FINAL PROGRAM ANNOUNCEMENT



25th Annual North American Conference of the USAEE/IAEE

Fueling the Future: Prices, Productivity, Policies, and Prophecies

September 18-21, 2005 | Omni Interlocken Resort | Denver, Colorado - USA

Supporting Organizations:



United States Association for Energy Economics



Denver Chapter, USAEE

Sponsors:

American Petroleum Institute Aramco Services Co.

BP, plc

Colorado Energy Research Institute & Mineral Economics Program, Colorado School of Mines

ConocoPhillips, Inc.

ExxonMobil

Gestore Rete Trasmissione Nazionale

Halliburton Energy Services

Institut Français du Pétrole

Lexecon, An FTI Company

Sandia National Laboratories

Strategic Energy & Economic Research

Toyota Motor Sales, U.S.A., Inc.

Leonard Coburn

Joseph Dukert

CONFERENCE OBJECTIVE

Topics addressed at this conference include fossil fuel reliance and reserves, national energy policy, non-conventional energies and renewables, and our progress towards clean, inexpensive, stable, and secure energy supplies. With concentrated plenary sessions, diverse concurrent sessions, and ample networking opportunities, we will explore a widerange of current energy issues in a convivial atmosphere with a scenic mountain view.

WHO SHOULD ATTEND

Energy Company Executives and Managers | Energy Policy Analysts |
Governmental Employees in Energy Resource Planning | Academics Specializing
in Energy Policy and Analysis | Electricity Pricing and Market Analysts |
Energy Consultants | Energy Company Planners | Economic Energy Risk
and Derivatives Specialists | Oil and Natural Gas Executives | Energy Rate
Executives | Electric and Utility Supervisors | Energy Environmental Analysts |
Geologists and Engineers | Environmentalists | Energy Journalists

PLENARY SESSION THEMES

- Fossil Fuels Reliance and Reserves
- National Energy Policy for the 21st Century
- Future Fuels and Use: Hope for Tomorrow
- Experience in Electricity Market Restructuring: The Bad, The Ugly, and The Not So Bad
- Energy Policy Gone Awry
- Non-Conventional Energies: Probable to Proven
- · Renewable Energy: Back to the Future?

ark!

25th Annual North American Conference of the USAEE/IAEE

WELCOME & OVERVIEW

Dear Colleague:

We are pleased to announce the 25th Annual North American Conference of the USAEE/IAEE, *Fueling the Future: Prices, Productivity, Policies, and Prophecies*, scheduled for **September 18-21, 2005, in Denver, CO**, at the Omni Interlocken Resort.

Please mark your calendar for this important conference. Some of the key themes and sessions for the conference are listed below. Plenary sessions will be interspersed with concurrent sessions designed to focus attention on major sub-themes. Ample time has been reserved for more in-depth discussion of the papers and their implications.

Meal function keynote speakers include Jim Mulva, CEO, ConocoPhillips and Michael "Mickey" Glantz, Senior Scientist, National Center for Atmospheric Research.

There are 30 concurrent sessions planned, with over 140 accepted papers. Given the location of the meeting in Denver, CO, we anticipate a good delegate draw to our plenary and concurrent sessions.

Denver, Colorado is an inspiring city and a great place to begin or end a vacation. Single nights at the elegant Omni Interlocken Resort are \$135.00 per night. Contact the Omni at 303-438-6600 to make your reservations. Conference registration fees are US\$600.00 for USAEE/IAEE members and US\$700.00 for non-members. Your registration fee includes two lunches, a dinner, three receptions and numerous coffee breaks, all designed to increase your opportunity for networking. These prices make it affordable for you to attend a conference that will keep you abreast of the issues that are now being addressed on the energy frontier.

MAIN CONFERENCE SUB-THEMES & PLENARY SESSIONS

Fossil Fuels Reliance & Reserves

National Energy Policy for the 21st Century

Non-Conventional Energies: Probable to Proven

Renewable Energy: Back to the Future?

Future Fuels and Use: Hope for Tomorrow

Experience in Electricity Market Restructuring: The Bad, The Ugly, and the Not So Bad

Energy Policy Gone Awry

The following pages detail the program overview, hotel and conference reservation and fees, student scholarship program, and information on Denver, CO. Please take advantage of the pre-registration discounts and make both your conference and hotel reservations as soon as possible. September in Denver is breathtaking! Please make your hotel reservations early by contacting the Omni Interlocken Resort.

Further information on Denver may be obtained at http://www.denver.org/visitors/index.asp and Boulder at http://www.bouldercoloradousa.com

If you have any questions regarding this conference, please contact David Williams at USAEE/IAEE Headquarters (216-464-2785 / usaee@usaee.org). We look forward to seeing you at the 25th Annual North American Conference of the USAEE/IAEE.

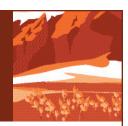
Sincerely,

Marianne Kah General Conference Chair Carol Dahl *Program Co-Chair*

Dorothea El Mallakh *Program Co-Chair*

Visit the Conference Web site at http://www.iaee.org/en/conferences

PROGRAM DETAILS



Sunday, September 18

IAEE COUNCIL MEETING

(By Invitation)

8:00 am - 12:00 noon • Spruce Room

IAEE/USAEE COUNCIL LUNCH

(By Invitation)

12:00 noon - 1:00 pm • Cedar Room

USAEE COUNCIL MEETING

(By Invitation)

1:00 pm - 5:00 pm • Spruce Room

BP CENTER FOR VISUALIZATION TOUR - See page 17

2:00 - 4:00 pm • Omni Front Entrance

REGISTRATION

1:00 pm - 5:30 pm • Aspen Room

OPENING RECEPTION

5:30 pm - 6:30 pm • Lobby Court & Terrace

USAEE/IAEE COUNCIL DINNER

(By Invitation)

 $7:00 \ pm - 9:30 \ pm$

The Flagstaff House Restaurant 1138 Flagstaff Road

Boulder, CO 80302

Monday, September 19

REGISTRATION

7:00 am - 5:00 pm • Aspen Room

CONTINENTAL BREAKFAST

7:30 am - 8:30 am • Centennial Foyer

Sponsored by: BP, Plc

ANN ARBOR CONFERENCE PLANNING MEETING

7:30 am - 8:30 am • Fir Room

ENERGY JOURNAL BOARD OF EDITOR'S MEETING (By Invitation)

7:30 am - 8:30 am • Spruce Room

WELCOME & INTRODUCTION

8:30 am - 8:45 am • Interlocken BCD Rooms

Marianne Kah (Presiding)

Chief Economist

ConocoPhillips, Inc.

President, USAEE

Carol Dahl

Professor of Economics CSM/IFP

Colorado School of Mines

Denver Conference Co-Chair

Dorothea El Mallakh

Director

ICEED

Denver Conference Co-Chair

PLENARY SESSION:

FOSSIL FUELS RELIANCE

8:45 am - 10:15 am • Interlocken BCD Rooms

Amy Jaffe (Presiding)

Fellow for Energy Studies Baker Inst.

Rice University

PANEL:

Mark Finley

Head of Energy Analysis

BP plc

Janet Gellici

Executive Director

American Coal Council

Thomas J. Woods

Senior Consultant

Platts Research & Consulting

COFFEE BREAK

10:15 am to 10:45 am • Centennial Foyer

Sponsored by:

Strategic Energy & Economic Research

PLENARY SESSION:

NATIONAL ENERGY POLICY FOR THE 21ST CENTURY

10:45 am – 12:00 noon • Interlocken BCD Rooms

Shirley J. Neff (Presiding)

Adjunct Lecturer and Research Scholar

CEMTPP, Columbia University

PANEL

Susan F. Tierney

Managing Principal

Analysis Group, Inc.

Joseph M. Dukert, Discussant

Energy Analyst

USAEE AWARDS LUNCHEON

12:00 noon - 2:00 pm • Centennial Ballroom

Marianne Kah (Presiding)

Chief Economist, ConocoPhillips, Inc.

Guy Caruso

Administrator

Energy Information Administration

Sponsored by: American Petroleum Institute & ConocoPhillips, Inc.

