# ENERGY, ENVIRONMENT AND ECONOMICS IN A NEW ERA

24th Annual North American Conference of the USAEE/IAEE

July 8 - 10, 2004 • Capital Hilton Hotel Washington, DC, USA

#### SESSION THEMES AND TOPICS

A New Era in Oil Market Management

**Competition in the Electricity Industry** 

**International LNG** 

Electricity Reliability: How Much, By What Means, At What Cost?

**Vehicle Fuel Efficiency** 

**Commercial Issues: Operating in Volatile Markets** 

State & Regional Ascendancy in Energy Policy

The Price of Balancing the North American Gas Market

Impact of Climate (Non) Policy on the Energy Sector

The Global Energy, Environment and Investment Outlook

**Sustainable Transport** 

**Energy Security** 

Russian Energy

**Hydrogen Economy** 

EARLY BIRD CUT-OFF DATE ENDS JUNE 7

HOTEL RESERVATIONS NEED TO BE MADE BY JUNE 18

# 3rd PROGRAM ANNOUNCEMENT & CONFERENCE REGISTRATION

#### WHO SHOULD ATTEND

This conference will attract high profile speakers and delegates from around the world. The opportunities to expand your knowledge within related energy fields and to develop new contacts are vast. Below is a partial listing of who should attend this valuable conference:

- Attorneys & Accountants
- Energy Company Executives & Managers
- Energy Policy Analysts
- Governmental Employees in Energy/Resource Planning
- Academics Specializing in Energy Policy & Analysis
- Electricity Pricing and Market Analysts
- Energy Consultants
- Energy Company Planning Economists
- Energy Risk and Derivatives Specialists
- Energy Forecasting Specialists
- Oil and Natural Gas Executives
- Energy Rate Executives
- Electric and Utility Supervisors
- Energy Environmental Analysts
- Geologists and Engineers
- Environmentalists
- Energy Journalists

In short, anyone with an active interest in the field of energy economics will not want to miss this meeting.

#### CONFERENCE SPONSORS (As of 5/18/04)

**Robert Borgstrom** 

BP, plc

Leonard L. Coburn

ConocoPhillips, Inc.

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**Electric Power Research Institute** 

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United States Association for Energy Economics



IA EE

#### 24th Annual North American Conference of the USAEE/IAEE

# ENERGY, ENVIRONMENT AND ECONOMICS IN A NEW ERA

#### Dear Energy Professional:

We are pleased to announce the 24th Annual North American Conference of the USAEE/IAEE, Energy, Environment and Economics in a New Era, scheduled for July 8-10, 2004, in Washington, DC at the Capital Hilton Hotel.

Please mark your calendar for this important conference. Some of the key themes and sessions for the conference are listed below. The 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.

#### A New Era in Oil Market Management?

- Future investment requirements and crude oil prices
- The International Energy Forum: Agenda of producer-consumer dialogue
- Role of intergovernmental coordination in balancing industry investment

#### Competition in the Electricity Industry?

- International comparisons of privatization and restructuring
- Federalism and competition in North America: States and Provinces
- Competitive strategies

#### International LNG

- Global supply/demand balance
- Frameworks for LNG supply investments
- Impediments to increased LNG utilization

#### Electricity Reliability: How Much, By What Means, At What Cost?

- How much would different customers pay to avoid an outage?
- What mechanism could work to create a market allowing customers such choices?
- What would this mean for electric industry infrastructure, imperatives and investment?

#### Commercial Issues: Operating in Volatile Markets

- Current market developments on energy and environmental trading post-Enron
- Renewable energy trading and emissions trading
- Weather derivatives

#### State & Regional Ascendancy in Energy Policy

- Environmental drivers for states' push on energy policy
- Texas: An unlikely leader on this front
- A state patchwork: Implications for Federal regualtion?

#### The Price of Balancing the North American Gas Market

- Meeting long-term capital requirements
- Industrial demand destruction
- Implications for energy efficiency, conservation and environmental protection

#### Impact of Climate (Non) Policy on the Energy Sector

- The impacts of the Kyoto Protocol on the Canadian energy sector
- Climate policy uncertainties and business risks
- Implications for multi-national companies in the United States

#### Vehicle Fuel Efficiency

- Policies to reduce petroleum use by passenger vehicles
- Cost-effectivness of greenhouse gas measures
- Reducing transportation oil use: substitution vs. efficiency?

#### Russian Energy

- Russia's electricity sector: Can reform be implemented and what will it look like?
- Russia's infrastructure: How will new pipelines and export capacity be developed?
- Developments in Russia's gas sector.

#### The Global Energy, Environment and Investment Outlook

- Long-term energy investment outlook
- Energy, environment and developing countries
- Global energy outlook

#### **Energy Security**

- The cost of oil security
- Global oil supply projections how realistic?
- LNG will enough be available?

#### Sustainable Transport

- Projections of transportation demand
- Implications for oil demand
- Urban planning and urban transport

There are 28 planned concurrent sessions. Given the location of the meeting in Washington, DC, we anticipate a strong draw to our concurrent sessions.

Washington, DC is an inspiring city. DC is a great place to begin (arrive early to celebrate the U.S. Independence Day - July 4th) or end a vacation. Single nights at the elegant Capital Hilton Hotel are \$155.00 per night. Contact the Capital Hilton Hotel at 202-797-5820 or 1-800-HILTONS to make your reservations. Conference registration fees are US \$570.00 for USAEE/IAEE members and US \$670.00 for non-members. Your registration fee includes 3 lunches, 3 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 in the energy industry.

The enclosed registration materials detail the program overview, hotel and conference reservation and fees and information on Washington, DC. Please take advantage of the pre-registration discounts and make both your conference and hotel reservations as soon as possible. July in Washington is a celebration! Please make your hotel reservations early by contacting the Capital Hilton Hotel (information provided above and further on in this program announcement).

Further information on Washington, DC may be obtained at: http://www.dcregistry.com/sights.html

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 24th Annual North American Conference of the USAEE/IAEE.

Sincerely,

Mine Yucel General Conference Chair

Louis Aboud Alex Farrell Kate Offringa Program Co-Chairs Tony Owen IAEE 2004 President Shirley Neff

USAEE Vice President of Conferences

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

# Wednesday, July 7

#### **USAEE COUNCIL MEETING**

(By Invitation)

8:00 am to 12:00 noon Federal B Room

# IAEE/USAEE COUNCIL LUNCH

(By Invitation)

12:00 noon to 1:00 pm Federal A Room

#### IAEE COUNCIL MEETING (By Invitation)

1:00 pm to 6:00 pm Federal B Room

**COUNCIL DINNER** (By Invitation)

6:30 pm - 9:30 pm Les Halles Brasserie

# Thursday, July 8

#### REGISTRATION

7:30 am - 5:00 pm Registration Desk - Ohio Room

# SPECIAL INTERNATIONAL CONFERENCE MORNING SESSIONS

#### **DUAL PLENARY SESSIONS**

8:30 am – 10:00 am RUSSIAN ENERGY

Federal A/B

**Leonard L Coburn,** *Presiding*Director Russian & Eurasian Affairs
US Department of Energy

#### **Panel Discussion**

#### **Bob Ebel**

Chairman Energy Programs Center for Strategic & International Studies

#### **Isabel Murray**

Senior Russia Analyst International Energy Agency

#### Stephen O'Sullivan

Director, Research United Financial Group, Moscow

#### THE GLOBAL ENERGY ENVIRON-MENT AND INVESTMENT OUTLOOK

#### Presidential Ballroom

Anthony D. Owen, Presiding

Professor

The University of New South Wales

Panel Discussion

#### Fatih Birol

Chief Economist, Head of Economic Analysis International Energy Agency

#### **Jonathon Pershing**

Director, Climate, Energy and Pollution Program World Resources Institute

#### **Dominique Lallement**

Energy Adviser/Manager, ESMAP The World Bank Group

#### **Edgard Habib**

Chief Economist ChevronTexaco Corporation

#### **COFFEE BREAK**

10:00 to 10:30 am
Capital Terrace
Sponsored by Strategic Energy
and Economic Research

#### **DUAL PLENARY SESSIONS**

10:30 am - 12:00 noon

#### **ENERGY SECURITY**

#### Presidential Ballroom

**Shirley Neff,** *Presiding* Senior Advisor Goldwyn International Strategies

#### Panel Discussion

#### **Gordon MacKerron**

Associate Director NERA

#### Fereidun Fesharaki

President

Facts Inc.

