

# Plant Status of Fukushima Daiichi Nuclear Power Station

February 14, 2012  
Tokyo Electric Power Company

<1. Status of the Nuclear Reactor and the Primary containment vessel> (As of February 14 at 11:00)

Unit	Status of Water injection		Bottom temperature of Reactor pressure vessel	Pressure of primary containment vessel	Hydrogen density Of Primary containment vessel
Unit 1	Injecting Fresh water	Core Spray System: Approx. 1.8 m <sup>3</sup> /h	24.5	106.9 kPaabs	0.01 vol%
		Feed Water System: Approx. 4.3 m <sup>3</sup> /h			
Unit 2	Injecting Fresh water	Core Spray System: Approx.9.9 m <sup>3</sup> /h	251.2 *	112 kPaabs	0.08 vol%
		Feed Water System: Approx. 7.6 m <sup>3</sup> /h			
Unit 3	Injecting Fresh water	Core Spray System: Approx. 6.0 m <sup>3</sup> /h	48.8	101.6 kPaabs	/
		Feed Water System: Approx. 3.0 m <sup>3</sup> /h			

\* The soundness of thermocouple is now being checked.

[Unit 2]

- Because the tendency of temperature rise at the bottom of PCV had been accelerated since February 2, the amount of water injection to the reactor was increased and monitoring of tendency of the temperature fluctuation is continuously implemented.
- At 11:12 on February 13, gas sampling of the gas control system of Unit 2 Primary Containment Vessel was conducted. The density of Xenon 135 at the entrance of the system was lower than the detection limit ( $9.9 \times 10^{-2}$  Bq/cm<sup>3</sup>). Since it is lower than 1 Bq/cm<sup>3</sup>, which is the threshold for judging re-criticality, we confirmed the reactor didn't go re-critical.
- From 14:02 to 14:54 on February 13, we conducted a DC resistance test on this device. As a result of this test, we think that it may disconnecting and the device seems broken due to the fact that the DC resistance was higher than ordinary status. The device indicated approx. 342.2 (for the reference value) after the test, and we will finally evaluate the soundness of the device.
- At 17:10 on February 13, gas sampling of the gas control system of Unit 2 Primary Containment Vessel was conducted. The density of Xenon 135 at the entrance of the system was lower than the detection limit ( $1.0 \times 10^{-1}$  Bq/cm<sup>3</sup>). Since it is lower than 1 Bq/cm<sup>3</sup>, which is the threshold for judging re-criticality, we confirmed the reactor didn't go re-critical.

[Unit 4] [Unit 5] [Unit 6]

- No significant incidents have happened.

<2. Status of the Spent Fuel Pool> (As of February 14 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Spent Fuel Pool
<u>Unit 1</u>	Circulating Cooling System	Under operation *	24.0
<u>Unit 2</u>	Circulating Cooling System	Under operation	12.6
<u>Unit 3</u>	Circulating Cooling System	Under operation	24.9
<u>Unit 4</u>	Circulating Cooling System	Under operation	25

\* System secondary air fin cooler: out of service

[Unit 2]

- A desalination equipment has been activated in order to reduce density of salt from the spent fuel pool since 11:50 on January 19.
- From 13:29 to 15:07 on February 13, we injected approx. 2 m<sup>3</sup> of hydrazine (a corrosive) to the spent fuel pool of Unit 2 through the circulating cooling system.

[Unit 3]

- A radioactive material removal equipment has been activated in order to remove radioactive materials from the spent fuel pool since 3:18 pm on January 14.
- From 10:07 am on February 8 to 10:08 am on February 13, we stopped the operation of the secondary cooling tower in order to prevent overcooling of alternative cooling system of spent fuel pool.

[Unit 6]

- In order to conduct inspection of the strainer changeover valve of the pump of the reactor sea water system of Unit 6 from February 14 to February 17, at 10:02 am on February 14, we stopped cooling of the spent fuel pool by the spent fuel pool cooling system (B) and at 10:06 am on the same day, we stopped the pump of the reactor sea water system (A) (spent fuel pool water temperature during the stoppage: approx. 23 °C). Because the spent fuel pool cooling system isn't in operation during the inspection, we conduct alternating cooling of the reactor and the spent fuel pool by the residual heat removal system. The water temperature in the reactor and the spent fuel pool are expected to rise up to 37 °C and 31 °C respectively during the inspection, but in terms of the temperature raise, we estimate that it is not a problem

<3 . Status of water transfer from the Vertical Shaft of the Trench and the basement floor of the Turbine Building>

Unit	Draining water source	Place transferred	Status
Unit 2	Unit 2 T/B	Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	14:43 on February 10 - Transferring
Unit 3	Unit 3 T/B	Central Radioactive Waste Treatment Facility [Process Main Building]*	9:57 on February 12 - Transferring
Unit 6	Unit 6 T/B	Temporary tanks	10:00 - 16:00 on February 14 - Transferred

\*From February 12, it was stated that place to be transferred of Unit 3 was [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)], however, it is an error. [Process Main Building] is the correct one, it was corrected.

<4 . Status of the Treatment Facility and the Storage Facility> (As of February 14 at 7:00)

Facility	Cesium adsorption apparatus	Secondary Cesium adsorption apparatus (sarry)	Decontamination instruments	water desalinations (reverse osmosis membrane)	water desalinations (evaporative concentration)
Operating status	Under operation	Under operation*	Out of service	Operating intermittently according to the water balance	Operating intermittently according to the water balance

\*Cleaning of filter is implemented accordingly.

- June 8, 2011 ~ Large tanks to store contaminated and decontaminated water are transported and installed.

<5 . Others>

- October 7, 2011 ~ : Continuously implementing water spray using water after purifying accumulated water of Unit 5 and Unit 6 to prevent spontaneous fire of trimmed trees and diffusion of dust.
- January 11, 2012 ~ : As finding accumulated water including radioactive materials (December 18, 2011) at the trench between Process Main Building of Central Radioactive Waste Treatment Facility and Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building), we started inspection of the other trenches in the site. \*Please refer to the other reference materials for the result of daily inspection.

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