

Rocky Mountain Association of Energy Engineers

Monthly Lunch Meeting
January 21, 2016 11:30-1p



Where: Indian Tree Golf Course
7055 Wadsworth Blvd Arvada

Rois Langner from NREL's Commercial Buildings Research Group will speak on Small Commercial Buildings and Energy Efficiency

Small commercial buildings (buildings smaller than 50,000ft²) are vast and diverse, and account for a large fraction of the energy consumed by U.S. commercial buildings. They make up 95% of our nation's commercial building stock by number, 51% of our commercial square footage, and 44% of building energy consumption. Due to the sector's fragmentation and diversity in buildings, this sector has historically been left behind in the energy efficiency marketplace because financial and technical resources have flowed to larger commercial buildings. Rois Langner from the National Renewable Energy Laboratory's Commercial Buildings Research Group will talk about National Laboratory and Department of Energy involvement with the sector to accelerate the uptake of energy efficiency technologies and solutions.

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

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303-489-2774

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Board Member

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Board Member

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Presidential Wisdom

What's Happening in our Industry!

From Industry Newsletters (tidbits from around the industry):

EERE Network News (www.energy.gov):

ARPA-E Backs 12 New Projects to Improve the U.S. Electric Grid

The Energy Department's Advanced Research Projects Agency-Energy (ARPA-E) on December 11 announced \$33 million in funding for 12 innovative projects as part of ARPA-E's Network Optimized Distributed Energy Systems (NODES) program.

NODES project teams will develop technologies that coordinate load and generation on the electric grid to create a virtual energy storage system. Solar Industry Magazine (<http://www.solarindustrymag.com>):

Multiyear Investment Tax Credit Extension Added To Federal Spending Bill

On Tuesday night (12-15-15), the U.S. House of Representatives included a five-year extension of the solar investment tax credit (ITC) in an omnibus bill that will likely be finalized and taken up by the full House by the end of this week.

http://www.solarindustrymag.com/e107_plugins/content/content.php?content.15954

It passed out of Congress 12-17-15 (really long link, though):

http://www.greentechmedia.com/articles/read/breaking-house-passes-1.1-trillion-spending-bill-with-renewable-energy-tax?utm_source=breakingnews&utm_medium=Newsletter&utm_campaign=breakingnews AEE Newsletters and e-mails (<http://www.aeecenter.org>)

A reminder for anyone that is a National Member of AEE, you have access to energy journals at the AEE website w/ timely articles. For example:

Strategic Planning for Energy and the Environment (Vol 35, Issue 3) -

- Prevalence of Findings from ASHRAE Level 2 Energy Assessments at 13 Colleges, Michael Madigan, Robert Neimeier & Stuart Spiegel, Page 43-72
- Secret Benefit #2 - Increased Productivity, Eric Woodroof, Page 7-8

Energy Engineering (Vol 113, Issue 1) -

- Automated Ongoing Commissioning via Building Control Systems, Paul Hutchins, Pages 11-20
- Development of an Energy Benchmarking, Measurement & Verification Program for an Existing Laboratory Building, Leonid Kramer & Vincent Rizzo, Pages 66-80

Please see the calendar of conferences for 2016 by AEE in the pages of this newsletter:

- March 9-10th, 2016 Boston – GLOBALCON
- May 25-26th, 2016 Seattle – EMC2
- Sept 21-23rd, Washington DC - WEEC

Monthly Meetings Info

- The Dec 10th Holiday Mixer was fun with a few of us present to enjoy the drinks and snacks at Indian Tree Golf Club. Thanks to John Winkel and Victor Prep for hosting the event.
- The January 21st meeting will be at the Indian Tree Golf Club, Rois Langner from NREL's Commercial Buildings Research Group will speak on Small Commercial Buildings and Energy Efficiency.

Other Events in the State

Jan 6th, 2016

- RMASHRAE – Monthly Meetings are 1st Wednesday of each month. Jan 6th meeting is dinner meeting in Denver (at Jackson's) featuring Renee' Azerbegi/Linda Morrison speaking to the new WELL program for evaluating buildings for human comfort and environments. See: www.rockymtnashrae.com

January 14th, 2016 - 11:45 AM

- USGBC Colorado Chapter – LEED Dynamic Certification and Plaque
<http://usgbccolorado.org/meetinginfo.php?id=176>

January 21st, 2016 - 7PM

- Metro Denver Colorado Renewable Energy Society (MDCRES) –
- Monthly public meeting at The Garden, 3435 Albion St., Denver, CO
- March 7-9, 2016
- CoSEIA – 2016 Solar Power Colorado
- Omni Resort and Conference Center, Broomfield, Colorado (Denver Area)

Board and Membership

This is also a friendly reminder to update your membership in the Chapter and/or National AEE. Remember that your attendance at the Forum got you 1.6 Credits of the 10 needed annually for AEE Certification maintenance, especially for CEMs. (Most renewals were due by Dec 31st, 2015 but it is not too early to set up a spreadsheet to track CEUs for future maintenance).

As always, we need more members to volunteer to be on the Board, please. Contact any Board member if you are interested. We have at least two open Board positions to fill early in 2016.

And please contact any of the Board with suggestions or commentary on how we can improve RMAEE for you. Thanks to you all for supporting the Rocky Mountain Chapter of AEE.

Sincerely,

Thom W Johnson

RMAEE Chapter President, 2015

Steve Morgan

RMAEE Chapter President, 2016

Membership – It may be 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.

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.

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>

AEE 2016 Energy Events

MAKE PLANS TO ATTEND!