#### Amy Jaffe

Fellow for Energy Studies, Baker Institute Rice University

#### SUSTAINABLE TRANSPORT

#### Federal A/B

**Anthony Finizza,** *Presiding* AJF Consulting

#### Panel Discussion

#### Lee Schipper

Co-Director EMBARQ World Resources Institute

#### **Richard Scurfield**

Sector Leader, Transport & Urban Development Department The World Bank

#### Additional Speakers to be Announced

#### **LUNCHEON**

12:00 noon - 2:00 pm Congressional Room

Anthony D. Owen, Presiding

Professor

The University of New South Wales President, IAEE

2004 BP Statistical Review of World Energy

#### **Mark Finley**

Senior Economist BP America

#### Sponsored by BP plc

For more than 50 years, BP has published a Statistical Review of World Energy - a consistent and objective series of historical energy market data. The Review presents country-by-country data on energy reserves, production, consumption, and trade. This presentation will distill the key stories from the world of energy in 2003 based on the data in the Review.

#### GENERAL CONFERENCE WELCOME

2:15 pm – 2:30 pm Presidential Ballroom

#### Mine Yucel

Vice President & Sr Economist Federal Reserve Bank of Dallas President, USAEE

#### Anthony D. Owen

Professor

The University of New South Wales President, IAEE

#### **Louis Aboud**

Manager, Market Intelligence BTU Ventures Conference Program Co-Chair

#### Alex Farrell

Assistant Professor, Energy & Resources Group University of California, Berekely Conference Program Co-Chair

#### Kate Offringa

Program Manager Alliance to Save Energy Conference Program Co-Chair

#### KEYNOTE SPEAKER

2:30 pm to 3:30 pm Presidential Ballroom

Mine Yucel, Presiding Vice President & Sr Economist Federal Reserve Bank of Dallas

Speaker to be Announced

#### **COFFEE BREAK**

3:30 pm to 4:00 pm Capital Terrace

#### **DUAL PLENARY SESSIONS**

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

# A NEW ERA IN OIL MARKET MANAGEMENT?

#### Federal A/B

**Guy Caruso,** *Presiding* Administrator

Energy Information Administration

#### **Panel Discussion**

**Claude Mandil** 

**Executive Director** 

IEA

**Arne Walther,** *Invited* Secretary General

International Energy Forum Secretariat

Majid Moneef, Invited

**Board Member** 

**OPEC** 

# COMPETITION IN THE ELECTRICITY INDUSTRY?

#### Presidential Ballroom

Alex Farrell, Presiding

Asst Professor, Energy & Resources University of California Berkeley

#### Panel Discussion

#### **David Victor**

Director, Program on Energy and Sustainable
Development
Stanford University

#### Hon. Nora Mead Brownell

Comissioner

Federal Energy Regulatory Commission

Carl H. Seligson

Senior Advisor

K. Road Management, LLC

#### **OPENING RECEPTION**

5:30 pm - 6:30 pm Senate Room

# Friday, July 9

#### REGISTRATION

7:30 am – 8:00 pm Registration Desk – Ohio Room

#### CONTINENTAL BREAKFAST

7:30 am – 8:30 am Capital Terrace

#### DENVER CONFERENCE PLANNING

**MEETING** (By Invitation)

7:30 to 8:30 am New York Room

#### TRI-PLENARY SESSIONS

8:30 am - 10:00 am

#### INTERNATIONAL LNG

#### Presidential Ballroom

Michelle Michot Foss, *Presiding*Executive Director, Institute for Energy, Law

& Enterprise

University of Houston

#### Panel Discussion

#### **David Nissen**

Professor

Columbia University

#### Jim Jensen

President

Jensen Associates Inc

#### **Gordon Shearer**

Senior Commercial Advisor, LNG

Poten & Partners

# ELECTRICITY RELIABILITY: HOW MUCH, BY WHAT MEANS, AT WHAT COST?

#### Federal A/B

John Jimison, Presiding

**Executive Director** 

U.S. Combined Heat and Power Association

#### **Panel Discussion**

#### Robert E. Burns

Senior Research Specialist National Regulatory Research Institute

#### **Lester Lave**

Professor, Graduate School of Industrial Administration and Director, Carnegie Mellon Electricity Industry Center

#### Lynne Kiesling

Senior Lecturer of Economics Northwestern University

#### HYDROGEN ECONOMY

#### South American B

#### Bob Dixon, Presiding

Senior Advisor for Climate Change, Office of Energy Efficiency and Renewable Energy

U.S. Department of Energy

#### **Panel Discussion**

#### Joseph Romm

Executive Director

Center for Energy and Climate Solutions

#### Mark Jaccard

Professor

Simon Fraser University

#### **Additional Speaker TBA**

#### **COFFEE BREAK**

10:00 am to 10:30 am Capital Terrace

#### **DUAL PLENARY SESSIONS**

10:30 am - 12:00 noon

# COMMERCIAL ISSUES: OPERATING IN VOLATILE MARKETS

#### Federal A/B

Peter Fusaro Presiding

President

Global Change Associates

#### Panel Discussion

#### Tim Bullock

Regional Business Leader BP North American Gas & Power

Brad Leach, Invited

Director of Research NYMEX

#### **Justin Harlow**

Senior Consultant

Risk Capital Management Partners

# STATE & REGIONAL ASCENDANCY IN ENERGY POLICY

#### Presidential Ballroom

Kate Offringa Presiding

Program Manager

Alliance to Save Energy

#### **Panel Discussion**

#### Anna Garcia

Deputy Director

Ozone Transport Commission

Ed Meyers, Invited

Policy Director

Southface Energy Institute

#### Malcolm Verdict, Invited

Associate Director, Energy Systems Laboratory

Texas A&M University

#### IAEE/USAEE AWARDS LUNCH

12:00 - 2:00 pm Congressional/Senate Rooms

Mine Yucel, Presiding
Vice President & Sr Economist
Federal Reserve Bank of Dallas

#### **CONCURRENT SESSIONS - 1 TO 7**

2:00 pm to 3:30 pm

- 1 NATURAL GAS MARKET IN THE U.S.
- 2 USING ECONOMIC EXPERIMENTS TO UNDERSTAND ELECTRICITY MARKETS
- 3 SECTORAL ENERGY DEMAND ANALYSIS
- 4 INTERNATIONAL ELECTRIC RESTRUCTURING ISSUES
- 5 UNCERTAINTY IN MODELLING ENERGY TECHNOLOGIES
- 6 DEVELOPING ENERGY PROJECTS IN TRANSITIONAL ECONOMIES
- 7 ENVIRONMENTAL POLICY & THE ECONOMY

#### **COFFEE BREAK**

3:30 pm to 4:00 pm Capital Terrace

#### **CONCURRENT SESSIONS - 8 TO 14**

4:00 pm to 5:30 pm

- THE GEOPOLITICS OF ENERGY **SECURITY**
- U.S. ELECTRICITY RESTRUCTURING
- 10 ENERGY DATA MODELLING & **DEMAND RESPONSE**
- 11 ENERGY AND THE ENVIRON-MENT: INTERNATIONAL EXPERI-**ENCE**
- 12 AGENT SIMULATION AND DIS-CRETE CHOICE MODELLING
- 13 ENERGY FINANCE & RISK MANAGEMENT
- 14 ECONOMIIC IMPACTS OF PRICE VOLATILITY

## **USAEE CHAPTER LEADERSHIP**

**MEETING** (By Invitation)

4:30 pm to 5:30 pm New York Room

#### **USAEE GENERAL MEMBERSHIP MEETING**

5:30 - 6:00 pm New York Room

#### IAEE GENERAL MEMBERSHIP **MEETING**

5:30 - 6:00 pm California Room

#### RECEPTION

6:00 - 8:00 pm Canadian Embassy

Light hors d'oeuvres and drinks served. Buses will begin loading at 5:45 pm in front of the hotel on 16th street. Transportation to and from the Canadian Embassy Reception will be continuous. NOTE: You must bring a photo ID (e.g., drivers license or passport) for admittance to the Canadian Embassy.

