RCM News for April 2019

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.

Job Opportunity

WSU Energy Program is looking to expand the staff of energy efficiency engineers and specialists in Olympia, WA. Depending on expertise and experience, these positions could include a combination of responsibilities including commercial and institutional energy audits, building condition assessments, state building efficiency, ENERGY STAR Portfolio Manager input and reporting, residential energy code hotline, and home energy ratings certification. Note that the position is broader than the official job description. If you have questions about the “temporary” nature of the position, please contact us.

Announcements

You have just a few days left to register for the 15th Annual Energy/Facilities Connections Conference taking place May 7-9, 2019 in Leavenworth, WA. The conference, hosted by WSU Energy Program, focuses on issues facing facilities leadership in planning for energy efficiency and resource management. Building maintenance, personnel, facilities security, and more are also addressed.

The RCM Program at WSU Energy Program just published “The Short Guide to Energy Submetering”. See below under Articles for more detail.
The April 24, 2019 WSU Energy Program webinar – “SEM for RCMs: Strategic Energy Management for Resource Conservation Managers” – is now available for viewing and download. The presentations focus on the SEM program managed by Tacoma Power, and one of their participating agencies, Pierce County, whose energy champion is an RCM.

**ARTICLES**

**Deep Energy Retrofits**
“Historic Airport Terminal Realizes Massive Savings from Deep Energy Retrofit”, a two-page article written by Maria Vargas published March 11, 2019 online for Retrofit magazine details how a very successful deep retrofit of the King County International Airport was able to produce a 60% energy savings and be a model for other such similar projects. King County focused on six key strategies, including a long-term investment perspective, working with the state and utilities, a holistic approach, and state-of-the-art technologies. King County is a U.S. Department of Energy Better Building Challenge partner, and has already achieved successful energy savings with other projects.

**Lighting Controls**
A two-webpage article on LED lighting retrofits, written by Ian Shapiro, appears in the April 2019 Building Operating Management. Adding sensors when performing an LED retrofit can lead to increased savings and reduced energy use, as well as greater occupant satisfaction. Shortening the time delay – the time it takes for the lights to turn off after someone leaves a room – is one way that lighting controls can improve savings. Different controls have different standard delays, and may not all allow for very short delay times.

- Part 2 – Occupancy Sensors: Best Practices for Product Selection

“Study Says Lighting Controls Boost LED Efficiency by 47 Percent” was published 4/25/2019 in Buildings magazine and written by Sarah Kloeppele. Unlike residential markets, there are still a lot of savings to be realized in the commercial LED lighting sector. The most significant areas are linear LED lamps and fixtures and parking area/garage products. Adding networked lighting controls to LED installations can boost savings even more.

**Lighting and Wellness**
A four-webpage article on the connection of lighting and wellness was written by Darcie Chinnis and appears in the April 2019 issue of Building Operating Management. Both sustainability and wellness are key factors in lighting design. The LEED rating system addresses direct and indirect impacts of electric lighting on energy efficiency, and the WELL Building Standard focuses on how lighting affects occupant wellness. While there is some overlap with these standards, there are also some fundamental conflicts, especially in regards to the appropriate lighting level.

- Part 1 – How Does Lighting Choice Affect Occupant Wellness?
- Part 2 – How LEED Illuminates Efficient Lighting Strategies
- Part 3 – How To Use WELL to Enhance Lighting Strategies
- Part 4 – How Lighting Energy Efficiency Connects to Wellness
Net-Zero Buildings
A three-webpart article on net-zero buildings, written by Rachel Bannon-Godfrey, Porus Antia, and Sergio Sadaba, appears in the April 2019 Building Operating Management. Net-zero energy buildings are becoming more financially attainable for many projects. Whether designing and building a new facility, or performing a retrofit, it is important that the design process be open and integrated, with designers, builders, engineers, facility managers and operating staff collaborating from the beginning.
Part 2 – Integrated Design Is a Must for Net-Zero Energy Success
Part 3 – How to Forge a Long-Term Relationship Between FMs and Designers

Submetering
“The Short Guide to Energy Submetering”, recently published by WSU Energy Program, presents a framework of the basics of submetering. Best practices and strategies for developing a submeter plan, types and features of submeters, and barriers are discussed. The information presented is brief, yet detailed enough to start forming a plan for a submeter project.

