

Tuesday, November 8

1. **Energy Leadership Keynote - - 12:30 PM – 1:30 PM**

U.S. Energy Secretary Steven Chu
Israeli Ministry of National Infrastructures, Minister Uzi Landau

2. **Energy Industry in Transition: Models for Success - - 1:30 PM – 2:45 PM**

Encyclopedias, bookstores, travel agents, wired phones, and typewriters...digital technology has transformed industries and made numerous technologies, business models and companies extinct. Is the energy industry next? How might today's utilities evolve and in what forms? Will today's utility survive and if so, in what form? How will the value chain from generation to consumption change? Who will be the winners and who will be the losers? These are questions that are in the minds of utilities, aggregators, large consumers, and cities and municipalities. The session will explore these key issues including the transition of other industries and how those experiences might apply to the utility industry.

3. **Lessons Learned: What the ARRA Data Tells Us - - 3:15 PM – 4:30 PM**

As part of the American Recovery and Reinvestment Act of 2009, (ARRA), approximately \$4.5B was granted to more than 100 companies to accelerate the deployment and evaluate the impact of smart grid technologies. As we approach the halfway point of this three year program, what have we learned? What do we have to show for the investment? Are the added or unexpected benefits received from investment? Do the benefits outweigh the costs? Senior executives from ARRA recipient companies will discuss the progress of their projects and check in with the DOE on how they view progress to date.

4. **Guarding the Grid: Smart Grid and Grid Vulnerability - - 4:30 PM – 5:45 PM**

As the electric system becomes a network of flowing data as well as power, security has emerged as a chief concern. The electric power system is now viewed as a national security issue, with the military establishment looking at mission criticality and support. The grid must be protected from both fraud and malice in order to keep the lights on. In this session, several of world's top experts on systems security will focus on key issues associated with grid vulnerability including the standards and practices that have already been put in place to address grid security. What are the highest priority areas of cybersecurity that have not yet been addressed by standards organizations or regulators? In looking at this new treasure trove of data, how do we balance usability and security?

Wednesday, November 9

5. **The Technology Horizon: Future Trends and Potential Disruptions - - 8:30 AM – 10:00 AM**

As our vision for the modern grid unfolds, technology development and innovation will continue to be a key driver. Predicting how and when various technologies will impact the evolution of the smart grid is difficult; understanding what technologies will engage consumers is difficult; and understanding the potential for disruptive change is critical for setting the context for other key issues. Disruptive change leads to new conceptual models that transform markets and institutions. What new technologies are most likely to impact the design and operation of the grid over the next 20 years? What technologies will engage consumers and change behavior? What new solutions are needed to support PHEVs, distributed storage, and smart appliances? What are the keys to harmonizing the integration of all these new technologies? Chief Technology and Chief Strategy Officers from leading utilities and technology companies will discuss technology trends, strategic planning consumer involvement, and R&D programs that can unlock the full potential of new technologies on the grid.

6. **Smart Grid Data: Insights, Privacy, or Both? - - 10:30 AM – 12:00 PM**

Underlying the "smart" in smart grid is a mountain of new data that will be produced across the entire electric delivery system. The depth and breadth of this data raises the question of privacy and customer expectations. Many believe that this data will create a new energy information marketplace for demand response, energy efficiency, and other beneficial services. How do we collect, manage, and analyze this data over its life cycle, extracting value and leveraging it to transform customer information and enhance service? Who owns the liability side of managing and securing data? What policies regarding privacy and third party access will be required? Participants in this session will discuss and debate what data and information can, and should be provided to customers and third parties.

7. Smart Grid and the Regulatory Landscape: Evolution or Revolution - - 2:00 PM – 3:30 PM

The transformation of the legacy electric grid into an intelligent system presents a number of issues that pose challenges for state and federal regulators. As recent events with smart meters in California, Texas, and Maryland have demonstrated, some of these issues vary in intensity and response across the many regulatory jurisdictions. This session will delve into an analysis of the regulatory compact in this country. What will the regulatory landscape look like in the future? What tools do regulators require to make the right decisions? What changes need to be made to regulatory processes to keep pace with speed of modernization? What role, if any, should FERC play in resolving key differences to ensure the transformed electric system does not become merely a modern balkanized version of today's grid? In this session, panelists will discuss these challenges and offer up ideas and solutions to ensure the smart grid delivers on its full potential in a diverse regulatory environment.

8. Integrating Renewables: The Hype, The Challenges, and the Reality - - 4:00 PM – 5:30 PM

Renewables are being connected to the grid at different levels. At the transmission level, large wind farms are being constructed and linked into the grid. Similarly at the distribution level, roof-top photovoltaics and PHEVs/PEVs are being added. Right now much of this is being done in a patchwork of regulatory mandates and state RPS standards. Most recently the California government passed a law making it mandatory that 33% of supply would come from renewable sources. Several other states are also considering RPS standards. Several key questions come to play - is it time for a national renewable energy policy? Does this need to be connected with a national transmission/energy policy and common interconnection standards? How should PHEVs be integrated into the grid and should there be a separate tariff for their interconnection? How should we provide remuneration for energy sent into the grid? This session will discuss these and other key issues relating to the impact of renewables on the electric system.

Thursday, November 10

9. Connecting with Consumers: Strategies for Successful Consumer Engagement - - 8:30 AM – 10:00 AM

Consumer engagement and acceptance has emerged as a key influencing factor in the widespread deployment of modernized grid technologies. The electricity industry has had only limited success in connecting with its customers and conveying the value of a smarter grid. Over the years, consumer products companies have been extremely successful in marketing to consumers; one of the most successful of these has been Procter & Gamble. In this session Procter & Gamble CEO, Robert McDonald, will share some of the ways P & G has connected with the market using a variety of techniques and media. What is the process that P&G uses to translate consumer behavior? What are the differences in selling to P&G consumers and electric utility consumers? Mr. McDonald will lead a discussion with senior utility and electricity industry vendor executives on possible strategies for conveying the message of a smarter grid to the consumer.

10. Building the Smart Grid: Best Practices for Success - - 10:30 AM – 12:00 PM

Around the world, billions of dollars are being spent to implement a smarter grid. The current level of investment and more will be necessary to continue the transformation of the global electric system. While funding has come from a variety of sources, governments and utilities have accounted for the largest portion of the investment. In all countries, early failures would deal a severe setback to the continued deployment of these technologies. Fortunately, there have been a number of successful implementations around the globe. The strategies behind these implementations have varied. This session will explore several of these projects discussing what went right; what could have been done better; and the lessons learned.

11. Investing in our Electrical Future: The Impact Globally and Locally - - 2:00 PM – 3:30 PM

Electric system investments improve economic results at the local, regional and global level in two major ways. First, by enhancing efficiency, thereby improving asset performance and reducing losses from power disruptions; and second, by supporting energy technology industry growth, which in turn, fuels innovation. Understanding these impacts at an economic level is critical to driving motivation, venture funding, national policies, and job growth. They also impact how the U.S. is viewed around the world as a leader in both technology innovation and environmental stewardship. This session will explore the quantitative impacts in the form of cost savings directly for consumers and indirectly through operating improvements that reduce outage costs and the cost to generate and deliver power. In addition, the panelists will discuss the impact of smart grid work on business formations, capital investments, venture funding landscape and its overall impact on job growth.