#### OPTIONAL NIGHT TOUR OF WASHINGTON MONUMENTS

8:00 - 10:00 pm

Old Town Trolley Tours is offering an evening tour of Washington's famous monuments. The trolley will pick up interested conference delegates at the conclusion of the Canadian Embassy Reception for a 2 hour visit through the Nation's Capital. View the monuments beautifully lit for the evening from the comfort of the trolley. Attendees will be returned to the Capital Hilton hotel upon the conclusion of the tour. Cost of the tour is \$30.00. Please make your tour reservations early as space is limited. Note: The likelihood of being able to book this tour while at the conference is very slim. We suggest you reserve your tour tickets early. Reservations can be made by completing the registration form included with this program announcement or by visiting www.iaee.org/ en/conferences and clicking on "Registration.

# Saturday, July 10

#### REGISTRATION

7:30 am - 6:30 pmRegistration Desk - Ohio Room

#### STUDENT SCHOLARSHIP BREAKFAST Karsten Neuhoff

(By Invitation)

7:30 am - 8:30 am New York Room

#### **ENERGY JOURNAL BOARD OF** EDITORS MEETING (By Invitation)

7:30 am - 8:30 am Michigan Room

#### **CONCURRENT SESSIONS - 15 TO 21**

8:30 am to10:00 am

- 15 INTERNATIONAL NATURAL GAS **MARKETS**
- 16 ENERGY DEMAND & EFFICIENCY
- 17 CRUDE OIL SUPPLY AND PRICING ISSUES
- 18 U.S. ELECTRICITY MARKET
- 19 ENERGY INVESTMENTS & ANALYSIS
- 20 CO, COUNTRY PERSPECTIVES
- 21 RENEWABLE ENERGY: ISSUES AND PROSPECTS

#### **COFFEE BREAK**

10:00 am to 10:30 am Capital Terrace

#### **DUAL PLENARY SESSIONS**

10:30 am - 12:00 noon

#### THE PRICE OF BALANCING THE NORTH AMERICAN GAS MARKET

Presidential Ballroom

Lori Schell, Presiding

President

**Empowered Energy** 

**Panel Discussion** 

James F. Wilson

Principal

LECG Corp.

**Carlos Ayon** 

Partner

Gnostica, S.C.

#### Additional Speaker TBA

#### IMPACT OF CLIMATE (NON) POLICY ON THE ENERGY SECTOR

South American A/B

David South, Presiding

President

Technology & Market Solutions LLC

**Panel Discussion** 

Rafe Pomerance

President

Climate Policy Center

Rafe Pomerance

President

Climate Policy Center

#### Sean O'Dell

Director General, Policy & Economics Large Industrial Emitters Group Natural Resources Canada

Research Associate Department of Applied Economics University of Cambridge

Marc Stuart (invited)

Director

**EcoSecurities** 

#### **Brent Dorsey** (invited)

Director, Corporate Environmental Programs Entergy Services, Inc.

#### LUNCH

12:00 - 2:00 pm Congressional Room

Mine Yucel, Presiding

Vice President & Sr Economist Federal Reserve Bank of Dallas

Energy Policy: Think Outside the Box

Speaker to be Announced

#### PLENARY SESSION

2:00 pm - 3:30 pm

#### VEHICLE FUEL EFFICIENCY

Presidential Ballroom

Paul Leiby, Presiding

Research Scientist Oak Ridge National Laboratory

Panel Discussion

#### John German

Manager, Environment and Energy Analysis American Honda Motor Co., Inc.

National Transportation Research Center Oak Ridge National Laboratory

#### Additional Speaker to be Announced

#### **COFFEE BREAK**

3:30 pm to 4:00 pm Capital Terrace

#### **CONCURRENT SESSIONS - 22 TO 28**

4:00 pm to 5:30 pm

- 22 GLOBAL OIL SUPPLY: ROLE OF OPEC
- 23 RECENT DEVELOPMENTS IN THE INTEGRATION OF DISTRIBUTED GENERATION IN ELECTRICITY **SUPPLY**
- 24 ROLE OF GOVERNMENT IN **ENERGY DEVELOPMENT**
- 25 ENERGY USE AND THE ECONOMY
- 26 U.S. NATURAL GAS POLICY ISSUES
- 27 ELECTRICITY MARKET FAILURES
- 28 ELECTRICITY MARKETS AND THE **ENVIRONMENT**

#### **CLOSING RECEPTION**

5:30 - 6:30 pm Capital Terrace

#### **CONCURRENT SESSIONS - 1 TO 7**

Friday, July 9 2:00 pm to 3:30 pm

#### NATURAL GAS MARKET IN THE U.S.

Presidential Ballroom

Les Deman, Presiding

Director, Fundamental Research & Analysis Shell Trading

Qatar LNG 2010 and the U.S. Gas Market: Setting A New Global Cost Benchmark

#### Aloulou Fawzi

US Department of Energy

Developing LNG in North America: Impact on Prices of Natural Gas

#### Sophie Meritet

Dauphine University, Paris Alberto Elizalde Baltierra Petroleos Mexicanos, PEMEX

Trends in the Use of Natural Gas in the U.S. Households, 1987 to 2001

#### Stephanie J. Battles Behjat Hojjati

**Energy Information Administration** 

The Impact of Energy Efficiency and Renewable Energy on Natural Gas Markets

R. Neal Elliott

Anna M. Shipley Elizabeth Brown

Steven Nadel

American Council for an Energy-Efficiency Economy

#### USING ECONOMIC EXPERIMENTS TO UNDERSTAND ELECTRICITY MARKETS

Federal A/B

#### Bart Wilson, Presiding

Interdisciplinary Center for Economic Science George Mason University

#### AND

#### Lynne Kiesling, Presiding

Center for Applied Energy Research, IFREE and Northwestern University

The economics of electricity markets and policy is a complicated issue. To illustrate how electricity markets work, and to demonstrate how experimental economic methodology is a useful tool for understanding markets and policy changes, we will put session participants in decision-making roles in simulated electricity markets. This session is limited to a total of 48 people that will utilize laptop computers to assist in this electricity generator experiment. Please email usaee@usaee.org to reserve your place in this special session.

