Plant Status of Fukushima Daiichi Nuclear Power Station

January 14, 2012
Tokyo Electric Power Company

<Draining Water on Underground Floor of Turbine Building (T/B)>

◇Status of highly concentrated accumulated radioactive water treatment facility and storage tank facility

[Treatment Facility]

・14:36 on January 4, 2012: We restarted the 2nd cesium adsorption facility. At 14:48, we reached the regular flow rate.

・15:22 on January 11, 2012: We actuated Cesium adsorption apparatus. At 15:30 the flow rate reached steady state.

[Storage Facility]

・June 8, 2011～: Large tanks to store and keep treated or contaminated water have been transferred and installed sequentially.

◇Accumulated water in vertical shafts of trenches and at basement level of building

Unit	Draining water source→Place transferred	Status
Unit 2	・Unit 2 T/B→Central Radioactive Waste Treatment Facility [Process Main Building] Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	・Transferred from 21:55 on Jan 12 to 7:58 on Jan 13 ・Transferred from 14:46 on Jan 13 to 8:07 on Jan14
Unit 3	・Unit 3 T/B→Central Radioactive Waste Treatment Facility [Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	・Transferred from 21:59 on Jan 12 to 8:03 on Jan 13 ・Transferred from 14:54 on Jan 13 to 8:11 on Jan14
Unit 6	・Unit 6 T/B→Temporary tanks	・1/12 No transfer

Transferring destination	Water level at transferring destination (as of 7:00 am on January 14)
Process Main Building	O.P.+4,436mm (cumulative elevation of water level:5,653mm), raised 96mm from 7:00 am on January 13
Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)	O.P.+3,041mm (cumulative elevation of water level:3,767mm), raised 198mm from 7:00 am on January 13

◇Water level of the vertical shaft of the trench, T/B and R/B(As of January 14 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on January 13)	O.P.+ 3,183 mm (18mm increase since 7:00 on January 13)	O.P.+ 4,195 mm (3mm decrease since 7:00 on January 13)
Unit 2	O.P.+ 2,950 mm (44mm decrease since 7:00 on January 13)	O.P.+ 2,940 mm (42mm decrease since 7:00 on January 13)	O.P.+ 3,102 mm (38mm decrease since 7:00 on January 13)
Unit 3	O.P.+ 3,123 mm (19mm decrease since 7:00 on January 13)	O.P.+ 3,039 mm (33mm decrease since 7:00 on January 13)	O.P.+ 3,318 mm (36mm decrease since 7:00 on January 13)

Unit 4	—	O.P.+ 3,077 mm (11mm decrease since 7:00 on January 13)	O.P.+ 3,091 mm (17mm decrease since 7:00 on January 13)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Place of sampling	Date of sampling	Time of sampling	Ratio of density limit (times)		
			I-131	Cs-134	Cs-137
Around 30 m north from discharge channel of 5-6U, 1F	January 13	8:50	ND	0.08	0.07
Around 330 m south from discharge channel of 1-4U, 1F	January 13	8:30	ND	0.03	0.02
Around discharge channel of 3-4U, 2F	January 13	8:35	ND	0.02	0.01

・Others: Samples from one point at the coast of Fukushima (sampled on January 13) showed ND for all three major nuclides (Iodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools > (As of January 14 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	12.0 ℃
Unit 2	Circulating Cooling System	Under operation	13.0 ℃
Unit 3	Circulating Cooling System	Under operation	13.5 ℃
Unit 4	Circulating Cooling System	Under operation	21 ℃

【Unit 3】・From 9:35 to 16:46 on Jan 12, we stopped the Unit 3 spent fuel pool alternative cooling system in order to install a radioactive materials removal equipment in the Unit 3 spent fuel pool. (Temperature of the spent fuel pool: at the time of the stoppage: approx. 12.7℃, after restart: 13.1℃)

・A radioactive material removal equipment has been activated in order to remove radioactive materials from the spent fuel pool since 15:18 on Jan 14, 2012

【Unit 4】・From November 29, 2011, we actuated ion exchange apparatus in order to desalinate water in spent fuel pool.

< Water Injection to Pressure Containment Vessels > (As of January 13 at 11:00)

Unit	Status of water injection	Feed-water nozzle Temp.	Reactor pressure vessel Bottom temp.	Pressure of primary containment vessel
Unit 1	Injecting freshwater (Feed Water System: Approx.4.3 m^3/h, Core Spray System: Approx.1.8 m^3/h)	24.9℃	25.3℃	106.0 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.2.8 m^3/h, Core Spray System: Approx.7.0 m^3/h)	47.3℃	48.7℃	109 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.2.0 m^3/h, Core Spray System: Approx.7.1 m^3/h)	45.0℃	54.4℃	101.6 kPaabs

【Unit 2】・11:20 on January 13:As variation in the injected water amount into the reactor was confirmed, we adjusted water injection from the reactor feed water system from approx 2.5 m^3/h to 3.0 m^3/h, and water injection from the core spray system from approx. 7.2 m^3/h to 7.0 m^3/h.

【Unit 3】・11:13 on January 13: After completion of the replacement of water injection pipes, we adjusted water injection from the reactor feed water system from approx. 0.5 m3/h to 2.0 m3/h, and water injection from the core spray system from approx. 8.3 m3/h to 7.0 m3/h.

【Unit 4】【Unit 5】【Unit 6】・No major change

<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
- January 14, 2012-: Around 1:40 pm, we conducted a water passing test of the water transfer line between 1U vertical shaft and Centralized Radiation Waste Treatment Facility. Two water leakage of small amount through pinhole were discovered. We stopped the pump and it was disappeared. According to sampling results, I-131 was less than ND, Cs-134 was $1.8X10^{-1}$(Bq/cm^3), and Cs-137 was $2.0X10^{-1}$(Bq/cm^3). We estimate that it is mixture of sea water and rain water. The pinholes were closed by plastic.

End