

GLOBAL2011 Tsuruga Session

- Global future energy -

Briefing Paper

December 16, 2011

The GLOBAL2011 Tsuruga Session took place on December 16, 2011 at Plaza Bansho, Tsuruga city with the 187 participants. The conference was hosted by Atomic Energy Society of Japan (AESJ) and co-hosted by Japan Atomic Energy Agency (JAEA).

Presentations were given by the guest speakers from U. S., France and Korea in the wake of the Fukushima Daiichi accident.

The three experts from the U. S., France and Korea made a presentation to introduce future energy options of each country's "optimum energy mix" considering global stable energy supply as well as tackling global warming after the accident at Fukushima Daiichi nuclear plant. These presentations were followed by remarks of Mr. Kondo, Director General of Fast Breeder Reactor Research and Development Center Monju, on the significance and the role of "Monju" in terms of energy resources security and the utilization possibility through the international collaboration. After the presentations, the guest speakers and the local residents participated in a panel discussion.



U. S. Energy Perspective

Investment in safety-improved next generation nuclear systems.

David Hill, Deputy Laboratory Director for Science and Technology, Idaho National Laboratory (INL)

The U. S. expects that electricity demand grows by 31 % between now and 2035. Even after the Fukushima Daiichi accident, the importance of nuclear energy remains high while seeking importance of renewable energy. The U. S. is committed to continued development of nuclear energy as a secure resource for energy and it continues to invest in Generation IV nuclear energy systems which represent improvements in waste intensity, safety and economy.

Nuclear Energy in France, Status and Perspectives

It is important to develop nuclear energy with lessons learned from the Fukushima Daiichi accident.

Jacques Bouchard, Special Advisor to the Chairman and CEO, Commissariat à l'énergie atomique et aux énergies alternatives (CEA)

Soon after the Fukushima Daiichi accident, the stress tests were performed in all of the nuclear power plants in France where largely relying on nuclear energy. In Europe, while Germany and Italy have decided to step out of nuclear power, UK, Finland and Eastern Europe have chosen to continue building new nuclear power plants. France also sees heated debate over nuclear energy but many people are sensitive to the influence of electricity cost, employment and climate change. To introduce the forth generation reactor is essential in France to enhance the safety even though the construction of the safety-improved third generation reactors is in progress. Monju will play the significant role with operation experience. It is important to develop nuclear energy with lessons from the Fukushima Daiichi accident through continuous international collaboration between France and Japan.



Korean Perspective on Nuclear Energy after Fukushima Accident

Global contribution by Japan's sustainable FBR development.

Dohee Hahn, Vice President, Korean Atomic Energy Research Institute (KAERI)

In Korea which has a narrow land, nuclear energy is a major source of electricity as a clean, economical and technology-driven energy with sustainability since there are limited fossil fuels such as crude oil and natural gas and limited potential for renewable energy in the near future. Korea took immediate actions to examine and improve safety of domestic nuclear power plants after the Fukushima accident. A special safety inspection was conducted on the nuclear power plants in operation and a prompt action was made for information sharing with the media and public. While the importance of nuclear energy is acknowledged, the challenges including treatment of spent fuel and lifetime extension of nuclear power plant are still in the case. In most cases, however, it is considered that utilization of nuclear energy will be essential until development of competitive alternative energy sources. Korea advances the development of SFR for efficient utilization of resources and reduction of radioactive waste. The development of nuclear energy by Japan, the world leader in this field, will make a contribution to the world.



Panel Discussion joined by the guest speakers and local residents

In the panel discussion, chaired by journalist Takehiro Hashizume, the three guest speakers, two local panelists: Kazuaki Fujimori, President of Young Entrepreneurs Group, Tsuruga Chamber of Commerce and Industry and Machiko Maeda, Executive Board Member of the Tsuruga United Women's Association participated in the panel discussion. The discussion was developed with opinions from the panelists.

“Telling the truth, showing a faithful attitude and listening to different views are important to obtain public understanding.”

While changing the national consciousness after the Fukushima Daiichi accident, various opinions were expressed under the theme of “What is important for symbiosis with nuclear energy?” One of the guest speakers addressed, “Telling the truth, showing a faithful attitude and listening to different views are important to obtain public understanding”.

“All workers in nuclear power plants need to be aware of providing safety and security for local residents.”



M. Maeda

Various opinions were expressed from the panelists: “I believe that Japan is the world-leading country in the field of nuclear technology. I heard that Japan intends to export the technology to developing countries even after the March eleventh earthquake, but I expect Japan to lead the world by applying lessons learned from the accident and helping to prevent global warming.”, “The results should be presented after calm discussion looking ahead to the future among nuclear experts on utilization of nuclear energy.”, “I think nuclear energy will be necessary for the time being in the situation that renewable energy cannot be substituted as basic electricity. All workers in nuclear power plants including operation and management sections need to be aware of providing safety and security for local residents.”



K. Fujimori



T. Hashizume

On the topic of the high-level waste treatment, one of the speakers mentioned that reducing the amount of toxicity of radiation waste using fast reactor cycle is essential.

Mr. Hashizume summarized the discussion by noting that it has been half a century since Fukui prefecture invited nuclear power plants. We were able to get broader perspective through this session by understanding international situations at the time when we need to see the future in a calm manner in the light of the Fukushima Daiichi accident.



S. Kondo

The GLOBAL series of international conferences covers future nuclear energy systems with emphasis on their associated advanced fuel cycles. The first GLOBAL conference was held in Seattle in 1993. The conferences are regularly held and the 10th conference “GLOBAL2011” was held at Makuhari Messe, Japan on December 11 to 15, 2011 with more than 15 countries participation. On December 16, GLOBAL2011 Tsuruga Session was held at Plaza Bansho, Tsuruga city. The next GLOBAL conference is scheduled to be held in Salt Lake City in 2013.



D. Hill

J. Bouchard

D. Hahn