#### SECTORAL ENERGY DEMAND ANALYSIS

South American B

#### Carlo Andrea Bollino, Presiding

University of Perugia, Italy

Information Effects on Residential Energy Conservation: A Japanese Experiment

#### Isamu Matsukawa

Faculty of Economics

Musashi University, Japan

Rural Economic Impact of a Statewide Energy Efficiency Initiative: An Analysis of Three Non-Metropolitan Counties Participating in Wisconsin Focus on Energy

University of Wisconsin-Madison

Chinese Industrial Energy Demand

#### Lixia He

#### **Dayton Lambert**

Purdue University

The Impact of Climate Policy on ROK's Energy Sector: An Application of the LEAP Model to Energy Sector Analysis

#### Hoseok Kim

**Euisoon Shin** 

Yonsei University, Republic of Korea

#### INTERNATIONAL ELECTRIC RESTRUC-TURING ISSUES

Pan American Room

#### Leonard Waverman, Presiding (invited)

London Business School

Retail Electricity Market Competition: Learning from Texas to Get it Right in France

#### Steven Curet

Embassy of France, USA

Electricity Prices in Restructured Electricity Market in Australia: A Panoramic Discourse

#### Deepak Sharma

Associate Professor

University of Technology, Sydney

Structural Issues to Resolve in Mexico in Support of Electric Industry Reform

#### Bruce T. Laxdal

Laxdal Consulting, S.A. de C.V.

Competition in the Electricity Industry?

#### Carole Le Henaff

PhD Student

Universite Paris IX Dauphine

#### UNCERTAINTY IN MODELLING ENERGY TECHNOLOGIES

South American A

#### Georg Erdmann, Presiding

Full Professor

TU Berlin

Pathway to a Hydrogen Economy: What Path to Follow?

#### Lorna Greening

Oso Energy and Environmental Consulting

#### Erich Schneider

Los Alamos National Laboratory

A Hybrid Top-Down Bottom-Up Model with Macro-Economic Feedbacks

#### Christopher Bataille

Mark Jaccard

Simon Fraser University

Twenty First Century Energy: Transition from Fossil Fuels to Renewable-Non-Polluting Energy Sources

#### John D. Edwards

Geology Professor

University of Colorado at Boulder

Adapting for Uncertainty: A Scenario Analysis of U.S. Technology Energy Futures

#### John "Skip" Laitner

U.S. Environmental Protection Agency

## Donald A. Hanson

Argonne National Laboratory

#### **Irving Mintzer**

J. Amber Leonard

Global Business Network

#### DEVELOPING ENERGY PROJECTS IN TRANSITIONAL ECONOMIES

California Room

#### Dave DeAngelo, Presiding

Adjunct Professor

Northampton County Comm College

Creating a Commercial Environment for Energy Projects - Lessons from Central and Eastern Europe

#### Robert Borgstrom

Independent Consultant

How to Work with U.S. TDA on Priority Energy Projects

#### Henry Steingass

Regional Director, Africa and the Middle East U.S. Trade and Development Agency

Managing Demand Growth in Energy-Intensive Transitional Economies

#### **Katherine Spector**

**Energy Strategist** 

Deutsche Bank

Commercially viable energy projects never create themselves. Instead, the development of sustainable, market-oriented energy businesses, especially in transitional economies, require the focused, collaborative effort of host country and international governments, private enterprises, and the international financial community. This panel features speakers from each of these groups who will provide insight into some of the challenges of and steps toward implementing energy projects in transitional economies throughout the world. At the same time, they will lead a forward-looking discussion of the major issues surrounding the development of such projects. Audience participation will be welcome.

#### ENVIRONMENTAL POLICY & THE **ECONOMY**

Statler Room A/B

#### Einar Hope, Presiding

Professor of Energy Economics

Norwegian School of Economics and Business

Administration

Energy Indicators to Assess Sustainable Development at the National and Regional Levels: Acting on the Johannesburg Plan of Implementation

#### Kathleen Abdalla

United Nations Department of Economic and Social Affairs

#### Ivan Vera

International Atomic Energy Agency

Sustainable Energy in the Stationary Power Sector

#### **Anthony Owen**

The University of New South Wales, Australia

The Income Distribution Impacts of Climate Change Mitigation Policy

#### Gbadebo Oladosu

Oak Ridge National Laboratory

#### Adam Rose

The Pennsylvania State University

Energy and Environmental Legislation in North Africa

#### Paul Sullivan

Professor

National Defense University, USA

#### **CONCURRENT SESSIONS - 8 TO 14**

Friday, July 9 4:00 pm to 5:30 pm

## THE GEOPOLITICS OF ENERGY SECURITY

Presidential Ballroom

#### Jan Myslivec, Presiding

Director

#### CityPlan spol sro

Realism in Caspian Energy: Over-Hyped and Under-Risked

#### Maureen Crandall

Professor of Economics

National Defense University, USA

Energy Priorities in the Central Asian States

Malika Saidkhodjaeva Tashkent State Technical University, Uzbekistan Latin America, the Persian Gulf, and the Future of the

#### U.S. Oil Supply Security Strategy

Ramon Espinasa

Inter American Development Bank Singapore's Role in Sustaining Energy Security in Asia

#### Youngho Chang

Stacev H. Tsai

National University of Singapore

The Effect of Growing Russian Oil Exports on the 'Asian Premium

#### Ronald Soligo

**Amy Myers Jaffe** 

Rice University

#### U.S. ELECTRICITY RESTRUCTURING

Federal A/B

William F. Hederman, Presiding

Director, New Office of Market Oversight &

Investigations

Federal Energy Regulatory Commission

Competition and Regulation in the North American Electricity Industry: Can These Two Seemingly Opposed Forces Coexist?

Joseph Cavicchi

**Charles Augustine** Joseph P. Kalt

Lexecon Inc

Mitigating Market Power in Deregulated Electricity Markets

Seth Blumsack Lester B. Lave

Carnegie Mellon University

Market Competitiveness in the U.S. Eastern Interconnection: A Transmission-Constrained Oligopoly Model-Based Assessment and Possible Regulatory Applications

**Udi Helman** 

Federal Energy Regulatory Commission

**Benjamin Hobbs** 

The Johns Hopkins University

Performance Under Pressure: The Performance of Traditional and Non-Traditional Generators in a Deregulating Market

Stan Kaplan

Branch Chief, Electric Industry Information Team U.S. Department of Energy

Deregulation, Restructuring and Changing R&D Paradigms in the US Electric Utility Industry

Paroma Sanyal

Assistant Professor

Brandeis University, USA

10 ENERGY DATA MODELLING & DEMAND RESPONSE

South American B

Kenneth B. Medlock, III, Presiding

Visiting Assistant Professor

Rice University

Price Responsiveness of the Deregulated Electricity Market in Singapore

Youngho Chang

National University of Singapore

Tuan Hin Tay

Singapore Power Ltd.

Empirical Analysis of the Spot Market Implications of Price-Elastic Demand

Afzal Siddiqui **Emily Bartholomew** Chris Marnay

Shmuel Oren

University College Dublin, Ireland

Energy Demand Elasticities - Fact a Fiction: A Survey Update

Carol Dahl

Carlos Roman

Colorado School of Mines

Residential Energy Consumption: Longer Term Response to Climate Change

Frederick Joutz

**Christian Crowley** 

The George Washington University

11 ENERGY AND THE ENVIRONMENT: INTERNATIONAL EXPERIENCE

Pan American Room

Sara J. Banaszak, Presiding

Director, Gas Group

PFC Energy

Italy's Route to Kyoto: A Wishful Thinking?

Enzo Di Giulio

Stefania Migliavacca

Eni Corporate University - Scuola Mattei, Italy

Alessandro Vaglio

University of Bergamo, Italy

UK Energy Policy: Conflict or Synergy Between Climate Change, Security and Efficiency Objectives?

