RCM NEWS

RCM News for July 2014

A newsletter for Resource Conservation Managers in the Northwest

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Behavior Change

"<u>Battle of the Kilowatts</u>" is written by Jennie Morton, senior editor of *Buildings* Magazine, and published in the July 2014 issue of the same magazine. Plug load by building occupants can account for anywhere from 15 to 50% of a building's energy use. Engaging occupants to reduce plug loads through creative competitions can be more successful than nagging or signs. The article offers clever names for energy competitions, and nine steps toward success.

Buildings

A three-part article, "BACnet: Data and Analytics" discusses how integration of multiple building systems, such as HVAC, lighting, and building management systems, contributes to increased energy efficiency. The article appears in the July 2014 issue of *Building Operating Management*. BACnet systems collect data and use analytical algorithms to drive greater performance of equipment, locate operational issues, and more. There are many types of BACnet systems – it's important for facility managers to choose one that works for their situation, and learn how to use it well.

Part 1: BACnet Data Fuels Success With Analytics

- Part 2: Analytics Options Are As Varied As Buildings
- Part 3: Facility Managers Must Truly Understand BACnet To Maximize Its Benefits

"Green Building Report: The Real Costs of Major Energy Upgrades" by Stefan Domby appears in the July 2014 issue of *Building Operating Management*. It is crucial to understand the full costs of an energy project. Some of the many issues to consider when estimating costs include whether the building is occupied or not, comparing the cost (including installation and maintenance) of a new system with the

cost of doing nothing, understanding how the utility rate structure affects different systems, and if the energy savings have been modeled on components or an entire system. Information about the new LEED v4 completes the article.

Part 1: Budget For Energy Upgrades Requires Fully Understanding Real Costs

- Part 2: True Energy Costs Play Important Role In Determining Energy Savings
- Part 3: <u>Realistic View Of Energy Savings Helps Meet Targets</u>
- Part 4: USGBC Professional Exams Evolving With Launch Of LEED v4

ENERGY STAR

"Energy Star: No Excuses", written by Angela Maas, Managing Editor of *Building Operating Management*, appears in the July 2014 issue of that online magazine. The three-part article counters some common misconceptions about Energy Star that may be preventing facility managers from using the program. Excuses such as "my type of building uses too much energy to do well on Energy Star" and "using Energy Star is too much work" are refuted with facts about Energy Star and how it works.

Part 1: <u>Misconceptions About Energy Star Can Prevent Facility Managers From Seeing Its Benefits</u> Part 2: <u>Time Commitment For Energy Star Portfolio Manager Is Work That Should Already Be Done</u> Part 3: <u>Improving Building's Energy Performance Brings Additional Benefits As Well</u>

Pumps

"System Efficiency Lowers Lifetime Costs" is written by Jack Creamer of Schneider Electric and published in the July issue of *Pumps & Systems*. While efficient pumping systems can save up to 50 percent in potential energy costs, there is a lack of focus, awareness, and funding when it comes to improving pump efficiency. Inefficient pump systems and how to improve them are explained, along with cost-effective maintenance strategies. Also mentioned are minimum efficiency standards for pumping systems being developed by the Department of Energy.

Submetering

"Energy Management 101: Smart Submetering and Data Logging" appears in the July 2014 issue of *Buildings* Magazine, and is written by Christopher Curtland, assistant editor at the magazine. Knowing greater detail about energy usage per floor or system, for example, can lead to more focused energy analysis and lower energy use and costs. Data logging and submetering devices are used to reach this level of detail. With loggers, one can measure the temperature and humidity of an HVAC system, and on/off status, occupancy and light levels of a lighting system. Evaluating the data can result in upgrades and improvements for increased energy efficiency. A few case studies are included in the article.

Upcoming Events & Training Opportunities

Efficient Industrial Lighting - Tips on What's Best for Your Application

Learn how to select the best LEDs and other lighting products to meet your specific needs for both interior and exterior applications. Open to all.

• Aug. 5 online webinar

Click here for more information

NEEA, BPA, WSU Energy Program, NWFPA

Energy Efficiency for Air Cooled Refrigeration Systems

Learn how to reduce energy use and operating costs while improving reliability.

• Aug. 6 in Boise, ID

Click here for more information

NEEA, BPA, ID Power, WSU Energy Program, NWFPA

2012 Washington State Energy Code - Commercial Provisions Trainings

Topic-specific trainings that focus on commercial provisions of the 2012 WA State Energy Code.

- Envelope and Lighting Provisions Aug. 12 in Seattle, WA
- Envelope and Mechanical Provisions Aug. 15 in Port Angeles, WA

Click here for more information

NEEC

ENERGY STAR® Portfolio Manager Trainings

All are online webinars.

- Benchmarking Water/Wastewater Treatment Facilities in Portolio Manager Aug. 12
- Portfolio Manager Office Hours, Focus: Sharing Aug. 21
- Portfolio Manager 101 Aug. 26
- Portfolio Manager 201 Aug. 27
- How to Apply for the ENERGY STAR Aug. 28

Click here for more information

US EPA

ENERGY STAR® Low Carbon IT Webinars

- Data Center Energy Efficiency Opportunities: What Managers Should Know Aug. 14 online webinar
- Computer Power Management with ENERGY STAR Aug. 21 online webinar

Click here for more information

US EPA

Energy Efficiency of Chilled Water Systems and Cooling Towers

Attend one or both days. At the first class, learn how technology improvements of chilled water systems can reduce energy costs. The second day features efficiency measures concerning cooling towers such as sizing vs. energy savings, efficient fan operation, and water treatment.

- Energy Efficiency of Chilled Water Systems Aug. 27 in Missoula, MT
- Energy Efficiency of Cooling Towers Aug. 28 in Missoula, MT

Click here for more information

NEEA, BPA, WSU Energy Program, NWFPA

The Upcoming Lighting Revolution – Oregon APEM Fall Forum

The Oregon Association of Professional Energy Managers' 2014 Fall Forum delves into emerging trends in lighting, specifically color-temperature tunable LEDs and impacts on human behavior.

• Oct. 3, 2014 in Portland

Click here for more information Oregon APEM

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 usually meet one or two full days a month over a period of four to six months.

All dates below are for the first class.

Washington State

- Level I Oct. 23, 2014 in Longview
- o Level II Sept. 11, 2014 in Spokane
- o Level II Sept. 11, 2014 in Olympia
- Level II Sept. 24, 2014 in Seattle
- Level II Oct. 1, 2014 in Everett

Click for BOC Washington state information

- Oregon
 - o Level I February 4, 2015 in Pendleton

Click for BOC Oregon information

Building Operators Certification

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

Building Competition Resources

While your facility is probably not competing in the ENERGY STAR National Building Competition, you can still take advantage of <u>technical resources</u> designed for the teams who are competing. Saving energy, saving water to save energy, and ENERGY STAR calculators are a few of the topics with available resources. Creative materials on the website may inspire you to consider holding your own inhouse (or building to building) competition.

Energy Efficiency Expert Evaluations

Although offered as a webinar for the Federal Energy Management Program (FEMP), the recorded version of <u>Energy Efficiency Expert Evaluations: A Customized Assessment Approach</u> is valuable viewing for all energy managers. It looks at different inspections and building evaluations for different purposes, what you might look for during walk-through assessments, and best practices. There are many examples, photos and descriptions.

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