

RCM NEWS

RCM News for November 2015

A newsletter for Resource Conservation Managers in the Northwest

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Data Centers

A two-part article on Data Centers, written by Steve Ryan and Robert Huang for the November 2015 issue of *Building Operating Management*, describes 12 energy saving strategies for small to mid-size data centers. These best practices, provided by Energy Star, are common energy-efficiency opportunities. They include variable speed drives, temperature and humidity adjustments, and economizers.

Part 1: [Best Practices for Saving Energy In Data Centers](#)

Part 2: [Data Center Energy Efficiency Targets Include Temperature, Humidity Adjustments; Economizers](#)

LEDs

The November 2015 issue of *Building Operating Management* has a three-part article on LEDs, written by Melanie Taylor. LEDs have completely transformed the lighting industry. Energy and facility managers need to know how to evaluate and implement LED products to make the best use of the technology. LED color, light quality, intensity, light distribution, and life-cycle costs are described in this primer.

Part 1: [A Primer on LEDs, Including Lamp Life and Light Output](#)

Part 2: [LED Issues Include Color Temperature, Light Distribution](#)

Part 3: [Considering Relative Cost when Evaluating LEDs](#)

Lighting Controls

Lighting Controls are explored in a four-part article written by Craig DiLouie in the November 2015 issue of *Facility Maintenance Decisions*. Lighting controls can increase the efficiency and energy savings of a lighting upgrade, reduce maintenance costs, and add flexibility to a lighting system. Manual controls, occupancy-based controls, and photocontrols are just a few options to find the best combinations of

devices for the application. Other factors to consider include required energy codes and the needs of both the occupants and building.

Part 1: [Lighting Controls Achieve Next-Generation, Maintenance Cost Benefits](#)

Part 2: [Managers Can Specify a Combination of Lighting Technologies](#)

Part 3: [Application Issues With Lighting Control Systems](#)

Part 4: [LEDs Popular Retrofit Choice for Lighting Control Systems](#)

Submetering

A four-part article on submetering, written by Derek Tynan, appears in the November 2015 issue of *Facility Maintenance Decisions*. For many buildings and campuses, submetering is important to identify energy efficiency opportunities, isolate and measure energy use of different building energy systems, and improve sustainability. Smart meters have technology that allows energy to be monitored continuously, which can reduce demand charges. Also, immediate savings can be realized through the ability to bill for a tenant's actual energy use. New meters should be selected dependent on cost, data accuracy, and they should be placed in accessible locations.

Part 1: [Advances in Submetering Technology Optimize Energy-Saving Systems](#)

Part 2: [Data, Cost Important Considerations for Submetering Upgrades](#)

Part 3: [Long-Term Benefits of Commissioning Energy-Monitoring Systems](#)

Part 4: [Spotlight on Smart Buildings](#)

Water Conservation

Plumbing & Restrooms, as they relate to water conservation, is the topic of a four-part article published in the November 2015 issue of *Facility Maintenance Decisions*, written by Dave Lubach, Associate Editor. Restrooms are one of the highest users of water in commercial buildings, and therefore present a great opportunity for reducing water use. High efficiency plumbing products, though perhaps more expensive up front, can save over the life of the product, due to energy and water savings, and reduced maintenance costs.

Part 1: [Maintenance Managers Use Plumbing Systems to Wage War on Water Waste](#)

Part 2: [Maintenance Challenges with Low-Flow Toilets, Urinals and Faucets](#)

Part 3: [Maintenance Managers Face Potential Roadblocks With Water Conservation Projects](#)

Part 4: [Managers can Take Steps to Maximize Water-Conservation Savings](#)

Upcoming Events & Training Opportunities

Effective Use of Electricity: Improving Your Power Factor

- Dec 1 online webinar

[Click here for information](#)

NEEA, BPA, WSU Energy Program, NWFPA

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Portfolio Manager® 201 (en español) – Dec 2
- Ask the Expert: Portfolio Manager® Office Hours on 2015 Enhancements – Dec 3
- Energy Savings Plus Health: Indoor Air Quality Guidelines for School Building Upgrades – Dec 9
- The Value of Energy Star for Commercial Building Design – Dec 10

- Portfolio Manager® 101 – Dec 15
- Portfolio Manager® 201 – Dec 16
- Portfolio Manager® 301 – Dec 17

[Click here for more webinars and information](#)

US EPA

E3T Showcase Webinars

- A Coming of Age: Low-E Storm Window Retrofits – Dec 2 online
- Multifamily New Construction Technology Roundup – Dec 17 online

[Click here for information](#)

WSU Energy Program

Integrating Smart HVAC Into Your Building Systems – VRF Zoning

- Dec 3 online

[Click here for information](#)

Forester University, Mitsubishi Electric

Improving Energy Efficiency Now & In the Years to Come

Oregon APEM 2015 Winter Forum

- Dec 4 in Vancouver, WA

[Click here for information](#)

Oregon Association of Professional Energy Managers

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 – March 2016 in Seattle
 - Level I – May 2016 in Silverdale
 - Level I – Fall 2016 in Renton
 - Level I – Fall 2016 in Moses Lake
 - Level II – Fall 2016 in Tacoma

[Click for BOC Washington State information](#)

- Oregon
 - Level II – Feb 24, 2016 in Portland

[Click for BOC Oregon information](#)

Building Operators Certification

Realizing the Potential of Underutilized ECMs in ESPCs

A five-module on-demand training focusing on four energy conservation measures that are underutilized in energy savings performance contracts. Federal Energy Management Program (FEMP) training courses are free and open to all, although courses are designed for federal agency energy and facility managers.

- On-demand

[Click here for information](#)

FEMP, US DOE EERE

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

Smart Buildings Center Tool Resources

The Smart Buildings Center, a project of the Northwest Energy Efficiency Council, not only has a tool lending library, but they also have [online resources](#) for first time users (and others). These resources include lighting tools, HVAC & mechanical, power meters, as well as software.

Green Ribbon Schools

Do you know a school or school district in Washington state that deserves an award for being “green”? The Office of Superintendent of Public Instruction (OSPI) recognizes PreK-12 schools and districts that work toward reducing environmental impacts, improving the health of schools and students, and providing sustainability education. Applications are now available at the [OSPI website](#) for the 2015-2016 Green Ribbon Education Award. Deadline for submission in January 8, 2016, but don't delay!

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!

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