

Taiwan's Energy Policy Challenges Just before the Regime Change (2)

Ken Koyama, PhD
Chief Economist, Managing Director
The Institute of Energy Economics, Japan

On April 28, an international conference titled “Power 2050: The Future of Electricity Summit Forum” took place in Taipei. State-run Taiwan Power Company, known as Taipower, hosted the conference to mark its 70th anniversary, inviting Japanese, Korean and other foreign power company leaders as well as electricity and energy experts from around the world to vividly discuss the outlook and challenges of the electricity industry and Taipower with the company’s executives including Chairman Hwang Jungchiou and President Chu Wenchen. I took part in the conference, visiting Taiwan for the second straight week after attending a Japan-Taiwan joint energy seminar in the previous week. As well as the seminar, the Taipower conference, though focusing on electricity problems, provided me with a precious opportunity to think about Taiwanese energy challenges just before the new government’s inauguration on May 20. In the following, I would like to summarize key points I felt through the conference and my talks with Taiwanese experts before and after the conference.

As indicated by the title of “Power 2050,” the most important issue for discussions at the conference was clearly the importance of electricity, the electricity industry and efforts to address electricity challenges from a long-term perspective. In this respect, long-term strategic challenges such as climate change measures and lower-carbon electricity were positioned as the focus of discussions, although current energy market problems including the plunge and wild fluctuations of crude oil prices were matters of concern to participants in the conference. In this respect, it was interesting that many presentations, and relevant enthusiastic questions and answers were made on technological initiatives to promote lower-carbon technologies and develop the electricity industry.

In respect to advanced electricity-related technologies, the conference participants argued that various new technologies could be introduced and diffused for the whole of the electricity supply chain from electricity generation to transmission, distribution and consumption. From the viewpoint of lower-carbon electricity and the electricity industry’s development, their arguments indicated expectations on the potential of renewable energy power generation and information technology. As noted in my previous special bulletin, Taiwan has built a plan to expand renewable energy power generation from 4.3 gigawatts in 2015 to 17.3 gigawatts by 2030. The target could be raised depending on future discussions. In Taiwan as an island country like Japan, power generation and distribution technologies to expand renewable energy power generation, reduce costs and respond to intermittent electricity supply will play great roles. In this respect, the conference participants expressed high expectations on contributions by the great development of information

technology for which Taiwan has international competitiveness. This is because information technology is expected to play great roles in improving electricity suppliers' interface with customers further, in rationalizing and conserving electricity consumption and in improving the electricity supply and demand structure for the development of the electricity industry. This is a viewpoint that is indispensable for the further long-term development of Taipower observing its 70th anniversary.

While conference participants discussed electricity problems for the long-term future and expectations on technologies' roles in solving them as noted above, serious discussions came on how best to cope with Taiwan's present electricity problems as well.

The first problem involves nuclear power generation. The existing first to third nuclear power stations are scheduled to terminate operation around 2020. In July 2015, Taiwan officially froze the construction of the fourth one that was almost completed. As Taiwan sees the birth of the new administration pursuing a country independent from nuclear energy, discussions will deepen on nuclear and other energy policies in the future. What energy mix will Taiwan pursue from the viewpoints of energy security, climate change measures and electricity cost cuts? Taiwan and Taipower now face a great challenge. The conference participants indicated strong interest in the realities and experiences of Japan that took four years after the Fukushima nuclear plant accident to map out a new energy mix for 2030 in which nuclear energy is set to account for 20-22% of electricity generation. I felt that Taiwan is seriously considering what lessons it should learn from Japanese experiences regarding discussions on its future energy policy and mix.

Another present Taiwanese issue attracting interest at the conference is the deregulation of the electricity market. Taipower, as a state-run vertically integrated electricity monopoly, had strong interest in the electricity deregulation that the new administration is expected to tackle more ardently than the previous one. At present, any specific direction for the deregulation is still uncertain. Details and the schedule of the deregulation are left unclarified. While referring to earlier foreign electricity deregulation cases, Taiwan may consider how to promote rationalization and competition under the state-run power company to facilitate competition in the power generation and retail sectors.

In this sense, the participants in the conference indicated very strong interest in Japan that fully deregulated electricity retail in April this year and plans to legally unbundle the electricity transmission and distribution sector. This is because Taiwan can refer to the Japanese case in considering what strategies new electricity market participants are planning to get customers and how the existing electricity company will respond to the deregulation. The conference participants also indicated strong interest in how Japan will realize a desirable energy mix for 2030 while proceeding with the electricity deregulation and what policy approach Japan will take in this respect. The questions represent a key challenge that Taiwan and Taipower face.

Electricity will play even greater roles in the simultaneous achievement of the so-called 3Es -- energy security, economic efficiency and environmental conservation -- under relevant energy policies and in the development of the national economy. Electricity industry is required to

contribute to national development while securing its survival or development. Electricity policies and power industry strategies will remain at the center of energy problems.

Contact: report@tky.ieej.or.jp

The back issues are available at the following URL

http://eneken.ieej.or.jp/en/special_bulletin.html