CONCURRENT SESSIONS – 1 TO 6

 $2:00 \ pm - 3:30 \ pm$

1. International Energy Economics - I

2. Modeling and Forecasting Energy Demand

3. Restructured Electricity Markets – Pricing Issues

4. CO₂ Emissions: Economics and Technology Aspects

5. Changing Dynamics of the World Oil Market

6. The Natural Gas Market: Global Perspectives

COFFEE BREAK

3:30 pm - 4:00 pm • Centennial Foyer Sponsored by: Colorado Energy Research Institute and Mineral Economics Program, Colorado School of Mines

CONCURRENT SESSIONS - 7 TO 12

4:00 pm - 5:30 pm

7. The Path to Getting Published

8. Restructured Electricity Markets – Capacity Expansion

9. Electricity Market and the Environment

10. Alternative Energy Systems and the Economy

11. Proven Petroleum Reserves, Production and Policy

12. Risk and Uncertainty in Petroleum Business Activity

USAEE CHAPTER LEADERSHIP MEETING

(By Invitation)

4:30 pm - 5:30 pm • Fir Room

Monday evening Reception and Dinner information on following page.



PROGRAM DETAILS

RECEPTION

6:00 pm - 6:45 pm • Centennial Foyer Sponsored by: Toyota Motor Sales, U.S.A., Inc.

DINNER

6:45 pm - 9:30 pm • Centennial Ballroom

Dorothea El Mallakh (Presiding) Director, ICEED

"What Makes Good Climates Go Bad"

Michael "Mickey" H. Glantz

Senior Scientist

National Center for Atmospheric Research

Tuesday, September 20

REGISTRATION

7:00 am - 5:30 pm • Aspen Room

STUDENT SCHOLARSHIP BREAKFAST MEETING

(By Invitation)

7:30 am - 8:30 am • Pine Room Sponsored by: Halliburton Energy Services

DUAL PLENARY SESSIONS

8:30 am - 10:00 am

A FUTURE FUELS AND USE: HOPE FOR TOMORROW

Interlocken BCD Rooms

Thomas Drennen (Presiding) Senior Economist

Sandia National Laboratory

PANEL

S. David Freeman

Renewable Resources Group

James L. Sweeney

Professor of Mgmt Science & Engineering Stanford University

Amory Lovins

Chief Executive Officer
Rocky Mountain Institute

B EXPERIENCE IN ELECTRICITY MARKET RESTRUCTURING: THE BAD, THE UGLY AND THE NOT SO BAD

Interlocken A Room

Fereidoon P Sioshansi (Presiding)

President

Menlo Energy Economics

PANEL

Joseph Desmond

Chairman

California Energy Commission

Jay Zarnikau

President

Frontier Associates LLC

Taff Tschamler

Principal

KEMA, Inc.

COFFEE BREAK

10:00 am - 10:30 am • Centennial Foyer Sponsored by: Lexecon, An FTI Company

CONCURRENT SESSIONS - 13 TO 18

10:30 am - 12:00 noon

- 13. Energy Consumption and the Economy
- 14. International Electric Restructuring Issues
- 15. Economics of Renewable Energy Systems
- 16. Environmental Policy Issues and the Economy
- 17. USAEE Student Best Paper Award Presentations and Contest
- 18. International Natural Gas Markets LNG

LUNCH

12:00 noon - 2:00 pm • Centennial Ballroom

Marianne Kah (Presiding)

Chief Economist

ConocoPhillips, Inc.

ENERGY POLICY GONE AWRY

Robert E. Ebel

Chairman, Energy Program

Center for Strategic & International Studies

Fred Flintstone

Worker, Bedrock Gravel Company

Michael C. Lynch

President, Strategic Energy & Economic Research

John C. Felmy

Chief Economist, American Petroleum Institute

DUAL PLENARY SESSIONS

 $2:00 \ pm - 3:30 \ pm$

A NON-CONVENTIONAL ENERGIES: PROBABLE TO PROVEN

Interlocken BCD Rooms

John Edwards, (Presiding)

Geology Professor

University of Colorado at Boulder

PANEL

Philip Herald Stark

Vice President of Industry Relations IHS Energy Group

Robert Alfred Lamarre

President,

Lamarre Geological Enterprises, LLC

John Edwards

Geology Professor

University of Colorado at Boulder

B DECODING THE FUTURE: AN OVERVIEW OF SHELL'S NEW GLOBAL SCENARIOS

Interlocken A Room

Wim Thomas, (Presiding)

Head of Energy Team

Shell International plc

Andrew Slaughter, (Presiding)

Senior NA Energy Advisor, Global Business Environment

Shell International

COFFEE BREAK

3:30 pm - 4:00 pm • Centennial Foyer Sponsored by: Aramco Services Co.

CONCURRENT SESSIONS - 19 TO 24

 $4:00 \ pm - 5:30 \ pm$

- 19. International Energy Economics II
- 20. Energy Efficiency: Technology and Policy Issues
- 21. Electricity Market Structure, Conduct and Performance
- 22. Perspectives on Alternatives to Carbon
- 23. Crude Oil Price Formation: Issues and Trends
- 24. Energy Industry Investments and Finance

USAEE GENERAL MEMBERSHIP MEETING

5:30 pm - 6:00 pm • Fir Room

OFF SITE RECEPTION

6:15 pm - 8:15 pm • Red Lion Restaurant

Sponsored by: GRTN SpA

Buses will begin loading at 5:45pm

Buses will begin loading at 5:45pm from the Garden Level floor of the hotel. Transportation to and from the Red Lion Reception will be continuous. The Red Lion Restaurant is beautifully located just five minutes from Boulder with a breathtaking drive 3.8 miles up Boulder Canyon Drive. Set in the Rocky Mountains, overlooking lovely grounds and Boulder Creek, light hors d'oeuvres and drinks will be served in a rustic yet formal venue.

PROGRAM DETAILS



Wednesday, September 21

REGISTRATION

7:30 am - 2:00 pm • Aspen Room

CONCURRENT SESSIONS – 25 TO 30

8:30 am - 10:00 am

- 25 Sectoral Energy Demand Analysis
- 26 Micro Analyses of the U.S. Electricity Market
- 27 Nuclear Energy Policy Issues and Economics
- 28 Energy, Environment and the Economy: Updates
- 29 Microeconomic Analysis of High Oil Price Impacts
- 30 Natural Gas Market Volatility: Methods and Models

COFFEE BREAK

10:00 am - 10:30 am • Centennial Foyer

PLENARY SESSION

RENEWABLE ENERGY: BACK TO THE FUTURE?

10:30 am - 12:00 noon • Interlocken BCD Rooms

Douglas J. Arent (Presiding)

Principal Analyst, Energy Analysis Office National Renewable Energy Laboratory

PANEL

Daniel M. Kammen

Director

Renewable & Appropriate Energy Laboratory University of California Berkeley

Rich Halvey

Clean and Diversified Energy Program Manager

Western Governor's Association

Michael C. Moore

Senior Fellow, Institute for Sustainable Energy, Environment and Economy University of Calgary

Hermann-Josef Wagner

Director of the Institute of Energy University Bochum, Germany

CLOSING REMARKS

12:00 noon – 12:15 pm • Interlocken BCD Rooms

Marianne Kah

Chief Economist ConocoPhillips, Inc. President, USAEE

NREL TOUR - See page 17

12:30 - 5:00 pm • Omni Front Entrance

!!! NEW THIS YEAR !!!

Three exciting sessions have been added to this years' USAEE/IAEE North American Conference.

THE PATH TO GETTING PUBLISHED

Monday, September 19 • 4:00 pm - 5:30 pm

Chair: Andre Plourde

Professor & Chair, Department of Economics, University of Alberta

Session Description:

Interested in finding out how to get a paper off your desk and into the pages of a refereed journal? How about getting tips on what journals look for? Or what kinds of submission and assessment processes are now in place? If so, then this session is for you! We have brought together editors from a number of key journals in the field of energy economics to address your questions and help you penetrate the world of peer-reviewed journals. See page 7 for a listing of speakers.

