



## **AGENDA**

# **SOUTH ASIA REGIONAL REGULATION PARTNERSHIP EXECUTIVE EXCHANGE**

**September 21 – 25, 2009**

**Albany, New York & Washington, D.C.**

**Conducted by the  
U.S. ENERGY ASSOCIATION  
Under the  
SOUTH ASIA REGIONAL  
ENERGY PARTNERSHIP PROGRAM (SAREPP)  
Funded by the  
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT**

## **EXECUTIVE EXCHANGE OBJECTIVES:**

To gain a better understanding of:

- Organizational structures and operational best practice policies and procedures
  - To promote the institutional strength and effectiveness of energy, gas, and oil regulatory organizations in the South Asia region
  - To share approaches and discuss best-practices policies and procedures for effective regulation, especially in the areas of renewable energy integration and conservation
  - To develop stakeholder support for regulatory organizations
- Tariffs and rate setting mechanisms
  - To share and discuss tariff setting mechanisms for national oil, gas, and power transmission regulation in South Asia
- Consumer affairs
  - To stimulate public support and confidence in the regulatory organization and its processes
  - To develop a customer protection program
- Policies that promote renewable energy, including renewable portfolio standards & other incentive programs
- Rebate programs, the role of an income tax base for renewable energy projects, and other financing strategies
- Impacts of integrating renewable energy on the energy market
- How a market facilitates renewable energy use
- Consumer education and marketing programs related to renewable energy

## **EXECUTIVE BUSINESS TRIP PARTICIPANTS**

### **BANGLADESH**

Mr. Zaved Choudhury  
Director (Gas)  
Bangladesh Energy Regulatory Commission

Mr. Md. Haronur Rashid  
Deputy Director (Power)  
Bangladesh Energy Regulatory Commission

### **NEPAL**

Dr. Narayan Chaulagain  
Executive Director  
Alternate Energy Promotion Center (AEPC)

Mr. Iswar Singh Thapa  
Joint Secretary  
Water and Energy Commission Secretariat

### **PAKISTAN**

Mr. Maqbool Ahmad Khawaja  
Member  
National Electric Regulatory Authority (NEPRA)

Mr. Yawar Ali  
Chairman  
Lahore Electric Supply Company (LESCO)

### **SRI LANKA**

Mr. MMC Ferdinando  
Secretary  
Ministry of Power & Energy

Mr. Upali Daranagama  
Additional Secretary (Planning & Development)  
Ministry of Power & Energy

### **USAID**

Mr. Sher Khan  
SARI/Energy Country Coordinator  
USAID/Bangladesh

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**MONDAY, SEPTEMBER 21**

**8:30 AM**

**PRESENTATIONS BY SOUTH ASIA PARTICIPANTS**

Roundtable of South Asia Regulation Partnership delegates who will make a 15- minute power point presentation on the key lessons learned during the regulatory policy and/or development of a regulatory commission in their country including challenges and obstacles to the development of energy regulation in their country. Please provide any formal documentation that explains the roles and responsibilities of a commission.

Please make sure that your presentation covers the below topics. Please exclude the history of the energy sector of your country.

- Establishing independence
  - Degree of independence of commission
- Establishing transparency
  - Enforcement of standards and compliances
  - Working with the utilities, consumers and Ministries
- Establishing creditability
  - Developing new standards
  - Customer response standards
  - Serving the utilities and consumers
  - Licensing
- Protecting low-income consumers & establishing reasonable tariff rates
  - How to cover the cost of renewable energy integration in setting tariff rates
- Human resources
  - Job descriptions
  - Administration and the role of the staff
  - Internal workflow
  - Role of staff
    - Determining tariffs
    - Improving quality decision making
    - Responsibilities of the staff in cases before the commission
    - Advising the commission on cases
- Guidelines adopted by Commissions on consumer service
- Introducing competition
- Promotion of energy conservation, energy efficiency and renewable energy use by the regulator
- Other Challenges
- Lessons learned

**10:30 AM**

**OVERVIEW OF GE**

Presenter: Ronald J Brzezinski, Power and Water, GE Energy Infrastructure, Commercial Manager Team Leader - Wind Americas, GE Energy

