



NEWSLETTER

Midwest Cogeneration Association, Inc.

February 2008

Vol. 23, No.1

Midwest Cogeneration Association

Invites You To Attend A Dinner Meeting On

Wednesday, March 12, 2008

**Featured Speaker: Mr. John Kelly
Endurant Energy, LLC**

CO₂ Reductions in Distributed Electric Generation

John Kelly of Endurant Energy, LLC will build on the introduction to greenhouse gas concepts presented at the MCA 2007 Annual Conference by discussing specifics on carbon emissions factors for each state in the MCA region, the quantification of CO₂ offsets, and the positive impact that cogeneration has on a building's carbon footprint. Please plan to join us for this very timely and informative presentation.

Place: Costa's Greek Dining & Bar (upper room)
1 S. 130 Summit Ave.
Oakbrook Terrace, Illinois 60181
(630) 620-1100

Time: Social Hour: 5:30 pm
Dinner: 6:30 pm
Featured Speaker: 7:15 pm

Cost: \$35.00

Reservations: Call the MCA voicemail at (630) 323-7909 by 10:00 am
Monday, March 10, 2008 or e-mail your reservation to
midwestcogen@ameritech.net

If your plans change after you have made a reservation, please cancel your reservation. If your cancellation is not received on or before 3/10/08, the MCA reserves the right to invoice you for the cost of the dinner.

MEMBER NEWS

2008 Board of Directors

President

Tom Riemer

JTR Industries, Inc.

Vice-President

John Cuttica

University of Illinois
Energy Resource Center

Secretary

Larry Hagemeyer

Dial Corp.

Treasurer

Kenneth W. Jacobs

Retired

Directors

Robert J. Conway

Charles Equipment Co.

Dean Karafa

PCI Mgmt. & Consulting Co.

Tom Kelleher

AMS

David Martindale

Ballard Engineering

William O'Shea

O'Shea Environmental

Mike Rutter

The Edward D. Newell Company

Thomas Smith

Equity Office Properties

Alden T. Wulff

Retired

MCA HOLDS ANNUAL CONFERENCE

On Wednesday, October 24th, 2007, the MCA held its annual energy conference at the McDonald's University in Oak Brook. The title of the conference this year was

Clean, Green & Efficient the future of Distributed Energy

Approximately 70 attendees were treated to excellent sessions and presentations covering such timely topics as:

- The Design of Future Electric Grids
- Calculating Carbon Footprint
- Electric Interconnect Standards in the Midwest
- Industrial Waste Heat Recovery
- CHP in Ethanol & Biodiesel Plants
- Bio-Waste to Energy
- Cogeneration in Today's Deregulated Electric Market

Visit our website at www.cogeneration.org to view the Program Agenda, Attendance List, List of Exhibitors, and all the presentations in downloadable format.

CONFERENCE EXHIBITORS

The MCA thanks the following exhibitors for their support at the recent 2007 Annual Energy Conference held on October 24th, 2007 at McDonald's University.

Charles Equipment Company
Energy Resource Center, Univ. of Illinois
H. Ertel Inc.
Inland Power Group
Lehman Company & Associates
Middough, Inc.
Stanley Consultants, Inc.
The Edward D. Newell Co.
The Power Generation and Control Group

PRESIDENT'S LETTER

Here in the Midwest, since 1984, the MCA has been the standard bearer for cogeneration. During that time I have talked many times about some of the advantages of belonging to this organization. Well here I go again.

There are at least two major benefits of belonging to, and continuing to support the MCA. The first being the sharing of the knowledge of many of our members who collectively have too many years to count in this industry and an experience base that far exceeds expectations. Perhaps because of its size, there is a certain intimacy that enables even the novice to network with some of the "captains" of the industry. The second major benefit is the opportunity to network with some of the leading suppliers and manufacturers within the industry, which enables one to keep up with the latest technology and methodology available from the marketplace. Networking also allows you to keep up with the latest intelligence from "off the street".

To summarize, we can define purpose in three ways. That is (1) the sharing of knowledge, (2) networking, and (3) the promotion of cogeneration. We all still know that when applied properly, cogeneration is environmentally friendly, makes good economic sense, and conserves energy. And in most cases today we have to look at it as a part of a larger energy plan.

