

## **Participating in 50th JAIF Annual Conference**

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

On April 11 and 12, the Japan Atomic Industrial Forum held its 50th annual conference at the Tokyo International Forum. Under the keynote theme “Bridging the Past and Present toward the Future,” a large number of Japanese and foreign nuclear energy policy and industry stakeholders at the conference vigorously discussed roles, expectations and challenges for nuclear energy in the past, present and future in three sessions and a special session for young people following an opening session in the morning of the first day.

In the opening session, JAIF Chairman Takashi Imai and Parliamentary Vice Economy, Trade and Industry Minister Toshinao Nakagawa delivered keynote addresses, followed by speeches by Yukiya Amano, director general of the International Atomic Energy Agency, Satoru Katsuno, chairman of the Federation of Electric Power Companies of Japan, Jitsuro Terashima, chairman of the Japan Research Institute, and Daniel Lipman, vice president of the U.S. Nuclear Energy Institute. From their respective viewpoints, these speakers pointed to roles and expectations for nuclear power generation regarding the so-called 3E’s -- energy security, environmental protection measures including climate change responses and economic efficiency (reducing power costs) -- in the past and future. They also gave opinions on the significance of thorough safety enhancement based on reflections and lessons learned from the Fukushima accident.

In Session 2 titled “State of Fukushima and Efforts toward Restoration,” speeches, questions and answers were given on the present situation of the Fukushima Daiichi Nuclear Power Station, initiatives and future challenges for decommissioning its reactors and handling water pollution, the post-accident Fukushima restoration situation, and various constraints and challenges seen from social, economic and cultural viewpoints. In Session 3 titled “Global Trends and Expectations of Japan” on the second day, reports were presented on the global nuclear power generation trend and outlook and the up-to-date nuclear power generation situations in India, the Czech Republic, Mexico and South Africa. Vigorous discussions were made on the roles Japan could play based on reflections and lessons from the Fukushima accident. Including the special session for young people, the JAIF annual conference provided discussions on the future of nuclear energy from a comprehensive range of viewpoints.

I attended Session 1 on the first day as panelist along with former U.S. Deputy Energy Secretary Daniel Poneman (chief executive officer of Centrus Energy Corp. at present) and Kunihiko Miyake, research director of the Canon Institute for Global Studies. The session was titled “Roles of

Nuclear Energy -- Past, Present and Future,” linked directly to the keynote theme of the annual conference. Poneman and Miyake made interesting presentations from which I learned much.

Poneman’s presentation dealt with the history, present situation and future outlook of Japan-U.S. cooperation in nuclear power generation. An impressive point of the presentation was that nuclear power generation cooperation between the key postwar allies has not necessarily been smooth but has included twists and turns, occasionally facing difficulties that the Japanese and U.S. governments and industries have jointly striven to overcome. Since the Fukushima accident, the Japanese and U.S. market environments for nuclear power generation have been commonly severe, though with different problems. The new U.S. administration’s nuclear policy is still uncertain. The two countries also have various nuclear energy problems, including a business crisis at Japan’s Toshiba Corp. and its U.S. affiliate Westinghouse Corp.’s filing for bankruptcy protection. The presentation implied the significance of continuous Japan-U.S. cooperation in resolving problems for nuclear power generation in the two countries and the world.

Miyake presented views from a panoramic or macro perspective regarding the international situation, rather than any perspective specialized in nuclear energy. Its summary follows: The universalism that had dominated the international situation from the end of World War II through the 1990s has been replaced by particularism or unilateralism, under which exclusionary nationalism rather than international cooperation is emphasized. Developments symbolizing such trend include the birth of the Trump administration and the United Kingdom’s decision to exit from the European Union. The trend should be taken into account when future developments are analyzed. In such world, survival is extremely important for individual countries and parties. Significant in this respect is how to secure stable energy supply. Important for securing stable energy supply are the diversification of energy supply sources and the stable supply of domestically produced energy. From this viewpoint, the significance of nuclear energy should be reconsidered.

I made a presentation on nuclear energy’s roles based on three points -- (1) the gravity center of the global energy market will shift to Asia, (2) Japan is expected to take a key position and play key roles in Asia, and (3) the 3E’s challenges are important not only for Japan but also for Asia as a whole. On the third point, particularly, I clarified nuclear energy’s possible contribution to the simultaneous achievement of the 3E’s targets in Japan and Asia by providing quantitative differences of 3E’s indicators such as the energy self-sufficiency rate, carbon dioxide emission reduction and electricity costs in multiple nuclear power generation scenarios, based on an analysis in “Asia/World Energy Outlook 2016” by the Institute of Energy Economics, Japan. In order for nuclear energy to play the expected role, however, every country will have to thoroughly enhance nuclear safety, establish transparent, independent nuclear safety regulations and develop and fortify overall nuclear safety culture to secure the social acceptability of nuclear energy. Every country will also have to make serious relevant efforts and promote international cooperation in securing the 3S’s (safety, security and safeguard) covering not only nuclear safety but also nuclear security and nuclear non-proliferation.

The presentations, questions and answers in the session indicated that the Japanese and

foreign market environments for nuclear energy contain various complexities and uncertainties. Nuclear and all other energy options have challenges to overcome. We must acknowledge that there is no perfect energy source. Based on the acknowledgement, we must do our best to overcome problems and challenges peculiar to various energy options, effectively utilize energy sources and develop the best energy mix. Through the conference, I felt anew that although there are many difficult challenges, countries in the world will have to concentrate all wisdom to overcome these challenges.

Contact: [report@tky.ieej.or.jp](mailto:report@tky.ieej.or.jp)

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