

2017 EIA ENERGY CONFERENCE

AGENDA

MONDAY, JUNE 26, 2017

7:30 AM **REGISTRATION AND CONTINENTAL BREAKFAST**

8:45 AM **WELCOME AND PLENARY**

Howard Gruenspecht, Acting Administrator and Deputy Administrator, EIA
Greg Walden, Chairman of the U.S. House Energy and Commerce Committee
Scott Sheffield, Executive Chairman of the Board, Pioneer Natural Resources

10:30 AM **CONCURRENT BREAKOUT SESSIONS**

NATURAL GAS INFRASTRUCTURE TO SERVE GROWING MARKETS *International Ballroom East*

This session will discuss how natural gas infrastructure is evolving to serve globalized markets. Speakers will cover the integration and build-out of the U.S.-to-Mexico natural gas pipeline supply network as well as transportation realignments to serve liquefied natural gas export facilities.

Anatol Feygin, Chief Commercial Officer and Executive VP, Cheniere Energy, Inc.
David Madero Suárez, Director General, CENAGAS
William Yardley, Executive Vice President & President, Gas Transmission & Midstream, Enbridge
Moderator: Shirley Neff, Senior Advisor, EIA

RENEWABLE PROJECT FINANCING: CURRENT AND FUTURE *International Ballroom West*

Innovations in financing renewable energy projects have developed in recent years. To realize available financial incentives such as federal tax credits and accelerated depreciation of assets, the wind and solar industries have developed their own approaches to project finance that set them apart from others in the electric power industry. Using corporate renewable power purchase agreements (PPAs)—in lieu of standard utility PPAs—to finance renewable energy projects is also on the rise. The new financial structures may bring advantages in terms of raising capital from tax equity partners or finding higher-value customers but may also impose additional transactional costs on the projects. This session will provide insights on how EIA is taking into account current issues in renewable energy project finance, discuss implications of changes to federal tax laws, and introduce corporate PPAs and their use.

Keith Martin, Partner, Chadbourne & Parke
Colin Murchie, Senior Director, Customer Energy Services, Sol Systems
James Saeger, Director, Power & Renewables, North America, IHS Markit
Moderator: Chris Namovicz, Team Lead, Renewable Electricity Analysis, EIA

12:15 PM **LUNCH AND PLENARY**

Alex Laskey, President and Founder, Opower

2:00 PM **CONCURRENT BREAKOUT SESSIONS**

THE ENERGY-WATER NEXUS AND INDUCED SEISMICITY *International Ballroom East*

This session will provide an overview of issues related to induced seismicity associated with oil and natural gas production. Expanded domestic oil and natural gas development over the past decade led to increased seismicity in several areas of the country, including areas where it was previously uncommon. The primary cause of this is the disposal of produced-water (a by-product of the oil and natural gas extraction process) by large-scale wastewater injection. Topics discussed will include the evolution of this seismicity, the geology, economics, and regulatory frameworks associated with wastewater injection, and the challenges and opportunities related to managing wastewater produced from oil and natural gas production.

Jeremy Boak, Director, Oklahoma Geological Survey, University of Oklahoma
Linda Capuano, Fellow in Energy Technology, Center for Energy Studies, Rice University's Baker Institute for Public Policy
Kyle Murray, Hydrogeologist, Oklahoma Geological Survey, University of Oklahoma
Moderator: Meg Coleman, Team Lead, Exploration & Production, EIA

THE FUTURE OF U.S. NUCLEAR POWER *International Ballroom West*

Electric utilities have generally viewed nuclear power as a source of reliable, base-load generation with zero CO2 emissions. However, in the past few years, competition has increased between renewables and low-cost natural gas in an environment of low electricity demand growth and challenging capacity and carbon emission market-pricing conditions. These conditions have led several owners to either retire plants or seek relief to cover their operating and ongoing capital costs. The high costs for new nuclear plants, relative to natural gas and renewables, and the large investments required also pose a challenge to new nuclear development. This session will address the future of nuclear power in the United States by taking a closer look at the competitive challenges facing the existing fleet and the options available to plant owners and state/federal regulators as they examine the role of nuclear energy in their generation portfolios.