Yet, for some, it has become difficult to find purpose in sustaining the enthusiasm necessary for the MCA; either by attendance at a dinner meeting, or by contributing their valuable time to insure the organizations viability. They cite the lack of potential for projects and the fact that the spark spread probably won't improve in the very near future and/or the perception that the MCA has become irrelevant due to the many competing and much larger organizations. They also cite that much of the needed technology already floods the internet.

I don't believe that we have to re-invent the MCA in order to continue; but, I do believe that we need to change some of the things we do. We will probably need to have fewer meetings and those meetings will have to deal with more meaningful and timely subject matter. And perhaps we have to broaden our scope of discussion to include wind-power, bio-mass, bio-gas, and others. As evidenced by the Annual Conference, if the topics are timely and meaningful, the membership and others will support our efforts. We should also continue to encourage networking and the sharing of knowledge with others in the industry.

We need to encourage more active participation by the membership by way of new ideas, and participation in the implementation of those ideas. We also need to encourage the membership to inject themselves into the process by submitting their names as possible candidates for membership on the board, as chairs for the various committees, or actively participate in some other manner that fits into one's life style. Volunteering for any of these positions usually only amounts to 1-2 hours per month and will allow the MCA to go forward and continue to thrive and prosper as the standard bearer for the industry. If interested in submitting your name, email your interest to Mike Rutter at mrutter@ednewell.com.

Please, let me know your thoughts on how we can improve the MCA and consider becoming a volunteer. We need your help and participation!



UPCOMING EVENT

The Midwest Cogeneration Association is teaming up with the Illinois Section American Water Works Association to present a seminar on Electric Deregulation.

Electric Deregulation.....What Now?

May 6, 2008

9:00 a.m. - 3:00 p.m.

The benefit to all will be in the networking and the opportunity to better understand the needs of our water industry; thus be better equipped to serve your industry. The benefit to your organization would be the opportunity to meet some of the professionals directly related to the power generation industry and give your membership an opportunity to ask questions and hear first hand the answers to some of those questions.

- Topics:** Electric Deregulation and electric rates
Engine generators (Natural Gas, Diesel, Bio fuel)
Turbine generators
Heat recovery equipment (water, steam)
Switchgear
Distribution switch gear
Energy studies
Project financing
Alternative fuel use
Engineering companies of various topics
- Location:** Park Place
6240 Joliet Road
Countryside, IL
(708) 588-1756
- Cost:** \$35 for MCA and AWWA members
\$50 for non members
- Registration:** 8:30 a.m. registration - Seminar will begin at 9:00 a.m.
Earn up to 5 renewal training credit hours or professional development hours. Continental breakfast and lunch included.

If you are interested in being a speaker at this event, please contact David Martindale, Ballard Engineering, (815) 229-1800 or david@ballardcos.com. This is our Opportunity to put on our groups' abilities to a target audience and speak to the whole group.

INDUSTRY UPDATE

POLLUTION REGULATION'S UNINTENDED CONSEQUENCES

By: Thomas Casten, Chairman, Recycled Energy Development LLC



Two recent energy stories were cheered by environmentalists and booed by the Wall Street Journal. Al Gore won the Nobel Peace Prize for his tireless efforts to warn about climate change. American Electric Power was fined \$4.6 billion for modifying old coal-fired power plants.

One decision celebrates reducing carbon dioxide emissions and the other effectively criminalizes carbon dioxide reductions. AEP will spend billions to reduce the emissions of criteria pollutants – nitrous oxides, oxides of sulfur, and particulate mater. Sounds good, but the new scrubbers and fans will add 5% to 10% parasitic load to each plant and lower efficiency. Criteria pollutant emissions will drop, but electric prices and CO2 emissions will go up.

Happily, there is a way to beneficially impact all three metrics. Efficiency gains reduce costs by saving expensive fuel, reduce criteria pollutant emissions and reduce CO2 emissions. Although current environmental and electricity regulations discourage efficiency, there is good news. Thermodynamic laws are inflexible, but governmental laws can be changed.

To understand the potential, look at the electric industry history, remembering that power generation is the largest U.S. source of carbon emissions. Delivered efficiency grew from 6% at Edison's first commercial power plant to over 30% by 1960, and then stopped improving. From the end of Eisenhower's presidency until today, the U.S. electric industry has failed to top 33% efficiency, thus wasting 2/3's of the energy in the fuel. Why?

