
National Capital Area Chapter

United States Association for

Energy Economics

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news

“Outlook for Renewable Energy in the U.S. and Around the World”

Speaker:

**Michael T. Eckhart
President**

American Council On Renewable Energy (ACORE)

WHEN: 12:00 PM, March 20, 2009
WHERE: Chinatown Garden
618 H St NW
Washington DC 20001
Gallery Place-Chinatown Metro Stop

Mike Eckhart is founding President of the American Council On Renewable Energy (ACORE), a Washington DC-based nonprofit organization with over 600 organizational members covering wind, solar, hydro, ocean, geothermal, biomass, and biofuel sources of energy. He is a 2008 recipient of the Skoll Foundation Award for Social Entrepreneurship, a 2006 recipient of RSF's Good Deal for All Award, and a four-time participant in the Clinton Global Initiative. He serves on the Advisory Committee to Prince Charles' Rainforest Project. Previously, he developed financing for solar energy under the SolarBank initiative for which he was named Renewable Energy Man of the Year of India. Earlier, he was an executive with United Power Systems, Inc., Areté Ventures, Inc., General Electric Company, and Booz, Allen & Hamilton. He served in the US Navy Submarine Service, and received his undergraduate degree in Electrical Engineering from Purdue University and an MBA from Harvard Business School.

Please join us on Friday, March 20, at 12 noon at the Chinatown Garden restaurant for this opportunity to gain insight on realistic prospects for renewable energy's contribution to the nation's and world's energy mix from a leading

proponent. We'll begin networking at noon, with the lunch served promptly at 12:30 and the presentation beginning at 1 pm. The meeting will end no later than 2 pm. Cost is \$20.00 for members and their guests (\$5.00 for student members and their NCAC hosts!) and \$25.00 for non-members and their guests. Make checks payable to NCAC-USAAEE.

PLEASE RSVP: By COB Wednesday, March 18 to Mark Lively, Chapter Treasurer, by phone at (301) 428-3618 or e-mail at mbelively@aol.com.

LOOKING AHEAD...

- **2009 MEMBERSHIP RENEWAL/REGISTRATION:** The attached sheet provides a registration form for new members for 2009 or a renewal form for existing members. Please fill out and send (with a check for \$20) to Mark Lively, Chapter Treasurer, or bring it with you to the February 20 luncheon.
- **HOLD THIS DATE: MONDAY, APRIL 27.** This year's Annual 1-day NCAC-SAIS Washington Policy Conference will explore the new energy dynamics caused by global recession, and look beyond to recovery as well. Panels of experts and insiders will review the changing oil and gas geopolitics, how the economy will play out for electricity generation, transmission and implications for carbon policy. For further information, please contact Bo Kong, Director of SAIS's Global Energy and Environment Initiative (GEEI), at bkong@jhu.edu.
- **REGISTER NOW FOR THE 32nd IAEE International Conference – Energy, Economy, Environment – The Global View, June 21-24, 2009, at the Grand Hyatt in beautiful San Francisco.** International energy and climate issues are critical as trading infrastructure development for all energy forms continues, and fuel prices, although temporarily eased, remain of principal concern. This year's IAEE International Conference will bring together leading economists from around the nation and the world – don't miss a chance to be there! Visit <http://www.usaee.org/USAEE2009/> to view program details, and sign up!

STUDENTS!

- **NOW NCAC'S STUDENT DISCOUNT EXTENDS TO HOSTING MEMBERS TOO!** Any Chapter member bringing a student attending for the first time pays only the student rate – \$5 instead of the regular \$20.
- **ALSO FOR DC AREA STUDENTS - \$750 GRANTS AVAILABLE!** Once again this year, the NCAC will offer \$750 stipends to up to three DC area students to attend the IAEE International Conference in San Francisco, June 21-24 (see above). For more information on the NCAC scholarships, please contact NCAC Council Member Glen Sweetnam at glen.sweetnam@eia.doe.gov.

- **PIZZA AFTERNOONS:** For more information about holding a career pizza discussion at your school or university, please contact Sheila Moynihan at sheila.moynihan@gmail.com.

