
National Capital Area Chapter

United States Association for
Energy Economics

May 2003

<http://www.ncac-usaee.org>

news

Renewable Energy Credit Markets: Implications of Market Design on Prices and Volatility

Our Next Luncheon at Library of Congress

- WHEN:** Noon, Friday, May 30
- WHERE:** 6th Floor, Madison Building—Montpelier Dining Room
Library of Congress (enter from Independence Avenue)
1st Street & Independence Avenue, SE
Washington, DC
- SPEAKER:** Marc Chupka, *The Brattle Group*

Markets for Renewable Energy Credits (RECs) are beginning to emerge as renewable portfolio standards (RPS) are implemented in various states, and are considered in national energy policy debates. Several aspects of market design—especially those related to compliance flexibility such as banking or borrowing and penalty prices—will exert a strong influence on REC prices and price volatility as these markets evolve. This presentation will examine these issues and implications for risk management strategies for market participants.

Marc Chupka is Senior Consultant at *The Brattle Group*. Marc has over 15 years of public and private sector experience analyzing the market impacts of domestic and international energy and environmental policy. He is the former acting Assistant Secretary for Policy and International Affairs at the Department of Energy, and has held other key policy positions in DOE and the White House.

Marc's work has focused on the electricity market impacts of Clean Air Act regulations, assisting clients in developing compliance strategies, valuing generating assets, and analyzing the effects of environmental regulations on generating unit availability. He has experience in electric utility deregulation, stranded cost estimation, energy contract negotiation and litigation, electricity procurement reasonableness and prudence reviews, and electricity and emission allowance price forecasting. Marc also conducts analyses on the financial implications of possible climate change policies on the energy sector.

Join us on Friday, May 30 at 12:00 pm for networking, with the lunch-line forming promptly at 12:30 and the presentation beginning at 1 pm so we are done by 2 pm.

COST: \$20.00 for members (\$5.00 for student members) and \$25.00 for non-members—guests are always welcome. Make checks payable to NCAC-USAAEE. **RSVP:** By COB Tuesday, May 27 to Leslie Coleman by phone (202/463-9780) or email (lcoleman@nma.org). Cancellations after noon Wednesday will be billed.

Materials from May 5 NCAC Policy Conference on International Conflict

Thanks to all of our colleagues who attended NCAC's May 5 conference on *Energy Policy and International Conflict: Responding to War, Terrorism and Disruption*. The conference provided revelations, not only about the world oil market, but also the role that natural gas will play in the coming years in North America, and the possibilities for hydrogen-fueled automobiles. Some of the presentations are now available on the [NCAC web site](#). In addition, SAIS, which co-sponsored this event, will be producing the proceedings of the conference for the benefit of NCAC members.

Highlights of the April Lunch

SPEAKER: Michael C. Lynch, President
Strategic Energy & Economic Research, Inc.

The Dogs of War and the Bulls of Oil...(and the Pigs of Policy)

Although originally scheduled to speak in March, when the war in Iraq was just beginning, Michael Lynch had kindly agreed to address our chapter in April just as military operations in Iraq were shifting gear from a 'war' to a 'rebuild' effort. Lynch explained that before the start of the war, he made three predictions: the Iraqi oil fields would be blown up (set on fire or damaged), the price of oil would reach \$50/barrel, and oil would be released from the Strategic Petroleum Reserve (SPR). While these predictions all proved incorrect, Lynch said that he could explain why.

With respect to why oil fields in Iraq were not damaged, Lynch offered several possibilities – Saddam was kind, Rumsfeld was clever to start with a surprise attack, there was insurrection amongst Iraqi troops who refused to follow orders, or the lack of damage was a conspiracy to embarrass the United States. Lynch suggested that some people might find appeal in the last explanation, but that more likely the surprise element of attack had played a role. The remaining two predictions were addressed during the remainder of the talk, which focused on energy security, oil policy and economics, including a brief historical overview and a discussion about scarcity, capacity, and hoarding.

Lynch emphasized the importance of history and briefly reviewed some of the main developments in U.S. oil policy and how they came about -- frequently out of pursuit of stability. He noted how many people today lack a familiarity with this history, a point that received more emphasis later in the talk. Lynch also shared several graphs to demonstrate the importance of historical context and frame one of his central points regarding the key role of oil producing capacity in addressing energy security.

The first graph shows a number of 1980 oil price forecasts (from the Energy Modeling Forum 6) compared to the actual price of oil. All of the forecasts greatly overestimated what the price of oil would be during the 1980 to 2000 period. Lynch pointed out that the graph demonstrates how "everyone" was wrong in 1980 in thinking that available oil was running out and the price would rise (Lynch concedes that some analysts were claiming otherwise, but were not producing forecasts). The graph also highlights lack of understanding about oil price elasticity, which according to Lynch, is not sufficiently well understood and is not studied much anymore. He explained that before 1979/1980, there was great debate about how much oil was available, but that after the 1979 oil "crisis" and the Iranian revolution, there was consensus of opinion around the scarcity of oil.