DECODING THE FUTURE: AN OVERVIEW OF SHELL'S NEW GLOBAL SCENARIOS

Tuesday, September 20 • 2:00 pm − 3:30 pm

Co-Chairs: Wim Thomas

Head of Energy Team, Shell International plc

Andrew Slaughter

Senior NA Energy Advisor, Global Business Environment Shell International plc

Session Description:

Shell has recently developed a new set of global scenarios as a framework for thinking about uncertainties risks and future development options for our world and our industry. This session will provide an overview of the scenario paths and some energy market implications.

USAEE STUDENT BEST PAPER AWARD PRESENTATIONS AND CONTEST

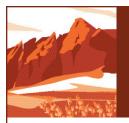
Tuesday, September 20 • 10:30 am - 12:00 noon

Chair: Wumi Iledare

Professor, LSU Center for Energy Studies

Session Description:

In the past few years, USAEE has offered a cash prize for the winner of the USAEE Best Student Paper Competition. The organization recently increased the number of student paper awards to three cash prizes in addition to a complimentary conference registration package for each of the top four finalists. This concurrent session provides a forum for the four finalists to present their papers and exchange ideas with USAEE members and other students. See page 10 for a listing of speakers.



CONCURRENT SESSION DETAILS

Concurrent Sessions 1 - 6

Monday 2:00 pm − *3:30 pm*

1. INTERNATIONAL ENERGY ECONOMICS - I

Interlocken B Room

David L. Dorenfeld (Presiding) Consulting Economist

SESSION SPEAKERS

The Energy Crises and the Corporate Way of Life: Can Energy Corporations Meet the Need for Workable, Fair, and Comprehensive Solutions to Energy Issues?

Kenneth R. Zimmerman

Oregon Public Utility Commission

The General Equilibrium Effects of Oil Price Shock and Trade Liberalization: Application of TAIGEM-III

Hsing-Hua Lin

Ching-Yun Institute of Technology

Han-Pang Su

Ministry of Justice

Shih-Mo Lin

Chung Yuan Christian University

Chung-Huang Huang

National Tsing Hua University

Oil Crises and Energy Savings: Looking Back on 30 Years of Energy Use in IEA Countries

Fridtjof Unander Paul Waide

International Energy Agency

Strategies for National Gas Companies

Hadi Hallouche

City University London

2. MODELING AND FORECASTING ENERGY DEMAND

Interlocken A Room

David F. Banko (Presiding)

President

Banko Petroleum Management, Inc.

SESSION SPEAKERS

Modeling and Forecasting the Demand for Crude Oil in Asian Countries

Nourah AbdulRahman Al-Yousef

King Saud University, Saudi Arabia

Those Elusive Elasticities: An Econometric Quest Towards Understanding of European Natural Gas Demand

Ragnar Tveteras Odd Bjarte Nilsen

University of Stavanger

Modelling Random Energy Demand Trend by Sector

Jean-Thomas Bernard Marie-Elaine Denis

Lynda Khalaf

Universite Laval

A Simultaneous Multimarket Model for Estimating the Energy Demand Elasticity

Torstein Bye Petter Vegard Hansen

Statistics Norway

3. RESTRUCTURED ELECTRICITY MARKETS – PRICING ISSUES

Pine Room

Youngho Chang (Presiding) Assistant Professor, Department of Economics National University of Singapore

SESSION SPEAKERS

Attributes of Well-Functioning Electricity Markets: How Can We Tell Them Apart?

Fereidoon P. Sioshansi

Menlo Energy Economics

Pricing Behavior, Market Power and Vesting Contracts in a Deregulated Electricity Market

Youngho Chang

National University of Singapore

A Regression Model of Gas/Electricity Price Relationship and its Application in Detecting Potentially Anomalous Electric Price

Young Yoo Bill Meroney

Federal Energy Regulatory Commission

Technology Adoption and Reliability in Electricity Distribution: Pricing Distributed Generation

Ricardo Raineri

Carlos Salamanca

Pontificia Universidad Catolica de Chile

4. CO₂ EMISSIONS: ECONOMICS AND TECHNOLOGY ASPECTS

Interlocken D Room

James L. Smith (Presiding) Cary M. Maguire Chair in Oil & Gas Management Southern Methodist University

SESSION SPEAKERS

Where Does the Hydrogen Come From: Potential Market Penetration in the U.S. of Low- or no- Carbon, Energy Secure Sources

Lorna A. Greening

Consultant

CONCURRENT SESSION DETAILS



CO₂ Abatement and Induced Technological Change

Lise-Lotte Pade

AKF

Mitigation Options for Energy-Related CO₂ Emissions in the Indonesian Manufacturing Sector

Rislima F. Sitompul Anthony D. Owen

The University of New South Wales

Scraping the Bottom of the Barrel: CO₂ Emission Consequences of a Transition to Low-Quality and Synthetic Petroleum Resources

Adam Brandt Alexander E. Farrell

 ${\it University~of~California~Berkeley}$

5. CHANGING DYNAMICS OF THE WORLD OIL MARKET

Interlocken C Room

Paul Tempest (Presiding)
Director & CEO

Windsor Energy Group

SESSION SPEAKERS

Iraq: How Big a Force in the World Oil Market?

Amy Myers Jaffe

Rice University

Donald Hertzmark

Oil Industry Consultant

The Changing Dynamics of the World Oil Market

Mine Kuban Yucel

Federal Reserve Bank of Dallas

Adnan Yucel

Numerica

The Oklahoma Refining Study

Dennis J. O'Brien

Sarkeys Energy Center University of Oklahoma

The Value-Relevance of Accounting Figures in the International Oil and Gas Industry – Cash Flows or Accruals?

Bard Misund Petter Osmundse

Frank Asche

 ${\it University~of~Stavanger}$

6. THE NATURAL GAS MARKET: GLOBAL PERSPECTIVES

Spruce Room

Joseph M. Dukert (Presiding) Energy Analyst

SESSION SPEAKERS

A Cartel in Natural Gas: Implications for a Global Natural Gas Market

Kenneth B. Medlock III Ronald Soligo Amy Myers Jaffe Rice University

A Seasonal Simulation Model of the California Natural Gas Transportation and Storage Network

Rocio Uria

University of California

It's Happening Again: Market Psychology vs. Natural Gas Fundamentals

Robert S. Linden

PA Consulting Group

The Shifting Sands of the U.S. Legislative and Regulatory Policy: Implications for Natural Gas Supplies from Foreign Sources

Dena E. Wiggins

Sutherland Asbill & Brennan LLP

Concurrent Sessions 7 - 12

Monday 4:00 pm − *5:30 pm*

7. THE PATH TO GETTING PUBLISHED

Interlocken B Room

Interested in finding out how to get a paper off your desk and into the pages of a refereed journal? How about getting tips on what journals look for? Or what kinds of submission and assessment processes are now in place? If so, then this session is for you! We have brought together editors from a number of key journals in the field of energy economics to address your questions and help you penetrate the world of peer-reviewed journals.