**11:00 AM**

**OVERVIEW OF U.S. POWER SECTOR**

Presenter: Sundar Venkataraman, Director, GE Energy

**2:00 PM**

**NEW YORK STATE PUBLIC SERVICE COMMISSION**

Introductions

Speaker: Judith Lee, Executive Deputy

- Welcome to NYSPSC

Speaker: Hon. William Bouteiller, Administrative Law Judge

- History of NYSPSC
- Organization & Functions of NYSPSC
- Role of Commission & Staff
- Dichotomy of Authority between FERC & NYSPSC
- Hearing Process

Speaker: Raj Addepalli, Deputy Director of Electric, Office of Electric, Gas & Water

- How to Cover Cost of Renewable Energy Integration in Setting Tariff Rates
- Demand Response Initiative
- Transaction Regulation: U.S.-Canada Cross Border Energy Exchange & Independent Power Producers

Speakers: Christina Palmero, Chief, Renewable Energy & Environmental Compliance & Michael Townsley

- Renewable Energy/Energy Efficiency/Energy Conservation
- Portfolio Standards & Other Incentive Programs

Speakers: Laura Getz & Erin O'Dell-Keller, Consumer Affairs Specialists, Office of Consumer Services

- Consumer Advocacy & Low-Income Programs

Speaker: Hon. William Bouteiller, Administrative Law Judge

- Conclusion

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## TUESDAY, SEPTEMBER 22

10:00 AM

PLUG POWER INC.

Speakers: Andrew Marsh, CEO; Katrina Fritz Intwala, Vice President, Government and Public Relations; Rhonda Staudt, VP Operations, Continuous Power Division; Jim Petrecky, Director of Strategy & Marketing; Mark Sperry, Vice President & General Manager, Continuous Power Division

*Plug Power Inc. develops, manufactures, integrates and services proprietary fuel cell solutions, providing clean, reliable energy for customers throughout the world. Since its inception in 1997, Plug Power has worked mainly to commercialize fuel cells built on a platform-based systems architecture using Proton Exchange Membrane (PEM) and related fuel-processing and system-management technologies.*

*They are currently focused on commercializing product lines targeted at different markets. GenSys® systems for off-grid, prime power and grid parallel combined heat and power applications deliver lower maintenance and fuel costs, low emissions, higher efficiency and quiet operation, as well as longer life compared with incumbent technologies.*

AFTERNOON

MUNNSVILLE WIND FARM/BLLENHEIM-GILBOA PUMPED STORAGE FACILITY

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## WEDNESDAY, SEPTEMBER 23

9:00 AM

RENSSELAER POLYTECHNIC INSTITUTE (RPI) LIGHTING RESEARCH CENTER

Presenters: N. Narendran, Ph.D., Associate Professor & Director of Research; Russell Leslie, Associate Director, Professor; Mary Cimo, Manger of Research Communications

#### Overview of the RPI Lighting Research Center & the Regional Center for Energy Efficient Lighting (RCEEL)

*The Lighting Research Center (LRC) is part of Rensselaer Polytechnic Institute. They are the leading university-based research center devoted to lighting and offer the world's premier graduate education in lighting, including one- and two-year master's programs and a Ph.D. program. Since it was began in 1988, they have built an international reputation as a reliable source for objective information about lighting technologies, applications, and products. LRC provides training programs for government agencies, utilities, contractors, lighting designers, and other lighting professionals. The LRC investigates lighting issues and educates the next generation of lighting leaders. Programs cover a range of activities including both laboratory testing of lighting products and real-world demonstration and evaluation of lighting products and designs. LRC conducts research into energy efficiency, new products and technologies, lighting design, and human factors issues.*

**11:30 AM**

#### NEW YORK STATE PUBLIC ENERGY RESEARCH & DEVELOPMENT AUTHORITY (NYSERDA)

Presenters: Donald LaVada, Director, Consumer Services and Events Management; Peter Keane, Associate Counsel; David Coup, Senior Project Manager, Energy Analysis; John Love, Senior Project Manager, Industrial Research; Michael Shimazu, Project Manager, Clean Energy Research and Market Development

