

# RCM NEWS

## RCM News for February 2015

A newsletter for Resource Conservation Managers in the Northwest

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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.*

### Automation Systems

*Building Operating Management* magazine published a five-webpage article by Loren Snyder in the January 2015 issue that discusses the risk of building automation systems to a cyberattack. As more building systems are networked to each other, and use a central control hub, it's important to understand the risks and take cybersecurity measures to protect the system.

Part 1: [Hackers Pose Threat To Building Automation Systems](#)

Part 2: [Why Building Management Systems Are At Risk Of Cyberattack](#)

Part 3: [Cybersecurity Measures To Protect The BAS/BMS](#)

Part 4: [BAS Cybersecurity Steps: Firewalls, Isolation, Patches](#)

Part 5: [Survey Suggests Many BAS Could Be Vulnerable To Hackers](#)

### HVAC

"[Reducing Daytime Energy Costs With Nighttime Activity](#)", written by William Atkinson, appeared in the January 2015 issue of *Business Energy*. Demand response programs involve reducing the demand for energy during peak times of energy use. Reducing summer cooling can fulfill demand response, but possibly at the cost of occupant comfort and productivity. An alternative is to run chillers at night, during off-peak hours, to create ice-based thermal energy stored in tanks. The HVAC system then uses the stored water to assist cooling during the day.

### Lighting

"[The Task at Hand](#)", written by Alice Liao, appears in the January-February 2015 issue of *Architectural Lighting*. Office lighting strategies must take into account the type of computer screens in use. The high reflectiveness of cathode ray tube (CRT) monitors, for example, necessitates lighting that will help reduce glare from the CRT. As CRT monitors are rarely used these days, new screen technologies such as liquid crystal displays (LCDs) create more and different illuminating choices, as well as influencing new lighting guidelines.

## School Buildings

Using school buildings as teaching tools is the focus of a three-webpage article on Green Schools written by Julie Nelson, appearing in the January 2015 edition of *Building Operating Management* magazine. Facility Managers, and by extension RCMS, can play a role in sustaining a building by teaching students and educators about the technologies and materials the facility uses.

Part 1: [How School Buildings Can Become Hands-On Teaching Tools](#)

Part 2: [More Ways Facility Managers Can Excel as Educators](#)

Part 3: [Design Collaboration Can Make School a Great Teaching Tool](#)

## Utilities

“Utility Incentives” is a three-webpage article in the February 2015 issue of *Building Operating Management* magazine, written by Angela Maas. Utilities may offer more types of energy efficiency incentives than facility managers are aware of. These can include financial rebates, technical advice, assessments, and retrocommissioning assistance. To take advantage of such incentives, it’s important to include the utility early on in the project planning process, think about starting small, and get expert advice on the project.

Part 1: [Utility Rebates, Advice Aid Energy Efficiency Efforts](#)

Part 2: [Utility’s Advice Aided School’s Energy Upgrades](#)

Part 3: [To Get Utility Incentives, Reach Out Early In Project Planning](#)

## Upcoming Events & Training Opportunities

### ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- ENERGY STAR® and Green Building Rating Systems – March 3
- Energy Savings Plus Health: Indoor Air Quality Guidelines for School Building Upgrades–March 4
- Portfolio Manager® Office Hours: Understanding Energy Metrics – March 12
- Portfolio Manager® 101 – March 24
- Portfolio Manager® 201 – March 25

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

US EPA

### E3T Emerging Technologies Showcase: New Construction Ductless Heat Pumps Study

Bonneville Power Administration (BPA), Tacoma Power, WSU Energy Program, and Habitat for Humanity are collaborating on the first known study in the nation to help identify and validate energy savings with ductless heat pumps in residential new construction.

- March 11 online webinar

[Click here for registration and information](#)

WSU Energy Program, BPA

### BOC Live Technical Webinar Series

- Communicating with the Boss’ Boss – March 12 online
- Communicating Energy Performance in Your Organization – April 22 online

[Click here for more 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.

- Energy Monitoring Tools – March 25 online webinar

#### [PGE Energy Education Classes](#)

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

### Northwest Facilities / Managing Green Buildings Conference

- April 1 & 2 in Portland, OR

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

### 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 – April 7 in Seattle (features a combination of classroom and online learning)
  - Level I – April 22 in Tacoma
  - Level I – May 2015 in Everett
  - Level I – Sept. 23 in Renton
  - Level I – Fall 2015 in Olympia/Lacey
  - Level II – Oct. 21 in Renton

#### [Click for BOC Washington State information](#)

- Oregon
  - Level I – April 22 in Portland
  - Level I – TBA in Pendleton

#### [Click for BOC Oregon information](#)

*Building Operators Certification*

### Oregon's Energy Future Conference

- April 16, 2015 in Portland, OR

#### [For more information](#)

*PGE*

### Energy/Facilities Connections Conference

*Staying Smarter than Your Buildings* is the theme of this year's outstanding conference run by the WSU Energy Program Plant Operations Support Consortium. Consortium members can take advantage of an early bird special by registering before March 13.

*Note: RCMs have been spotted attending this conference, as well as presenting at workshops.*

- May 5-7, 2015 in Leavenworth, WA

#### [For more information and registration](#)

*WSU Energy Program Plant Operations Support Consortium*

## Emerging Technologies – Oregon APEM 2015 Summer Forum

- May 29, 2015 in Portland, OR

[Click here for more information](#)

*Oregon APEM*

## Energy Management Certificate

It's not too early to register for the annual "energy bootcamp" at the Northwest Water & Energy Education Institute. This is an advanced certificate program covering a wide array of energy management topics, and requires the student to implement and measure results from an energy-efficiency project.

- July 13-24, 2015 in Eugene, OR (*please note date change since the previous newsletter*)

[For more information](#)

*NWEEI*

## 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.aeeprogams.com/realtime/>.

## Resources for You

### ENERGY STAR Data Trends

[Data Trends](#) is a series of two-page fact sheets summarizing the energy, operational, and property characteristics for 16 property types that are eligible to receive an ENERGY STAR score. Twelve of these property types have not previously been profiled. Statistics and observations were compiled using data from buildings that use Portfolio Manager to track their energy use, and include benchmarking and energy savings, ENERGY STAR certification, and water use tracking.

### Shop Talk

The Winter 2015 issue of [Shop Talk](#), the newsletter of the WSU Energy Program's Plant Operations Support Consortium, is now available. Highlights of this issue include a clearly understood article about power factor correction, and discussion of solid waste and recycling issues focusing on reducing costs.

### Portfolio Manager® Enhancements

Approximately 950 people gave input to improve the EPA's Portfolio Manager® Tool in 2014.

[Enhancements](#) for 2015 include meter page improvements, allowing reporting for more than two time periods, and enhanced data quality checking. You too can [volunteer](#) to be a user tester.

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

