

ESTABLISHING NATIONAL POLICIES AND STRATEGIES TO ENABLE AND ENHANCE DECOMMISSIONING

Monday, 23 May 2016 16:50 (20 minutes)

On March 11, 2011, the Fukushima Daiichi Nuclear Power Station (NPS) suffered a severe accident brought about by the tsunami caused by the Great East Japan Earthquake. The decommissioning of the Fukushima Daiichi NPS is a globally unprecedented challenge that involves a lot of difficulties. For this task to be implemented smoothly, it is not only essential to advance potential technologies that incorporate knowledge gathered from around the world.

1) Overview of Decommissioning Strategy

The Government of Japan made “Mid-and-Long Term Roadmap towards the Decommissioning” and has updated it in 2013 and 2015. On the roadmap, there is 3 phases. Phase1 has completed in November 2013, with the start of removal of spent fuels from Unit4. We are now in the beginning of Phase2, which will be completed with the preparation for removal of fuel debris, which is planned on the end of 2021. In Phase3, actual decommissioning activities will be carried out in 30-40 years, which is likely very long and challenging period.

2) Main Progress on Decommissioning Work

Removal of fuel from the spent fuel pool in Unit 4 was completed in December 2014, and the Unit is being maintained in a stable condition. As for Unit 3, large-size rubble has been removed out of the upper section of the reactor building. Presently, removal of roughly 20 tons of large-size rubble out of the spent fuel pool is underway by remote control. Cooling is continuing stably in all of the Units.

3) Main Progress on contaminated Water Management

For management of contaminated water, the Government of Japan defined comprehensive countermeasures to manage contaminated water, based upon 3 major principles, (1) “Removing” the contamination source, (2) “Isolating” groundwater from the contamination source and (3) “Preventing leakage” of contaminated water. These countermeasures have been progressing according to the structured plan defined in the countermeasure, such as groundwater by-pass system, sub-drain system, impermeable walls with a soil freezing method, seaside impermeable walls, etc.

4) Cooperation with International Communities

In order to complete this extremely difficult mission and to contribute to the global nuclear community, we are committed to disclose or share our new findings in our operations to the world. From this context, we cooperate closely with the IAEA and have requested peer-review mission in 2013 and 2015. Furthermore, on April 2016, we hold “The 1st International Forum on the Decommissioning of the Fukushima Daiichi NPS” at Iwaki-city, Fukushima.

Country or International Organization

Japan

Type “YES” to confirm submission of required
 Forms A and B via the official channels

Yes

Primary author: Mr HIRAI, Hirohide (Ministry of Economy, Trade and Industry (METI))

Presenter: Mr HIRAI, Hirohide (Ministry of Economy, Trade and Industry (METI))

Session Classification: Session 1-2

Track Classification: National policies and strategies to enable and enhance decommissioning and environmental remediation