

RCM NEWS

RCM News for August 2013

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.

Buildings

The Summer 2013 issue of [Shop Talk](#) features articles about “A Baker’s Dozen Energy Saving Ideas” (part two of a two-part article, the first part was in the Spring issue), a unique sustainability idea implemented by the Pateros School District, and the positive impacts of day cleaning at Community Colleges of Spokane. Shop Talk is a quarterly electronic newsletter of the WSU Energy Program Plant Operations Support Consortium, providing information focused on facility operations.

The following two case studies appeared in the Summer 2013 issue of *Buildings*; click on “Read More” at the end of the text for the rest of the article:

1. “[Designing for Off](#)” was co-written by Shawn Oram, PE, and Carmen Cejudo, both of Ecotope. A renovated Sears building becomes an NZEC (net-zero-energy capable) office and studio for the Rice Fergus Miller architectural firm in Bremerton, Washington.
2. “[Science of Efficiency](#)” was co-authored by Matthew Longsine, PE, WSP Flack + Kurtz, and Chris Hellstern, KMD Architects. It is a case study of the Biological and Computational Sciences Factory at Pacific Northwest National Lab (PNNL) in Richland, Washington. Labs are energy-intensive, but this one has achieved 77% efficiency and has earned LEED Gold certification.

“Lighting: Energy Savings with No Regrets” is a three-part article by Karen Kroll, Contributing Editor, in the July 2013 issue of *Building Operating Management*; it discusses the importance of considering lighting quality and lighting energy savings together as parts of the same issue:

[Part 1: Lighting Quality Is Often Overlooked in Commercial Building Lighting Upgrades](#)

[Part 2: Harsh Lighting, Glare among Quality Concerns in Commercial Lighting](#)

[Part 3: Lighting Controls, Occupant Involvement Are Big Pieces of Successful Lighting Projects.](#)

Energy Upgrades

["Elementary School Wins ENERGY STAR Challenge,"](#) published in the June 2013 issue of *Buildings* describes the inexpensive measures taken by an elementary school in Bloomfield, New Jersey, that reduced energy consumption by 52% and won it recognition.

["Financing Energy Upgrades for K-12 School Districts"](#) is an April 2013, U.S. Department of Energy-funded, 46-page guide from the Lawrence Berkeley National Laboratory, written by Merrian Goggio Borgeson and Mark Zimring. Various financing options for upgrades in K-12 facilities involving energy efficiency and/or renewable energy are discussed, as well as basic financial concepts and principles of financing energy upgrades. Appendix B includes six case studies showing how schools around the country have benefited from the financing methods described in the guide. One of the case studies involves the Local Option Capital Asset Lending Program for seven schools in the Centralia, Washington, school district.

Green Cleaning

["12 Overlooked Opportunities for Green Cleaning,"](#) by Jennie Morton, Associated Editor of *Buildings*, was published in the June 2013 issue of that journal. Her list of 12 opportunities can be used as a checklist for those experienced in or new to green cleaning to ensure that these opportunities are overlooked no more.

HVAC/R (Heating, Ventilation, Air Conditioning, and Refrigeration)

The following two articles were carried in the July 2013 issue of *HPAC Heating/Piping/AirConditioning Engineering*:

1. ["Location, Location, Location: Why Proper Placement Is Vital for HVAC Controls"](#) was written by Mickey Schroeder, PE, HVAC Service Manager at Control Services Inc. The article is a serious caution to facilities managers and installers of HVAC controllers that the equipment must be located where physical maintenance can be conducted.
2. ["Pulse-Combustion Boilers Play Key Role in Sustainability-Lab HVAC,"](#) by The Fulton Cos. Staff, focuses on the Syracuse Center of Excellence (SyracuseCoE) in Syracuse, New York. Part of the Center is a laboratory researching clean and renewable energy, indoor air quality, and water resource efficiencies. The other part is a demonstration area where newly developed, sustainable technologies are showcased. The building itself uses systems that are shown on tours.

Lighting

The following two articles appeared in the July 2013 issue of *Buildings*; both were written by Janelle Penny, Associate Editor of Buildings:

1. ["Practical Solutions for Long-Term Lighting Problems"](#) shows how several different companies tackled their particular lighting problems with excellent results.
2. ["Take Control of Lighting Upgrades"](#) is a helpful discussion of how to get started in accomplishing an intelligent and effective lighting upgrade.

Policy

"[Water Matters!](#)" is an article by Lawrence (Larry) Clark, CEA, GGP, LEED AP O+M; it was published in the July 13, 2013, issue of *HPAC Heating/Piping/AirConditioning Engineering*. HVAC equipment consumes a great deal of energy and water. The author explains how the state of Florida and Florida's Broward County is proceeding in its major efforts to conserve water by reducing the water needs of HVAC equipment through policy initiatives such as building code changes.

