RMAEE April 2014

Rocky Mountain Association of Energy Engineers



Monthly Lunch Meeting April 10, 2014 11:30 am-1 pm

Where: Indian Tree Golf Course
7055 Wadsworth Blvd Arvada

Forbes Guthrie is VP of Stewart Environmental Consultants, CEO of Stewart Energy and Director at Energy Water Solutions.

He specializes in engineering solutions for the water and energy markets. He has over 20 years of experience in applied environmental technology commercialization.

This presentation will provide a brief overview of some of the most pressing issues and areas of the water/energy nexus including:

- Water is a huge consumer of energy ... For example 19% of the California's electric grid moves, heats, or processes water and 1/3 of the state's natural gas is directed to heat water. (NOTHING uses more energy in California than water!)
- Water provides a big opportunity for energy savings in most organizations.
- Did you know the largest single consumer of electricity in most US cities is the water/waste water department
- Every KWh of electricity generation consumes large amounts of water for cooling, cleaning, etc.
- Natural gas wells in Colorado utilize large amounts of water for fracking, but some also produce water too.
- If you convert a swamp cooler to a roof top DX unit do you increase or decrease the total water consumption???

To register on line click on <u>Lunch Registration</u>. If you need a vegetarian entrée please click on <u>vegetarian</u>.

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Presidential Wisdom

What's Happening in our Industry

From AEE (National) – The Association of Energy Engineers (AEE) would like to announce its newest Training Partnerships with the American Institute of Architects (AIA), the Green Building Certification Institute (GBCI) and American Council on Renewable Energy (ACORE) to offer additional energy management, green, sustainable, renewables and industry training & educational programs. In other words, membership in AEE allows for workshops, seminars, conferences with other organizations to qualify for CEUs/PDHs in both organizations.

AEE Energy Newsletter:

US Building Efficiency Was Worth More Than Clean Electricity in 2013 – See more at:

http://www.energyvortex.com/pages/headlinedetails.cim/id=07-focuum_source_fCollantSubm_medium_email&utm_campaign= AEE-%20Energy,%20Power,%20Facilities%20Newsletter&utm_content=AEE+Energy+Newsletter#sthash.ssjLjwDb.dpuf

Monthly Meetings Info

Jess Lorentz gave us a good overview presentation on energy dashboards on March 20th. Thanks to Jess and Peter Widmer of Power TakeOff, and thanks to the 42 attendees. The April 10th, 2014 meeting will be a presentation from Forbes Guthrie of Stewart Environmental on the energy-water nexus, how energy use is related to water use. Indian Tree Golf Club (7555 Wadsworth Blvd in Arvada) from 11:30 AM to 1:00 PM.

May 2014 CEM Class & Examination is cancelled!

Unfortunately, as mentioned elsewhere in the newsletter we did not get enough people signed up to hold the class and test this year. We will attempt to create this opportunity again in the future, but really do need to have a minimum of 20 attendees to cover our expenses in holding the class locally.

We have received some interest in holding the CEA (Auditor) Class locally and are investigating venue and timing for that certification. Please let us know if you have any interest in that certification class and exam.

As a reminder to anyone holding an AEE certification (CEM, CGD, GBE, CSDP, etc.): Each certified professional is required to obtain Continuing Education Units (CEU) or Professional Development Hours (PDH) each renewal period. Attendance at RMAEE monthly meetings, being on the Board, attendance of AEE conferences, etc. all qualify as credits for CEUs/PDHs.

(For more information, please see:

http://www.aeecenter.org/i4a/pages/index.cfm?pageid=3771)

Please contact any of the Board with suggestions or commentary on how we can improve RMAEE for you. Sincerely,

Thom W Johnson RMAEE Chapter President, 2014

Upcoming Events

All lunch meetings are the third Thursday of the month at Indian Tree Golf Course unless noted otherwise

Stay Connected with the RMAEE!
Visit this award winning website at
http://www.rmaee.org/

We've added an employment section.

If you would like to post an employment notice please send your listing(s) to Dan Sachse at dan sachse@xcelenergy.com.

Membership - It maybe time to renew!

- RMAEE Membership Fees may be due. The RMAEE annual fee is \$50/person, unless you hold a National AEE membership. For National AEE members the RMAEE annual fee is \$40. Local membership gets you \$10 off the regular lunch meeting price of \$30 through out the year. Fill out the application (below) and fax, mail or email to Steve Kutska.
- Annual Corporate Memberships- Improved! An Annual Corporate Membership (ACM) is assigned to the company, thereby allowing any employee of the company to use this "Annual Corporate Membership" to attend RMAEE meetings. Each ACM allows one company employee to attend the meeting. This is different from previous years, when only the assigned employee could use the corporate membership
- Another membership benefit is the password protected member's corner on the RMAEE website, www.rmaee.org. All available presentations are stored here in PDF form for local members to download. If you are a local member and do not know the password send an email to dan.sachse@xcelenergy.com and the sign on and password will be mailed to your email address.