Andre Plourde (Presiding)

Professor & Chair, Department of Economics University of Alberta

G. C. Watkins

University of Aberdeen

Adonis Yatchew

University of Toronto Co-editors, <u>The Energy Journal</u>

Roderick Eggert

Colorado School of Mines Editor, <u>Resources Policy</u>

Dorothea El Mallakh

ICEED

Managing Editor, <u>The Journal of Energy and</u> <u>Development</u>

Lorna Greening

Consultant

Associate Editor, Energy Economics

Anthony D. Owen

University of New South Wales Member, Editorial Board, <u>Energy Policy</u>

Andre Plourde

University of Alberta Member, Editorial Board, <u>Energy Studies</u> <u>Review</u>

C. K. Woo

Energy and Environmental Economics, Inc. Associate Editor, <u>Energy - The International</u> <u>Journal</u>



CONCURRENT SESSION DETAILS

8. RESTRUCTURED ELECTRICITY MARKETS – CAPACITY EXPANSION

Interlocken A Room

David Nissen, (Presiding) Professor Columbia University

SESSION SPEAKERS

Electric Restructuring and Capacity Investment in Power Generation in the U.S. – A Panel Data Analysis of Generating Capacity

Toru Hattori

Research Economist CRIEPI

Electric Resource Adequacy is Not an Issue of Operating Reserves

Jonathan M. Jacobs

PA Consulting Group

Dynamic Analysis of Investment in Generation Capacity in Liberalized Electricity Markets

Laurens J. De Vries

Delft University of Technology

9. ELECTRICITY MARKET AND THE ENVIRONMENT

Pine Room

Gurcan Gulen (Presiding) Senior Economist Center for Energy Economic University of Texas at Austin

SESSION SPEAKERS

The Growth in Electricity Demand in U.S. Households, 1981-2001: Implications for Carbon Emissions

Behjat Hojjati Stephanie Battles

 $Energy\ Information\ Administration$

Analysis of Multi-Pollutant Initiatives in Electricity Markets

Robert T. Eynon

U.S. Department of Energy

A Modelling Assessment of the Impact of Clean Development Mechanism on Electricity Generation Systems: Case of Shandong Province, China

Edgard Gnansounou Denis Bedniaguine

Laboratory of Energy Systems

Jun Dong

Energy Research Institute

Solar Activity and Economic Fundamentals: The Case of the Electricity Market in Texas

Kevin F. Forbes

The Catholic University of America

O.C. St Cyr

NASA-Goddard Space Flight Center

10. ALTERNATIVE ENERGY SYSTEMS AND THE ECONOMY

Interlocken D Room

Alex Farrell (Presiding) Assistant Professor University of California

SESSION SPEAKERS

Climate Policies and Induced Technological Change: Impacts and Timing of Technology Subsidies

Snorre Kverndokk

Ragnar Frisch Centre for Economic Research

Knut Einar Rosendahl

Statistics Norway

Thomas F. Rutherford

University of Colorado at Boulder

High Oil Prices & Alternative Fuels Impacts on the US & Global Downstream

Martin R. Tallett

EnSys Energy & Systems, Inc.

An Empirical Investigation of Resource Extraction and Sustainable Development

Graham A. Davis

Colorado School of Mines

Fuelling the Future of a Billion Poor With Renewable Energy Lessons from an Economic Experiement in India's JABA Community

D.P. Kar Carol Dahl

Colorado School of Mines

11. PROVEN PETROLEUM RESERVES, PRODUCTION AND POLICY

Interlocken C Room

Jean-Philippe Cueille (Presiding)
Director of Studies Center for Econ. & Mgmt.
IFP School

SESSION SPEAKERS

How Credible Are Proven Oil Reserves: The Case of Iran, Russia & Canada

Mamdouh G. Salameh

Director, Oil Market Consultancy Service

Crude Oil from the Canadian Oil Sands: A Viable Energy Alternative for the American Continent

Kees Versfeld

Natural Gas & Energy Management Leader Syncrude Canada Ltd.

The Role of Alberta Oil Sands in North American Crude Oil Supply

Farhood Rahnama

Alberta Energy and Utilities Board

12. RISK AND UNCERTAINTY IN PETROLEUM BUSINESS ACTIVITY

Spruce Room

Peter K. Nance, (Presiding) Senior Principal Teknecon Energy Risk Advisors LLC

SESSION SPEAKERS

Political Uncertainty in Project Economics – A Case Study: ConocoPhillips' in Venezuela

DeAnn Craig

PhD Candidate, Colorado School of Mines

CONCURRENT SESSION DETAILS



Risk and Russia's Take Over of Yukos: Why Russia's and the World Oil Production May Peak Even if There is No Scarcity of Oil

Marek Kolodziej

University of Illinois at Chicago

Concurrent Sessions 13 - 18

Tuesday 10:30 am – 12:00 noon

13. ENERGY CONSUMPTION AND THE ECONOMY

Interlocken B Room

Leonard L. Coburn, (Presiding)

President

Coburn International Energy Consultants LLC

SESSION SPEAKERS

The Evaluation of Standard of Living and the Role of Household Electricity Consumption: A Panel Cointegration Analysis

Ronald D. Ripple Roselyne Joyeux

Macquarie University, Australia

The Relationships Between Useful Work, Economic Growth, and Energy Regulation

Thomas R. Casten

Primary Energy LLC

Robert U. Ayres

INSEAD

A New Approach to Measuring the Energy Productivity of an Economy

Chi-Yuan Liang

The Institute of Economics, Academia Sinica

OECD Energy Demand: Modelling Underlying Energy Demand Trends Using the Structural Time Series Model

Arqam Al-Rabbaie

Lester C. Hunt

SEEC, University of Surrey

14. INTERNATIONAL ELECTRIC RESTRUCTURING ISSUES

Interlocken A Room

Geoff Bertram, (Presiding) Senior Lecturer in Economics Victoria University of Wellington

SESSION SPEAKERS

Application of Panel Data Models in Benchmarking Analysis of the Electricity Distribution Sector

Massimo Filippini Mehdi Farsi

W. Greene

Swiss Federal Institute of Technology

The International Convergence of Electricity Prices

Juan A. Vega-Cervera

Luis R. Murillo-Zamorano

University of Extremadura, Spain

Electricity Deregulation in Israel: Is it Likely to Succeed?

Asher Tishler

Tel Aviv University

Chi-Keung Woo

Energy and Environmental Economics, Inc.

Retail Electricity: Scale Economies, Competition and Regulation Policy

Lyn Grigg

University of Canberra

15. ECONOMICS OF RENEWABLE ENERGY SYSTEMS

Pine Room

Kim F. Coffman, (Presiding)

Program Analysis

Minerals Management Service

SESSION SPEAKERS

Sustainability Indicators for Energy Systems to Enhance Decision Making Processes

H.J. Wagner

T.J. Petrovic

Institute for Energy Systems and Economics, Ruhr-University, Germany

Do Waste-to-Fuel Processes Make Economic Sense?

Michael E. Canes

LMI Research Institute

An Economic Assessment of Perth's Hydrogen Fuel Cell Buses

Colin J. Cockroft

Murdoch University

Anthony D. Owen

University of New South Wales

Feasibility Study for Renewable-Hydrogen Energy Systems With Application to Rural Area in Japan

Manabu Tada Toshihiko Nakata

Tohoku University

16. ENVIRONMENTAL POLICY ISSUES AND THE ECONOMY

Interlocken D Room

Donald A. Hanson, (Presidng)

Economist

Argonne National Laboratory

SESSION SPEAKERS

Can a Carbon Permit System Reduce Spanish Unemployment?

Taran Fahn

Statistics Norway

Antonio G. Gomez-Plana

Public University of Navarre, Spain

Snorre Kverndokk

Ragnar Frisch Centre for Economic Research

Economic Growth and Increasing Emission Leakages Across National Borders

Annegrete Bruvoll Taran Fahn

Statistics Norway

The Role of Environmental Management Capacity on Energy Efficiency: Evidence from China's Electricity Industry

Katsuya Tanaka

Shunji Matsuoka Manami Suga

Hiroshima University

Chazhong Ge

Chinese Academy for Environmental Planning



CONCURRENT SESSION DETAILS

17. USAEE STUDENT BEST PAPER AWARD PRESENTATIONS & CONTEST

Interlocken C Room

Omowumi Iledare (Presiding) Professor LSU Center for Energy Studies

SESSION SPEAKERS

Impact Mitigation for Emergency Events: Their Effects on Day-ahead and Real-time Market Locational Based Marginal Pricing at the New York ISO

Shoko Nakano

Hitotsubashi University, Japan

Does Uncertainty Matter? A Competing Risks Analysis of Investment in Petroleum Refining Industry

Xiaovi Mu

University of Oklahoma

Optimal Environmental Policies in a Heterogeneous Product Market Under Research and Development Competition and Cooperation

Olusegun Oladunjoye

University of Guelph, Canada

Econometric Study on Long-term Energy Strategy of Malaysia to the Year 2030-Focusing on the Impacts of Renewable Energybased Power Generation

Peck Yean Gan

Nagaoka University of Technology, Japan

18. INTERNATIONAL NATURAL GAS MARKETS – LNG

Spruce Room

Mine K. Yucel, (Presiding) Vice President & Senior Economist Federal Reserve Bank of Dallas

