

The 22nd N-20 Joint Statement

The group N-20, which consists of nuclear industries, research experts, and representatives of governments from Japan and France, held its 22nd meeting in Tokyo from November 9th to 10th, 2015. During the two-day meeting, the experts from both countries exchanged information and opinions on the following topics:

1. Light water reactors issues
2. Human resources & Public outreach
3. Nuclear Energy Policy
4. Back-end of the fuel cycle : spent fuel management
5. Final waste management and repository
6. Fast Neutron Reactors
7. Fukushima

1. Light water reactors issues

Japan presented the status of the restart of NPPs, with explanations on NRA's review status on conformity to the New Regulatory Requirements. The restart procedures of the Sendai 1 and 2 NPPs were detailed. Efforts will continue to be made for early restarts of Takahama-3 & -4 and Ikata-3 as well as other plants.

France presented its strategy about life extension of plant operations over 40 years by introducing its long-term operation programme "Grand Carenage", with integration of post-Fukushima learnings. It also presented its D&D industrial operations, both in France and in foreign countries, insisting on its expertise on project management to meet the budget and time constraints. Regarding R&D on D&D, 6 main axis were highlighted: overall facility characterization, waste characterization, work in hostile environment, structure and soil decontamination, liquid and solid waste treatment, and methods and IT tools emphasizing the importance to help decrease costs, schedules and amounts of waste, and to improve the safety of workshops.

2. Human resources & Public outreach

Both parties introduced their strategies to reach out to young generation in order to ensure that the best possible workforce in the nuclear industry. Japan proposed possible cooperation to attract young generation by introducing dream-inspiring advanced projects and to respond to globalization by standardizing curriculum internationally.

France shared its best practices in order to retain and motivate people working in the nuclear industry. EDF proposed the possibility of occasionally receive Japanese students with sufficient knowledge of french language. On the public acceptance side, the situation in France was introduced. After an initial drop of support for nuclear energy after the Fukushima Daiichi accident, studies showed that the support level is now back to the situation before the accident.

3. Nuclear Energy Policy

Japan introduced its new energy policy, with an objective of 20 to 22% of nuclear power generation in the energy mix in 2030. The situation on start-up of the NPPs in Japan was detailed. Efforts to restart NPPs and to enhance the safety by Japanese nuclear operators were explained. For the future, replacement, in addition to operation beyond the current limit of 40 years, is essential to achieve and maintain nuclear

power's share in the energy best mix.

In regard to the Energy Transition for Green Growth Law adopted in July 2015, France detailed the process leading to the implementation, its objectives, and the way it will be implemented. In the framework of this law, the role of nuclear energy was confirmed in the future energy mix.

4. Back-end of the fuel cycle: spent fuel management

Japan updated its current situation of nuclear fuel cycle with an emphasis on spent fuel management. Action Plan for resolving the challenge of how to manage and dispose of spent fuels was decided in October 2015. Japan will strengthen its effort for expanding dry-cask storage capacity of spent fuels based on this plan. In case of the status of Rokkasho Reprocessing Plant, the current target to obtain an operating license by March 2016 needs to be revised again even after nearly two years since its application to NRA for safety evaluation.

France recalled the basis of the country's fuel cycle policy, stressing the principle of sustainable plutonium management. Industrial performance in the field of back-end of the fuel cycle in La Hague and Melox plant were explained. The importance of maintenance and training was also highlighted. The international presence of AREVA was introduced, and a focus was made on the Mox Fuel Fabrication Facility (MFFF) project and on its support to NDA for the Sellafield site.

5. Final waste management and repository

Japan presented its recent reconsideration of HLW final disposal policy in which the Basic Policy was revised as a cabinet decision under the Final Disposal Act in May 2015. The newly-added process highlights the selection of scientifically preferable areas and proposal of accepting the survey to multiple municipalities from the Government. France recalled the main points about its policy concerning the final waste management. ANDRA introduced the CIGEO project, and presented its detailed technical features and schedule. The reversibility was highlighted and its many aspects were presented: technical, public acceptance, management, policy, etc. The situation on the IL-LL wastes was also introduced, with an approach focusing on the sites where ANDRA is already present.

6. Fast Neutron Reactors

France introduced the ASTRID program, its main innovations concerning safety, and its schedule. The differences between LWR fuel cycle and the FNR cycle were explained, the latter being much more simple. It also presented a possible scenario for the introduction of FNR in France. The close cooperation with Japan on ASTRID program was highlighted.

Japan updated the status of its SFR development. In the case of Monju, safety measures for the organization, the management, the maintenance, etc. are required for clearance of the NRA order. Meanwhile, Joyo has recently completed the restoration work and will file for NRA's safety review in the near future.

7. Fukushima

Japan presented the current status of Fukushima Daiichi NPS, striving to make necessary efforts for decommissioning and contaminated water control. It emphasized the importance and its appreciation of international cooperation contributing to its current smooth decommissioning work progress. With supports from home and abroad, the decommission work will move forward in the years to come. The current and future plans for "Collaborative Laboratories for Advanced Decommissioning Science (CLADS)", a remote-controlled equipment development facility and a radioactive material analysis & research facility were detailed.

In regards to off-site activities, decontamination status, return of population and economic revitalization in Fukushima were updated. Numerous Japan-France cooperation and joint projects on environmental recovery researches were introduced.