2013 International Electricity Summit

April 22, 2013

The Federation of Electric Power Companies of Japan

This is a summary of the International Electricity Summit held in San Diego, USA for two days from April 8, 2013.

The International Electricity Summit is a conference held every 18 months, where leaders of the world's major electricity industry associations including FEPC, the Edison Electric Institute (EEI) ^(*1) of the USA and the Union of the Electricity Industry (EURELECTRIC) ^(*2) of Europe meet to exchange views from an international standpoint on an array of issues, including the current status of the electricity business of each region and challenges common to the electric power industries. This year's summit marked the thirteenth.

In the meeting, the leaders frankly exchanged views on the future of the electricity amid a rapidly changing business environment, fuel choices considering the global trend, energy efficiency, and climate strategies. In the closing statement issued at the end of the meeting, the leaders agreed to contribute to sustainable economic growth by providing affordable, highly reliable and accessible electricity to customers.

*1 Edison Electric Institute (EEI):

Edison Electric Institute is the association of US Shareholder-Owned Electric Companies organized in 1933, located in Washington DC. EEI currently has approximately 70 member US companies (100 companies including subsidiaries) and more than 200 industry suppliers and related organizations as Associate Members and 80 international electric companies as Affiliate Members.

*2 Union of the Electricity Industry (EURELECTRIC):

Established in December 1999, EURELECTRIC is headquartered in Brussels, Belgium. It has 35 full members (national electricity association or leading electricity enterprises of 27 EU Member States and other European countries), and 17 European affiliate members.

Exhibit 1: Closing Statement for 2013 International Electricity Summit in San Diego (original)



2013 Summit Closing Statement 9 April 2013

The 2013 International Electricity Summit in San Diego on 8-9 April 2013 brought together electric industry leaders from the world's major electric industry associations, including the Edison Electric Institute of the United States, EURELECTRIC, the Federation of Electric Power Companies of Japan, the Canadian Electricity Association, the Energy Supply Association of Australia, and CIER (representing South and Central America and the Caribbean).

The industry leaders' discussion focused on four themes:

- 1. The Future of Electricity
- 2. Fuel Choices: Maintaining all the Options
- 3. Energy Efficiency, the Role of Distributed Generation, Smart Grid and Electric Vehicles
- 4. Climate Strategies

The Future of Electricity

The electricity industry worldwide is undergoing rapid change. Conventional generation is playing an increasingly dynamic role alongside decentralized models of power production as a result of significant growth in Renewable Electricity Standards (RES), distributed generation and smart grid technologies. A level playing field for all new investment in low-carbon technologies should be encouraged.

The management of the business across the full value chain is affected by the shifting focus toward smarter and more active distribution system management and retail

services, and the development of intermittent renewable sources, necessitating increased flexibility in the operation of conventional generation assets to ensure backup and balancing, as well as the efficient operation of the distribution network in order to both enable and respond effectively to customer behavior.

Flexibility, storage and demand-side response are thus the buzz words of the future, with fast moving technological developments and new "business-to-business" and "business-to-customer" models challenging the industry's innovative capacities and determining its competitive edge.

Customers will, in the future, play an ever greater role in determining the success or failure of new products and services on offer. To facilitate a more active role of the customer it is imperative that clear regulatory and operational rules are in place. The industry needs to become more proactive in working with policymakers and regulators to develop appropriate and balanced regulatory and market arrangements. Such an approach will provide for needed investment in transmission and distribution grids, which are the backbone of the electric system and ensure reliability and economic efficiency.

Fuel Choices

Acknowledging all of the above, and conscious of the 1.3 billion people—one in five globally—still lacking electricity to light their homes, industry leaders meeting in San Diego reiterated their call for ALL generation options to be kept open and exploited, recognizing that there is no single approach for every region.

The leaders discussed the urgent need to have a complete portfolio of coal, gas, oil, nuclear, and renewable generation, coupled with expanded energy efficiency. At the same time, the leaders recognized that short-term political considerations frequently dictate fuel policy outcomes. For many economies nuclear power is a key part of the solution to both energy security and climate change. As such, it should be used provided

its safety is ensured. It also is extremely important to continue the development of hydroelectricity, which will produce energy and facilitate greater utilization of intermittent renewables like wind and solar.

Energy Efficiency, Distributed Generation, Smart Grid and Electric Vehicles

Electricity and high-efficient end-use electric technologies, such as electric cars, heat pumps and efficient industrial applications, will play a growing role in the functioning of societies, thus combating climate change by helping to decarbonize the economy, achieve greater energy efficiency and create economic growth and jobs.

In this regard, the world's leading electricity industry executives urged policymakers to work toward developing, in a timely manner, a clear, stable and cost-effective framework throughout the global economy to stimulate and underpin these needed investments. Industry leaders were cautious, however, to underline that such a framework must be accompanied by a combination of appropriate policies and measures (e.g., technology RD&D, market-based approaches). As a final step to realizing the gains of electrification, the Summit leaders call on all governmental bodies to adopt and implement fair and balanced policies, so that the potential for electricity to deliver on climate policy objectives can be realized.

Regulatory authorities should be encouraged to consider business and regulatory models that provide incentives for utility and customer investment in cost-effective energy-efficiency measures that promote end-user energy savings without imposing mandates on utilities to meet energy efficiency targets, the achievement of which rely on consumer behavior beyond the control of utilities.

While significant reductions have been—and will continue to be—made within the power sector, using electricity as a fuel for plug-in electric vehicles can reduce emissions in other sectors including transportation, off-road vehicles, and manufacturing, further reducing national GHG emissions.

Climate Strategies

Electric utilities are making significant progress in reducing carbon emissions. Despite the difficult financial and economic context that businesses worldwide are operating in, the electricity sector needs sizeable investments to adapt to the climate challenge.

The key to further emissions reductions from the power sector is clear policy signals for the development of low-cost technologies that allow electric utilities to use all generation fuels in the most environmentally sustainable manner. To this end, continued technology research, development, demonstration and deployment (RDD&D) programs are crucial, particularly in the areas of carbon capture and storage, new generation technologies, and electricity storage.

In October 2008, the International Electricity Partnership (IEP) was formed to create a roadmap to foster the development and deployment of technologies to help realize a global, lower carbon future. The Summit leaders will continue the IEP's involvement in the international climate change debate, focusing on efforts to harmonize the scientific and political timelines with technical reality.

Future GHG emissions from the power sector will continue to decline as the fleet is transitioned to lower and zero-emitting technologies. Electric utilities will continue their efforts to transition to a cleaner, more modern electric generating fleet, and will work with governments to deploy low-carbon technologies in developing countries, help improve energy efficiency globally, and electrify the transportation sector.

Conclusion

Electricity will play an indispensable role in the transition to a globally sustainable energy system. The industry leaders want to engage with policymakers on the path forward, and will continue to work together to reaffirm their common goal: to provide

sustainable, reliable, affordable and accessible electricity to further economic growth. The IEP will continue to advance the global efforts of the power industry.