2016 AEE SHOWS	JANUARY <small>Sun Mon Tue Wed Thu Fri Sat</small> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	FEBRUARY <small>Sun Mon Tue Wed Thu Fri Sat</small> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	MARCH <small>Sun Mon Tue Wed Thu Fri Sat</small> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	 GLOBALCON 2016 <small>San Francisco, CA</small>	APRIL <small>Sun Mon Tue Wed Thu Fri Sat</small> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
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	 WEEC 39th <small>World Energy Engineering Congress</small>	SEPTEMBER <small>Sun Mon Tue Wed Thu Fri Sat</small> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	OCTOBER <small>Sun Mon Tue Wed Thu Fri Sat</small> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	NOVEMBER <small>Sun Mon Tue Wed Thu Fri Sat</small> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	DECEMBER <small>Sun Mon Tue Wed Thu Fri Sat</small> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	SAVE 10% with Conf16

Save \$200 on any conference - Coupon: Show200



27th GLOBALCON

March 9-10, 2016
 Boston, MA
www.GLOBALCONevent.com

Hosted by National Grid



34th West Coast EMC

May 25-26, 2016
 Seattle, WA
www.energyevent.com

Hosted by Puget Sound Energy



39th World Energy Engineering Congress (WEEC)

September 21-23, 2016
 Expo: Sept. 21 & 22
 Washington, DC
www.energycongress.com

Job Position: Senior Energy Engineer

Location: Denver, CO

Target hire date: Immediately

Exciting opportunity to join a fast-growing clean energy company that is expanding nationally (see below for more on the company). Seeking an experienced Energy Engineer to design, develop, and evaluate projects and programs to improve energy efficiency and reduce energy costs for commercial and industrial clientele. Experience in all aspects of construction that affect energy usage, especially heating, ventilation, and air conditioning (HVAC) and lighting systems and an understanding of options for alternate or renewable energy sources to supply some or all of a building's energy a plus. Should be experienced in using computer modeling and simulations to perform financial analysis of the impact of modifications to various building systems have on energy consumption. Responsibilities include: Inspect or monitor energy systems including heating, ventilation, and air conditioning (HVAC), lighting systems and other energy consuming system and analyze performance to determine how much energy is being used and how much can be saved. Manage the development, design, or construction of energy conservation projects. Meet budget and schedule requirements. Adhere to all code and other applicable standards. Evaluate construction design information like drawings, design calculations, system layouts, and sketches. Perform building audits and identify potential energy saving measures. Perform energy modeling, measurement, verification, commissioning, or retro-commissioning. Review architectural, mechanical, or electrical plans to evaluate energy efficiency. Verify energy bills and meter readings. Visit job sites to collect data for energy conservation analyses. Qualifications Required BS degree in engineering, Mechanical or Electrical 3+ years of related experience Experience with energy modeling Willingness to travel (1-2 times per month max) Preference given to candidates with the following qualifications PE or EIT CEM (Certified Energy Manager) LEED AP or GA Other energy engineering certifications Key Qualities Desired: Capable of working in a team-oriented, collaborative environment Can conform to shifting priorities, demands. Flexible during times of change. Must be motivated to learn, understand, and apply new technologies Compensation Base Salary to be determined in accordance with level of experience Company paid health plan and other benefits Responding: Interested parties should send a resume and cover letter to greatjobs@microgridenergy.com

Job Position: Research Analyst Business Energy Advisor product

[Part time, 20 hrs/wk. Start date: 1/1/2016 or after. Students encouraged to apply!]

We have a half-time opening in our Boulder, Colorado, office for a Research Analyst on our Technology Assessment Team to conduct research and write or update 2 – 5 page reports for our [Business Energy Advisor \(BEA\) product](#), a hosted, web-based library of energy-efficiency advice tailored to the needs of utility's business customers. BEA provides commercial and industrial customers with access to more than 100 web pages of expert guidance on improving the energy efficiency of their specific facility types. Due to the preponderance of HVAC related energy consumption in buildings, knowledge of HVAC systems is a plus.

Proficiency. The ideal candidate will be able to demonstrate a high level of proficiency in:

- Efficiently identifying information resources and conducting research;
- Communicating clearly and effectively both in writing and verbally;
- Thinking critically to distinguish between essential and peripheral information, and between fact and fiction;
- Understanding fundamental engineering principles governing energy efficiency end-use technologies, with an emphasis on HVAC systems.
- Translating complex technical information into readable text that is easy for audiences of varying technical skills to understand.

Key Duties & Responsibilities

- Create thought-provoking, high-quality content that meets E Source standards for completeness, accuracy, objectivity, and attention to detail.
- Work closely with your manager and others to scope and organize your deliverables.
- Demonstrate progress in gaining an understanding of our audience and in tailoring your draft materials to satisfy that audience.
- Demonstrate subject-matter expertise in at least one relevant field.

Preferred Qualifications

- College degree or degree-in-progress in engineering or physics. Course work focused on building energy systems a plus.
- Excellent research skills, including the ability to conduct interviews.
- Strong writing skills.
- Strong communication skills.
- Good interpersonal skills.
- Computer skills using Microsoft Office, including word processing, spreadsheet, and presentation applications.

Part- or full-time students seeking to work 20 hours per week are encouraged to apply. E Source has the flexibility to work around class schedules for the right candidate.

About E Source. E Source information services provide member organizations with unbiased, independent analysis of retail energy markets, services, and technologies. Our clients include electric and gas utilities and other energy service providers, large corporate and institutional energy users, government agencies, energy service companies, manufacturers, consultants, research institutions, and other organizations in nearly two dozen countries worldwide. For further information on this position, please contact Mary Horsey at Mary_Horsey@esource.com or Jess Davis at Jessica_Davis@esource.com.