and closed-loop water systems and the pump systems that represent excellent opportunities for energy and resource savings. The author offers information about a calculator tool, an ISO standard, an API piping plan, and alternative sealing systems, all of which can help to raise efficiencies.

Water

"<u>A Path to Net-Zero Water</u>," by Jennie Morton, Associate Editor of *Buildings*, appeared in the August 2013 issue of that journal. It offers strategies for the facilities manager to employ for successful water harvesting.

"<u>Water & Energy: A Crucial Conversation</u>," by Dan Rafter, is a five-Web-page article in the July/August issue of *Distributed Energy*. It discusses the challenges faced by water utilities to cut costs by reducing energy consumption. While pumping accounts for most of their energy use, technological improvements have made new pumps much more efficient.

Upcoming Events & Training Opportunities

Speaking the CFO Language: Building the Case for Energy Efficiency with Financial Decision-makers

This webinar discusses best practices for communicating the value of building energy efficiency projects.

• Oct. 1 online webinar

Click for registration information Better Buildings, U.S. DOE

Portland General Electric Seminars and Webinars

Portland General Electric offers online webinars and paid courses open to everyone, and seminars and workshops free of charge to its commercial and industrial customers.

- Understanding Demand Response Oct. 1 in Salem/ Oct. 2 in Portland
- Compressed Air Systems Oct. 30 in Wilsonville, OR
- Understanding LEDs Oct. 3 online webinar
- Intro to Compressed Air Systems Oct. 8 online webinar

PGE Energy Education Center webpage

Portland General Electric, Energy Trust of Oregon, NEEA, BetterBricks

Building Operators Certification

BOC Level I certification is 74 hours of training and project work in building systems maintenance. Level II certification is 61 hours of training and elective coursework in equipment troubleshooting and maintenance. Classes are usually one or two full days a month.

- Washington State
 - o Level II Oct. 2, 2013 through Feb. 12, 2014 in Lacey
 - Level II Oct. 3, 2013 through Feb. 13, 2014 in Everett

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

- Oregon
 - o Level I Oct. 1, 2013 through Mar. 4, 2014 in Lincoln City, OR

- o Level I Oct. 8, 2013 through Feb. 12, 2014 in Tigard, OR
- Level II Feb. 26 through Jun 11, 2014 in Portland, OR

Click for BOC Oregon information

Building Operators Certification

ENERGY STAR® Portfolio Manager Trainings

All are online webinars.

- Financing Energy Efficient Upgrades with ENERGY STAR Oct. 3 •
- How to Apply for the ENERGY STAR Oct. 8 •
- ENERGY STAR and Green Building Rating Systems - Oct. 10
- Water: Benchmarking and Best Practices from WaterSense Oct. 16
- Portfolio Manager 101 Oct. 17 •
- How to Launch an ENERGY STAR Energy Efficiency Competition Oct. 22 ٠
- Portfolio Manager 201 Oct. 24

Click here for more information

US EPA

Energy Efficiency Investment Analysis

This webinar looks at key financial concepts for energy efficiency, such as simple payback, time value of money, and life-cycle cost analysis.

Oct. 15 online webinar

Click for registration information NEEA, BPA, WSU Energy Program, NWFPA

Building Walk Through - Finding Energy Waste

This webinar helps you plan and execute a successful building walk that will open your eyes to energy improvements.

Oct. 16 online webinar

Click for registration information

BOC

Introduction to Energy Data Management: A Hands-on Workshop

This day-long training presents methods, tools, and resources to analyze energy use.

- Oct. 17 in Roseburg, OR
- Oct. 23 in Spokane, WA

Click for information

NEEA, Pacific Power, ETO, Consumers Power, ODOE, Avista, Inland Power and Light, BPA, WSU Energy Program, NWFPA

Optimizing Pumping Systems: A Measurement-Based Approach

This two-day training focuses on measurements that are required for any pumping system performance assessment such as flow rate, pressure, and electrical data.

Oct. 29-30 in Nampa, ID

Click for information

NEEA, Idaho Office of Energy Resources, BPA, WSU Energy Program, NWFPA

AEE (Association of Energy Engineers) Real-time Online Seminars

Webinars and live interactive courses you can take from your computer. Programs are generally two to three hours long, over a period of days. Topics include energy auditing, lighting controls, HVAC systems and much more. Visit their website for a complete list:

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

Resources for You

Georgetown University Energy Prize

U.S. municipalities ranging in population from 5,000-250,000 residents have an opportunity to compete for the <u>Georgetown University Energy Prize</u>, a collaboration between U.S. DOE and Georgetown University with a launch date in February 2014. The competition involves developing a long-term energy efficiency plan and demonstrating initial effectiveness and sustainability during a two-year period. Although only one prize will be awarded (\$5 million to support continuing community-based energy efficiency efforts), participating communities will benefit from access to financial and technical resources. Interested communities are encouraged to submit a non-binding letter of intent as soon as possible.

2013 ENERGY STAR Certification

Please note that to be considered for 2013 ENERGY STAR Certification, applications must be submitted within EPA's Portfolio Manager by Midnight EST Friday, November 15, 2013. A <u>training document</u> is available to guide an applicant through the step-by-step process for applying.

Do you have newsletters, websites and links to share? Do you have RCM questions?

RCM News is always looking for interesting information, tips and resources to share with other resource conservation managers. Our goal is to increase your success by sharing what you and your colleagues are doing – with energy efficiency measures, problem-solving, communication, data tracking, presentations, and more. In addition, WSU Energy Program can help find solutions to your RCM program's technical and programmatic questions. <u>Email Karen J</u> to share and ask!

Energy Events Calendar

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

Washington RCM Support

The Washington State University Energy Program provides RCM support. Check out the "RCMx" website: <u>http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx</u>. 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.

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Previous issues of RCM News may be viewed at <u>http://www.energy.wsu.edu/PublicationsandTools.aspx</u> (click on Resource Conservation in the right hand column). We welcome comments or ideas for articles. Please send to Karen Janowitz - <u>janowitzk@energy.wsu.edu</u>

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www.energy.wsu.edu