Gordon MacKerron

Associate Director

**NERA Economic Consulting** 

Climate Policy Uncertainty and Business Risks: Impact of Climate (Non) Policy in Energy Sector

Edith Webster

Product Manager

U.S. Chamber of Commerce

Lessons on the Design and Implementation of Renewable Energy, Greenpower and Greenhouse Emissions Abatement Markets from the Financial Markets and Experimental Economics

Karel Nolles

Senior Research Fellow

University of New South Wales, Australia

AGENT SIMULATION AND DISCRETE CHOICE MODELLING

South American A

Arnold B. Baker, Presiding

Chief Economist

Sandia National Laboratories

Modeling the Restructured Illinois Electricity Market as a Complex Adaptive System

Gale Boyd

Richard Cirillo

**Guenter Conzelmann** 

Prakash Reddy Thimmapuram

Thomas Veselka

Argonne National Laboratory

Modeling the Distribution Utility as an Agent in the Wholesale Market

Joseph M. Roop

Eihab Fathelrahman Pacific Northwest National Lab

Testing the Reliability of FERC's Wholesale Power Market Platform: An Agent-Based Computational Economics Approach

Leigh Tesfatsion

**Deddy Koesrindartoto** 

Department of Economics Iowa State University

> The Use of Discrete Choice Research in Hybrid Energy-Economy Models to Guide Environmental Policy Analysis

Nic Rivers

Mark Jaccard

Simon Fraser University, Canada

#### 13 ENERGY FINANCE & RISK MANAGEMENT

California Room

Peter K. Nance, Presiding

Senior Principal

Teknecon Energy Risk Advisors, LLC

Managing a Portfolio of Real Options: Sequential Exploration of Dependent Prospects

**James Smith** 

Rex Thompson

Department of Finance

Southern Methodist University

The Dynamics of Risk Premiums in Nord Pool's Futures Market

**Erling Mork** 

Vice President, Statistics and Analysis

Nord Pool ASA, Norway

Extending Financial Options Knowhow to Real Options Applications in the Energy Business

Arturo G. Reinking

Professor

Universidad Nacional Autonoma de Mexico

Reducing the Costs of Disturbances to the Electric Power Network

Paul Hines

Sarosh Talukdar

Carnegie Mellon University

#### 14 ECONOMIIC IMPACTS OF PRICE VOLATILITY

Statler Room A/B

Mark A. Schwartz, Presiding

Managing Director

PIRA Energy Group

Does Energy Price Volatility Matter?

Arnisa Abazi

Lecturer

Rutgers University

Oil Price Fluctuations and Their Impact on the Macroeconomy of Trinidad and Tobago: A Case Study Using a VAR Mdoel

Frederick L. Joutz

Gerardo Reves Tagle The George Washington University

The Economics of Measures to Promote Vehicle Fuel Efficiency and Reduce Gasoline Use

Paul Leiby

David Greene

Oak Ridge National Laboratory

Jonathan Rubin

University of Maine

Natural Gas Development Versus Wildlife Preservation: Economic Tradeoffs in the Jack Morrow Hills Area of Wyoming

Roger H. Coupal David T. Taylor

University of Wyoming

Roy L. Allen Wyoming State Office

#### **CONCURRENT SESSIONS - 15 TO 21**

Saturday, July 10 8:30 am to10:00 am

#### 15 INTERNATIONAL NATURAL GAS MARKETS

Presidential Ballroom

Joseph M. Dukert, Presiding Independent Energy Consultant

Gas Supply Security in Europe in Long Term - Some Key Issues

Frits van Oostvoorn

Manager European Studies

Energy research Centre of the Netherlands, ECN

An Empirical Analysis of Market Power in the U.S. Natural Gas Market

**Donald Murry** 

Zhen Zhu

C.H. Guernsey & Company

Spud, Pipe and Chill: Mapping a Secular Transition

in North American Gas Markets

Robert S. Linden

PA Consulting Group

Interconnection of East European Natural Gas Markets: Towards a Cooperation Between Players?

Margarita Pirovska

PhD Candidate

Dauphine University, Paris

16 ENERGY DEMAND & EFFICIENCY

California Room

Mitchell Rothman, Presiding

Principal

Navigant Consulting, Inc.

The Economics of Time-of-Use Rates

with Temperatures from a Global Climate Prediction

Ken Tiedemann

Manager, Load Forecast BC Hydro Future U.S. Energy Use for 2000-2025 as Computed

Model and Energy Demand Model Stanton W. Hadley

David J. Erickson, III

Jose Luis Hernandez

S. L. Thompson Oak Ridge National Laboratory Real Time Prices and Electricity Demand Transfer: A Long Run Analysis of Capacity and Prices

Pierre-Olivier Pineau Stephan Schott

University of Victoria, Canada

Energy Efficiency: Still a Cost-Effective Resource Option

**Amy Roschelle** Tim Woolf

William Steinhurst

Synapse Energy Economics, Inc.

17 CRUDE OIL SUPPLY AND PRICING ISSUES Statler Room A/B

Andre Plourde, Presiding

Associate Assistant Deputy Minister, Energy Natural Resources Canada

Orinoco Belt and Alberta's Oil Sands: Comparative Analysis and Potential

Rodolfo Marin

Graduate Student

University of Texas at Austin

The Impact of Dollar Devaluation on the World Oil Industry

A.F. Alhajji

Associate Professor

Ohio Northern University

How Technical Analyses Affect the Crude Oil Price

Huei-Chu Liao Yu Bo Suen

Tam Kang University, Taiwan

The Global E&P Economy and Crude Oil Price Dynamics: Is There a Connection?

Omowumi Iledare

LSU Center for Energy Studies

18 U.S. ELECTRICITY MARKET

Congressional Room

Hung-po Chao, Presiding

Senior Team Leader-Power Delivery & Marketing Electric Power Research Institute

Optimal Technology R&D in the Face of Climate Uncertainty

Leon Clarke Erin Baker

Joint Global Change Research Institute

Real-Time Pricing for Managing the Steep Change of Electricity Demand

Makoto Tanaka

National Graduate Institute for Policy Studies, Japan Potential Economic and Electric Power Impacts of Residential Real-Time Pricing Contracts: A Caste Study of California

Mark Ehlen

Economist

Sandia National Laboratories

Demand Response as a Tool to Alleviate Market Power

Shiv Mani

Malcolm Ainspan ISO New England

19 ENERGY INVESTMENTS & ANALYSIS Pan American Room

**Session Speakers** 

Three Decades of Scenario Planning in Shell: Experience and Possible Extensions in the Future

Peter Cornelius

Alexander Van de Putte

Mattia Romani

Shell International

Energy Investment Outlook for the APEC Region

Naoko Doi

Juan Ramon Mota Aguilar

Younghun Jung

Jeffrey Skeer

Asia Pacific Energy Research Centre, Japan

The Role of Institutions in Energy Investment

Gurcan Gülen

Sebnem Kalemli-Özcan

University of Houston, USA

Dynamic Conditional Correlations in WTI Oil Forward and Futures Returns

Matteo Manera

University of Milan-Bicocca, Italy

Michael McAleer

University of Western Australia

Alessandro Lanza Eni S.p.A

20 CO, COUNTRY PERSPECTIVES

South American Room A/B

Stef Proost, Presiding

Professor Centrum voor Ekon Studies Katholieke Universiteit Leuven

CO, Emission Reductions Due to Renewable Power Generation Projects Under a Competitive Electricity Market

Ram Shrestha

Anula Abeygunawardana

Asian Institute of Technology, Thailand

The India Energy and Greenhouse Gas Model: Model Overview and Results

Peter Kobos

**Thomas Drennen** 

Sandia National Laboratories

Decarbonisation and Electricity System Security: Scenarios for the UK in 2050

Jim Watson

University of Sussex, UK

Goran Strbac

Dusko Nedic

Manchester Centre for Electrical Energy, UMIST and Tyndall Centre for Climate Change Research

Long-Term Global Energy Strategy for Stabilizing the Atmospheric CO, Concentration with Focus on the Potential Role of Hydrogen

Takayuki Takeshita Kenji Yamaji Yasumasa Fujii

The University of Tokyo, Japan

The Impact of Climate Change Policy on the Canadian Energy Sector

Tony Peluso

Ian Havhow

Natural Resources Canada

RENEWABLE ENERGY: ISSUES AND **PROSPECTS** Senate Room

Wilfrid L. Kohl, Presiding

Director, International Energy Program Johns Hopkins University

Public Preferences for Underlying Attributes of Renewable Energy Technologies

Ariel Bergmann

Nick Hanley

University of Glasgow, Scotland

Hybrid Electric Powertrain Fuel Consumption Reduction Cost Effectiveness Trade-Offs

Danilo Santini

Anant D. Vyas

Argonne National Laboratory

Managing Large Amounts of Wind Generated Power Feed-in-Every Day Challenges for a German TSO and Approaches for Improvements

Steffen Sacharowitz

Energy Systems Research Group

Technical University Berlin, Germany

Poverty and Electricity Scarcity of Lesser Developed Countries: Can Renewables Help Where Government Subsidies Cannot?

