

# RCM NEWS

## RCM News for December 2015

A newsletter for Resource Conservation Managers in the Northwest

Happy New Year from RCM News!

May your 2016 energy efficiency and energy conservation bloom and grow!

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*While every URL in RCM News is checked for accuracy prior to distribution, URLs may change, and servers may temporarily fail to connect to working URLs.*

### Energy Audits

[“Energy Audits, Onsite or Virtual, Are Vital”](#), written by Carl Weinschenk and appearing in the December 17, 2015 *Energy Manager Today*, reports on a new standard for energy audits. A draft of the ASHRAE/ACCA Standard 211P, “Standard for Commercial Building Energy Audits” is available for public comment until January 4, 2016. Intended to standardize and thus bring consistency and structure to energy audits, the standard includes the commercial sector but not industrial or agricultural processes. The three main levels of audits are further broken down into four steps, including benchmarking, and covers envelope, lighting, HVAC, water systems, plug loads, and more.

### Energy Efficiency – Energy Star

Some organizations have received Energy Star certifications for a large number of buildings. Six lessons from conversations with these organizations are the topic of a three-part article for the January 2016 issue of *Building Operating Management*, written by David Lewellen. The importance of understanding the value of Energy Star, requiring Energy Star benchmarking, and working with older buildings are a few of the lessons.

Part 1: [Energy Star Leaders Offer 6 Lessons for Facility Managers](#)

Part 2: [Meeting Energy Star Expectations and Making the Program a Foundation](#)

Part 3: [More Energy Star Tips: Stay the Course with Older Buildings, Engage Tenants](#)

## Internet of Things

[“Enterprise IoT: How Will It Improve Energy Management? Plus Steps to Moving Forward”](#), written by Jennifer Hermes, appears in the December 14, 2015 issue of *Energy Manager Today*. Lighting, HVAC, and plug load use the majority of sensors that produce data. When integrating these Enterprise IoT systems into a long-term energy plan, several elements must be considered, including wireless, open standards, and operational efficiencies.

## Net Zero Building

[“From Darkness to Light”](#), by Scott Bowman, and appearing in the Summer 2015 issue of *High Performing Buildings*, is a case study of a new building for the Iowa Utilities Board and Office of Consumer Advocate. The net zero building includes active and passive strategies, and uses four times less energy than a similar code-compliant office building. Measures used include ultra-low-flow plumbing fixtures, daylight harvesting, individual lighting controls, passive energy capture, and a geothermal heating and cooling system. Employee buy-in is high due to their involvement before the building was occupied.

## Personal Space Heaters

Wintertime is the season of space heater tussles – employees want them for heat, yet they can use a lot of energy. [“Alternatives to Traditional Space Heaters Warm Up Offices, Lower Utility Bills”](#) is an article written by Ellen Borza in the December 17, 2015 online *Energy Manager Today*. Five alternatives to conventional personal space heaters are reviewed, and typical objections to space heaters are examined.

## Water

It seems a bit illogical to include an article on water efficiency, given that most of us in the PNW have been deluged with what seems like never-ending rain. However, we had drought before the rain, and the future is unknown. This four-part article written by Ronald Kovach, Managing Editor, for the December 2015 issue of *Building Operating Management*, explores how facilities in California have been cutting water use as a response to that region’s drought. Applicable everywhere, a couple of measures have been to reduce irrigation or use high-efficiency irrigation systems, and set up better leak monitoring.

Part 1: [Facilities Respond to California’s Drought](#)

Part 2: [California Water-Use Targets Include Sprinklers, Water Reclamation, Landscaping](#)

Part 3: [Better Design, Management, Technology Aid California Water Reduction](#)

Part 4: [Dishwashing Efficiency, Xeriscaping Help Cut California Water Use](#)

[“Water-Saving Strategies”](#), written by Janelle Penny, Senior Editor, for the December 2015 online issue of *Buildings* magazine, discusses the benefits of WaterSense, an EPA program that specifies products which reduce water use by 20% or more. It is important to first perform a water assessment on your building to determine how much water (and energy) you can save through retrofitting or replacing fixtures. Other tools to reduce water use include regular maintenance, periodically checking for leaks, and supporting building occupants to use water more conservatively.

## Upcoming Events & Training Opportunities

### Smart Buildings Center Air and Water Flow Meter Training

- Jan 21 at the Smart Buildings Center, Seattle, WA

[Click here for information](#)

*Northwest Energy Efficiency Council*

### ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Portfolio Manager® 101 – Jan 26
- Portfolio Manager® 201 – Jan 27
- Portfolio Manager® 301 – Jan 28
- Tackling WaterSense® – Sanitary Fixtures and Equipment – Jan 28

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

*US EPA*

### Portland General Electric Seminars and Webinars

Portland General Electric offers online webinars and paid workshops open to everyone, and seminars and workshops free of charge to its commercial and industrial customers. All classes in Oregon or online.

- Energy Monitoring Tools – Jan 26 online webinar
- Calculating Energy Costs – Feb 3 online webinar

[PGE Energy Education Classes](#)

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

### Building Operators Certification

Free informational webcast to learn about the BOC

- Feb. 3, 2016 online

[Click here for more information](#)

*Building Operator Certification*

### 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*

### Energy/Facilities Connections Conference

Plan now to attend this annual conference.

- May 3-5, 2016 in Leavenworth, WA

[Click here for information](#)

*WSU Energy Program Plant Operations Support Consortium*

### 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

#### Advanced Roof Top Unit Campaign

A [visual tool from the DOE's Advanced Rooftop Unit \(RTU\) Campaign](#) helps you evaluate the efficiency of your buildings' roof top units, and if you should consider replacement or retrofit. The graphical decision tree includes information on screening, evaluation and analysis, and planning and procurement. Other resources include case studies and links for more detailed evaluation.

#### Financing Energy Efficiency Projects

Financing energy efficiency measures may be the toughest part of your job. The [EPA Energy Star program](#) has a few resources to help. Their cash flow opportunity calculator estimates anticipated savings from a project, how much new equipment can be purchased with those savings, and the best time to finance. Learn more about different financing mechanisms and options, as well as some standard financial term definitions in the *Innovative Financing Solutions* report. Energy Star also publishes a directory of energy efficiency programs to help you find rebates and incentives in your region.

#### 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!

#### 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](mailto:janowitzk@energy.wsu.edu)



[www.energy.wsu.edu](http://www.energy.wsu.edu)