ELECTRIC POWER CONSULTANT MARK B. LIVELY DISCUSSES THE SMART GRID AND WOLF PRICING MODEL AT NCAC FEBRUARY 20 LUNCHEON.

A strong turnout of 70 members attended the February luncheon, where Mark Lively spoke about “Smart Pricing for the Smart Grid”. In addition to being the current NCAC Treasurer, Mark Lively is a consulting engineer specializing in the pricing of electricity and natural gas, generally in traditional regulatory proceedings.

Mr. Lively began his presentation by stating that the future of wind energy is not in small backyard generating units, but out in the Great Plains, in what T. Boone Pickens describes as “big windmills.”

Distributed generation alone will not work. There needs to be a smart grid coupled with a better pricing plan to get buy-in from generators and consumers. For example, in 2001 California had 30 GWh of distributed generation, mostly from small producers using on-site generators who could have provided power to 30 million homes for the few hours or minutes that would have been needed to maintain load integrity. Instead the state had rolling blackouts because it had no way of distributing or connecting to this distributed resource. There was no smart grid and no economic package that resulted in getting this generation to run at the right time.

The difference between the existing electric grid and the electric smart grid is simply more telecommunication, more meters, more control devices, computer power, software, etc., but not much more in terms of power lines. To put it in perspective, the smart grid is nothing more than SCADA (Supervisory Control and Data Acquisition) “on steroids.” It is the regular grid, beefed up with more remote control systems and timely capabilities to enable price responsive behavior, better detection of problems, and more.

How will it be paid for? A smart grid can ultimately pay for itself because it reduces the number of man-hours needed to make more efficient use of the resources, the automation and monitoring systems allow for targeted peak shaving, helps reduce average fuel costs, results in faster re-connection times, and creates greater overall efficiencies.

But the system has to allow providers and users to make real time decisions regarding load management, and using a term Mr. Lively borrowed from Vijay Vaitheeswaran, our Annual Dinner speaker, the pricing needs to be a “Dynamic Dance” in which what we do changes in response to the anticipated price changes the price on us. This is the key to Mr. Lively’s WOLF pricing in which prices rise or fall in response to the voltage frequencies on the grid.

Finally, making the smart grid a reality for small consumers will require charging these customers to pay for Smart Grid elements and putting into place a mechanism to enable them to recover their costs through savings in their electric bills.

Question and Answer:

Sarah McKinley: Why would the customer have to pay for Smart Grid elements, when the understanding all along has been that utilities would pay customers for the right to shut off services electronically?

Mark: The hardware needed is not yet in place for residential customers, and someone will initially have to shoulder the cost of this equipment. This may be different for large customers who may already have the equipment in place.

Joe Dukert: Can Smart Grid pricing be set at the national level since there may be many different systems in place?

Mark: A smart grid may end up with 2000 different systems, but some aspects of pricing will need to be standardized, especially unscheduled flows across different power providers. But below that level, there will have to be some differences to create flexibility.

2009 MEMBERSHIP RENEWAL/REGISTRATION FORM
National Capital Area Chapter
U.S. Association for Energy Economics

Please check here for membership renewal.

Please check here for new membership registration.

Membership registration/renewal for the NCAC-USAE is expected by the end of the preceding calendar year.

Please return your registration form and check to **Mark Lively** — NCAC-USAE Treasurer at: **Utility Economic Engineers, 19012 High Point Dr., Gaithersburg, MD 20879**. Phone: 301-428-3618. Email: MbeLively@aol.com

Full membership dues for 2009 are \$20.00 (students \$10.00). Please make checks payable to NCAC-USAE.

Please print clearly.

NAME _____
TITLE _____
ORGANIZATION _____
MAILING ADDRESS * _____

TELEPHONE NUMBER _____
FAX NUMBER _____
E-MAIL ADDRESS ** _____

Would you be interested in becoming more involved in NCAC-USAE by serving on the Council or as an officer of the Chapter? Yes ___ No ___

Please list topics or speakers you would be interested in:

* For DOE, please provide complete routing address.

** Provide the best e-mail address to receive the newsletter.