UPCOMING EVENTS & TRAINING OPPORTUNITIES

International Living Future
• April 30 – May 3 in Seattle
Click here for more information
International Living Future Institute

Energy Efficiency of Cooling Towers
• May 2, 2019 in Spokane, WA
Click here for more information
NEEA, Avista, and many more

Energy/Facilities Connections Conference
• May 7-9 in Leavenworth, WA
Click here for more information
Washington State University Energy Program

ENERGY STAR® and Portfolio Manager® Trainings
All are online webinars.
• Portfolio Manager 101 – May 7
• Overview of Changes to 2018 and 2019 Certification Application Rules – May 9
• Portfolio Manager 201 – May 14
• Portfolio Manager 301 – May 21
• A Detailed Look at Data Center Benchmarking – May 23
• The New Locator Tool for ENERGY STAR Certified Buildings and Plants – May 29
• Ask the Expert – Most Wednesday at 9:00 AM Pacific time
Click here for more webinars and information
US EPA
Getting to Zero Buildings Count and Trends for 2019
  • May 9 Webinar
Click here for more information
New Buildings Institute

Portland General Electric Education
Classes and workshops are free to PGE business customers; others may attend for a fee.
  • Creating an Energy Management Plan – May 9 class in Wilsonville, OR
Click here for more information
Portland General Electric

Building Operator Certification Technical Webinar Series
  • Energy Management Information Systems: How Do You Track and Communicate Savings Over Time – May 15, 2019 webinar
Click here for more information
Building Operators Certification

Better Buildings Webinars
  • Innovative Wall Technologies for Commercial Buildings – May 16 online webinar
  • Overview of IT Consolidation in Data Centers – May 21 online webinar
Click here for more information
US DOE Building Buildings

Fresh Air, Hot Water, High Performance Mechanical Systems
This Northwest EcoBuilding Guild ShiftBuilding Symposium has a fee, but is free to students and sponsors.
  • May 23 Symposium in Portland
Click here for more information
Northwest EcoBuilding Guild

Oregon APEM Summer Forum
“A Deep Dive into Pools: Illustrating common engineering principles through an examination of pool and natatorium systems”
  • June 7 at Clackamas Community College Harmony Campus in Milwaukie, OR
Click here for more information
Oregon Association of Professional Energy Managers

Why Smart Buildings? Leveraging Smart Technology for Building Performance
A one-day conference regarding building performance through smart technologies and practices.
  • June 18 in Seattle
Click here for more information
Smart Buildings Center, NW Regional Building Commissioning Association
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 classes
    - Sept 25, 2019 through March 2020 in Seattle
    - Oct 7, 2019 through April 2020 in Tacoma
  
  [Click here for BOC Washington State information](#)

- **Oregon**
  - Stay tuned for more classes
  
  [Click here for BOC Oregon information](#)

Building Operators Certification

Education Resources

Energy Management and Water Conservation Technician Degrees – Lane Community College

Enroll for the Fall Term 2019 in either the [Energy Management Degree](#) or [Water Conservation Technician Degree](#) at the [Northwest Water & Energy Education Institute](#) at Lane Community College. Both award a two-year associate of applied science degree. Scholarships are available.

Sustainable Building Science Technology Bachelor’s Degree – South Seattle College

[Enrollment is open for the Fall 2019](#) innovative two-year degree program at South Seattle College. Classes and field work prepare you for the field of highly technical sustainable building operations and facility management. Classes are mostly online and geared toward the working adult.

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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](#) 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](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