Rocky Mountain

Association of Energy Engineers

Membership Form

Members may join the local Rocky Mountain Chapter of AEE at any time during the year. Membership will run for one year from the month you join RMAEE.

Please send the completed form or attach a business card and send along with payment for your membership dues. We have 2 ways to pay - check payable to RMAEE or Credit Card (Master Card or Visa cards only).

Mail payment to: Steve Kutska Xcel Energy 1800 Larimer Street Denver, CO 80202 Stephen.p.kutska@xcelenergy.com

For questions about membership call Steve Kutska at 303 571-7254.

RMAEE Local Membership Dues Form					
Please complete this box or simply attach a business card and mail along with your payment.					
☐ I am an AEE National Member – a check for \$40 is enclosed for Chapter Dues AEE Member					
☐ I am NOT an AEE National Member – a check for \$50 is enclosed for Chapter Dues					
Annual Corporate Membership - 220.00 per year allows the company to send one employee to each meeting. This also includes one free lunch meeting.					
Name					
Company					
Address					
City, State, Zip					
Phone					
Email					
Credit Card Information Master Card Visa					
Card Number					
Expiration Date					
Name as it appears on card					

Dr. Doug McKenzie-Mohr is the founder of community-based social marketing.

Recommended by Time magazine, his book "Fostering Sustainable Behaviour" has become requisite reading for those who deliver environmental programs. The approaches that Dr. McKenzie-Mohr advocates in these workshops are now being utilized globally. For example, Queensland's "Home WaterWise Service" and "ClimateSmart Home Service," which reached over 500,000 households across the state, made extensive use of community-based social marketing. Dr McKenzie-Mohr has delivered community-based social marketing workshops internationally for over 60,000 environmental program managers. Below is a small sample of recent anonymous evaluations:

- -Fantastic, simply invaluable.
- -This is hands-down the most valuable workshop/training I've ever attended.
- -Speaker was wonderful.
- -The best workshop/conference I have ever experienced.
- -Outstanding presentation style. Expertise is obvious.
- -Superb presentation skills.
- -By far, the best workshop I have attended on any topic!

Who should Attend?

These workshops will be of interest to those working to promote waste reduction, water and energy efficiency, conservation, modal transportation changes, watershed protection, and other sustainable behavior changes. Those who work to promote behavioral changes that promote health, such as active lifestyles, will also benefit from attending. Descriptions of both workshops are provided below.

Introduction (May 20-21): The two-day introductory workshop provides a comprehensive

introduction to community-based social marketing and how it is being applied throughout the world to foster sustainable behaviors. Those who attend the workshop will learn the five steps of community-based social marketing (selecting behaviors, identifying barriers, developing strategies, conducting pilots, and broad scale implementation) and be exposed to numerous case studies illustrating its use. Each participant will receive a copy of the new edition of "Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing." The introductory workshop is a *mandatory* prerequisite for the advanced workshop.

Advanced (May 22-23): This completely new two-day advanced workshop provides an in-depth exploration of how community-based social marketing can be used to foster sustainable behavior. This workshop introduces new research on selecting behaviors, identifying barriers and benefits (including market segmentation, survey sampling and survey creation), applying behaviour change tools (including some exciting new developments regarding the use of commitments, norms, prompts, goal setting, and social diffusion), and piloting programs. The workshop also addresses the effective use of social media and websites in the fostering of sustainable behavior. Further, participants will also be coached in making community-based social marketing presentations to their agency or community and will receive PowerPoint and Keynote presentations for this purpose. Finally, each participant will receive a copy of the new edition of "Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing." To ensure a high level of learning and exchange of ideas, this workshop is restricted to individuals who have previously attended Dr. McKenzie-Mohr's introductory workshop. If you have not yet attended an introductory workshop, you can attend the introductory workshop that precedes the advanced workshop in Denver and then attend the advanced workshop as well. Reduced rates are available for attending both sessions.

Details:

Both the Introductory and Advanced workshops are being held at the Environmental Training Center (301A), Red Rocks Community College, 13302 Fox Run Rd., Lakewood, Colorado, 80228. The light rail stops some 200 yards north of the Environmental Training Center. The workshops begin at 9:00 am on both days. Both workshops will finish at 4:30 pm on the first day and at 4:00 pm on the second day. We would ask that you arrive by 8:30 am on the first day of either workshop so that we can deal with registrations prior to our start. Venue information will be emailed to registrants. Workshop attendees receive a copy of Dr. McKenzie-Mohr's book, "Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing (3rd Edition)" at the event. Lunch on both days is included in the registration fee.