SESSION SPEAKERS

The Rice World Gas Trade Model: The Role of Russian Natural Gas and the Impact of Competing Technologies in a Global Gas Market

Peter Hartley Kenneth B. Medlock III

Rice University

Project Competition in International Gas Trade: LNG versus Pipeline, An Examination of Cost Structures

James Osten

Global Insight World Energy Services

The Future of LNG in Europe: How to Extract Value from Flexibility

Silvia Pariente-David

PA Consulting Group

Concurrent Sessions 19 - 24

Tuesday 4:00 pm − *5:30 pm*

19. INTERNATIONAL ENERGY ECONOMICS II

Interlocken B Room

Young Ho Chang (Presiding) Assistant Professor, Department of Economics The National University of Singapore

SESSION SPEAKERS

Evidence on the Role of Oil Prices in Venezuela's Economic Performance

Amany El-Anshasy Michael D. Bradley Frederick L. Joutz

The George Washington University

Hydrocarbon Policies in Mexico: The Difficulties of Changing and Modernizing the Oil and Gas Sector in the Framework of the Democratic Transition (2000-2005)

Isabelle Rousseau

El Colegio de Mexico

Are High Oil Prices Here to Stay? Medium-term Market Implications

Sharif Ghalib

Energy Intelligence Research

Analysis of the Energy Access Improvement in Developing Countries Through Rural Electrification

Makoto Kanagawa Toshihiko Nakata

Tohoku University

20. ENERGY EFFICIENCY: TECHNOLOGY AND POLICY ISSUES

Interlocken A Room

Kevin Forbes (Presiding) Associate Professor The Catholic University of America

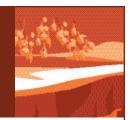
SESSION SPEAKERS

Making Markets That Drive Energy Efficiency

Iain MacGill

University of New South Wales

CONCURRENT SESSION DETAILS



Energy Efficiency and Renewable Energy Problems in the New EU Countries

Karlis Mikelsons

Latvian Power Company "Latvenergo"

Vilnis Kreslins Karlis Brinkis

Dispatcher Center of the Baltic Power Systems

Viktors Zebergs Namejs Zeltins

Institute of Physical Energetics of LAS

The Impact of Energy Efficient Equipment on Household Energy Use in Canada: Programmable Thermostats

David L. Ryan Darren Herasymiuk University of Alberta

The Experience With Energy Efficiency Policies and Programs in OECD Nations: Learning From the Critics

Howard Geller

Southwest Energy Efficiency Project

Sophie Attali

Energy Consultant

21. ELECTRICITY MARKET STRUCTURE, CONDUCT AND PERFORMANCE

Pine Room

Carlo Andrea Bollino (Presiding) Chairman

GRTN SpA

SESSION SPEAKERS

Status of Deregulation and Restructuring in Power Markets

Duane Chapman

Cornell University

Measuring Market Power in Wholesale Italian Electricity Markets: Preliminary Results - April 2004

C.A. Bollino P. Polinori

 ${\it University~of~Perugia}$

Agent-Based Simulations of GenCo Bidding Strategies in Restructured Electricity Markets

Audun Botterud Prakash R. Thimmapuram

Malo Yamakado

Argonne National Laboratory

Data Errors, Structural Change and Time Series Shocks in the Electricity Market

Nancy Kirkendall

Joe Sedransk

 $U.S.\ Department\ of\ Energy$

Lindolfo Pedraza

SAIC

22. PERSPECTIVES ON ALTERNATIVES TO CARBON

Interlocken D Room

Peter H. Kobos, Presiding Staff Economist

Sandia National Laboratories

SESSION SPEAKERS

The Hydrogen Futures Simulation Model: Projecting Carbon Sequestration Costs

Thomas E. Drennen William Kamery

Hobart and William Smith Colleges

Peter H. Kobos

Sandia National Laboratories

The Southwest Regional Partnership on Carbon Sequestration: Employing the Integrated Assessment Model for Systems Insight

Peter H. Kobos David J. Borns Len A. Malczynski Orman H. Paananen

Sandia National Laboratories

Measurement, Monitoring, and Verification (MMV) in Geological Sequestration Scenarios, Technical Advances and Economic Constraints

Julianna Fessenden

Los Alamos National Laboratory

Use of Hydrogen for the Light Duty Transportation Fleet: Technology and Economic Analysis – Comparative Energy Security and Environmental Implications of Chemical and Gaseous Hydrogen Economies

Peter Balash John Ruether Kathy Stirling

National Energy Technology Laboratory, DOE

Donald Hanson David Schmalzer John Molburg

Argonne National Laboratory

Dale Keairns Kenneth Kern

National Energy Technology Laboratory, SAIC

John Marano Independent Contractor

23. CRUDE OIL PRICE FORMATION: ISSUES AND TRENDS

Interlocken C Room

James W. Ragland (Presiding) Director/ERG Armaco Services, Inc.

SESSION SPEAKERS

An Econometric Evaluation of a Political Theory of Crude Oil Prices

Ahmad Slaibi Duane Chapman Hazem Daouk Cornell University

How Technical Analyses Affect the World Crude Oil Price: More Evidences from Candle-stick Charting Method

Ming-I Cheng Huei-Chu Liao

Tamkang University, Taiwan



CONCURRENT SESSION DETAILS

When Do Spot Prices of Crude Oil Revert Toward Futures Prices? A New Answer Based On Improvements to a Standard Model of Oil Price Formation

Mark W. French

Federal Reserve Board

Predicting Crude Oil Price Trends Using Artificial Neural Network Modeling Approach

Faisal Aladwani

Omowumi Iledare

Louisiana State University

24. ENERGY INDUSTRY INVESTMENTS AND FINANCE

Spruce Room

Glen E. Sweetnam (Presiding)

Vice President

Lukens Energy Group/Black & Veatch

SESSION SPEAKERS

Why Have So Many States in the U.S. Adopted a Renewable Portfolio Standard for Power Sales?

Asbjorn Moseidjord

Chevron Professor of Energy and Resources Saint Mary's College of California

Investment in U.S. Power Generation Facilities Under Regulation and Natural Gas Price Uncertainty: Timing of Plant Retirement and New Technology Choice

Peter Reinelt

State University of New York, Fredonia

David Keith

University of Calgary

What Will it Take to Tap the "Saudi Arabia of Wind"?

Frank Stern Ron Norman

PA Consulting Group

Assessing Impacts from Energy Efficiency Resource Investments

Scott Dimetrosky

Quantec, LLC

Jennifer Ellefsen

New York State Energy Research & Development Authority

Daniel Violette

Brent Barkett

Summit Blue Consulting

Concurrent Sessions 25 - 30

Wednesday 8:30 am - 10:00 am

25. SECTORAL ENERGY DEMAND ANALYSIS

Interlocken B Room

Arlon R. Tussing, (Presiding)

Professor

University of Alaska

SESSION SPEAKERS

Industrial Energy Use in the Future: Does the Modeling Framework Make A Difference?

Joseph M. Roop

Pacific Northwest National Laboratory

Lorna Greening

Consultant

Decomposing Change in Energy Use in the Japanese Economy: A Double Calibration Approach

Makoto Tamura Shinichiro Okushima

University of Tokyo

Energy Demand Elasticities Estimated by Shrinkage Estimators: How Much Confidence Can We Have in Them?

