Plant Status of Fukushima Daiichi Nuclear Power Station

January 12, 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)] 	From 15:45 on Jan 11 to 8:02 on Jan 12	
Unit 3	· Unit 3T/B Central Radioactive Waste Treatment Facility [Process Main Building, Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)]	on Jan 12	
Unit 6	·Unit 6T/B Temporary tanks	· 1/12 No transfer	

Transferring destination	Water level at transferring destination (as of 7:00 am on January 12)		
Process Main Building	O.P.+4,365mm (cumulative elevation of water level:5,582mm), elevated 391mm from 7:00 am on January 11		
	O.P.+3,115mm (cumulative elevation of water level:3,841mm), elevated 6mm from 7:00 am on January 11		

^{*} From 10:15 to 12:50 on January 12, we transfer water from Unit 3 water storage tank to basement of Unit 2 turbine building.

Water level of the vertical shaft of the trench, T/B and R/B(As of January 12 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm	O.P.+ 3,149 mm	O.P.+ 4,211 mm
	(No change since 7:00 on	(16 mm increase since 7:00 on	(13 mm decrease since 7:00 on
	January 11)	January 11)	January 11)
Unit 2	O.P.+ 2,973 mm	O.P.+ 2,964 mm	O.P.+ 3,126 mm
	(92 mm decrease since 7:00 on	(83 mm decrease since 7:00 on	(81 mm decrease since 7:00 on
	January 11)	January 11)	January 11)

Unit 3	O.P.+ 3,150 mm	O.P.+ 3,072 mm	O.P.+ 3,353 mm
	(14 mm decrease since 7:00 on	(51 mm decrease since 7:00 on	(41 mm decrease since 7:00 on
	January 11)	January 11)	January 11)
Unit 4	-	O.P.+ 3,099 mm (8 mm decrease since 7:00 on January 11)	O.P.+ 3,119 mm (3 mm decrease since 7:00 on January 11)

<Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

Place of campling	Date of	Time of	Ratio of density limit (times)		(times)
Place of sampling	sampling	sampling	I-131	Cs-134	Cs-137
Around 30 m north from discharge channel of 5-6U, 1F	January 11	8:45	ND	0.03	0.02
Around 330 m south from discharge channel of 1-4U, 1F	January 11	8:25	ND	0.06	0.05
Around discharge channel of 3-4U, 2F	January 11	8:35	ND	ND	0.01

Others: Samples from one point at the coast(sampled on January 11) and 7 points at offshore of Fukushima Prefecture (sampled on January 10) showed ND for all three major nuclides (lodine-131, Cs-134,137).

<Cooling of Spent Fuel Pools > (As of January 12 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	12.5
Unit 2	Circulating Cooling System	Under operation	12.9
Unit 3	Circulating Cooling System	Operation suspended	13.0 *
Unit 4	Circulating Cooling System	Under operation	21

^{*}data is as of 5:00 am on Jan 12 as system operation is suspended at 11:00 am on Jan 12.

- [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. (the temperature of the spent fuel pool: at the time of the stoppage: approx. 12.7 , after restart: 13.1)
- [Unit 4] From November 29, 2011, we actuated ion exchange apparatus in order to desalinate water in spent fuel pool.
 - ·From 13:30 to 15:14 on Jan 12, hydrogen(approx 2 m³) was injected into the spent fuel pool

<u>Water Injection to Pressure Containment Vessels</u> > (As of January 12 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.4.6 m³/h, Core Spray System: Approx.1.6 m³/h)	24.7	25.1	107.0 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.2.8 m³/h, Core Spray System: Approx.7.1 m³/h)	47.4	49.0	108 kPaabs
Unit 3	Injecting freshwater (Feed Water System: Approx.0.8 m³/h, Core Spray System: Approx.8.0 m³/h)	45.6	54.8	101.6 kPaabs

- [Unit 1] ·11:07 on January 12:As variation in the injected water amount into the reactor was confirmed, We adjusted water injection from the reactor feed water system from approx 4.6 m³/h, and water injection from the core spray system from approx. 1.6 m³/h to 2.0 m³/h.
- [Unit 3] ·10:30 on January 12: We adjusted water injection from the reactor feed water system from approx 1.0 m³/h to 0 m³/h, and water injection from the core spray system from approx. 8.2 m³/h to 9.0

- m³/h to replacement of the cooling system piping arrangement for the trial run of cooling system piping in Turbine Building.
- ·11:00 on January 12: After completion of the replacement, we adjusted water injection from the reactor feed water system from 0 m³/h to 1.0 m³/h, and water injection from the core spray system from approx. 9.0 m³/h to 8.2 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 11, 2012: As the result of gas sampling in the gas management system of Unit 2 PCV, Xenon 135 at the inlet of such system was below detection limit of 1.1 x 10⁻¹ Bq/cm³ and also below the threshold when determining the recriticality, 1Bq/cc.

End