Durga P. Kar

**Ilze Rukis** 

Wisconsin Public Service Corporation

The Role for Solar in the Long-Term Outlook of Electric Power Generation in the U.S.

Robert M. Margolis

National Renewable Energy Laboratory

Frances Wood

OnLocation, Inc.

**CONCURRENT SESSIONS - 22 TO 28** 

Saturday, July 10 4:00 pm to 5:30 pm

22 GLOBAL OIL SUPPLY: ROLE OF OPEC

Presidential Ballroom

Michael C. Lynch, Presiding

President

Strategic Energy & Economic Research OPEC Proven Reserves: How Realistic?

Mamdouh Salameh

Director

Oil Market Consultancy Service

Inscrutable OPEC? Behavioral Tests of the Cartel Hypothesis

James Smith

Department of Finance

Southern Methodist University

OPEC Production Quota System and Its Determinants: Empirical Evidence, 1993-2003

Omowumi Iledare

Associate Professor

Louisiana State University

The Impact of Downstream Oil Market Liberalization on the Flow of Profit in Indonesia

Dr. Kurtubi

Senior Economist Pertamina

RECENT DEVELOPMENTS IN THE INTEGRATION OF DISTRIBUTED

GENERATION IN ELECTRICITY SUPPLY California Room

Frits van Oostvoorn, Presiding Manager European Studies

Energy research Centre of the Netherlands, ECN

Policy and Regulatory Roadmaps for Integration for DG in the Medium and Long Term in Europe

**Martin Scheepers** 

Manager, Gas & Power Markets Group

Energy research Centre of the Netherlands, ECN Economic, Commercial and Regulatory Aspects of the

Integration of DG: A European Perspective

Goran Strbac

Professor of Electrical Power Engineering **UMIST** 

Institutional Issues of Distributed Generation Development in Taiwan

Jeffrey Fang

Research Fellow Taiwan Institute of Economic Research

Quantifying the Robustness of Centralized Versus Distributed Energy Systems

Hisham Zerriffi

PhD Candidate

Carnegie Mellon University

ROLE OF GOVERNMENT IN ENERGY DEVELOPMENT

Statler Room A/B

Kevin Forbes, Presiding Associate Professor

Catholic University Fiscal Mechanisms for Encouraging Oil and Gas Production on Marginal State Leases

David E. Dismukes

**Dmitry U. Mesyanzhinov** 

Jeffrey M. Burke Lousiana State University

Evaluating Government Fiscal Policy in Maintaining the Attractiveness of the UK North Sea Province - A Time Line Analysis

Carole Nakhle David Hawdon

University of Surrey, UK

The Effect of State Environmental Regulation on the Price of Gasoline

**Anthony Radich** 

Economist

U.S. Energy Information Administration

Role of Government R&D Project in CO<sub>2</sub> Reduction Technology Development: Case of 21C Frontier CDRS Project in Korea

Su-Uk Park

Korea Institute of Energy Research

**Eunnyeong Heo** 

Seoul National University

Kyung-Jin Boo

Korea Energy Economics Institute

#### 25 ENERGY USE AND THE ECONOMY

Congressional Room

Stephen P. Brown, Presiding

Director of Energy Economics & Microeconomic Policy Analysis

Federal Reserve Bank of Dallas

The Potential Economic Benefits from Implementing Price-Demand Response in Retail Electricity Markets

**Ronald Sutherland** 

Consulting Economist

Environmental Compliance and Industrial Productivity in U.S.

Abbas A. Taheri

University of Wisconsin-Fox Valley

Rodney Stevenson

University of Wisconsin-Madison

The Changing Patterns of the Energy Intensity of the Canadian Manufacturing Sector and the Implementation of the Kyoto Protocol

Jean-Thomas Bernard Nancy Bergeron Johanne Boivin

Universite Laval, Canada

Decomposition Analysis of Changes in Energy Intensities by Energy Type in Korea

Hyunkeong Kim Jinsoo Kim Eunnyeong Heo

Jonanne Boivin

Eunnyeong Heo
Seoul National University

26 U.S. NATURAL GAS POLICY ISSUES

Pan American Room

Samuel A. Van Vactor, *Presiding* President

Economic Insight, Inc.

The "Cyclical" Nature of Natural Gas Prices

Huagang "Hugh" Li Glen Sweetnam

Lukens Energy Group

U.S. Natural Gas Policy and Market Consequences

Sara Banaszak

Director, Gas Group

PFC Energy

When Are Natural Gas Futures Accurate Predictors of Future Spot Prices and When Are They Uninformative?

Mark W. French

Federal Reserve Board

Natural Gas Demand Elasticities in Storage Dependant Northeastern Natural Gas Markets

Jeff Sanders Carol Dahl

Colorado School of Mines

27 ELECTRICITY MARKET FAILURES

South American Room A/B

Sarah E. McKinley, Presiding

Manager of State Outreach

Federal Energy Regulatory Commission

Marginal Cost Pricing Has Little Place in Electricity Regulation

Jeffrey Jakubiak

Troutman Sanders LLP

Regulatory Failure in Power Markets: Price Caps and Artificial Scarcity

Frank Rusco

US General Accounting Office

W. David Walls

University of Calgary

Generation Adequacy, Market Regulation and Demand Elasticity in the Electricity Industry: A Stochastic Long Run Equilibrium Analysis of Capacity Markets

Javier Inon

Benjamin Hobbs

The Johns Hopkins University

Competitive Electricity Generation: Looks Great on Paper, But Does it Work in Practice? Evidence from California and Elsewhere

Fereidoon P. Sioshansi

President

Menlo Energy Economics

Competition in the Electric Utility Industry: Metaphors and Rhetoric versus Reality

John Kelly

Director, Economics and Research American Public Power Association

28 ELECTRICITY MARKETS AND THE ENVIRONMENT

Senate Room

Namejs Zeltins, Presiding

Head of Energy Efficiency Centre

AS FEI

Interaction of Oligopolistic Transmission-Constrained Power Markets with Renewable Portfolio Standards, Green Power Pricing Programs and Emission Allowances

Yi-Hsu Chen Benjamin Hobbs

The Johns Hopkins University

Making Clean Air Markets Work: Lessons From the Regulation of Acid Rain in the United States and the European Union

Kevin B. Jones

Principal

Navigant Consulting

Electricity Reliability in the States: A Roadmap for Integrating State Energy and Environmental Policy

Sue Gander

Art Diem

U.S. Environmental Protection Agency

Market Power in Join Markets for Power and Green Certificates

Eirik S. Amundsen Gjermund Nese

University of Bergen, Norway

#### FREE TOUR OF THE FERC MARKET MONITORING CENTER

#### Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC

#### Wednesday, July 7, 2004 - 2:00 to 3:30 p.m.

The Federal Energy Regulatory Commission is hosting a tour of its Market Monitoring Center (MMC) on Wednesday afternoon, July 7. The tour is free and is located within easy distance of the USAEE/IAEE conference venue, the Capital Hilton Hotel.