Edward Kee, CEO, Nuclear Economics Consulting Group
Chris Mudrick, Senior VP for Northeast Operations & COO CENG, Exelon
Bradley Williams, Senior Advisor, Office of Nuclear Energy, DOE
Moderator: Greg Adams, Team Lead, Coal & Uranium Analysis, EIA

4:00 PM **CONCURRENT BREAKOUT SESSIONS**

GASOLINE FUEL QUALITY: THE LOOMING OCTANE SHORTAGE *International Ballroom East*

To comply with more stringent fuel economy standards, one of the major automotive industry strategies relies on engine designs that require higher compression ratios. Higher compression ratios, in turn, require gasoline with a higher octane rating. In the past five years, this design shift has resulted in increasing shares of premium gasoline sales and an almost doubling of the retail price difference between regular and premium gasoline. This session will explore future limitations on gasoline octane that stem from limited ethanol blending, low-quality refinery feedstocks, and new Tier 3 regulations and potential refinery investments.

Blake Eskew, Vice President, Global Consulting, IHS
Tom Kloza, Global Head of Energy Analysis, OPIIS
Max Pyziur, Director, Downstream Projects, Energy Policy Research Foundation, Inc.
Moderator: Lynn Westfall, Director, Office of Energy Markets and Financial Analysis, EIA

HUMAN BEHAVIOR AND ENERGY USE IN BUILDINGS *International Ballroom West*

Researchers are studying the connection between human behavior and energy use and are developing technologies such as intelligent systems and devices that result in more efficient energy use. This panel will explore both the human and technological aspects of this relationship to provide insights into how current efforts may shape future energy use in buildings.

Karen Ehrhardt-Martinez, Associate Director, Navigant
Kurt Roth, Director, Building Energy Technologies, Fraunhofer Center for Sustainable Energy Systems
Marina Sofos, Technology Manager, Building Technologies Office, DOE
Moderator: Erin Boedecker, Team Lead, Buildings Energy Consumption & Efficiency Analysis, EIA

5:30 PM **RECEPTION, NETWORKING, AND EIA PRODUCT DEMONSTRATIONS**

TUESDAY, JUNE 27, 2017

8:00 AM **REGISTRATION AND CONTINENTAL BREAKFAST**

8:30 AM **PLENARY**

Rick Perry, U.S. Secretary of Energy, U.S. Department of Energy
Colette D. Honorable, Commissioner, Federal Energy Regulatory Commission

9:45 AM **CONCURRENT BREAKOUT SESSIONS**

PETROLEUM EXPORTS: COMPETING IN THE GLOBAL MARKET *International Ballroom East*

U.S. exports of crude oil and petroleum products have risen to record levels recently, driven by the lifting of restrictions on crude oil exports, increasing production of crude oil and natural gas, and increasing worldwide product demand. To sustain or even increase export levels, U.S. exporters will face increasing international competition for markets and must consider the political implications of becoming major players in the international energy trade. This session will explore the factors underlying export growth, current and new markets for U.S. exports, and how an increased U.S. presence in the world market could affect international relations.

John Auers, Executive Vice President, Turner, Mason & Company
Alan Gelder, VP for Refining, Chemicals and Oil Markets, Wood Mackenzie
Sarah Ladislaw, Director and Senior Fellow, Energy and National Security Program, CSIS
Moderator: Hannah Breul, Team Lead, Petroleum Markets, EIA

GLOBAL TRANSPORTATION, ELECTRIC VEHICLES, AND FUEL DEMAND *International Ballroom West*

Despite years of technological advances and breakthroughs in product designs, electric vehicles still represent just a fraction of today's vehicle markets. This session will explore how market and policy developments influence global transportation trends as well as how global demand for oil and other transportation fuels may change.