Odd Bjarte Nilsen

Frank Asche

Ragnar Tveteras

University of Stavanger

Stephen P. A. Brown (Presiding)

Interlocken A Room

Director of Energy Economics & Microeconomic Policy Analysis

26. MICRO ANALYSES OF THE U.S.

Federal Reserve Bank of Dallas

ELECTRICITY MARKET

SESSION SPEAKERS

Agent-based Approach to Deal with Business Complexity in US Wholesale Power Trading

Mika Goto

Central Research Institute of Electric Power Industry

Toshiyuki Sueyoshi

New Mexico Institute of Mining and Technology

Modeling and Forecasting U.S. Electricity Consumption at the Regional and Sectoral Level

Frederick L. Joutz

The George Washington University

David Costello

Energy Information Administration

On-Site vs. Off-Site Electric Power Supply in Refineries in the USA: the Use of Cogeneration in Texas and Louisiana

Alberto Elizalde Baltierra Gerardo Bazan Gonzalez

Petroleos Mexicanos

Myrna Varela Salazar Columbia University

Tania Cerda Sauvage

National Autonomous University of Mexico

Michelle Michot Foss

University of Texas at Austin

CONCURRENT SESSION DETAILS



27. NUCLEAR ENERGY POLICY ISSUES AND ECONOMICS

Pine Room

Arnold B. Baker, (Presiding) Chief Economist Sandia National Laboratories

SESSION SPEAKERS

Restoring the Nuclear Option in the U.S.: A Real Options Approach

Rob Graber

EnergyPath Corporation

Geoff Rothwell

Stanford University

Potential Synergies Between Nuclear and Oil Sands: A New Target for Future Commercial Reactor?

Christophe Bonnery

AREVA

Modeling and Analysis of Nuclear System Strategies in the U.S.

A.M. Yacout R.N. Hill

Argonne National Laboratory

Predictions of Nuclear Energy Market Share in the US Electricity Market

A.M. Yacout G. Conzelmann

V. Koritarov

Argonne National Laboratory

28. ENERGY, ENVIRONMENT AND THE ECONOMY: UPDATES

Interlocken D Room

Asbjorn Moseidjord, (Presiding)

Professor

Saint Mary's College

SESSION SPEAKERS

Environmental Regulation and the Market for Motor Vehicle Fuels: Unintended Consequences of Fuel-Type Proliferation, Including Higher and More Volatile Prices

Frank W. Rusco Jon Ludwigson

U.S. General Accounting Office

W. David Walls

University of Calgary

Links Between the Emerging Market for Greenhouse Gas Emission Permits and the Energy Markets

Bjart Holtsmark

Statistics Norway

Is A Richer-But-Warmer World Better Than Poorer-But-Cooler Worlds?

Indur M. Goklany

US Department of the Interior

The Life Cycle Private and External Costs of Increased Coal Use in the United States

Joule Bergerson

Lester Lave

Carnegie Mellon University

29. MICROECONOMIC ANALYSIS OF HIGH OIL PRICE IMPACTS

Interlocken C Room

Sergio Galina-Hidalgo (Presiding)

Scientific Researcher

Mexican Petroleum Institute

SESSION SPEAKERS

High Oil Prices: A Non-OPEC Capacity Game

Petter Osmundsen

Frank Asche

Bard Misund

Klaus Mohn

Section for Petroleum Economics University of Stavanger

Measuring the Impact of High Oil Prices and Federal Policy Initiatives in Offshore Gulf of Mexico Exploration, Development and Production Forecasts

Lee O. Upton III Peter K. Ashton

Innovation & Information Consultants, Inc.

Crude Oil and Natural Gas Pricing and Its Effects on E&P Industry Performance Measures: Empirical Evidence From Petroleum Producing States in the U.S.

Omowumi Iledare Mark Kaiser

Allan Pulsipher Louisiana State University Will High-Priced Oil Revolutionize the Energy Industry?

William Steigelmann Jill Cliburn

Aspen Systems Corporation

30. NATURAL GAS MARKET VOLATILITY: METHODS AND MODELS

Spruce Room

Frederick L. Joutz (Presiding)
Professor of Economics
George Washington University

SESSION SPEAKERS

Natural Gas Market Volatility: Impact and Buying Strategies for End-Users

Craig Schultz

President

Energy Buying Strategies Inc.

Opportunities in Chaos

Talal Saklou

Saudi Arabian Texaco Inc.

Simulation-Based Analysis of the Efficiency of the NYMEX Natural Gas Futures Market

Hiroaki Suenaga Jeffrey Williams

University of California, Davis



FEEL LIKE GOLFING?

The Omni Interlocken Resort and Golf Club is a 27-hole facility consisting of three individual regulation 9-hole courses (Vista, Eldorado and Sunshine). Ranked third in Best Resort Courses of Colorado, the Omni's Golf Club has played host to the Sun Microsystems/John Elway Celebrity Classic Golf tournament. With more than 400 feet in elevation changes, the course offers a stunning panoramic view of the Colorado Rockies. From the Vista's fourth hole, one can see from the Front Range of Pike's Peak in the South to Long's Peak in the North. Stretching over 300 acres, this rolling 7,100 yard, par 72 course provides a truly exceptional experience for the pro or amateur golfer. To set up your tee time, please contact the pro-shop at 303-464-9000.

BUTTERFLY PAVILION

A truly unique experience! If you have some extra time before or after the conference, you may wish to add the Butterfly Pavilion to your itinerary. More than butterflies, the Butterfly Pavilion is the first stand-alone nonprofit insect zoo in the nation. Once inside the computer controlled, tropical environment, visitors can surround themselves with over 1200 free flying butterflies while viewing the process of metamorphosis as adult butterflies emerge from their chrysalids; view insects along a shoreline tide pool, and so much more. For more information please visit the Butterfly Pavilion website at www.butterflies.org or call at 303-469-5441. The Butterfly Pavilion is a short taxi ride from the Omni Hotel.

IAEE INSTITUTIONAL MEMBERS

Alberta Energy

Aramco Services Co., USA

BP Plc, UK

CEEM, The University of New South Wales

Council on Energy & Environment, Korea

Institute for Economics, Transport & Energy, Czech Republic

Institute for Energy Economics & Policy, University of Oklahoma

Institut Français du Pétrole, France

Institute of Energy Economics, Tokyo

National Energy Board, Alberta, Canada

Rice University Baker Institute, USA

Sandia National Laboratories, USA

University of Alberta, Canada

University of Georgia, USA

USAEE SUSTAINING MEMBERS

Advanced Resources International, Inc.

American Petroleum Institute

Anadarko Petroleum Corp.

Aramco Services Co.

ChevronTexaco Corporation

ConocoPhillips, Inc.

Deutsche Banc AG London

Energy Information Agency

ExxonMobil Corporation

Global Insight, Inc.

Halliburton Energy Services

National Renewable Energy Laboratory

Shell Trading

Strategic Energy & Economic Research, Inc.

COMING USAEE/IAEE EVENTS

June 7-10, 2006

29th IAEE International Conference

Potsdam, Germany

Kongresshotel am Templiner See

September 24-27, 2006

26th USAEE/IAEE

North American Conference

Ann Arbor, Michigan, USA Ypsilanti Marriott at Eagle Crest

February 18-21, 2007

30th IAEE International Conference

Wellington, New Zealand

Victoria University of Wellington

CONFERENCE INFORMATION

Have Any Questions? Call 216-464-2785 for Answers



HOTEL RESERVATION / INFORMATION

The Omni Interlocken Resort, the conference venue, is beautifully situated amongst Denver and Boulder attractions. We have a special room block at the following rates per night:

Single/Double Room - \$135.00

Please note that these rates are exclusive of sales and occupancy tax. The special rates apply for occupancy September 13 - 25, 2005, allowing you plenty of time before and after the conference to enjoy Colorado. Please note that you MUST make your reservation prior to **Monday, August 29, 2005**, to receive these special rates. Reservations placed after Monday, August 29, 2005, will be confirmed on a space-available basis AND AT HIGHER ROOM RATES. Check-in time is 3:00 pm and checkout time is 12:00 noon. For reservations phone: 303-438-6600 or 1-800-THE-OMNI and identify yourself as being with the USAEE/IAEE North American Conference. For fax reservations please fax 303-438-7224.