The MMC is an energy market information resource center within FERC's Office of Market Oversight and Investigations. This center has access to a variety of powerful commercially-available information and analytical tools that allows the agency to monitor energy markets in North America in real time. The MMC is also a central point for knowledge exchange and training.

Conference delegates will be able to see the market working on large-screen monitors from data used by energy traders and tools developed specifically for FERC. Your tour will include a briefing by experts from the MMC, who will discuss natural gas prices, electricity trades and "hot" topics of the day.

Conference delegates should make their own way from the Capital Hilton Hotel (or where you plan to stay in Washington, DC) to FERC for this tour. Return transportation after the tour will be the responsibility of the conference delegate as well.

Directions: FERC is a 5-10 minute cab ride from your hotel. It is also within easy walking distance from Union Station metro. When getting off the metro, walk to the right side of the platform, up the escalator, exiting the Metro turnstile and turning left to exit Union Station onto

First Street. Turn right on First Street and walk about two blocks. FERC, at 888 First Street, will be on your left. Dress is business casual. Please plan to arrive about 10-15 ahead of time and have photo ID available to go through security. FERC staff will meet attendees at the front desk to escort them to the MMC.

When completing you conference registration form please indicate that you will be attending this free tour, as an advanced registration list is needed for processing through FERC's building security. You may also send an email to usaee@usaee.org indicating you plan to attend this event

#### WASHINGTON NIGHT MONUMENT TOUR

Old Town Trolley Tours is offering an evening tour of Washington's famous monuments. The trolley will pick up interested conference attendees at the conclusion of the Canadian Embassy Reception for a 2 hour visit through the Nation's Capital. View such monuments as Lincoln, Vietnam, FDR and Korean War memorials beautifully lit for the evening from the comfort of the trolley. The tour is fully narrated. Attendees will be returned to the Capital Hilton hotel upon the conclusion of the tour. Cost of the tour is \$30.00. Please make your tour reservations early as space is limited. Note: The likelihood of being able to book this tour while at the conference is very slim. We suggest you reserve your tour tickets early. Reservations can be made by completed the registration form included with this program announcement.

#### WASHINGTON, DC CITY TOURS

Our host hotel, The Capital Hilton, is centrally located to view all the history Washington, DC has to offer. Two of the most predominant tour companies include: Grayline and Old Town Trolley. Most city tours include views/stops at Union Station, China Town, Freedom Plaza, The White House, National Cathedral, Smithsonian, Air & Space Museum and Georgetown. To book city tours, please contact the Head Concierge, Mr. Shujaat Khan at 202-639-5712 or by email at: shujaat\_khan@hilton.com Mr. Khan can book your tours and/or dinner

#### STUDENT SCHOLARSHIPS AVAILABLE

USAEE is offering a limited number of student scholarships to the 24th USAEE/IAEE North American Conference. Any student applying to receive scholarship funds should:

- 1) Submit a letter stating that you are a full-time student and are not employed full-time. The letter should briefly describe your energy interests and tell what you hope to accomplish by attending the conference. The letter should also provide the name and contact information for your main faculty supervisor or your department chair, and should include a copy of your student identification card.
- 2) Submit a brief letter from a faculty member, preferably your main faculty supervisor, indicating your research interests, the nature of your academic program, and your academic progress. The faculty member should state whether he or she recommends that you be awarded the scholarship funds.

USAEE scholarship funds will be used only to cover conference registration fees for the 24th USAEE/IAEE North American Conference. All travel (air/ground, etc.) and hotel accommodations, meal costs in addition to conference-provided meals, etc. will be the responsibility of each individual recipient of scholarship funds.

Completed applications should be submitted electronically to USAEE Headquarters office no later than June 21, 2004. Email to usaee@usaee.org

Students who do not wish to apply for scholarship funds may also attend the conference at the reduced student registration fee. Please respond to item #1 above to qualify for this special reduced registration rate. Please note that USAEE reserves the right to verify student status in accepting reduced registration fees.

If you have any further questions regarding USAEE's scholarship program, please do not hesitate to contact David Williams, USAEE Executive Director at 216-464-2785 or via e-mail at: usaee@usaee.orgreservations, etc.

#### STUDENT SCHOLARSHIPS

USAEE is grateful to the following organizations and individuals for support of the Student Scholarship fund:

Leonard Coburn, ConocoPhillips, Joseph M. Dukert, ExxonMobil, Margarita Pirouska

The Student Scholarship fund has been set-up to cover the cost of conference registration fees for promising graduate students who plan to participate in the Annual North American Conference of the USAEE/IAEE. USAEE will continue this scholarship fund and actively encourages corporate and individual support. For information on both contributing to this fund or receiving these funds as a student, please speak to Dave Williams at the conference registration desk or at the following numbers: (p) 216-464-2785, (f) 216-464-2768, (e) usaee@usaee.org

#### **Conference Information**

Have Any Conference Questions? - Call 216-464-5365 for Answers

#### HOTEL RESERVATION / INFORMATION

The Capital Hilton Hotel, the conference venue, is conveniently located to the business district and city attractions. We have a special room block at the following rates per night:

Single/Double Room \$155.00 Tower Level Single/Double \$185.00

Please note that these rates are exclusive of sales and occupancy tax. The special rates apply for occupancy July 3 – 14, 2004, leaving you plenty of time before and after the conference to enjoy Washington, DC. Please note that you MUST make your reservations prior to Friday, June 18, 2004 to receive these special rates. Reservations placed after June 18 will be confirmed on a space-available basis AND AT HIGHER ROOM RATES. Check-in time is 3:00 pm and check-out time is 12:00 noon. For reservations phone: 202-797-5820 or 1-800-HILTONS and identify yourself as being with the USAEE/IAEE North American Conference.

#### **GROUND TRANSPORTATION**

The approximate cost for a taxi from the Washington National Airport to the Capital Hilton is \$15.00 for one person, one way (20 minute drive, approximately 7 miles, heavy traffic depending). From Dulles Airport it is \$35.00 (30 minute drive, approximately 20 miles, light traffic depending). Several airport shuttles make runs between the airports and downtown hotels. Taxi and shuttle services are located on the sidewalks outside of baggage claim.

#### SPECIAL INDEPENDENCE DAY CELEBRATIONS

Arrive a bit early for the conference and enjoy the Nation's largest and most spectacular fireworks display. Independence Day in the United States signifies the day of national independence in commemoration of the adoption of the Declaration of Independence in 1776. The Fourth of July celebration in Washington, DC is one of the most festive times to visit the city. On July 4th, free events take place all

day long on Washington's famous Mall. The Smithsonian hosts its annual Smithsonian Folklife Festival which includes day and evening programs of music, song, dance, crafts, cooking demonstrations and general celebration of contemporary living traditions. In the afternoon of the Fourth, witness more than 100 marching units in a parade along Constitution Avenue. In the evening, the National Symphony holds its free concert on the west grounds of the U.S. Capitol, with guest stars and soloists, performing at 8 pm. The grand finale is a half hour fireworks display on the Mall held at about 9:15pm. More than 500,000 people will come to the Mall to watch these fireworks. All of these events are a short walk from the conference hotel.

#### **CITY & HOTEL OVERVIEW**

Washington, D.C. is inspiring. As the Nation's Capital, it is home to the President of the United States as well as many of the 535 members of Congress who not only work but live in the city. The city bustles with government activity. Much of Washington is concentrated around the National Mall (park). To the east of the Mall is the Capitol, lining both sides are the Smithsonian Institute's museums, to the north is the White House, to the west is the Lincoln Memorial, to the south is the Jefferson Memorial...all of these spectacular sites are within short metro/walking distance from our conference venue, the Capital Hilton.