Rebecca Lindland, Executive Analyst, Kelley Blue Book
Devin Lindsay, Principal Analyst, North America Powertrain Forecasts, IHS Markit
Melissa Lynes, Industry Economist, EIA
Moderator: Jim Turnure, Director, Office of Energy Consumption and Efficiency Analysis, EIA

11:30 AM **CONCURRENT BREAKOUT SESSIONS**

"BIG DATA" AND ENERGY INFORMATION *International Ballroom East*

The digitization of energy systems is producing vast amounts of "big data" about generation, distribution, building consumption, and energy-consuming devices. The data are sharper, timelier, more frequent, and specific, which is spurring innovation and efficiencies from the electric power sector to the building sectors. In this session, panelists will discuss the contributions and value of technology, partnerships, and data integration. They will also explore future opportunities and workforce needs to achieve a more dynamic, data-driven energy system.

Ganesh Bell, Chief Digital Officer & Head of Digital Business, GE Power
Gil Quiniones, President and CEO, New York Power Authority
Kevin Kampschroer, Director, Office of Federal-High Performance Buildings, GSA
Moderator: Eileen O'Brien, Team Lead, Building and Survey Statistics, EIA

COAL-NATURAL GAS COMPETITION: THE CURRENT STATE OF PLAY *International Ballroom West*

This session will examine the current balance of coal and natural gas competition in power markets. The topic will be explored from three perspectives: technology for coal to natural gas conversions, impact on system dispatch, and the response of the railroad industry.

Robin Bedilion, Senior Technical Leader, Technology Innovation, EPRI
Robert DiDona, Principal, Energy Ventures Analysis Inc.
Jamie Heller, Founder and President, Hellerworx, Inc.
Moderator: Stan Kaplan, Director, Office of Electricity, Renewables & Uranium Statistics, EIA

1:00 PM **NETWORKING LUNCH AND PLENARY**

Sun Xiansheng, Secretary General, International Energy Forum

2:30 PM **CONCURRENT BREAKOUT SESSIONS**

ENERGY DATA TRANSPARENCY *International Ballroom East*

Timely and accurate energy data are critical to informed decision making by energy market participants and policy makers worldwide. To address concerns about the availability and quality of energy data, key international organizations have launched energy data transparency initiatives and accessible energy data portals to provide clarity to data users and analysts. This panel will discuss progress in standardizing data, providing reliable open access to data, and developing new energy data initiatives.

Amar Amarnath, Head of Information Management, King Abdullah Petroleum Studies & Research Center
Duncan Millard, Chief Statistician & Head of the Energy Data Centre, International Energy Agency
Bob McNally, President, The Rapidan Group
Moderator: Tom Leckey, Assistant Administrator for Energy Statistics, EIA

ELECTRIFICATION IN DEVELOPING COUNTRIES *International Ballroom West*

By some estimates, more than 1 billion people are living without access to electricity. The mechanisms by which rural and developing regions of the world acquire this key resource are an active area of research with political, technological, and financial considerations. This session will explore electrification in developing countries and some of its strongest drivers: funding, government policy, and delivery mechanisms—including distributed generation in place of grid connection.

Gang He, Assistant Professor, Department of Technology and Society, Stony Brook University
Dorian Mead, Energy Reform and Reconstruction Advisor, USAID
Steven Rose, Senior Research Economist and Technical Executive, EPRI
Moderator: Thad Huetteman, Team Lead, Electricity Analysis, EIA

4:00 PM **ADJOURN**

4:30 PM **POST CONFERENCE SESSION**

UNDERSTANDING THE NEW INPUT AND OUTPUT FILES IN THE INDUSTRIAL DEMAND MODULE

A years-long overhaul of some of the industry submodules of the Industrial Demand Module (IDM), a module of the National Energy Modeling System (NEMS), is complete. We use NEMS results to formulate our projections for the Annual Energy Outlook (AEO). Modeling for five industries—paper, glass, cement and lime, iron and steel, and aluminum—are now more detailed. Supplementary results from the IDM now include data output by process step and by changes in technology used. In addition, the input files are much more detailed compared with previous years. This session will show how we model these industries, how to use the new input files, and how to interpret the supplementary output files. We will use results from the AEO2017 in this demonstration.