Upcoming Events & Training Opportunities

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 are usually one or two full days a month.

- **Washington State**
 - Level I – Sept. 10, 2013 through Mar. 12, 2014 in Renton
 - Level I – Sept. 17, 2013 through Mar. 5, 2014 in Tri-Cities
 - Level I – Sept. 25, 2013 through Mar. 11, 2014 in Olympia
 - Level II – Oct. 2, 2013 through Feb. 12, 2014 in Lacey
 - Level II – Oct. 3, 2013 through Feb. 13, 2014 in Everett

<http://www.theboc.info/wa/wa-schedule.html>
- **Oregon**
 - Level I – Sept. 11 through Dec. 11, 2013 in Portland
 - Level I – Oct. 1, 2013 through Mar. 4, 2014 on the Oregon Coast (TBA)
 - Level I – Dec. 4, 2013 through Jun 4, 2014 in Clackamas

[Click for BOC Oregon information](#)

Building Operators Certification

Energy Efficiency of Chilled Water Systems

Attendees will learn how technology improvements can reduce the energy costs of chilled water systems, which often account for a major portion of energy consumed in facilities.

- Sept. 10 in Seattle

[Click for registration information](#)

Note: reduced fee when [registered with next day's](#) Energy Efficiency of Cooling Towers
NEEA and many others

Energy Efficiency of Cooling Towers

Attendees will learn about efficiency measures and other issues of cooling towers, including water conservation, maintenance, and approach control strategies.

- Sept. 11 in Seattle

[Click for registration information](#)

Note: reduced fee when [registered with previous day's](#) Energy Efficiency of Chilled Water Systems
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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.

- Get Plugged-In with Electric Vehicles – Sept. 11 in Salem
- Strategic Energy Management Workshop – Sept. 18 in Portland
- Human Centric Lighting – Sept. 24 in Portland/ Sept. 26 in Salem
- LED Indoor Lighting – Sept. 25 in Portland
- LED Outdoor Lighting – Sept. 25 in Portland
- Understanding Demand Response – Oct. 1 in Salem/ Oct. 2 in Portland

[PGE Energy Education Center webpage](#)

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

[Developing an Energy Plan](#)

An energy management plan helps improve efficiency and encourages energy-saving behavior.

- Sept. 17 online webinar

[Click for registration information](#)

NEEA, BPA, WSUEP, NWFPA

[E3T Showcase for Emerging Technologies Webinar – Task Ambient Lighting](#)

Task Ambient Lighting is an integrated lighting system that can offer significant energy and lifecycle cost benefits along with a productive working environment.

- Sept. 18 online webinar

[Click here for more information](#)

WSU Energy Program, BPA, WAPA

[Motors & Motor Controls](#)

A 7-week course.

- Sept. 18 to Oct. 30 in Tualatin, OR

[Click for registration information](#)

PGE, EnergyTrust of Oregon, BetterBricks, NEEA

[Measuring and Controlling Plug Loads](#)

This webinar looks at the growth in plug loads and how building operators can manage their effect on building energy use.

- Sept. 18 online webinar

[Click for registration information](#)

BOC

[Learning ECAM+ Step-by-Step](#)

ECAM+ is a Microsoft Excel®-based tool developed to analyze energy and data from building automation systems. The original development was co-funded by NEEA, New Buildings Institute and the California Energy Commission.

This online course is held in three 2-hour sessions for a fee. The course is targeted to anyone interested in managing their buildings' energy usage.

- Sept. 18 – session 1
- Oct. 16 – session 2
- Nov. 13 – session 3

[Click for information](#)

Onset

Pumping System Optimization

- Sept. 25 in Longview, WA

[Click for registration information](#)

NEEA and others

World Energy Engineering Congress

September 25-27 in Washington, DC

<http://www.energycongress.com/>

Association of Energy Engineers

Real Time Energy: Utility Monitoring and Real-Time Data Collection

The Fall Forum of the Oregon APEM (Association of Professional Energy Managers) explores how to influence energy use utilizing real-time energy monitoring tools.

- Sept. 27 in Portland

[Click for information](#)

Oregon APEM

ENERGY STAR® Portfolio Manager Trainings

Financing Energy Efficient Upgrades with ENERGY STAR

- Oct. 3 online webinar

[Click here for more information](#)

US EPA

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 Operations Tools and Technical Advice

[BetterBricks](#), the commercial building initiative of the Northwest Energy Efficiency Alliance (NEEA), provides tools and resources to help operate, maintain, and build more energy efficient buildings.

Buildings Performance Database

Launched in June 2013, the [Buildings Performance Database](#) has a dataset of more than 60,000 residential, commercial and public buildings from across the country. Data includes location, age of building, function, electricity and fuel consumption, and other energy performance data. See webinars in the events section above.

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

