

Rocky Mountain Association of Energy Engineers



Monthly Lunch Meeting June 19, 2014

Where: Indian Tree Golf Course
7055 Wadsworth Blvd Arvada

Can Virtual Audits Compare to In-Person Boots on the Ground Audits?

Innovation has been at the heart of the energy management profession since the beginning. How can our clients do things better, faster, cheaper? The question is not limited solely to the work we may do for end-users. It often applies to ourselves and our own processes. Can virtual audits compare with in-person boots on the ground audits? This presentation will highlight a project in Washington D.C. for their school district that combined two subcontractors, one performing boots on the ground energy assessments and the other virtual audits. We will discuss the similarities in findings, overall results and constraints perceived between the two approaches.

As to the not too distant future, what if there was some type of portable hard hat/eye-wear that auto-records what you see as video including functionality tied to GPS, integral infrared, and integral acoustics to allow real-time room measurements, insulation levels, and as-builts to be auto-generated while driving back to the office. Capturing the information off a nameplate and transmit seamlessly to populate the as-builts with existing equipment information, expected remaining life, maintenance cost, energy costs, and expected savings for alternatives. The glasses could include a spectral analyzer that combines with the tools above to estimates air flows, performed test and balance observations, and even estimate the life remaining of installed fiber-optic lighting systems. In that future environment, instead of spending days/weeks traveling we would ship one device to the facility managers and discuss with them the operations of their facility while sitting at our office "virtually" explore their facility together? See page 2 for speaker bios

To register on line click on [Lunch Registration](#). If you need a vegetarian entrée please click on [vegetarian](#).

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Can Virtual Audits Compare to In-Person Boots on the Ground Audits?

Presenters

Eric Ruffel - began his career in Energy Management in 1998 working with the CSU Industrial Assessment Center program as well as Poudre School District and City of Fort Collins Utilities. Around 1999 he was a RMAEE scholarship recipient. He is presently the senior technologist for energy management and a sustainability consultant for CH2M HILL. Eric has worked on projects domestically and abroad. He is a registered Professional Engineer in the State of Colorado with an undergraduate in Mechanical Engineering along with a MBA and Masters of Science in Finance. Other initials include the CEM, CEA, CDSM, LEED AP, and LEED AP BD&C designations. He has managed or provided quality control for thousands of building energy assessments.

Lindsay Ritter - recently transitioned within CH2M HILL to the Transportation market as the Global Practice Lead for Asset & Operations Management, located in our Denver, Colorado, office. Lindsay previously served as the Sustainability Director for CH2M HILL's Operations Management services group, developing best practices and stakeholder awareness, and integrating sustainable solutions into our delivery of operations services at 200-plus client facilities across North America. Prior to her sustainability role, Lindsay served as Facilities Manager for the City Services division of the former Operations Management Business Group, where CH2M HILL provided a wide range of municipal services and assisted in the incorporation of newly formed municipalities.

Presidential Wisdom

What's Happening in our Industry

Noteworthy this month:

Alliance to Save Energy (ASE)'s 7th International Energy Forum was held May 20-23rd in Washington – energy thought leaders helping increase awareness of energy efficiency as the least-cost resource in our political “arena”:

<http://www.ase.org/news/global-energy-thought-leaders-gather-international-energy-forum>

Congress passed the Energy Efficiency Improvement Act of 2014 (HR 2126):

<http://thehill.com/blogs/congress-blog/energy-environment/202074-make-energy-efficiency-part-of-us-policy>

From USNews Blog:

General public media list of residential energy efficiency topics – see what you think:

<http://money.usnews.com/money/personal-finance/slideshows/10-energy-efficient-home-improvements>

Monthly Meetings Info

May's Meeting was a tour of IKEA Sustainable Practices at the Centennial store. Highlights of the tour included an explanation of 6 different recycling streams IKEA uses to minimize waste throughout their processes, information on how the ice-storage tanks help make the ground-source heat pump systems work, how they added a 2nd phase of PV to their roof getting to 1.21 MW capacity, issues they had with the original control system that was replaced last year (and why), and how IKEA is building a wind farm in Illinois large enough to produce twice the amount of electricity all of the IKEA stores use in North America.

The Thursday, June 19th, 2014 meeting will be a presentation by CH2M Hill's Eric Ruffle comparing “boots on the ground” audits to virtual audits. Indian Tree Golf Club, 7555 Wadsworth Blvd, Arvada, CO 11:30 AM.

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/PDH.

We need more members to volunteer to be on the Board, please. Contact any Board member if you are interested. (For more information, please see:

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

And 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 _____

As a reminder to anyone holding an AEE certification:

Each certified professional is required to obtain Continuing Education Units (CEU) or Professional Development Hours (PDH) each renewal period. AEE does not maintain a record of your continuing education in the interim so you must maintain your own record of continuing education and complete a recertification form at the time of your renewal. A total of 10 renewal credits are required utilizing a combination of the following:

- Employment in energy activities
- Membership in a professional organization
- Office held in professional organization
- Continuing education (courses, seminars)
- Energy conference attendance
- Professional awards or published/presented papers

For more information, examples of how to tabulate credits, and how contact hours (CEUs, PDHs, etc) are converted to AEE credits see

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

AFFEC

Advanced Facilities Management and Engineering
Conference and Exhibits



[\(Click the Picture for more information\)](#)

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

Organization	Event	Location	Date	Contact
RMAEE	Monthly Lunch Meeting	Indian Tree	June 19, 2014	http://www.rmaee.org/
CRES	CRES Exhibits at IEEE PV Specialists Conference	Denver Convention Center	June 8, 2019 9a m-4pm	http://cres-energy.org/
AFEC	AFEC	Sports Authority Field Denver, CO	September 24 and 25, 2014	http://afec.biz/
RAMEE	15 th Annual Energy Forum	Police Protective Association Denver	October 15, 2014	Rmaee.org

Colorado Governor's Energy Office:
<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.solarenergy.org/workshops>