



IAEA Team Completes Review of Japan's Plans to Decommission Fukushima Daiichi

4 December 2013

Tokyo, Japan -- An IAEA expert team today completed a review of Japan's efforts to plan and implement the decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station. The International Peer Review of *Japan's Mid-and-Long-Term Roadmap towards the Decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station Units 1-4* conducted its visit from 25 November to 4 December 2013.

The 19-member team praised Japan for adopting a more proactive approach towards addressing the many complex challenges posed by the nuclear accident. Relevant authorities have evolved their strategies over time to develop sustainable solutions.

"Japan has established a good foundation to improve its strategy and to allocate the necessary resources to conduct the safe decommissioning of Fukushima Daiichi," said team leader Juan Carlos Lentijo, IAEA Director of Nuclear Fuel Cycle and Waste Technology. "The situation, however, remains very complex, and there will continue to be very challenging issues that must be resolved to ensure the plant's long-term stability."

As requested by the Government of Japan, the team examined a wide variety of issues related to decommissioning the power plant, focusing particularly on Tokyo Electric Power Company's (TEPCO's) removal of fuel assemblies from Reactor Unit 4's Spent Fuel Pool and on contaminated water management issues. In addition, the review mission considered Japan's efforts to monitor radiation conditions in the marine environment, including seawater, sediments, and biota.

The IAEA team held extensive discussions with officials from the Ministry of Economy, Trade and Industry (METI) and TEPCO. The team also met with officials of the Nuclear Regulation Authority (NRA) to discuss marine monitoring. The team visited the nuclear accident site to gain first-hand information about conditions at the power plant and progress toward decommissioning the facility.

In its Preliminary Summary Report delivered to Japanese authorities today, the team acknowledged a number of accomplishments in preparing Fukushima Daiichi for decommissioning. For example, the team highlighted these areas:

- TEPCO has successfully begun to remove fuel assemblies from the Spent Fuel Pool of Reactor Unit 4, a task that is essential to ensuring the long-term stability of the accident site;
- While many challenges remain, the Government of Japan and TEPCO have developed a comprehensive set of well-defined measures to manage Fukushima Daiichi's extensive contaminated water issues;
- The NRA and other Japanese institutions have established a comprehensive monitoring programme to track radiation levels in the environment around the accident site, including the marine environment; and
- TEPCO and METI have pressed forward with developing innovative tools to address key technical problems. For example, the development of remote technology to identify the location of reactor leaks has seen initial success and should serve as a significant step towards repairing the containment vessels.

In addition, the IAEA team provided advice in areas where current practices could be improved. For example:

- The Government of Japan and TEPCO are encouraged to continue their efforts to address water issues at the site, including preventing groundwater from entering the reactor buildings and monitoring the effectiveness of all such measures;
- Regarding the growing amounts of contaminated water at the site, TEPCO should bolster its efforts to treat this water and then examine all options for its further management, including the possibility of resuming controlled discharges in compliance with authorized limits. To pursue this option, TEPCO should prepare appropriate safety and environmental impact assessments and submit them for regulatory review;
- Japan needs to continue its transition to long-term stability of the site and to develop waste management solutions. Waste facilities should be planned to support the decommissioning process for its lifetime, and a laboratory should be established for waste characterization; and
- The NRA should enhance the seawater monitoring programme by coordinating inter-laboratory comparisons to ensure good harmonization of the environmental data.

"We are still at the beginning of a lengthy process," Lentijo said, "but Japan is gaining a better understanding of the situation, an understanding that is critical to address the challenges."

The IAEA team plans to deliver its final report to Japan by the end of January.

Japan's request for the mission came in the context of the *IAEA Action Plan on Nuclear Safety*, endorsed by all IAEA Member States in September 2011. The *Action Plan* defines a programme of work to strengthen the global nuclear safety framework, and it encourages the use of peer review missions to take full advantage of worldwide experience.