

## Summary on Fukushima Related Activities in Japan

*Monday 27 October 2014 12:00 (30 minutes)*

This keynote presentation presents an overview and update on the new regulatory framework in Japan including merger of the former TSO, JNES (Japan Nuclear Energy Safety Organization) with the regulatory body, the NRA (Nuclear Regulation Authority), and on the Fukushima Daiichi-related activities with a focus on on-site stabilization such as fuel removal from the spent fuel pools and management of large amount of radioactive water toward safe and prompt decommissioning.

The NRA was established as an independent and integrated commission body in September 2012 and urgently started developing the new regulatory requirements for nuclear power plants which came into force in July 2013. So far, a total of 20 units, 12 PWRs and 8 BWRs, have applied for conformance review to the new requirements for restart.

On March 1, 2014, the former JNES was merged with NRA to enhance the technical competence and expertise of NRA. On that occasion, a new department, Regulatory Standard and Research Department was created in NRA as a so-called “internal TSO” for developing the technical standards and guides and conducting safety research. In parallel, cooperation with the Nuclear Safety Research Center in JAEA (Japan Atomic Energy Agency) and NIRS (National Institute for Radiological Sciences) which are the external TSOs has been strengthened.

Regarding Fukushima Daiichi, Tokyo Electric Power Company (TEPCO) has conducting various activities according to the Mid-and-Long-Term Roadmap towards Decommissioning under the supervision of the Council for Decommissioning of TEPCO’s Fukushima Daiichi Nuclear Power Station of the government.

TEPCO has already started fuel removal from the spent fuel pool (SFP) at unit 4, more than 75% of which has been completed. According to the roadmap, fuel debris removal would start in the first half of the fiscal year 2020 at earliest. It would take 30 to 40 years to complete the whole process.

Large amount of radioactive water being created daily is a difficult issue that needs long-term efforts. Highly radioactive water remaining in the seawater pipe trenches in the seaside area is believed to be the highest risk contributor at the moment. In order to drain the radioactive water in the trenches, TEPCO is attempting to plug the flow paths between the trenches and turbine buildings by applying the ice plugging technique that will also be applied for construction of the so-called “frozen soil wall” surrounding the units 1 to 4.

### Country or International Organisation

Japan

**Author:** Mr HIRANO, Masashi (Nuclear Regulation Authority (NRA))

**Presenter:** Mr HIRANO, Masashi (Nuclear Regulation Authority (NRA))

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