RCM News for August 2014

A newsletter for Resource Conservation Managers in the Northwest

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Building Envelope

“Air Leakage Testing: A Hot Button or Hot Air?”, by Christopher Curtland and published in the August 2014 issue of Buildings Magazine discusses the use of pressure testing for detecting building problems and the importance of understanding how the process works. In addition, it's important to develop a basic knowledge of building science and building enclosure performance before doing testing. A sidebar lists some warning signs of potential problems, such as water staining at specific spots in the building envelope.

HVAC

“HVAC” is a three-part web article appearing in the August 2014 issue of Facility Maintenance Decisions, and written by James Piper. Preventive and predictive maintenance is necessary to achieve optimal performance by HVAC systems, as well as other energy-using systems. Facility managers must understand the benefits, including reduced energy use, that proactive maintenance programs provide. Proactive maintenance includes facility walk-throughs and retrocommissioning, as well as attention to individual systems such as chillers, boilers and even BAS systems.

Part 1: Hidden Savings in HVAC Systems
Part 2: Patchwork Repairs Often Result in Increased HVAC Costs
Part 3: Boiler Maintenance Key to HVAC Savings

Lighting

“Customize Lighting Control with Wireless Flexibility” was written by Janelle Penny and appears in the August 2014 issue of Buildings. In addition to being less invasive and expensive, some wireless lighting controls can form a mesh network, which allows system components to communicate with each other and is also a self-healing web.
“Are your Occupants Sleep-Deprived?”, appearing in the August 2014 Buildings Magazine, is a brief article explaining how the unseen color of lighting affects alertness. Blue light can be sleep inducing, yet it also uses the least amount of power for its brightness.

A four-webpage article published in the August 2014 issue of Facility Maintenance Decisions, “Online Exclusive: Wireless Lighting Controls”, written by Dave Lubach, Associate Editor of the magazine, discusses energy use, costs, maintenance, and challenges of wireless energy controls, as well as the role that energy standards play in them. Wireless controls are gaining in popularity with the increase in LED lighting. Highlighted are a couple of examples of their use from a university and a factory.

Part 1: Wireless Lighting Controls: Reducing Energy Use, Costs, and Maintenance
Part 2: Wireless Lighting Controls Ride LED Wave
Part 3: Challenges Associated with Wireless Lighting Controls
Part 4: Local Energy Standards Play Role in Wireless Lighting Control Systems

“Showcase: LEDs” is a four-part article appearing in the August 2014 issue of Building Operating Management, written by Casey Laughman, Managing Editor of that magazine. While LEDs continue to improve and provide great advantages, they are not yet a universal solution. When it comes to lighting controls, combining different LED lights and other lights can be a challenge – careful research needs to be done on the best types of lights and the best types of controls for your facility. The last part highlights different LED products.

Part 1: Managing Multiple Lighting Options With One Control System
Part 2: Balance Cost Efficiency, Functionality To Decide Correct Lighting Options
Part 3: Multiple Types Of Lighting Can Complicate Daylighting Efforts
Part 4: Showcase Products: LEDs

Water

“Grounds Management”, written by Mike Fitzpatrick in the August 2014 issue of Facility Maintenance Decisions discusses the importance of maintenance for irrigation systems. The article looks at elements of regular comprehensive maintenance, as well as when to make the decision to repair or replace the irrigation system.

Part 1: Irrigation Systems: Maintaining for Savings
Part 2: Is it Time to Repair or Replace Irrigation System?

Upcoming Events & Training Opportunities

Make Your Building Sing!: Building Re-tuning to Reduce Energy Waste
US Dept. of Energy Better Buildings Challenge partners will share their experience with re-tuning training.
  • Sept. 2 online
Click here for more information
US Dept. of Energy EERE
ENERGY STAR® Portfolio Manager Trainings
All are online webinars.
- Portfolio Manager Office Hours, Focus: Sharing Part 2 – Sept. 4
- Portfolio Manager 101 – Sept. 23
- Portfolio Manager 201 – Sept. 24
- Energy Treasure Hunts: Simple Steps to Finding Energy Savings – Oct. 8

Click here for more webinars and information
US EPA

ENERGY STAR® Low Carbon IT Webinars
- Data Center Energy Efficiency Opportunities: What Managers Should Know – Sept. 11 online webinar
- Computer Power Management with ENERGY STAR – Sept. 18 online webinar

Click here for more information
US EPA

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
  - Level II – Sept. 11, 2014 in Spokane
  - 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**
  - Level I – Sept. 16, 2014 in Bend
  - Level I – Oct. 7 in Portland
  - Level I – Feb. 4, 2015 in Pendleton

  Click for BOC Oregon information

Building Operators Certification

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. All classes in Oregon or online.
- Motors & Motor Controls, 7-week class – Sept. 17-Oct. 29 in Wilsonville
- Save Energy through Operations & Maintenance – Sept. 18 online
- Electrical Safety Essentials – Sept. 30 online
- Intro to HVAC Systems – Oct. 7 in Portland

PGE Energy Education Classes
Portland General Electric, Energy Trust of Oregon, NEEA, BetterBricks
Optimizing Energy Management through Big Data and Analytics

BOC webinar – Information technology meets energy efficiency in this live webinar about retrieving and understanding building data.
- Sept. 24, 2014 live webinar
Click here for more information

Building Operators Certification

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

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

Better Buildings Summit Highlights
Presentations from the US Department of Energy’s Better Buildings Summit, held May 7-9, 2014, are available online. 180 presentations covered everything from emerging technologies, energy data management best practices, employee engagement and incentive programs, and workforce training. The presentations are grouped into categories such as Commercial Sector, Public Sector, Making Energy Efficiency Investment Easier, and Collaborations and Partnerships.

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. Email Karen J 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: http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx. 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 http://www.energy.wsu.edu/PublicationsandTools.aspx (click on Resource Conservation in the right hand column).
We welcome comments or ideas for articles. Please send to Karen Janowitz - janowitzk@energy.wsu.edu