*New York State Energy Research and Development Authority (NYSERDA) is a public benefit corporation created in 1975. NYSERDA is primarily funded by state rate payers through the System Benefits Charge (SBC). These SBC funds are allocated towards energy-efficiency programs, research and development initiatives, low-income energy programs, and environmental disclosure activities. Part of this funding went into the creation of New York Energy SmartSM, which helps maintain momentum for the State's efforts to develop competitive markets for energy efficiency; demand management; outreach and education services; research, development, and demonstration; low-income services; and to provide direct economic and environmental benefits to New Yorkers.*

- Overview of NYSERDA
  - History & overview of reason for establishment of NYSERDA as separate entity from utilities' functions
  - Mission
  - Organization make-up
  - Relationship with New York State Public Service Commission & FERC
  - Financing
- Services
  - Agriculture
  - Bond financing
  - Business partners
  - Commercial / industrial
  - Economic development
  - Energy analysis
  - Environment
  - FlexTech
  - Geothermal heat pumps
  - Green buildings
  - New York Energy SmartSM Program
  - Loan fund
  - New York Energy SmartSM Program Evaluation
  - Power systems
  - Renewable portfolio standard

- Renewables
- Research & Development
- Residential
- Technical assistance
- Transportation
- Incentive Programs
  - Agricultural
  - Colleges and Universities
  - Commercial / Industrial
  - Commercial Real Estate
  - Health Care
  - Hospitality
  - Con Edison Gas Customers
  - National Fuel Customers
  - Municipalities
  - Residential
  - Schools
  - State Government
  - Water / Wastewater
- Other NYSERDA Initiatives
  - GetEnergySmart.org – the New York Energy SmartSM program designed to continue energy efficiency, low-income services, research and development, and environmental protection programs during the State’s transition to electric retail competition,
  - Low-Income Forum on Energy (LIFE) – unique statewide dialogue to bring together organizations and individuals committed to addressing the challenges and opportunities facing low-income New Yorkers as they seek safe, affordable and reliable energy.
  - Business Partners Program for Motor Systems – New York Energy SmartSM Premium-Efficiency Motors Program
  - NYSERDA’s comprehensive renewable energy initiatives
  - Saratoga Technology + Energy Park (STEP) – owned by NYSERDA, STEP is the nation's first park dedicated to renewable and environmental-friendly, clean energy technologies
  - Small Commercial Lighting Program – the Right Light™ - the New York Energy SmartSM Small Commercial Lighting Program (SCLP) to promote effective, energy-efficient lighting solutions
- Visit to NYSERDA energy efficiency & renewable energy installations, including PV

2:30 PM

## NEW YORK INDEPENDENT SYSTEM OPERATOR (NYISO)

Presenter: Ken Klapp, Communications Specialist

*The New York Independent System Operator (NYISO) manages New York’s electricity transmission grid – a 10,775-mile network of high-voltage lines that carry electricity throughout the state and serves 19.2 million New Yorkers. The NYISO also oversees wholesale electricity markets where more than \$70 billion has been transacted since 1999. The state’s geographic location means that the NYISO serves as the pivot point for the cross-border transfer of electricity to and from the Northeastern U.S. and Canada. The NYISO is a national leader in innovation and technology, and provides New York with the most sophisticated and comprehensive energy management system in the United States.*

- Overview of NYISO
  - History
  - Mission
  - Overview of the New York market
  - Organization make-up
  - Relationship with state & federal regulators
  - Financing
- Products
  - Energy market auctions

- Ancillary services
- Demand response programs
- Installed capacity auctions
- Transmission congestion contracts
- NYISO Services
  - Customer registration
  - Market monitoring
  - Market training
  - Planning
  - Financial services
- Visit to control room

**THURSDAY, SEPTEMBER 24**

**9:00 – 11:30**

**FEDERAL ENERGY REGULATORY COMMISSION**

Presenters: Sarah McKinley, Manager of State Outreach, Office of External Affairs; Julie Simon, Deputy Director, Division of Policy Development; Bikash Thapliya, Energy Industry Analyst; Keith Collins, Manager – Electric Analysis Group; William Booth, Chief, Market Information & Reporting Branch