Monopoly protection and central planning are classic ways to suppress innovation, and the US electric industry suffers from both, which principally explains the observed stagnation. But environmental regulations behind the AEP fines also help explain three decades of stagnant efficiency.

In 1977, Congress amended the Clean Air Act to reduce emissions of criteria pollutants – NOx, SOx, and particulates. This was long before today's concerns about CO2 emissions. The law allowed each existing plant to pollute at historic levels, unless the plant was subsequently modified. Modifications for any reason, including increased efficiency, voided the grandfathered right to pollute and required the plant to cease operations or to reduce cut emissions to then currently allowed levels.

This approach effectively blocked efficiency gains and perverted economic decisions. A flood of new technology could profitably increase the efficiency of existing power plants, but no one installs any of this technology because this would void the plant's permit to operate unless the owners installed prohibitively expensive pollution controls. New generation must meet current emission standards, which raises the capital cost, but the plant has to compete with power from dirty plants. Old coal plants gained immortality and the industry efficiency stagnated.

The Times editorial applauded the AEP penalty, but was it a penalty? The court found that AEP had illegally modified several coal plants without reducing emissions. In settling the case, AEP agreed to invest billions of dollars in pollution control equipment, which investment will go into rate base and increase allowed profits. The new pollution control will reduce efficiency, but regulators typically pass all fuel costs through to ratepayers, effectively holding the utility shareholders harmless. And the old coal plants will operate another 20 years at their dismal 1960 efficiency. It seems that the public has been penalized.

INDUSTRY UPDATE

POLLUTION REGULATION'S UNINTENDED CONSEQUENCES (CON'T.)

Congress can modernize the Clean Air Act's anti-efficiency bias by replacing grandfathered permits with nationwide output-based pollution allowances. Set a pollutant allowance per unit of useful energy that applies to every producer of electricity and thermal energy, and then set a schedule of lower allowances over time. Let producers of clean energy sell excess allowances and force producers of dirty energy to purchase allowances to cover excess pollution. Several states have taken the lead on output-based standards, and it is time for new federal rules.

Replace government's current intrusive right to select pollution control technology with these

universal output-based allowances. This still forces cleaner air, but frees power entrepreneurs to pick among efficiency, windmills, solar power, waste energy recycling, added controls and every other idea that profitably reduces pollution.

Output-based allowances reward efficiency. Increasing the useful output of any power plant increases its pollutant allowances without increasing pollution or fuel use. Clean energy plants can improve economics by selling excess pollutant allowances while the cost of purchasing allowances will speed retirement of dirty plants. New construction will boom. Several Senators including John McCain have proposed 'four

pollutant' bills linking carbon dioxide and criteria pollutants. To foster efficiency, add output-based standards.

Congress can turn climate change into an opportunity by simply removing the barriers inherent in old regulatory approaches. Modernize regulations to reflect climate change concerns and to speed deployment of proven efficiency improvements. Entrepreneurs will begin profitably reducing carbon emissions even before we resolve the larger issues surrounding a carbon bill. The resulting economic boom will clean the air, reduce carbon emissions, reduce electric prices and create a new U.S. export industry for clean energy technology.

INDUSTRY HUMOR

During these tough times in the energy field and relentless high gas prices, LaSalle Associates, Inc., has managed to stay afloat. Founder (and longtime MCA member, now in honorary status) Bob Patricoski, has taken LaSalle in a new direction. LaSalle's alternate venture is "the coffee business." They have successfully transformed the office into a coffee shop and short order breakfast establishment, where MCA members and followers (and anyone who knows how to use a slide rule) can come and enjoy good coffee, conversation, light bulb advice, and the occasional political debate. The profitability of this venture remains to be determined, but in the meanwhile, it's keeping our political leaders on their toes, our superbowl betting to a minimum, and our hearts healthy. LaSalle's best kept secret.....Smart Balance.