GROUND TRANSPORTATION

The approximate cost for a taxi from the Denver International Airport to the Omni Interlocken Hotel is \$75.00 for one person, one-way. Alternatively, Boulder SuperShuttle has been chosen as the conference's official transportation service. Boulder SuperShuttle will be running between the Denver International Airport and the Omni Interlocken Hotel. No reservations are needed for this portion of the trip. Each guest is simply to check in at the Boulder SuperShuttle Counter, where you will purchase your round trip tickets to the Omni Hotel. A discounted rate of \$32.00 round trip has been negotiated for USAEE/IAEE Conference Attendees. When you arrive at Denver International Airport, a train will take you from your concourse to the main terminal and baggage claim. After exiting the train, the Boulder SuperShuttle Counter can be found by making an immediate left when reaching the top of the escalator. Boulder SuperShuttle departs Denver International Airport every hour, at 10 minutes past the hour, from 7:10am to 11:10pm, with service on the half hour during busy afternoon hours. Please check with the Boulder SuperShuttle Counter for the next departure. For the return Boulder SuperShuttle to Denver International Airport, allow for 45 minutes to an hour's drive. Keep in mind that most airlines recommend you arrive at least 1½ hours before your flight time. **Reservations are required** for your return trip from the Omni Interlocken to the Denver International Airport. Please make reservations with the hotel concierge or call (303) 227-0000 x 2.

DENVER/BOULDER OVERVIEW

Because Denver is exactly one mile above sea level, its local moniker is the "Mile High City." Thirty miles to the northwest is charismatic Boulder—a university town "nestled between the mountains and reality." You arrive at the Denver International Airport with ease, one of the busiest airports in the world. With 1,300 flights daily, it is a convenient destination for our international/national travelers.

The site of the 25th Annual North American Conference of the USAEE/ IAEE is the Omni Interlocken Resort, which is situated between Denver and Boulder along highway U.S. 36. The Omni is beautifully nestled against the backdrop of the Rocky Mountains and offers a full-service spa facility; heated outdoor swimming pool and whirlpool; close-by walking,

jogging, and biking paths (with complimentary bike rentals); scenic hiking; and a beautifully appointed 27-hole championship golf course as well as a practice facility complete with a golf shop and clubhouse.

The Omni Interlocken is 10 minutes from downtown Boulder, home of the University of Colorado at Boulder's campus, the eclectic outdoor Pearl Street Mall, the Celestial Seasonings Tea Company headquarters, National Center for Atmospheric Research, National Oceanic and Atmospheric Administration, Fiske Planetarium, and the Boulder Dushanbe Teahouse (a gift from Boulder's Tajikistani sister city, this traditional Persian teahouse is the only one of its kind in the western hemisphere). Boulder is gateway to Rocky Mountain National Park where you can go for a peek at some exciting wildlife and stunning mountain vistas.

Heading from the Omni on a short 20-minute drive to the east, you will find downtown Denver. The Mile-High City's exciting sites include baseball's Coors Field, football's Invesco Field at Mile High, ice-hockey's Pepsi Center as well as the Denver Performing Arts Complex, Civic Center Park, Denver Botanical Gardens, 16th Street Mall (a mile-long shopping street), the Denver Art Museum (home to the world's finest collection of Native American art), and the Denver Zoo (with almost 4,000 animals in beautiful surroundings), among many others. Nearby Coors Brewery (Golden, Colorado) offers free tours. More than 300 days of sunshine a year makes Denver renowned for experiencing outdoor sports including golf, hiking, and the views of the breathtaking mountains that surround the city. Allow plenty of time both before and after the conference if you intend to explore all that Denver and its environs has to offer.

If you're planning to tour outside of Denver or Boulder, many towns and sites are within short drives. A sampling of day trips might include: Royal Gorge—a two-hour trip from Denver—is the world's highest suspension bridge. Garden of the Gods—an hour drive from Denver—is a collection of unusual red-rock geologic formations set in a lovely park at the base of Pikes Peak. And don't forget to drive through Rocky Mountain National Park or visit the charming villages that are home to world-class ski resorts, such as Aspen, Beaver Creak, Breckenridge, Copper Mountain, Keystone, and Vail!

For more information on Denver, please visit www.denver.org

For more information on Boulder, please visit www.bouldercoloradousa.com

CLIMATE

September weather in the Denver/Boulder, CO area is pleasant, making it one of the best months to visit throughout the year. Expect temperatures to range from an evening low of 53 degrees to a daytime high of 87 degrees Fahrenheit. Fall is a particularly beautiful time to visit and make day excursions to the mountains to view the colorful changing of the aspens, an event that takes place from mid-September until mid-October.

WHAT TO WEAR

This year's conference attire is business casual. This includes slacks, polo-type shirts, blazers, or sweaters for gentlemen; slacks, skirts, polo-type shirts or blouses, blazers or sweaters, and comfortable shoes for ladies. Suits, ties, nine-to-five dresses and high heels are strongly discouraged. (Although the temperatures outside may be warm, the air-conditioning indoors may warrant a light sweater or jacket.)

TOURS & PROGRAM COMMITTEE



TECHNICAL TOUR: BP CENTER FOR VISUALIZATION

Sunday, September 18, 2005 • 2:00 pm – 4:00pm

A special tour of The BP Center for Visualization located at 3400 Marine Street, Boulder, Colorado is available for the first 25 delegates who register. The BP Center for Visualization is a world-leading applied visualization research center. The Center conducts research and development in the application of visualization technology across a broad range of disciplines. Established in October 2000 by a major donation from BP, the Center has particular strength in visualization applied to problems in energy industry exploration, development and production, including industry-funded research consortia in the geosciences and drilling engineering. A new focus in the area of carbon-dioxide sequestration and management is currently being developed in partnership with the industry and other laboratories. The current R&D program also includes immersive visualization applied to aerospace system/vehicle design and design evaluation, medical visualization (molecular modeling, radiation therapy treatment planning, early detection of Alzheimer's disease), rehabilitation, and fundamental human studies of the value of immersive visualization. Details on the Center, and contact information, can be found at the web site: www.bpvizcenter.com Delegates will be transported to the Center from the Omni Interlocken Hotel at 2:00pm. The tour will last approximately one hour after which all tour guests will be transported back to the Omni. To register for this unique tour please complete the line item on the registration form enclosed and submit to USAEE with payment of tour fees. The \$40.00 charge is to cover bus transportation fees. Questions regarding the tour can be directed to James Byrant, (303) 492-3667 or David Williams at usaee@usaee.org (\$40.00 Fee)

TECHNICAL TOUR: NATIONAL RENEWABLE ENERGY LABORATORY (NREL)

Wednesday, September 21, 2005 • 12:30 pm – 5:00 pm

A Tour of the US Department of Energy's National Renewable Energy Laboratory (NREL) is being offered Wednesday, September 21, 2005, from 12:30 pm – 5:30 pm NREL is the nation's primary laboratory for renewable energy and energy efficiency research and development. Learn about advances in solar, wind and bioenergy technologies while touring NREL's research facilities. In addition to the research and technology tour, overviews and discussions on energy markets will be included. This world-class laboratory consists of three centers, the National Center for Photovoltaics (NCPV) and the National Bioenergy Center (NBC) in Golden and the National Wind Technology Center (NWTC) near Boulder. The laboratory showcases energy saving technologies, which help our nation meet its energy and environmental goals. While on tour, you will see NREL research facilities that use the sun's energy for lighting, heating and electrification. You will also see how NREL's tools and research laboratories assist the bioenergy industry to develop fuels, bioproducts, chemicals and electricity from biomass sources. To register for this unique tour program, please complete the line item on the registration form enclosed and submit to USAEE with payment of tour fees. To gain entry to NREL, each U.S. participant will need a valid U.S. driver's license and be pre-registered with the conference. All foreign nationals (non-U.S. citizens) must complete a foreign national data card in advance for approval. In addition, all foreign national attendees must provide a passport and visa upon arrival to NREL for laboratory entry. The maximum attendance for this tour is 35 participants. A box lunch will be served on the bus. All foreign national data cards (numbers 1-17) must be completed and submitted to USAEE by September 15, 2005 for full consideration. Upon payment of your tour you will be provided with detailed information needed to clear NREL security. Please note that the NREL portion of this tour is complimentary and that all arrangements and guidelines are subject to change and modification due to NREL laboratory policies. The \$50.00 charge is to cover bus transportation and box lunch fees. Questions regarding NREL's visitor policies and programs can be directed to James Bosch, james bosch@nrel.gov, (303)384-6567 or David Williams at usaee@usaee.org (\$50.00 Fee)