The Capital Hilton is an elegant 12-story hotel in the center of downtown. It is located two blocks from the White House and within walking distance to monuments, museums, shopping and all local attractions. Situated a block and a half from the Metro: Farragut North. The Metro is clean and safe, making all that Washington, DC has to offer is at your door.

#### CLIMATE

July weather in Washington, DC is pleasant, making it one of the best months to visit throughout the year. Expect temperatures between 74-91 degrees Fahrenheit with an occasional rain or shower. Dress comfortably to travel and relax. Many of Washington's attractions are just a short distance from the Capital Hilton.

#### RECEPTION — CANADIAN EMBASSY

Join us for a lovely evening reception at the Canadian Embassy, Friday, July 9, from 6:00-8:00pm. The Canadian Embassy sits on one of the most prestigious sites in Washington, DC, on Pennsylvania Avenue, just down the street from the Capitol Building, and across from the National Gallery of Art. The embassy, designed by Arthur Erickson, is a blend of neoclassic and modern concepts, with a facade of smooth, unpolished Canadian marble echoing the surrounding monuments.

The slender triangular pillar that anchors the embassy's southeast corner, and vast courtyard, mirrors the angles of I.M. Pei's modernist East Building of the National Gallery of Art. Within the courtyard is the mythological sculpture, *The Spirit of Haida Gwaii*. The Haida are one of Canada's First Nations from the Queen Charlotte Islands off the coast of British Columbia. The sculpture encompasses mythical creatures, animals, men and women, who together symbolize not just one culture but the entire family of living beings. Visit http://www.canadianembassy.org/embassy/haida-en.asp to take a glimpse at this spectacular sculpture. **NOTE**: *You must bring a photo ID (e.g., drivers license or passport) for admittance to the Canadian Embassy.* 

#### **CONFERENCE SPONSORS**

Sponsorship is an important part of the USAEE/IAEE Conference. The North American Conference is grateful to and acknowledges with thanks the following organizations for their assistance in ensuring the success of this year's conference. If you are interested in sponsoring one of the many events held during the conference, please contact David Williams, USAEE/IAEE Executive Director, at 216-464-2785. Sponsors to date include:

Robert Borgstrom BP, plc Leonard L. Coburn
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Joseph M. Dukert ExxonMobil Sandia National Laboratories
Strategic Energy & Economic Research
U.S. Department of Energy

# FUTURE USAEE / IAEE EVENTS

ANNUAL CONFERENCES

September 2-3, 2004 6<sup>th</sup> European Conference

Swiss Federal Institute of Technology

Zurich, Switzerland

November 22-23, 2004 1st Annual CZAEE International Conference

Prague, Czech Republic The Municipal House

June 3-6, 2005 28th IAEE International Conference

Taipei, Taiwan Grand Hotel

# Broaden Your Professional Horizons















International Association for Energy Economics

In today's economy you need to keep up-to-date on energy policy and developments. To be ahead of the others, you need timely, relevant material on current energy thought and comment, on data, trends and key policy issues. You need a network of professional individuals that specialize in the field of energy economics so that you may have access to their valuable ideas, opinions and services. Membership in the IAEE does just this, keeps you abreast of current energy related issues and broadens your professional outlook.

The IAEE currently meets the professional needs of over 3300 energy economists in many areas: private industry, non-profit and trade organizations, consulting, government and academe. Below is a listing of the publications and services the Association offers its membership.

• **Professional Journal:** The Energy Journal is the Association's distinguished quarterly publication published by the Energy Economics Education Foundation, the IAEE's educational affiliate. The journal contains articles on a wide range of energy economic issues, as well as book reviews, notes and special notices to members. Topics regularly addressed include the following:

Alternative Transportation Fuels Conservation of Energy Electricity and Coal Energy & Economic Development Energy Management Energy Policy Issues Environmental Issues & Concerns Hydrocarbons Issues International Energy Issues Markets for Crude Oil Natural Gas Topics Nuclear Power Issues Renewable Energy Issues Forecasting Techniques

- Newsletter: The IAEE Newsletter, published four times a year, contains articles dealing with applied energy economics throughout the world. The Newsletter also contains announcements of coming events, such as conferences and workshops; gives detail of IAEE international affiliate activities; and provides special reports and information of international interest.
- **Directory:** The Annual Membership Directory lists members around the world, their affiliation, areas of specialization, address and telephone/fax numbers. A most valuable networking resource.
- Conferences: IAEE Conferences attract delegates who represent some of the most influential government, corporate and academic energy decision-making institutions. Conference programs address critical issues of vital concern and importance to governments and industry and provide a forum where policy issues can be presented, considered and discussed at both formal sessions and informal social functions. Major conferences held each year include the North American Conference and the International Conference. IAEE members attend a reduced rates.
- Proceedings: IAEE Conferences generate valuable proceedings which are available to members at reduced rates.

To join the IAEE and avail yourself of our outstanding publications and services please clip and complete the application below and send it with your check, payable to the IAEE, in U.S. dollars, drawn on a U.S. bank to: International Association for Energy Economics, 28790 Chagrin Blvd., Suite 350, Cleveland, OH 44122. Phone: 216-464-5365.

Yes, I wish to become a member of the International Association for Energy Economics. My check for \$65.00 is enclosed to cover regular individual membership for twelve months from the end of the month in which my payment is received. I understand that I will receive all of the above publications and announcements to all IAEE sponsored meetings.

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Mail to: IAEE, 28790 Chagrin Blvd., Ste. 350, Cleveland, OH 44122 USA Join online at http://www.iaee.org/en/membership

WaPro



#### **RESERVATION FORM**

Deadline for Room Reservations: FRIDAY, JUNE 18, 2004 • 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 availability basis.

# **USAEE/IAEE North American Conference**

July 6, 2004 – July 11, 2004

Occupancy: Single/ Double: \$155.00 Each additional person: \$20.00

Washington, DC 20036

- Concierge Level guestrooms are available at an additional \$30.00
- The above rates are subject to prevailing state and local taxes of 14.5%
- The group rate is available on a space available basis from July 3-14 for those wishing to be in Washington 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 **Capital Hilton Hotel**), or a valid credit card is acceptable.

Please indicate:		
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Departure on: DAY:	DATE:	DEPARTURE TIME:
Name(s) of person(s) sharing accommod	lations:	
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Mail this page with your deposit directly  RESERVATIONS  The Capital Hilton Hotel  1001 16th Street, NW	Call/fax/em Fax: (202) 9 Email: capi	nail reservations: 942-1371 ital_rooms@hilton.com confirmation from the Capital Hitlon be sent to yo

After check-in, should you choose to depart earlier than the agreed upon departure date, a \$75.00 early departure fee will be charged to your account.

# **Registration Form**

# ENERGY, ENVIRONMENT AND ECONOMICS IN A NEW ERA

July 8-10, 2004 • Capital Hilton Hotel, Washington, DC, 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, three lunches, three receptions, 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	Received	Received	Received
Speakers and Poster Session	on or Before	on or Before	June 8 to	After July 5, 2004
Participants - NOTE payment	April 6, 2004	June 7, 2004	July 5, 2004	& Onsite Fee
must be received by 4/6/04	\$ 495.00 US			
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Please send payment to:

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USAEE/IAEE very much appreciates the interest and support of our Exhibitors at the  $24^{th}$  Annual North American Conference. Delegates are urged to visit the exhibits in the Capital Terrace. All coffee breaks will be held in the exhibit area as well. Exhibit hours are from 8:30am to 5:30pm Thursday, July 8, 7:30am to 5:30pm Friday, July 9 and from 8:30am – 6:30pm on Saturday, July 10.

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