- History of FERC
- Role and organization of FERC
- FERC rules of governance
- Rate setting process for wholesale transmission
- Consumer issues addressed by FERC
- Information sharing with state commissions
- Role of regulation in the promotion of renewable energy and energy efficiency
- Regulation of independent power producers & regional transmission operators
- Arbitration and dispute resolution
  - Conflict Resolution Options
  - Role of Alternative Dispute Resolution (ADR)
  - Utility-consumer complaints (e.g. utility operating practices, billing problems, safety concerns)
    - Rights of Utility
    - Rights of Consumer
    - Role of Commission
  - Utility-commission disagreements (e.g. agency ruling or decision, agency mandate)
    - Appeals process
    - Alternative negotiations or processes for resolution
  - Constructing an ADR program

**10:30 TOUR OF MARKET MONITORING CENTER**

After noon

**DELAWARE PUBLIC SERVICE COMMISSION**

Speaker: Mr. David Bonar, Government Services Administrator/Ombudsman

- Background of Public Service Commission
- Human resources
  - Job descriptions
  - Administration
  - Internal workflow
- Role of staff
  - Determining tariffs

- Improving quality decision making
- Policies promoting renewable energy, energy efficiency and energy conservation
  - Portfolio standards & other incentive programs
  - Rebate programs & other financing strategies
  - Demand response initiatives
  - Impacts of integrating renewable energy on the energy market
- Protecting low-income consumers & establishing reasonable tariff rates
  - How to cover the cost of renewable energy integration in setting rates
- Responsibilities of the staff in cases before the commission
- Case management: streamlining the decision making process
- Using information technology
  - How data and date requests are used in the regulatory process
- Consumer assistance

## **FRIDAY, SEPTEMBER 25**

**8:20 AM**

### **DEPART HOTEL FOR SITE VISIT**

**9:15 AM**

### **SITE VISIT TO AREA RESIDENTIAL HOME RETROFITTED FOR SMART GRID TECHNOLOGIES**

Mr. Asim Hussain & Zoilo Miguel Rodas, Senior Smart Grid Engineer, Current Group

CURRENT, a private company founded in 2000, provides electric utilities a Smart Grid solution that increases the efficiency and reliability of the electric grid while reducing the environmental impact of electric usage. CURRENT's scalable solution combines advanced sensing technology with low latency IP based communications and enterprise analysis software and related services to provide location-specific, real-time actionable data that is easily integrated into a utility's existing IT infrastructure. Utilities around the world are using the CURRENT Smart Grid™ solution. In the United States, Xcel Energy is using CURRENT's technology in its SmartGridCity™ project in Boulder, Colorado, the nation's first fully integrated Smart Grid community. The CURRENT Smart Grid solution also serves more than 100,000 homes and businesses with Oncor Electric Delivery Company in the Dallas-Fort Worth area, the 5th largest U.S. metropolitan statistical area. CURRENT is also a participant in several European Union-sponsored projects, including one led by Iberdrola, the world's 4th largest electric utility, to expand the use Smart Grid technology to benefit electric utilities and residents of the European Union.

**1:30 PM**

### **SITE VISIT TO RESIDENTIAL RETROFITTED PROJECTS**

- Mr. Scott Sklar, President, The Stella Group, Ltd.

Scott Sklar, the The Stella Group's founder and president, lives in a solar home in Arlington, Virginia which has solar water heating, passive solar building features (including double-paned, argon-filled windows, LO/MIT thermal barrier paint in the attic, R38 insulation), energy efficient fixtures and appliances (such as Whirlpool Cabrio washer), 1.2 kW of Solarex polycrystalline photovoltaics and 0.5 kW of UniSolar 'peel-and-stick' modules on a metal-seamed roof on the front porch, and a 24 gel cell battery bank tied to a Xantrex SWPlus inverter. The house boast's Virginia's first direct exchange (geothermal) ground-coupled heat pump. The Stella Group's Virginia office building has 1 kW of UniSolar photovoltaic roofing shingles, a 3.6 kW GridPoint smart battery bank, a 0.5 kW small wind turbine by Southwest Windpower, solar daylight tube, and has the first commercial lease of a 5 kW Plug Power fuel cell (running on recycled industrial hydrogen in canisters) tied to a dedicated Xantrex inverter.