Do you have your own story of survival? Email us at midwestcogen@ameritech.net



U.S. EPA / CHP PARTNERSHIP

U.S. EPA LAUNCHES NEW WEB SITE FOR CHP PARTNERSHIP

The U.S. EPA is pleased to announce the launching of its new Web site for The Combined Heat and Power (CHP) Partnership. New project development resources are now available and portions of the Web site have been streamlined to improve the access to existing tools and information. Some of the changes include the following:

- ◆ Revised Funding Database - To build on the popularity of the original funding database, we have made the new funding database easier to navigate by including updated tabs and organizing the information by type of project and the type of incentive. Please visit the new Funding Database, at: <http://www.epa.gov/chp/funding/funding.html>.
- ◆ Revised Project Developer's Page - The Streamlining Project Development Web page, consolidates a number of different resources into a single location, using a common navigation menu. This descriptive resource helps to guide users through the entire procurement process: from analyzing site-specific technical potential for CHP to operations and maintenance of a completed CHP system. The guide also highlights various tools and resources that might be helpful at each stage of the CHP development process. This newly consolidated guide is available at: <http://www.epa.gov/chp/project-development/index.html>
- ◆ Newly Added Tools and Resources - The Web site now includes a number of new resources, such as: a section outlining CHP project economics, available at: <http://www.epa.gov/chp/basic/economics.html>; new information on the CHP Partnership's strategic market sectors for CHP, accessible at: <http://www.epa.gov/chp/markets/index.html>; and a publications page listing all CHP Partnership documents available on the Web site, located at: <http://www.epa.gov/chp/publications/index.html>.
- ◆ Improved Basic Information on CHP - More background information on CHP is included, such as a section on renewably-fueled CHP (a new home for information about biomass and biogas utilization for onsite power generation), as well as resources for quantifying the efficiency and reliability benefits of CHP compared to conventional separate heat and power generation. Please visit the new Basic Information Web page, at: <http://www.epa.gov/chp/basic/index.html>.
- ◆ More to Come - Over the next few months, The CHP Partnership will be posting several reports currently under development to the new Web site, such as the Biomass CHP Catalog of Technologies - a follow-up to our CHP Catalog of Technologies. The Biomass CHP Catalog of Technologies will provide in-depth information on technology applications, the project development process, and other important considerations when building a biomass-fueled CHP system.

The CHP Partnership will be announcing several new tools and resources over the next few months to CHP Partnership members. For more information on joining the CHP Partnership, please visit: <http://www.epa.gov/chp/partnership/how-to-join.html>.

CHP PARTNERSHIP CONTACT INFORMATION

U.S. Environmental Protection Agency
Fax: 202-343-2208
Web site: www.epa.gov/chp
Kim Crossman (crossman.kim@epa.gov) 202-343-9388
Tom Frankiewicz (frankiewicz.thomas@epa.gov) 202-343-9794
Felicia Ruiz (ruiz.felicia@epa.gov) 202-343-9129



Midwest Cogeneration Association
P.O. Box 283
Western Springs, IL 60558-0283

RETURN SERVICE REQUESTED



UPCOMING EVENTS

February 25-29, 2008

Comprehensive 5-Day Training Program for Energy Managers

Location: Wyndham Midtown
Atlanta, Atlanta, GA

Contact: AEE (770) 925-0633 or
valerie@aeecenter.org

March 12, 2008 CO2 Reductions in Distributed Electric Generation

Location: Costa's Greek Dining,
Oakbrook Terrace, IL

Contact: MCA (630) 323-7909 or
midwestcogen@ameritech.net

March 18-19, 2008 *Creating A Sustainable Energy Management Program*

Location: Austin Convention Center,
Austin, TX

Contact: AEE (770) 936-0644 or
valerie@aeecenter.org

April 14-18, 2008

Comprehensive 5-Day Training Program for Business energy Professionals

Location: Sheraton Pasadena
Hotel, Pasadena, CA

Contact: AEE (770) 925-0633 or
valerie@aeecenter.org

May 13-14, 2008 *Applying Cost-Effective Renewable Energy Technologies*

Location: Washington State
Convention & Trade Center

Contact: AEE (770) 925-0633 or
valerie@aeecenter.org

September 29-30, 2008

Basics of Distributed Generation & Onsite CHP

Location: Gaylord National
Convention Center, Washington, DC

Contact: AEE (770) 925-0633 or
valerie@aeecenter.org