Plant Status of Fukushima Daiichi Nuclear Power Station

January 5, 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: Restarted the 2nd cesium adsorption facility. At 14:48, we reached the regular flow rate.

[Storage Facility]

- From 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 2T/B→Central Radioactive Waste Treatment Facility ［Process Main Building、Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)］	・From 9:30 on January 5, 2012 – Transferring
Unit 3	・Unit 3T/B→Central Radioactive Waste Treatment Facility ［Process Main Building、Miscellaneous Solid Waste Volume Reduction Treatment Building(High Temperature Incinerator Building)］	・From 10:01 on January 3, 2012 – Transferring
Unit 6	・Unit 6T/B→Temporary tanks	・10:00-16:00 on January 4, 2012 - Transferred

Place transferred	Status of Water Level (As of January 5 at 7:00)
Process Main Building	Water level: O.P.+ 2,845 mm(Accumulated total increase:4,062 mm) 20mm increase since 7:00 on January 4, 2012
Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)	Water level: O.P.+ 3,084 mm(Accumulated total increase:3,810 mm) 101mm increase since 7:00 on January 4, 2012

◇Water level of the vertical shaft of the trench, T/B and R/B(As of January 5 at 7:00)

	Vertical Shaft of Trench	T/B	R/B
Unit 1	O.P. <+ 850 mm (No change since 7:00 on January 4, 2012)	O.P.+ 3,024 mm (25mm increase since 7:00 on January 4, 2012)	O.P.+ 4,250 mm (7mm increase since 7:00 on January 4, 2012)
Unit 2	O.P.+ 3,226 mm (68mm increase since 7:00 on January 4, 2012)	O.P.+ 3,196 mm (62mm increase since 7:00 on January 4, 2012)	O.P.+ 3,323 mm (59mm increase since 7:00 on January 4, 2012)
Unit 3	O.P.+ 3,201 mm (13mm decrease since 7:00 on January 4, 2012)	O.P.+ 3,154 mm (17mm decrease since 7:00 on January 4, 2012)	O.P.+ 3,422 mm (19mm decrease since 7:00 on January 4, 2012)
Unit 4	－	O.P.+ 3,151 mm (20mm decrease since 7:00 on January 4, 2012)	O.P.+ 3,172 mm (2mm increase since 7:00 on January 4, 2012)

<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 30m north from discharge canal of 5,6U, 1F	2012/1/4	8:40	ND	0.07	0.06
Around 330m south from discharge channel of 1-4U, 1F	2012/1/4	8:20	ND	ND	0.01
Around 7m south from discharge canal of 1,2U, 2F	2012/1/4	7:45	ND	0.02	0.02
15km offshore of Fukushima Daiichi Power Plant, upper layer*	2011/12/19	8:40	ND	0.01	ND

*to lower the detection limit we re-measured the samples taken on December 19 and 27 at Fukushima Daiichi Power Plant offshore 15km upper layer and Fukushima Daini Power Plant offshore 15km upper layer.

・Others: samples from 5 locations at offshore of Fukushima Prefecture (sampled on January 3, 2012) showed ND for all three major nuclides (Iodine-131, Cs-134,137). Samples from 2 locations at offshore of Fukushima Prefecture (sampled on December 19 and 27, 2011) showed ND for all six major nuclides (Iodine-131, Cs-134,137 manganum-54, cobalt-60, cerium 144) except those shown in the table above.

<Cooling of Spent Fuel Pools >(As of January 5 at 11:00)

Unit	Cooling type	Status of cooling	Temperature of water in Pool
Unit 1	Circulating Cooling System	Under operation	13.5 ℃
Unit 2	Circulating Cooling System	Under operation	13.5 ℃
Unit 3	Circulating Cooling System	Under operation	23.9 ℃
Unit 4	Circulating Cooling System	Under operation	20 ℃

[Unit 3]

- 16:54 on December 30, 2012: As there was often the tendency that absorbing pressure decreased until now and a sign of the strainer jamming may occur in future when we continue operating, until January 4,We decided to stop the cooling of the spent fuel pool temporarily and stopped this cooling system in consideration of a current pool water temperature degree being low enough with approximately 13 ℃ and radiation exposure by countercurrent work of the strainer. And after December 31, 2011, we operate the primary system of this system once a day due to confirm the spent fuel pool water temperature (Expected pool water temperature increase: approximately 5.0～6.0 ℃ per day)
- 9:56 on January 4, 2012: We restarted the continual operation of the alternative primary cooling system. After the resumption, we observe the inlet pressure of the pumps and brush the strainer.
- Since the suction of the primary circulating pump of the spent fuel pool substitute cooling system of Unit 3 was continuously low, at 11:46 am on January 5 2012 we stopped this system to replace the strainer at the entrance of this system. Due to this the cooling of the spent fuel pool has been temporarily suspended and is scheduled to remain suspended until January 7. During this period the temperature of the pool is expected to rise by approx. 0.25℃/h (Temperature at the time of suspension: 23.7℃)

< Water Injection to Pressure Containment Vessels > (As of January 5 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.4.5 m^3/h,Core Spray System: Approx.2.0 m^3/h)	25.9℃	26.4℃	105.6 kPaabs
Unit 2	Injecting freshwater (Feed Water System: Approx.1.0 m^3/h, Core Spray System: Approx.9.0 m^3/h)	50.8℃	52.2℃	108 kPaabs

Unit 3	Injecting freshwater (Feed Water System: Approx.2.9 m^3/h, Core Spray System: Approx.6.0 m^3/h)	47.0℃	55.2℃	101.6 kPaabs

【Unit 1】

・Regarding the atmosphere temperature of the Primary Containment Vessel, we confirmed at one point (point C) that the temperature was rising from December 22, 2011 and we confirmed afterwards gentle temperature rise at 2 other points (point D and point E).

point C (Max) approximately 54.6℃(December 28, 2011 at 18:00) → approximately 41.4℃(January 5 at 11:00)

point D (Max) approximately 35.8℃(December 29, 2011 at 17:00) → approximately 31.3℃(January 5 at 11:00)

point E (Max) approximately 40.0℃(December 29, 2011 at 17:00) → approximately 34.3℃(January 5 at 11:00)

・At 10:12 am on January 5 2012, there was a fluctuation in the injection amount to the reactor of Unit 1. Therefore we adjusted the injection through the reactor feed water system from 4.8m^3/h to 4.5m^3/h and injection through the reactor spray system from 1.8m^3/h to 2.0m^3/h.

【Unit 2】

・At 9:58 am on 5 January 2012, due to diversification works of reactor water injection pumps, we adjusted water injection through reactor feed water system from approx.1.7 m^3/h to 1 m^3/h and water injection from core spray system from approx. 8.2 m^3/h to 9 m^3/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 4, 2012: We conducted sampling of the gas of the PCV gas management system of the primary containment vessel of units 1 and 2. As a result of the analysis, we confirmed that at the entrance of the system Xenon 135 was below detection limit (Unit 1 : 1.1×10^{-1}Bq/cm^3, Unit 2 : 1.0×10^{-1}Bq/cm^3), and below the re-criticality criterion which is 1Bq/cc.

End