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

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*Tokyo, Japan* -- An IAEA expert team today completed a third 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* took place from 9 to 17 February 2015.

The 15-member team praised Japan for taking steps to implement planned measures to reduce radiological risks from the site and progress towards the safe decommissioning of the accident plant.

"Japan has made significant progress since our previous missions. The situation on the site has improved - progressive clean-up has led to reduced radiation dose levels in many parts of the site," said team leader Juan Carlos Lentijo, IAEA Director of Nuclear Fuel Cycle and Waste Technology.

"The situation, however, remains very complex, with the increasing amount of contaminated water posing a short-term challenge that must be resolved in a sustainable manner. The need to remove highly radioactive spent fuel, including damaged fuel and fuel debris, from the reactors that suffered meltdowns poses a huge long-term challenge."

As requested by the Government of Japan, the team examined a wide variety of issues related to decommissioning the tsunami-stricken power plant, focusing particularly on the safety and technological aspects of decommissioning, radioactive waste management, control of underground water and accumulation of contaminated water at the site and the planning and the implementation of pre-decommissioning and decommissioning activities, including removal of spent and damaged fuel. The mission also reviewed progress achieved since two earlier missions, conducted in April and November to December 2013.

The IAEA team held extensive discussions with officials from the Ministry of Economy, Trade and Industry (METI) and TEPCO, the operator of the plant that is now managing the decommissioning work, as well as other authorities. The team visited the Fukushima Daiichi site to obtain first-hand information about the conditions and progress toward decommissioning. In its *Preliminary Summary Report* delivered to Japanese authorities today, the team acknowledged a number of accomplishments in preparing Fukushima Daiichi for decommissioning, including :

- The creation in 2014 of a new branch of TEPCO, called Fukushima Daiichi Decontamination and Decommissioning Engineering Company, as the only responsible organisation for the safe implementation of the on-site radioactive waste management and decommissioning activities, is a good step forward to clarify responsibilities.
- The establishment of the Nuclear Damage Compensation and Decommissioning Facilitation Corporation as a national authority to develop a guiding strategy for the decommissioning demonstrates the proactive attitude of the Government of Japan and TEPCO towards addressing the many difficulties at the site.
- The situation on-site has been improved since the last IAEA mission in 2013. Several important tasks were accomplished, including:
  - the completion of the removal of spent fuel from Unit 4;
  - the improvement and expansion of systems to clean contaminated water;
  - $\circ$  the installation of new, improved tanks to store contaminated water;
  - $\circ$  ~ the operation of an underground water by pass system, and
  - the clean-up of the site, reducing radiological dose to the workforce.

The IAEA team encouraged Japan to continue implementing and enhancing its strategy to ensure the safe decommissioning of the plant and the management of the radioactive waste. Challenging issues making the situation very complex include:

- persistent underground water ingress to main buildings and the accumulation of contaminated water on-site;
- the long-term management of radioactive waste, and
- issues related to the removal of spent fuel, damaged fuel and fuel debris removal

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

- All stakeholders should continue considering the future configuration of the site, which is an important factor for the long-term management of the very large amounts of radioactive waste present on the site and expected to be generated during the decommissioning process.
- TEPCO is encouraged to develop an integrated plan for Decommissioning and Radioactive Waste Management at Fukushima Daiichi, taking into account how the different stages in a waste management long-term strategy affect each other.
- The IAEA team considered the current practice of storing contaminated water a temporary measure and highlighted the need for a more sustainable solution. The team reiterated advice it provided on this topic during the last mission.

"The path ahead is long, complex and challenging," Lentijo said. "Japan is progressing stepby-step and plans are taking shape, which is a welcome development. It is important to maintain safety as the highest priority during all steps of the decommissioning of the site."

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

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.

Additional Resources, including the Preliminary Summary Report, are available on the IAEA website – www.iaea.org

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