PROGRAM COMMITTEE

GENERAL CONFERENCE CHAIR

Marianne Kah, ConocoPhillips Inc

CONFERENCE CO-CHAIRS

Carol Dahl, Colorado School of Mines

Dorothea El Mallakh, ICEED

CONCURRENT SESSION CHAIR

Omowumi Iledare, LSU Center for Energy Studies

PROGRAM COMMITTEE

Douglas Arent, National Renewable Energy Laboratory

Arnold Baker, Sandia National Laboratories

David Banko, Banko Petroleum Management Inc

Young Ho Chang, The Nat'l University of Singapore

Leonard Coburn, Energy Consultant

Thomas Drennen, Sandia National Laboratory

John Edwards, University of Colorado at Boulder

Mark Finley, BP plc

Kevin Forbes, Catholic University

Sergio Galina-Hildgo, Mexican Petroleum Institute

Gurcan Gulen, University of Texas at Austin

Lester Hunt, University of Surrey

Amy Jaffe, Rice University

Frederick Joutz, George Washington University

Michael Lynch, Strategic Energy & Economic Research

Shirley Neff, American Bioenergy Association

Andre Plourde, University of Alberta

Mark Schwartz, PIRA Energy Group

Fereidoon Sioshansi, Menlo Energy Economics

Mine Yucel, Federal Reserve Bank of Dallas

ARRANGEMENTS CHAIR

David Williams, USAEE Executive Director

CONFERENCE MANAGEMENT COMPANY

Administrative Management Services, Inc.





CONFERENCE REGISTRATION FORM

September 18-21, 2005 | Omni Interlocken Resort | Denver, Colorado - USA

REGISTRATION FEES are payable in advance. Complete the form below and mail to USAEE Conference Headquarters along with your check payable to USAEE in U.S. dollars and drawn on a U.S. bank. Conference registration fees may be paid by check, credit card or wire transfer. **Fax 216-464-2768** for wire transfer information or e-mail to usaee@usaee.org. Hotel and related travel costs are not included in registration fees. Registration fees include: registration materials, a copy of the conference proceedings, two lunches, three receptions, one dinner and coffee breaks. Students: submit a letter stating that you are a full-time student and are not employed full-time. The letter should provide the name and contact information for your main faculty supervisor or your department chair and a copy of your student identification card. USAEE reserves the right to verify student status.

TYPE OF REGISTRATION (check which applies)	Received on or Before 8/5/05	Received on or Before 8/15/05	Received 8/16 to 9/16/05	Received After 9/16/05 (Onsite Fee)
Speaker Participants (Payment must be received by 8/5/05)	\$525.00			
☐ IAEE Members		\$609.00	\$650.00	\$675.00
Non-Members (includes membership)		790.00	750.00	775.00
☐ Full-time Students		3/55.00	405.00	455.00
Guests (meal functions only; no meeting sessions)		355.00	405.00	455.00
Proceedings CD Rom - Member		130.00	130.00	130.00
Proceedings CD Rom - Non-Member		80.00	180.00	180.00
General Conference Sponsorship		300.00	300.00	300.00
Student Scholarship Fund Support		75.00	75.00	75.00
BP Center for Visualization Tour, Sunday 9/18 (see p.17)		40.00	40.00	40.00
□ NREL Technical Tour, Wednesday 9/21 (see p.17)		50.00	50.00	50.00
(All amounts are in U.S. Dollars) ENTER TOTAL PAID:		/		

METHOD OF PAYMENT					
Check (Check payable to USAEE in U.S. dollars and drawn on a U.S. bank)					
☐ Credit Card: ☐ Visa ☐ Master Card	(Sorry, we are not able to accept any other cards.)				
Card Number:	Exp:				
Signature:					
REGISTRATION INFORMATION					
NameFirst Name for Badge	Loot Nome				
Guest's Name (for badge), if any:					
Business Title:					
Company/Organization:					
Address:					
City/Country:	Zip/Mail Code:				
Telephone:	Fax:				
E-mail:					

PLEASE SEND PAYMENT TO:

USAEE Conference Headquarters 28790 Chagrin Blvd., Ste. 350 Cleveland, OH 44122 USA

Phone: 216-464-2785 | Fax: 216-464-2768

E-mail: usaee@usaee.org

CANCELLATIONS/SUBSTITUTIONS

All cancellations and substitutions must be received in writing at USAEE Conference Headquarters. Cancellations received on or before August 14, 2005 are subject to a non-refundable \$200.00 administrative fee. Cancellations received after August 14, 2005 will be honored, however, no refund will be made. There will be no refunds for noshows. There is no exception allowed to this policy. Should you be unable to attend, substitutions may be made to transfer your registration to another member of your organization at any time up to September 16, 2005.

At what hotel will you be staying? (check one)

Ш	Omni Ii	nteriock	en Res	sort		
	Other:				 	_

Check here if you have a disability or special need and may require accommodation to fully participate.

REGISTER ONLINE AT:

http://www.iaee.org/en/conferences

HOTEL RESERVATION FORM



OMNI INTERLOCKEN RESORT

DEADLINE FOR ROOM RESERVATIONS: MONDAY, AUGUST 29, 2005

Reserve early, as the rooms may fill prior to the deadline date. Reservations received after deadline date will be accepted at the group rate on a space available basis.

Group name and dates:	USAEE/IAEE North American Conference Sunday, Sept. 18 to Wednesday, Sept. 21, 2005					
Occupancy:	 Single/Double \$135.00 Each Additional Person \$20.00 The above rates are subject to prevailing state and local taxes of 9.45% The group rate is available on a space available basis from September 13 – 25, 2005 for those wishing to be in Colorado either prior to or post the conference. A deposit equal to one night's stay is required to hold all reservations. Personal check or money order (made out to the Omni Interlocken Resort), or a valid credit card is acceptable. 					
Please indicate:	For arrival on: DAY:	DATE: AR	RIVAL TIME:			
	Departure on: DAY:	DATE: DE	PARTURE TIME:			
Number of people in room	n: Name(s) of person(s)	sharing accommodations:				
Select a bed type preference	ce: (1) King/Queen Bed	(2) Double Beds Non-smo	king			
	Special requests (e.g., Suites):					
	The hotel will make every effort to accommodate your room requests on a first come, first serve basis.Suites are available by calling the hotel directly.					
☐ Check or money order	enclosed in the amount of \$					
☐ Credit card guarantee:	t card guarantee: American Express Visa Diners Club Discover MasterCard					
	Cardholder's Name:					
	Credit Card number:	F	Expiration Date:			
Reservation information:	on information: LAST NAME FIRST NAME					
	ORGANIZATION/COMPANY					
	STREET ADDRESS					
	CITY	STATE COUNTRY	POSTAL CODE			
	() WORK	- ()	EMAIL			

Mail this page with your deposit directly to:

RESERVATIONS Omni Interlocken Resort 500 Interlocken Blvd. Broomfield, CO 80021

Request that a confirmation from the Omni Interlocken be sent to you.

Call/Fax/Email Reservations:

Call: (303) 438-6600 or 1-800-THE-OMNI

Fax: (303) 438-7224

Email: kstableford@omnihotels.com

PLEASE identify yourself as being with the USAEE/IAEE North American Conference.

Guaranteed reservations must be cancelled 48 hours prior to arrival to avoid billing of first night's room and tax. This registration form must be returned by fax or mailed to the above address. This completed form may also be emailed to kstableford@omnihotels.com for processing. Check-in time is 3:00 pm and checkout time is 12:00 noon.



FUELING THE FUTURE:

PRICES, PRODUCTIVITY, POLICIES, AND PROPHECIES

CONFERENCE SPONSORS





























Leonard Coburn

Joseph Dukert

USAEE 25th Annual North American Conference

September 18-21, 2005, Omni Interlocken Resort, Denver, CO, USA USAEE Conference Headquarters 28790 Chagrin Boulevard, Suite 350 Cleveland, OH 44122 USA

Presorted Standard U.S.Postage Paid Richfield, OH Permit No. 82