Turning to focus on energy security and what constitutes an oil crisis, Lynch noted that people still view oil as valuable and scarce and many equate a reliance on imports with vulnerability. Lynch believes that this leads to a focus on the “wrong” problems. Crisis, he said, has nothing to do with oil resources, but rather reflects a capacity problem. Having reviewed historical crises, Lynch characterized them as short-term events, involving a politically-derived disruption, and including not just a gross loss of oil, but also a response to the disruption in which oil production comes on line. This is why it is the *net* loss of oil, and not just the *gross* loss of oil supply that is important in a crisis event. (Lynch shared graphs depicting this net loss of oil supply during past ‘crisis’ events.) Surplus capacity is not generally economic for an industry has dropped sharply in recent years, so that consumers are now more vulnerable to even small disruptions.

A second key problem according to Lynch is hoarding. Some analysts see less hoarding now when there is threat of disruption than previously and attribute it to the presence of a futures market, but Lynch is not convinced. He believes the future could see more oil hoarding and suggests that this a concern in the U.S. for the Department of Energy. The third key problem identified by Lynch has to do with what OPEC does *after* there is a price spike in the oil market. That is to say, OPEC has a tendency to cut production in pursuit of (maintaining) higher price ranges. Lynch believes that little can be done about the loss of surplus capacity and that hoarding can be addressed through a range of common sense policies, including proper use of the U.S. strategic petroleum reserve (SPR).

Focusing briefly on the last problem – the tendency of OPEC after a price spike to attempt maintaining high prices – Lynch pointed out that at least a couple of OPEC energy ministers have been talking about a “fair” (high) price of oil. He noted that too many OPEC decision-makers today don’t remember what happens when the price of oil is kept too high. Who’s left, he asked, who remembers the previous oil crises? Saddam Hussein and Muammar Qaddafi?!

Lynch then proceeded to identify several concerns, first and foremost being the lack of research funds to study the problem areas identified above. More research is needed to understand hoarding behavior and how effectively markets work. Lynch is also concerned about long-term market structure questions. For example, is the growth in pipelines (which may be easy to blow up) for transportation creating vulnerability? A real catastrophic failure in the oil market has not yet occurred, for example, the disruption of supply from two major suppliers at the same time, leading to the removal of 8-10 million barrels per day of oil supply and a sustained high oil price. The potential for this type of event is not disappearing, given an environment of tightening capacity, political instability in the Middle East, and a growing role for Russia as a supplier. What can be done to prepare for this possibility?

The presentation ended with a Q&A session that included a discussion on the strategic petroleum reserve (SPR) and what, if any, would be an appropriate policy for release of SPR oil stocks. Michael Lynch warned that the danger of specifying a policy is that it creates a specific target for stakeholders to abuse. Thus, there cannot be a specific trigger price for SPR release, and stock release should be conditional upon a political incident (not just a market disruption) that disrupts supply and threatens to set off hoarding. Overall, Lynch noted, the SPR is effective as a deterrent against market blackmail.

2003 OFFICERS and COUNCIL MEMBERS

Name	Phone	Fax	E-Mail
Sarah McKinley President	202-502-8368 Federal Energy Regulatory Commission	202-208-0500	sarah.mckinley@ferc.gov
Ron Planting Vice President	202-682-8509 American Petroleum Institute	202-962-4730	Planting@api.org
Sara Banaszak Secretary	202-586-2066 Department of Energy	202-586-4062	sara.banaszak@hq.doe.gov
Leslie Coleman Treasurer	202-463-9780 National Mining Association	202-833-9636	lcoleman@nma.org
David South Immediate Past Pres.	703-690-2737 Technology & Market Solutions, LLC	703-690-2736	david@t-msolutions.com
Stephanie Battles	202-586-7237 Energy Information Administration	202-586-0018	stephanie.battles@eia.doe.gov
John Felmy	202-682-8530 American Petroleum Institute	202-682-8408	felmyj@api.org
John Jimison	202-466-0060 Cameron McKenna LLP	202-466-0077	jjimison@cmcklaw.com
Fred Joutz	202-994-4899 George Washington University	202-994-6147	fjoutz@attglobal.net
Wil Kohl	202-663-5725 Director, IEEP, SAIS	202-663-5769	wkohl@jhu.edu
Len Levine	202-965-2788 Energy Consultant		len.levinegr@verizon.net
Mark B. Lively	301-428-3618 Utility Economic Engineers	301-428-3618	MbeLively@aol.com
Shirley Neff	202-361-5434 Goldwyn International Strategies, LLC		sneff@goldwyn.org
Carol Rendall	301-229-8978 Energy Consultant	301-229-8978	carolwrendall@msn.com
Anne Roland	410-767-8166 Maryland Peoples' Counsel		AnneR@OPC.STATE.MD.US
Cyndy Wilson	703-698-7049 Catalytics, Inc.	703-698-5404	Catalytics@aol.com

2003 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.
- Please check here for student membership registration.

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

Please return your registration form and check to **Leslie Coleman**—NCAC/USAEE 2003 Treasurer at: **National Mining Association, 101 Constitution Ave., Suite 500 East, NW, Washington, DC 20001**. Phone: 202/463-9780. Email: lcoleman@nma.org.

Full membership dues for 2003 are \$20.00 (students \$10.00). Please make checks payable to NCAC/USAEE.

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