Additional Information and Registration:

https://register.cbsm.com/workshops/denver-colorado-2014



Demand Response Leadership Since 1999

15th PLMA Spring Conference

April 15-16, 2014 in Denver

Mile-High View of Demand Response

Gain real-world insight from market practitioners, technology firms, and energy utilities/marketers active in the demand response marketplace. About 150 industry professionals are expected to attend, including: energy utility/marketer professionals, regulatory, and business professionals responsible for demand response as well as Industry advisors, including consultants as well as product and service providers.



Opening Keynote Co-Presenters



Speaker Ron Binz Former Chief, Colorado Public Utilities Commission



Speaker Jon Wellinghoff Past Chair, Federal Energy Regulatory Commission

Keynote Speaker



Bryan Hannegan Associate Laboratory Director, Energy Systems Integration, National Renewable Energy Laboratory



Advanced Facilities Management and Engineering Conference and Exhibits



(Click the Picture for more information)

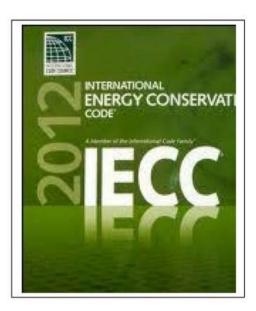


Did You Know: The Colorado Energy Office has training opportunities for contractors, code officials, architects, and any other stakeholder for commercial and residential energy codes?

Did You Know: That the training can be tailored to the local community, where a jurisdiction is on the 2006 IECC all the way up to 2012 IECC or ASHRAE 90.1

Do you have questions on how to comply with local energy codes or where to get information?

The Colorado Energy Office presents multiple ½ day training sessions from Colorado Code Consulting with continuing education credits available that can help provide answers:



<u>Sample</u> ½ day sessions: Commercial IECC, Residential IECC, Residential Performance path, Commercial Lighting Controls, HERS, etc.

Trainings on Western Slope or Four Corners area using a two day format could work such as follows (note these are only examples):

Day 1 – morning Commercial IECC, afternoon Residential IECC (two standalone trainings, people can attend one or both)

Day 2 – morning Residential Performance path, afternoon Commercial Lighting Controls

Where: The CEO would like to provide training around the State, so please let us know if you would like training in your jurisdiction (20 sessions are planned through the end of June with 5 follow up webinars)

\$0 fee per course!

Please contact Shaunna Mozingo starting March 17th to setup training at: SMozingo@coloradocode.net

Colorado Energy Events

If you know of other upcoming events that should be listed in this calendar, please contact Dan Sachse at dan.sachse@xcelenergy.com

Organizatio n	Event	Location	Date	Contact
RMAEE	Monthly Lunch Meeting	Indian Tree Golf Course Arvada, CO	April 10, 2014 11:30 am – 1 pm	http://www.rmaee.org/
CCIA / CAMA	How to Improve Your Bottom Line with Energy Efficiency Strategies	Wynkoop Brewing Co. 1634 18th Street Denver, CO 80202	April 30, 2014 3pm – 6pm	http://coloradocleantech. com/calendar/

<u>Colorado Governor's Energy Office</u>:

http://www.colorado.gov/energy/

ASHRAE

http://www.ashrae.org/

Rocky Mountain Electric League http://www.rmel.org/

IEEE

http://www.ieee.org/portal/site

Colorado Renewable Energy Society – http://www.cres-energy.org/events

Solar Energy International -

http://www.solarenegy.org/workshops



2014 BPE Job Descriptions and Requirements

Building Performance Engineer, Level 1 or 2, Denver Office

Are you ready to work where you can have real IMPACT? Ambient Energy is seeking a Building Performance Engineer, Level 1 or 2, experienced in integrative design to provide energy consulting as well as our complete range of building performance design consulting and sustainability services.

Minimum Requirements:

- Minimum of 5 years (level 2) or 2 years (level 1) of professional experience in energy analysis and sustainable building design.
- Proficient in Energy Plus, OpenStudio, IES-VE, or eQuest and life-cycle cost analysis.
- Able to innovate in passive solar design, HVAC, lighting, controls, renewable energy systems, and carbon neutral buildings.
- Expertise in energy and sustainability building codes and green building rating systems such as LEED, Living Building Challenge, ASHRAE 90.1, IGCC, Title 24, and CalGreen.
- Excellent communication with public speaking and technical writing skills.
- Skilled in MS Excel, Word, Powerpoint, Sketchup and Ruby or similar.
- BS in Mechanical Engineering or related discipline.
- PE or EIT and LEED-AP required for Level 2.

Preferred:

- Additional proficiency in daylight consulting, computational fluid dynamics, natural ventilation, and / or comfort analysis.
- Experience in commissioning, measurement and verification, and building audits.
- MS in Mechanical Engineering or related discipline.

Key Responsibilities:

- Provide energy analysis and building performance design consulting.
- Foster innovation in high performance design from concept through operation.
- Collaborate with diverse project teams through goal setting and analysis of sustainable building strategies.

Please send resumes to Christina@ambient-e.com.